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Risks and Vulnerability to HIV, STIs and AIDS Among Street Children in Nepal: Public Health Approach

By

SANGEETA KARKI

A thesis submitted to the University of Huddersfield in partial fulfilment of the requirements for the degree of Doctor of Philosophy.

2013

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ABSTRACT

Street children are a population highly at risk of HIV/AIDS/STIs, which is becoming an overriding concern. Due to the critical importance of the problem under investigation, this study focuses on the causes and consequences of risks involved in the dynamics of HIV/STIs transmission and the occurrence of AIDS. The study utilised a qualitative paradigm, with two methods of data collection from children and young people in the street; these were observation and in-depth interviews, which emerged as the most appropriate methods for investigating the HIV/AIDS risks and vulnerability of street children. The study was guided throughout by a public health theoretical framework.

The study revealed that children leave home due to parental mistreatment; they engage in risky sexual behaviour living in the street, they have little or no understanding of HIV, AIDS and STIs or of the respective relationship between these, and they have negative attitudes towards HIV/ STIs treatment and people affected by HIV/AIDS. Four domains of HIV/STIs and AIDS risks and vulnerability of street children were identified: parental mistreatment (causing vulnerability to exposure and thus the likelihood of acquiring HIV and STIs); high risk-taking sexual behaviour (creating vulnerability to infection); lack of knowledge regarding HIV, AIDS and STIs (vulnerability to re-infection); negative attitudes towards HIV/STIs treatment and people affected by HIV/AIDS (resulting in denial, failure to seek treatment and contributing to the perpetuation of the problem); and the effects of living in the street (increasing vulnerability to progression from HIV to AIDS). By exploring the prime and subsequent root risk factors, these complex interlinking risks have been analytically conceptualised, providing a model which explicates the complete phenomenon of risks and vulnerability to HIV/STIs and AIDS for street children, as well as for broader society, in a cyclical manner. Hence, HIV/STIs and AIDS is not a health problem among street children only, it is a public health problem in the broader society in Nepal.

Having identified these problems for street children, this study offers an intervention plan, the CAP model. This model extends previous public health approaches and argues for targeted action to prevent risk and vulnerability for children in the street, and suggestions for policy and legislation which would enable the implementation of the model are offered.

GLOSSARY OF ACRONYMS

ADB	Asian Development Bank
AIDS	Acquired Immune Deficiency Syndrome
APC	Association for the Protection of Children
CBS	Central Bureau of Statistics
CPCS	Child Protection Centres and Services
CWCN	Child Watabaran Centre Nepal
CWIN	Child Workers in Nepal Concerned Centre
GDP	Gross Domestic Product
HIV	Human Immunodeficiency Virus
IDUs	Intravenous Drug User/s
ILO	International Labour Organization
MSM	Men who have Sex with Men
NCASC	National Centre for AIDS and STD Control
NDHS	Nepal Demography and Health Survey
SAARC	South Asian Association for Regional Cooperation
STD	Sexually Transmitted Disease
STI/s	Sexually Transmitted Infection/s
UNAIDS	The joint United Nations Program on HIV/AIDS
UNCRC	United Nations international Convention on the Rights of the Child
UNESCO	United Nations Educational Scientific Cultural Organization
UNICEF	United National International Children and Emergency Found
US	United States
USAID	United States Agency for International Development
VCT	Voluntary Counselling and Testing
WHO	World Health Organization

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1 INTRODUCTION

HIV-AIDS is a growing problem in Nepal (UNAIDS, 2008) and as a Nepalese woman with a long-standing interest in public health research I have found myself increasingly drawn to this topic. My first master's degree provided me with knowledge about health, infections and diseases, especially as they affect people in underdeveloped countries such as Nepal (Karki, 2003). I became curious to understand other health risks such as HIV and how they are spread, and the impact of these in the developing world. I explored the topic in my second master's degree by researching women's health and HIV in Nepal with a special focus on housewives. While doing the analysis, it surprised me to note that in Nepal, the number of housewives with HIV was quite high, and that infection rates were increasing (Karki, 2008). My investigation explored HIV in a socio-cultural context characterized by a male dominant society with considerable economic disparities and discrimination against females. Having established that HIV affects general populations (such as housewives) even though they are considered as a low risk group in terms of sexual behaviour, I was led to speculate about marginalized groups such as, for instance, street children, and I believed that the potential severity of the HIV-AIDS risks would be increased for children who have to survive on the streets. Indeed this is the case. Research has shown that street children in Nepal have reduced access to health and support services yet have been found to have higher levels of morbidity due to AIDS than the general population (Meincke, 2009).

This study therefore examines the risks and vulnerability of street children in Nepal with regard to acquiring HIV and sexually transmitted infections (STIs) and developing AIDS. The study uses a public health approach throughout; to inform the research design, as an interpretative lens through which the data are analysed and, in identifying the policy and practice implications of the findings. While there are a small number of studies that have investigated street children in Nepal (see Chapter Two), these have been somewhat fragmented, focusing on a single

aspect of children's experiences such as the reasons that cause children to live on the streets, or substance misuse and there are no published studies that examine children's experiences in a holistic way exploring the links between the reasons that lead to children to living on the streets, their networks, kinships and daily life risks and the accumulative impact of these factors in increasing vulnerability to HIV-AIDS. Similarly, while there have been studies of HIV-AIDS in Nepal, see for instance (Gurung, 2004; Ryckmans, 2008; Southon & Gurung, 2006), these tend to conflate HIV with AIDS or focus on HIV *or* AIDS, neither of which is helpful in informing the different strategies required for tackling HIV prevention and AIDS treatment as separate but interconnected health problems. Furthermore, while the links between STI and HIV are well documented in the literature, there are no studies which explore knowledge of these health risks among street children in a way that *also* incorporates children's lived experiences. In bridging these divisions, I have conceptualised this study as the investigation of the *complete phenomenon* of risks and vulnerabilities of street children to HIV, STIs and AIDS and it is in this regard that the study makes an original contribution to knowledge. While the findings are of particular importance for public health policy in Nepal, they raise issues about the limitations of existing HIV prevention models for groups such as street children and the health ramifications of their sexual behaviour (and exposure to sexual abuse) and thus brings new understandings to public health discourse which will also be of value to other developing countries.

The study has investigated HIV, STI and AIDS-related knowledge, sexual behaviours and attitudes among street children in Kathmandu, Nepal. This involved the detailed exploration of views and deepening understanding of these issues from the perspectives of children themselves. It also entailed exploring how HIV/STI and AIDS vulnerability and risk factors among street children impact upon broader society.

The aims of the study were:

- To analyse the causes and consequences of the vulnerability of street children to HIV/STIs and AIDS in Nepal.
- To understand the phenomenon of HIV/STIs and AIDS vulnerability and risk factors in street children within a public health context concerned with the transmission of HIV within broader society.

Specific research questions were:

1. What are the factors that increase the risk of children becoming street children (especially views about the characteristics of families, root causes and issues)?
2. What are the HIV/AIDS/STIs related knowledge, sexual behaviours and attitudes of street children?
3. In what ways does the sexual behaviour of street children increase their vulnerability to HIV/AIDS and STIs?
4. In what ways does their knowledge in relation to HIV/AIDS/STIs transmission, prevention and treatment increase vulnerability to infection?
5. In what ways do attitudes to HIV/STIs treatment, and to people affected by HIV/AIDS, contribute to vulnerability among street children?

This chapter outlines the rationale for the study, identifying the gap in knowledge it seeks to fill; provides a brief summary of what is known about street children in Nepal and presents an overview of HIV/AIDS and the links with STIs. Finally, the chapter describes key social, economic and cultural factors important for understanding the specific location of the study.

1.1 Rationale for the Study

The number of children on the street is increasing in Nepal. Although the actual number of street children is not known, the number of street children in Kathmandu alone is estimated at 1,000 to 1,500 (Ryckmans, 2008). Subedi (2002) reported that the number of street children was increasing by five hundred per year in Kathmandu, with the children coming from different places in Nepal. The Child Welfare Scheme and UNESCO (2005) reported that this annual increase dates back to the start of political insurgency in 1998, and this was confirmed by Tournon in his 2008 study (Tournon, 2008). The phenomenon has become severe due to political conflict (Child welfare scheme and UNESCO, 2005) and rural urban migration. Although the exact number of street children is difficult to record, as they are not officially registered at birth and so are excluded from the national census (ADB, 2003), in (2008) UN-HABITAT estimated that the total number of street children in Nepal was 30,000. There are further difficulties in accurately assessing numbers due to the various definitions of street children (ADB, 2003) and their seasonal fluctuation (Eches, 2007). Several factors which lead children to the life of the street have been mentioned (Dhital, Gurung, Suvedi, & Hamal, 2002; Rai, Ghimire, Shrestha, & Tuladhar, 2002; Southon & Gurung, 2006).

Children on the street engage in different risky activities associated with health risks. Street children are characterized by risky sexual activities such as unprotected sex, and drugs and alcohol use are also a common (Gurung, 2004; Southon & Gurung, 2006; Subedi, 2002). Exposure to high-risk sexual behaviours increases their vulnerability to HIV and STIs. Studies by USAID (2008) and Southon & Gurung (2006) stated that street children in Nepal were among the most vulnerable groups at risk of HIV infection. Southon & Gurung's study reported that 10-30% of street children were HIV positive, and that 30-40% of them were using drugs. Independent tests of street children in Nepal, conducted by CWIN (Child Workers in Nepal Concerned Centre) in 2002, reported that 25 out of 80 (31%) of respondents were HIV positive (Southon & Gurung, 2006). A

similar study by Southon & Gurung (2006) reported a higher proportion, and stated that 16 (50%) out of 32 children were HIV positive. Tournon (2008) showed that 10%-30% of street children in Nepal were living with HIV in Kathmandu valley alone. Southon & Gurung (2006) reported that children have a lack of knowledge, which increases HIV/AIDS prevalence among street children. However, information regarding HIV/AIDS knowledge, and the attitudes and behaviour of street children, are not sufficiently reported in other studies (CPCS, 2007; Gurung, 2004; Southon & Gurung, 2006). Similarly, street children are also vulnerable to STIs. The World Bank (2005) reported that the number of sexually transmitted infections are rising in Nepal, which is an ominous sign since street children are exposed to high-risk sexual behaviour implicated in the transmission of sexual diseases.

The actual prevalence for HIV/AIDS among street children has not been recorded because of weak public health surveillance system and an inadequate health infrastructure, which collects only limited data. The quality and accuracy of available data estimation depends on the quality of HIV/STI health services, the extent to which the patient seeks health care, the intensity of case diagnosis and the quality of reporting. Due to the lack of a public health surveillance system, the actual number of HIV and STIs cases are likely to be higher than the available estimated data (Tournon, 2008). It is nevertheless reasonable to assume, that street children have a low life expectancy and a high rate of morbidity and mortality, and that this is increasingly due to the growing number of HIV infections. Therefore it is important to understand in what ways children are at risk of acquiring HIV, including increased risks posed by STIs. Exploring these issues from the perspectives of children themselves, including why children leave home and how they survive once they do can provide a detailed understanding of the causes and consequences of vulnerability to HIV/STI and AIDS in street children. This provides the rationale for the study and it is my hope that the research will influence public health policy on prevention and that this will in turn, result in fewer children from dying at an early age due to AIDS.

1.2 Introduction to HIV/AIDS and STIs

The term (HIV) refers to the Human Immunodeficiency Virus. HIV invades the bloodstream through infected bodiliy fluids transmitted by sexual intercourse (anal or vaginal) or oral sex; blood transfusion; sharing injecting equipment; from mother to child prior to birth across the placenta or during birth, or via breast feeding. The presence of HIV in the bloodstream of any individual does not indicate that the person has Acquired Immune Deficiency Syndrome (AIDS) (WHO, 2009). Once HIV enters the bloodstream, it starts to attack the body's immune system that provides a natural defence mechanism against infections. HIV severely destroys a body's immune system and weakens the ability to defend against certain diseases. Suppressing the immune system makes an individual vulnerable to opportunistic infections; any symptoms such as tuberculosis or diarrhoea may occur in a person infected with HIV and may result in AIDS (WHO, 2009).

HIV leads to Acquired Immune Deficiency Syndrome (AIDS). The term AIDS is used to describe the second stage of HIV, when the immune system stops working, and specific infections develop, indicating the final stage of immune system breakdown. The time period between HIV infection and the development of AIDS varies widely among individuals and depends upon various factors, including: access to good nutrition; safe water; basic hygiene, care and treatment regimes, and infections to which the person is exposed (WHO, 2009).

UNAIDS & WHO (2007) report that the most common reason for AIDS related death is due to a lack of HIV prevention and treatment services. This is an incurable disease, but proper medical care and treatment of HIV can delay the development of AIDS and prolong the life of people living with HIV. AIDS related illness is one of the leading causes of death globally and is projected to continue as a significant global cause of premature mortality in the coming decades (WHO, 2008).

Although street children are not a new population in Nepal (their increasing numbers stem back to the political insurgency of 1998), surviving on the streets in an era of HIV raises specific challenges for health and survival. Worldwide, 2,500 young people between ages 15-24 are said to be newly infected each day and there are an estimated 5 million young people living with HIV (UNICEF et al., 2011). If there are no means of accurately measuring the numbers of street children, identifying those living with HIV is virtually impossible, however all studies that have examined this identify street children as experiencing higher levels of morbidity due to AIDS than other groups. Sexual activity and experimentation for street children is not simply a matter of adolescent development and identity formation; it is an important commodity for survival. Decision-making about sexual behaviour is therefore defined primarily by the need to survive and in the absence of effective prevention and treatment approaches and, alternative options for income generation; these children continue to be at significant risk of experiencing sexually transmitted infections and premature death. The issues are multiple and complex and not only include sexual behaviours but also, the impact of stigma and discrimination and the lack of services in a context in which the general population is blighted by high levels of poverty, illiteracy and under-development of public services. Important for any study of HIV, is an understanding of the extent of sexually transmitted infections since both share means of transmission and STIs are widely known to increase susceptibility to HIV.

Sexually Transmitted Infections (STIs) are also termed Sexually Transmitted Diseases (STDs) and are infections that can be transferred from one person to another, primarily through sexual contact. There are more than 30 sexually transmitted infections (of which HIV is one), and these may be caused by bacteria, viruses, or parasites (WHO, 2007b). Some of the common STIs are chlamydia, gonorrhoea, syphilis, HIV, human papilloma virus and trichomonas (WHO, 2007b). Some STIs, like HIV and syphilis, are transmitted through blood products, from mother to child during birth, and by tissue transfer (WHO, 2007b).

The incubation periods for STIs range from a few days to several months (U.S. Department of Justice, 2002). The most serious health challenge associated with a sexually acquired infection is the presence of inflamed or ulcerated symptoms, such as ulcers or inflammation of vaginal and oral tissues, and under the foreskin of the reproductive tract (Centres for Disease Control and Prevention, 2010). HIV and STIs are biologically linked. In most cases - but with some exceptions - HIV is transmitted in the same ways as STIs and can be prevented by the same safe sexual behaviours. HIV is different from STIs in that HIV is also transmitted by sharing contaminated injecting equipment, and in that it can lead to AIDS. The striking difference between other STIs and HIV is that they are curable, while HIV is incurable and the virus remains in any infected person until their death (USAID, 2000). WHO (2005) reported that all STIs are sexually transmitted, while over 75% of HIV infections are acquired through sexual transmission with the rest being transmitted through contamination of body fluids and intravenous drugs. Therefore STIs prevention and treatment are important components in an HIV prevention strategy (WHO, 2001).

1.3 Country Context

1.3.1 Demographic and socio-economic factors

As a Nepalese woman with an interest in public health issues I have selected Nepal as the location for this study because of my desire to contribute to social change and improved health outcomes particularly for marginalised groups in the country. In relation to HIV-AIDS, there are several marginalised and high risk groups (such as migrants, sex workers, men who have sex with men) however street children, by virtue of their status as social outcasts and as minors are socially, politically and economically disenfranchised and as such are particularly voiceless, hence my decision to focus on their needs. In the following section I summarise the geopolitical, social and economic conditions in Nepal, since this is

the wider context for the problems faced by Nepalese families and which contribute to children living on the streets.

Nepal is a South Asian developing country. The eleventh National Census (2011) by the Central Bureau of Statistics (CBS) reported that the country's population was 26.6 million and the annual growth rate was 1.40%. Kathmandu had the highest population, with 1.74 million people. The population of women was higher than that of men: there were 13,693,378 (51.44%) women and 12,927,431 (48.66%) men (Sharma, 2011). Nepal is a landlocked country surrounded by hills and mountains, and is bordered by India in the east, west and south, and by China to the north. This small country (total land area is 147,181 square kilometres) is geographically rich; it has great physical diversity, ranging from the Terai Plains situated at 90 metres above sea level, to the 8,848 metre high Mount Everest. From the lowland Terai fields, land forms rise in successive hills and mountain ranges including the towering Himalayas. Topographically, the flat Terai plains, hills and the high Himalayas are the country's three main ecological areas. Because of limited facilities in terms of transportation and communication, only about 7% of the total population lives in the mountainous region. The hilly region is densely populated, containing about 44% of the population.

Nepal is an agricultural country and more than 80% of the population relies on agriculture as a major source of income, even though there are few economic and technological resources. With a per capita income of $468 per annum (ADB, 2008) Nepal is identified as one of the poorest countries in the world. Forty nine per cent of the population are below the poverty line (Tournon, 2008), in that the purchasing power necessary for attaining basic goods and services is below their income threshold (Ministry of Finance, 2009). UNFPA (2009) reported the country's low human development index, with over 80% of the total population surviving on less than $2 per day. Agriculture, which supports a large part (32.4%) of the GDP in Nepal (Ministry of Finance, 2009) depends upon natural

rainfall. A weak irrigation system and adverse weather are challenges to development of the agricultural sector. The non-agricultural sector of the economy includes both public and private sectors, and a portion of the population is employed in commercial and building sectors. The non-agricultural sectors have also been affected by the instability of the political situation. A decade-long conflict has had a negative impact on industries, with the result that some factories are fully or partially closed (Ministry of Finance, 2009). About 80% of Nepalese people live in rural areas (ADB, 2008), and majority of the people live without basic development infrastructure or primary health care services provided elsewhere by the government health care system. The country's limited resources are not adequate to support the growing population in terms of essential health, education or social security services. Due to the poor infrastructure, many people lack the most fundamental needs like safe drinking water and electricity, conditions which have been exacerbated by a decade-long political conflict.

The hilly zone is the most fertile and urbanized area, and this includes Kathmandu Valley. Kathmandu Valley is the political, commercial and cultural hub of the country and transportation and communication systems are better facilitated here than in the mountainous and hilly zones (Ministry of Health and Population, 2007). This densely populated region is the urban centre of Nepal and is considered as having the most advanced infrastructure of all urban areas. The Valley is a centre for the industrial and financial sectors, as well as for tourism and the major government headquarters, health services, reputable schools and universities are all based here. Factories such as those for producing carpets and garments are located here and these serve as a magnet for child labour which explains why many children migrate to Kathmandu. This is the location in which the study took place.

1.3.2 Political Issues

Given that political instability has been identified as one of the factors in the increasing numbers of street children in Nepal, it is important to fully appreciate the impact of this problem. The Communist Party of Nepal (Maoist) announced the people's war against the government of Nepal in 1996. The decade-long war that followed affected the whole country and resulted in an estimated 13,000 deaths (Save the Children, 2006). The war badly affected the country's situation. Conflict-related migration was common during the period, due to fear of abduction, fear of being forced to join the Maoist rebels, or fear of threats or harassment by either the government or the Maoist party. Conflicts and a deteriorated economic environment forced the rural population to migrate to urban areas and also, to India. Throughout the Maoist conflict, Maoist forces targeted children for recruitment as soldiers into the Maoist army, or to use for various other purposes (Save the Children, 2006). Due to the fear of abduction, children migrated to major city areas, especially to Kathmandu, and some migrated to India (Save the Children, 2006). A comprehensive peace agreement was signed between the Maoist party and the government in November 2006 (WHO, 2007a). Despite the peace process, the country faced yet further political tensions and the government remains unstable. Although the security situation has improved since 2010 (ADB, 2011), there are still public demonstrations and strikes which heavily affect the livelihoods of the general population; nevertheless, the tensions are less than during the conflicts.

1.3.3 Urbanization and migration pattern

Both internal migration from rural to urban areas and external migration abroad are common in Nepalese society. The neighbouring country, India, is one of the destinations for the middle class Nepalese family to seek jobs in order to support a better life. Middle Eastern countries and European countries have also become destinations. Tens of thousands of Nepalese have migrated from rural homes, and it is estimated that during the conflict, up to 200,000 Nepalese were internally

displaced, with up to two million moving to India (WHO, 2007a). Nepali migration to India is a worrisome factor for the HIV/AIDS epidemic since sex work is common among poorer migrants and the prevalence of HIV infection is high in Indian cities (International Labour Office in Nepal, 2004). Internal migration has become one of the main survival strategies of poor families. Unskilled people from remote villages who are challenged by unemployment come to the city. This pattern of migration is increasing rapidly and often involves children. The Child Welfare Scheme and UNESCO (2005) stated that more than 90% of the labourers involved in transport services, or working as porters, shoe shiners or domestic helpers in the Kathmandu Valley, were child migrants, which resulted in a large number of children on the street. An estimated 127,000 children aged between 5 and 18 were involved in child labour, of which 80% were migrants (Child welfare scheme and UNESCO, 2005). Nepal's decade of conflict has clearly deepened the poverty in this already poverty-stricken country, with the lives of poor rural people being particularly affected (WHO, 2007a). The lack of employment opportunities, political conflicts, government instability and high inflation are said to be the main reasons for the growing extent of migration (Ministry of Finance, 2009). These are important contextual factors for this study since they contribute to the increasing numbers of street children in Nepal.

In the next section I turn my attention to the support systems that exist in the country since it is the lack of access to services which is one of the primary factors differentiating life on the streets to normal life for Nepalese children and families.

1.3.4 The education system

The number of children receiving an education in Nepal has been increasing since 2001 as a result of various education campaigns by the government to provide a quality education and improve school enrolment. The government of Nepal has conducted an Education for All (EFA) strategy since 2001, to ensure a universal education for all children that is both free and compulsory (Ministry of Health and

Population, 2007). There had been a wide gap between male and female educational attainment in previous years with 70.3 % of males but only 43.6 % of females literate (UNFPA, 2009). An earlier study: The Nepal Demography Health Survey (NDHS) 2006 reported that the gender gap in educational attainment for children aged between 6 and 9 had been narrowing over the years; the illiteracy figure had declined to 10% of males and 16% of females, whereas previously it had been 21% of males and 31% of females in 2001. Despite these overall improvements, UNFPA (2009) report a continued low literacy rate for those aged 15-49 years in Nepal.

The law has enforced 100% compulsory school attendance for children in primary level education since the 2001 Education Act. However, the available statistics show that the basic education goal is far from 100%. Educational attainment varies widely between the rural and the urban population. Higher numbers of both males and females are educated in urban areas compared to rural areas (Ministry of Health and Population, 2007) although street children (who live primarily in urban areas) are not included in these figures and there appear to have been no programmes targeted at ensuring they can benefit from the provision of universal education.

1.3.5 The health system

Health care services in Nepal are weak (WHO, 2007a) and people in the country have almost negligible access to basic health services. There are no national survey records of mortality and morbidity and the available data are limited and un- reliable due to a lack of proper health management systems and insufficient health treatment protocols. The poor health system results in low life expectancy at birth. In 2007, the life expectancy at birth of women was less than that for men; that is, 59.91 years and 60.43 years respectively, according to (WHO, 2007a). However, an improved health status has since been reported, with life expectancy at birth for males at 66.4% and for females at 67.8% (UNFPA, 2009). Infant and

child mortality rates in Nepal are the highest in the world. Infant mortality was 40 per 1000 live births, and the maternal mortality of Nepali women was 830 per 100,000, as recorded by UNFPA (2009). Although efforts have been made to establish primary health care centres nationwide, the health system and its services are not functioning well. The situation of the health care system is worst in rural areas, due to the lack of trained staff, drugs and medicine (WHO, 2007a). Primary health care services are provided at a district level through sub-level posts, health posts, primary care centres and district hospitals. Secondary and tertiary care is provided zonally, and only regional hospitals have special tertiary facilities (WHO, 2007a). Health care in Nepal involves both modern and traditional dimensions. Public hospitals, nursing homes and private clinics tend to be centralized in urban areas however modern health services are hard to access for rural people. The Nepalese government is placing increasing emphasis on the need for the health sector to provide better health services, especially for children and women, the rural population, the poor and the marginalized. Reduction of infant and child mortality, and low cost but high impact services have also been featured in the second long-term health plan 1997-2017 (WHO, 2007a). Respiratory infection and diarrhoea are the two leading killers of children in Nepal, and these are also opportunistic infections for HIV/AIDS (International Labour Office in Nepal, 2004). Seven out of ten children die due to diarrhoea, respiratory infection and other diseases like measles or malaria and it is reported that 78,000 children die each year due to malnutrition (International Labour Office in Nepal, 2004). The poor health status is mainly due to unhygienic food and a polluted working environment. Health services are therefore inadequate for most children in Nepal however for street children, the situation is even more difficult since not only do they have reduced access to health care; they also have more health problems.

1.3.6 Epidemiological view of HIV/AIDS and STIs in Nepal

The first AIDS case in Nepal was reported in 1988 (World Bank, 2008) . Since then the number of people living with HIV/AIDS has been increasing and the total number of people reported as having HIV in Nepal by August 2011 was 18,535. Among the total number of reported cases, 11,964 were male and 6,571 were female (National Centre for AIDS and STD Control (NCASC), 2011). Injecting drug users, followed by clients of sex workers and female sex workers were the most affected groups (National Centre for AIDS and STD Control (NCASC), 2011). In 2010 it was reported that less than 1% of the adult population was living with HIV and there was no indication of a generalized epidemic (UNAIDS, 2010). However, Nepal has undergone a transition from a low level epidemic country to a country with a concentrated epidemic level, which is characterized by an HIV prevalence that consistently exceeds 5% among certain most at-risk groups: intravenous drug users (IDUs), female sex workers and their clients, and men who have sex with men (World Bank, 2008). Sex workers are considered as the most at-risk group, with migrants also identified as an at-risk group, since they are often the clients of sex workers (UNAIDS, 2010). Among 25,000-34,000 female sex workers in Nepal, an estimated 1.3%-1.6% were living with HIV, and 15-17% of street-based sex workers were living with HIV in Kathmandu Valley (World Bank, 2008). Drug use overlaps with commercial sex and is also driving HIV transmission in Nepal (World Bank, 2008). World Bank (2008) reported that of 46,309 drug users, 61% were injecting drug users and 34% of these people were living with HIV.

National estimates show that around 8% of migrants returning from India are living with HIV (World Bank, 2008). The striking contributory factor for elevating HIV prevalence in Nepal is girl trafficking (UNAIDS & WHO, 2009), with particular risks for Nepali sex workers in Indian brothels. World Bank (2008) found that about 50% of Nepal's female sex workers in Indian brothels have HIV,

and it is estimated that 2% of their clients are also infected (World Bank, 2008). The national estimate for MSM (men who have sex with men) and MSW (male sex workers) is 64,000-193,000; the HIV prevalence among MSM in Kathmandu Valley alone is estimated to be 3.3% (World Bank, 2008).

The National Centre for AIDS and STD Control (NCASC) (2009) reported on a 2009 Integrated Biological and Behavioural Surveillance (IBBS) survey among high-risk population groups, which found a significant decline in HIV prevalence among IDUs, and a stable low HIV prevalence among MSM, female sex workers and truckers. The results showed that the HIV prevalence among IDUs was 21% in Kathmandu, 4% in Pokhara Valley and 8% in the eastern and western Terai. High prevalence has been reported among MSW compared to non-MSW (National Centre for AIDS and STD Control (NCASC), 2009). AMDA Nepal, an organization taking care of refugees' health in Nepal, stated that the incidence of HIV had been found in fifteen refugees inside the Kakarbhitta-based camp, while there were no refugees diagnosed with HIV a few years ago (RSS, 2010).

Save the Children US (2002) reported that nationwide statistics for STIs are not available in Nepal, but the number of people with STIs is increasing with the rise of risky behaviour. The World Bank (2005) also reported a similar finding. In the survey, among the 7% of women and 2% of men who had STIs, only 42% of women and 61% of men had sought medical treatment from a health centre (Ministry of Health and Population, 2007). It should be noted that research on this topic is dated and no recent studies on the prevalence rates of STIs in Nepal are available. In (2002), Save the Children US stated that the number of people seeking STI treatment increased from 37.5% in 1997 to 55.5 % in 2002 . It is most important that people who have STIs are treated along with their partners, however the prevalence of partner treatment in the study was low among the section of the population considered most at risk (Save the Children US, 2002).

The study also reported that people felt reluctant to seek treatment for STIs. Poverty, poor access to health services and a large number of men migrating to India seemed to be the major reasons for the prevalence of STIs (Save the Children, 2001). People considered that having STI was sinful and that they would be stigmatized if they sought treatment (Save the Children US, 2002). These views are linked to cultural and religious beliefs that may be shared by street children and as has been found in other literature, fear of stigmatization can inhibit access to treatments since people fear this may lead to unwitting disclosure of diseases that are associated with moral or social sanction. It may therefore be the case that street children are not only vulnerable because of the lack of availability of treatment and care but that internalised stigma adds a further barrier to accessing treatment.

1.4 Legislation and Policy for Children's Welfare

There have been significant developments in relation to the rights of the child in the past few years. The Government of Nepal ratified the UN International Convention on the Rights of the Child (CRC) in 1990, as well as the International Labour Organization's International Programme on the Elimination of Child Labour Convention (ILO-IPEC) on Minimum Age (Convention No. 138, 1973) and the Worst Form of Child Labour (No. 182, 1999) (Child welfare scheme and UNESCO, 2005). Each signatory country to the CRC is required to develop policy and legislation to protect children's rights and welfare to the maximum extent for their survival and development. The government's ability to translate the CRC into effective policy and programmes for vulnerable children is hampered because of widespread poverty, weak infrastructure and the political instability referred to earlier. Most of the services for vulnerable children are therefore provided by non-government organisations (as I discuss later into this chapter). Despite the limitations of the government, the policy framework provided by the CRC and other human rights instruments provides an important benchmark for measuring the country's progress on children's rights.

The UN Convention on the Rights of the Child signifies that a child means any human being below the age of 18, and specifies that children under this age are entitled to special protection. This Convention gives children the full range of human rights and special protection as children. Key articles of the CRC relevant to this study include children's rights to family life (Article 9); access to mass media for the dissemination of information important for children (Article 17); protection from all forms of physical or mental violence, abuse, neglect or maltreatment from the parents or any others who care for the child (Article 19); state protection for a deprived child who is unable to remain with their family (Article 20), and the right to survival and health care. The CRC urges governments to promote a healthy lifestyle through: health treatment and facilities; diminishing child mortality; combating disease and malnutrition; provision of adequate nutritious food and clean drinking water; consideration of the dangers and risks of environmental pollution, and promoting knowledge about health education, hygiene and environment (Article 24). The Convention requires State parties to take all measures to ensure that children achieve a general and vocational education (Article 28); Article 32 of the CRC states that children must be protected from economic exploitation and from any hazardous work, and sets a minimum age, hours of work and conditions for children's employment, while Article 33 demands protection from drugs and substances. Furthermore, in ratifying the Convention, State parties must undertake measures to protect children from all forms of sexual exploitation, and Article 34 states that children shall not engage in unlawful sexual activity, prostitution, or be involved in sexual exploitation such as pornographic performances or materials (UNICEF, 2011). The CRC suggests that the rights for every child include the basic elements necessary for subsistence, such as food, shelter and health care to live a healthy life, and the right to protection from diseases (UNICEF, 2011). As I have shown however, these rights are not safeguarded in respect of street children who are also exposed to additional harms caused by involvement in hazardous child labour.

The Worst Form of Child Labour Convention no. 182 (1999) was ratified by Nepal in 2002, aiming to eliminate the worst forms of child labour.This agreement states that children should refrain from hazardous types of employment and that their rights concerning employment should be protected.This Convention comprises statements such as: "Children who have not attained the age of 18 years shall not take part in any hostilities and in armed conflict by force; children shall not be recruited into armed groups by force, or be involved in armed conflict through coercion". Within Nepal's constitution, the labour rules were amended in 1993 after adopting the Labour Act in 1992. Following this, with the commitment to the elimination of the worst forms of child labour, the Children Act was enacted in 1992, in line with the UN Convention for the Rights of the Child (UNCRC) (Child welfare scheme and UNESCO, 2005). The Children's Act (1992), and the Regulations on Children (1995), state that a child means someone who has not reached the age of 16 years. The minimum age for employment and work in this Act is 14 years (Child welfare scheme and UNESCO, 2005). Children aged from 14-16 are prohibited from being employed in hazardous work and should not do any work that affects them physically or psychologically. There are restrictions on the type of work and the hours that children can work. The Act has been amended to specifically address sexual abuse and exploitation against female children, but does not extend to the sexual abuse of boys (ILO, 2009).

Commercial sexual exploitation is considered one of the worst forms of labour exploitation and is a punishable crime (CWIN, 2003). Nepal also ratified the South Asian Association for Regional Co-operation (SAARC) Convention on Regional Arrangements for the Promotion of Child Welfare in South Asia, in 2002 (SAARC, 2009). This Convention is in line with the CRC, but further ensures the provision of basic services such as education and health care, with special attention to the prevention of diseases and malnutrition, and promotes policy development for child survival and development.

1.5 Organizations Working for Street Children

In the next section, I describe the main organisations in Nepal that are providing services for vulnerable children. In 2004 several organizations created an alliance to co-ordinate their efforts on behalf of children comprised of: Child Workers in Nepal Concerned Centre (CWIN); SAATHI; Child Protection Centres and Services (CPCS); Child Watabaran Centre Nepal (CWCN), and the Association for the Protection of Children (APC). This network provides services for street children with the primary target aim being to get children off the street (Tournon, 2008). The trained fieldworkers from these organizations visit street children regularly in the streets where they live. Their purpose in making contact is to establish a relationship with them and let them know about the services they provide. Some of the organizations provide services in the street; they provide awareness on health care, drugs and HIV/AIDS; others do not provide services in the street, but try to get the children to go to a centre (Tournon, 2008).

1.5.1 Child Workers in Nepal Concerned Centre (CWIN)

Child Workers in Nepal Concerned Centre (CWIN) was established in 1987, and is the pioneer organization for the rights of street children in Nepal. This organization campaigns against issues of child labour exploitation such as long working hours, under- or no payment, forced labour, and working conditions which are hazardous to health (Child welfare scheme and UNESCO, 2005). The organization is helping children with matters such as shelter, treatment and being freed from custody. They have emergency line services for people to contact them on issues of children's protection (Tournon, 2008).

1.5.2 SAATHI

SAATHI is a non-governmental organization which was established in 1992. The main objective of the organization is to work on violence against women. Street girls are prioritized as they are more vulnerable to sexual abuse. The SAATHI

drop-in centre provides a non-formal educational (NFE) programme for children between 5 and 14 years old. Some of the street children who are outstanding, and interested in joining a school to study, are receiving scholarships to study at a private school through the organization (Child welfare scheme and UNESCO, 2005).

1.5.3 Child Protection Centres and Services (CPCS)

The Child Protection Centres and Services (CPCS) were founded in 2002 to fulfil the needs of street children in Nepal. The organization has six centres in Kathmandu valley and other regional centres in different parts of the country. They launch life skills training, recreational programmes and informal education on the risks of street life, drugs, HIV/AIDS, health, hygiene and treatment. Some interested children are getting a formal education from the CPSC schooling programme. The CPCS is helping street children from mobile medical services and 24-hour opening clinics; the mobile services give emergency treatment. Counselling services are also available for the children who are in need of psychological support. The organization focuses on children's fundamental rights, and provides legal support in enforcing the Children Act 1992. 24-hour emergency hotline services are available, through which children can approach them with any legal or medical problem. The organization aims to reunite them with their families, depending on their wishes (CPCS, 2008).

1.5.4 Child Watabaran Centre Nepal (CWCN)

The Child Watabaran Centre, Nepal (CWCN) has been working with street children since 2002 in different parts of Nepal. The main objectives of the organization are to reintegrate and rehabilitate street children by providing formal and informal education, and giving vocational training for long term security. This organization works for the protection of children's rights; seeks to reunite them with their family; supports children through counselling; develops awareness

among street children; focuses on personal hygiene, and has developed emergency health services for children at the centre with regular access to treatment. It has been working under two different projects: the Watabaran Centre for boys (WCB) and the Watabaran Centre for girls (WCG). Education and vocational training are provided at the centre, as well as other recreational activities for boys and girls (Child Watabaran Centre (CWCN), 2011).

1.5.5 Association for the Protection of Children (APC)

The Association for the Protection of Children (APC) Nepal was started to assist destitute children, including orphaned and abandoned children and those living and working on the street in Kathmandu, and has existed since 2001. The organisation offers a wide range of facilities like shelter, refuge, counselling, emergency health care, food and clothing. The children are also provided with income-generating activities, such as mechanical training, through the APC (Association for the Protection of Children Nepal (APC) 2008) .

1.5.6 Drop-in centres

There are approximately eleven drop-in centres in Kathmandu valley. These drop-in centres focus on socialization, where street children can visit at any time during the day and find shelter, food, security, washing facilities and cultural activities. They can also obtain medical and psychological services, legal services, an awareness programme and literacy skills. The drop-in centre works as a transit centre where children are socialized and sent to a rehabilitation centre, where those who cannot join the school system can get vocational training or a non-formal education, or some children may be enrolled in a public school (Tournon, 2008). Theoretically, street children should be able to access services from the organisations listed above however there is a popular view that many NGOs are exploitative and use vulnerable children to source sponsorship which then gets used for other purposes. While there have been no evaluation studies carried out

and there is therefore no evidence to support or refute this, there is generally a high level of suspicion and scepticism on the part of the general public towards many such agencies. It is also the case that none of the children in my study were routinely accessing the services listed above.

1.6 Structure of the Thesis

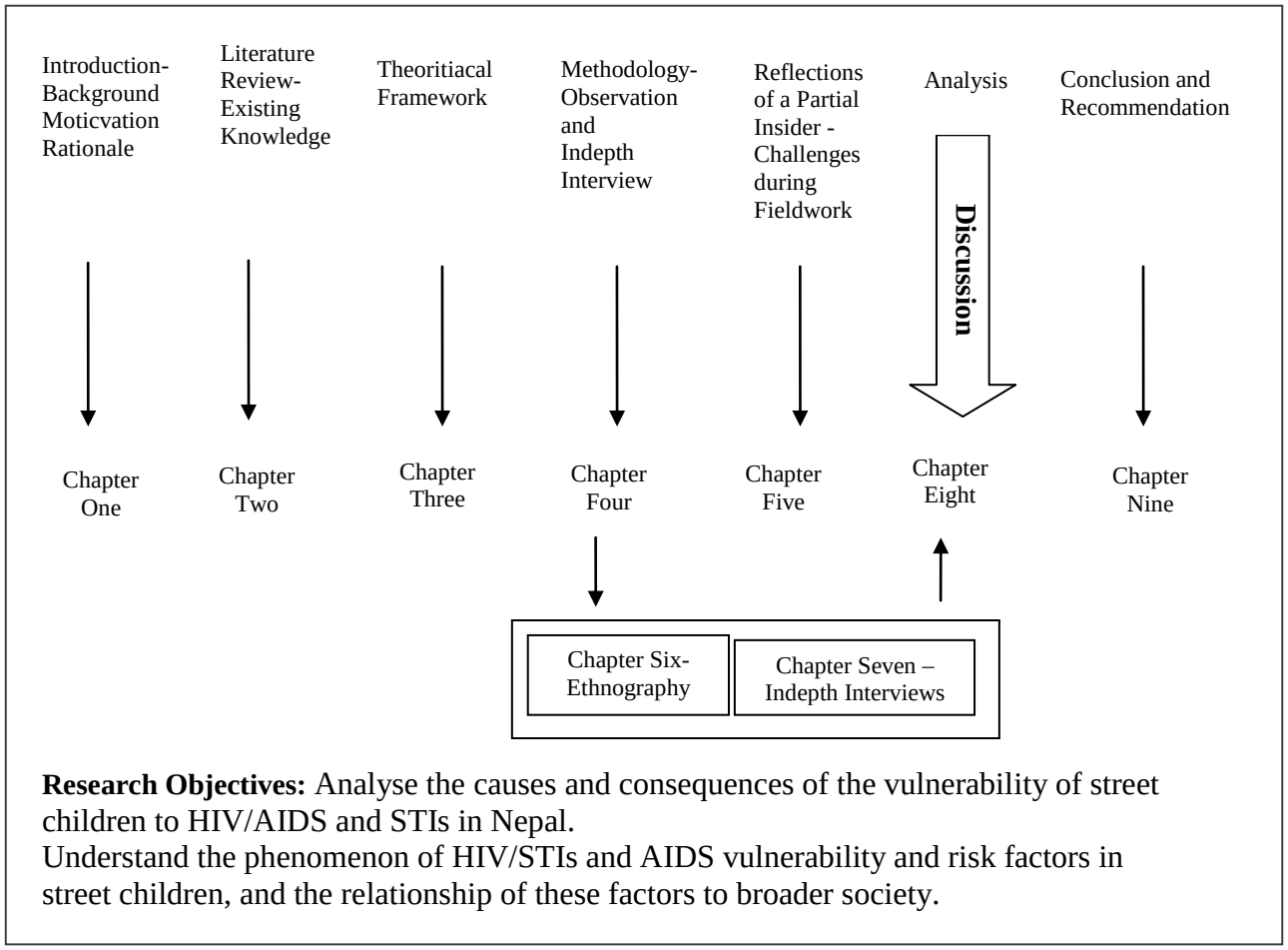

Figure 1-1 Diagramatic presentation of the structure of the thesis

Thesis is systematically structured into nine chapters, beginning with Chapter One, which has provided a summary of my own professional background and the factors that motivated me to conduct this research. This chapter also introduced the topic, outlined the rationale for the investigation of HIV/AIDS risk and vulnerability, and identified the significance of the study and the distinct

contribution to knowledge that it makes. Background information such as demographic and socio-economic contexts; urbanization and migration; the education and health system, and political issues, all of which impact on the problem, have been described and followed by a summary of the legislation and policy context for protecting children's rights and welfare. The chapter concluded with a brief profile of each of the key organizations working with street children.

Chapter Two presents an extensive review of the literature. This chapter examines the risk factors that are associated with HIV/AIDS and STIs, and the vulnerability of children who live on the streets. The review of the literature revealed significant gaps in knowledge and generated the theoretically derived conceptual framework that, in turn, influenced the study design. The research questions and operational definitions used throughout the thesis are explained in this chapter.

Chapter Three provides the theoretical framework of the study that utilises public health approach.The chapter explains about public health and its link in Nepal with HIV/AIDS and street children.

In Chapter Four, the methodological approach, research design, methods and analytical process are described. The chapter outlines the use of a qualitative methodology to undertake the study, and the ways in which the rigour of the study was established. Researching such a sensitive topic raised many ethical issues, and the ethical procedures adopted in the study are also outlined in this chapter.

Chapter Five provides a reflective account of the partial researcher that emerged through the data collection process. In addition to highlighting the complexity of the study, the practice of reflexivity and reflectivity enables one to scrutinise the robustness of the study.

Chapters Six and Seven present the findings of the study. Chapter Six presents findings from the ethnographic phase of the research; it provides details of the

living conditions of the children and describes the behaviours and practices they displayed in their every-day contexts. In Chapter Seven, I discuss the findings from the in-depth interviews, the second phase of the study. The findings from each chapter are summarised separately under the themes and sub-themes related to HIV/AIDS and STIs risks and vulnerability. The key themes include the reasons that led to children becoming street children; their high-risk sexual behaviour while living on the street; the knowledge the children have regarding HIV/STIs and AIDS and their attitudes towards the problem, and their day-to-day living situation.

In Chapter Eight, HIV/STIs and AIDS risks to street children are outlined and discussed. This chapter draws the identifiable themes together from Chapters Six and Seven, and explores the causes and consequences of the risks and vulnerability of street children in relation to other studies on the topic. Emerging risks and vulnerability issues from the two methods of data collection are contextualised and lead to my assertion that this study presents an original model for understanding the risks street children face. I refer to this as the: *holistic model of the complete phenomenon of interlinking risks and vulnerability to HIV/STIs and AIDS as they affect street children.* The development of the web of sexual relationships, and the establishment of sexual networks that increase risk at a societal level, are also discussed. Drawing on the findings, this chapter also presents a new model for interventions and policy to address risk and vulnerability for children of the street.

Chapter Nine is a summary of the study's endeavour; this provides an account of the research process, methods and methodology, and summarises the broad themes regarding HIV/STIs and AIDS risk and vulnerability of children on the street. The contribution which the study makes to knowledge in this area is outlined. This chapter concludes with the challenges in tackling the issues of risk and vulnerability to HIV/AIDS and STIs, the implications of the work for policy

and practice, and makes recommendations for future research. The limitations of the study are also discussed.

2 LITERATURE REVIEW

2.1 Introduction

This chapter considers and reviews the national and international literature related to HIV/AIDS and STIs as they affect street children. I begin by discussing the operational terms and definitions used in the study and then move on to explore key studies on the topic and in doing so I highlight gaps in the literature that this study seeks to fill

2.2 Defintions of Terms

2.2.1 Definition of Street Children

In 1851, Henry Mathew first introduced the term street children in his book on London 'Street folk'. The term street children became popular only after UN introduced it in the 1979 'Year of the Child' campaign to raise awareness of global issues impacting children (Graham, 2011). The term 'street children' basically refers to children who spend most of the time on the street, living in poverty and under vulnerable conditions. However, the definition of street children has been greatly debated internationally because of categorisations based on their age group, their contact with family and the nature of any work they do, all of which cause difficulty in specifying street children in research.

No single definition has been universally accepted and different terms and definitions are used interchangeably (Graham, 2011). One of the reasons that makes universal consensus on the definition of street children difficult to achieve is because of cultural variations across countries (Graham, 2011) . Also there are differences in ideological and theoretical backgrounds of childhood specialists and the notion of childhood itself varies according to cultural and ideological positions. The term street children has negative connotations as it is associated with begging and robbery and while this is not an accurate depiction of most

children, many workers with street children are dissatisfied with the term (Graham, 2011). The new widely used term for street children is ‘children in street situations’ as it implies a temporary condition, is flexible enough to include children who both live and work on the street and the description does not make street life the defining characteristics of the child (Graham, 2011)

One definition of street children is that provided by an international network of organisations who work in the field: “any girl or boy who has not reached adulthood, for whom the street (in the broadest sense of the word, including unoccupied dwellings, wasteland, etc.) has become her or his habitual abode and/or sources of livelihood, and who is inadequately protected, supervised or directed by responsible adults” (Inter-NGO, 1985). This definition was formulated by Inter-NGO in Switzerland in 1983 and is similar to how the United Nations defines a street child: “any girl or boy for whom the street is his or her habitual abode and/or source of livelihood, and who is inadequately protected, supervised or directed by responsible adults” (International Catholic Children’s Bureau, 1985, p.58).

In 1986, UNICEF categorised street children based on their street status and their contact with family. These categories refer to children as being‘on’ the street and ‘of’ the street. Children ‘on’ the street are those who spend most of the time on the street but return home at night and live with their family. They contribute their earnings to their family. Children ‘of’ the street are identified as permanent residents of the streets with limited or no contact with their families. They leave their home and/or their families are disintegrated (Scanlon, Tomkins, & Scanlon, 1998). The definition of street children offered by UNICEF is widely accepted. As my aim was to study the risk and vulnerability of children who spend most of their time in the street and who have little contact with their family, I adopted UNICEF

definition of children ‘of’ the street described as children who live most of the time in the street without having contact with the family.

2.2.1.1 Clarifying Concepts- Children ‘of’ the street’

The literature review showed that a greater number of the children ‘of’ the street possessed drugs and were involved in high-risk sexual activity as compared to children ‘on’ the street’ (Inciardi & Suratt, 1997). A possible explanation for this could be that their involvement in drugs abuse and violence was due to being deprived of family protection and supervision (Inciardi & Suratt, 1997). A few researchers have included children both ‘on’ and ‘of’ the street in their studies (Kruger & Richter, 2003; Moon, Binson, Shafer, & Diaz, 2001; Olley, 2006; Raffaelli et al., 1993; Swart-Kruger & Richter, 1997; Tadele, 2003; Wutoh et al., 2006). The researchers who addressed both categories of street children found that children ‘of’ the street were a higher risk group for HIV/AIDS than children ‘on’ the street (Anarfi, 1997; Kruger & Richter, 2003; Moon et al., 2001; Raffaelli et al., 1993; Swart-Kruger & Richter, 1997).

Children ‘of’ the street were sexually active (Raffaelli et al., 1993) and had sexual relationships at an earlier age compared to children ‘on’ the street (Kruger & Richter, 2003). They were reported to have less knowledge and had a greater variety of misconceptions than children ‘on’ the street (Kruger & Richter, 2003; Swart-Kruger & Richter, 1997). They had multiple sexual relationships (Moon et al., 2001). Moon et al. (2001) reported that a significant number of children ‘of’ the street (95%) were likely to use tobacco and injection drugs, and inconsistent condom use was more significant and was more strongly associated with exchange of needles and unprotected sex. Moreover, Kruger & Richter reported that many children ‘of’ the street avoided seeking medical help from doctors and tried to ‘sleep off’ their illness, as compared to children ‘on’ the street.

It has been confirmed that children 'of' the street are identified as having less knowledge regarding transmission and prevention, including many serious misconceptions, negative attitudes and higher risk sexual behaviour (Anarfi, 1997; Dube, 1997; Gurung, 2004; Kruger & Richter, 2003; Lockhart, 2002; Pakistan Voluntary Health and Nutrition Association (PAVHNA), 2004; Ryckmans, 2008; Southon & Gurung, 2006; Swart-Kruger & Richter, 1997; Tadele, 2003). Moon et al. (2001) suggested however that there were no significant differences between children 'of' and 'on' the street regarding their number of sexual partners, frequency of using condoms and use of drugs, including intravenous drugs. And, these two groups are not mutually exclusive categories, since children may move, share and learn very quickly between these states (Young & Barrett, 2001). Therefore, while I adopted the term children 'of' the street for this study, the research provides understanding of risks and vulnerability of both groups of children. This approach is in line with my review of the literature which does not distinguish between these different groups.

2.2.1.2 Operationalising the Definition

Children 'on' and 'of' the street in this research were identified by asking the question *"Do you go to home to sleep?"* The respondents who slept on the street were considered as 'children *of* the street', whilst children who went to a home, or to a shelter run by welfare organisations, were considered as 'children *on* the street'. The emphasis (in italics) identifies these as distinct (though inter-related) categories. It is also important to be reminded of the distinct (but inter-related) categories of risks that street children are exposed to, as discussed earlier in the chapter. Here my emphasis on *pre-street* factors, *street* risk factors, *aggravating* risk factors and *perpetuating* risk factors indicates these as distinct clusters of risk factors that feed into each other. These concepts are presented in a theoretical model set out in chapter three. Henceforth, the term children 'of' the street in the research process is used interchangeably with children 'on' the street, street children, street boys and girls or young children.

2.2.1.3 Conceptualisations of Childhood

Although the study is of children, I have also included a number of young people (up to the age of 24 years). My reasons for this are both conceptual and methodological. As is widely acknowledged, childhood is a socially constructed phase of life (Morrow, 2011), influenced by cultural, historic and social factors. In Nepal, age (rather than other social markers, such as marriage) is the primary determinant of childhood, with children being considered to be in childhood until the age of 18 regardless of what roles and levels of responsibility or maturity they have reached. Fifty percent of Nepalese people are married as children, however they still retain the status of child (regardless of marital role and responsibility) until they reach the age of majority; this is because the legal age for marriage is 20 years (Newar, 2011). Despite this, the Ministry of Health and Population reports that approximately 23 percent of girls are married between the ages of 15 to19 years and in many rural areas girls may be married as young as 11 to 13. So that while girls can be married at a very young age (child marriage is common in Nepal), these girls are still considered children within the context of marriage until they are 20 (the legal age of marriage) and thus stay embedded within the system of patriarchal control (firstly as children under the control of parents and then as wives under the control of husbands and husband's families) (Luitel, 2001). Street children live within the broader context of a patriarchal society but do not live within a family structure of family patriarchal controls but then neither do they experience parental care or supervision. From the time they arrive on the streets and regardless of what age they are, they must become adults in the sense that they must fend for themselves and take complete responsibility for their own survival. The normal social rules about childhood as linked to age do not apply and for this reason, it was pragmatic to be flexible about the determination of age especially as many young people had not official record of birth and the age given was often an estimated guess.

There were methodological advantages too in taking a fluid approach to defining childhood; by including youth in the study, I was able to include the experiences of young people who had spent the greater part of their childhoods on the street, that is they had grown up on the street and their retrospective reflections together with their lived realities at this older age contributes to this notion of a *complete phenomenon.*

2.2.2 Defining Risks and Vulnerability in relation to HIV/AIDS

The terms risk and vulnerability have been used differently in different contexts by different scholars (Millstein & Felsher, 2001) and can be conceptualized and measured in many ways. We can examine the individual's risk and vulnerability by identifying those things that worry or concern the individual, as well as the anxiety that is generated by these concerns. We can also judge or identify whether people recognize the risks in a given situation or how someone accurately judges specific risk (Millstein & Felsher, 2001). Risk judgements may focus on situations (is having unprotected sex dangerous?) or on possible outcomes (what is the chance you will get HIV?) (Millstein & Felsher, 2001). Risk judgement reflects magnitude assessments of risks and focuses solely on an outcome. When assessments of risk do not involve magnitude estimates, this is termed as risk identification. Risk identification and judgement are the direct ways to tap assessments of risk. When assessments focus on the degree of anxiety, or concern individuals have in particular situations, this is referred to as perceptions of vulnerability. Like the more cognitive aspects of risk perception vulnerability can be identified by the indication of the feeling of experiencing negative outcomes. For example, an individual may have feelings of vulnerability to HIV. Other behavioural related risks, such as getting sick from drinking alcohol or acquiring a STI can also generate feelings of vulnerability (Millstein & Felsher, 2001). The literature reflects the difficulty in compare the concepts of risk and vulnerability across different studies. Rogers (1996) defined vulnerability as someone who is

susceptibility to health problems, harm or neglect. In this sense, the notion of vulnerability is interpreted as the danger, threat or harm to the person. Any individual experience of vulnerability creates stress and anxiety which affects physical, psychological and social functioning. Vulnerability is affected by personal factors as well as factors within environment.

Rogers (1996) states that degree of vulnerability varies as one individual may not perceive vulnerability (threat to harm or danger) in a specific situation, while another person may be acutely aware of feeling vulnerable in the same situation. Perception of the degree of the vulnerability depends on the amount of control one feels over the situation (Rogers, 1996). Vulnerability is also situational and depends on the person's environment (Rogers, 1996). Children who live on the street face threats of illness or harm related to their situations in ways that might not be experienced by children living at home or in a different environment. Therefore, children's vulnerability to HIV starts in the street.

Risk factors that are responsible for vulnerability include both modifiable risk factors and non- modifiable risk factors. Age, gender and ethnicity are the factors that no one controls. However, Rogers (1996) suggests that poverty, low education and level of social support are potent risk factors of vulnerability that are modifiable. Further, vulnerability also occurs due to non modifiable risk factors such as genetic predispositions to illness or poor coping skills; and modifiable risk factors that arise due to conditions occurring in the environment such as homelessness or abuse. Societal attitudes, unemployment, marital harmony and discord affect the functioning of the individual within the environment, and are risk factors for vulnerability. The modifiable factors of education, income, employment and the level of social support are the environmental factors that influence health. Thus, the environment can have either detrimental effect on the person's health or it can promote health (Rogers, 1996).

So, while risk and vulnerability are defined in many ways, the meaning behind these concepts is similar. For the purposes of this study we can understand that 'risks are the external factors, which cause problems, harm or threats; while vulnerability is the probability or susceptibility of becoming infected with HIV/STIs and/or of developing AIDS'. This study has used the meaning of risks and vulnerability as used in the context of HIV/AIDS research in a report by (UNAIDS, 2008; WHO, 2008).

The report shows that risks include behavioural risk factors, social, cultural and, economic factors that may increase or decrease vulnerability to HIV. Other risks factors that increase vulnerability to HIV may be gender disparities, inheritance, or violence. The report also suggests that social discrimination and stigma are considered as one of the major socio-cultural determinants that increase vulnerability to HIV WHO, (2008). The definition of risk and vulnerability that I adopt in this study is related specifically to HIV/AIDS and is in line with the definition proposed by UNAIDS (2008, p. 65):

> "risk is defined as the probability or likelihood that a person may become infected with HIV. Certain behaviours create, increase, and perpetuate risk. Examples include unprotected sex with a partner whose HIV status is unknown, multiple sexual partnerships involving unprotected sex, and injecting drug use with contaminated needles and syringes. Vulnerability results from a range of factors outside the control of the individual that reduce the ability of individuals and communities to avoid HIV risk. These factors may include: (1) lack of knowledge and skills required to protect oneself and others; (2) factors pertaining to the quality and coverage of services (e.g. inaccessibility of service due to distance, cost or other factors); and (3) societal factors such as human rights violations, or social and cultural norms. These norms can include practices, beliefs and laws that stigmatize and disempower certain populations, limiting their ability to access or use HIV prevention, treatment, care, and support services and commodities. These factors, alone or in combination, may create or exacerbate individual and collective vulnerability to HIV."

This definition of risk and vulnerability is widely used and has become a standard definition for both policy and practice in work on HIV/AIDS and is appropriate for this study.

The Literature - Street Children and HIV-AIDS and STIs

Since children 'of' the street and children 'on' the street are not mutually exclusively categories and both are at risk of, and vulnerable to, HIV/AIDS and STIs (Moon et al., 2001) literature on both groups of children has been reviewed. The review is organised and presented under the main themes identified in the literature: reasons for being on the street; sexual behaviour, prostitution and drug abuse; knowledge regarding HIV/AIDS and STI transmission, prevention and treatment, and attitudes towards people living with HIV/AIDS. The intention was to review literature which was as current as possible and from developing countries which may face similar socio-economic constraints to Nepal. These were the main criteria that guided the selection of the published literature (both quantitative and qualitative studies are included) while the key words used in the search were identified from the research aims.

2.3 Reasons why the Children leave Home

Children may be forced to become street children, may be lured to life on the streets or may choose to be on the streets either to escape hardships in their home life or for survival purposes. The different reasons are described below.

2.3.1 Familial factors

Familial reasons, such as changes in the composition of the family, death of a parent, remarriage, separation or desertion, are said to be one of the factors that force children onto the streets in Bangladesh (Greska, Rie, Islam, & Maki, 2007). Changes in the composition of the family which push children onto the street,

maybe due to family breakdown, death of a parent or divorce, were also reported in Ghana (Baffoe, Dinther, Saakwash, & Nathan, 2002; Orme & Seipal, 2007) and in Zambia (Lemba, 2002). Similar findings were reported in other studies in Pakistan (Iqbal, 2008) and in Brazil (Raffaelli, Koller, Reppold , Kushick, & Krum, 2001).

Some empirical studies have also demonstrated that familial reasons are one of the main causes that push children onto the street. In a study by Felsham, in Colombia, almost all street children, that is, 97% of the children, abandoned their home due to a non-conducive family environment (Felsman, 1989). According to Berge-Simenel (2004) in Accra, Ghana, 86% of respondents were pushed onto the street due to familial reasons, while the other 14% of street children registered in the centre were connected with poverty. Greska et al (2007) in Dhaka, Bangladesh, illustrated that most of the children in their study (35%) left home due to reasons connected with the family, such as the composition of the family, death of a parent, remarriage, or desertion, while 30% were abused and 29% left home due to the desire to earn money.

Davies (1999) states that family breakdown produces a wide variety of stresses to children, including feelings related to loss of parents, loss of support, changes in home and school, financial adversity, parental depression and new parental relationships; stress is also influenced by abuse, and child neglect, all of which compound family difficulties and pushs children towards life on the street.

2.3.2 Abuse and neglect

Abuse has been reported by a number of studies in different countries as being a contributing factor: in Brazil (Abdelgalil, Gurgel, Theobald, & Cuevas, 2004), in Egypt (Bibars, 1998) and in Turkey (Duyan, 2005); sexual abuse (Bibars, 1998), and verbal abuse (Duyan, 2005), were all cited as reasons which pushed children onto the street. Bibars (1998) further reported that some parents who intentionally

injured or maimed their children (as this improved opportunities for begging) often abandoned their children in the street.

Empirical findings also report that physical and/or sexual abuse are primary reasons for street children to leave home. Farber, McCoard, Kinast & Faulkner (1984) reported that 78% of the respondents in their study left home as a result of physical and or sexual abuse. Similarly, Nye (1980) found that 40% to 50% of street children had escaped from severe sexual and physical or emotional abuse at home. Also, the majority of the street children in Bangladesh left home due to abusive behaviour in the home; 30% of the street children were abused or oppressed (Greska et al., 2007), and 78 out of 80 respondents were physically, sexually and emotionally abused (Conticini & Hulme, 2006).

Iqbal (2008), in Pakistan, gathered qualitative information about how children had come to live on the street. Physical violence, strict family discipline and corporal punishment commonly appeared as the main reasons that brought them onto the street, and being beaten up by a stepfather was commonly reported (Iqbal, 2008). Similarly, several reports found that children were abused or neglected following a parent's remarriage and the presence of a stepfather or stepmother in Bangladesh (Conticini & Hulme, 2006; Greska et al., 2007) and in India (Singh, Sareen, Ojha, & Sareen, 2008). Step-parents were likely to be the main perpetuators of abuse as many children were found to leave a home with one step-parent (Conticini & Hulme, 2006; Greska et al., 2007; Iqbal, 2008; Singh et al., 2008). Sexual and physical abuse by a husband was also reported by very young married street girls in Dhaka, Bangladesh (Conticini & Hulme, 2006). Bibars (1998), in Egypt, found that abusive behaviour of step-parents as well as real parents pushed children onto the street, and fathers or uncles were reported as first line perpetuators by street children who were sexually abused.

Similarly, most of the children in studies in Nepal reported that they were beaten by their parents, and included domestic violence and family conflict as reasons for

leaving home (Dhital et al., 2002; Rai et al., 2002). As in other countries, children reported that step-parents were the main perpetuators, and more than two thirds of street children were abused by a stepfather or stepmother (Subedi, 2002).

Tournon (2008) stated that the presence of a stepfather or stepmother created a lack of proper family environment, resulting in children feeling neglected and pushed onto the street. Children, driven by despair and frustration at being abused and neglected by family members, abandoned their homes and sought shelter in the street. The literature review thus confirmed that domestic physical abuse was often associated with step-parents (Bibars, 1998; Conticini & Hulme, 2006; Greska et al., 2007; Iqbal, 2008; Singh et al., 2008; Subedi, 2002; Tournon, 2008).

2.3.3 Drug abuse and neglect

Both qualitative and quantitative studies have shown children's exposure to serious abusive issues from alcoholic or substance-abusive parents. Dhital et al. (2002) in Nepal reported that 57% of street children expressed various types of impact from alcoholic parents, such as scolding, beating, punishment, lack of food, and consequently being pushed from home. A number of researchers explored the relationship between parental substance abuse and child neglect. Research in ten European states showed that children of drug and alcohol abusive parents suffered from physical and emotional abuse, and that they had very little support available, other than occasional support from family members (Velleman & Templeton, 2008).

Ennew (1994) explored the weak relationship between children and alcohol and drug-addicted parents in Turkey. Velleman & Templeton (2007) in Aracaju, Brazil, suggested the correlation of alcohol and drug abuse as the cause of domestic abuse. Abdelgalil et al. (2004) in Brazil emphasized that alcohol and drug use among step-parents was a precipitating factor for family disruption. Alcoholism can be the focus of family conflict, and if this is accompanied by

additional risks like housing problems, poverty, unemployment and a low level of education, then the risk of motivating children to leave home is further increased (Cleaver, Unell, & Aldgate, 1999; Duyan, 2005; Velleman & Templeton, 2008). A drug and alcohol-abusive family is a triggering factor that results in family disintegration (Abdelgalil et al., 2004; Inciardi & Suratt, 1997; Martins & Ebrahim, 1993), and was found to be one of the causes of leaving home for street children in Rio de Janeiro and Sao Paulo (Inciardi & Suratt, 1997; Martins & Ebrahim, 1993).

An alcoholic father was one of the reasons that children left home in Nepal. Rai et al. (2002) and Tuladhar (2002) illustrated that 16% of the participants in Kathmandu, Nepal, left home due to an alcohol-abusive family. Also, Farhat (2004) in Pakistan reported that 9.7% of the participants mentioned drug addiction as a cause of leaving home. Domestic abuse associated with alcohol misuse was often found to be the worry for children that caused most upset (Nicholas & Rasmussen, 2006; Ritter, Stewart, Bernet, Coe, & Brown, 2002; Velleman & Orford, 1999) and motivated them to leave home.

2.3.4 Economic issues

Economic issues were identified as one of the important factors that pushed children onto the street. Aptekar (1988) in Cali, Colombia, and Rizzini & Lusk (1995) in Latin America, found that the majority of street children left home due to economic reasons. Therefore, almost all engaged in some form of economic activity in the street. Some researchers carried out empirical studies and found that economic or family factors were the most significant factors that pushed children onto the street. Research conducted by Farhat (2004) in Pakistan showed that 26.4% of respondents were pushed onto the street due to economic reasons.

UNICEF (2001) asserted that poverty was the major leading cause of children being on the street, and this was supported by WHO (2000). Several studies

identified poverty as the main, or the only, cause that pushed children onto the street. Research in Indonesia found that poverty was the dominant factor behind the emergence of children onto the street. Though the terms expressed by street children were found to be dissimilar, the importance of economic factors was supported by their economic motivation to earn money for a better chance of survival and self-reliance (Greska et al., 2007). Poor parents could not meet the needs of a growing family. This forced children onto the streets to work, to increase family income and to maximize the purchasing power of existing income by reducing the family size (Silva, 1991). Similarly, Rai et al.(2002) in Nepal reported that some street children left home in search of employment due to poor economic conditions.

Contrary to these findings, Conticini and Hulme (2006) in Dhaka, Bangladesh, illustrated that not all the street children were from economically poor households, but ranged from severely poor to well-off households. In addition, Tournon (2008) reported that not all the street children in Nepal were from poor families. Tournon further stated that about half of the street children's families were involved in income-generating activities, such as farming or skilled work. Abdelgalil et al (2004) supported this view, stating that poverty was not a sole contributory factor in street children leaving home, as other poor families in the neighbourhood managed to retain their children at home. Similar findings were also reported from Rio de Janeiro (Martins & Ebrahim, 1993). Matchinda (2002), in Cameroon, also supporting these views, suggested that the link between street children and family structure and parenting style reflects only a weak association between leaving home and poverty.

It is supported by these studies that step-parents, especially stepfathers, were more likely to be abusers than biological parents, and to cause children to be on the street (Conticini & Hulme, 2006; Greska et al., 2007; Iqbal, 2008; Singh et al., 2008; Subedi, 2002; Tournon, 2008). Further, Osterling (2008) stated that poverty typically does not have a direct effect; instead it indirectly affects the children

mentally, via a negative impact on certain family processes, including parenting behaviour and family conflict and violence. It is primarily factors such as single parent status, ineffective parenting, parental depression, family dysfunction and overcrowded or poor housing that push children onto the street. Similarly, various other studies have explained that poverty is not a direct cause in its impact on children, but a contributing factor for child neglect (Crosson-Towner, 2005; McSherry, 2004) and child abuse (Frederick & Goddard, 2007; Guterman, 2001). Also, Stevenson (1998) reported that the majority of families living in poverty did not abuse children. Supporting these views, Tournon (2008) reported that children did not leave home if they had been provided with a proper family environment, care and love. Therefore poverty is only one important factor in a complex web of factors of abuse that push children onto the street.

2.3.5 Social factors

Previous studies have shown the issue of traditional family structures to be one of the factors that push children onto the street. Duyan (2005) states that street children in Turkey moved onto the street due to extended and overcrowded families; many street children had five or more siblings. Similarly, Aksit et al. (2001) reported that children moved onto the street due to large nuclear families with an average household size of 8 (7.8). Singh et al.(2008) illustrated that 76% of street children were living in joint families and only 24% of street children were living in nuclear families. Joint families imposed economic burdens on the household, which was a reason why children felt compelled to adopt life on the street. Similarly, most of the respondents (86%) had six siblings (Pakistan Voluntary Health and Nutrition Association (PAVHNA), 2004). The average family size of the total selected sample of 50 street children in Cairo and Alexandria was 5.94 persons in the family (United Nations Office for Drug Control and Crime Prevention (UNODCP), Undated).

Most of the street children in Nepal were from a family size of six (Subedi, 2002). 57% of the total respondents reported that they had five to seven family members, and more than three quarters of the street children originated from a family size of more than four. The distribution pattern of respondents by their family size suggested that a large family size may be one of the reasons that pushed children onto the street. Duyan (2005) said that an extended family structure was one of the major factors in children being pushed onto the street, but in contrast, Subedi (2002) suggested that it was difficult to conclude that a larger family size was exclusively associated with the phenomenon of street children, as 23% of the respondents were from a family size of 1 - 4. However, Subedi suggested that a larger family size might have implications on the availability of sufficient food, care and support, and finances, a lack of which may push children onto the street.

2.4 Street Risks to Street Children

The literature showed that children on the street engaged in various forms of risky behaviour; these are discussed below.

2.4.1 Sexual behaviour

Street children have a 10 to 25 times higher HIV seroprevalence rate than other groups of children in many countries (Wutoh et al., 2006). The chances of exposure to HIV among street children are reported as being due to the fact that they become sexually active earlier than other any other group of adolescents, they have multiple sexual relationships and unprotected sex, they are reportedly raped or forced into sexual relationships and have inadequate information about sexuality (Wutoh et al., 2006).

Street children were found by (Anarfi, 1997; Pakistan Voluntary Health and Nutrition Association (PAVHNA), 2004) to be sexually active at an early age, as they were exposed to early sexual experience at below 10 years. The average age

of sexual initiation of street children was 12 years in some countries (Lockhart, 2002; Swart-Kruger & Richter, 1997). Similarly, Raffaelli et al. (1993) reported that the mean age of first sexual intercourse was 11.2 years for boys, which was earlier than for street girls. In Nepal, street children were also found to be sexually active at an early age: at 13 years for boys and still lower for girls, at 11 years (Gurung, 2004; Subedi, 2002). Southon & Gurung (2006) reported that the age of first sex ranged from as early as seven years, to 17 years, and the average age of first sex was 13 years.

Multiple sexual practices and multiple sexual relationships were frequently observed among street children (Anarfi, 1997; Gurung, 2004; Kruger & Richter, 2003; Lockhart, 2002; Moon et al., 2001; Raffaelli et al., 1993; Southon & Gurung, 2006; Swart-Kruger & Richter, 1997). Street children engaged in various sexual practices like prostitution; rape; 'survival sex'; experimental sex among themselves, and sex with girlfriends. Boys engaged in practices that included various forms of non-penetrative public masturbation, as well as unprotected penetrative oral, anal or vaginal sex (Kruger & Richter, 2003; Southon & Gurung, 2006; Swart-Kruger & Richter, 1997); this included group sex practices among boys and girls (Gurung, 2004; Southon & Gurung, 2006), and masturbation and fondling (CPCS, 2007; Southon & Gurung, 2006; Subedi, 2002).

Homosexuality, lesbianism, oral and anal sex were frequently reported by street children (Anarfi, 1997; Raffaelli et al., 1993). Moon et al. (2001) reported that lesbianism among street girls was higher than homosexuality among boys, though both homosexuality and heterosexuality were common practices. The statistical data illustrated that more than 28% of females and more than 8% of males had same sex practices, whilst 82% of females and 78% of males had opposite sex practices. Wutoh et al. (2006) also stated that females were more likely to have sex; the majority of them had peers who reported having sex regularly, and a higher percentage of females were involved in different sexual activities compared to males while on the street. Wutoh illustrated that more than three quarters of the

females (74%), but below half of the boys (42%), reported having sex in the street. Street girls appeared to be more sexually active than boys (Moon et al., 2001) and undertook high-risk sexual behaviour, experienced forced sex and were involved in prostitution (Southon & Gurung, 2006); also, female street children may be more vulnerable to sexual exploitation in spite of their adequate knowledge regarding HIV transmission (Wutoh et al., 2006).

In some other countries, however, homosexuality was found to be a more common practice than lesbianism and heterosexuality, such as in Pakistan (Pakistan Voluntary Health and Nutrition Association (PAVHNA), 2004) and in Tanzania (Lockhart, 2002), where bisexual behaviours were also reported as being low. In Pakistan, most of the street children were homosexual; 69% of street boys had males as their regular sexual partners and 63% played a passive role. Multiple sexual relationships were very common in Pakistan: 85% of street boys reported multiple partners and even had more than four, and 6% had sexual partners who were commercial sex workers. A slightly lower percentage of street boys expressed having sexual relations with females who they considered just as friends or acquaintances, or with strangers.

Street children are exposed to various forms of sexual practices and their sexual partners are widespread, both from inside their social circle and outside. Lockhart (2002), in Tanzania, found harsh and coarse sexual activities among street boys. Street boys in Tanzania practiced anal sex at as early as 11 years old, but lessened the homosexual practice as they approached the age of 18, and increased their heterosexual encounters after the age of 12. All the street boys had experienced both homosexual and heterosexual practices by the age of 18. The critical period when the homosexual and heterosexual activities overlapped as they grew older presented a risk of contracting HIV/AIDS and other STIs from the general population, as they had an extended range of sexual partners (Lockhart, 2002).

Studies showed that street children had multiple sexual relationships and that their sexual partners came from both within their circle and from different social groups outside (Anarfi, 1997; Gurung, 2004; Lockhart, 2002; Raffaelli et al., 1993; Southon & Gurung, 2006; Tadele, 2003; Wutoh et al., 2006). Wutoh et al. (2006) reported that more than half of the females and a few males had had sexual intercourse with strangers. Beazley (2002) found that street girls socialised with a variety of different groups, including university boys, rickshaw drivers and street traders. Street boys, street girls, prostitutes and strangers including schoolgirls were also sexual partners of the respondents (Lockhart, 2002). Many street boys' first sex was with commercial partners (Gurung, 2004; Southon & Gurung, 2006), and 67% of the respondents had had commercial sex workers as their sexual partners (Gurung, 2004). Street-based peers, homosexuals, older youths and tourists, street girls, street-based sex workers, or cabin or restaurant workers were found as sexual partners of street children in Nepal (Southon & Gurung, 2006).

Unprotected sex has been frequently reported among street children in different countries (Gurung, 2004; Kruger & Richter, 2003; Lockhart, 2002; Moon et al., 2001; Southon & Gurung, 2006; Swart-Kruger & Richter, 1997; Tadele, 2003; Wutoh et al., 2006). Multiple partners, often of both sexes, were common in South Africa. It was common practice for street boys to have two girlfriends at a time and not to use condom in these relationships. Their girlfriends also practiced 'survival sex' without the use of condoms (Kruger & Richter, 2003).

Moon et al. (2001) illustrated that significant numbers of the street children were in primary relationships. Street girls had many regular sexual partners compared to boys (Anarfi, 1997; Moon et al., 2001). 58% of males and 76% of females (Moon et al., 2001), and 34% of street girls and 27% of street boys (Anarfi, 1997), were reported to be in primary relationships. Street children commonly reported oral and vaginal sex in primary relationships, and little use of condoms. Both males and females reported less sexual activity but higher rates of condom use with non-primary relationships than with primary partners (Moon et al., 2001).

Tadele (2003) said that primary relationships might be promiscuous and activity with such partners to a large extent jeopardises the use of condoms. This suggests that steady relationships are as dangerous as more temporary ones (Tadele, 2003), therefore relationships with permanent partners are a risk factor for HIV/STIs.

Condom practice was very low in Nepal (Gurung, 2004; Southon & Gurung, 2006). CPCS (2007) illustrated that only 36% of the respondents used condoms during sexual intercourse. Street children were frequently found to have STIs. Southon & Gurung (2006) suggested that large numbers of street children were likely to have untreated STIs. Tadele (2003) reported that most children had had gonorrhoea at least once in their lifetime, and they had had sexual intercourse at the time of infection. Further, Wutoh et al. (2006) illustrated that 72% of males and 45% of females did not use preventive methods for STIs or pregnancy in their last sexual activities; these figures confirm the high level of unprotected sex among street children.

2.4.2 Prostitution and sexual abuse

Prostitution and sexual abuse were found to be rampant among children on the street (Olley, 2006; Ryckmans, 2008; Subedi, 2002; Tournon, 2008) and children were potentially at risk as a result of sexual abuse and prostitution (Ryckmans, 2008; Subedi, 2002; Tournon, 2008). Prostitution was also reported among street children in other countries (Kruger & Richter, 2003; Lockhart, 2002; Swart-Kruger & Richter, 1997; Tadele, 2003). 'Survival sex' was also disclosed (Swart-Kruger & Richter, 1997; Tadele, 2003). Iqbal (2008) stated that sexual abuse, including forced intercourse, beating on the genitals, having objects inserted, prostitution, masturbation, pornography and anal intercourse were all common practices among street children. Also, they were constantly subjected to exploitation (Venazi, 2003).

Olley (2006) demonstrated that 49% had had sexual relations with sex workers and 11% had been raped; of those, 83% of the females had been raped and 100% were sex workers, compared with 42% of males who engaged in sex work. Subedi (2002) and Ryckmans (2008) in Nepal found that the most common forms of abuse were masturbation, oral and anal sex. 29% of respondents had been made to perform anal penetration, 29% had been made to perform oral sex to adults and 40% had been made to touch the abuser's genitals or masturbate them (Ryckmans, 2008). Ryckmans also showed that street children were abused considerably more in street locations. Supporting the report, Tournon (2008) illustrated that about half of the participants, or 46% of street children in Nepal, were sexually abused. Ryckmans (2008) stated that street children had reportedly experienced rape. Rape among street girls was also reported by Subedi (2002).

Prostitution and abuse among street children were not limited to within the group; they engaged with a variety of partners both within and outside their social group for various reasons (Anarfi, 1997; Beazley, 2002; Kaime-Atterhog, Lindmark, Persson, & Ahlberg, 2007; Raffaelli et al., 1993; Ryckmans, 2008). Street boys engaged with prostitution because they thought buying sex was cheaper than having regular sexual relationships, and street girls used prostitution for their survival (Anarfi, 1997). Both street boys and street girls engaged in sexual activities typically for money, food, clothing and other materials (Beazley, 2002; Raffaelli et al., 1993), as well as to feel protection, to obtain alcohol, drugs or food and for entertainment (Beazley, 2002).

In Ryckmans's (2008) study in Nepal, 40% of sexually abused children reported that the perpetrators were street children and adults, whilst 40% were people from various other social categories, including 20% foreigners; Ryckmans also found that females were potential abusers that had demanded boys to penetrate them. Samu (2003) in India also reported that foreigners were abusers. Both male and female foreigners were reported as potential abusers (CWIN, 2003; Subedi, 2002) in Nepal. A further quantitative report demonstrated that 67% of the respondents

had had commercial sex workers as their partners in Nepal (Gurung, 2004). Risky sexual practices with multiple partners were reported by street children, which occurred either forcefully or for fun (Milky & Ahammed, 2000). Wutoh et al. (2006) found that street girls had experienced being forced into their first sexual intercourse, while the boys' first sex experiences were usually for fun.

Kaime-Atterhog et al. (2007), in Nakuru, Kenya, illustrated that street boys had multiple sexual relationships and networked widely for sexual purposes, as their sexual partners were schoolgirls and street girls from other areas. They were also reported to have participated in infrequent homosexual activities for drugs and glue. Street children exchanged sex not only for money: many used sex as a way to gain food, affection and attention (Scheper-Hughes & Hoffman, 1994).

Swart-Kruger & Richter (1997) suggested that street children in South Africa engaged in prostitution and 'survival sex'. Rape was a constant threat from older boys, and more than half of the boys reported experience of rape. Kruger & Richter (2003) found that South African street children had experienced survival and forced sex, as well as prostitution. Prostitution was seen as the best way to gain money for boys in South Africa. Lockhart (2002) also found that street boys engaged in 'survival sex', which was for direct acquisition of material resources. Swart-Kruger & Richter (1997) also stated that street children in South Africa were under a constant threat of rape by older street boys. As in other countries, Subedi (2002) and Tournon (2008) in Kathmandu, Nepal, reported that child prostitution was a growing concern that involved prostitution for money.

Berezina (undated) disclosed that street girls were sexually abused by security forces, and that in some cases police blatantly raped girls. A similar report, evidenced by a study of street children in Brazil, stated that both street girls and boys in Brazil were raped by police and others; they were used for passive anal intercourse (Scheper-Hughes & Hoffman, 1994).

Tadele (2003) suggests that prostitutes in developing countries believe themselves to be powerless in forcing their clients to use condoms. Commercial sex in poor countries also involves a mix of emotional attachments, and even exchange of gifts and steady relationships. In a situation where, for most prostitutes in developing countries, prostitution and alcoholic drinks usually go together, consistent condom use by either party is not expected (Tadele, 2003). Also, Orme & Seipal (2007) suggested that exploitation and sexual abuse makes the victims vulnerable to HIV/AIDS and other debilitating diseases. One empirical study illustrated that, among 52 HIV infected street children in Rio de Janeiro, Brazil, 28% had had presumably forced anal intercourse. Of those, 63% had had anal intercourse and 57% had been forced to have anal intercourse by older street children (Inciardi & Suratt, 1997).

2.4.3 Drugs and alcohol abuse

Moon et al. (2001) said that intravenous drugs use was significantly common among street children, and that 93% to 95% of them were likely to use tobacco and inject drugs. In Indonesia, Beazley (2002) reported high-risk behaviour among street girls, as they used pills, cigarettes and cheap alcohol. They administered morphine and heroin through razor cuts in their arms, mixed it with their blood and then sucked. Similarly, use of drugs among street children was rampant in Nepal, in that 95% of the respondents used glue and some were absolutely addicted to dendrite, which they sniffed throughout the day to become high (Rai et al., 2002). Significant numbers were polydrug abusers, using more than one kind of substance such as cigarettes, glue, hashish, marijuana, tablets, pills and tidigesic (CPCS, 2007; Rai et al., 2002), including intravenous drugs (CPCS, 2007; Rai et al., 2002; Tournon, 2008).

Street children in Nepal were reported to have a high exposure to alcohol and drugs (CPCS, 2007; Dhital et al., 2002; Rai et al., 2002; Tournon, 2008), and injecting drugs was also practiced (CPCS, 2007; Rai et al., 2002; Southon &

Gurung, 2006). It was found that both street girls and boys used injection drugs and shared needles: 100% of street girls and 53% of street boys injected, and 60% of boys and 33% of girls reported sharing needles (Southon & Gurung, 2006). Also, 67% of boys and 40% of girls used alcohol (Dhital et al., 2002). Moon et al. (2001) in San Francisco illustrated that there were no significant differences between males and females in the use of drugs and sex: their study found that 88% of males and 74% of females had had sex while drunk, and 92% males and 89% of females reported having sex while high.

Several studies showed that street children began to use alcohol and drugs at a very early age. Street children in Nepal started to use drugs and alcohol at the age of five, according to Dhital et al. (2002) and Ryckmans (2008). Also, CPCS (2007) suggested that street children in Nepal used hashish, alcohol and glue from the age of five. The earliest reported age for use of tablets/pills was eight years, and for intravenous drug use was 10 years; only 3% of IDUs reported using drugs before the age of 12. Usually street children started to inject drugs at an age ranging from 12 to 17 (Southon and Gurung 2006); they began to use substances at the age of 10 - 12 (Tournon, 2008).

Street children engaged in sex under the influence of drugs (CPCS, 2007; Kruger & Richter, 2003; Moon et al., 2001; Raffaelli et al., 1993; Swart-Kruger & Richter, 1997; Wutoh et al., 2006). Nearly half of the respondents had had sex while under the influence of alcohol or drugs, which was shown to be 43% of the boys and 49% of girls (Raffaelli et al., 1993). Similarly, 60% of the street children in South Africa had had sex under the influence of substances and alcohol (Kruger & Richter, 2003).

Raffaelli et al.(1993) says that drug use is associated with unprotected sex, in that it provokes them to have sex and gives them courage to approach potential partners. Also, Tadele (2003) suggests strong associations between alcohol use and prostitution, in that substance use and drinks made street children more likely

to have sex and to engage in unprotected sex. Street boys reported that they forgot to use a condom or used one improperly when they were drunk. Kruger & Richter (2003) also reported that street children practiced high-risk sexual behaviours under the influence of drugs or alcohol, and that the majority of street children were more likely to have sex and less likely to use a condom when they were high. Kruger & Richter (1997) further suggested that intoxication provoked high-risk behaviour and also made them more vulnerable to rape.

Further, the threat of HIV/STIs increases with the use of alcohol and drugs; as Anarfi (1997) noted, sexual behaviour would be reckless and sexual intercourse could take place at any time and in any place if the partners were under the influence of drugs. Similarly, Chan (2009) reported that children drinking alcohol or using drugs were more likely to have multiple sexual partners and refrain from safer sex practices because they were less likely to use condoms. Also, Southon & Gurung (2006) stated that street children who reported having had sex while under the influence of drugs or alcohol were four times more likely to be engaged in high-risk sexual behaviours than those who had not had sex under the influence of drugs or alcohol. Therefore, alcohol and drug use plays a double role in the risk of HIV/AIDS/STIs. It not only presents the threat of HIV/STIs, but is also a risk factor for AIDS, since there is considerable evidence that alcohol and drugs weaken the immune system, thereby increasing the susceptibility to infection and diseases (Corwin, undated). Once infected, substance abusers have a higher vulnerability to virus progression (Corwin, undated), which in turn causes AIDS to flare up faster. Also, intravenous drugs play a double role in the danger of acquiring HIV/STIs, both in the effects on behaviour, as with alcohol and other drugs stated above, and in transmitting HIV directly through sharing syringes.

The extent of injection drug use among street children was not always common and sometimes not even reported, but they were still exposed to a high risk through their high-risk sexual behaviour in practicing unprotected penetrative sex, regardless of their injection drug-using behaviour (Kruger & Richter, 2003;

Tadele, 2003). This was supported by the statistical data, which illustrated high-risk sexual behaviour among 172 street children, where none of the respondents were acquainted with intravenous drugs (Riihiner, Holmgren, Inglesi, & Ommundsen, 1994).

2.5 Aggravating Risk Factors

The knowledge that the street children have regarding HIV/AIDS and STIs transmission and prevention is discussed below.

2.5.1 Knowledge of HIV/AIDS and STIs transmission

Literature about knowledge of HIV/AIDS showed that most of the children on the street had heard of AIDS (Anarfi, 1997; Gurung, 2004; Kruger & Richter, 2003; Lockhart, 2002; Pakistan Voluntary Health and Nutrition Association (PAVHNA), 2004; Southon & Gurung, 2006; Swart-Kruger & Richter, 1997; Tadele, 2003; Wutoh et al., 2006). Anarfi (1997) illustrated that 93% of the respondents had heard of AIDS and that the level of HIV awareness was higher in males (96.7%) than females (87.8%) in Accra. On the other hand, Wutoh et al. (2006) found that HIV transmission knowledge was higher in females (88%) than males (77%). CPCS (2007) found that about 38% of the street children in Nepal did not know about HIV/AIDS.

Studies have shown that the majority of the street children had heard of AIDS, and some knew the major modes of transmission, but that nearly half of the respondents did not know about transmission (Anarfi, 1997; CPCS, 2007; Gurung, 2004; Kruger & Richter, 2003; Lockhart, 2002; Southon & Gurung, 2006; Swart-Kruger & Richter, 1997; Tadele, 2003; Wutoh et al., 2006).

Most street children knew that HIV was transmitted through sexual intercourse (Anarfi, 1997; Gurung, 2004; Lockhart, 2002; Pakistan Voluntary Health and

Nutrition Association (PAVHNA), 2004; Southon & Gurung, 2006; Tadele, 2003; Wutoh et al., 2006). PAVHNA (2004) illustrated that the majority of street children (78.6%) said sexual intercourse was a main mode of HIV transmission. The second most frequent response was sharing of a syringe (21.9%), and that was followed by blood transfusion and mother-to-child transmission. HIV transmission knowledge was lower among street children in Accra (Anarfi, 1997), where half of the respondents were not able to report two modes of HIV transmission and one quarter of respondents were not able to name any modes of HIV transmission. However, Anarfi stated that sexual intercourse, sharing of syringes, blood transfusion and mother-to-child transmission were the most common responses by street children regarding HIV transmission.

Wutoh et al. (2006) found that the majority of street children (80%) had correct knowledge of at least one mode of transmission, including unprotected sex, use of contaminated needles and razor blades. Statistical data showed that 45% of respondents reported unprotected sex, 25% reported unprotected sex as well as infected blades and 4% reported unprotected sex and needles. 6% of the participants reported that personal items including infected blades could transmit HIV, and one fifth of the respondents reported having no knowledge of how it was transmitted (Wutoh et al., 2006). Similarly, unprotected sex, sharing of needles and blood exchange with an infected person were the common responses by street children of Nepal on the modes of transmission of HIV (Gurung, 2004; Southon & Gurung, 2006). Tadele (2003) found that knowledge about HIV/AIDS was relatively low among street children, and responses were not uniform and were fragmented. Tadele said some participants were relatively well informed about at least one way in which HIV was transmitted, while some could not respond with anything more than that AIDS was a punishing disease.

In South Africa, Kruger & Richter (2003) and Swart-Kruger & Richter (1997) reported that most of the street boys had heard of AIDS as an incurable sexually transmitted disease, but that none of the street children had heard of HIV or the

methods of HIV transmission**.** Some street boys said that AIDS was transmitted through needles and intravenous drugs (Swart-Kruger & Richter, 1997) and through anal and homosexual sex (Kruger & Richter, 2003). A significant number of street children did not know that HIV and AIDS are the two different stages in the occurrence of AIDS (Kruger & Richter, 2003; Swart-Kruger & Richter, 1997; Tadele, 2003).

Kruger & Richter (2003) suggested that there was a lack of knowledge about HIV infection and the latency period between HIV infection and AIDS. They seemed to presume that full-blown AIDS occurs virtually instantaneously, as with other diseases. Similarly, Swart-Kruger & Richter (1997) reported that street children had an inadequate concept of HIV infection, as none of the boys were able to specify that the media for transmission were sperm, vaginal fluids and blood. Similarly, Tadele (2003) stated that street children assumed HIV and AIDS were two different diseases and used two different names for the same disease; it clearly appeared that street boys did not know the different aspects of HIV and AIDS.

Studies have revealed a lot of misconceptions among street children regarding HIV transmission. Street children perceived that particular groups such as homosexuals or prostitutes could transmit HIV (Dube, 1997; Kruger & Richter, 2003; Lockhart, 2002; Swart-Kruger & Richter, 1997; Tadele, 2003). Kruger & Richter (2003) reported that street boys considered men and women could get AIDS from other men and women, and the majority of street children stated that they could get AIDS from adults, while more than half of the street children believed AIDS was transmitted from other children, and some believed children could not get AIDS at all. Lockhart (2002) reported that street boys felt homosexual activities were not real sex, so homosexual activities did not transmit HIV, and also girl friends and acquaintances were not a risk for HIV transmission; yet they strongly believed that females transmitted HIV, that prostitutes were a risk for transmission of HIV, and perceived that street girls were prostitutes. On

the other hand, Tadele (2003) stated that street children believed prostitutes were a safer group than schoolgirls, home girls or ordinary girls, since prostitutes consistently forced their clients to use condoms.

Further misconceptions were also revealed: 8.7 % said HIV was transmitted through unhygienic conditions (Pakistan Voluntary Health and Nutrition Association (PAVHNA), 2004), and others blamed mosquitoes and kissing (Dube, 1997; Gurung, 2004). Gurung (2004) illustrated that 60% of the street children thought it could be transmitted through mosquitoes, and 26.7% of the street children said that HIV could be transmitted by kissing. Other methods named included: using utensils (Dube, 1997); sharing food and cigarettes or drinking from the same glass (Anarfi, 1997; Dube, 1997; Swart-Kruger & Richter, 1997; Tadele, 2003); sharing a toilet, clothes or a room (Anarfi, 1997; Swart-Kruger & Richter, 1997); eating bad or rotten food; using a dirty toilet; flies or dirt; living in a dirty environment (Anarfi, 1997; Swart-Kruger & Richter, 1997); talking with someone with AIDS (Anarfi, 1997), or breathing in the same air (Kruger & Richter, 2003; Swart-Kruger & Richter, 1997)**.** In addition, Swart-Kruger & Richter (1997) stated that street children in South Africa believed AIDS to be transmitted through saliva and skin, and from prisoners, soldiers and monkeys. Further perceptions of street children regarding individuals at risk of contracting AIDS were those who do not sleep at home every day, criminals and lower class people (Swart-Kruger & Richter, 1997). Also, Tadele (2003) in Ethiopia reported that some thought HIV could be contracted by eating a chicken that had swallowed a condom used by an HIV infected person. Furthermore, the study found that some believed one could get the virus from food, if an HIV infected person had accidentally cut a finger and the blood had spilled onto the food.

Street children associated AIDS with bodily appearance, in that they believed a healthy looking person would not have AIDS, and people could not get AIDS from a healthy looking person (Southon & Gurung, 2006; Swart-Kruger & Richter, 1997; Tadele, 2003). Southon & Gurung (2006) found that major

misconceptions existed in street children in Nepal. Many boys believed that people could not get HIV/AIDS during first time sex. Similarly, CPCS (2007) reported that 44% of the respondents believed HIV/AIDS could be contracted by sleeping with an infected person, and 25% of them believed they could be infected by speaking with an HIV infected person.

Street children in South Africa expressed the belief that people who had AIDS would get thinner and become weak, and would have pimples or sores, shrunken eyes, dry lips, loss of hair, bleeding and paralysis (Kruger & Richter, 2003; Swart-Kruger & Richter, 1997). Tadele (2003) found that street children referred to symptoms such as weight loss, sparse or balding hair, coughing and lesions on the lips.

Information on STIs was very limited due to the limitations of the literature review. Anarfi (1997), in a study in Accra, found that more than 59% of street children did not respond with any knowledge about STIs: 68.4 % of female street children and 52% of male street children had no awareness of STIs (Anarfi, 1997). Tadele (2003) in Ethiopia further reported that street boys had no real knowledge regarding STIs. Only one street boy could name any STIs such as gonorrhoea. Also, street children were found to have misconceptions about STIs. They believed that STIs were the result of poor vaginal hygiene and developed in women who did not wash their vagina properly. Some street children thought that STIs could not be transmitted from a man to a woman because an STI infected man could not perform sex (Tadele, 2003).

2.5.2 Knowledge of HIV/AIDS/STIs prevention

PAVHNA (2004) found multiple responses regarding knowledge about HIV/AIDS prevention. Quantitative research illustrated that most of the street children knew about condoms: 69% of the respondents said use of a condom could prevent HIV/AIDS; 47% stated that HIV could be prevented by avoiding

sexual intercourse; 51% stated that HIV could be prevented by taking care of hygiene, and 23% of the respondents did not know how to prevent HIV (Pakistan Voluntary Health and Nutrition Association (PAVHNA), 2004). Similarly, Anarfi (1997) conducted research in Accra which illustrated that 83% of the street children knew about condoms; yet only half of the respondents said contracting AIDS could be prevented by using a condom, while others did not know about the use of a condom. Anarfi further reported that 28% had never used a condom and some 21% had used one in the last three months; this indicated inconsistent use of condoms among street children.

Significant numbers of street children did know about condoms as an effective means of prevention of HIV/AIDS (Anarfi, 1997; Gurung, 2004; Kruger & Richter, 2003; Pakistan Voluntary Health and Nutrition Association (PAVHNA), 2004; Southon & Gurung, 2006; Swart-Kruger & Richter, 1997; Tadele, 2003), and many street children knew that HIV/AIDS is spread through unprotected sex. Tadele (2003) said that street children had a good understanding of how to prevent HIV/AIDS, and knew that a condom was the best method to protect themselves from HIV/AIDS. They were even aware of the need to be selective about choosing sexual partners, yet unprotected sex and inconsistent use of condoms were frequently reported among street children (Gurung, 2004; Kruger & Richter, 2003; Pakistan Voluntary Health and Nutrition Association (PAVHNA), 2004; Raffaelli et al., 1993; Southon & Gurung, 2006; Swart-Kruger & Richter, 1997; Tadele, 2003)**.** There were almost no street children who used a condom in Tanzania (Lockhart, 2002), and unprotected sex was also common in Kenya, even though condoms were readily and freely available (Kaime-Atterhog et al., 2007).

However, Southon & Gurung (2006) reported that 73% of boys and 76% of girls identified that a person could be infected with HIV/AIDS from having unprotected sex. The literature available showed inconsistent use of condoms among street children in Nepal (Southon & Gurung, 2006). Condom use was low for all types of sexual practices (Gurung, 2004; Southon & Gurung, 2006), and

only 36% of the respondents used condoms according to CPCS (2007). Gurung (2004) illustrated that 79.1% of the street children inconsistently used condoms, and 65% had used condoms during sex. Raffaelli et al. (1993) reported that street children had very little knowledge about HIV/AIDS/STIs prevention, as they were prone to have sexually transmitted diseases, and pregnancy and abortion were widespread. About 39% had sexually transmitted diseases; half of the survey respondents said that their friends had STIs, and one fifth said they themselves had. Premature pregnancy and abortion were frequently revealed among street girls. Over half of the girl respondents were pregnant, 69% of street girls said their friends were pregnant and 44% of street boys said their friends had impregnated a girl or woman. Over one quarter of street girls reported one, two or more abortions. 16 (30%) of street girls had had at least one child and one was pregnant at the time of the study. The pregnancy, abortion and sexually transmitted diseases suggested that there were frequent unprotected sex practices among street children (Raffaelli et al., 1993) .

The reasons for not using a condom were varied. The commonest reason for not using a condom was less sexual enjoyment during sex (Anarfi, 1997; Kruger & Richter, 2003; Pakistan Voluntary Health and Nutrition Association (PAVHNA), 2004; Southon & Gurung, 2006; Tadele, 2003). Also, street boys thought that sex with a condom was unnatural and caused suspicions of unfaithfulness to their partners (Southon & Gurung, 2006; Swart-Kruger & Richter, 1997; Tadele, 2003). Numerical data showed that 37% of the respondents were irregular in using a condom because of less enjoyment, 29% of participants responded that it was due to the unavailability of condoms and 10% of them responded that they were non-effective (Pakistan Voluntary Health and Nutrition Association (PAVHNA), 2004).

In addition, street boys expressed extremely negative attitudes towards condoms. Swart-Kruger & Richter (1997) reported that street boys viewed condoms as only good for balloons, thought that they smelt funny and that they wasted sperm.

Similarly, Kruger & Richter (2003) also identified that street boys disliked condoms; they called condoms ‘coats’ and ‘bum suckers’, and believed that condoms wasted sperm, generated mistrust between partners and spoilt sexual sensation. Similarly, Tadele (2003) reported negative attitudes about condoms: there was a consensus that sex was unnatural with a condom and was messy while putting it on and taking it off. Street boys also mentioned the problems of purchasing condoms and myths around them, as well as lack of knowledge of how to use a condom.

Studies also revealed misconceptions regarding HIV/AIDS prevention. Street boys believed that one could be protected from AIDS by proper eating habits; being obedient to parents; living at home instead of on the street; not sharing eating utensils with someone with AIDS, and by visiting traditional healers (Kruger & Richter, 2003; Swart-Kruger & Richter, 1997). Similarly, Swart-Kruger & Richter (1997) revealed misconceptions that behaving well towards others, eating properly, living at home and listening to parents could prevent HIV/AIDS.

2.6 Perpetuating Risks

Street children’s attitudes regarding HIV/AIDS/STIs treatment, as well as towards the disease of HIV/AIDS, are described below.

2.6.1 Attitudes to HIV/AIDS/STIs treatment

Studies revealed that street girls did not access proper medical treatment, as they showed that many pregnant street girls induced themselves, a few others were induced by non-medical persons and some were induced spontaneously (Raffaelli et al., 1993). Also, street children had recurrent bouts of STIs, in addition to high rates of pregnancy and abortions, which showed that street children did not utilize contraception effectively. The prevalence of STIs, especially recurrent bouts of

sexually transmitted diseases, and pregnancy-related problems like unwanted pregnancy and abortion, clearly illustrated the lack of knowledge regarding treatment and medical services (Raffaelli et al., 1993). Similarly, street children in India did not access the health care system, in spite of the various chronic diseases which they suffered. Studies indicated that street children in India preferred to access government hospitals only in case of dire need (Nigam, 1994). Also, Iqbal (2008) asserted that most of the street children in Pakistan did not access health care services despite acute health problems. Furthermore, Milky & Ahammed (2000) in Bangladesh reported that street children were found to have suffered from STIs without availing themselves of any medical facilities, and nor did they visit doctors for health care support. Milky & Ahammed stated that street children visited traditional healers to treat their health problems.

Street children's positive attitudes to treatment by traditional healers was commonly revealed (Dube, 1997; Kruger & Richter, 2003). Dube (1997) stated that street children in Harare believed STIs could be treated by traditional medicine, and that AIDS could be cured by traditional medicine treatment, similarly to STIs. Kruger & Richter (2003) also found that, although South African street children knew AIDS was an incurable disease, they believed it could be treated by traditional healers.

Statistical data showed that 21.7% of respondents in Nigeria had a history of sexually transmitted diseases, with gonorrhoea being the most common (Olley, 2006), and 7% of the respondents had contracted STIs in Accra (Anarfi, (1997). Many of the respondents (62%) had resorted to self-medication (Olley, 2006), and 34% of infected street children reported that they were directly self-medicated instead of going to hospital (Anarfi, 1997). Olley (2006) reported that 7.7% of street children used traditional healers instead of going to hospital, and 31% went to the dispensary when they were infected (Anarfi, 1997).

The study in Accra found that the most commonly reported STIs were gonorrhoea, as well as syphilis, leucorrhoea and herpes. Symptoms like pus from the penis or a burning sensation on urination were commonly reported by street children, showing the common occurrence of STIs among them. Besides this, the study found that street children were not getting treatment although they had STIs at the time of the interview, which showed that they were not aware of treatment (Anarfi, 1997). Anarfi (1997) also suggested that street children used inappropriate medicine for STIs treatment, and took medicine from those who were self-medicated, whereby there was a high chance of remaining uncured.

Studies in Bangladesh and in Kenya found that street children delayed seeking care until the illness became severe (Kaime-Atterhog et al., 2007; Milky & Ahammed, 2000). Also, Kaime-Atterhog et al. (2007) found a variety of treatment patterns in Kenya: this study reported that street children shared medicine among friends or borrowed medicine from others instead of going for treatment, and that they stopped taking medicine when the symptoms disappeared, without being cured completely.

The reasons given by the street children for not having medical treatment were varied. Milky & Ahammed (2000) in Dhaka, Bangladesh, found that street children did not visit the doctor due to poverty and lack of knowledge. Likewise, Kaime-Atterhog et al.(2007) in Kenya showed that poverty was the main reason given by street children for not visiting doctors: Kenyan street children were not able to access health care due to the cost of the medicines. Also, Bibars (1998) suggested that street children in Egypt had negative impressions of the health service. They refused to go to a doctor and complained that the doctors at the largest public sector hospital treated them very badly, and that private doctors refused to see them. They thought that the doctors or the hospitals would hand them over to the police and accuse them of having AIDS. Bibars (1998) further reported that street children were not willing to go to hospital, but they liked to go to the mosque for treatment .

Very little research has been done in Nepal regarding HIV/AIDS and STIs, and even less regarding treatment. The information available on general health, and medical information, showed that only half of the street children who were ill visited hospital, and 9% of the respondents had been refused medical treatment by a medical authority (CPCS, 2007).

2.6.2 Attitudes to HIV/AIDS

Studies have shown that street children have mixed attitudes towards people with HIV/AIDS. Dube (1997) reported that street children had negative attitudes, in that they had a fear of touching AIDS affected people. However, attitudes to HIV/AIDS have not been consistent in studies in Nepal. Gurung (2004) found mixed responses, in that 50% of respondents said that they would not touch people who had AIDS, but they would talk to them, and 40% of respondents said they would have normal contact with them. Similarly, Kruger & Richter (2003) found mixed responses among street children towards people with AIDS; Kruger & Richter reported that some street children had positive thoughts, and that they would behave kindly towards them. Some had negative attitudes that were associated with revenge feelings, and had thoughts of going out to have unsafe sex with people if they themselves had been infected by AIDS (Kruger & Richter, 2003; Swart-Kruger & Richter, 1997), whilst some children had suicidal thoughts about if they had AIDS (Kruger & Richter, 2003; Tadele, 2003). Similarly, Tadele (2003) stated that street boys thought about committing suicide if they had HIV, as they thought that dying was better than waiting for diseases which would lead to a painful death. Furthermore, Tadele explained that street children would not disclose their positive status to anyone for fear of disrupting social relationships, resulting in embarrassment, isolation and discrimination.

2.7 The Relationship between HIV, STIs and AIDS

If any individual is infected with HIV, they may spread the virus continuously in the absence of adequate treatment (USAID, 2000). UNAIDS & WHO (2009) state that HIV infected people who are not accessing treatment have a greater possibility of transmitting infection than those who are under treatment.The longer a person remains untreated, the more likely they are to pass infection on to others, and to become vulnerable to HIV.

Importantly, STIs facilitate HIV infection (Godinho et al., 2005), so the prevalence of STIs increases vulnerability to HIV/AIDS (UNESCO, 2006). For a person who already has an existing STI, the risk of becoming HIV positive rises to 80%, depending on the type of STI (Kamminga & Wegelin-Schuringa, 2003). Similarly, Centres for Disease Control and Prevention et al.(1997) report that HIV positive individuals who are infected with other STIs are three to five times more likely to contract or transmit HIV through sexual contact. Moreover, people living with both STIs and HIV transmit STIs as well as HIV, and have a greater chance of transmitting HIV because of the high viral load in people with STIs (Kamminga & Wegelin-Schuringa, 2003). Dlamini et al. (2007) report that the risk of HIV transmission or contraction is determined by co-occurring biological factors such as the viral load from HIVpositive partners and co-occurring STIs.

One of the most important factors which increase the rise of STIs prevalence is delaying treatment. The presence of untreated infections, both ulcerative and non-ulcerative, in any individual, increases the likelihood of HIV acquisition; in addition, if an HIV infected individual is affected with STIs, that person is more likely to transmit HIV through sexual contact than any other HIV infected person, and this factor may also alter the course of disease progression and so eventually lead to the quicker development of AIDS (WHO, 2007b). Even in cases of STIs where there are no breaks in the skin, there can be biological changes, such as swelling of tissues, which make HIV transmission more likely (Centres for Disease Control and Prevention et al., 1997).

As mentioned above, HIV and STIs are closely associated with each other, and therefore STIs are a risk for HIV infection and consequently the development of AIDS. Untreated STIs result in further serious implications. Also, inadequate treatment may lead to repetition of infection, becoming drug resistant and even further difficulties in treatment and cure. Anarfi (1997) explains that inadequate treatment and repeated infections facilitate HIV infection, as the open sores and wounds present in STIs aggravate and cause HIV infection. The reoccurrence of STIs in any HIV individual enhances the deterioration of their HIV status, thereby leading to AIDS. Hence, delaying or neglecting medical treatment for STIs increases the risk of becoming further infected or re-infected, or of transmission.

Any HIV-infected individual will be symptomless for a period of time, which is called the latency period; as a result, 90% of HIV-infected people are not aware of their HIV status and blood testing is the only way to find evidence of HIV infection (Kamminga & Wegelin-Schuringa, 2003). Virus transmission occurs continuously during the latency period between infection with HIV and the onset of AIDS (Kamminga & Wegelin-Schuringa, 2003).

Put in this context, it is clear that lack of care and treatment for STIs and HIV impacts on the development of AIDS. Diagnosis of the disease, follow-up with medication, and the appropriate use of medicine as early as possible is highly essential in preventing vulnerability to AIDS. Care and treatment can prolong the life of HIV infected people, as reported by several studies (Kamminga & Wegelin-Schuringa, 2003; UNAIDS & WHO, 2009). Similarly, Kamminga & Wegelin-Schuringa (2003) reported a reduced rate of death after the use of HIV medicine by HIV-infected persons in the United States, Western Europe and Brazil. Kelland (2011) reports the importance of earlier diagnosis and better care and treatment, which has made a big difference to HIV-infected individuals, in that their life expectancy increased by 15 years between 1996 and 2008. Proper care and treatment has a great impact by reducing the viral load in people living

with HIV, and can delay the development of AIDS; this increased longevity has been proved by worldwide evidence (UNAIDS & WHO, 2009).

2.8 Summary of the Chapter

In this chapter, I have described the operational definitions and definitional parameters in respect of street children and concepts of risk and vulnerability that are used in this study. I have also undertaken a comprehensive review of the literature regarding risks of HIV/AIDS and STI for street children. I have summarised the risk factors under the three main themes that emerged from the literature review: the reasons that make children leave home; sex and drug-abusive behaviour in the street; and knowledge and attitudes regarding HIV/AIDS and STIs. The literature review reveals that studies are fragmented and do not provide a comprehensive or detailed understanding of the links between these different areas of risk and vulnerability for street children. The need for a deeper understanding of these issues from the perspectives of children themselves is identified as a significant gap in knowledge and gives rise to the aims of the study:

- To investigate the causes and consequences of the vulnerability of street children to HIV/STIs and AIDS in Nepal.
- To explore these vulnerability and risk factors among street children within a public health context concerned with the transmission of HIV within broader society.

And specific research questions:

1. What are the factors that increase the risk of children becoming street children (especially views about the characteristics of families, root causes and issues)?
2. In what ways does the sexual behaviour of street children increase their vulnerability to HIV, STI and AIDS?

3. What levels of knowledge do street children have in relation to HIV/STI and AIDS prevention and treatment and how does knowledge impact vulnerability to infection?
4. In what ways do children's attitudes to HIV/AIDS contribute to their vulnerability?

The theoretical framework, and the conceptual model derived through the literature analysis, which informs the research design are discussed in the following chapter, Chapter Three.

3 THEORITICAL FRAMEWORK

This chapter discusses the theoretical framework that underpins the study. The chapter begins by examining what is meant by a public health approach and traces the history of this 'movement'; this is followed by a brief overview of public health developments relevant to Nepal's social, economic and developmental status. Following this I discuss public health in relation to HIV/AIDS and STIs and in the final section I merge the main themes from the literature review with public health principles to produce a conceptual model of risk and vulnerability. This model informs the methodology (Chapter Four), research design and interpretation of data ensuring that the study is theoretically coherent and aligned with a public health approach from study inception, through to research design, data analysis and interpretation of findings.

3.1 A Public Health Approach

Public health focuses on health at a population level rather than at the individual level and is measured in terms of the extent of health and illness in a population (Turnock, 2013). It deals with the knowledge and techniques that can be applied to solve health-related problems. Public health policy calls for the investigation of problems and the provision of preventative services as well as medical care in order to minimise threats to the health safety of indigent populations.

Once a problem has been identified, a public health approach requires the implementation of interventions to manage diseases and health infections and begins by tackling the risk factors by using public health measures and health promotion strategies. The key components of a public health strategy are to

measure the health status of the population and provide interventions that increase life expectancy and decrease mortality and morbidity in the population by solving certain health problems. Public health has a long history and has evolved over time based on theories generated at specific points to inform policy aimed at increasing understanding of the determinants of health; these include: the 'miasma' model, the 'agent' model, the 'behavioural' model, and the 'ecological' model (Wiley, 2012).

In the time of the Cholera epidemic (an intestinal disease that can cause death within hours after the first symptoms of vomiting or diarrhoea) 200 years ago, people didn't have running water or modern toilets in their homes. They used town wells and communal pumps to get water for drinking, cooking and washing. Septic systems were primitive and most homes and businesses dumped untreated sewage and animal waste directly into the Thames River or into open pits called "cesspools". Water companies often bottled water from the Thames and delivered it to pubs, breweries and other businesses (Tuthill, 2003). At the time, when it was assumed that the cholera was from miasma (bad air), a scientist named John Snow proved that the Cholera outbreak occurred due to contaminated drinking water although his 'germ' theory of disease was not widely accepted until the 1860s (Tuthill, 2003). Snow's accomplishments advanced the art and science of public health. With greater understanding of the value of environmental controls for water and sewage and of the role of specific control measures for specific diseases (including quarantine, isolation, and vaccination), local health agencies were created to carry out these activities. In the early nineteenth century, public health policy subscribed to the 'miasma' model in order to improve the physical environment in urban slums as a means of fighting disease. Health agencies found hazards from dusts, heavy metals and general conditions; and detected parasite infected meat and food contamination, all of which poisoned the atmosphere. They championed the closure of drainage and sewage systems and improved garbage collection systems, thus protecting citizens from cholera outbreaks.

In 1883 a German physician, Robert Koch, discovered the cause of cholera is bacterium vibrio cholera, the "poison". Koch determined that cholera is not contagious from person to person, but is spread only through unsanitary water or food supply sources, adding credence to Snow's theory. The cholera epidemics in Europe and the United States in the 19th century ended after cities finally improved water supply sanitation (Tuthill, 2003). Another public health pioneer – a hundred years before Koch was Jenner who, in 1796 successfully used vaccination for a disease that ran rampant through communities across the globe. This was the initial shot in a long and arduous campaign that, by the year 1977, had totally eradicated smallpox from all of its human hiding places in every country in the world. The work of public health pioneers such as Edward Jenner, John Snow, and Edwin Chadwick illustrates the value of public health even when its methods are applied amidst scientific uncertainty. Before Koch established scientific methods for linking bacteria with specific diseases and before Pasteur's experiments helped to establish the germ theory, both Jenner and Snow used deductive logic and common sense to do battle with smallpox and cholera, respectively.

At the turn of twentieth century, scientists identified bacteria, viruses and toxins which are responsible for illness and they conclusively determined that diseases were attributable to specific causes rather to general environmental miasmas. Identification of the bacteria, viruses and toxins made effective vaccination and medical treatment possible. This was the time for transformation of the public health era from the 'sanitarians' subscribing to the 'miasma' model towards 'agent' model of public health. Interventions to prevent disease were now based on the agent model and applied to individuals, unlike the sanitarian approach through which interventions focussed on the environment. In the twentieth century, public health law was defined primarily by the law of communicable diseases control. The efforts were on compulsory vaccination and treatment, isolation and quarantine, and surveillance of health data were its main subjects

(Wiley, 2012). There was an issue with public health law's new focus on chronic disease as well as an acute communicable diseases outbreak. The responses were to limit transmission by vaccines, to isolate the affected, and eventually, to cure with chemotherapy and antibiotics (Wiley, 2012).

In the second half of the twentieth century, the chronic, non infectious disease overtook communicable diseases as the leading cause of death in developed countries. This is when the public health agent model shifted towards the behavioural model. Initially the medical aetiology of disease was not understood properly, and this explains the initial use of the agent model; this was later discredited as inappropriate for diseases associated with behaviour patterns such as heart diseases, cancers and diabetes which are linked to diet, exercise and tobacco consumption. Similarly, HIV/AIDS is associated with behavioural patterns such as unprotected sex and intravenous drug use. Identifying that these behaviours are responsible for the disease, the 'behavioural' model of public health advocated the change the behaviour as a preventive approach. Providing the information about the risks associated with smoking, lack of exercise, risky sexual behaviours and individual counselling by physicians were introduced.

The benefits of this approach can be seen for instance, in the fact that in the early years of this century we have witnessed 50 million fewer smokers than would have been expected, given trends in tobacco use through 1965. More than 2 million Americans are alive who otherwise would have died from heart disease and stroke, and nearly 100,000 Americans are alive as a result of automobile seat belt use. Protection of the United States blood supply has further prevented more than 1.5 million hepatitis B and hepatitis C infections and more than 50,000 human immunodeficiency virus (HIV) infections. These results did not occur by themselves. They came about through decisions and actions that represent the essence of the public health approach (Turnock, 2013).

Behavioural interventions are not always effective however and efforts to convince people to change behaviour are hindered by several factors. Researchers have investigated the external factors that constrain people's behaviour choices and health outcomes and conclude that an individual's behavioural pattern depends on the social, economic and physical environment. Later in the late twentieth century, the behavioural model of the public health was expanded to encompass not only individual behaviour, but also the social, economic and physical environment with which the agent individual has to interact. A new 'ecological' model of health has now emerged influenced by social epidemiology, which exhibits the socially, culturally, economically disadvantages that lead to people living shorter, less healthy lives. The association between social environment and health seems firmly entrenched even in places with universal health care systems. This suggests differential access to healthy living conditions and lifestyles plays a greater role in determining health disparity than differential access to medical care (Wiley, 2012). This suggests that behaviour is influenced by environmental factors and is not simply about personal choice to eat the wrong foods (for example).

As has been shown, the public health approach has a long history and has already saved millions of lives worldwide. I turn now to discussing the public health approach to addressing HIV/AIDS.

3.1.1 Public Health and HIV/AIDS

In the beginning HIV was considered primarily as a behaviour-related disease however public health researchers have now identified that chronic diseases such as heart disease, hepatitis and HIV/AIDS are not only linked with the individual behavioural factors, but also encompass social, economic, and environmental factors. Therefore the behavioural model was transformed into the ecological

model to combat the diseases (Wiley, 2012), which is one big step for interventions for HIV/AIDS prevention. In the development of public health from the miasma model to the ecological model there has been widespread recognition of the need for interventions to integrate attention to the physical environment in which the people interact, in preventing HIV/AIDS (a particularly important point for groups such as street children) as well as to focus on individual behaviour. For the public health approach to be effective in addressing HIV/AIDS, understanding the behaviour and practices of the individual is critically important. Mann and Tarantola (1996) suggests however that the powerful public health strategy that was developed in the mid-1980s preceded epidemiological data about individual risk and behaviour. This initiative involved a three part model for HIV prevention. This was a traditional approach that included providing information and education, and social services (treatment, testing and counselling, condoms and drug abuse) designed to induce and sustain a change in behaviour. The third part of the initiative was ensuring non-discrimination towards HIV infected people and people with AIDS. This approach was developed by the World Health Organisation(WHO), and was used as the basis for national AIDS programme development worldwide (Mann & Tarantola, 1996).

The lack of information between individual life and society is also evident in previous behavioural research on HIV/AIDS and while describing the features of sexual life is useful, many research efforts have been unhelpful in prevention strategies on HIV/AIDS (Mann & Tarantola, 1996). Identifying and responding to the deeper underlying societal causes of vulnerability to HIV/AIDS is fundamental as these socio-cultural factors interfere with people's ability to make effective and informed choices about their behaviour (Mann & Tarantola, 1996). Mann and Tarantola (1996) suggest moreover, that the traditional public health approach even when applied with extra vigour, still lacks sufficient power to combat the pandemic and lessen its impact.

Therefore, a new approach to HIV/AIDS control and prevention is necessary. This requires a clear understanding of the situation and societal determinants of health

since socio-cultural contexts determine to an enormous extent the lived realities of any group of population, such as children and women. Social barriers to prevention must be recognized, understood and should be addressed directly.

If we return to the work of the pioneer of epidemiology, John Snow, that I discussed earlier, we can see that the public health strategies he advocated were based on a deep underlying knowledge of society and the conditions in which people live their lives. The investigation of the Cholera outbreak was successful because of contextual research. Snow's investigation within a specific 'context' proved his theory that contaminated water was the cause of the Cholera outbreak. He investigated those who lived near the pump; and also investigated groups of people who did not get cholera and tracked down whether they drank pump water. That information was important because it helped Snow rule out other possible sources of the epidemic besides pump water. One case that provided an important source of knowledge for Snow concerned two women, a niece and her aunt, who died of cholera. The aunt lived some distance from the water pump, as did her niece; the mystery was cleared up when Snow talked to the woman's son who revealed that his mother liked the taste of the water from the pump so much that she had bottles of it brought to her regularly (Tuthill, 2003). This demonstrates the importance of conducting research within the social context in which the problem occurs and the need to explore what social determinants and risk factors exist which increase vulnerability to infection.

In 1981, AIDS was first detected among homosexual men in the United States. By 1983, HIV was identified. By the mid of 1980s, it became pronounced that the virus had spread - largely unnoticed through most parts of the world (UNAIDS/WHO, 2003). Once the first AIDS case was discovered in 1981, the AIDS death rate increased rapidly during 1980s and current estimates suggest that globally, approximately 34.0 million people were living with HIV at the end of

2011, although the burden of the HIV/AIDS epidemic continues to vary considerably between countries and regions. An estimated 0.8% of adults aged 15-49 years worldwide are living with HIV and the number of both adults and children newly infected with HIV is reducing, as are the numbers of people dying from AIDS-related causes (UNAIDS, 2012). Reports further show that the number of people dying from AIDS related causes began to decline in the mid-2000s because of the use of care and treatment. In South East Asia, WHO (2008) stated that discrimination is one of the major socio-cultural determinants of the HIV epidemic. More recently, WHO (2011) has recognised the need to address specific populations to control and prevent HIV/STIs. By investigating risks associated with a particular group (men who have sex with men and transgendered people) the World Health Organization has been able to develop a public health approach. These are the first global public health guidelines to focus on a specific population and which seeks to benefit a particular group (WHO, 2011). Stigma and discrimination are claimed to be one of the risk factors that increase vulnerability to HIV/STIs among men who have sex with men. Hence the WHO approach primarily addresses human rights issues, stigma, discrimination and violence, along with other issues that needs to be addressed in HIV/AIDS prevention and control.

3.1.2 Linking Public Health in Nepal with HIV/AIDS and the Needs of Street Children

In Nepal, health surveys are usually conducted only in capital or cities and may not be nationally representative. Also data covers only some groups of the population as the overall surveillance system is weak (UNAIDS, 2012). The most recent UNAIDS report showed that the number of people dying from AIDS related diseases has not changed or decreased in Nepal in 2011 (100 people), while, in South Africa people dying with AIDS had decreased by approximately 25- 49%, where the burden was higher in the past years. New hope has emerged

for further control and prevention of HIV/AIDS with the lowering number of HIV as well as the AIDS in the countries and communities across the world that had previously been devastated by AIDS (UNAIDS, 2012). However, public health infrastructures are still forming in the developing world. There are not enough trained health workers or monetary sources to provide even a basic level of medical care and disease prevention (Funes, Hausman, & Rastegar, 2012). Nepal is not an exception from these issues. WHO (2008) reported that five countries India, Indonesia, Myanmar, Nepal and Thailand covers the burden for HIV/AIDS over 99% of the region of South East Asia. HIV incidence is universally high in these countries among sex workers and their clients, men who have sex with men, and injecting drug users (WHO, 2008).

The reported coverage evidenced that HIV/AIDS is *preventable and treatable* (UNAIDS, 2012). However, the world does not seem as they are focussing towards the population who are impoverished and surviving in the street and who have even less access to resources than other people. Despite the global aspirations, I argue at this point that it will be impossible to think about the prevention or elimination of the HIV/STIs and AIDS from the world without exploring the problems underneath which impact groups such as street children. Priority should be given to these marginalised sections of the population. Street children have been in the shadows and yet there are connections between their needs and bigger societal issues.

HIV/AIDS in street children has not been considered even though it is one of the underlying issues for HIV prevalence. As I have shown in Chapter One, previous studies have showed that street children in Nepal are increasing. Children living in the street possess risky sexual behaviour and abuse drugs and alcohol; they have a lack of knowledge regarding HIV/AIDS and the existing data shows that the prevalence of HIV/AIDS among street children is increasing (see Chapter One). It can be assumed that children are dying due to the lack of simple health diseases

and the infection due to HIV and AIDS. The children therefore have a low life expectancy, high mortality and morbidity. The number of children living with HIV is increasing enormously causing personal, social and economical losses throughout the world. 'Today's children are the hope for tomorrow'. Despite evidence of the strong impact of the HIV epidemic on street children, to date, no public health guidelines exist to guide health systems in addressing the HIV/AIDS prevalence among them.

Public health science demonstrates that poor people become ill more often than the rich not simply because they are exposed to co infection or because they engage in unhealthy behaviour; but because their exposure to risks and behaviour have social roots (Wiley, 2012). For affected street children, who are doubly victimised since they experience stigma as street children as well as AIDS related stigma, there is need to examine *all* of these factors; to explore risk and vulnerability, exposure to co infections through living in the street and also risky sexual behaviour *and* also, the social roots that cause them to become street children. However, increase of life expectancy, combating low rate of morbidity and low rate of mortality among street children are only possible if we are able to define the underlying causes of their problems. My understanding is that the socio cultural contexts that impact HIV epidemics are associated with the population under investigation. It is essential to recognize the 'contextual determinants' in the case of street children, as they survive in the street through a range of different strategies that increase their vulnerability. Without this knowledge, identification, understanding the HIV/AIDS and STIs risks and vulnerability would be incomplete and implementation of the technical recommendations will be problematic (Mann & Tarantola, 1996; WHO, 2008, 2011).

Public health advocates and campaigners are working to develop and implement innovative, evidence-based regulatory solutions to a wide range of health problems. They are also increasingly involved in the development of ground-

breaking litigation strategies (Wiley, 2012). The recently published new public health approach to combating HIV/AIDS specified four levels of action (WHO, 2008).

1. *The first step is to define the problem* through the collection of information from surveillance and screening to knowing the magnitude of HIV prevalence
2. *The second step is to understand the characteristics of the diseases, and its causal factors* and the consequences of the diseases, the factors that increase or decrease the risk for infection; and the factors that could be modified through interventions. Identification of the issues such as health problems, causal factors of the diseases, followed by the implementation of interventions for control and prevention
3. *The third step is the scaling up of effective interventions* in a wide range of settings
4. *The fourth step is to monitor and evaluate the impact of the interventions* as an integral part of any programme.

The WHO (2008) 'Public Health Approach to combating HIV/AIDS' is general guidance for the wider population and is not specifically targeted to any particular group within a population . However, it does emphasize that interventions should be targeted to a key sections of the population by understanding their own specific needs. A response that is effective for the control of the spread of HIV/AIDS in one group may not be good practice for another group (WHO, 2011). It is impossible to control the spread of HIV and other sexually transmitted infections without addressing the specific needs of key parts of a population (WHO, 2011).

Any effective intervention is only possible when the actual needs of the specific population are fully understood. Previous studies have highlighted the increasing evidence of HIV incidence among street children (see Chapter One). Developing a public health response for this population requires a deeper understanding of the

underlying societal causes of HIV/STI risk and vulnerability for children 'of' the street. This study explores the social determinants and current contexts of the sexual risky behaviour (network, community and broader society); the knowledge and attitudes that children have and that may influence their vulnerability to HIV/AIDS and STIs. This is a public health issue and the public health framework for addressing HIV/AIDS developed by the World Health Organisation (2008) underpins this study of the risk factors associated with HIV/AIDS vulnerability among street children.

The public health approach focuses on the health of an entire population even they are healthy, rather than on an individual person after they become ill. Public health is a multi-disciplinary approach to preventing disease and improving the health of the community and population. Hence, the study makes a contribution to knowledge in that it will provide technical recommendations on the prevention and treatment of HIV and STIs among street children and for the promotion of health and quality of life. The study therefore is both framed by a public health approach and at the same time seeks to provide added value to public health science by focusing on a hidden population.

3.1.3 A Public Health Framework for the study of HIV/STI and AIDS risks and vulnerability among street children

I define HIV/AIDS and STIs among street children as a public health issue because : *sexual and other risky behaviour (at the individual level) are influenced by social and economic factors (at the family and community level) which, concurrent with the lack of access to care and treatment, therefore contributes to the spread of disease (at the societal level).*

The review of the literature (Chapter Two) shows that there are gaps in the information about street children's sexual behaviours, their knowledge of the ways of acquiring HIV/AIDS/STIs and attitudes that increase the risk of HIV/STIs and AIDS. The interlinking and perpetuation of risk factors are presented in a conceptual model (Figure 3-1); this is underpinned by the fundamental principles of the public health approach in terms of HIV/AIDS and is informed by the extensive literature review on those specific issues impacting the population under investigation. This theoretical model will be used to guide the development of a theoretical framework for the interpretation of data.

The Public Health Guidelines for HIV/AIDS (WHO, (2008), report that risk factors that cause HIV may be individual behavioural risk factors or various social, cultural and economic factors. The model below reflects HIV/AIDS/STIs risk and vulnerability at both of these levels. It is concerned with the factors which cause children to become street children, risk factors present in living on the streets, and knowledge and attitudes that the street children have which aggravate and perpetuate risk of HIV/STIs and AIDS for themselves and their sexual networks.

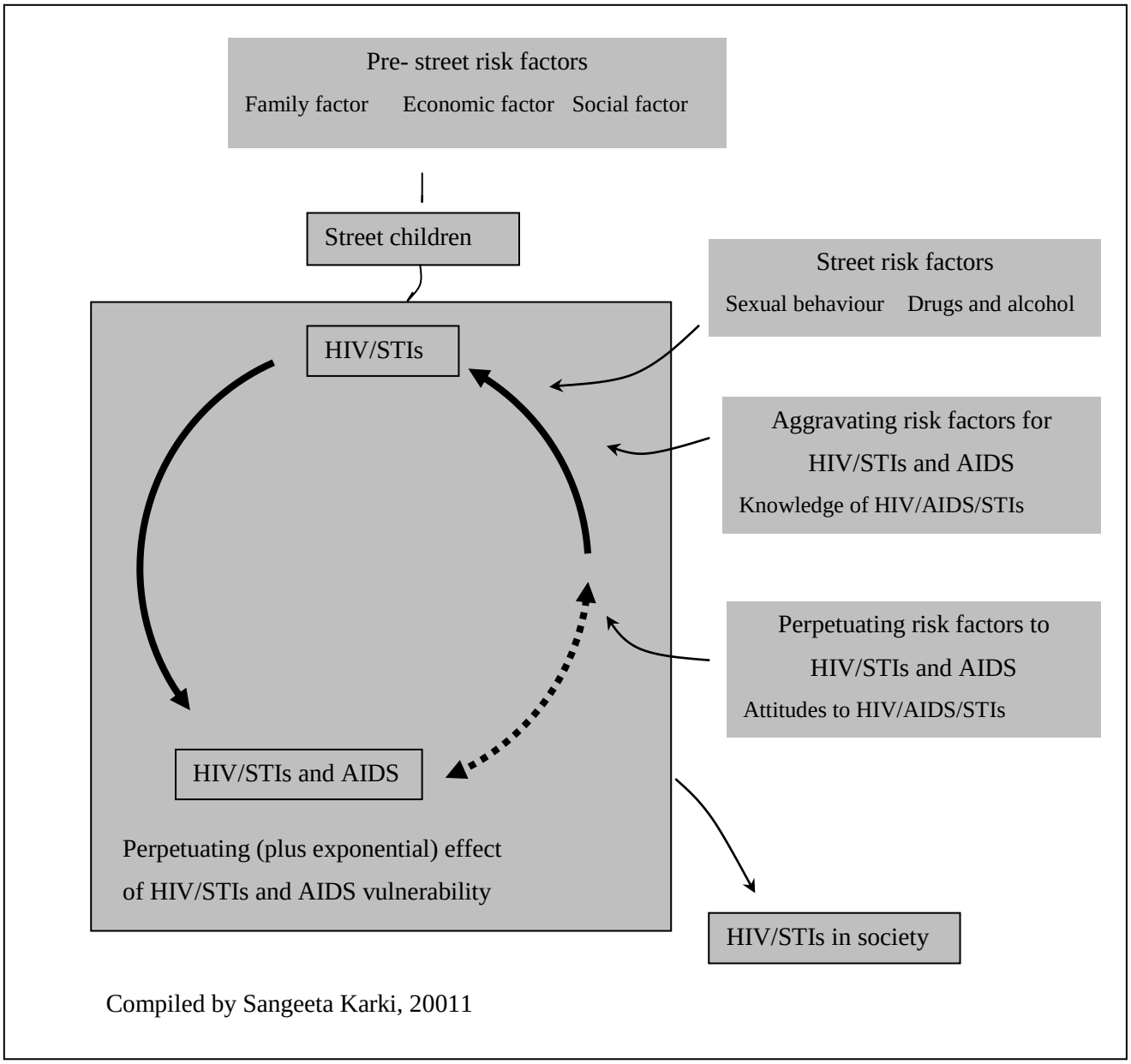

Figure 3-1 A Public Health Framework for the study of HIV/STI and AIDS risks and vulnerability

The framework encompasses the factors that push children into living on the street, thereby identifying the primary root causes of HIV/STIs vulnerability. The occurrence of HIV/STIs in street children is linked with street risk factors, such as sexual and drug-abusive behaviours. Other risk factors may be a lack of knowledge about transmission, prevention and treatment of HIV/AIDS/STIs, and

attitudes that enhance the spread of HIV/STIs and AIDS. A key aspect of the study is to explore the ways in which the links between these factors spread HIV/STIs and contribute to AIDS within broader society, and eventually impact on the life span of the children in the street.

3.2 Summary of Chapter

This chapter has discussed the guiding principles of the public health approach, briefly charted its history and has shown how this is being applied to the prevention of HIV and the management of AIDS. In drawing together the key issues emerging from this discussion with the gaps identified in the literature review (Chapter Two), I have produced a conceptual framework to guide the research design. The conceptual framework reveals that HIV and STIs among street children is a health threat (that can lead to AIDS) that is sufficiently public in nature and therefore comes within the realm of public health. Public health focuses on trends in health, illness and injury to understand their causes and to develop intervention to address a specific health problem rather than being concerned with medical treatment on a case by case basis (Wiley, 2012).

4 METHODOLOGY

4.1 Introduction

In this chapter, all aspects relating to the research methodology are considered. Utilising the public health approach as a theoretical framework and drawing on the major themes arising from the review of the literature, I have developed a Public Health Framework for the study of HIV/STI and AIDS risks and vulnerability (see Chapter Three). This chapter four describes the research paradigm and justifies the choice of methodological approaches for the study; I demonstrate how the Public Health Framework was used to support the research design and this is followed by a detailed explanation of the research process. The data analysis process, establishment of the rigour of the study and methodological limitations of the study are made clear. The ethical processes applied throughout the study are also elucidated. Reflexivity regarding challenges during the research process is presented in Chapter Five.

4.2 Epistemological Approach

Qualitative and quantitative research methods are both widely used in social science research and each involves different strategies for data gathering and analysis. All research methods have their own advantages, but the selection of research method depends upon what the researcher is trying to investigate. Both qualitative and quantitative research can be descriptive, but quantitative studies involve measurable phenomena and are significant for quantifying size, scope and numerical data because they focus on the prevalence, incidence, size and measurable attributes of the phenomenon (Polit & Beck, 2004). Quantitative approaches are limited if we are interested in exploring views and experiences of complex topics like drugs and sexuality.

Qualitative research however enables us to achieve a deep understanding of how and why people view issues in particular ways and the factors that impact upon their experiences. Also, a qualitative research method facilitates participants to speak, so enabling the disclosure of insights and resulting in original, deep and rich information.One of the strengths of qualitative research is its utility in analysing actual happenings in natural settings (Silverman, 2006). Mack, Woodsong, Macqueen, Guest & Namey (2005) emphasise that the use of qualitative methods is to discover information on knowledge and a deep understanding of the meanings, perceptions, beliefs, values and behavioursof a targeted population, as this gives deep insights into different facets of the issues. Power (1998) explains how employing a qualitative research method helps to discover attitudes, behaviours, concerns, culture and lifestyles that relate to HIV/AIDS/STIs. Power also reports that this methodology has been frequently used in investigating HIV related risks in the relationship between drugs and unsafe sex, and knowledge and attitudes concerning HIV/AIDS. Besides this, the approach has been shown to be appropriate for investigating the situation of street children (Conticini & Hulme, 2006), and to understand their daily lives (Lucchini, 1996). For the reasons discussed above, the study of HIV/AIDS/STIs among street children in the particular cultural context required a qualitative research design. More specifically, I adopted the ethnographic case study approach under the qualitative research paradigm, since this most effectively matched the research aims. The WHO (2008) 'Public Health Approach to combating HIV/AIDS' emphasizes the importance of understanding the specific needs of target groups. Developing a public health response for this population requires a deeper knowledge of the underlying factors that impact street children and I took the position suggested by Power (2002) which supports the value of ethnography for the exploration of HIV/AIDS and STIs among street children, not only because of the particular social phenomenon being investigated, but also because children who live on the streets are intensely private and often engage in illicit activities; methods which uncover these factors (such as observation and immersion required in an ethnographic study) are more useful than other qualitative methods.

4.3 Methodological Approach

While I was attracted to the use of ethnography for reasons explained above, I felt it was also important to explore street children as a 'social phenomenon' in order to analyse the risks factors associated with activities and behaviours of street life as a social determinant of HIV/AIDS and STIs (Mann & Tarantola, 1996). I therefore conceptualised the study as one influenced by ethnography but which also utilised the notion of the 'case study', in this instance, the case under study being a social phenomenon and which therefore required conducting interviews to gain information about the *meanings* of life on the street children. One of the forerunners of the public health approach illustrates the benefits of combining these approaches. In a study by John Snow reported in (Tuthill, 2003). Snow used observation as well as interviews to collect underlying information from society to examine the spread of Cholera. The combination of ethnographic and case study research has also been reported by other scholars, see for example, (Basit, 2003).

Basit (2003) suggests that case study research can be used to examine a single instance or phenomenon and the focus of study can be for example, a pupil, a class, a group or a school; the purpose being to clarify information about the wider population to which the child or group belongs (Basit, 2003). My own approach, in line with the views of Basit (2003) was to combine an ethnographic approach with the investigation of a social phenomenon through case study method (for the purposes of the study the case was a group of children) in order to illuminate information about the wider population of street children. The method of data collection here, being in-depth interviews.

The study therefore was not a typical ethnography, but aimed to portray a picture of a group of street children as a single case relying on interviewing for gathering data. In this aspect, case study is similar to ethnography; they have similar features and it is appropriate to describe the integration of these methods as 'ethnographic case studies' (Basit, 2003) .I therefore use the term 'Ethnographic Case Study Approach' to describe my research design and while other qualitative methods could have been considered (e.g. focus groups or peer research), the

sensitive and confidential nature of the data I aimed to gather (e.g. personal sexual practices, HIV status etc.) required an approach that would best preserve the confidentiality of the participants.

The study used the Ethnographic Case Study Approach to explore street children's behaviour and practice regarding HIV/AIDS/STIs in their natural context (i.e. on the streets). My justification is derived from my exploration of the research literature, the design is embedded within a public health approach and careful attention has been paid to theoretical robustness and coherence. I have produced a diagram which shows the different components of the research process and the ways in which they fit together; see 4-1 below.

Research design illustrated by activity flow diagram

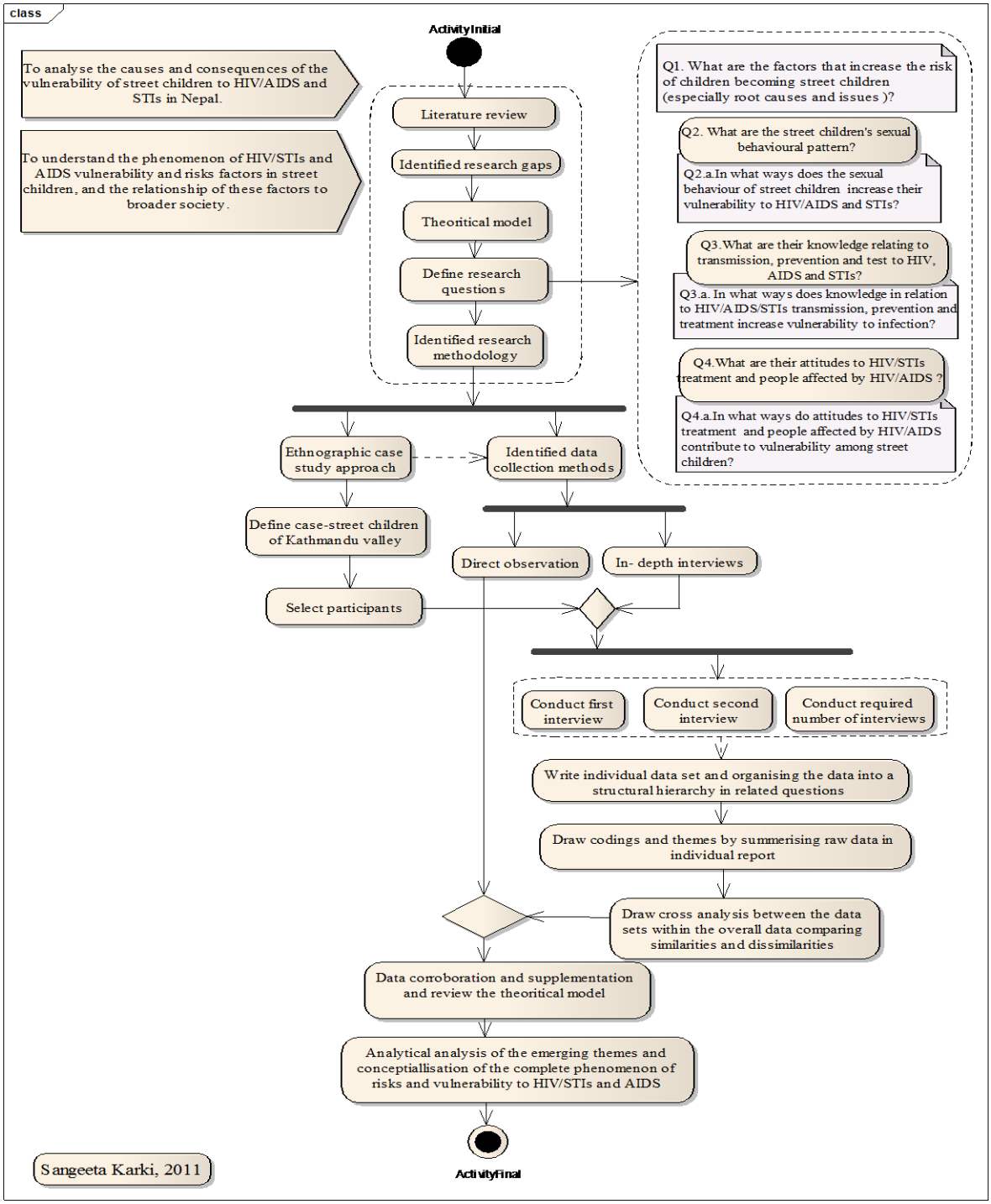

Figure 4-1 Schematic illustration of research design

In the section that follows, I describe the case study method and the ways in which this was applied to the study and I also discuss the ethnographic aspects of the research.

4.3.1 Case study approach

The term ‘case study’ has been used in different ways and has been defined inconsistently (Platt, 2007). It is difficult to clearly delineate the case study research strategy, as many of the features associated with this approach overlap with other research methods (Denscombe, 2003). However, it is important to be aware that a case study is a research strategy, not a method of data collection (Denscombe, 2003; Robson, 2002).

A case study is a study of a certain individual, a group, a setting or an organisation in order to develop an in-depth understanding and to gain insight into the problem in its context (Robson, 2002). Denscombe (2003) argues it is particularly appropriate for investigations with a small sample, sometimes with only one unit of investigation. A design can include multiple case studies involving several individual cases which all have common features (Prosser, 1995). The case study method involves exploration of problems in naturally occurring settings without influencing outcomes by imposing external controls. Yin (2003a) defines the case study as a method of choice when a contemporary phenomenon (such as HIV/AIDS/STIs and street children) can only be studied in its natural context (setting); in the case of this study, this is the street (Yin, 2003a). Denscombe (2003) explains that the significance of the case study is the establishment of relationships between events, and the focus on making connections between events in a way that is flexible and provides rich information about subjects by interlinking and interconnecting them, in order to demonstrate the phenomenon.

A striking feature of the case study strategy is that it is adopted to investigate pre-determined theoretical propositions and uses both a theory-building and theory-testing research design (Denscombe, 2003). Yin (2003b) notes that the role of theory development in a case study prior to data collection is a key difference

between the case study and other methodological approaches, such as ethnography and grounded theory, which do not specify prior theoretical positions. Importantly, Yin (2003b) further states that it is the development of theoretical propositions from the research questions, literature review and exploratory work that guides data collection and analysis. These distinguishing features of a particular type of case study were applied in this research.

Another important aspect of this approach is that it allows the researcher to use a variety of methods and different data sources, as long as they are appropriate to the research questions under investigation (Stark & Torrance, 2005). Collecting data from multiple sources rather than a single source is beneficial in different ways (Green, Camilli, & Elmore, 2006). The multi-method approach provides rich information on the same topic by enabling it to be viewed from different aspects and perspectives. Data collected from different methods helps in corroboration by comparing findings and thus increasing the validity of the results (Denscombe, 2003). For example, if observation shows that drug-abusive behaviour gives the impression of risky behaviour, then that could be corroborated through interview data.

4.3.2 Ethnographic approach

Ethnography is an approach to research that involves immersion within, and investigation of, a culture or social world. Ethnography is the study of a certain group of people in a naturally occurring setting or specific field and describes their everyday behaviour, values, beliefs and practices (Cohen & Court, 2003). An important feature of ethnography is that it analyses the role of culture ; therefore, ethnography does not simply focus on behaviour and events, but also analyses the cultural factors that govern behaviour and practices (Cohen & Court, 2003). It involves the researcher becoming immersed in a particular context for a period of time in order to gather data which captures socio-cultural meanings, practices and behaviour (Brewer, 2000). The observation method in ethnographic research

allows for viewing of certain groups directly, in order to describe their natural social actions within their natural field (Mitchell, 2007).

> "Ethnography is a description of a social group based on recorded observations of interaction with individuals and their environments. Observations are descriptive because of the volume of data and are interpretive to make this data useful. Research is a systematic investigation that establishes knowledge. Ethnographic research is the attentive observation, the experience, and the systematic documentation of a social group in order to establish knowledge" (Skaggs, 2010, p. 2).

Typically, ethnographic study has often been used and found suitable in the study of marginalised groups, such as homeless people, alcoholics, drug users, street gangs and commercial workers (Denscombe, 2003; Power, 2002), as well as powerless groups such as sick,disabled and gay people (Prosser, 1995). Supporting these views, Denscombe (2003) suggests that ethnography is appropriate in the study of a subgroup of a community who are known to have different norms within society. Moreover, Cohen & Court (2003) report that the ethnographer aims to achieve an in-depth understanding of everyday behaviour, such as the practices of street gangs. Also, Lucchini (1996) states that ethnography is particularly appropriate for the study of children, to develop understandings of their worlds. An ethnographer is able, by being immersed in the children's natural context, to understand their culture much better (Bemark, 1996). Furthermore, Power (2002) argues that ethnographic study is particularly important in the study of STIs/AIDS and drug-abusing behaviour. Street children are a marginal population (Bemark, 1996) and the study is about HIV/AIDS/STIs, therefore the idea of using ethnography fits well.

Furthermore, the importance of ethnography comes to light in the way that it allows the researcher to compare the children's behaviour. Repeated observation of the same children's behaviour in different contexts, as well as the observation of different behaviour of the same child in the same context, is a procedure which

can be linked to research reliability. Also, observations of different children can be compared within the same contexts (Lucchini, 1996).

4.3.3 An ethnographic case study: justification for integrating ethnography and case study approaches

Gathering a large sample is difficult if a study involves street children because they are a hard-to-reach population (Panter Brick, 2002), and therefore meeting times and specific places cannot be pinpointed (Bemark, 1996). Collecting information on street children is further complicated because they are restless and reluctant participants (Ayuku, Odero, Kaplan, De Bruyn, & De Vries, 2003). A further challenge is that the in-depth interview is a time-consuming method when studying street children and may take from several hours to a few days (Power, 1998) because the children are often , uncooperative and irresponsive (Bemark, 1996). The choice of a case study strategy, adopting a small number in the sample (Yin, 2003a), allowed for the investigation of children's vulnerability to HIV/STIs and AIDS, and how the issues are propagated within broader society. Adopting the case study approach enabled me to compare and contrast the emerging issues from one informant to other, thus enhancing the validity of the findings and contributing to establishing the robustness of the understandings produced (Prosser, 1995).

The approach adopted theoretical propositions (theory-building and theory-testing) and involved testing the theoretical model developed from the comprehensive literature review which linked HIV/STIs and AIDS risks and vulnerability (Tellis, 1997a).

Based on the research literature discussed above, I combined ethnography and a case study approach and summarise my design as an 'ethnographic case study approach'. The idea was to provide an intensive and holistic understanding of issues (the phenomenon of risks and vulnerability to HIV/STIs and AIDS) in real-

life settings (street children within the street environment). Utilising the ethnographic approach in a case study strategy enabled me to describe as accurately as possible the street environment of the children, giving a further and broader understanding of the context, including the children's activities and behaviour, through direct observation, thus providing a deeper understanding of the HIV/AIDS/STIs risk and vulnerability of the children in their natural context.

I used the ethnography study as a supplementary approach to the case study because, as discussed above, ethnographic research is especially fruitful when applied to marginalised groups and certain behaviours such as drug-injecting practices and sexual practices within a real-life context (Power, 1998). Using ethnography in this research also helped to corroborate data with interviews. Data collection from the different methods used in the study (observations and interviews) produced converging evidence to boost the validity of the data through triangulation (Denscombe, 2003; Tappen, 2011). Also, the combination of two methods such as observation and interviews, accompanied by contextualisation within the environment such as the street, is taken into account for validation of the research results (Lucchini, 1996).

The street children's cultural practices and behaviour are particular, distinctive and contextual, in that they are deeply embedded and determined by their context (Ayuku et al., 2003). Ayuku et al.(2003) points out that only a few studies offer in-depth analysis of street behaviour and experiences directly derived from street children themselves. Given the importance of the children's perspectives, therefore, the ethnographic case study approach was particularly important in examining the practices and behaviour of street children, and the ways in which these behaviours relate to HIV/AIDS/STIs risk and vulnerability within a specific socio-cultural context.

4.4 Methods

Using the ethnographic case study approach, observation and in-depth interview methods were applied to gather information.

4.4.1 Observation

Ethnographers carry out fieldwork by observation while living in the communities of their particpants, observing activities of interest, recording field notes and observations and carrying out various forms of ethnographic interviewing (Dwyer, 2009). The term ‘observation’ means that a researcher directly observes the behaviour and activities of the group under study and the out come of the process is termed ethnography. Engaging in the field where the ethnography takes place and collecting data is called observation. This is the primiary source of ethnographic data. Street ethnographers freely enter into the children’s lives in order to collect information without biasing data (Bemark, 1996). According to Bemark, the ethnographer, as an observer, initially simply walks into the street in an effort to become immersed in the context to understand the street children’s culture (Bemark, 1996). I discuss the ethical issues involved in this approach to data collection in subsection 4.8 of this chapter. The process of immersal helps the researcher to understand the day-to-day activities of the participants in their natural environment, and the meaning of these activities. The ethnographic approach involves the use of field notes. Observation focused on listening to children and observing what they were doing and why they were doing it (Robson, 2002). The data include actions and verbalisations, such as encounters, relationships and conversations (Greene & Hill, 2005). The date, time and physical location of the situation, including any events, verbal and non-verbal communications and behaviour, how people talk and their relationships were all logged in the field notes. Data analysis involved informal conversation, observation, quotations and the participants’ views in their own words (Genzuk, 2003). Informal conversations helped me to interpret the observational data (Stark

& Torrance, 2005). As well as the participants' behaviour, my ideas, thoughts and feelings, as researcher were also noted (Emond, 2005).

4.4.2 In-depth interviews

The choice of in-depth interviews in this research was appropriate primarily due to the sensitive topic (Mack et al., 2005). A sensitive topic include aspects of private lives that participants may not want to disclose or which may present a threat to an individual, or which have the potential to arouse an emotional response (Lee, 1993). Any topics labelled as taboo, like HIV/AIDS/STIs which involve sexual and drug-abusive behaviours, are also sensitive topics (Dickson-Swift, James, & Liamputtong, 2008). Dickson-Swift et al.(2008) further note that the sensitivity of a topic depends on the culture of the people being studied; for example; HIV/AIDS/STIs are highly sensitive topics, particularly where sex and sexuality are not openly discussed.

Trust between researcher and participant are important in the study of sensitive issues; therefore, an in-depth interview was identified as a suitable method to create trust between myself and the participants (Mack et al., 2005). The vitally important preparatory stage in interviewing children was building up rapport. It was important that trust between researcher and participants was developed during data collection in order to obtain quality data since good rapport can encourage more truthful answers as well as enable the researcher to pick up any signs of distress(Pitts & Miller-Day, 2007; Scott, 2008). This process of maintaining relationships is only possible in in-depth interviews (Pitts & Miller-Day, 2007).

The problem of illiteracy is particularly acute when the participants are street children (Scott, 2008). The children in my study were mostly illiterate and had limited vocabulary, and were sometimes not so may not be able to answer fluently (McAlpine, Henley, Mueller, & Vetter, 2009). In-depth interviews are therefore particularly important so that if children do not understand the questions at once;

the method allows repeated conversation and interpretation in the case of misapprehension or if clarification is needed. This approach helped me to obtain adequate information (Britten, 2006). Moreover, Pope & Mays (2006) state that the in-depth interview is useful to explore subjective understandings involving the disclosure of information about knowledge, attitudes and sexual behaviours.

4.4.3 Justification for using the data collection methods

Group discussion is also a popular mode of data collection in qualitative research, but use of this method is of doubtful value for gathering sensitive data with street children, because one is unable to ensure confidentiality (Scott, 2008). Another important barrier and reason for avoiding group discussion is that the street children are reluctant to speak freely and critically in a group, especially about sex and sexuality (Milena, Dainora, & Alin, 2008). Use of focus group discussion as a method does not guarantee anonymity between participants (Robson, 2002), and there is also a chance of interruption and confidentiality being broken by outsiders (Mack et al., 2005).

Similarly, self completion methods were considered inappropriate given the children's limited reading and writing skills (Scott, 2008). They might not give the answer directly or correctly based on a conventional one-off questionnaire, because of their limited formal education (McAlpine et al., 2009). Also, stereotyped and normative answers to quantitative one-off questionnaires do not disclose real insights on sensitive issues related to HIV/AIDS/STIs. In addition, issues such as differences in the level of understanding of the questions, and the inability to gather quality information, arise in a survey method (Greene & Hill, 2005). Moreover, the questionnaire technique may not provide the type of data required even if the research surveyed the entire population. In-depth interviews were considered the most appropriate way of exploring children's perceptions, allowing for adjustment of misunderstandings (Judith Ennew & Plateau, 2004). The presence of the researcher is essential to adjust the participants' potential

misunderstanding of enquiries during data collection (Britten, 2006; Greene & Hill, 2005), especially among street children.

Another important aspect of the in-depth interview was its usefulness in researching sexuality in a country like Nepal, where talking about sexuality is considered taboo (CPCS, 2007). The issue of taboos in talking with children about sexuality was more easily managed during in-depth interviews (Mack et al., 2005), because I had already established rapport with the children. Moreover, the power imbalances in research with street children can be reduced by using the in-depth interview method of data collection (Mack et al., 2005), and also the assurance of anonymity in an in-depth interview makes children relax and speak comfortably (Mack et al., 2005).

The research used observation as a supplementary method to gather information. The motivation behind the observation was to see the children's behaviour and events, and to analyse why these occurred in a real situation (Pope & Mays, 2006). The ethnographic approach is also important as it helps to provide information, through precise and detailed descriptions of the locations and contexts, on high-risk behaviour regarding HIV/STIs and drug abusing behaviours, as well as of community-level interventions (Power, 2002). Observation provides the opportunity to collect information about behaviour, practices and events through direct watching, and helps in the collection of examples of behaviour and practices in relation to HIV/AIDS/STIs risk and vulnerability (Pope & Mays, 2006).

Another reason for using observation was to make an attempt to enter inside the group to be a part of it. This strategy helped me to access participants for formal interviews; it also helped in building up relationships and gaining trust between myself and the participants (Power, 2002). Maintaining close relationships, trust and rapport between the researcher and the respondent is important in qualitative research, especially with sensitive issues like HIV/AIDS/STIs (Dickson-Swift,

James, Liamputtong, & Kippen, 2006). Interviews offer information from the respondents' memories, thoughts and knowledge, while observation gives insights by observing them directly in their natural context (Stark & Torrance, 2005). The information from two data collection procedures helped to cross-validate the information and so increased the credibility of the research and enhanced contextualisation.

4.5 Field Settings and Data Collection

4.5.1 Identification and selection of participants

Thirty three (33) in-depth interviews were conducted over a period of four months from March 2010 to July 2010. Of the respondents, 23 participants were male and 10 were female. Only seven participants were above the age of 18, of whom two participants were male and five were female. Five participants did not complete the interview process, so only the complete information from 28 participants has been documented in the research. The reasons given for refusing to complete the interview process were their friends being around them, shyness and children being busy with activities such as seeing and meeting with other people or friends.The average age range of the participants was from 13 to 18 years.

For the purpose of the study, 'street children' were considered to be children 'of' the street, mainly of an age range from 8 to 18, but including some above 18 years. This gave me an opportunity to learn retrospectively about the risks and vulnerability of street children over a period of time. The street children spent their childhood and eventually became young adults on the street over an extended period of time; the inclusion of participants above the age of 18 was therefore in order to learn how the risks and vulnerability increase over time among the street children and in society.

4.5.2 Sampling - inclusion and exclusion criteria

This research included children and young people aged 8 to 23 years who had been living on the street for at least the preceding three months at the time of the study. This age group ensured that young adults who had grown up on the streets, and were able to retrospectively reflect on their lives as children on the streets, were included in the study.

4.5.3 Research settings

The study area was located in the Kathmandu valley in a range of street locations (including tourist centres, markets, bus stations and cinema hall). Observations and interviews took place in three main sites. These were different locations (close to one another) in the Kathmandu Valley and were selected simply because they were places where street children congregated and children moved freely between the sites. The sites are: Ratna Park - an open air auditorium, Thamel and the Pashupati area. Detailed discussion of my observations in these three sites is provided in Chapter Six. Choosing these different sites was simply an attempt to gain a greater understanding of children's living and working conditions. These interview sites were also chosen because they offered a private place where the children felt safe, relaxed, and comfortable and could be apart from onlookers, thus protecting their anonymity. It was not appropriate to analyse the data according to the sites they were gathered as I was studying a single phenomenon and the same group of children migrated between the three. The interviews were held in informal settings in a casual manner, in order to make the children feel safe and at ease to speak freely.

4.5.3.1 Ratna Park

Ratna Park is open market of the Kathmandu valley. Children gather in this place as there is an economic generation opportunity. They work as casual labourers as there are lots of small shops and eateries.

4.5.3.2 Thamel

Thamel is touristic area. As this is the tourist area children get different opportunities for working and earning. Begging from tourists is a popular way of earning in this area.

4.5.3.3 Pashupati temple area

Pashupati is the place where there are lots of corners, sheds and shelter. It is also a place for economic generation opportunity. Leather products are not allowed inside the temple premises and children can earn money by guarding the leather accessories of visitors. They also have the opportunity to get food as hundreds of devotees visit the Temple, and religious people offer food and money to the poor.

4.5.4 Sampling strategy

The fieldwork started with a period of direct observation of street children in street locations (tourist centres, markets, cinema hall and temple) in the Kathmandu valley. At the beginning, during the observation period, I took notice of the locations where they usually gathered and the time when they gathered. They were a difficult group to access (Panter Brick, 2002), so the strategy was kept open as to where and whom to approach. I tried to seek any street child who appeared in the street except for those influenced by drugs and alcohol. The street children who were ‘high’ in mood were identified by personal observation of

smell (of alcohol), appearance and physical characteristics. Interested participants were identified by their willingness to speak to me, their openness, interests and natural curiosity. After finding a potential participant, I tried to talk to them privately and invited the participant to take part in an interview away from the group. Initially with informal conversation, and subsequently by succeeding in building up a rapport, I was able to recruit participants to be interviewed. Besides direct contact with the street children, some members of the sample were collected by the snowballing sampling procedure (i.e. selecting children connected in some way to achild being interviewed).

4.5.5 Data collection instruments

A field notebook and an interview guide were used as instruments for the research. An observation guide was devised to note ethnographic information. This guide was designed to record information based on the objectives of the study regarding risks factors of HIV/AIDS and STIS. The observation guide shown in Appendix C comprised of broad themes underpinning the study: the nature of the settings, children's interaction with people, children's characteristics, and events (eating patterns, health and hygiene, sexual behaviour, drugs and alcohol abusing behaviour) that determine risks to HIV/STIs among street children.

Although a semi-structured interview guide was used for the in-depth interviews, the participants were encouraged to tell their stories in response to open-ended questions based on the research questions.

The guide enabled me to maintain focus on the objectives of the study, but also to let the participant speak openly about his/her experience. Therefore the interview maintained a structure, but if new topics arose, the participant was free to speak about them. The interview guide covered issues based on the reasons that push children onto the street, knowledge about HIV/AIDS/STIs, sexual behaviour and

attitudes. A socio-demographic schedule was also prepared to gather personal information from the street children.The research guide was developed based on USAID/WHO studies, Nepal Demography Health Survey (NDHS 2007) and a review of the literature related to the conceptual framework of the study. Interview questions were made simple, applicable and understandable to the children, and excluded any words that could harm or offend them. The Interview guide also covered questions on demographic data. This guide is presented in Appendix D and E. The interview guide was developed in English first and then translated into Nepali. The interviews were conducted in the participants' native language and then translated into English by myself for analysis.

4.5.6 Data collection procedures

Data were obtained via observation and in-depth interviews. I was properly prepared with field notebook, pen and ideas to note down what was seen and heard in order to collect information by the observation method. Information was taken by observing what the children were doing, what they were trying to accomplish and why they did this. Documentation of the observation was organized by different pre-determined themes based on evidence such as physical description (health and dress), diet and patterns of eating, sexual behaviour, drug use, abuse and the patterns of interactions between street children and with the general population. My thoughts on events and experiences were also noted to demonstrate the reflexive aspect of the research that is described in Chapter Five. I made notes immediately after the observation had occurred, so ensuring that an event was not missed and in order to give accurate data. Otherwise, postponing the expansion of notes could lead to events being forgotten, because the memory fades quickly (Mack et al., 2005).

Information from the observation was collected along with the in-depth interviews throughout the whole duration of the fieldwork. Street children that I met during the observation process were invited as potential participants in interviews. After

getting young people's consent after the building-up of rapport, arrangements for formal in-depth interviews were made. The participants who agreed to take part in the interviews were fully informed about the research before starting the interview. Potential participants were told the aims of the research and the kinds of topics that would be asked in the interviews. All the respondents signed a consent form that was developed in the participants' regional language, which confirmed that they were willing to participate in the study. The interview was then conducted using the semi-structured interview guide in a face-to-face informal conversational style. Each interview was approximately two hours in length, including obtaining consent at the beginning and informal talk at the end of interview. Young people determined how much time they wanted to contribute to the study.

4.5.7 Data collection

All of the participants were given an option to have their interview audio recorded. Each participant was initially introduced to the tape recorder and I played a small sample of recordings for them to hear the voices before starting. In some instances I noted the participants' unwillingness to speak in front of a machine (audio recorder). I also realised that using an audio recorder was not an appropriate technique for interviewing street children because they were restless, and sometimes irresponsive. Also, the interview process in the street was not precise; young pople frequently interrupted conversations, which resulted in long pauses that disturbed the fluency of the recording process. Furthermore, conducting interviews in a busy place with background noise sometimes gave unclear recordings.

In those instances where the participant's preference was to have information noted down as opposed to being audio recorded, I took notes during and after the interview. Pope & Mays (2006) suggest that there is a possibility of data alteration through writing notes, as writing during an interview can interfere with the

interview process, and notes written afterwards are likely to miss out important details. It is true that writing notes afterwards has the potential of missing out information, as the memory fades quickly and it would be difficult to remember everything that was said in a one or two hour interview. However, my experience was that writing notes during an interview does not have to mean losing information, as it is possible to control the interview speed and to clarify misunderstandings. Balancing the situation, I managed to take some notes at the time of interview and wrote key words for some of the information, because paying attention and listening to the participants was also essential, (I considered that continual writing would show inattention and lack of care towards the participants). Written notes from the interviews were translated into English to proceed to analysis.

4.6 Thematic Analysis

Thematic analysis is the identification of codes and overarching themes (Aronson, 1994). The coding process involves reading and summarising raw data in a way that reduces chunks of text (Ryan & Bernard, 2000), and makes it easier to manage data and identify similarities and dissimilarities. Codes are extracted from blocks of raw data, which could be direct quotations or paraphrasing of information, concepts, ideas, terms and phrases or interpretations (Aronson, 1994; Corbin & Strauss, 2008). Basit (2003) describes the code as an abbreviation of the text for a particular category, which gives the sense or understanding attached to chunks of text, phrases, sentences or whole paragraphs relevant to the questions under study. Groups of relevant codes belonging to the specific domain are categorised together, based on the interpretation of these codes, and are termed as themes (Ryan & Bernard, 2000). Fereday & Muir-Cochrane (2006) suggest that theme is a form of pattern recognition that organizes the possible information, and briefly describes and interprets the aspect of the phenomenon within the data which reflects the category for analysis. A theme can be understood as any term based on the research questions which connects and communicates with the codes

and data, and is formed by the fusion of similar ideas over the codes in a higher order.

After identifying the codes, they were classified based on their relationship to one another. Then the relevant codes within the data groups were clustered and conceptualised, which means bringing them together under a heading directly related to the research questions, to make first level themes (Fereday & Muir-Cochrane, 2006). This scheme helps the researcher to change or drop codes to make a hierarchical order of themes. Some identified codes were not matched to each other because their meaning was not directly connected, and the themes were contemplated and found to give meaning if linked with codes; therefore, such codes were condensed in order to culminate in hierarchical themes. The study comprised the pre-designed conceptual framework which underpinned the study; therefore the process of splitting, splicing and linking of codes was driven by theoretical concerns (Fereday & Muir-Cochrane, 2006). Some new codes relevant to the research questions emerged and were fused under the relevant themes to expand meaning.

The coding process was initiated by categorisation of the text or quotations using review and comment features of Microsoft Word. Initially, relevant chunks of text were grouped based on research questions across the data of each participant, using the comment feature in a single document. Then, the data from each participant were coded in a similar pattern. The given codes, including the text or the quotations, appeared on the right hand side of the document. In another stage, codes of similar level for all participants were assembled under certain themes. Finally, the individual data were analysed within the overall data by comparing similarities and dissimilarities to make higher level themes. Each coding stage was saved in the computer by naming the document.

Though the process was time consuming, this method of coding helped to organise the data systematically. It was also easier for cross-checking each

participant's data forward and backward in a single document. There was no fear of missing data because it enabled the protection of each stage of the coding process. It was important, however, to handle all the sets of data carefully, as there was a chance of mixing the data of one participant with that of another. I placed a numerical name for each piece of text or quotation by each participant throughout the coding process to ensure that the data were handled carefully.

The importance of thematic analysis is that it permits the researcher to combine analysis of the frequency of codes with analysis of their meaning in context (Joffe & Yardley, 2004). Thus it elucidated if the particular coding unit in the data was common or rarer, so providing an idea of whether many or just a few street children had certain behaviour, knowledge or practices, or whether any new themes emerged. Braun & Clarke (2006) report that the importance of thematic analysis is due to its flexibility. They suggest that qualitative analysis is generally divided into two paradigms: one is that tied to, or derived from, a theoretical or epistemological framework, such as conversation analysis and interpretative phenomenological analysis; another paradigm, such as grounded theory and discourse analysis, is essentially independent of theory and epistemology, and can be applied across a range of theoretical and epistemological approaches. Thereby, Braun & Clarke (2006) state, thematic analysis is important because of its flexibility, in that it is not wedded to any specific theoretical framework, and therefore it is appropriate in research that is comprised of a pre-determined conceptual framework.

This study utilised a predetermined public health theoretical framework (Chapter Three) and the hierarchal themes were extracted from the predetermined theory. Thematic analysis enables the use of predetermined theory (Braun & Clarke, 2006). The four domains of risk factors that I had previously identified formed the hierarchical themes: a) pre- street risks factors (family, economic and social); b) street risks factors (sexual behaviour, drugs and alcohol); c) aggravating risks factors (lack of knowledge regarding HIV/AIDS), and d) perpetuating risk factors

(attitudes towards people living with HIV/AIDS and HIV/AIDS treatment). The public health theoretical framework therefore influenced the aims of the study justified the methodology, informed the research design and provided the theoretical lens for the analysis of the study.

The template (Figure 4-2), demonstrates the hierarchical themes developed for this study that links the pre-conceptual framework (Figure 3-2) and research questions. After overarching themes were identified, multiple themes that were conceptually or sequentially related were merged; this in turn allowed for higher order abstraction and interpretation. The themes produced in the thematic analysis provide the opportunity to match the findings with the pre-existent theoretical framework, in order to see patterns and identify new themes. New themes emerged from the findings of the in-depth interviews such as parental mistreatment; high risk sexual behaviour, lack of knowledge of HIV and AIDS and STIs on transmission, prevention and treatment and negative attitudes towards HIV/STIs treatment and people living with HIV/AIDS, including perverse attitudes, stigma, suicidal feelings revealed (see Figure 4-2). Finally, succinct phrases were added and explained in a coherent manner to describe the meaning of the four hierarchical themes. The newly emerged theory explains in detail the four domains of risk factors that are vulnerable to HIV/STIs and AIDS in street children (see Figure 8-3).

The chart represents each stage of the coding and provides the sense of links between themes. The step-by-step process of thematic analysis, using the hybrid approach that is outlined in the study (see Figure 4-2), that shows the rigour of the analysis used (Fereday & Muir-Cochrane, 2006). The method demonstrates the transparency of how the overarching themes were formulated from the raw data, and ensure that the data interpretation remained directly linked to the words of the participants (Fereday & Muir-Cochrane, 2006).

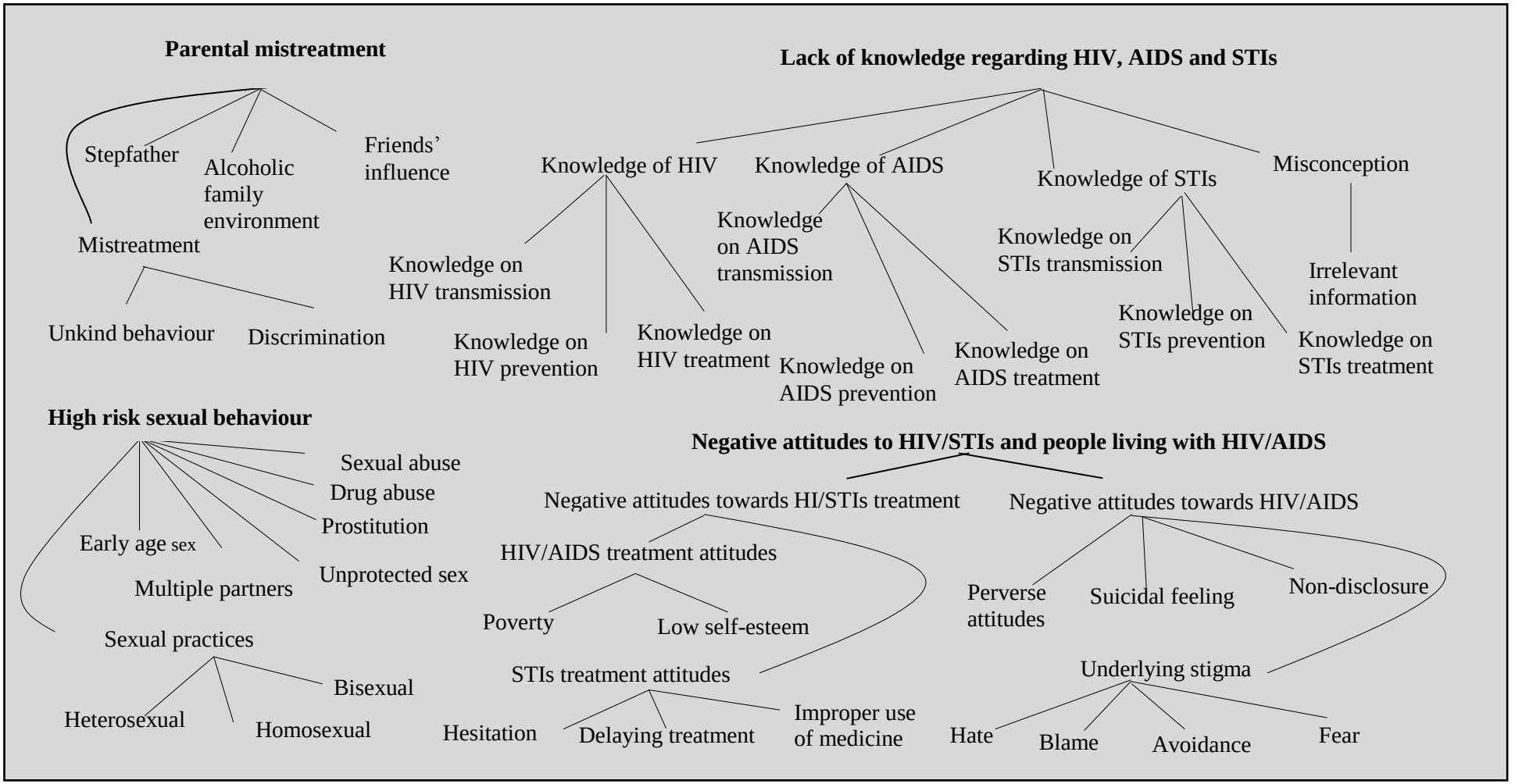

Figure 4-2 Thematic coding of HIV/AIDS and STIs risks to street children

4.7 Rigour of the Research

Careful attention has been paid to ensuring the rigour of the study by mapping the procedures followed, against the research literature (shown in Table 4-1).

Table 4-1. Rigour of the study

Rigour criterion	Rigour presentation
Reliability and validity are used to demonstrate the rigour of the study in both qualitative and quantitative research. Reliability and validity used in quantitative studies are also used in some qualitative studies to show the quality of the research (Tappen, 2011). However, due to the difference in underlying philosophy and criteria between the two paradigms, different terms should be used to show rigour in qualitative and quantitative studies (Golafshani, 2003; Tappen, 2011).Validity and reliability in quantitative research suggests that the research is credible, while the credibility of qualitative research depends on the ability and the effort of the researcher (Golafshani, 2003). Although reliability and validity are treated separately in quantitative studies, these terms are not viewed separately in qualitative research. Instead, terminology that encompasses both is used, such as credibility, neutrality or conformability, consistency or dependability, and transferability or applicability (Lincoln & Guba, 1985; Tappen, 2011). The application of validity and reliability demonstrates robust procedure, plausible data and the analytical outcome of the research (Bashir, Afzal, & Azeem, 2008). • Some authors have suggested that the rigour of a study can be achieved through incremental and interactive verification throughout the research process. Meyrick (2006) suggests that mirroring the flow of the research process gives rigour to the study. Meyrick puts forward two principles: transparency, which refers to close disclosure of the research process, and systematicity, which refers to the framework and logical connection between the purposes of the study. Although the criteria are phrased differently, Morse, Barrett, Mayan, Olson,	Through my analysis of the literature, a theoretically derived conceptual framework was developed which generated research questions; this provided the theoretical rationale for the methodology (question formulation, sampling sufficiency,

&Spires (2002) report that the demonstration of a meticulous, systematic approach yields validity to the research. Also the verification strategy (congruent methodological coherence, systematic sampling, data collection, close and detailed analysis) ensures the rigour of the study. The methodological coherence and sampling sufficiency ensures congruence between the research questions and the methodological component, which includes an appropriate sample that represents the research topics and allows sufficient data to be obtained (Morse et al., 2002). • Ethical implications in the study enhance rigour in qualitative study (Carpenter & Hammell, 2000). Reliability in quantitative research corresponds to dependability in qualitative studies, which examines the trustworthiness of the research (Lincoln & Guba, 1985). Trustworthiness in qualitative research is an alternative term to show reliability and validity (Golafshani, 2003; Tappen, 2011),which is achieved by establishing credibility, conformability, dependability and transferability (Tappen, 2011). Establishing trustworthiness is crucial in that it persuades that the research is worthy of being used in future research (Tappen, 2011), because one can determine that the findings of the inquiry have applicability for use in other contexts or with other subjects (Lincoln & Guba, 1985).	data collection strategies and active analytical development of the study) and the lens through which data are interpreted, which shows the coherence of the study (see Chapters Three and Four). Detailed explanation of the ethical issues.
Credibility	
• Credibility is equivalent to internal validity. *Credibility* can be achieved through prolonged engagement in the field and persistent observation, rich and thick description, and triangulation (Tappen, 2011). A researcher engaged in research sites for a prolonged period of time has many advantages (Creswell & Miller, 2010). Observation over time builds trust with the participants and is demonstrated by participants being comfortable in disclosing information. A researcher being in the field over time solidifies evidence because it enables researchers to check the data and their hunches, and to compare interview data with observational data.	Observation and in-depth interviews continued for a time period of four months. Data collected from two methods were triangulated.

The longer the researcher is engaged in the field, the more pluralistic perspectives will be heard from participants and the better the understanding of the context of the participants' views. Generally, ethnographers spend a time period of from four months to a year, though there is no set duration (Creswell & Miller, 2010). • Tappen (2011) states that individual interviews provide richer description than group discussion. The description of the setting, the participants and the themes of a study establish credibility. The purpose of a thick description is that it creates verisimilitude; statements produce for readers the feeling that researchers have experienced the events being described in a study (Creswell & Miller, 2010). • Methodological triangulation involves combining methods such as using observation and interviews (Tappen, 2011). Informant triangulation is via data sources (Carpenter & Hammell, 2000; Shenton, 2004). Information from the individual participant can be cross-checked across the participants, which gives a rich understanding based on the contribution of a range of informants (Shenton, 2004).	In-depth interviews were obtained, including an explanation of all details of the study methods. Detailed explanation of my experiences, challenges and feelings (see Chapter Six). Multiple methods and a wide range of informants were used in in-depth interviews and observations.
Dependability	
• Reliability cannot be shown on its own but is a precondition of validity;therefore a demonstration of validity is sufficient to establish reliability (Lincoln & Guba, 1985). The concept of reliability is endorsed with the concept of dependability or the concept of consistency, and those are used to examine both the process and product of the research (Lincoln & Guba, 1985). Campbell (1997) reports that reliability or dependability can be achieved through a process of step-by-step research, which is verified through examination of items such as raw data, data reduction processes and process notes. Similarly, reliability is the indication whether the procedures applied across the research process show stability and consistency (Riege, 2003). The demonstration of consistency in the research design and procedures, together with congruence in the development of research questions, data collection and analysis of the research, all	Detailed explanation of the data collection process, identification of codes and themes from raw data and generation of the theory.

establish reliability (Riege, 2003). Dependability is equivalent to reliability in quantitative research, which can be obtained by compiling six components as follows (Tappen, 2011): • Data collection instruments	Field notebook, interview guide.
• Raw data	Observation data and interview data.
• Process notes	Descriptions of how data were obtained and how analysis was done.
• Data analysis products	Themes conceptualised and framework generated.
• Data synthesis products	Coding schemes created coded data; themes and interpretations made.
• Reflections of the researcher	Reflexive on challenges during study.
Conformability	
• A key criterion of conformability is that the researcher admits his or her own predispositions in the adoption of the methods and methodology, and these are made clear, along with the limitations in the use of research methodology by others (Shenton, 2004). • The emphasis on triangulation promotes conformability (Shenton, 2004)	The reasons behind the adoption of the methods and methodology used in the study, and the limitations in terms of the use by others are acknowledged. Methodological triangulation (observation and in-depth interviews), informant triangulation (wide range of informants) and data sources triangulation (range of documents) have been employed.

Transferability	
External validity is referred to as transferability or generalisibility in qualitative research. Transferability means that the finding of the study is applicable for further use in other contexts (Tappen, 2011). Creswell and Miller (2010) and Meyrick (2006) say that a detailed description of the methods and the context in which the study is conducted enables readers to decide about the applicability of the findings to other contexts or subjects. • The motivation of qualitative research is not for generalisation, as is the aim of quantitative research (Tappen, 2011). There are critics of the transferability of a small number sample in qualitative studies (Shenton, 2004). Robson (2002)suggests that there is criticism about generalisation even if the idea of a case study is an appropriate methodology for the investigation. However, adopting a single case study using multiple participants has a better chance of providing robust results and avoiding the common criticism about single case studies with regard to generalisation in wider contexts (Tellis, 1997b; Yin, 2003a), because individual views and experiences from a wide range of participants gives a rich picture of understanding based on data corroboration. • Similarly, Fisher & Ziviani (2004) put forward the view that case study research based on theory is generalisable. Fisher & Ziviani report that generalisation is achievable in single case studies (using multiple respondents) through case replications based on theory. Each individual study is a complete inquiry of its own; replications are driven by having multiple respondents and the combination of inquiries from more than one generates a theory or conclusion which therefore demonstrates transferability. • Moreover, Horgan (2006) asserts that theory-generated case studies producethe possibility of generalisation, and that they can generalise widely when contextualization is a principal idea. Horgan further suggests that ethnography studies generalise widely beyond their specific contexts if the characteristics of the contexts are similar to wider practices.	This research, designed as a theory-based single case study, involved multiple participants which is preferable in case study research (Robson, 2002; Yin, 2003a), and is accompanied with ethnography. Therefore the findings of the study could be generalised in other places providing there are similar contexts. However, the aim of the research was not to generalise. The intention of the study was to explore the phenomenon of HIV/AIDS and STIs risks and vulnerability, which could be obtained from small numbers of street children, and in which rich and thick descriptions, were essential (Myers, 2000).

4.8 Ethical Processes

This section deals with the ethical approaches that were applied during data collection in the research. It summarises the ethical issues which arose in the process of data collection, and the ethical dilemmas that were highlighted during the period of conducting the research; the ways in which I handled them without harming the street children psychologically or physically are also explained. As a minimum requirement, ethical approaches are defined as acting morally and not harming the participants. The issue also considers the responsibility of researchers and the dangers that researchers could encounter during data collection. Piper & Simons (2005) state that ethical conformity balances the moral dilemmas that the researcher may encounter during data collection with the need to act ethically with participants. They further suggest that ethical practice is about paying attention to the 'rights' and 'dangers' of both participants and researchers. The ethical protocol applied in a particular research study depends upon who is being studied and what the subject area of the study is; for example, the topic of this research was highly sensitive because it deals with street children and their sexual behaviours regarding HIV/AIDS and STIs. That is why this research was conducted in conformity with specific ethical protocols. The key considerations associated with ethical protocols in this research were informed consent, and confidentiality and anonymity, which were explained clearly both in an information sheet and on the consent form (see Appendix A and Appendix B).

4.8.1 Permission for study

Ethical approval was given by the School Research Ethics Panel at the University of Huddersfield. Proxy consents were not obtained from any organisation or family members of the children to take part in the study, as children 'of' the street were living freely on their own. However, the study sought permission from the participants for in-depth interviews, to comply with ethical standards.

4.8.2 Informed consent

4.8.2.1 Dispensing withconsent - an ethnographic observation

Obtaining informed consent is obtaining permission for data collection, which is necessary for all types of data collection methods (Mack et al., 2005; Piper & Simons, 2005). However, informed consent for observation in ethnographic studies is inappropriate (Mack et al., 2005; Wiles, Heath, Crow, & Charles, 2005) and difficult (Wiles et al., 2005). Wiles (2005) assert that it is impossible to obtain informed consent from all the participants who are being observed in a public place such as a pub or in the street. Emond (2005) supports this view, suggesting that informed consent in an observational approach is determined by the research topic. In this case, I was faced with the dilemma of whether to obtain consent or not in the observation method of data collection. The question raised at first was how to obtain consent and what the participants should consent to. Informed consent in this preliminary aspect of my research of street children was inappropriate and impossible. Primarily, observation in this research meant to observe widely, not to observe a particular child in a particular corner and therefore it was not feasible to obtain informed consent. Also, because of their mobile nature (Bemark, 1996; Kombarakaran, 2004), gathering information from street children in a public place after informed consent was difficult. Street children are often reluctant, opposed or hesitant to engage in conversations with outsiders (Ayuku et al., 2003). Robson (2002) suggests that trying to get permission from participants to take part in an observation of them might not be accepted and if participants know that someone is in their midst and observing them, the researcher would be unable to preserve natural data in natural settings (Denscombe, 2003). Similarly, Emond (2005) notes that if the researcher aimed to gain consent before observation, it would significantly disturb the participants' natural state, and they would be unable to observe true events. Skaggs (2010) suggests that participants who are not influenced by a researcher will keep doing their natural activities and the researcher will be able to perceive real activities. Otherwise, the children may intentionally decide to change their usual practices

and so their natural activities would be destroyed by pre-scheduled observations (Green et al., 2006).
Therefore the idea of obtaining consent before the observation placed me in dilemma.

The issue of consent also arose in the light of the sensitivity of the research. The main purpose of utilising an observation method in this research was to observe naturally occurring behaviour from the street children's natural context. It would have been impossible to collect information on behaviour and practices regarding HIV/AIDS/STIs after obtaining consent. For example, if children had been informed that a researcher was watching them to collect information, they would not have wanted to be seen using drugs or watching pornography. Observation was the only way to collect naturally occurring behaviour in their natural context. Obtaining informed consent from the street children may have had a negative impact on the quality of the information, especially given the sensitivity of the research topic. Wiles (2005) takes a radical stance and argues that obtaining consent from participants in an ethnographic approach is inappropriate, because it undermines the exposure of social problems is the only way that some areas of social contexts can be exposed in order to aid understanding.

Hence, the information about street children's natural habitats and behaviour was gathered through observation without informing the young people. However, information was collected by observing children in their natural contexts in ethical ways, without harming them physically or psychologically. Documentation of the observation information has not indicated the name of any particular child or a particular group. Information from the observation showed the behaviour and practices of the street children as a whole, which occurred in the public domain where anybody could observe them in their general context.

4.8.2.2 Informed consent in in-depth interview

Informed consent in the case of in-depth interviews is essential, as it is the right of the participants to be informed about the research and its risks and benefits to them. It is difficult to gain consent from participants who have no responsible adults acting for them, such as street children who live on their own and are not associated with any organization or family. The study was of children 'of' the street who were not accessible through guardians, parents, relatives, care givers or service providers. Therefore, these children are autonomous individuals, and they make their decisions on their own. On the other hand, legal constrictions state that children under 16 are not legally competent to provide consent (Department of Children and Youth Affairs (DCYA), 2012). Ethically however, it is important to gain informed consent from children who wish to take part in any research (Piper & Simons, 2005). This was not a straightforward process and required the establishment of a rapport in the first instance. After building up rapport, and before the interviews started, participants were given information about the research: they were informed about the aims of the study and the kinds of topics that would be discussed in the interview, including the possible outcome of the research, its expected benefit and the time likely to be required. The young people were also fully informed about the anonymity and confidentiality of the information collected from them and their rights during the interview (see Appendix A). In order to adhere to ethical issues, I used a snowballing method to identify participants; once children were comfortable with me being in the area, had got to know me, and knew the reason I was there, they would inform others about the study. In this way children acted as gatekeepers and protected one another's interests. The information provided to participants is shown in Appendix A. After the research information was provided, the consent form was explained verbally to each of the participants in their regional language. The consent form was written both in English and in Nepali languages. I read the consent form for those street children who were unable to read. Then they were given the choice between written and verbal consent, and assured that they could withdraw at any

time thereafter without giving a reason. The consent form is presented in Appendix B.

4.8.3 Anonymity

Anonymity is a process of using pseudonyms in a report, in order to offer protection of privacy and confidentiality (Piper & Simons, 2005). Anonymity attempts to avoid identifying the people who have participated in research. The participants of the research remained anonymous throughout the study, as their identities were protected by using pseudonyms. The participants were informed about the possibility of using direct quotations from the interview and any future uses, but told that these would be fully anonymised. Anonymity was also maintained by conducting the interviews in a private place so that a participant taking part was not observed by outsiders. Also, permission was obtained from the participants to take and to use their photos. However, the photos used in the research were obscured, and other identifying features changed, to anonymise them.

4.8.4 Confidentiality

Confidentiality is a procedure whereby a researcher talks in confidence and assures the participant of the confidentiality of the information collected during research (Piper & Simons, 2005). Prior to data collection, the street children were informed that all the information they provided would be treated in the utmost confidence except where there was risk of harm, in which case referral to an appropriate agency would be suggested. Confidentiality was maintained according to the data collection guidelines: field notes were accessed by the researcher and were kept secured and confidential while in Kathmandu. Only the researcher and supervisory team accessed the written information at University, field notes from

the interviews were kept in a secure place in a filing cabinet, and all electronic data were stored in the researcher's password-protected computer.

4.8.5 Legal versus ethical issues

Researchers of street children often face difficult, unique and unexpected ethical issues and moral dilemmas. In such situations the actions need to be resolved ethically depending on the circumstances of the children. The ability to handle the situation ethically to combat these issues is the researcher's priority in such research, so I was prepared to confront complex ethical issues during the research process. Prior to the interviews, I had the contact details at hand of some organisations working for children. I knew what services they could offer. I had planned to make an arrangement to refer the participants if a serious vulnerability came to light during interview (e.g., if an interviewee had HIV/AIDS/STIs or was trying to get help). I would inform them about the available services provided by these organisations. They would be advised to go to a hospital or an organisation and their anonymity would be respected. At the beginning of the interviews, anonymity was guaranteed to the interviewee. They would also be asked whether they wanted anonymity. Depending on their willingness, they would be advised, and issues explained, but the choice would be theirs as the researcher did not have any legal responsibility and there was no support system for the researcher. In research involving children, child protection overrides anonymity and confidentiality as it is a responsibility of the researcher to inform any authorised organisation or hospital if children have been raped or had problems regarding HIV/AIDS, in order to protect them from risk and harm. I did not encounter such serious ethical issues during the research.

Most of the children and young people used illegal drugs and alcohol, often quite openly. It was not my role as researcher to judge this behaviour or to intervene. This raised an ethical dilemma regarding my moral obligation to the children. I

informed them about the consequences of such harmful behaviour; however, as Young & Barrett (2010) point out, it is necessary to understand the circumstances of survival strategy and the reasons for the use of drugs by children. Young & Barrett further explain that discouraging the use of drugs without understanding the children's survival strategies may not be in their best interest.

I also observed that the children were physically and verbally abused, and thoughts occurred to me regarding the importance of reporting multiple abuses, in which legal issues are particularly significant. Bemark (1996) asserts that the involvement of the researcher in such issues is mandatory and expected if there are mandatory law in the country. Child abuse reporting standards are different from country to country, and in developed countries there are strict guidelines for the protection of children from abuse (Sonkin & Liebert, 1998). However, reporting child abuse is inappropriate and impractical in research with street children in developing countries like Nepal (Young & Barrett, 2010) since services may not be available and children can be put at further risk of harm. The problem was, where and how to report the issues in respect of protecting children's rights and needs. Court systems, mandatory statutory systems or any designated reporting authorities which deal with such problems were not available.

Some participants experienced distress during the research process, as some parts of the study covered emotional, personal and family issues; for example, poverty, death, family violence and infections. Caution and sensitivity were applied while interviewing the participants. In cases where a participant became upset, I allowed time to stay and talk until they calmed down. Nevertheless, counselling groups were not readily available for help in Nepal. I had details of organizations and support services which were working in Nepal for street children, and I disclosed the details of available services where that seemed helpful or if the participants expressed a need. Bemark (1996) also states that there is no mandatory rule that

the researcher should transport or accompany the child to a source of help, but that informing them about the available services complies with the ethical issues.

4.8.6 Dignity

Bemark (1996) emphasises the importance of dignity in research of street children. Bemark advises the researcher to consider that children deserve the same rights to respect as others. Low self-esteem or inferior feelings among participants could potentially affect the relationship and create a gap between interviewer and participants. Thus the children were treated with dignity and respect, which spurred them to talk openly and also helped to develop a relationship with me.

4.8.7 Power imbalance

Power imbalance was one of the major issues in this study of street children. Power imbalance is a two-fold process. The street children were dominant in the street sub-culture in terms of aggressiveness and negative attitudes; on the other hand, I was dominant in terms of my education and status as a professional adult. While I could not change the unequal power balance that existed between us, I was mindful to dress modestly and to ensure that my behaviour was respectful and that I treated the young people with dignity at all times; I was also careful in terms of speech. Behaving with modesty, politeness, humility, respect and friendliness helped to establish close relationships and to build up confidence, which in turn helped to address the balance of power in the research relationship. Maintaining an overly professional role and identity would not have helped the young people to talk openly (Bemark, 1996) .

4.8.8 Vulnerability of the researcher

Researchers are vulnerable in research with street children. Bemark (1996) suggests that street researchers are likely to be involved in risks as they are around

some elements of danger and lack protection. Therefore, safety measures were considered to protect me from any potential harm. An appropriate companion or 'chaperone' was chosen, whose responsibility was to ensure that I was safe in the field. The chaperone was told the nature of the study and was informed to preserve the confidentiality and anonymity of participants. Research with street children places the researcher in a dilemma as to whether having a companion with them during interviews is appropriate or not. The researcher being accompanied by someone else might affect the interview process, especially if the research topic is sensitive and related to poverty, violence, sex and sexuality.Ryan & Bernard(2003) also said that participants were hesitant to respond and the relationship with the researcher was negatively affected if the researcher was in the presence of another person. The challenge was that having a companion who stayed nearby but at a distance was still a high risk. An incident might happen on the spot at any moment, because erratic movements and crime were continually present risks, and the carrying of weapons was not uncommon (Bemark, 1996). I tried to minimise the risk by avoiding conducting the interviews in the evening, despite the fact that this wouldhave beena potentially good time to visit the street children, as they tended to gather in one place during the evening. Therefore, I conducted interviews in the morning and afternoon with a companion nearby. Good relationships with the street children also have a great impact on the safety of the researcher. I was cautious to develop and maintain good relationships with all the street children I encountered, even if they had refused to participate in interviews. Any bad rumours spread about the researcher among the street children would be a risk.

4.9 Summary of the Chapter

In Chapter Four I have presented the aims of the study and detailed aspects related to the methodology and methods utilised in the investigation stages of the study using a public health approach as a theoretical thread running through research aims, methods and data analysis. I have also described the identification and

selection of the participants; the research settings; sampling strategy; data collection instruments and procedures, and how the data were gathered in the field. Analytical process and the rigour of the study have been demonstrated. The chapter has also detailed the ethical issues and how it was ensured that ethical principles were applied in the research.Since the research topic was sensitive, and related to marginalised people, ethical issues were considered carefully.

5 REFLECTIONS OF A PARTIAL INSIDER RESEARCHER

5.1 Introduction

Given the complex situation of research involving children on the street, this chapter demonstrates how I became reflective and reflexive during the research process. The process of reflection is however, an integrated component of this thesis; it emerged in relation to the justification and rationale for the study, was central to my research decision to blend ethnography and case study approaches and surfaced again in my discussion of ethics (see Chapter Four).

Reflectivity and reflexivity depend on the nature of the research process, the participants and the individual researcher. I have reflected upon my own ideas, assumptions and actions which influenced the situation, or resulted in a change to my practices, using both concurrent and retrospective analysis. Atkins & Murphy (1993) assert that certain cognitive and affective skills are necessary to engage in reflection. Also, the result of the research depends upon the researcher's presence, and on the extent and nature of the connection with the subjects of the research (Aull Davies, 2002). Therefore, the nature of the connection between the researcher and participants has a great impact on the outcome of the research.

Aull Davies (2002) describes reflexivity as an awareness of the impact and implications of the researcher's own opinions, preconceptions and characteristics on data, which may alter the outcome of the research, but which acknowledges the role of the researcher in the production of the data. Aull Davies (2002) further reports that issues of reflexivity are important in ethnographic research, in which the involvement of the researcher is particularly close to the research settings. Although covert participation eliminates the researcher's influence, the researcher's presence still impacts on results, although such effects are less visible. Therefore the demonstration of reflexivity is important to this

ethnographic case study research, as it involved engagement in children's lives over an extended period of time.

In my reflections, I recognise the complexity of the identities of both researcher and researched and in positioning myself as an insider researcher, I make no claims of being an absolute insider since my proximity to the lives of the research participants was influenced by many factors including: gender, education, values, social status, perceptual differences and so on. Furthermore, while I clearly had cultural knowledge relevant to my participants in terms of language, religion, cultural mores and traditions and a shared history (at the macro level) (Hall, 1994), it was apparent from my observations that the street children lived their lives in two realms: as part of wider society and also, within the context of a sub-culture born out of their experiences of marginalisation, social isolation and strategies for survival. There is need therefore to critically reflect on the use of the term 'insider research' itself given the multifaceted and fluid nature of identity and culture (Hall, 1994). For example, subcultural theories dominant among studies of young people and which suggest cultural groupings characterised by clear boundaries of 'us' and 'them' belie the fact that despite my observation that street children seemed to occupy a distinct 'social space' separate from mainstream society, this does not mean they were an homogenous group. Indeed it is more likely, especially given the transient nature of street life, that as with other youth cultural groupings, the groups I observed were themselves diverse, ephemeral and loosely bounded. In addition to the complexities of identity, my relationship with the research participants was also complex and while at one level my insider status was established because of shared language and understanding of cultural nuance, I was certainly not an insider in terms of lived experience. I agree therefore with the views of (Song & Parker, 1995) who state:

Dichotomised rubrics such as 'black/white' or 'insider/outsider' are inadequate to capture the complex and multi-faceted experiences of some researchers such as ourselves, who find themselves neither total 'insiders' nor 'outsiders' in relation to the individuals they interview (Song & Parker, 1995 p.243).

In line with this position, I suggest that insider status is determined as much the research subjects as by any attributes or characteristics the researcher might possess; in this case, cultural and linguistic knowledge provided a passport to partial insider status only and other insider access could not be taken for granted. When I was permitted insights into the group, this was on the terms of the young people and was clearly for the purposes of the research only. The reflections contained within this chapter are therefore those of a partial insider researcher.

5.2 Reflectivity during Fieldwork

5.2.1 Accessing participants

Accessing street children in the street environment was a complex process. The primary reason was that children's lives were fluid and movable as they did not have a fixed place to live. I did not find it a straightforward process of just seeing a child and being able to conduct an interview. The process included three stages: contacting, identifying and then finding children in the right place and at the right time.

Isolating one child from a group to take part in an interview was a complicated task, as the children always tended to be together in a group. The challenge I faced was that of finding an interested interviewee but failing to get a favourable spot straight away, which would result in the loss of a participant. It was difficult to find a favourable interview spot if the street children were approached in a busy place. I chose not to attempt to conduct interviews with street children who were roaming freely in the street in a busy place, due to unfavourable circumstances and the lack of proper interview sites.

Moreover, I experienced particular challenges in finding street girls. The process of accessing street girls was more difficult than for boys during the fieldwork. Therefore, the proportion of girl participants in the study was lower than boy

participants. There were several reasons that girls were less accessible and less available. Primarily, street girls were not so easily recognizable because in most cases even when they were identified by other young people as children who lived on the streets, they did not present as such as they were usually well-dressed and fashionable; which may have been linked to their primary occupation as sex workers. They were also more difficult to approach, as sometimes they remained in a group or with a male friend. However, even if I was successful in identifying interested female participants and they were available, their participation was still limited. Most of the young women did not respond to me when I tried to greet them; some even ignored me or refused to listen, and sometimes they were challenging and aggressive. I also noticed that some of them did not want to be near to me; I perceived the reason to be that they thought I would engage them and take up time they needed for their work. Their reluctance to participate was in marked contrast to the participation of boys and there may have been several reasons for this including the fact that both the researcher and the participants were female (in other circumstances, this may have influenced access in a positive way, however in this case, it seems that I was sometimes regarded as a rival) and also that the young women did not always identify themselves as street children even though it was very clear that they both lived and worked on the streets. One day I met a girl and during the conversation she denied that she was a street girl, yet during the data collection process another girl introduced me to the same girl as being a street girl. This made me think that the girls did not want to be known as street girls, probably because they thought there was a stigma attached to being a street girl. This might be true, as during interviews the boys told me that the girls on the street were prostitutes and the girls told me that they were known as prostitutes; of note here is the fact that being known as a prostitute carried less stigma than being known as a street child.

One of the important reasons that street girls were less available and rarely visible was related to the nature of their work. Most of the street girls, having left home at an early age, looked for different survival strategies like working in a restaurant or

hotel, or marrying someone. I think that being on the street was a last resort as a way of living. During informal conversations, some of the older girls mentioned that they had worked in a hotel or restaurant, or had worked as housemaids, or they had been married at an early age. However, for various reasons, such as the failure of the marriage or dismissal from employment, they were compelled to live on the street. My observations are also supported by Lalor (1999) who reported that street girls were frequently not visible because of the nature of their work, as they usually worked as maids in hotels, bars and in private houses. Younger girls were likely to repeat the same life patterns as the older girls. Some of the younger girls whom I approached had already experienced the failure of a marriage, and also hinted that they were linked with pimps (see Chapter Six). This would suggest that maybe these younger girls were actively looking for any kind of work.

Another reason for difficulties in accessing street girls might have been due to their involvement in prostitution and they knew that this was an illegal activity. One day a street girl, while being interviewed about sex and sexuality, suddenly stood up and tried to run away from me; she said, "*Didi* (sister), you are not a student, you are a policewoman." I assume that she was afraid she would be arrested after revealing her sexual activities. It made me think the girl had already encountered experiences with the police. Prostitution in Nepal is not open, and the police arrest people involved in such illegal activities. This might be one of the reasons that the street girls were not comfortable or easy to approach for interview, because they did not want to disclose their working activities. Given this situation, I thought that a snowballing sampling procedure would be the best way to find street girls. When I applied this snowballing method, I found it to be a useful way to move from one girl to another in order to collect data.

5.2.2 Accessibility of places

The street children were often reluctant to cooperate with my arrangements for interviewing them in ways that would ensure their privacy and confidentiality even if they had agreed to participate in the study. Several times, they refused to go to a place which I had chosen, even if the place was suitable for an interview. They refused to go for a variety of reasons, including distance and personal preference (Young & Barrett, 2001). Although I found that some children liked to be around their friends and were not willing to go out of their own territory, I also found that other participants were not happy to give an interview if they were overseen by their friends. The preference of these children made me more comfortable, as they themselves did not like to be interviewed in front of their friends, so I did not need to convince them to go to another place that was suitable for an interview. My concern was that their response would be affected if they were around their friends, as I had the impression that some children were awkward and shy about being interviewed. I also thought that the reason they did not like to be overseen by their friends during interviews was because they wanted to protect their privacy. This suggested to me that they were serious and they would possibly say things which were more private, which might be more truthful information.

On the other hand, some young people liked to be overseen by their friends during the interview. In this situation I had to take a further step to convince them to go to a private place. I was always mindful that an interview in a crowded place and near their friends would not maintain confidentially and would distract from the interview process, especially as I had observed that the children were drawn towards their friends if they saw someone in the group smoking or taking dendrite. I saw them snatching the cigarettes and dendrite from each other, and I had also spotted them asking passers-by for cigarettes. I thought that the reason they hesitated to go away from their territory was due to their relationships with their friends in that particular area. I found they had tight relationships with each other, and their friendships appeared to be part of their survival strategy (see Chapter

Six). Mizen & Ofosu-Kusi (2010) also reported that mutual exchange between children was essential in street life. I also observed that sometimes they were scared to go to another territory if they had had a clash with the children in other sites. One day a boy said: "Let's stay here and take interview; if boys see me they come to hit me. I had fight with the boys there." Another reason for avoiding being away from their friends might have been a feeling of insecurity; in that the children might have thought that I would oppress or harm them given many of them had had harmful experiences at the hands of adults. The finding and selection of sites was a challenge, however I managed to find locations that were in line with the children's preferences, not too far from their friends, were within their own territory and yet were still private. One example of the problems I encountered was as follows: I had a difficult time in the Thamel area with selecting areas to gather data. There were a few possible sites to conduct in-depth interviews in Thamel; among them, one interview site was a temple. When I was interviewing a boy, the caretaker of the temple shouted to me that I should not take street children inside the temple. He thought the street children were a nuisance and trouble makers. He explained that the street children defecated in the compound used the place as a toilet and they stole things. The man swept dirt with a broom, making the area all around dusty, which forced us to move from the interview spot, so interrupting the research process. He further accused me of earning money from this work. Sometimes I was obliged to request pedestrians to leave the area as they came up to us while we were having our conversation, as they were curious to know what I was doing with a street boy or girl.

5.2.3 Risks to the researcher

Risks to researchers should be taken seriously in research with street children. During the field work I encountered a series of incidents. Maintaining a relationship was most important in combating difficult situations, but it was also a difficult process. I found that the children sometimes did not recognize me, even though I had already established a good relationship with them and had had

several good conversations with them. I was sometimes scared of the young people because they could be aggressive. Also, most of the time I found that they used various types of drugs and alcohol. Bemark (1996) stated that " street culture was danger - danger lurks around the corners and movement of drugs, prostitution and crime follows them." Bemark further said that the street researcher needs to learn how to remain safe in the "potentially threatening world" of a context where people are scared to walk alone because of limited enforcement of laws and few rules are implemented by authorities (Bemark, 1996 ,p. 151).

There were occasions where I felt it was necessary to leave the area for my own safety because the street children were drunk or drowsy. For example, one afternoon when I entered the park, I noticed a street girl sitting on the grass. I will refer to her as Girl A. She used to speak nicely to me but always avoided giving me an interview. I decided to ask her again if she was interested but she refused to respond to me. Even so, I tried to build a relationship and would often converse with her. On another day, another street girl (Girl B), who was very drunk, came up to us and started to shout and asked: "What happened here? What are you doing?" I thought that she had come towards us to find out who I was, what I was doing and what I was talking about with her friend. She had a razor blade in her hand, which frightened me. Though it scared me, I was trying to handle the situation by being well-mannered, polite and respectful. Street girl B dropped the blade after Girl A convinced B to be quiet, telling her that the interviewer was just a student. She also said: "Leave her, leave her; don't do anything." She also said other things that I did not understand. After Girl B had calmed down, I asked her about her reason for carrying a blade. She said the blade was to slash anyone who harassed them. I assume that if Girl A had not talked to Girl B in my support, Girl B would have harmed me. Nevertheless, I visited Girl B regularly, though sometimes she did not even recognize me. Girl B also refused to give me an interview at first, but later asked if she could take part. What I believe is that my friendly, smiling manner, and a polite and respectful approach, over time earned

her trust and persuaded her to be friendly with me. She later appeared to be more supportive than many others in introducing to me other street girls.

I knew that the young children took interest in, and were suspicious about, a new person chatting with their friends in their area. I realised this as I found that groups of children encircled me several times when I spoke to a child and were curious to know what we were talking about. They must have been suspicious that I was trying to abuse them since children in the street were found to be often abused in various ways by pimps and political groups. Sometimes I was asked by children if I wanted to take them home as a maid. I also got hints that children were abused by an organ transplantation mafia (see Chapter Six).

On another day, when I was heading towards the park, a street girl who was drunk came over, shouting wildly so that people around could hear her. She shouted: "I know why you are coming here. You are not providing any help for us; do you give us job? Do you give us any money for interviewing?" She used harsh language. The incident happened in a busy place and everybody was looking at me. People encircled us. I was worried, not only because of the girl's behaviour, but also because I thought my future interviews would be jeopardised. I was equally concerned about my public image; people might misunderstand my role and think I was manipulating the girl in some way. I was calm but nervous as she screamed continuously, without caring about others. She further said that I should not enter the park and I should immediately leave the area. However Girl B, whom I mentioned earlier, came up to us and stopped her shouting at me. I could not enter the park for a while, fearing that she would attack me. Though a chaperone was nearby, I found her to be no help as she would not handle such a threatening situation. Also, the chaperone could not have used force against the street children, because the children were dominant as well as being numerous, and could have been carrying weapons. I think that the use of a chaperone in research with street children is not very helpful.

Later one man, who was a casual worker, boldly said he would help me to enter the park. He accompanied me to the park for my safety and I continued my usual work. I felt protected and taken care of by that man, because he had stayed in the area to find petty jobs and I believed that he knew the street environment, as well as the behaviour and attitudes of the children, and had learnt how to handle them.

Thus, being a researcher with street children always remained a risk. The safety of the researcher is one of the challenges in research with street children, because a researcher has to encounter people who might bring about unpredictable and difficult situations. The challenges were exaggerated due to the children's drug use and previous experiences of abuse at the hands of adults. Also, it was clearly evident that the street children often had weapons with them to defend themselves.

Another notable example of the challenges I faced during fieldwork is demonstrated below. Topics that included sex and sexuality were an issue of the research that increased its difficulty. On one field visit, it was drizzling in the afternoon and people were sheltering from the rain. I was with a boy, conducting an interview under the roof of a cottage. The research process had gone well until the topic of sexuality was discussed. He started to touch my lower back, trying to demonstrate his way of approaching his sexual partners. I was startled by his behaviour and moved slightly away from him. I was aware of his sexually charged behaviour but did not make any comment. He saw that I felt uncomfortable and he apologised. However, he repeatedly showed the same behaviour during the interview. I ended the interview at this point and went to leave; he came along with me for a couple of steps and so I walked faster and left the place. I could not look back at the boy because I felt threatened by his behaviour. That was one of the scariest days for me during the fieldwork. I understood that a researcher should be careful and watchful, especially while talking about sexuality with children; otherwise they might take things the wrong way.

Though talking about sexuality is a social taboo, the children talked without being embarrassed. Although some children hesitated at first, they generally felt at ease when talking about sexual issues and their lack of inhibition showed that they were used to these activities. Nevertheless it clearly was unusual to be asked questions about sex, and some children might have misinterpreted these questions, which may have sent the wrong signal to them. They were a sexually active group, and conversations about sex might have provoked sexual behaviour towards me. My strategy was to stop if the children started to show any unusual behaviour.

On another data collection visit, one woman suddenly came up to me and asked: "What types of questions did you ask the girls?" She said that I had annoyed one or two girls by asking about private matters on sex and sexuality, so they were thinking of getting revenge on me and had said they would beat me. She further stated: "Be careful, you know that these children do anything; some of them also know HIV positive people and they might use needles to harm you." It left me with the impression that the children might harm people by pricking them with the needles of HIV infected people in order to infect others.

I also encountered some other incidents. On one day it was raining heavily. I was standing under a tree along with some street boys under an umbrella. A street girl whom I knew came over to me and shouted and behaved as if she was about to hit me. The boys who were with me chased her, protecting me. Similarly, on another day, when I was looking for a group of children in the park, a boy whom I had never seen before started asking sharply about the purpose of my work. Another boy, who had refused to take part in an interview, stopped him from harassing me. Some street children took an interest in the interviews, while others ignored me, but I treated all the children equally: those who were willing to co-operate to give an interview, those who were not, and those who mistreated me. That helped me to have a good relationship with all the children, and therefore I got support from children in difficult situations. What I learnt is that we should treat all children equally and respectfully, even when they display challenging behaviour. Good

relationships with street children have a great impact on the safety of the researcher, establishing feelings of security for the young people and also impact on the success of the data gathering process.

It is thus confirmed that researchers are potentially vulnerable in research with street children. Safety measures should be applied in order to protect the researcher from any possible harm. I did a risk analysis and management plan for ethical approval by having a chaperone during the fieldwork. However, research involving street children places the researcher in a dilemma regarding whether the idea of having a companion with them during an interview is appropriate or not. The presence of a chaperone might affect the interview process, especially if the research topics are sensitive and related to issues such as poverty, violence, sex and sexuality. Ryan & Bernard (2003) also stated that participants hesitated to respond in the presence of a chaperone. Yet, even if the researcher has a companion who stays nearby, the researcher may still be at high risk. Bemark (1996) states that since children might carry weapons, an unforeseen incident might happen at any moment and an unpredictable crime might follow. Given these two limitations regarding the use of a chaperone, I feel that the negative features outweigh the positive features.I chose to have a chaperone because they might be helpful in case of emergency however this person was always kept at a distance in order to make the children feel at ease with me while having a conversation. Despite these precautions, I felt at risk during my field work because I was in such close contact with the children, that anything could have happened within a moment and it would take time for the chaperone to come to my rescue. I also tried to minimise the risk by avoiding conducting the interviews in the evening, even though this was also potentially the best time to visit the street children as they tended to gather in one place during the evening. Instead, I conducted interviews in the morning and afternoon with a companion nearby. To conclude, I would say good relationships and establishing trust were the most important ways of accessing the children. Good relationships with street children have a great impact on the safety of the researcher as well. I was cautious to

maintain good relationships with all the street children I visited. Any misunderstanding spread among the street children about my research would have increased the risk.

5.2.4 Misconceptions

Another concern was negative impressions regarding my role. The children were unaware that a researcher could also be a student, and it was difficult to convince them of this. It was difficult to explain to them, as the children had very poor educational backgrounds and most were illiterate. They did not understand about research, researchers and doctorate studies. At the beginning of the fieldwork, the children were suspicious of my role as a researcher and were convinced that I was involved with organisations that work with children, or that my motives for talking to them were different from what I had stated. They frequently asked about the organisation I was involved in, and asked the name of the organisation. Street children having negative attitudes to the researcher has also been experienced in previous studies (ILO, 2001). The children in the ILO study believed that the researchers were benefiting from different donor agencies and using them. However, in my study when the children were convinced that I was just a student with an academic objective, that made it easier to interact with them.

There were negative perceptions regarding researchers amongst the public at large as well. I was commonly asked by onlookers which organisation I represented and what benefit the street children were receiving in return for the interviews. People believed that organisations associated with street children working in Nepal were sponsored by foreign agencies in the name of street children, but were not working sufficiently well. They also thought that I was from an organisation and was working for personal profit.

5.2.5 Impact of drugs and alcohol

Most of the street children seemed to be addicted to drugs and other substances. They were often in altered mood states such as being drowsy or high due to the effects of drugs and alcohol. I tried to conduct interviews in the mornings and during the daytime when the children were less affected by drugs and alcohol, in order to be safe and to avoid harm. Street children who were identified as being high were avoided for my own safety and to avoid getting distorted information. Children were identified as intoxicated based on personal observation of smell, appearance and physical characteristics. One issue during the interviews was that the child's attention was sometimes diverted away from the interview if they saw their friends using dendrite or smoking. In order to combat this issue and to minimize the disturbances, interviews were conducted some distance away from their friends but still within their territory.

5.3 Reflections on Interviews

5.3.1 Topic issues

Questions about sex and sexuality, especially regarding HIV/AIDS and STIs, are linked with personal sexual activities. Talking about sex and sexuality is not a commonly accepted aspect of culture in Nepal. Some children found it odd to talk freely about private matters of their sex and sexuality. Some of them thought that questions like the number of partners, use of condoms and sexuality were very private and should not be asked. However, their responses were frank and it seemed as if they felt free to talk about sex and sexuality. The interactions were made easier by maintaining a friendly manner and developing a sense of trustworthiness. I was familiar to them, which persuaded them to talk freely about their experiences on sensitive topics. From time to time I reminded the young people of the confidentiality of the research, and the aim of collecting accurate information. I stated clearly that the information would not be disclosed at any cost except to my professors, and there would be no harm in answering truthfully about HIV/AIDS and STIs.

5.3.2 Appropriate language

The children were mostly illiterate and had a limited vocabulary. Therefore, simple questions in simple language with lots of probes and prompts were used throughout the interview process. I assumed that the children would become embarrassed if they did not understand what I was saying. I also thought that they would not ask for clarification and that this would therefore create misunderstandings, which would result in meaningless or incorrect answers.

5.3.3 Flexibility and adaptability

I reflected that it was important to complete an interview at the first attempt of an interview process. Several times assurances were made by the participants that they would come for an interview the following day, but the planned interview did not take place. Some of the participants were interested at first, but later lost interest and avoided giving an interview, which wasted time and prolonged the overall period of the fieldwork. Initially, before going into the field, I had planned to approach 30 participants. However, during the data collection, not all the participants completed the interview process. I had decided that I should not stop because the data collected would not be enough for analysis, so I amended my plan and approached more children, intending to conduct further interviews. In total, I completed interviews with 28 children while the total numbers of participants approacheas 33.

Research with street children was time consuming and this is a great concern in research as it has human resource implications. The children were found to be a movable population and difficult to reach. They neither had a fixed place to stay nor a fixed time for everyday activities. The interview time depended on finding an interested participant and a favourable interview spot. Some days were completely unsuccessful in terms of acquiring interviews. Illiteracy also seemed to be one of the factors in prolonging the time. Because of their illiteracy, children

had low levels of vocabulary, and as a result they were unable to answer fluently and had frequent pauses that prolonged the interview period. McAlpine et al. (2009) also reported that children were illiterate and did not understand the questions at once, which meant that they did not respond quickly and made them quiet and apprehensive.

I am convinced that the researcher needs to be flexible regarding the time required for the research process, as they may need to extend this for various reasons. The time may be prolonged if the children's attention is diverted. Hutz & Koller, (1999) stated that in their study, the children could not focus their attention fully for a long period. Their attention would be diverted if they were busy or needed to hurry to go to work, to eat or to make arrangements. Moon et al. (2001) stated that most of the children in the street were busy and children would be over-hasty during interviews with researchers, which altered the data acquired. Impatient interviewers may inhibit children in a way that damages the data quality (Scott, 2008). Giving adequate time to each of the participants also helped to build up relationships with them. I maintained patience in giving the children enough time to think, repeating the questions and explaining any misunderstandings, which ultimately helped in obtaining good quality data.

5.4 Overall Account of Reflexivity of the Research

Research with street children is always dangerous. Street researchers should be tactful and ready to handle any situation that might be encountered. I was polite and respectful in all situations. I explained about the purpose of the research so that the participants understood what was involved and that they could change their mind at any time. The children were also convinced that they were not at risk of harm in any circumstances; otherwise they could have been agitated or fearful. In order to make children feel secure and not in any danger, I engaged them with a skilful manner. I was always careful to maintain good relationships with them: I treated them respectfully, calmly and gently and I controlled my tone of voice at

all times, even if I found the children to be aggressive or making fun of me. This helped the street children to gain confidence with me and they felt safe, whilst good relationships with them made me confident and successful in gathering data.

Researchers should learn to be patient. I was sometimes harassed (see evidence above) and sometimes was teased and bullied. Young people made suggestive comments about my sister (they assumed I had one) and even my three-year-old daughter. These comments caused me a lot of upset and unease, but I did not react at any point. One day a boy in a group suddenly asked for my cell phone. It was hard for me to risk showing it to him and I hesitated to give it to him at first. It was equally hard for me to say no, as I knew and I had talked with these boys. They said: "Don't you trust us? We don't take your mobile." I gave it to him without appearing afraid, though I half expected that they might run away with my cell phone. I would not have known how to get it back, but I realised that if I had not given the cell phone to the boy, they would have had negative attitudes and I would have lost their trust. They would have realised that I did not trust them and so would not have trusted me any more. Sometimes it was important to take a risk in order to get reliable information. It also helped in establishing trust and rapport.

I had had the preconception that there might be a possibility of this sort of incident while being a street researcher and ensured that I did not needlessly carry any valuables. The main reason that I carried the cell phone was because the thought occured to me that it might be essential to contact someone for help in case of emergency, because anything might happen at any time while working with a threatening group. The experience confirmed to me that carrying attractive accessories could be a risk to the researcher.

Flexibility should also be a characteristic that a researcher should have. The researcher has to accept the children's choice of time and place. It can be assumed that the researcher should act like a student and the children should be treated like teachers. It was also crucial to see whether the child was in a good mood. If the

child appeared to be in a good mood, I talked with them in response to their mood. The researcher also needs to be a quick thinker and react quickly by understanding the situation of the surrounding area and circumstances. The ability to handle the situation tactfully is another important characteristic of the street researcher.

The researcher should maintain good relationships with all the children; this was vitally important. After all, the children knew each other, and even knew the children from other groups and areas. Bad relationships with one child might ruin relationships with other children as well, because any row or argument might spread. I tried not to leave a negative impression on any of the children in any area.

Finally, I can say that I succeeded in building up good relationships with the children in the street. In my experience, the street researcher should be composed and able to sometimes handle risk as well. Another important characteristic of the street researcher is that they should be down to earth. I think that my behaviour with the young people and my personal disposition encouraged the children to be friendly with me. My manner and the reputation that I established among the children caused them to look upon me favourably. I think the primary thing that impacted on the data collection process was building up friendships and trusting relationships. I further believe that the other reasons are related to my personal manner; I tried to project an image of not being any special high level academician or professional but someone who simply wanted to gain information on HIV/AIDS and STIs. I projected my behaviour in accordance with them: I tried to join in with them by joking, laughing and talking as they were doing. After getting to know each other, I then started to give more serious suggestions to them regarding the situation. That made us closer and helped me to build up a reputation among them. I also presume that my age, as a young researcher, also helped to build close relationships, but I think that behaviour and manner counted most significantly. Also, being a female researcher of a small stature might have helped me to become closer to them, and in addition I believe my features might

have appeared as similar to those dominant amongst them, so they more readily mixed with me.

In terms of being reflexive in relation to the topic of gender, and its effect on the data collection process, my preconception was that gathering data from the girls would be easier for me. Normally the assumption would be that the gender of the researcher would cause differences in responses from female or male children, and as I was a female researcher I thought I would be treated favourably by the females. However, my experience was that there were fewer differences than expected between male and female responses. I found that the girls were reluctant to be open with me at first, and I encountered a series of tougher times than with the boys, which was in itself interesting to learn. I concluded that the girls required more time and effort to build up sufficient trust and friendship to allow me to take information from them.

The final consideration in terms of reflexivity is with respect to the reallibility of research data. The product for analysis in this research was a series of complete in-depth interviews from 28 samples and ethnographic observation. I think that, in spite of my efforts to build strong trusting relationships with the children in order to obtain reliable information, the data from the children might not all be genuine. Although I believe that they did give me truthful information, I presume that some might have just told me anything because we had built up a friendship. Also, as I had applied my own meanings to the observations of members of the research group, my interpretations of what I observed are clearly subjective.

5.4.1 Reflections on being a (Partial) Cultural Insider

Researchers who belong to the same population of a study are often referred to ‘cultural insider’. It is complex to understand the identity and the multiplicity of participants in a particular cultural context and the insider researcher often has an

advantage in data collection (Hodkinson, 2005). However, not everyone agrees and there is considerable debate about the advantages and disadvantages of cultural insider vis-à-vis cultural outsider research. Dwyer (2009) suggests that arguments highlighting that being a cultural insider may increase the influence of the researcher's perspectives fail to acknowledge that outsider influence may also impact perspectives. Dwyer, further claims that cultural insider studies do not influence the research process negatively especially since in-depth reflection of the subjective research process and awareness of one's own biases reduce researcher bias. While one does not have to be a member of the group under investigation, the ability to be open, honest and having a genuine interest in the experience of the participants may help in appreciating cultural nuance. My own view is that given the subject of my research is inextricably linked to a specific social and cultural context; being rooted within the culture of Nepal was a significant advantage in gaining access to the participants, managing challenges and, in being able to ask sensitive questions.

One of the benefits to being a member of the group of the study population is acceptance and it how this contributes to trust and openness (Dwyer, 2009). Also, the advantage of being a cultural insider for me, was in negotiating the practical aspects of the research process such as access and also, in establishing rapport (Hodkinson, 2005). Cultural insiders have an advantage because they are able to use their knowledge of the group of the study (such as language and cultural knowledge) to gain more intimate insights into participants' perspectives. As, Dwyer (2009) suggests, the cultural insider can achieve more successful and productive interactions with participants, increase the opportunity for realisation of the research goals and can help to minimise potential difficulties. Nevertheless, as I explained at the beginning of this chapter, being an insider is not a status one can take for granted and neither is it fixed. I realised this from the interest the young people showed in me; they appraised the situation to determine whether I was to be allowed inside the group and the extent to which they involved themselves in my study. The way they talked to me and the way they approached

me was helpful for the data collection procedure, however perhaps the most significant factor which illustrated my insider status was the way in which young people protected me from the harm of others (as described earlier). Being a cultural insider meant that I was more in tune with subjective hunches and intuition. For example I thought I should become quiet and soft with the girl who showed me a blade, and I also became quiet with the girl who shouted at me and did not allow me to enter the park; I believed that the quiet submissive female voice was more likely, to reflect my cultural belonging than an aggressive posture. In positioning myself as a cultural insider, this was therefore not only important for the research but also helped me in managing the difficulties I encountered during the data collection process. I understood the challenge of having a dual role as researcher and also as a member of the same population to which my research participants belonged. As we share the same culture, I knew that talking about sex and sexuality freely was culturally sensitive. I anticipated that participants would be hesitant in the interviews and that information on the subjects related to sex and sexuality might be influenced by these cultural considerations. Knowledge of this meant that I took extensive precautions to ensure that the balance between my researcher role and my role as upholder of cultural values was maintained. Finding a way to work creatively is necessary in both cultural insider and cultural outsider research (Dwyer, 2009). Given the consideration mentioned above, I adopted a creative approach. I brought up the topic in a sensitive manner, and followed spontaneous leads from the research participants to ask further questions. I asked children the issues around sex in a very simple manner, showing that I accepted their experiences, but without showing any impression of surprise, excitement or protest in their answers. I also paid attention to levels of comfort by observing body language and non-verbal communication. I believed my interpersonal behaviour was not only concerned with gathering information but that my position as a cultural insider, played a significant role throughout the research process and helped to establish credibility (Rabbitt, 2003).

5.5 Summary of the Chapter

This chapter has presented my reflections of the research process. It has referred to how my feelings, actions and interpretations were applied during the research process and how these influences impacted on the product of the research. I positioned myself as a partial insider researcher who was also a cultural insider and I have explained how these terms are not simple constructions of a researcher's identity but mirror the fluid and changing identities and groupings of the research participants. This reflexive process has been summarised in this chapter but as explained from the outset, my reflections of observations, feelings, actions and interpretations have been demonstrated throughout the research process, from the initial selection of the research topic to analysis of the results.

6 AN ETHNOGRAPHY: OBSERVATION OF STREET CHILDREN IN KATHMANDU

6.1 Introduction

In the preceding chapters, I have reviewed the literature on street children and identified gaps in knowledge to provide the justification for the research aims of this study, which are to examine the links between risk, vulnerability and HIV/AIDS and STI transmission, and the implications of these issues for street children in Nepal. Through my analysis of the literature and set against a public health backdrop, I developed a theoretically derived conceptual framework which was used to generate research questions. This provides the theoretical rationale for the methodology and the lens through which data were interpreted. The theoritical framework (Chapter Three) includes four domains of risk and vulnerability which feed into one another:

1. Pre-street risk factors (these are risks linked to the social factors that increase vulnerability and the likelihood of children having to live on the streets).
2. Street-life risk factors (these are the behavioural risks presented by day-to-day living on the streets, which cause vulnerability to HIV and STIs).
3. Aggravating risk factors (these are linked to the children's knowledge about HIV/STIs and AIDS, which influences their behaviour and which increases vulnerability to HIV/STIs).
4. Perpetuating risk factors (these relate to knowledge and attitudes towards HIV/AIDS and the limited access to prevention and treatment of HIV/STIs, which perpetuate risks of transmission and hasten the onset of AIDS, both for street children and for wider society in a cyclical manner).

The findings are divided into two chapters: the first is the ethnographic phase of the study that draws on my observations of, and informal conversations with, street children; and this is followed by a second findings chapter derived from the in-depth interviews. This chapter is the first of my findings chapters. It documents the details of the street children's lives and their risk-related activities according to the domains listed above; the findings in this chapter are derived from ethnographic observations and, as such, are descriptive as well as analytical. The chapter starts with explaining why this method of collecting data is important, what enabled me to build up relationships and trust, and justifications for selecting sites. It provides a vivid description of the places and spaces within which the children live, work and sleep; the dynamics within groups of children; the interactions between children and wider society, and the behaviours and activities in which street children engage.

The observation and informal conversation data are illustrated in this chapter with photographs of children as they go about their daily lives. My interpretations of the photographs (based on the conceptual model described in Chapter Three) are demonstrated in the relevant sections in the chapter. It should be noted that permission was given by the children to both take and use the photographs for this purpose, and their anonymity is fully protected by obscuring the children's faces and changing other identifying features.

Although the study did not involve interviews with formal key informants, street youth often served the purpose of key informant, providing key information such as children's whereabouts; activities, and best methods of gaining access. Marshall (1996) reports that key informants are useful in getting to know the situation of the participants of the study, especially in ethnographic research. I use the term 'key informant' to simply refer to information collected simply from informal conversations with young people. Key informants who are members of the group under study are an important source of information and they can be considered as experts with experience of the population being researched

(Marshall, 1996). One of the main benefits of using key informants is in being able to collect quality data in a limited period (Marshall, 1996) and in this study, key informant information was used to complement ethnographic observations. Key informants, in this study, mostly refers to informal conversation with young people and street vendors, however conversations with members of the public were also drawn on to provide supplementary data.

In the second findings chapter, the results of in-depth interviews with 28 children and young people are presented (although interviews were conducted with 33 children, complete information was not obtained from them all and only data from 28 young people are included). This begins with some detailed demographic information and then discusses the children's responses to the interview guide, developed using the conceptual framework mentioned earlier. In Chapter Five of the thesis, I discussed my reflections on the challenges in negotiating access and conducting the fieldwork. My interactions with children in carrying out this research raise questions about the children's prior experiences of being exploited, the fragile balance between risk and protective factors, and the focus on basic survival as the dominant feature of social life, relieved only, it seems, by immersion in drug and alcohol addiction. The following description seeks to illustrate the complexities of the lives of the study participants and throws light on some of these issues.

6.2 Being Accepted by Street Children

The method of ethnographic observation was to spend time where street children live and work, and to study their activities and behaviour by immersing myself in their real-life contexts. This approach was chosen in order to learn about the culture of street children by observing, listening and engaging with them in informal conversations. This method allows the researcher to observe what participants are doing, how they are doing it, what they are intending to do and with whom they interact. Ethnographic observation could be described as an

immersion of the researcher in the particular context, to study activities in relation to particular issues, such as those of street children in relation to HIV/AIDS and STIs.

The ethnographic approach in this research was to become immersed into child street culture in the locations frequented by children, where I made regular close observations of street children for a period of four months from April 2010 to July 2010. I tried to spend as much time as possible in their real context in order to learn about their activities. I spent time in the locations in such a way that the street children did not realise that someone was watching them, in order to capture their activities and have informal conversations with them. I observed the young people without participating in their lives, so they did not change their original activities. This approach helped me to capture real data without any interference into the lives of the children. Thus, the data obtained from observation was first hand, original data, collected without any external influences.
I found the observation method to be the most useful, for various reasons, in collecting real information about behaviour and activities. Gradually, during the period of observation, informal conversations allowed me to enter inside the young people's group and to identify potential participants. Consequently, a rapport was initiated during informal conversations, which was of considerable importance in this particular type of research. Building up a good rapport helped me later to conduct in-depth interviews, which could only be possible after a series of informal conversations and the development of trust between the researcher and the street children. Informal conversations also provided an opportunity to be introduced to a larger number of street children. If a street child saw me talking with one of their friends, this made it easier for me to talk with them during my next visit. If one child talked to me, others were also willing to do so.

Establishing rapport and gaining trust were not only important in approaching street children for the interviews, but were equally important because of the

sensitivity of the research topics. Building up rapport facilitated the children opening up to me and talking about most intimate issues. It also facilitated conducting interviews. Thus the process was the most suitable method for the research in relation to HIV/AIDS and STIs among street children.

I can claim that over time I was welcomed into, and became a part of, the young people's circle. One afternoon, a group of street children were celebrating a boy's birthday in the shadow of the trees in the park among their friends. They saw me and invited me to join them. They asked me to take their photos. At the beginning of the fieldwork, having a camera and using it was quite frightening for me. Inviting me into their party and enjoying me taking their photos were gestures of trust. Once when it was raining heavily, I was standing under a tree along with some street boys under an umbrella. A street girl whom I had already met came towards me and shouted as if she was going to punch me. She did not recognize me as she was very drunk. The street boys who were with me chased her, protecting me. Another example of the rapport that I managed to build up was their interest in me. At a later stage of my fieldwork, street children frequently asked me: "Ooh *'didi',* ('elder sister', the respectful term for addressing a senior female), have you not passed your college exam yet?" They had the impression that I went into the field for the purpose of my college level study, and assumed I should have passed the exam because I had been frequenting the park for a long period. Inviting me to join in celebrating a birthday; allowing me to take their photos; protecting me against harm with the drunken girl, and being concerned about my exam showed their acceptance, trust and confidence in me. Hence, applying interpersonal skills such as politeness, patience, simplicity and a friendly manner played a great role in building rapport, consequently leading to trust and confidence between me and the street children, which allowed me to become a part of their community and helped me to later gather information from in-depth interviews successfully.

6.3 Justification for Adopting Sites in the Ethnographic Case Study of Street Children

I visited different locations to collect ethnographic information on the street children's activities regarding HIV/AIDS and STIs related behaviour. For the sake of clarity, I have categorised the PhD fieldwork into two phases: the exploratory phase, and observation phase that took place after the selection of the sites. At the beginning, in the exploratory phase, I visited different locations in Kathmandu where street children appeared, such as: New Road, Chabil, Lagankhel, new bus station, Balaju, Kings Way, Ratna Park, Thamel and Pashupati. I visited the areas regularly but did not initiate formal research at first; at this stage my fieldwork was confined to observation only. Even though ethnographic information on street children could be collected in any location and site where they were present, any attempt to approach the street children in a busy area with no access to an open public place would be unsuccessful in terms of data collection from interview. The street children were very reluctant to go away from their own location. I realized that I might encounter difficulties in gathering data using an ethnographic case study approach without identifying the right locations. As a result, I proceeded to select suitable locations for data collection. For the type of research proposed, it was crucial to find an interview spot that enabled the street children to be near to their friends and within locations where they felt easy and safe. I selected three locations for data collection: Ratna Park, Thamel and the Pashupati area. It is important to stress that the children who lived and worked in these sites were not separate groups but a loosely-banded single group of children who moved around from one location to another. In selecting three different sites I was not therefore collecting data on three different groups but simply increasing my opportunities for interviewing children from the same group. Choosing multiple sites presented additional difficulties, as I had to build up rapport in each site. Once I had built up rapport with the street children in one site, I initiated talking with street children in another site, letting them know that I was already interested in them and that their friends knew me.

The significance behind using these locations was the availability of street children that usually roamed around the area, and the availability of private spaces to be able to speak confidentially. The young people dwelled in such spacious public spaces; they dispersed from time to time for different purposes, but gathered in the same areas to sleep at night, to meet friends and to play, because they knew their friends were there and could easily find them. The street children spent time on their different personal activities in their own local areas, which allowed me to collect information from close observation and to engage in informal conversations. Close observation was essential to study their behaviour as it might link to HIV/AIDS and STIs. Engaging in informal conversation was equally essential as it helped me to obtain other general information and to understand the underlying significance of the observed behaviour, as well as to subsequently build relationships. The idea of choosing sites helped me to conduct in-depth interviews immediately after building up rapport, because interview sites were available in the same locations. After the selection of sites, I spent a lot of time in each selected site for formal fieldwork. Observation continued along with the in-depth interviews throughout the whole duration of the fieldwork.

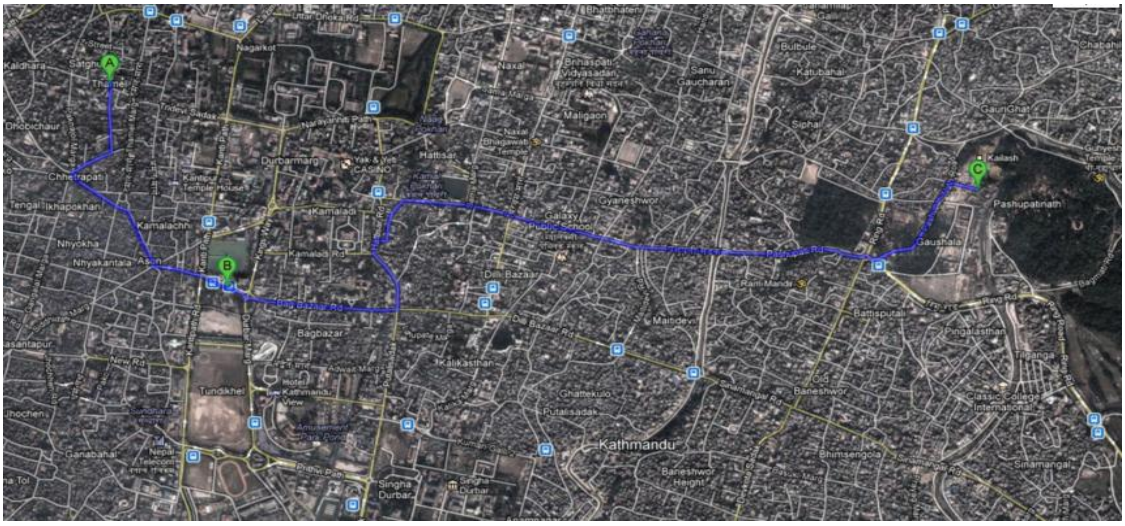

Figure 6-1Illustration of the distance between the three research sites; (A-Thamel, B-Ratna Park, C-Pashupati temple area)

The Figure (6-1) illustrates that these three sites are close to each other. It is approximately 1.5 Km from Thamel to Ratnapark; and 4 Km from Ratna Park to Pashupati temple area. Children often walk to visit these sites for different purposes. I often saw the same children moving from one site to another site. The street children were a loosely bounded group operating in several sites rather than being several different groups. This perhaps explains why I did not find any observational differences in the different sites in terms of risk and vulnerability. Therefore the reason of choosing three different sites was not to analyse the information with their respective sites but to get a deeper understanding of the many contexts in which street children live and work. Mann & Tarantola (1996) emphasize the importance of exploring the underlying societal causes of vulnerability to HIV/AIDS and adopting the three sites enabled me to observe a range of factors such as: hygienic conditions of the environment, status of basic needs such as the place where children slept, ate, drank water, went to the toilet (these activities were more likely to take place in one site than another) and the different levels of interaction with other people. Hence, the collective information of thse sites provides not only the vivid description of children's characteristics and behaviour, but also explores the living situaions that increase vulnerablityto HIV/STIs and consequently the development of AIDS.

6.4 Dynamics and Characteristics of Research Sites

It is important to know the characteristics of the sites in order to understand the context of the street children's daily lives. The following paragraphs provide the ethnographic detail of the research sites. The account shows the local conditions of street children and how the local living conditions shape their experiences.

6.4.1 Ratna Park - open air auditorium '*Khula Munch'*

The open air auditorium '*Khula Munch'* is located in Ratna Park (illustrated in Figure 6-2). Open air auditorium means 'open theatre', which is in a centrally located park in the heart of Kathmandu valley. This is a popular place for political parties to deliver public talks, and to organize mass meetings and cultural programmes. A small, bell-shaped building, a cottage, a big garden and bushes and trees within the park attract people, making the area more crowded. This was a place where street children frequently appeared. The street children are attracted to the park because it offers shelter both in summer and in the rainy season; also it is a good place for resting, and entertainment is always available. The young people can use the bushes in the park to hide from hostile people and policemen. This place is like an open market as shown in the figure (Figure 6-2). Small tea rooms sell tea, bread, cakes and alcohol; footpath shops sell cheap clothing and accessories; street vendors sell water bottles, ground nuts and seasonal fruits; drivers and conductors wash their vehicles, and porters and other visitors commonly gather in the park. People are entertained by magicians and attracted by fortune tellers, who tell fortunes by palm-reading. It is a general place for people to spend time by chatting, resting and napping on the ground.The park is overcrowded and polluted. I found the place very busy, noisy, dirty and dusty; it was particularly intense in hot weather. I used a handkerchief when I was in the area to protect myself from dust, as I am allergic to it.

In the rainy season there are puddles everywhere and it is muddy and difficult to walk. The park is littered. The ground seems a convenient location for visitors to

urinate and defecate, making the area smell unpleasant. Often I took out a handkerchief from my bag to cover my nose to avoid the unpleasant smell. People gazed at me after I had visited the park several times, and a number of people asked me why I was there. A man who was sitting on the grass said: “You should be careful in this area; people of all types and behaviour come here: frauds, liars, alcoholics and thieves gather here. You should not trust people here.” A lady from the tea shop in the park said: “People might think you are a prostitute if you come to this area; good people don’t come here, only frauds and liars. Here all people are like that; this is that kind of place. You can see many girls here in the late afternoon; maybe they have gone to lunch now.” It seemed the place was a hub for finding both prostitutes and clients.

Figure 6-2 Illustration of areas surrounding the Ratna Park research site (Source: http://www.travelblog.org/Photos/5908216)

6.4.2 Thamel

Thamel is a tourist district also known as an entertainment centre of Kathmandu. Thamel is a very busy area (illustrated in Figure 6-3); the place has many guest houses, hotels, restaurants, lodge bars and numerous shopping centres, as well as travel and trekking agencies, and offices. There are nude dance bars, massage parlours and cabin restaurants at every street corner. Shops, cafés and restaurants are lined up in the entire Thamel area. This part of the city is popular for finding handicrafts, paintings and antiques.

Figure 6-3 Illustration of areas surrounding the Thamel research site (Source: http://www.travelblog.org/Photos/5908216)

Because it is a tourist area, there are good shops and services here, and the place is made more crowded because of small shops and tea rooms on the footpath. The area is very busy with people from all walks of life: backpackers, potters, mountain trekkers and street vendors are commonly seen in the streets. Although the sex trade is illegal in the country, I learnt that prostitution was common in hotels, restaurants, dance bars, lodges and massage parlours in Thamel. A street boy said: "We can see prostitutes, '*bhalu*', commonly in this area at night; a man

comes to pick up a girl from the street and then goes." He added: "It is very easy; just asking 'Do you go?' is enough. If you have a desire to have sex you can get a girl of your choice from a lodge or a guest house in this area.'' Another street boy said: "Homosexuals, '*chakka*', walk in a group at night and they pull pedestrians from the roadside to have sex. This place is lively at night."

6.4.3 Pashupati temple area

The Pashupati area is an ancient holy site for Hindus. People from all around the country visit the temple for various rituals. Pashupati area covers a large space containing hundreds of temples of varying sizes with hidden nooks and crannies (illustrated in Figure 6-4). The Bagmati River flows near the Pashupati temple as shown in the figure. The river water is heavily polluted due to the disposal of public waste draining directly into it. The riverside is used for cultural and ritual activities. A number of stone platforms have been built in the river bed and are used for cremations. I heard a street girl yelling at her friends to go to the river. She yelled: "Ooh come! Let's go down to the river." I asked the street boys why they went to the river. They replied: "The girls go to trawl coins and valuables; sometimes coins and jewellery fall off the cremated bodies." I saw children immersed in the river to collect firewood that was pushed into the water after the cremations.

They were also busy fishing in the river. Street children were also eagerly searching for devotees' offerings such as money, fruit, and sweets in the piles of waste from the temple. Monkeys, dogs and cows freely roam around the area searching for food in the scattered waste. Sometimes the street children earn money by guarding leather accessories and shoes which are not allowed to be taken into the temple. The place is also convenient for begging and pickpocketing. In one festival, I saw a street boy guarding the shoes of devotees. The boy said: "I am doing this today because thousands of people visit the temple for this festival, so I can make some money from this work; this place is better for begging

because religious people visit the temple, so some people give us money, and in some festivals pickpocketing is also easy when millions of people gather."

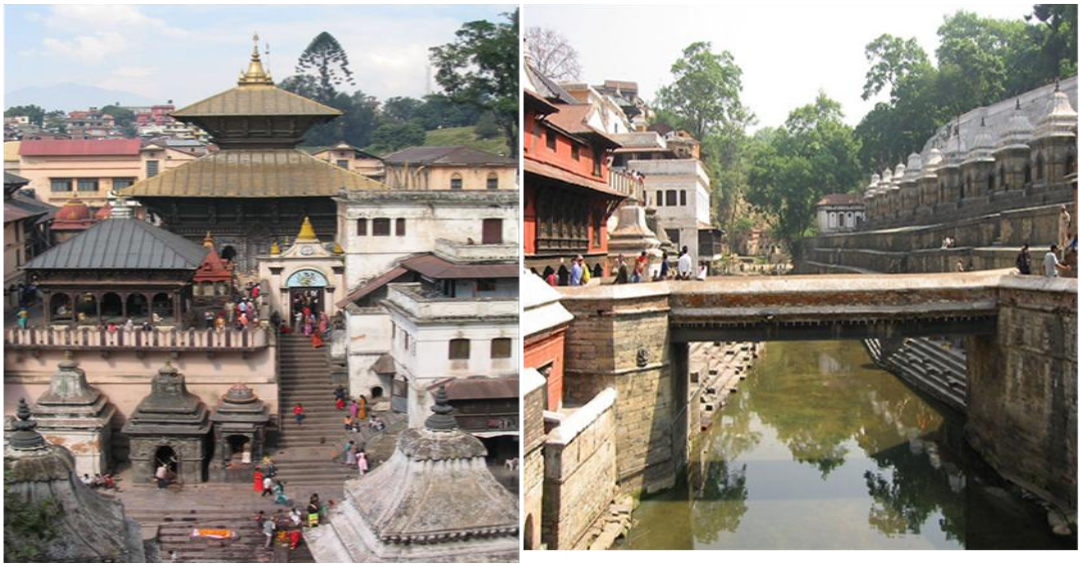

Figure 6-4 Illustration of areas surrounding the Pashupati research site (Source:http://www.travelblog.org/Photos/5908216)

6.5 Ethnographic Aspects of the Street Children' Lives

The ethnographic description is based on observation and informal conversation with street children for a period of four months from April 2010 to July 2010. Information from the ethnographic approach is categorized by different themes focused on HIV/AIDS and STIs related issues regarding risk and vulnerability. Apart from the observational data, I used several photographs to illustrate the key aspects of street life. I gained the children's permission to take and use their photographs, and obscured their faces to preserve their anonymity. The aim of this section is to describe the culture and subculture of life on the street in as much detail as possible, including language, customs, values, behaviour, interactions and the significance of these things.

6.5.1 Internal and external forces and the general interaction between people

Both external and internal forces had an impact on the street children. Internal tensions between the street children, and power struggles between the street children and policemen, were apparent. I saw children who danced, played, smoked and fought in the streets, footpaths and alleys of Kathmandu. I believe the street children had feelings of belonging to their group; they lived like a family, they shared their lives, they helped each other and they did everything together. I learnt that they informed their friends if they had discovered something, or they would keep food for their friends if they got it from somewhere. I saw a street boy holding a plastic bag. When I asked what was inside the bag, he said: "This is rice and curry for my friends; we do such things, and if my friend finds food he will save some for me." The street children defended any of the members of their group if they got into any trouble with other groups or the authorities. They were commonly thrown into jail for alleged illegal activities like fighting, looting and stealing. They helped to release their imprisoned friends from jail, and went to meet their friends who were in detention. However, the threat of violence amongst the street children was ever-present and fights broke out constantly; they did not treat each other gently. The street children quarrelled with others in their group for different reasons like money, food or drugs, or if they didn't keep to negotiated agreements. They blamed their friends if they thought their money was missing. They young people had a constant fear of policemen. One morning a group of policemen appeared near to an office building that was located in the park, and started to hit the children with batons as they were playing, napping and lying on the ground. All the street children dispersed when they saw policemen nearby, but one or two tried to hide in the area. I saw a policeman beat a boy with a baton; the boy was extending his hand, trying to avoid the baton; probably he wanted to say that he had not done anything wrong. Finally he was pushed out of the area. I got the opportunity to speak with the boy later. He said: "The clerk of this office must have complained about us and they came to chase us, but we didn't do anything wrong. Policemen are like this, they beat us, and it is common." Later I was able

to talk to the clerk who said he had complained to the police that the street children were violent. He had complained to the police instead of talking to children. The clerk said: “These children are noisy, they litter the area, and they use drugs and fight each other; sometimes they perform sexual acts which it is shameful to look at. It is no use trying to convince them.” He added: “They don’t listen; they ignore us and take no notice; moreover, that might be risky, as they may take revenge.”

The street children were unable to sleep peacefully. Several times, early in the morning, I saw street boys waking their friends up and running away with their torn blankets and sacks, to put them away safely somewhere in the corner for the next night. The street children were scared even when they were asleep: the owners of the shops or policemen might kick them in order to chase them away, so they had to go to sleep late in the evening after the shops had closed, and wake up early in the morning before they opened. Relationships between the street children and other members of the general public were poor. People avoided interacting with the street children for different reasons. People thought the street children were dirty, violent and aggressive. They suspected that they were burglars, thieves and petty criminals. They thought the street girls were exploited and involved in prostitution.

The street children were continuously exposed to various forms of exploitation, either by government bodies or by the general public. Both the girls and the boys were involved in political demonstrations by different government parties. Being involved in political protest was also their way of earning money, because they received money and food for participating in such protests. A street boy, in an informal conversation, stated that people call them to join the political demonstrations. Similarly, a street boy who later participated in in-depth interviews said that the then Prime Minister himself had asked the children to take part in a demonstration organised in support of national assembles. He reported that they had given Rs. 30,000 to their group for participating in the

demonstration[1]. He further stated that: "We get Rs.15 to 20 and sometimes food for participating in demonstrations." The political parties use street children to boost their protests. The street children would remain in the front line of the riots and they would be the first victims if a confrontation with the police occurred. The street children seemed to be abused by every level of society. They were abused within their circle and from outside the circle. I also got the impression that the street children were in contact with a range of criminal activities such as selling and buying kidneys. A distressed and agitated middle aged man approached me during my fieldwork in the park, and asked if I had seen his son. He wanted to know if I was acquainted with his son and described his appearance. He explained that he was looking for his son because he knew that his son was intending to sell his kidney to a mafia gang trading in body parts.

6.5.2 Characteristics

There was a great deal of brutality, fearlessness and shamelessness witnessed in the behaviour of the street children, and a defensive nature was commonly identified amongst them. The street boys and girls stayed together in parks, cottages, corners, temples and under the porches of houses. They were a mobile group; they moved from place to place to sleep, to meet friends and for different opportunities. They would spend their time by roaming, playing, chatting, giggling, sleeping, using illicit substances and watching movies in the cinema hall, and they engaged in talking and imitating the actions of actors and actresses in the film released. Usually the boys were more easily recognisable than the girls. The street boys looked shabby, dirty and wore torn clothes. The girls generally looked clean, well dressed, and often were by themselves rather than in a group, as was common with boys.

The photograph (Figure 6-5), was taken in early morning in a sunny day. The photogaraph shows the activities of the children after they get up in the morning.

[1] 138 rupees is equivalent to £1, but the exchange rate is variable from time to time.

They start without any plan or destination. Having good breakfast is out of their imagination and where to find cigarettes and dendrite becomes their central concern. Two boys are surrounding the boy who has cigarette in his hand asking for the same cigarette. The boy who has the striped scarf on his head, next to the boy who is asking cigarette has got a bulky pocket. This bulky pocket is due to a container of the dendrite. I had observed the boy always has dendrite in his pocket. The image clearly revealed the temptation of cigarettes and drugs. In the picture, an even younger boy is approaching the group. He may be asking for the cigarette. If he can get the cigarette, he uses the same hands which are inside his trousers then the cigarette pass to another, also his bare foot reveals the challenges of health and hygiene. Cleaning hands with water is not feasible when living on the street and it is easy to transmit dirt-borne diseases.

The photograph contains a group of boys in dirty ragged clothes; a boy in the centre in the photo is without even shoes. Children are not able to wear specific range of clothing and wear whatever they can get hold of even if this does not match their size, the season or the weather. The image presented is one of absolutely poverty.

The street boys often remained in a group in which they chose a leader (see Figure 6-5). The photograph shows the boy facing away from camera. He wears his cap back to front; he has put on the fingerless gloves and his clothes look nicer than others. His demeanour such as the way he behaved to other children and the way he talked to other children and the way children behaved him was distinct from others and I learnt that he was the leader in the group. I observed that the leader of a group can be differentiated by their demeanour and clothing and also because they present a bossy personality, which is commanding and controlling.

Figure 6-5 Group dynamics of street children with a group leader
(Photo taken: April 2010)

The leader of the group exerted authority over the others, and arranged different activities such as robbing and stealing. The children normally form themselves into groups of four to seven children, but this varies depending upon their activities. They gather in a large group when they sleep or they plan to do something. The boys commonly worked as rag pickers; rag picking, committing burglaries and stealing were their common ways of earning money. They did not hesitate to disclose that they had stolen cell phones. One street boy, who was a leader of a group, showed without hesitation five stolen cell phones without chargers, which he wanted to sell at a low price. The boys also commonly appeared to beg for money from pedestrians or drivers in stopping vehicles. I heard pedestrians and vehicle drivers shout at them. I believe the pedestrians and vehicle drivers were annoyed, as the street children were disturbing them. Street children begging for money were also commonly seen in the tourist areas, following foreigners. In general, the street girls' working activities were not so obvious, but I believe from their behaviour that they were involved in prostitution.

The street children coined and used their own words. For instance, the children commonly wandered around the street at night to rob people, which they referred

to as '*dhur*'. Similarly, they used other terms that were not understandable to members of the general public; for example, they referred to '*dasti*' for money, and '*pila*' for gold.

6.5.3 Living conditions

The street children slept in the park, around temples and by the side of the road in front of shopping centres. The photograph Figure 6-6 shows the children's living situation, how they sleep and how they spend their night. They sleep wherever they find a place. These children did not have even the sack to sleep on. The photograph shows that some children sleep on the simple sacks or just on the ground, sometimes together with a pack of dogs (see Figure 6-6). The reason for cuddling with dogs and sleeping together is to keep warm. It can be clearly seen that the children did not have any blanket to protect their bodies from the weather. It can be imagined how hard it is for the children to protect themselves from harsh weather. A boy in the photograph is standing and another boy is sitting up and dozing off, shows that these children did not sleep comfortably.

The children had to wake up early in the morning if they slept in front of shops or on the side of the road; otherwise they would get a hard kick. One day a street girl rushed towards a cottage in the park, ignoring my questions. I was surprised by her behaviour because she had already been introduced to me. Later it was found she had gone to the toilet behind a bush. I then had an informal talk with her. A small bottle of shampoo was in her hand; I asked why she needed that. It was to take a bath in a river that was about two hours away by bus.

Figure 6-6 Living conditions of street children
(Photo taken: April and June 2010)

Similarly, sometimes when I asked boys about their friends' whereabouts, they told me they had gone a few kilometres away to take a bath. To me it was clear they didn't have a toilet or bathing facilities. Their toilet was anywhere on public ground and their shower was a nearby river.

The children did not have a shelter to protect them from rough weather. I did my fieldwork during the summer and the rainy season. One day, when I had decided to go to certain locations to see the children, I was disappointed because none of them appeared. Later I realised that the night before it had rained heavily, so they had dispersed to shelter from the rain. There was no safety or security for the children. They rarely kept their money with them, as they had a fear that their money would be stolen. They kept their money and valuables in a secret place such as under a bush, or in a hole in the ground. They also left their money with a street tea-room owner for safe keeping. One street boy had a small radio, which he told me he had recently bought; he was holding it tightly, close to himself, and he kept hiding and taking it out of his pocket. He asked me to keep it for him, because he was frightened that someone would steal it. Later he said he had sold the radio. The children appeared to be living in a complete vacuum. They had no apparent interest in material comforts or planning for the future.

6.5.4 Food

The street children were more concerned to get hold of illicit substances than proper food. They started their day by sniffing dendrite[2] and smoking cigarettes and had food at very irregular intervals. The children ate food in local hotels if they were able to pay; otherwise they remained without food and went hungry, often for a few days at a time. They also searched for food in heaps of garbage. Sometimes they received food in return for working for street vendors. They gravitated to certain locations if they knew that someone was providing food. Occasionally, food would be distributed free of charge by a philanthropist or religious people. A ten-year-old street boy stated that he had walked to another town (approximately three kilometres away) to have breakfast when he heard that food was available. However, when he got to the town he was too late, and the food was no longer being provided. One day the street children were dispersing and only a few children appeared. One of the boys said that they had gone to Mahankal temple, where food was being provided; later I saw them queuing to get food.

Girls often hoped to receive food and other consumables from the boys. The girls sometimes rushed after the boys to abate their hunger. I noticed some street girls awaiting male friends to have lunch with them. When I talked with a married street girl next to a tree on a hot afternoon, I noticed she was uninterested in talking with me, and gave me monosyllabic answers to each of my questions. Later she saw a boy, who she called to and they went for some food. She left me saying: "I go for food, okay; I am hungry, and I have not had food since morning." Another married street girl, who stated she had HIV, showed similar behaviour to me. She talked with me at first, and later she left me when she saw a man nearby. She left me, saying: "I will see you later. I want to talk to my friend;

[2] Dendrite is a type of glue, which is a substance commonly used by street children in Nepal. This substance is usually used by shoemakers for sticking rubber or leather goods, so it is also referred as shoe glue. The substance is easily available in shoe repair shops or in hardware shops. Glue sniffers take the substance in a plastic bag and inhale the vapour through their nose and mouth. This practice of inhaling glue is known as glue or dendrite sniffing.

I am going to have a cup of tea." I had similar types of encounters a number of times with both the street girls mentioned, and others as well. Overall it was understood that the street children ate food in an irregular pattern, and also that they had unhygienic food.

6.5.5 Health and hygiene

Most of the street children looked pale and fragile. The children often looked drowsy, dirty and shabby, with untrimmed hair and nails. Cuts, wounds, grazes, bruises, skin pricks, rashes, dry lips and lacerations were very common in the street children, as were tattoos.

I believe the street children were careless about their health and hygiene. I came across a boy on the ground who had apparently suddenly fallen down and was unconscious, frothing at the mouth and wheezing. His friends around him were just teasing him, saying he was love sick, '*prem rog'*. The problem was getting severe, and the boy's friends asked me to make contact with an organisation for help. I tried to contact the organisation several times but was unsuccessful. He was eventually taken to a nearby hospital by his friends for treatment (see Figure 6-7) although it appears he did not get any treatment. The boy and his friends were halfway back from the hospital, without having had treatment, when they noticed his body was shaking. His friends teased him but it was clear that love, kindness and sympathy were shown towards the sick boy. One of his friends carried him, even though lifting up someone of similar weight might not be easy, but he put on his shoulder to take him to hospital. The other two friends were sharing ideas between them about how the boy could be helped; they were clearly worried about their friend's health. The boy's friends then insisted he should smoke a cigarette, saying that would make him well. In another case, I was asked by a group of street boys to assess an untreated lump on a boy's head. His friends were touching and looking at it .They were discussing between themselves about the lump,

presuming that it was a water accumulation, and also that it had pus in it. The lump appeared serious, so I convinced the boy to seek treatment. The child asked me to contact an organisation which he believed would help. I made contact with the organization; thereafter, the staff picked him up for treatment. The following day, I met the boy in the same place. He denied ever talking to me about his health, and made comments that made me believe that he had never been treated. This demonstrated that the children gave little thought to identifying physical problems. Their reluctance to go to hospital and negligence about medical treatment were clearly observed.

Figure 6-7 A sick street child being carried to hospital by his friends
(Photo taken: July 2010)

The street boys were not aware of hygiene and had no awareness of universal precautions related to blood and used drug implements (e.g. discarded needles), regardless of the risk of any hazardous diseases, including HIV. A street boy who had fresh cuts on his face was talking to me; he lay on the ground and grabbed some blood-spattered cotton buds that had been disposed of nearby. The children often searched for other possible useful things in the garbage. I observed a street boy pick up a razor blade from a heap of garbage and study it carefully from all angles. It seemed that he was imagining if it was possible to use. When I asked the

purpose of his interest in the blade, he said: “I can get money from it by selling it.” Another street boy picked up a rusted screwdriver from the garbage and put it into his pocket. The boys believed that these tools would be useful to defend themselves, but were not aware of the potential health risks from handling the implements.

Throughout the course of the fieldwork I observed street children with cracks, wounds, fresh cuts and tattoos on their hands, legs and face. On one day I noticed a boy coming across with shocking slashes and bleeding quite badly, the consequence of injuries he had done to himself. He refused to tell me the reason for making the slashes. I assumed from his group activities, and rumours in the grounds, that he had a problem with his girlfriend which made him slash himself on his wrist. The street children also made tattoos citing their partner’s name as a sign of love. One day a boy was tracing a figure on his friend’s leg to make a tattoo. They tattooed themselves, or did it with the help of their friends; their way of making tattoos was by pricking the skin with needles filled with different dyes. This method of tattooing is in itself clearly very hazardous and high-risk behaviour. As for girls who were pregnant, I noticed they appeared to give no thought about hospital check-ups, and were not treated for any health problems.

6.5.6 Sexual activities

Street children of all age groups were sexually active. Some of them were either already married, or separated, or involved in relationships having more than one partner. Joking, playing and sexual talk were common. Coarse language and slang words were very familiar among both girls and boys. In fact, it often seemed as if they didn’t have any other vocabulary. The street children were entertained by things that were related to the sexual act. One early morning, I observed some street boys fondling the penile region of a dog on the ground where they were sleeping. One of them was holding and massaging the penis of the dog. I found another group of boys giggling and playing with a condom hanging in a tree in a

park. Another day they were having fun with a brassiere they had found, by putting it on other street boys. On one hot afternoon, a group of street boys were assembled on the ground looking downward at something with great interest. I was interested to know what they were doing, and was astonished to discover they were watching pornography on a cell phone. I was surprised how they had got that, so I asked them how they had uploaded the pornography. They replied: "It is very easy; the shopkeeper in the shop uploaded it for us. We can get this everywhere; that is the shop [pointing to the nearest shop]." They had paid to upload such videos on their cell phone from a local shop.

Love, marriage and separation in relationships were common among them. I observed that street girls were more actively engaged in sexual activities than street boys. All the street girls said they were either married or separated, and many had extra-marital relationships. Marriages were casual unions tied up through a kind of formality by just saying 'I want to marry you and we will stay together', but some of the young people tried to signify their marriage differently, in a specific way, such as by putting their own blood in the middle of the parting in the bride's hair. Marriage for the young people meant living together (on the streets) and give love and support to each other, similar to how wider society percieves marriage.

I found that the girls' intention was to have a stable relationship, but I got the impression that these do not last long. A street girl told me that a street boy had put blood from cutting his own wrist on the middle of the parting in her hair, in a temple, (this was a variation of the cultural custom of putting a pinch of crimson coloured powder, *'sindur'*), in Nepali society, putting a pinch of crimson powder in the middle of the parting of the bride's hair is a custom which signifies the wedding knot. Putting their own blood instead of the crimson powder meant much the same as the marriage symbol to the street children, in that it signifies having a special relationship and being joined together. As a husband and a wife there is a promise of love and support of each other, in any situation. At the same time,

however,this young woman mentioned that the relationship had deteriorated, and at that point, she seemed very anxious and depressed. I later found the same married street girl had received a letter from another street boy suggesting love and sex: 'I love you' and 'I sex you Rosy'. A number of participants during the course of their interviews stated that they had used this same girl (Rosy) for sex, and paid Rs.250, which is equivalent to about £2, to have sex. There was no doubt that multiple sexual relationships were very frequent among the street children and prostitution among the street girls was common. A street girl mentioned that she used to be a prostitute and was now a 'madam' of the prostitutes, '*bhalu*', in the area. She had become comfortable with me by this time, and said: "Come with me, I will take you to the place where we can find the prostitutes; they will be there waiting for the men." She introduced me to a prostitute who she said was not a street girl. The way they behaved with each other gave me the impression of a close relationship. I asked her how they could recognize the prostitutes; she replied: "We can recognize them from their activities, but the lady I introduced you before, I have known for a long time." The same street girl assertively asked for money from a woman who was walking across the road. She told me: "I take money from all the prostitutes of this area; otherwise they can't do this job."

Some street girls were waiting for clients almost every day. One drunken street girl was standing on a footpath near a bus station. I went up to her as I had met her already. She had a kind of small plastic purse in her hand, and I asked her what was inside the purse. She giggled and answered: "This thing [showing me a condom]; if someone comes then I may need it." I asked her if she used a condom every time. She said: "I do use one every time; why would I offer sex to a stranger without a condom? Otherwise they need to pay more." It is sometimes hard to get a man. I asked her if she had had a client the day before. She replied: "There was a man, but he left me near to a lodge; that was so sad for me, I felt bad." I interpreted what she said about using a condom as evidence of the girls' general attitude to using condoms, and it was clear that they also used condoms as bargaining tool to earn extra money. I noticed one street girl involved in a sexual

act publicly, without any hesitation (see Figure 6-8). The photograph was taken during my field work in a hot sunny day in the mid afternoon. The image (taken at a discreet distance) involves a girl and two boys lying on the huge publicground and engaging in sexual activities. This behaviour was occurring in daylight and in a context in which such activity is illegal and a cultural taboo. I was aware that these three young people were all under the influence of alcohol at the time and the significance of this photograph is that it provides evidence of the links between substance misuse and high risk sexual behaviour.

Figure 6-8 Street children openly engaged in sexual activities
(Photo taken: June 2010)

The girls seemed to be continually thinking about boys and switched their attention from the interviews if boys were noticed nearby. I was never fully successful in approaching some of the street girls; even they were interested in participating in the study. They easily abandoned our conversations and often were not interested in talking after boys had appeared in the area. Some of the street girls living on the street were pregnant and some had children. Girls were always trying to find street boys or outsiders who were able to provide money or support. Boys active in stealing or robbing were considered as the smartest, or the

leaders of a group. They were more often attached to girls, as the girls were more attracted to street boys who had good earnings. Some street girls stated they were living with their partners on the street. Regardless of whether they were married, street girls continued to be prostitutes for various reasons. One street girl living with a partner on the street stated that her husband beat her if she was not able to bring in money by prostitution. Another street girl's rationale for having a partner was so as to avoid any harm from drug users or physical abuse during the night. The girl said: "The man whom I am staying with is an old man. He works as a casual worker. He seems good and he has property back at home. He is saying he will take me to his home after marrying me. I want to go to his home and let others know me. If I go, I will document everything formally so I can claim the property; then I will not be on the street anymore." She added: "He is telling me not to be a prostitute," but she was still involved in prostitution to make money. It was becoming clear that prostitution was rampant among the street children. I was having a chat with one young woman, trying to build up rapport, and whilst I was chatting with her, a group of street girls aged approximately 13 to 16 came over to us to greet the girl who was with me. The group of beautifully dressed girls left us after a few minutes. The girl stated: "Those girls looked clean, with nice dresses. I think that the dresses were given by their aunty." When I asked who the aunty was, she answered: "Aunty is the one who provides work in a restaurant and in a massage parlour." Later, what crossed my mind was that one of the girls of the group had refused to speak to me when I had tried to approach her for an interview the previous day, and she had told me: "I am in a hurry to go; I have to go to Aunty. I stayed with Aunty last night, and she has called me today, so I'm going now. I will talk with you later." I got the impression that the girls were linked with pimps, and had been involved in prostitution from an early age.

I met one street boy who had a girlfriend from outside the street. The girl frequently came to the street to visit her partner, and this girl was emotionally attached to the street boy. She said: "I like this boy so much. I suggested that he should do different work but he did not listen to me and continued living on the

street." She further stated: "I am three months pregnant now; I don't want to abort this baby, but I also don't know how to raise the baby, and I am worried what to do if my mother finds out about this." She would sleep in a restaurant or on the street when she visited her partner. This relationship, which extended further than the street relationships, suggested that the sexual networking of the street children was widespread.

6.5.7 Drugs and alcohol

Many street boys and girls appeared to be addicted to drugs and alcohol. The majority of them were heavy users of dendrite, cigarettes, alcohol and/or marijuana. The boys' common expenditures were on illicit substances rather than food. Injection drug use was also found practiced among both boys and girls. Drug injection scars were seen in some street girls. Some of the young people were experienced in intravenous drug use to such an extent that they had worked out where they should inject to have the quickest effect from the drugs. An HIV positive street girl, during informal conversation, stated that her friend had been trying to shoot drugs into a vein, but accidently injected in the femoral artery; this led to excessive bleeding that ultimately resulted in her death[3]. I noticed that girls could remain without food, but often had what seemed to be unbearable cravings for illicit substances; some girls had tremors in their hands, showing withdrawal symptoms. I asked a girl the reason for her tremor; the reason was that she was addicted to alcohol and had not been able to get any. Sometimes the children lay in the the public grounds after drinking alcohol or taking other substances. Usually the boys were noticed taking dendrite as soon as they woke up.I also witnessed a girl using marijuana in the park, sharing it with an old man. The girl stated: "I have marijuana all the time." She showed me how she had kept it safely

[3] Pulsatile blood flow through an artery is under great pressure so blood flows fast in spurts, but in veins the blood flow is not under pressure. Puncture of an artery may lead to severe haemorrhage. If the artery is punctured, blood comes out like a jet and ultimately there will be a chance of death. Intravenous drug users pierce veins in order to inject drugs to get effects, but sometimes they pierce the artery mistakenly, which can be fatal.

in an inner pocket. I asked some street girls how they had got marijuana. Some said: “We go as far as a few kilometres away from Kathmandu to get marijuana.”

What I also observed was that drug abusers from outside their circle used the street girls to get drugs. One afternoon, when I was under a roof of the cottage in the grounds, observing the children around me, I saw a young boy nearby screaming to a street girl, but the girl was refusing to go any closer. He became annoyed and murmured that he had provided food and money for her, but she refused to give him the marijuana that she had.

The children used drugs and alcohol as a means of recreation (see Figure 6-9). The photograph was taken in an early afternoon when a group of children were enjoying, talking and eating and in a celebration mood. They had bottles of beer, cigarettes, marijuana and some dry nibbles with them as a way to enjoy the party. There is some marijuana with a boy with a black t-shirt on the right hand side on the picture, on a paper on his hand; a girl on the right to the boy has a cigarette in her hand. The girl at the right hand side of the boy is handing the cigarette to a boy who has marijuana. They had a particular way of using marijuana and cigarettes; they filled cigarette tubes with marijuana before puffing. The picture shows one girl with a cigarette in one hand and another hand on the shoulder of a boy, posing for the photo. The two boys in another scene in the photograph are preparing dendrite; putting it in a container from the dendrite tube. Both the street boys and street girls were freely sharing drugs and alcohol among them. The three children sitting in the background were new to the group on the day. I also noted that some girls had a small gift box in their hand and I later found that they were the girlfriends of the boys in the party. It seemed that inviting friends, celebrating a birthday as a special day was common among the young people. Thus, I got the opportunity to see some street boys celebrating a birthday party. They were enjoying the party with marijuana, alcohol and smoking, and also some snacks. The street children mostly craved for dendrite, alcohol, cigarettes and marijuana, and would ask outsiders for some if they found someone who was smoking.

Figure 6-9 Street children using illicit substances
(Photo taken: June 2010)

6.5.8 Abuse

The children were frequently abused physically and verbally. One girl, who stayed together with a street boy (in a husband/wife relationship), told me that her partner beat her when she didn't bring in money by prostitution, and he also accused her of stealing money. Street children were frequently attacked by other people for a variety of reasons. One girl had fresh deep cuts in her face, caused by a drug user assaulting her the night before. Similarly, a boy had fresh cuts on his face made by other boys. Various criminal allegations and regular periods of detention were normal to them. I realised that some boys had been imprisoned as often as three times during the four months of my field visit. Almost all of the boys had experience of custody; this was almost always a consequence of having been charged with theft.

6.6 Summary of the Chapter

The ethnographic information of this study is focused on themes that illustrate the risk factors related to acquiring HIV/STIs and AIDS. I used the public health approach in the observational process by seeking to examine children's behavioural patterns; food habits; sexual and drug using behaviour, and environmental factors.

While I have referred to the term 'key informant'; the study did not include interviews with key informants in the usual research sense. As with other ethnographic studies, key informants were simply participants in public life (Marshall, 1996); in this case other young people, vendors and members of the public who were willing to engage in informal conversations with me. Key informants are an important source of information with experience of the population under study even though this information does not form part of the data analysis. Ethnographers prefer to use data from observations, informal conservations and also photography; I have drawn on all three of these methods. The use of photographs can be particularly useful when used to corroborate findings from other sources. Photographs can convey information in a more immediate sense and provides evidence of the environment in which street children lived in ways that visibly illuminate my observations.

In summarising the ethnographic data in relation to the public health framework that informed what I looked for and how I interpreted what I saw, it was clear that street children of all age groups were sexually active and multiple sexual relationships and prostitution were common. Sexual networking was widespread between the street children, both inside and outside their own circle. Besides risky sexual behaviour, the children used drugs and most of were multiple drug users. Use of dendrite, marijuana, cigarettes and alcohol were common. Drugs play both a direct and indirect role in the likelihood of contracting HIV and STIs. Narcotic effects often increase sexual arousal and may hinder protected sex. Also, the use

of intravenous drugs can play a direct role in transmitting HIV directly from one person to another, if one shares needles.

Street behaviour risks such as sexual and drug abuse further added to the unhealthy lifestyle young people lived, and contributed to the risk of contracting HIV/AIDS. The children lacked food, and subsisted at a low nutritional level, which results in malnutrition. Malnutrition increases the chances of having a weak immune system, which could be easily and quickly attacked by opportunistic infection. Also, the children have unhygienic food habits and reside in an environment that is hazardous to health and which puts them at risk of contracting many communicable diseases. Both malnutrition and communicable diseases are threats for HIV to develop into AIDS.

The children sometimes made skin pricks, cuts and slashes on themselves by using sharp needles to express both happy and unhappy feelings. They pricked their skin to make tattoos of their partners' names to express their love, and they cut their skin to use the blood to signify marriage as a sign of love; also they slashed themselves if they were distressed or felt betrayed in love. The young people also used sharp tools such as blades to defend themselves. They were not aware of hygiene and had no awareness of universal precautions related to blood, and used health hardware regardless of the risk of any hazardous diseases including HIV. The use of sharp needles is itself risky behaviour, which creates the potential for contracting HIV.

I observed that street children are commonly abused physically and verbally by different members of society: both the community and the authorities. Although there is not an obvious direct link between abuse and acquiring HIV/AIDS, the children were prone to health-related physical injuries and psychological damage from these abusive experiences. Injuries in HIV infected children may result in multiple serious complications, causing secondary infections and delay in wound healing. Furthermore, the street children were reluctant to go to hospital for check-

ups. They appeared reluctant to seek treatment and seemed to give no thought to their medical needs or care. Physical injuries from abuse, and a complacent attitude towards treatment, have an impact on the development of AIDS. Similarly, such attitudes towards care and treatment, including malnourishment and living in a hazardous environment, are factors which shorten the life span of children who have HIV.

Photographs used in the study also demonstrated the kinship among friends (Figures 6-5, 6-6, 6-7); leadership of a group (Figure 6-5); living situations (Figure 6-6); negligence in health treatment (Figure 6-7); sexual behaviour (Figure 6-8); drug using behaviour (Figures 6-5, 6-9).

To conclude, the sexual and drug-use behaviours of street children in the study mean that they are at risk of being infected with, and transmitting, HIV/STIs. Furthermore, their unhealthy lifestyle, food habits and abusive experiences aggravate the HIV/STIs condition and also make the onset of AIDS more likely; these factors are likely to decrease life span and may lead to premature death. The children and young people's complacent attitudes towards treatment further increase their susceptibility to contracting HIV/STIs, and perpetuate the risks of HIV/STIs and AIDS in a cyclical manner.

This chapter has summarised the ethnographic information that was derived from observation and informal conservations during the fieldwork. The aim of the ethnographic information was to produce a 'rich and thick' description of the lives of street children to explore in what ways children are at risk of acquiring HIV/STIs and AIDS in their living situations. The ethnographic information is corroborated by the findings from the in-depth interviews in Chapter Eight, which enabled the exploration of a deeper understanding of HIV/STIs and AIDS risk factors and the vulnerability of children on the street.

7 RISKS OF HIV/AIDS AND STIS FOR CHILDREN ON THE STREET

7.1 Introduction

The findings of the study are divided into two chapters. The preceding chapter was the first findings chapter and documented the ethnographic phase of the study, providing a rich and thick description of the street children's behaviour and activities. As discussed earlier, the research questions were generated from a theoretically derived conceptual framework, which was in turn developed through the review of the literature and the adoption of a public health approach. The conceptual framework comprises four domains of risks and vulnerability which feed into one another: pre-street risk factors, street life risk factors, aggravating risk factors and perpetuating risk factors (see Figure 3-1). By exploring the risk factors, the thesis documents the ways in which these risks feed into wider society in the form of a vicious circle (see Figure 8-3). A schematic presentation of the risks process is portrayed in Figure 7-2.

This second findings chapter moves beyond the mere description of the street children's lives, and both documents and analyses the risk-related factors that emerged from in-depth interviews. The chapter is organised in five sections. The demographic features are documented in the first section. In line with the underpinning theoretical model, the second section deals with the reasons why children came to be living on the streets; the third section explores street risks, followed by aggravating risks related to knowledge, and in the final section I discuss risk-related attitudes (perpetuating risks) that increase vulnerability to HIV/AIDS.

I approached a total of 33 street children and young people for in-depth interviews. Of the 33 respondents, 28 respondents completed the interview process. Five young people chose not to participate and this chapter is therefore

based on the analysis of data from 28 street children. In supplementing the findings that emerged from the ethnographic phase of the study with data from in-depth interviews, I have been able to compare observation data with data from the in-depth interviews, thus strengthening the methodology.

7.2 Demographic Details of the Respondents

This section presents the demographic information obtained from the in-depth interviews. The demographic features of the respondents comprise the geographical origin of the participants, their age and gender information, educational attainment, occupational status and health-related issues.

7.2.1 Place of origin of the participants

The street children originated from various regions of the country. Most of the participants were from adjoining districts of the Kathmandu Valley and from the surrounding regions. A small number of young children were from Kathmandu Valley itself, while others were from rural areas far away from Kathmandu. The circles in Figure 7-1 below illustrate the radius of the distance of the origin of the street children from the research sites. The distance from which the children had travelled to live on the streets ranged from within a 50 km radius to beyond an approximately 300 km radius from Kathmandu. The figure demonstrates that the street children who were concentrated in the Kathmandu Valley came from a wide range of geographical zones, including hilly areas, terai (plains region) and mountainous regions. Some of the surrounding areas, such as Sindhupalchok and Nuakot, are also known to be human trafficking areas and, although not explored in this study, this factor may have facilitated the movement of children to Kathmandu.

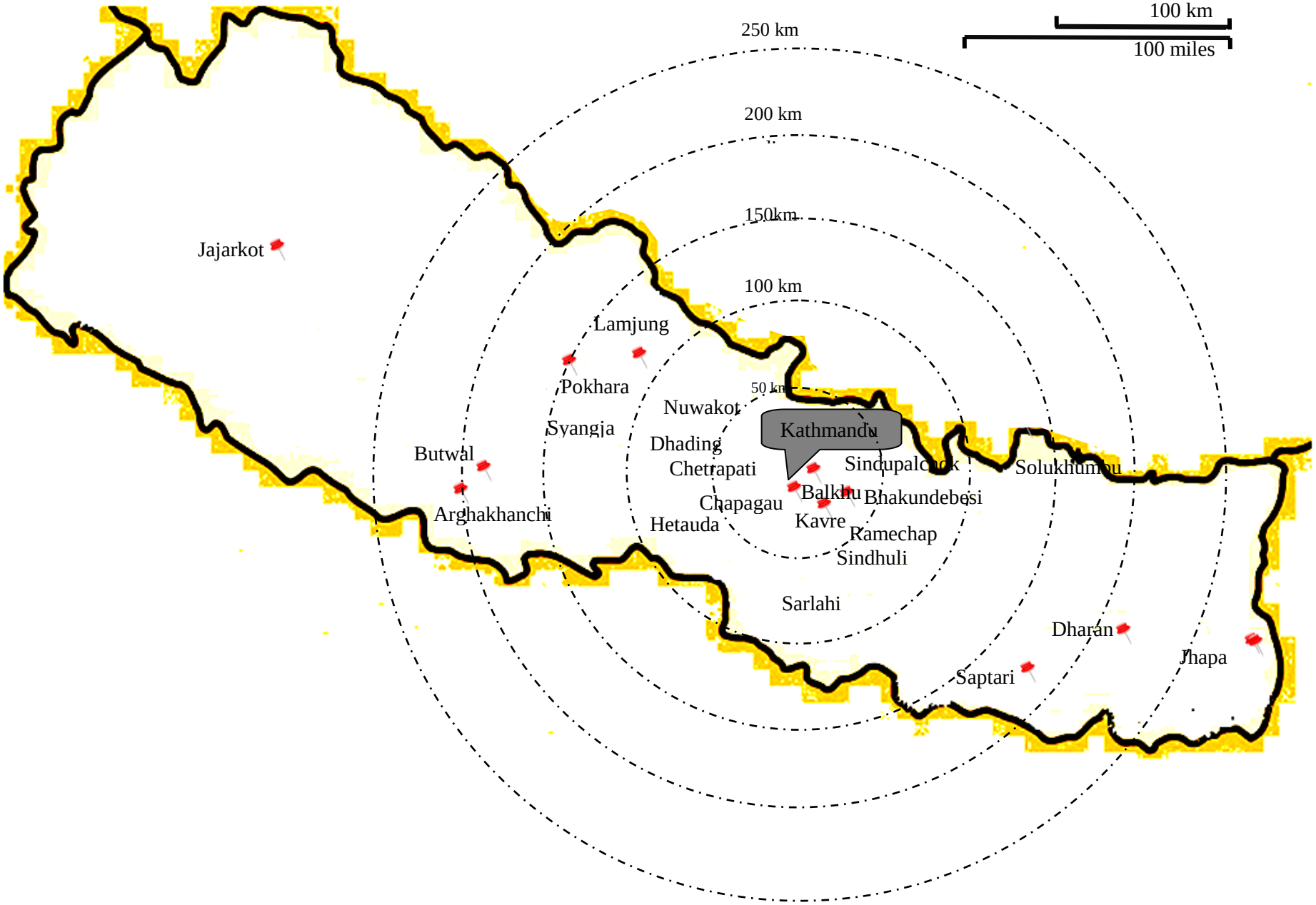

Figure 7-1: Distribution of participants according to their place of origin

7.2.2 Age and gender information

Table 7-1illustrates that among the total participants, 23 participants were male and 10 participants were female. The proportion of girl participants in the study was less than boy participants. Of the respondents, 26 participants were of the 13 to 18 age group, and seven participants were young people above the age of 18; two of these older respondents were boys and five were girls. The lower proportion of girls was due to various reasons: they were difficult to access and, once accessed, their availability to participate was restricted. After leaving home at an early age, most of the girls looked for different survival strategies like working in a restaurant or a hotel, or marrying. I found in their informal interviews that girls married at an early age or worked in a restaurant or as a housemaid before living on the street permanently. They lived on the street as a last resort for their survival.

Table 7-1: Age and gender distribution of participants

Age and gender distribution of participants			
Age range	**Age of participants**	**Boys**	**Girls**
13-18	13	2	0
	14	3	2
	15	2	2
	16	5	0
	17	1	0
	18	8	1
19-23	19	1	0
	20	0	3
	21	0	0
	22	1	0
	23	0	2

7.2.3 Educational attainment

Table 7-2 illustrates the educational performances of the respondents. Analysis of the results regarding educational attainment shows that most of the street children

went to school for at least one year in their lifetime. Seven participants amongst 33 had never attended school. The majority of them had finished their educational life in their third year of school. Few knew how to read and write, fewer knew how to read and even fewer could write.

Table 7-2: Distribution of participants by years of educational attainment

Distribution of participants by years of educational attainment		
Years of education attendance	**Boys**	**Girls**
Never	6	1
1 year	5	0
2 years	1	0
3 years	4	2
4 years	4	1
5 years	1	3
6 years	1	0
7 years	0	1
8 years	0	2
9 years	0	0
10 years	1	0

7.2.4 Occupational status

Table 7-3 illustrates the respondents' occupational status. Information about their occupations shows that the street children were engaged in ad-hoc and unskilled jobs in a hard and risky environment. Rag picking was the most common form of work among the street children. The majority of the young people revealed that they were involved in multiple 'working' activities such as pickpocketing, robbery and looting. A small number had jobs like parking and catering. Almost all of the girls reported that they were involved in sex work or, to use the term they used themselves, in prostitution.

Table 7-3: Distribution of participants by the nature of their work

Distribution of participants by nature of their work		
Nature of work	Boys	Girls
Rag picking	8	0
Begging	3	0
Casual work - tourist guide, parking, catering	4	1
Pickpocketing, robbery, begging, rag picking	7	0
Prostitution	0	7
None	1	2

7.2.5 Health-related issues

The table given below (7-4) illustrates the general health-related issues of the respondents. Participants were asked to give their views about their general health condition at the time. Information regarding their health status showed that only 11 participants thought they had good health. All the other participants responded that they had an average, weak or poor health status. Among them, 12 participants thought that they had poor health.

Table 7-4: Distribution of participants by health status

Distribution of participants by health status		
Health status	**Boys**	**Girls**
Good	9	2
Average	6	3
Weak	1	0
Poor	7	5

Information on the medical condition of participants revealed that the majority of them had a previous medical history. Most of the participants had previously

suffered from one type of illness or another. The young people reported multiple illnesses including: pneumonia, cough, fever, diarrhoea, tuberculosis, jaundice, lumps in the groin and chest pain. Some reported fracture-related problems of hands, legs or ribs.

7.3 Pen portraits

An informal description of some participants is presented below to provide an overview of a range of factors relating to age, gender, education level and health status. Some features like caste and family members are not used in the study.

Bijaya is 13 years old boy. His home is in Kavre which is neighbouring district of Kathmandu Valley. He has four family members in his home. He lives with his friends in the street. He went to school just for one year. He is surviving in the street by begging. He is not married but has girl frineds. He thinks his health status is weak and he has never had medical treatment.

Arjun is 16 years old boy living in the street with friends. His home is in Sarlahi. He went to school for four years. He has four family members in his home. He lives in the street with is friends. He has five girl friends. He said his health status is ok. He had done HIV screening test. He works as a tourist guide.

Sunil is an 18 years old boy. His home is in Balkhu which is located in Kathmandu. He has gone to school for three years. He has seven family members in his home. He lives in the street with his friends. He works as a begger for survival. He has his girl friends. He thinks his health status is poor. He had ribs fractured and treated.

Saru is 23 years old female. She is from Khamandu. She went to school for six years. She lives in the stret with other street children. She has six family members in home. She works as a prostitute. She is married and separated. She thinks her health status is fine. She has never had any health problem.

Usha is 14 years old girl. She came from Sinduli. She has been to shool for five years. She lives in the street with street children. She has five family members in her home. She works as a prostitute. She is married and separated. She thinks her health status is poor. She had pneumonia, cough and fever.

Puja is 14 years old girl. She came from Ramechap. She has been to school for four years. She has three family members in her home. She lives in the street with street children. She works as a prostitute. She is married. She thinks her health status is poor. She had diarrohea and fever.

The most vulnerable age for children leaving home is between 7 and 12 years. Among the respondents, most of them left home at an early age, between 6 and 13 years, and a few others reported that they had left home between the ages of 13 and 16. The majority of the children had been living on the street for the previous 6 to 10 years. Nearly all of the participants had been living on the street for at least 3 to 4 years at the time of interview. The maximum period of time the children had been living on the street was 10 years and the minimum duration was 2 years.

7.4 Reasons for Children to be on the Street

Most of the literature reports that escaping abuse is a main reason why children leave home to live on the streets. The term 'abuse' is vague and I wanted to understand exactly what experiences of abuse had forced the children into living on the streets. For the purpose of this research, I use the term 'mistreatment' to cover the forms of exploitation, unkind behaviour or physical beatings and discrimination that the children reported. The findings showed that such mistreatment occurred more often in 'reconstituted' families. In Nepal, the family is conventional and follows a traditional structure comprised of husband, wife and children. A 'reconstituted' family, for the purpose of the research, is considered to be a family where there is only a single parent due to separation or the death of one of the parents, or where a parent has remarried and a step-parent has joined the family. The significant reasons for children to leave home are clustered into three major themes: parental mistreatment, especially by step-parents, parental alcohol abuse and the influence of friends.

7.4.1 Unkind parental behaviour

Most of the boys claimed that they suffered from '*hela*' (mistreatments) in their home. They were asked what 'hela', had meant in their cases. The street children interpreted their experiences of mistreatment as 'overwork'; that is, excessive work demands or work demands which the boys considered inappropriate, such as

being asked do the washing up, bring firewood and grass from the forest, and cooking food. Most of the boys said that their reason for leaving home was due to parental mistreatment, often by step-parents. Boys experienced mistreatment at the hands of either their stepmother or stepfather. An illustration of a street boy's experiences of different forms of mistreatment, such as exploitation and unkind behaviour (physical beatings) by his stepmother, is as follows:

> "I had a stepmother and a father. Stepmother treated me bad '*hela*' at home. She made me do the washing up. Stepmother always beat me. Sometimes father loved me, [love meant for him was his father came to pick him from friends' house and gave him food] but stepmother shouted at me; then I got into the habit to live in street."
>
> [Guru, 18 years, male]

Similarly, another street boy reported his experiences of mistreatment such as exploitation and unkind behaviour by his stepfather:

> "I had a stepfather and a mother at home. Stepfather drank alcohol and beat me hard. He made me do the washing up and cooking rice. He made me out of home and I started to live in street."
>
> [Bikash, 14 years, male]

Children also experienced discrimination by step-parents. A street boy described how he was discriminated against and suffered from unkind behaviour from his stepfather, which led him to leave home:

> "Stepfather drank alcohol. He did not treat me well. He beat me. He treated me differently; he loved his daughter but does not love me. He bought food and things to her but not to me."
>
> [Binod, 15 years, male]

7.4.2 Parental influence of drugs and alcohol

Although step-parent's attitudes were particularly emphasised in the interviews, there were also examples of biological parents being abusive or harsh towards their children. Another aspect of parental mistreatment was the biological father abusing alcohol. For example, a respondent reported that:

> "I had parents and sisters at home. An alcoholic father always beat me hard. Father stabbed me in my face with a knife. Mother loved me but father always drank alcohol and beat me hard; then I left home."
>
> [Kumar, 16 years, male]

Unlike the street boys, street girls left home due to verbal mistreatment rather than physical mistreatment. A street girl described the reason for leaving home in her own words:

> "My mother drank alcohol. She scolded me and called me prostitute, '*randi*'. She shouted at me, saying that I should go away […] how can I tolerate this? I can tolerate it for one; two or three times […] so I left home."
>
> [Anita, 15 years, female]

This suggests that alcoholic or drug-abusive parents can also cause behavioural problems in children such as running away from home. The children's words suggested that the nature of mistreatment from parents was one of the causative factors for leaving home, and that mistreatment was exacerbated by alcohol and drug misuse. A boy described the severe beatings by his biological parents as the reason for leaving home:

> "My father beat me severely with a nylon rope. Once he beat me loud so that other people could hear. I was so much hurt […] I also hit him. I told my father not to call me a son. "I don't call you my father." He never beat my brother; maybe he was the eldest son. Then I went to Kathmandu. I will spend my life like this."
>
> [Dipak, 18 years, male]

7.4.3 Siblings or relatives

Where the traditional family structure had changed subsequent to death or divorce (the 'reconstituted' family), and where power was switched to siblings or relatives, this also appeared as one of the reasons for children to leave home. The findings showed that mistreatment by siblings or relatives were common in these

circumstances, and this was a push factor leading to children escaping to live on the street. For example:

> "Father died, brother mistreated me at home. He did not give me food, but he gave food to his wife, forcing her to eat. Brother told me to bring money at any approach. He beat me and then I left home."
>
> [Sunil, 18 years, male]

> "My father died of ill health. Uncle treated me badly. He said my father did not have any property, so I should go away from home. He chased me, saying I should never come back home. Then I started to live in the street."
>
> [Pravin, 16 years, male]

7.4.4 Family environment

Quarrelling between father and mother was also a reason for children leaving home. This was more frequent in families in which the parents abused alcohol. There was a link between the father's alcohol consumption and the family environment, with alcohol causing family disputes that led to a violent and chaotic family environment. A street boy described how the consequences of his father misusing alcohol led to him living on the street:

> "My father drank a lot of alcohol. Parents always quarrelled with each other. My father beat me bad. Mother went to Kuwait because of father's behaviour […] I didn't want to stay at home, even I had 5 plates of rice."
>
> [Roshan, 20 years, male]

Feeling neglected and experiencing unkind behaviour in a violent family environment pushed many of the children onto the street. Another boy illustrated the consequences of his alcoholic father's behaviour:

> "Father was an alcoholic, father hit mother. I was unhappy and had miserable life at home. They did not send me to school. I am happy in street; sometimes sad when money is stolen."
>
> [Bijaya, 13 years, male]

7.4.5 Influence of friends

The influence of friends was also one of the factors that pushed children into living on the street. For example:

> "I was in India with my family. We were working in a hotel there. I came to Nepal with my friends. Some of my friends told us we should go to an organisation, where we could get good food; we could get whatever we wanted. We found the organisation was not good, lice were found everywhere. Friends told me to live in street; then I went in street."
>
> [Bikash, 19 years, male]

The development of friendships on the street, combined with parents' negligence, appeared as a reason to leave home in several cases:

> "I started to hang out with street friends in Pokhara. I had fun and I enjoyed. I started smoking and bunking school. My parents never looked for me, and then I went to Kathmandu to live in the street."
>
> [Saroj, 13 years, male]

Similarly, a few girls said that the formation of new relationships with boys induced them to live on the street while in this example; children sometimes followed each other for work opportunities:

> "I had my friends who lived in street. We became good friends with each other. My friend used to go to a lodge [a hotel] at night. She used to be a prostitute in a lodge. Later I started prostituting in a lodge. Now I work as a prostitute like her and I started to live in street."
>
> [Puja, 14 years, female]

7.5 Sexual Risk Behaviour

Several participants explained that they had had their first sexual experiences after they left home. They also told the story of how they started to engage in risky sexual activities due to the influence of a friend after they started to live on the street. Some of the many examples are incidences such as:

> "I had sex when I was 11 years old. I was in another place […] at Lagankhel. I met a girl there, the girl purposed me to do so. I did not know what sex is until that time."
>
> [Binod, 15 years, male]

One boy explained that his friends influenced him to have sex with prostitutes. He stated that:

> "I had sex with prostitutes, '*bhalu*', after my friends introduced me. I did sex because of that friend [...]. Then it happened."
>
> [Sunil, 18 years, male]

> "First time at Thamel, I was walking down in the street. I met a boy with a girl. That girl stayed with the boy. She was a prostitute and he introduced me. I paid 600 for the girl and 100 for that boy."
>
> [Vola, 18 years, male]

7.5.1 Early sexualisation

During the interviews, the participants were asked about their sexual practices and behaviour, in order to learn about risk of HIV and STIs. Early age sexual activities were found to be common among the children. All the respondents reported having engaged in sexual intercourse at an early age. Many of the children reported that they had had sexual intercourse before the age of 13 and some children had been as young as nine:

> "I started to have sex when I was nine years old. My friends told us to have sex with prostitutes […] I didn't use condom that time. I did not have sexual pleasure in that time because of no discharge, '*mal jharena*'. I became experienced when I became 14 years, discharge started and I started to take sexual pleasure; then I got the habit to do."
>
> [Guru, 18 years, male]

7.5.2 Sexual orientation

During the interviews it became clear that the children had homosexual, heterosexual and bisexual orientations and different sexual practices. Boys

reported having sex with same sex partners; although vaginal intercourse was most common, they experienced anal and oral sex intercourse with male and female partners. A bisexual boy described how his multiple sexual relationships and his sexual practices included anal and oral sex with boys and vaginal and oral sex with girls:

> "I sleep with many girls within and outside of circle. We also find small street boys around. We have anal sex and let them suck organ. If someone comes out at night we just close their mouth and take to alley to have sex."
>
> [Manoj, 18 years, male]

Similarly, another homosexual boy reported that his partners were homosexuals and they enjoyed group fondling and masturbation. For example:

> "We meet '*chakka*', homosexuals, here around. They come and catch us and hold our organ […] I enjoy in it. I have oral sex with other friends […] we do in our group […] we have anal sex as well […]."
>
> [Kiran, 14 years, male]

From the boys' accounts it appeared that homosexual activities between younger boys and older boys were common:

> "I perform sex with small street boys and have anal and oral sex […]. They suck my organ too. I enjoy it".
>
> [Manoj, 18 years, male]

The findings suggest that the reason some young men were inclined to homosexual orientation was because of easier access to boys to fulfil their sexual desires, and the fact that homosexual sex was free.

> "We meet homosexuals, 'c*hakka*', at night here. Perform oral sex without paying […] they roam around here and we see them."
>
> [Vola, 18 years, male]

> "I go to lodge girls, '*bhalu*'. I don't do sex often with lodge girls because it is expensive. Different girls ask different amount of money, from Rs.300 to Rs.500. We can get prostitutes whenever we want here in the ground. They don't take much money. We perform anal sex between boys; that is also not by paying."
>
> [Guru, 18 years, male]

Same sex practice was not reported by female street girls. Among sexually active girls, sexual experience with opposite sex partners was universal and a few reported oral and anal sex. For example:

> "I was 14 years old when I had first sex. I did not use condom in first sex. I stayed with a boy for three years. I never used condom with him. I used to be a prostitute in Thamel before marriage […] I never used condom with the second man. […] I had oral and anal sex with my husband."
>
> [Saru, 23 years, female]

7.5.3 Commercial sex

The study showed that commercial sex was common. The dominant reason for this, for the girls, was monetary advantage for their subsistence. A girl described the reason for paid sex and the adoption of unprotected sex:

> "I sleep with my father for money. We can't identify who has HIV. We go there for money; we do whatever is just for money. Sometimes if we force them to use condom, people promise us they don't have disease and we trust them and they transmit diseases. It is all compulsion […] who likes to do this work? […] do you like this work? Everybody says us prostitute, '*randi*', '*bhalu*'. What to do? I should prostitute otherwise I don't have food."
>
> [Sunita, 23 years, female]

Prostitution was therefore a main source of income for street girls. A street girl described her story, which illustrated that the intention for prostitution was just to make money:

> "I work as a prostitute. We all do just for money. Once I went with an old man […] he was more than 60 years. I understood he intended to show me his money in his pocket of his shirt. He bowed down his head and asked to me to pick up something there. He was carrying a bag. I saw his bundle of notes. He asked me to go to lodge. We went to lodge together and he ordered a beer; before any activities, he drank alcohol. When he went to wash room […] I put a type of substance, '*Vat*', (that affects quickly) in his drinks that made him drowsy. He could not do anything; he was not interested to have sex at the time. He said to have sex next day and went to bed. I agreed him; when he slept, I took his cell phone, and all his cashes from his pocket; then I ran away from lodge."
>
> [Sona, 18 years, female]

Apart from cash, street girls also exchanged sex for drugs. For example:

> "I like to have dendrite; I saw them having dendrite, they offered me dendrite for sex […] sometimes for money. Then I go for sex. I do not think of condom."
>
> [Parvati, 14 years, female]

Boys also exchanged sex for money or other materials. A boy described sex with school girls in exchange for stationery:

> "I had sex with school girls […] they used to say me uncle. I never use of condom. I always have vaginal sex. I spent on their stationery; other expenses for sex at the most was Rs.200."
>
> [Dipak, 18 years, male]

Similarly, another young boy described sex with his female friend in exchange for alcohol:

> "[…] I always have sex with street girls. I have known a woman also. She lives in rented room. I go in her room to have sex. I give her alcohol; that is enough."
>
> [Anil, 22 years, male]

In addition, commercial sex was also practiced between some boys. One boy described how he received money for this.

> "I had oral sex at the very beginning with a boy who lived in a hostel in organization […] he enjoyed and gave me Rs.200. I

> sometimes meet homosexuals, 'c*hakka*', here in this ground. They asked to go for sex; they shake my organ to get enjoy. I like male to male sex […]."
>
> [Binod, 16 years, male]

7.5.4 Drugs and sex

All the respondents said they were in the habit of using alcohol or drugs. Both boys and girls who participated in this research were polydrug abusers. Street boys used a wide variety of drugs including handmade drugs that they thought would give a strong narcotic effect. Some of the young people were so experienced that they knew what gave the strongest narcotic affects. One boy described using handmade drugs like the tail of a lizard and said this had a stronger effect than other substances. For example:

> "I use all kinds of drugs that give me trip: dendrite, marijuana, cigarette, heroin 'brown sugar', hashish '*chares'*, alcohol, tail of a lizard '*bhittiko puchar*'. This handmade drug we make by drying a tail of a lizard and grinding it; then we use like marijuana, that gives a real trip. I can buy it in Pashupati."
>
> [Roshan, 20 years, male]

The most commonly reported substances among the street children were dendrite, cigarettes, marijuana and alcohol. A few of the young people reported that they used intravenous drugs and some stated that they used TT (tidigesic, an intravenous drug) and reused the syringe after cleaning it. For example:

> "I use dendrite, alcohol, marijuana, TT (intravenous drugs). We use syringe and reuse after cleaning it. I use four to five dendrite tubes in a day."
>
> [Binod, 15 years, male]

However, a few children reported injecting drugs and it appeared that they avoided sharing syringes. The boys' descriptions also suggested that younger children used a large amount of drugs and alcohol. For example:

> "I use dendrite, TT. I use marijuana, cigarette and alcohol too. We use new syringes as we don't want to share. I drink a lot of alcohol: about two litres daily."
>
> [Dipak, 18 years, male]

Sex under the influence of drugs and alcohol was also common practice among younger children:

> "I don't pay but I give them dendrite. We ask them to have dendrite […] they will be drowsy after having dendrite, then they come closer to attach; they feel to have sex and we do."
>
> [Bikash, 14 years, male]

Use of alcohol and drugs and unprotected sex was frequently reported by children:

> "I had my first sex with a girl; we worked together. We drank alcohol together and had sex without condom […] it was free sex. We can find girls all around at night […] they themselves ask for sex."
>
> [Kumar, 16 years, male]

> "My first sexual intercourse was when I was 11 years old. We both had dendrite before sex […] we had sex in a bush in the town. I did not use condom that time but as she told me to use."
>
> [Bijaya, 13 years, male]

Like the boys, girls also gave similar types of illustrations that they performed sex under the influence of drugs and alcohol:

> "I will never be without having marijuana; I have got now, also. Some clients buy drinks in lodge and offer to drink together before sex."
>
> [Sona, 18 years, female]

From the young people's accounts, it appeared that sex under the influence of drugs and alcohol was a common practice due to various reasons. The findings suggest that the children thought the use of drugs and alcohol would give pleasure. A young boy explained how the reason for using these was to achieve greater pleasure:

> "I do have sex with boys too. We don't use condom while having sex with male to male. We use drugs and have sex; that gives more pleasure."
>
> [Bibek, 18 years, male]

Besides pleasure, another boy reported that his inability to perform sex without drinking alcohol was the reason for using alcohol during sex. He explained:

> "I had sex with a street girl for the first time […]. I normally, have sex with street girls. […] I always have alcohol during sex, otherwise I can't perform sex."
>
> [Anil, 22 years, male]

7.5.5 Sexual abuse

Children on the street were at a high risk of being abused sexually, and confirmed that enforced sex was common in the street environment. They were susceptible to having sex forced on them by member of public. Street girls had experienced being abused by street boys, drug users and strangers. They had experienced group rape as well:

> "Street boys raped me when I was sleeping […] they were drunk. Four boys raped me at a time one after another […] no condom. Another time I and my friend went to roam around; when we were coming back […] street boys chased us, tried to rape my friend."
>
> [Sunita, 15 years, female]

Similarly, it is to be noted that street girls reported being abused by the people who were supposed to guard and protect them, such as policemen:

> "I have a lot of bitter experience of harassment. One year ago; I was taken by a man. He gave me Rs.1000. I did not know he was a policeman until we reached the jungle in Banepa. He showed me his identity card; he was with a gun. He had sex with me and then he took the money back."
>
> [Sunita, 23 years, female]

Not only girls, but boys also were victims of abuse, and found to have been forced into homosexual activities by street workers, older street boys and drug users. For example:

> "A man in the street forced us (me and my friend) to have anal sex. The man told he would not leave him until he performs sex. I and my friend both had anal sex with that man. I did it for 10 to 12 days continuously. We had oral sex too."
>
> [Bikash, 19 years, male]

Similarly, another boy talked of his experience of being abused by older boys in the street:

> "Yeah I was pressured to have sex in the street; older boys who were drug user force me to suck his penis. Otherwise they threatened us to complain to police. They were high using drugs."
>
> [Bikash, 14 years, male]

7.5.6 Multiple sexual partners

All participants had engaged in serial monogamous sexual relationships that were of short duration and which therefore increased their sexual exposure to multiple partners. From the interview findings it is clear that the young people had extended sexual networks. One boy explained:

> "I cannot count now but I have many as 30-40 sexual partners. We can commonly meet girls at night. I met five school girls, we used marijuana together when they were high and I did sex. My sexual partners are also hotel workers and street girls. We meet homosexuals, '*chakka*', at night here and perform sex without paying. […] I don't use condom every time."
>
> [Vola, 18 years, male]

The interviews showed that marriages, separation and extramarital relationships among the young people were common. A boy described his extramarital sexual relationships:

> "In the beginning I had sex with a street girl who was my wife […] I left her; later, I had sex with a girl who did not stay in

> street, she was a prostitute […] she would sleep with many other people. My second wife is imprisoned in Hanuman Dokha; she was a casual labourer."
>
> [Dipak, 18 years, male]

Like the boys, girls also had sexual partners from a wide area. Working as prostitutes, their clients were of various backgrounds and of various age groups, and the numbers of partners in a day depended upon the availability of clients. For example:

> "Five days before, I had sex with two men; it depends availability of clients. Some day there might be no one and other day might be many. We don't ask their profession; that may be any […] drivers, hotel workers, street boys, police and officials. They are of any age groups."
>
> [Sona, 18 years, female]

Similarly, one girl described her sexual partners, showing that these came from various backgrounds and were of all age groups:

> "I married a boy in the street; then it did not go well. Then I had encountered sex many times even in a single day with people of different ages, maybe some are 45 years to more than 60 years. Aged people are my choice as they don't do any bad and they teach good things. Now I am staying with another man. He says me not to do such work […]."
>
> [Sunita, 23 years, female]

7.5.7 Unprotected sex

The study found that most of the sexually active children were exposed to unprotected sex; only a small proportion said they used condoms and even these children used condoms inconsistently. The children had different perceptions of the use of a condom. One boy suggested that a condom is not necessary if the sexual partner is already known, if a sexual partner is young or if a sexual partner lives at home. It is necessary only if having sex with unknown girls and street girls:

> "I don't think the use condom is necessary every time we have sex. I don't need to use condom if I have sex with a girl I know, who are young and who stays at home. Use of condom is necessary if having sex with girls from outside, those I don't know and who stay in street."
>
> [Vola, 18 years, male]

Street boys and girls avoided using condoms for various reasons. Street boys disliked the feeling of using a condom and appeared to take no interest in its benefits. A few boys responded that the reason for not using a condom was simply that they did not care about HIV. An example of this is:

> "Use of condom is to prevent HIV. People use condom to protect from themselves from HIV. I don't want to use condom. I don't want to protect myself."
>
> [Binod, 15 years, male]

Low morale appeared as a link to the adopation of unprotected sex. A street boy expressed his presumation that he already had HIV therefore he did not use condom.

> "I think I have already have HIV. Why should I use condom if I have already have HIV? I don't use condom."
>
> [Dipak, 18 years, male]

Apart from their lack of interest and being complacent about the transmission of HIV, the size of condoms may have been an issue for some of the children, as explained here:

> "I don't use condom […] its size is big for us […] it does not fit us. I tried to use but it doesn't fit. People say it is to protect from HIV but I don't mind transmitting HIV."
>
> [Bikash, 14 years, male]

Relationship contexts such as love and trust between the partners were also given as one of the main reasons for avoiding condom use during sex:

> "I slept with my boyfriend for the first time. My boyfriend had a girlfriend called Sita before; he said to me that he did not love

> her and relationship was just to sleep. I have heard she has got HIV. My boyfriend and the girl were arrested by police while they were having sex. […] he also disclosed to me directly that he had two other girls previously. Now he loves me and he has not got any other girl. I don't know if he has got HIV. I already slept with him […] so no matter if I have HIV, I will sleep with him. But I will tell him to use condom […] if not that is okay. I have never used condom with my boyfriend."
>
> [Sunita, 15 years, female]

Another reason for not using a condom was because sex occurred spontaneously or was unplanned. For example:

> "I don't use condom […] this all happens without planning and don't know when it is going to be."
>
> [Kiran, 14 years, male]

One of the serious concerns regarding the street boys was that they thought condom use was not necessary in sex with male partners. For example:

> "I do have sex with boys too. We don't use condom while having sex with male to male. I prefer vaginal sex, most of the time anal sex. With girls I first do vaginal and then anal sex. Use of condom is necessary […] yes, I know […] I never use condom during sex. […] no use of condom with boys […] sometimes I use condom with girls."
>
> [Bibek, 18 years, male]

7.6 Knowledge Associated with HIV/AIDS and STIs

7.6.1 General knowledge about HIV/AIDS and STIs

It is essential to have knowledge regarding HIV, AIDS and STIs in order to reduce risky behaviour. To examine the street children's knowledge about HIV/AIDS and STIs, they were asked two things. Firstly, children were asked what they knew about HIV/AIDS and STIs in general. Secondly, they were asked the difference between HIV, AIDS and STIs. The responses were confused and indicated a low level of knowledge:

> "HIV infected people die, becoming thinner and thinner, but I don't know AIDS and STIs."
>
> [Bibek, 18 years, male]

> "HIV is the forming of wound on penis and no discharge of seminal fluid, '*maal*', during sex; no discharge of seminal fluid during masturbation, '*chattisa handa maal jhardaina*'. I don't know about AIDS and STIs […] I have not read books."
>
> [Vola, 18 years, male]

> "HIV is due to sexual contact with a boy or a girl; it occurs due to tongue kiss too. I don't know about AIDS and STIs."
>
> [Anita, 15 years, female]

Similarly, some of the respondents had knowledge of AIDS but didn't know about HIV and STIs transmission. Examples of participants' responses are:

> "I don't know HIV. AIDS is transmitted through sexual contact. STIs […] don't know."
>
> [Binod, 16 years, male]

> "I don't know about HIV; AIDS is transmitted through sexual relations to many people. STIs [...] don't know."
>
> [Parvati, 12 years, female]

> "I don't know about HIV but AIDS is germs that move in our body."
>
> [Saru, 23 years, female]

In response to the question on differences between HIV, AIDS and STIs, only a few of the respondents gave any details of all three, and these responses were incomplete, incorrect and included misconceptions. This was illustrated by responses such as:

> "HIV means danger. AIDS means that it disappears itself. STIs […] I have just heard of it today."
>
> [Binod, 15 years, male]

> "HIV is STIs and AIDS is a sex disease. I don't know about the difference of this."
>
> [Anil, 15 years, male]

> "HIV is a big disease, AIDS is the biggest disease and STIs are the smallest disease."
>
> [Dipak, 18 years, male]

> "HIV is a bad disease; HIV is one disease and AIDS is another disease and STIs are sores in penis."
>
> [Sunil, 18 years, male]

A high proportion of the children showed indifference to this question by either not responding or replying "nothing". HIV and AIDS are "dangerous", "big" and "bad" diseases were the common responses. Some young people stated that there is no difference between HIV and AIDS:

> **"**HIV and AIDS and STIs are same; there is no difference between HIV/AIDS and STIs. STIs are itching and blisters. When pus discharges from STIs, then it turns into HIV/AIDS."
>
> [Roshan, 20 years, male]

Many of the respondents shared their thoughts about what could happen to a person if he or she had HIV, AIDS or STIs:

> "I heard people having HIV won't like to have sex and their penis will not erect. I don't know about AIDS. […] STIs are sores in penis."
>
> [Guru, 18 years, male]

> "HIV is syphilis, '*viringi*' in Nepali language, and HIV/AIDS is in English, and STIs is white discharge, itching and sore."
>
> [Sunita, 23 years, female]

7.6.2 Knowledge of HIV transmission and misconceptions

During the interviews, children were asked to talk about the modes of transmission of HIV. Sexual contact without a condom appeared as the first response, followed by sharing of syringes and blood. Most responses were full of misconceptions and only two respondents had a clear idea about the main modes of transmission:

> "HIV can be transmitted by sex without using condom […] it transmits through blood […] it is also transmitted through seminal fluid, '*khusi*'. Sharing of syringe also transmit HIV."
>
> [Dipak, 18 years, male]

> "HIV transmits through blood, sharing of blade and having sex with HIV infected people. In any case it is transmitted through mixing of blood with HIV affected people."
>
> [Puja, 14 years]

Common misconceptions were that HIV can be transmitted through mosquito bites, breathing on one another, physical touching, sitting together with infected people and sleeping in the same bed. Some children thought that HIV could be transmitted through dirty things, including eating dirty food, sleeping in a dirty place, eating food from the garbage and from meat. Other commonly reported misconceptions were about HIV transmission through '*jutho*' food and drinks ('*jutho*' refers to eating somebody else's food or drinking from the same container) or sniffing dendrite with someone infected. Several children thought that HIV is transmitted through people who have multiple partners and, linked to this, did not believe therefore that virgins ormarried women could transmit HIV. Almost half of the respondents stated that girls are more likely to transmit HIV, and seemed to think that physical attributes such as being dark coloured or fat, for example increased the likelihood of transmission:

> "HIV can be transmitted through girls. Girls are nice in appearance but nothing is written on their forehead."
>
> [Arjun, 16 years, male]

> "Dark coloured girl transmit HIV if having sex without using condom."
>
> [Dipak, 18 years, male]

> "I am afraid of girls; they are most risk of HIV/STIs transmission. I am afraid of fat girls."
>
> [Anil, 15 years, male]

Further misconceptions about HIV were that it is transmitted by dogs or foreign nationals:

> "I heard HIV came from sex with a dog. It is transmitted through dog and the place where the people performed many sexual encounters. I heard that people in abroad have lots of sexual encounters and later it came here."
>
> [Dipak, 18 years, male]

A female respondent asserted that HIV is transmitted through rich people. She reported that HIV will not occur among poor people such as labourers and porters:

> "People here don't have money to eat rice, they do hard work for a whole day and sleep with their own wife; they don't transmit HIV. Working hard for a whole day and still they will have uncertainty what they are going to eat and what they are going to wear, so it is not transmitted from poor people from here. People who goes to abroad and return back to home from abroad have money, they go to hotel, restaurant; they have money but they don't have wisdom; those types of people transmit HIV. They stay for some years out of home; they don't stay without having sex, then they transmit HIV. HIV was not here before this came with people from foreign country. You know? It was transmitted from Thamel (tourist area)."
>
> [Sunita, 23 years, female]

7.6.3 Knowledge about AIDS

There is a close relationship between knowledge about AIDS and behaviour to protect oneself from getting the disease. The responses showed that children were not able to differentiate between HIV and AIDS, and the misconceptions about HIV transmission were repeated in response to questions about AIDS.Only one respondent reported that the occurrence of AIDS is the result of HIV incidence:

> "HIV is being attacked by virus, '*virus le attack gareko*'; AIDS is just a starting of disease. Difference is just that the beginning of the disease, and already has disease. HIV is a dangerous disease […] it wastes life. AIDS occurs after HIV similar to typhoid after jaundice. STIs […] I have heard about it but not seen, this is a sore in genitals. I have heard of syphilis, '*viringi*'. STIs is not syphilis; if scabies deteriorates then occurs syphilis."
>
> [Dipak, 18 years, male]

7.6.4 Knowledge of HIV/AIDS prevention

In response to questions regarding HIV/AIDS prevention, use of a condom was the leading response, followed by avoiding sharing needles. Some boys mentioned that having unprotected sex contributed to HIV:

> "I had sex with a prostitute last week […] I did not use condom. I think I got HIV a week before […] prostitutes may have HIV. I am panic."
>
> [Vola, 18 years, male]

Most of the children agreed that healthy people could have HIV, although there were still some misconceptions:

> "Healthy looking people may not have HIV because good looking people take care themselves […] he keeps concern of his health."
>
> [Sona, 18 years, female]

> "Healthy people may not have HIV and attractive looking don't have HIV. HIV infected people are thin."
>
> [Arjun, 16 years, male]

In response to the question on appearance and symptoms, almost all respondents stated that HIV infected people would have a different appearance. A quarter of the young people reported that HIV infected people are thin and bony like a skeleton, and look ill and dark. The young people thought that an HIV infected person would look like a corpse, salivating and with red and sunken eyes. None of the participants seemed to know much about AIDS symptoms, although they reported symptoms related to HIV. For example:

> "HIV infected people have sores in body, water oozes from body sores and sunken eyes."
>
> [Parvati, 14 years, female]

> "HIV/AIDS person has blisters that discharge whitish fluid […] gets thin, dizziness, less appetite, and infected person looks like dark."
>
> [Dipak, 18 years, male]

With regard to who is most at risk of HIV/AIDS, both boys and girls thought that people who have many sexual partners were most at risk of HIV/AIDS transmission, and that prostitutes were at particular risk as they have many sexual partners and readily go for sex for money and alcohol. For example:

> "Prostitutes have sex with many partners. They are risks for HIV transmission. They agree to have sex with whoever comes if somebody gives them alcohol."
>
> [Binod, 16 years, male]

> "Prostitutes who walk in Ratna Park are most at risk for infection. We [indicating those who stay on the street] know them easily; we can have sex with them easily by giving Rs.500. We ask them if they like to go to guest house."
>
> [Vola, 18 years, male]

Some young people thought that street children themselves were most at risk:

> "Having sex with the people who live in street and lodge is risk for HIV/STIs transmission."
>
> [Parvati, 14 years, female]

> "Guest house girls, street girls who have sex for money are most at risk for HIV/STIs transmission."
>
> [Arjun, 16 years, male]

One young person suggested that street children are at risk of HIV transmission because some of their friends had already contracted HIV:

> "My friends (street children) are risk to transmit HIV/AIDS as some of them already have HIV."
>
> [Manoj, 18 years, male]

Besides prostitutes, the young people thought that drug and alcohol abusers were at risk of HIV transmission as they have multiple partners:

> "Drug users, '*vitti*', are most at risk for HIV transmission; they use TT and have many sexual partners.
>
> [Binod, 16 years, male]

> "Injection users, people who does dirty thing (sex) are the risk for HIV transmission."

[Bikash, 14 years, male]

> "Hotel boys (hotel staff) are risk for HIV/STIs transmission […] they look good outside but bad inside. People who hang around drinking alcohol are risk for HIV transmission. They always try to have sex with girls."
>
> [Sona, 18 years, female]

Another young person thought that college girls were a risk for HIV transmission:

> "Prostitutes, '*bhalu*', and campus girls are much spoilt girls. They are risk to transmit HIV. If we go to that campus, there are condoms everywhere."
>
> [Pravin, 16 years, male]

A young girl stated that drugs have narcotic effects that provoke risky sexual behaviour:

> **"**People who use many TTs are more at risk for HIV infection. They become aggressive and they don't know their own sisters as well, and they do bad work (sex) to others. And also people who comes and asks to go [meaning to go for sex, so indicating clients] are risk for HIV infection."
>
> [Puja, 14 years, female]

Contrary to most of the responses, there were a few respondents who did not think that prostitutes and street girls were at risk of HIV infection.

> "Drugs users, people who have sex for free of cost are risk for HIV/STIs transmission […].I don't think prostitutes are risks, prostitutes don't have sex without condom."
>
> [Saru, 23 years, female]

> "I'm not sure about prostitutes, '*bhalu*', lodge workers."
>
> [Sunita, 23 years, female]

> "I scare of girls from massage centre, cabin girls, and disco girls. I am not scared of street girls; they know and understand and don't waste other life."
>
> [Dipak, 18 years, male]

7.6.5 Knowledge regarding HIV/AIDS tests and treatment

Most of the young people mentioned that they could be tested for HIV or STIs in hospitals. However, some of the children's responses suggested that they did not have knowledge of where they could go for a HIV test. Some thought that a test for HIV/STIs was done in blood donating places and bus stations. Only one of the respondents mentioned about Voluntary Counselling and Testing (VCT), and only two of the respondents stated that they could have an HIV/STIs test in Teku Hospital, where the HIV/STIs test could be done freely.

The young people were asked where they would go for HIV treatment. Most of them knew where they could go for treatment, although some did not:

> "Don't know where to go for treatment. I heard one '*baba*' knows how to treat it […]. It can be treated by herbal treatment that I have heard."
>
> [Dipak, 18 years, male]

> "We can go to organisation for HIV/STIs treatment."
>
> [Dipak, 18 years, male]

In response to the question of whether HIV could be treated, nearly half of the respondents stated that HIV is incurable, although some young people believed that HIV is curable. This is illustrated by responses such as:

> "HIV/AIDS are curable if we go for treatment soon. If we go for treatment after four or five days of having sex then it will be cured. Delay treatment can't cure HIV/AIDS."
>
> [Arjun, 16 years, male]

> "HIV/STIs are curable but AIDS is the bigger one that is not curable."
>
> [Dipak, 18 years, male]

> "I don't know HIV/AIDS/STIs is treated or not. I think HIV is curable and AIDS is incurable. I guess it is curable if it is treated, I have not heard of it. I have not seen it. I saw one in Thamel. A policeman hit a boy in Thamel; that made bleeding from his mouth. The boy said to police: 'I have AIDS, you might be infected but you can kill me.' I learnt from it."
>
> [Binod, 16 years, male]

7.6.6 Knowledge regarding STIs

The lack of knowledge about the link between STIs and HIV transmission was a further cause for concern. If someone gets a sexually transmitted infection, there is an increased chance of contracting HIV. Given the importance of knowing this, children were asked about their knowledge of STIs. The young people seemed not to understand the term STIs, *'youn rog'*, right away. Some of them even said that they never heard of STIs. However, by further probing and asking the children if they knew anything about diseases or sores and wounds around the genitals, I was able to obtain some insight into their knowledge:

> "I have never heard of STIs. I know sores in genitals, […] one have to put mask while walking where other have urinated."
>
> [Kumar, 16 years, male]

Only a small number of respondents thought that STIs are transmitted through sex. Among these, only two respondents stated that STIs are transmitted through sex without use of a condom:

> "STIs is that if someone has got STIs and that will be transmitted during sex without using condom."
>
> [Sona, 18 years, female]

A wide range of misconceptions were disclosed by the street children in response to the question of STIs transmission:

> "STIs can be transmitted through dirt […] someone has STIs due to dirty […] they use the same toilet, that transmit STIs. It passes through nose and effect occurs."
>
> [Kumar, 16 years, male]

> "STIs are transmitted though sex without use of condom if one has STIs,sex with girls who use TT (injecting drugs), and it can be transmitted through scratching skin and breaking with finger nail when fighting."
>
> [Dipak, 18 years, male]

> "STIs can be transmitted if not drinking adequate amount of water."
>
> [Bikash, 19 years, male]

Only three respondents reported that STIs could be prevented by using condoms. Some misconceptions which were revealed regarding STIs preventative methods are:

> "Avoiding sex protects from STIs, and cleanliness also helps to prevent STIs."
>
> [Guru, 18 years, male]

> "STIs can be prevented by not using alcohol, cigarettes."
>
> [Vola, 18 years, male]

> "Uses of mask prevent STIs."
>
> [Kumar, 16 years, male]

Itching and sores were the most frequently reported symptoms, followed by a swelling penis, blisters, "mouldy" sores and urinating blood. One child said that a white discharge and itching sores occur with STIs. Most of the young people mentioned that STIs could be treated in hospital, and most of them said that STIs could be curable except for syphilis, which was the most commonly cited name of an STI:

> "Syphilis is incurable […] people die in a month; syphilis is dangerous. My friend's mother died of syphilis. I don't know other STIs."
>
> [Pravin, 16 years, male]

7.6.7 Acquaintance with people infected with HIV/AIDS and STIs

The young people were asked about their acquaintances to determine the extent of risky behaviour within the group within which they interacted. The children reported knowing children who had died of AIDS:

> "Friend died of ulcers and wounds in his body. He used to go to many girls and he got HIV."
>
> [Kumar, 16 years, male]

> "My friend Biraj died of HIV/AIDS. He used drugs. Everybody hates people who have HIV/AIDS. He was expelled from organisation saying if other friends go to clean his cuts and sores they will be infected."
>
> [Arjun, 16 years, male]

In response to the question "Do you know someone who has had an STI?" one boy said:

> "One of my friends had sore in his penis, penis got huge swelling, legs couldn't move, bleed with pus and maggots; that made him die. We did not know that he had STIs. He used to go to lodge, restaurant and disco."
>
> [Bikash, 14 years, male]

Also, a young girl said this about her friend:

> "STIs […] I don't know. I know STIs is called syphilis, '*viringi*'. One of my friends had STIs and had sores in vaginal area and had itching and burning."
>
> [Anita, 15 years, female]

Some young people disclosed that they had STIs and a few thought that they might have HIV. A boy said about his experience:

> "I had sores in my genital areas, pus from penis, yet it comes. I have falls at night. I think my friend has got HIV."
>
> [Binod, 16 years, male]

> "I think I have already have HIV [...] I have burning sensation while urinating."
>
> [Dipak, 18 years, male]

7.7 Attitudes Associated with Risks that Induce HIV/AIDS and STIs

Attitudes to treatment are crucial to protection from the risks and infection of HIV, STIs and AIDS. Questions regarding attitudes associated with HIV/AIDS and STIs were put to the young people.

7.7.1 Attitudes to seeking treatment

The children were asked whether they would seek treatment for HIV. Some respondents said that HIV treatment was not necessary, as it is incurable and death is certain:

> "HIV is incurable; once HIV occurs then people die for sure, being thinner and thinner […] so I don't know if treatment is necessary […] so why should we go for treatment?"
>
> [Bibek, 18 years, male]

However, more than half of the respondents suggested that HIV treatment is necessary, although they thought that HIV treatment was just for rich people:

> "No […] I don't go for treatment. I should have money to treat HIV. It will be cured if I can spend a lot of money. Treating is not necessary for me because I can't pay for it."
>
> [Dipak, 18 years, male]

The sameview was also reflected in this comment:

> "Once infection occurs, it will not be cured itself, it will be all right after treatment. But I will not go for treatment because I can't afford treatment […] after all I will die. HIV can be cured if someone is able to pay. But I can't get treatment as we don't have money even to eat […] we are the people who eat food others have thrown in the street. We are surviving by eating food from garbage, especially from hotel garbage."
>
> [Binod, 16 years, male]

Given the high cost of medical treatment, the children thought of other alternatives for HIV treatment, such as using traditional healers:

> "I don't go to hospital because disease from other people transmits to me and my diseases transmit to other people. And, a cost of money to treat disease in hospital is high so I don't go there. Once I had fever; I went to traditional healer and I paid only little money, but hospital would charge more money. HIV treatment is necessary; I don't have money so I don't go for treatment."
>
> [Binod, 15 years, male]

Some young people also revealed that they had little trust or confidence in the health system in Nepal:

> "Treatment is necessary but it is not curable in Nepal. It can be cured abroad. Here doctors just want to make money […]. They do not inject right medicine. Boys told me that there are many people having HIV/AIDS and none of them are cured."
>
> [Pravin, 16 years, male]

The findings also show that street children delayed seeking treatment for STIs, and only did so when the problem was serious. They waited until they really suffered from the infections, and stopped taking medicine without being sure the infection was completely cured. A street girl described her symptoms and the treatment she received:

> "I had syphilis, '*viringi*'. I had itching. I was waiting to be cured itself. I had burning sensation; I could not stand in upright position, water discharged. It was not cured itself. So I went to hospital. Doctor told me to take medicine and avoid taking bath for three days. I didn't go to prostitute for three days. I was prostituting until symptoms became intolerable because I had clients at that time, then I went for treatment."
>
> [Sona, 18 years, female]

Furthermore, the findings show that the children neglected their own treatment. One young woman said that she had given birth to a baby in the street. The same girl appeared to be experiencing STI symptoms at the time of the interview, but did not seek treatment:

> "Nowadays, I feel itching while menstruating and discharge before menstruating but I have not been for treatment. My husband is imprisoned; I am running here and there to release my husband from jail. I am anxious, so I have not thought of treatment for this problem. I think I have HIV, but I have not been to test."
>
> [Saru, 23 years, female]

Negligence and carelessness in medical treatment was commonly reported. For example:

> "I feel in my heart I have HIV […] I had a boy friend, he had HIV. I had sex with him without condom. I went to test HIV in Bir Hospital […] I don't know the result yet."
>
> [Sona, 18 years, female]

Neglect of self care was also evident among young girls who became pregnant, and risky abortions were reported:

> "I am pregnant now. I don't have any medical check-up yet. I ate a contraceptive called Nilocon [trade name of a contraceptive], wax gourd '*kubindo*', molasses '*chaku*' and carried heavy loads to abort a child. Some of my friends told me to go to Satdobato; they charge Rs.1500 for abortion."
>
> [Sunita, 15 years, female]

The findings suggest that the children felt awkward and shy about going for treatment, and often they also did not complete treatment:

> "One can get medicine inpharmacy […] I had cracks on my penis few months before. I thought that will be cured itself; later it became deeper cracks. One of my friends brought medicine for me. I felt shy to go for treatment in pharmacy. Friend had already syphilis, so he knew where to go for treatment."
>
> [Bikash, 19 years, male]

7.7.2 Underlying thoughts about HIV/AIDS

The street children were asked about their underlying thoughts regarding people with HIV/AIDS. Although the children showed some positive attitudes towards HIV infected persons, negative thoughts were also expressed, such as fear, blame and alienation:

> "I don't hate them, but I don't make friends, I will not stay together with them; HIV can be transmitted by sitting together and blood rubbing against each other."
>
> [Dipak, 18 years, male]

Some of the respondents saying that they would love and care for an HIV infected person, however, they would do this without getting physically close:

> "I don't care for HIV/AIDS infected friends, nor do I hate them. Not to hurt them […] but try to be away. If I hurt him […] he might cut himself and he touches us and transmits HIV. If my friend has HIV/AIDS, I take him to hospital putting mask on him. If we walk separately one in front of the other and meeti at the hospital gate, that can prevent to transmit HIV/AIDS. We could take him to hospital in a taxi […]. Doctor comes from abroad and would check him.My thoughts are not to speak with HIV/AIDS infected men, not to stay together."
>
> [Arjun, 16 years, male]

Half of the participants said that people who had HIV were themselves to blame. The children thought that it was the result of wrongdoing or a promiscuous nature. One young person stated:

> "One gets HIV/AIDS because of wrongdoing."
>
> [Bijaya, 13 years, male]

A similar illustration was given by another child:

> "I feel bitter about it; unpleasant […] they have got HIV because of bad doing."
>
> [Bikash, 14 years, male]

> "My thoughts about HIV/AIDS infected people are that the person is not well behaved. We should not become his friend. I don't love people who have HIV/STIs. They are not to be loved if they go with everyone to have sex and become infected with the disease."
>
> [Vola, 18 years, male]

In responding to the question "Would you disclose your HIV status if you had it?" half of the participants reported that they would disclose their status to their close friends or their family, or to an organisation working for children. The other half of the respondents stated that they would not disclose their HIV status to anyone. They thought that by disclosing their HIV status, they would be ignored, insulted and isolated by friends. For example:

> "I don't disclose HIV status; if I tell to others they would think less of me, hate me, spit at me […] they insult me so I am afraid and I will be isolated by friends."
>
> [Anita, 15 years, female]

> "I think people would hate me, think less of me; people will stay away from me as they think the disease will be transmitted to them."
>
> [Guru, 18 years, male]

> "People would think less of me, hate me […] people would give me nickname, calling HIV/AIDS."
>
> [Dipak, 18 years, male]

> "I think people will hate me, tell bad things to me […] other people will insult me, saying this girl is spoiltand caused HIV."
>
> [Parvati, 14 years, female]

In response to the question regarding their attitude towards sex if they were infected with HIV, less than a quarter of the children said they would avoid sexual intercourse. One boy told me he would tell other people to stay away. Another boy said that he would want to protect others by not having sex with anybody. Nearly half of the respondents had positive attitudes and said they would use a condom during sex. However, one girl said that she would protect others' lives by medicating herself before going for sex if she had HIV, as for her, sex was compulsory to sustain life:

> "I will die for sure if I have HIV. I hope others will not die, but I go to have sex. If I have HIV/STIs, I will medicate it for two, four days; then I start to do. It is all a compulsion, what to do? Otherwise I don't have food."
>
> [Sunita, 23 years, female]

Very strong negative attitudes were mentioned at the thought of themselves being infected. When the children were asked what they would think of being HIV infected, suicidal thoughts were revealed from some of the participants. For example:

> "I don't know if HIV/AIDS are treatable or not. But me, I will kill myself either hanging or drowning, or throwing myself off a cliff or in front of vehicles. Why should I die in painful condition? […] I will not have money to buy medicine that means I would die painfully."
>
> [Guru, 18 years, male]

> "If I have HIV, I kill myself, I shoot myself or I hang or throw myself off a cliff, or throw myself in front of vehicle."
>
> [Dipak, 18 years, male]

Negative feelings associated with perverse attitudes were also expressed. A few children assertively said that their sexual desire was so strong that they would have sex even they had HIV and some young people displayed a lack of concern for others:

> "I will go to have sex even I have HIV/AIDS. I don't use condom. I will die, so why should I care about other people? Having sex is to quench a sexual lust, '*rishna metne ta ho ni*'."
>
> [Binod, 16 years, male]

> "[…] Yes I go to have sex evenif I have HIV/STIs. I don't give a damn, '*balai bhayana ni*'; mymind does not work under the influence of drugs and alcohol, '*kha ko tal ma hos hudiana*'."
>
> [Roshan, 20 years, male]

One young girl reported that she would intentionally transmit HIV to men so she could marry a man whom she likes:

> "I intentionally go to have sex even I have HIV. If I have sex with a boy, then he will be infected by HIV, and I can marry with the boy whom I like. I will tell him later that he has HIV […]."
>
> [Anita, 15 years, female]

7.8 Summary of the Chapter

In-depth interviews were the main method of data collection for this research. This chapter was the product of an analytic process which involved grouping, coding, different levels of categorisation, decontextualisation and fragmentation of

data from in-depth interviews with young people. Four broad major themes emerged from thematic analysis based on the predetermined conceptual framework, which were pre-street risks factors (reasons children came to be on the street); street risks factors (sexual risk-taking behaviour); aggravating risks factors (knowledge regarding HIV/AIDS and STIs); and perpetuating risks factors (attitudes associated with HIV/AIDS and STIs) (see Figure 4-2).

The underlying causes for the children to leave home, or *pre-street risks factors*, were found to be parental behaviour. The direct or indirect influence of parental behaviour especially that of step-parents, relatives or natural parents, contributed to the children leaving home. Mistreatment by parents had a direct impact, and parental alcohol misuse and its impact on the family environment was considered an indirect impact. If children had not encountered circumstances that compelled them to be on the street, the chances of them adopting risky sexual behaviour may well have been minimal. However once on the street, the children adopted street culture and very quickly adjusted to their life, including becoming grounded in risky sexual behaviour which they learned and developed as a part of their lifestyle, putting themselves at risk of acquiring HIV/STIs. I refer to these risks as *street risks factors.* Street risk factors are identified as risky sexual behaviour (early age sex, heterosexual sex, homosexual sex and bisexual sex); risky behaviour (prostitution, drugs and alcohol abuse and injecting drugs); sex under the influence of drugs and alcohol; including sexual abuse, multiple partners and unprotected sex.

The risks children were exposed to, in their everyday life, were determined and influenced by knowledge (or lack of knowledge), and this in turn triggered vulnerability to HIV/STIs and also the onset of AIDS - *aggravating risks factors.* Aggravating risk factors are identified as lack of knowledge or no knowledge about transmission, prevention and treatment on HIV and AIDS and STIs and lack of exclusive knowledge in links between STIs, HIV and AIDS.

Attitudes associated with treatment and underlying thoughts on HIV/AIDS and STIs perpetuated these risks - *perpetuating risks factors.* Negative attitudes towards treatment of HIV and STIs and negative underlying thoughts towards people living with HIV/AIDS are identified as perpetuating risk factors.

The risk factors categorised above are tightly interlinked as demonstrated in Figure 7-2. The risks factors produced in the model provide opportunity to match the risk factors with the pre- existent theortical framework (see Figure 3-1), inorder to see similar risk factors and identify new risk factors. New risk factors emerged from the findings of the in depth interviews such as parental mistreatment, friends influence; (lack of knowledge of links between HIV/AIDS, and STIs , low level of knowledge about transmission, prevention and treatment of HIV, AIDS and STIs; including negative underlying thoughts such as peverse attitude, stigma, suicidal feelings (see Figure 7-2). The model (see Figure 8-3) demonstrates how these risk factors feed into wider society in the form of vicious cycle. Providing a broad understanding of risk and vulnerability is compatible with a public health approach in that it points to the factors that need to be targeted for primary, secondary and tertiary levels of intervention. No other studies of street children in Nepal have examined the cumulative effects of HIV/AIDS/STIs risks and vulnerability by compiling the primary reasons and effects of being on the street, the impacts of the knowledge and attitudes that the street children have, and the eventual impact on broader society.

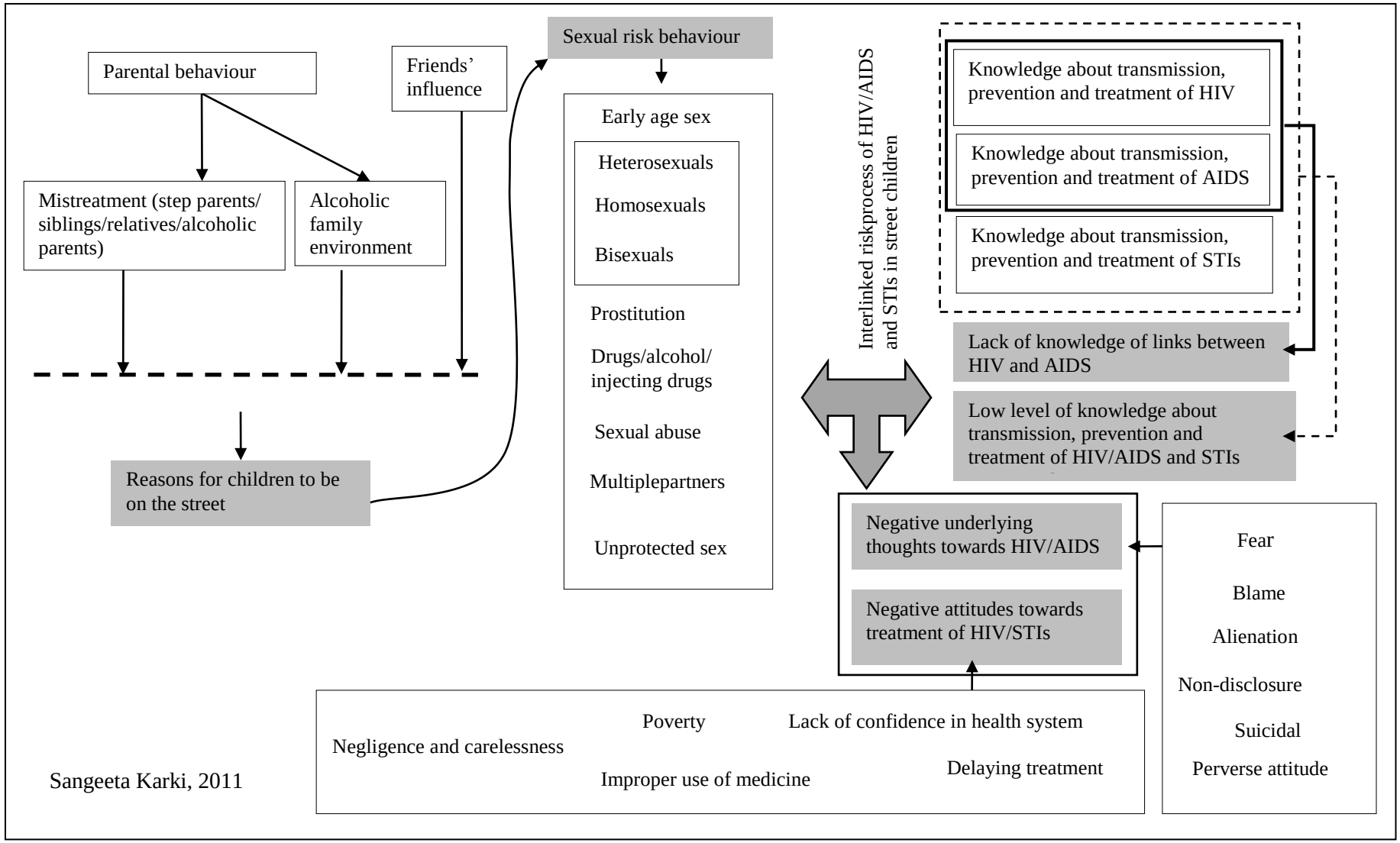

Figure 7-2 Schematic presentation of risk process of HIV/AIDS and STIs transmission in street children

Chapter Eight discusses the implications of the findings in relation to the development of public health strategies that might more effectively address the needs of particularly vulnerable populations such as street children. The thesis suggests the need for a holistic understanding of HIV/STIs and AIDS as these conditions impact street children and shows how HIV transmission among socially marginalised groups affects broader society (see Figure 8-3).

8 ANALYSIS OF RISKS AND VULNERABILITY TO HIV/STIS AND AIDS IN STREET CHILDREN

8.1 Introduction

This chapter synthesis the major findings extracted from the ethnographic observation and in-depth interviews (see Chapters 6 and 7) and discusses these in relation to the literature. The findings enabled the formulation of a theoretical position which I term '*the complete phenomenon of the HIV/*STIs and AIDS risks and vulnerability in relation to children living on the street'; this is different from the fragmented studies that dominate the literature and which only provide a partial view. The discussion locates these issues within the public health framework outlined in the theoretical chapter (Chapter Three) and seeks to advance the existing public health approach to HIV (WHO, 2008) by demonstrating the need to integrate specific and concerted efforts to protect especially vulnerable groups within a more generalist whole population prevention strategy. Although the focus in this case, is on the promotion of the health of street children, the approach recommended has utility for other vulnerable groups (and health problems) and because these groups are part of, not separate from the rest of society, has benefits for people in general.

I begin my discussion by revisiting the objectives of the study which were to:

1. Analyse the causes and consequences of the vulnerability of street children to HIV/AIDS and STIs in Nepal
2. Understanding of the inter-relationship of these factors within a broader societal context

The theoretical thread that runs throughout this thesis: the public health approach WHO (2008) makes it clear that in relation to strategies for preventing HIV, there is need for researchers to identify risk factors that increase vulnerability. In my study, I identified four categories of risk factors that pertain to the lives of street

children (pre-street risk factors, street life risk factors, aggravating risk factors and perpetuating risk factors) and suggest that together these help us to understand risk and vulnerability as a *complete* phenomenon. These four domains (which are discussed at some length in this chapter) are interlinked and some boost the effects of others. This analytical conceptualisation provides a comprehensive understanding of the phenomenon of HIV/STIs and AIDS risks and vulnerability for street children at societal level. The complexity and inter-relationship of the component parts of this complete phenomenon are demonstrated diagrammatically (see Figure 8-3, p.272). The sexual networks established by the children, and the impact of these at societal level, are also explained (see Figures 8-1, p.266 and 8-2, p.268). This chapter also includes a number of recommendations for interventions and policy to combat risk and vulnerability among street children based on the research.

8.2 Pre-street Risk Factors: Parental Mistreatment-Vulnerability to HIV/STIs Exposure

This study revealed different sets of underlying factors that prompted the children to leave home. The findings of the study showed that the underlying causes for the children to leave home were exploitation; unkind behaviour and mistreatment in the home (see Chapter Seven). However, these underlying causes were linked by a dominant thread which was parental behaviour. Instances of children who left home due to friends' influence were also connected to parental behaviour, such as parental negligence. One can speculate that if the appropriate parental care had been provided for the children, the influence of friends to leave home may have been reduced. The reasons for children becoming street children are similar to those of previous studies in Nepal, which show that most street children leave home because of being beaten by their parents, domestic violence and conflicts in the family (Dhital et al., 2002; Rai et al., 2002).

Changes in family structure (separation of parents, divorce, remarriage or death) were also identified as precipitating factors in this study, a finding reported in other studies too: in Bangladesh, by Greska et al (2007); in Pakistan, by Iqbal (2008); in Ghana,by Baffoe et al. (2002) and Orme & Seipal (2007); in Brazil, by Lemba (2002), and in Zambia, by Raffaelli et al. (2001). As in my study, these family changes were often found to be linked with abuse, especially physical abuse (Abdelgalil et al., 2004; Bibars, 1998; Duyan, 2005). In their study, (Greska et al (2007) found that 30% of the participants reported that they were abused or oppressed in their home, and 29% left home for economic reasons.

This study confirmed the direct or indirect influence of parents, especially step-parents and siblings, relatives or the children's own parents, in contributing to the children leaving home. Step-parents were most commonly cited as being responsible for the abuse that led to children living on the street. Several other studies have found that physical abuse is often associated with stepparents (Bibars, 1998; Conticini & Hulme, 2006; Greska et al., 2007; Iqbal, 2008; Singh et al., 2008; Subedi, 2002; Tournon, 2008). A previous study in Nepal found that more than two thirds of the street children were abused by their stepmother or stepfather (Subedi, 2002). Further, Tournon (2008) suggests that the presence of a stepfather or stepmother can contribute to the lack of a nurturing family environment, which results in children feeling neglected and being pushed onto the street. However, this study has highlighted that the children were also mistreated by siblings (brothers) and relatives such as an uncle after the death of their father, and this was a precipitating factor in them leaving home.
Several studies have shown that economic reasons are the main factors that push children into the street (Aptekar, 1989; Greska et al., 2007; Rizzini & Lusk, 1995). Rai et al. (2002).reported that children in Nepal left home in search of employment due to poverty, and UNICEF (2001) declared that poverty was the leading cause of children being on the street. However, the current study did not reveal that economic hardship was the main factor that pushed children into living on the street, but step-parent behaviour. The fact that children were more likely to

be abused by step-parents compared to their biological parents suggests that poverty was not the main reason children became street children.

While this study revealed that the underlying cause of children leaving home was mistreatment, the mistreatment may vary. Mistreatment by parents might involve the direct action of the parents towards the children, such as beating, discrimination and forcing children to do chores (which may have been excessive, since the children perceived this as mistreatment); or it might be parental alcoholism and its consequences in the family such as a chaotic family environment, and so it becomes the indirect actions of the parents which cause the problem. In both cases, parental behaviour was the dominant reason for children becoming street children.

One important inference deduced from the findings is that if children had not been exposed to circumstances that compelled them to live on the street, the chances of exposure to HIV/AIDS and STIs may have been reduced (see Chapter Seven, p.201). Therefore, understanding the precipitating reasons why children become street children is important, since these pre-street risks are the root cause leading to *exposure vulnerability* for acquiring HIV/STIs, and in the long-term, for increasing the likelihood of children developing AIDS.

8.3 Street Risk Factors: Sexual Risk-taking Behaviour - Vulnerability to HIV/STIs Infection

8.3.1 Early sexualisation

The demographic details of this study illustrated that some children left home as young as six, and that the most likely age for leaving home was between seven and twelve years. The majority of the participants in the study were between 13 and 18 years and this information was based on retrospective recollections. The exposure to risk starts after the children leave home (see Chapter Seven, p.201). Also, the findings of the study showed that sexual activities among children

started at an early age, even at the tender age of 10. Boys started sexual activities earlier, at the age of 10, than girls, who started at the age of 13. A similar pattern of sexual initiation was found in Accra, Ghana, where it was found that boys started earlier at the age of 10.8, and girls at the age of 12.4 (Anarfi, 1997). Early sexualisation is a common activity of street children worldwide. For exampe in Kenya, the age of first sex was found to be 10 years (Kaime-Atterhog et al., 2007), in Brazil was 10.8 years (Raffaelli et al., 1993) and 10 to 14 years in Accra, Ghana (Anarfi, 1997).

There are a number of factors related to early sexualisation and exposure to STIs and HIV. The demographic information revealed that the children had been living on the street for at least three to four years, and the maximum time spent there was 10 years (see Chapter Seven, p.197). Anarfi (1997) reported that the chance of contracting STIs increased with the child's age, and is influenced by the time they have spent on the street. The longer the period spent on the street, the greater the chance of having high-risk sexual partners, such as injecting drug users and prostitutes, and this increases the risk of HIV (Haley, Roy, Leclerc, Boudreau, & Boivin, 2004). Rector, Johnson, Noyes & Martin (2003) describe the negative consequences of early sexualisation, suggesting that girls who began sexual activity at the age of 13 had double the chance of being infected by STIs when compared to girls who started their sexual activity at the age of 21. Rector et al. (2003) further state that girls who begin sexual activity at an average age of 13 will have a partner turnover rate four times higher than those who initiate sex later in life. Kotchick, Shaffer & Forehand (2001) state that sexual initiation at an early age involves multiple aspects of risky sexual behaviour, including multiple partners, unprotected sex and pregnancy. Early age sexual initiation also has physiological consequences, because from a biological perspective the immature female genital tract is at greater risk of contracting STIs and HIV. There are several other negative impacts associated with HIV/STIs risks to younger children being on the street and remaining for a longer period. My study also revealed that experiences of abuse, which are increased depending upon the length of time a

child lives on the streets, is an additional factor in HIV/STI transmission (see Chapter Seven, p.208). Therefore a longer period of being sexually active correlates to risky sexual behaviours and this increases the risk of acquiring STIs and HIV and, the length of time children live on the streets also increases risks suggesting the need for early intervention.

8.3.2 Multiple sexual orientations and practices

This study showed that the children engaged in multiple sexual orientations and multiple sexual practices. This finding is supported by studies in Nepal (Gurung, 2004; Southon & Gurung, 2006) and other countries (Anarfi, 1997; Raffaelli et al., 1993). The nature of sexuality varies and is based on cultural differences (Kaime-Atterhog et al., 2007), which is evidenced in the present findings. Female homosexual relationships were not revealed among street girls in this study, whereas female sexual relationships were prominent in San Francisco (Moon et al., 2001). This study showed that girls were heterosexually oriented and few had experienced oral and anal sex practices. In Pakistan, homosexuality was a more common practice than lesbianism and heterosexuality (Pakistan Voluntary Health and Nutrition Association (PAVHNA), 2004) and in Tanzania, there were a low number of reports of bisexual behaviour (Lockhart, 2002). My study revealed that the boys were heterosexually, bisexually and, in some cases, homosexually oriented, and vaginal, oral and anal sexual practices were found. Among the reasons identified to be behind the homosexual orientation were the easy accessibility and availability of partners, as well as economic factors. Easy availability and accessibility of partners increased the opportunity to become involved in sexual activities. Multiple sexual orientations may give further opportunity to have multiple sexual partners, as participants are able to have both same sex partners and opposite sex partners.

Multiple sexual orientations among boys are a risk for HIV/STIs in various ways.

Diggs (2002) suggests that risky sexual behaviour occurs among homosexuals to a far greater extent than among heterosexuals, and the chance of contracting syphilis is three to four times higher in homosexuals compared to heterosexuals. The risk of sexually transmitted infections, including through physical injuries, is generally higher in homosexuals compared to heterosexuals (Diggs, 2002). Lockhart reported that bisexual orientation combined with risky sexual behaviours greatly increases the chance of spreading HIV and STIs (Lockhart, 2002)

This study found that children had experienced oral, anal and vaginal sexual practices. Although the risk of HIV infection is much less in oral sex than in vaginal and anal sex, some STIs, such as syphilis and gonorrhoea, can be passed on through oral sex (Family Planning Association, 2009). The risk of transmission increases in the presence of oral lesions, buccal ulcers or gingivitis in oral sexual practices (Haley et al., 2004). Infections can easily occur if infected body fluids come into contact with sores, cuts and ulcers on the lips and mouth, on genitals, or in the throat cells (Centres for Disease Control and Prevention et al., 1997; Family Planning Association, 2009). Even a small wound is likely to increase the risk of HIV infection (International HIV/AIDS Alliance (IHA), 2008). The contact allows viruses or bacteria such as syphilis, gonorrhoea and HIV to enter the bloodstream or to live in cells (Family Planning Association, 2009). Dry, cracked and chapped lips appeared commonly in the children, and injuries such as skin pricks, cracks, piercings and wounds were clearly apparent on their bodies (see Chapter Six, p.177). Given the risk factors above, it was confirmed that the street children were susceptible to being infected by STIs and HIV through physical contact during oral sex.

There is a potential chance of repeated trauma and damage to the skin during anal sex, which is the most efficient way of transmitting HIV and other infections such as syphilis and gonorrhoea (Diggs, 2002). Any organisms that are introduced into the rectum cause rapid infection more easily than in the vagina (Diggs, 2002). HIV transmission among males who have sex with males is higher than in

heterosexuals (Diggs, 2002; USAID, 2000), and the risk increases in unprotected anal sex (USAID, 2000). Therefore, the various sexual orientations and practices among street children are major risk factors for passing on STIs quickly, as well as HIV.

8.3.3 Prostitution

This study found that prostitution was common among street children. There were similar findings in other studies (Kruger & Richter, 2003; Lockhart, 2002; Olley, 2006; Swart-Kruger & Richter, 1997; Tadele, 2003; Towe, Hassan, Zafar, & Sherman, 2009). This finding is also supported by previous studies which reported prostitution as a growing concern in Nepal (Subedi, 2002; Tournon, 2008). In this study, most boys regarded girls in the street as prostitutes, and the girls themselves mentioned that the public labelled them as prostitutes. The ethnographic information, the occupational status given in the demographic information and the in-depth interviews also corroborate that many of the girls were involved in prostitution (see Chapter Six, p.179 and Chapter Seven, p.194; p.204).

The findings showed that the sexual partners of the girls were of varying backgrounds and of a range of age groups, even up to 65 years. An age gap between partners in cross-generational sex is a marker of high-risk sexual behaviour (USAID, 2005). USAID (2000) reported that age mixing is one of the principal forces that drives the heterosexual spread of HIV. The virus is often transmitted into a new pool of young uninfected people when people in a younger age group have sex with people from a higher age group that are already heavily infected. A sexual relationship between a young uninfected girl and a more mature infected man is an especially high risk factor for HIV transmission, for physiological reasons (USAID, 2000).

This study confirmed that girls were involved in prostitution in exchange for money, drugs and food , which was supported by other studies (Kruger & Richter,

2003; Swart-Kruger & Richter, 1997). Sex was exchanged for money and also for other necessities, such as food, affection and attention in studies by Beazley (2002) and Hughes & Hoffman (1994). My study confirmed that prostitution was felt to be obligatory for their survival, and that girls were involved in prostitution in order to fulfil their basic needs; therefore they were unable to control their choice of sexual partners, and safe sex was compromised, since the girls lacked the power to insist on using condoms. Therefore, it was revealed that prostitution, linked to survival is one of the most risky forms of sexual behaviour in terms of acquiring HIV. Towe et al. (2009) supports this study's findings, reporting that prostitution is risky sexual behaviour which is associated with HIV.

This study revealed that the street girls often injected drugs, and indeed multiple injection sites were often observed on their hands (see Chapter Six, p.184; Chapter Seven, p.206). The use of injecting drugs by street girls was also reported by other studies (Beazley, 2002; Dhital et al., 2002; Southon & Gurung, 2006). There was therefore evidence to show that street girls who are prostitutes, and also use injecting drugs, are doubly at risk of infection. Weber, Boivin, Blais, Haley, & Roy (2002) agree that girls involved in prostitution increase their risk of HIV transmission due to these factors such as sexual behaviour and drug-abusive behaviour.

Although not common, this study also highlighted male-to-male paid sex. This was similar to the findings of Kaime-Atterhog et al. (2007), who reported infrequent homosexual activities among boys for drugs and alcohol. Lockhart (2002) said that male-to-male paying sex was common among boys in South Africa, and this was practiced for the direct acquisition of material resources, which made it the best way to gain money. The homosexual nature of boys' prostitution is also a clear risk for infection and transmission of HIV.

The sexual risk-taking behaviours of street girls involved in prostitution further interlink to, and overlap with, the other risky sexual behaviours, such as the

evidence of sexual activity at an early age, engagement with multiple partners and unprotected sex under the influence of drugs, as explained in following sections.

8.3.4 Unprotected sex

In this study, use of condoms by both boys and girls was almost nil. Several previous studies have reported a low level of condom use (Gurung, 2004; Kruger & Richter, 2003; Lockhart, 2002; Moon et al., 2001; Southon & Gurung, 2006; Swart-Kruger & Richter, 1997; Tadele, 2003; Wutoh et al., 2006). This study showed that prostitution was a main reason for girls' inability to negotiate protected sex. The practice of unprotected sex increases if children adopt sex that is associated with survival strategies and intimate relationships (see Chapter Seven, p.204 and p.210). However, several other reasons were identified for not using condoms. One of the striking reasons cited in this study for not using condoms was the unavailability of appropriately sized condoms for the children (see Chapter Seven; p.210). This was a signal that some children may have tried to use a condom. Once they had found that the condoms were an inappropriate size and did not fit them, this might have caused them to lose interest in using them further, leading to the possibility of never adopting the practice in the future.The unavailability of condoms designed for children appears to be a matter of concern and raises ethical dilemmas that are likely to present a particular challenge for public health strategies.

Low morale was also associated with unprotected sex, in that the children did not feel that they needed to take measures to protect themselves, due to their presumption that some of them that they were already infected with HIV. Another finding linked to unprotected sex was the occurrence of spontaneous sex (see Chapter Seven, p.210), which is supported by another study that reported the links between spontaneous sex and unprotected sex among children (Kaime-Atterhog et al., 2007). A further common factor relating to the negotiation of condom use was the children's interpretation of trust, faithfulness and love in intimate

relationships. Unprotected sex linked to sex in intimate relationships, has consistently been reported in previous studies (Kruger & Richter, 2003; Moon et al., 2001; Tadele, 2003). Moreover, this study disclosed some misconceptions that also hindered the use of condoms (see Chapter Seven, p.210).

8.3.5 Multiple sexual partners

This study revealed widespread multiple sexual relationships among children on the street. Both boys and girls engaged in multiple sexual relationships within and outside their circle. The findings of this study are supported by those of other studies (Anarfi, 1997; Kaime-Atterhog et al., 2007; Lockhart, 2002; Raffaelli et al., 1993; Tadele, 2003; Wutoh et al., 2006). Most of the boys had experienced multiple sexual relationships with street girls and prostitutes, which was similar to the findings of a study in Kenya (Kaime-Atterhog et al., 2007). In this study, most boys regarded girls in the street and girls who worked in restaurants, lodges and guesthouses as prostitutes, and engaged in sexual relationships with them. Supporting these findings, street boys frequently engaging with commercial sex workers was also reported in previous studies in Nepal (Gurung, 2004; Southon & Gurung, 2006). It was revealed in my study that the sexual relationships of the boys extended to schoolgirls, housemaids and married women, which was similar to the situation reported by Lockhart (2002), who reported that their partners might be anyone. In my study, the street girls engaged in sexual relationships not only with street boys, but also with many others, including any male members of society such as drivers, hotel workers, porters, policemen and other officials. The girls' sexual relationships were thus found to extend to men of any profession and of any age group. Beazley (2002) supported the findings that street children socialize with different groups. The multiple sexual relationships described also corroborate the ethnographic information, which suggested multiple marriages and extra-marital sexual relationships (see Chapter Six, p.179 and Chapter Seven, p.209).

This study provides evidence of early sexualisation, multiple sexual orientations and practices, prostitution, unprotected sex and multiple partners, all of which confirm that children in the street were involved in high-risk sexual behaviour. Similar findings have been revealed in other studies (Anarfi, 1997; Wutoh et al., 2006). Therefore, the chance of exposure to acquiring HIV is high (Wutoh et al., 2006). Kotchick et al. (2001) also suggest that risk-taking sexual behaviour is closely linked with unprotected sex and multiple partners, and causes devastating effects on sexual health. Risky behaviour associated with sexual risks continues to accumulate in association with early sexual initiation (Kotchick et al., 2001), and may be heightened by additional risky sexual activities such as multiple sexual orientations and practices.

Children in the street embedded and adopted street culture; they shaped and established their habits and beliefs because their behaviour and culture was shaped by their social environment, so that they learned very quickly to adjust to their life. Therefore they indulged in, and became grounded in, high-risk sexual activities which they learnt and developed as part of their lifestyle, putting them at risk of acquiring HIV/STIs. By living on the street, the children also experienced abuse and drugs that further boosted of acquiring HIV/STIs and AIDS, as explained below.

8.3.6 Abuse

This study found that the children were often subject to sexual abuse. These findings are supported by other studies in Nepal (Ryckmans, 2008; Subedi, 2002; Tournon, 2008), as well as those in other countries (Iqbal, 2008; Venazi, 2003). Sexual abuse was a constant threat to girls as well as boys. Both boys and girls told different stories of being abused in the street. Given the unprotected environment of the street, one can see why children might easily fall prey to sexual abusers (see Chapter Seven, p.208).This study found that the perpetrators of abuse were primarily strangers (previously unknown to the children), but also included other street children. Adults, including people from the local area as well

as foreigners, have been reported as abusers in Nepal (Ryckmans, 2008). The perpetrators were also found to include the police, who were supposed to be responsible for the protection of the children's lives, and this was similar to findings in other studies in Nepal (ILO, 2001) and in other developing countries (Hughes & Hoffman, 1994; International HIV/AIDS Alliance (IHA), 2008). This study found that boys were vulnerable to being abused by adult homosexuals, which was consistent with other studies (International HIV/AIDS Alliance (IHA), 2008 ; Kaime-Atterhog et al., 2007). Sexual abuse is a risk for acquiring infection in several ways, as the person might have already been infected with HIV or STIs. The homosexual nature of some of the abuse raises particular concerns regarding increased vulnerability to HIV, given the lack of condom use. Details of the effects of homosexuality are described above (see Chapter Eight, p.239). International HIV/AIDS Alliance (IHA) (2008) also says that abuse of a homosexual nature leads to risk of HIV infection. Abusive practices in the street include a number of sexual partners, and sexual mixing with multiple partners is a high risk for street children. Abusive practices in the street enhance the risk of acquiring HIV and AIDS, as reported by USAID (2000).

Negotiating safer sex in an aggressive moment such as forced, coercive or abusive sex cannot be expected. Heise, Ellsberg & Gottemoelle (1999) report that forced sex puts both victim and perpetrators at risk of HIV and other STIs, as a condom is unlikely to be used during this kind of sex. There is also a high possibility of vaginal or anal injuries being caused during violent sexual assaults. In a situation of forced sex, there is a chance of bleeding and tearing of the genital area. Studies in India demonstrated that forceful sex resulted in extensive injuries to victims' genitals and subsequent signs of STIs (Pagare, Meena, Jiloha, & Singh, 2005).

Furthermore, in this study, the children were found to have been abused physically and verbally by different groups of the local population (see Chapter Six, p.186). Physical abuse and forced sex can create injuries that lead to open wounds, which can create easy ways for HIV to enter the bloodstream; this can be serious and

even fatal, and can provoke HIV to develop into AIDS in an infected individual (Heise et al., 1999). International HIV/AIDS Alliance (IHA) (2008) agrees that physical abuse is associated with injuries, and as a consequence makes the victim vulnerable to HIV including AIDS (International HIV/AIDS Alliance (IHA), 2008). The mental distress and low self estem caused by physical and verbal abuse hinders caring behaviour and treatment, since emotionally abused people are less likely to do what they need to do in order to protect themselves and others from HIV (International HIV/AIDS Alliance (IHA), 2008).

8.3.7 Drugs and alcohol abuse

Use of drugs and alcohol was found to be widespread, which is corroborated by the ethnographic data (see Chapter Six, p.184). All of the participants used drugs; alcohol, cigarettes, dendrite and marijuana were drugs that were frequently used by the street children. Children were addicted to such an extent that some of them used handmade drugs and knew where to inject to give strong narcotic effects (see Chapters Six, p.184 and Seven, p.206). Physical signs such as tremors, a high mood, a dull or drowsy appearance and injection puncture marks clearly corroborated the reported drug addiction behaviour (see Chapters Six, p.184 and Seven, p.206). Several studies have documented that drugs and alcohol are associated with risky sexual behaviours (Bagnall, Plant, & Warwick, 1990; Gerbi, Habtemariam, Tameru, Nganwa, & Robnett, 2009; Kotchick et al., 2001). Kotchick et al.(2001) further states that substance abusive behaviour provokes children to acquire multiple partners and to have unprotected sex. Drugs and alcohol-using behaviour impairs the ability to make judgments, which in turn results in multiple partners (International HIV/AIDS Alliance (IHA), 2008). Also, the findings of this study showed that children frequently used multiple types of drugs on a daily basis, and on multiple occasions in a day. There is a correlation between the quantity and frequency of alcohol use and multiple sexual partners. Occasional drinkers are more likely to have one sexual partner than frequent

drinkers (Gerbi et al., 2009); similarly, high frequency alcohol users are seven times less likely to use a condom than less frequent users (Bagnall et al., 1990).

This study showed frequent unprotected sexual practices under the influence of drugs and alcohol (see Chapter Seven, p.206). Alcohol abusers have a high probability of practising risky behaviour such as intravenous drug use and homosexuality. The HIV infection rate is also reported to be five to ten percent higher among alcoholics than non-alcoholics (Meyerhoff, 2001). In addition, International HIV/AIDS Alliance (IHA) (2008) suggests that the consumption of drugs and alcohol is associated with violence. Alcohol causes people to be more likely to behave aggressively and violently (International HIV/AIDS Alliance (IHA), 2008),which increases the chance of acquiring HIV or STIs (Pagare et al., 2005). Therefore, sex under the influence of drugs and alcohol has various relationships with the acquisition of HIV/AIDS and STIs.

Although infrequently reported, risky injecting drug practices by street children were disclosed. Some children reused syringes after cleaning them just with water and others shared syringes. Injection drug users can be infected with HIV by sharing HIV-infected syringes or equipment to prepare drugs and by reusing syringes (Centres for Disease Control and Prevention et al., 1997). Injecting drugs create a risk of HIV/STIs and AIDS vulnerability in various ways: by directly transmitting HIV and other infectious diseases during injection, and indirectly by provoking the transmission of infection through behavioural changes.

Drugs and alcohol present two-fold risks in terms of increasing HIV/ STIs and AIDS vulnerability. Alcohol and drugs consumption changes behavioural patterns, and deteriorates health status resulting in an increased risk of AIDS developing from HIV. The use of alcohol and drugs weakens physical health (Anarfi, 1997), and substance abuse causes nutritional deficiencies that affect HIV progression (Hahn & Samet, 2010). Meyerhoff (2001) also states that heavy use of alcohol adversely affects vulnerability to HIV infection and the progression of HIV to

AIDS. This study identified widespread regular glue sniffing among the children. The use of glue causes runny noses, hoarseness, colds and flu, as well as other physical health effects such as tiredness and weight loss (Van Rooyen & Hartell, 2002).Injection drug users are susceptible to serious health problems at the sites of injection and, if left untreated, they are also more susceptible to bacterial and viral infections (National Institute on Drug Abuse (NIDA), 2011).

The cluster of aforementioned sexual activities, such as early sexualisation, sexual orientation, prostitution, sex under the influence of drugs and alcohol and sexual abuse all overlap with risk-taking sexual behaviour (unprotected sex and multiple partners), which cause children to be vulnerable to HIV and STIs. Drugs and alcohol use increase the risks and raise the chances of acquiring HIV/STIs, including effects which deteriorate AIDS status. Furthermore, abuse and drugs, in association with the children's living situation, play a double role in the risk of HIV/STIs infection and the deterioration of AIDS status, as described below.

8.4 Street Risk Factors: Habitat Risks - Vulnerability to HIV/STIs and AIDS Deterioration

Living in the street was found to be hazardous to health. The street children's living situation, such as their eating habits, shelter, hygiene, working activities, sexual and drug-using behaviour and various abuses have been documented in detail (see Chapter Six, p.168). The aforementioned living situation of the children clearly shows significant features of their susceptibility to HIV/STIs infection and the development of AIDS. The fundamental characteristics of HIV and consequent progression to AIDS are associated with the immune system and the resistance of the body, and vice versa. Malnutrition has come to be seen as a prominent factor in HIV/STIs infection and AIDS development for street children, because it is the result of the children's everyday living situation. Malnutrition is a common occurrence and is associated with the shortage of food faced by children on the street (Van Rooyen & Hartell, 2002).

8.4.1 Eating patterns

A proper quality and quantity of food are requirements for a healthy life, which were out of the children's reach. Living without food, or having inappropriate and unhealthy eating patterns, was common as described in Chapter Six. The findings were similar to those of the study by Anarfi (1997), which reported that children living on the street had irregular and unhygienic food. Staying hungry is common among street children (ILO, 2001), and there is a strong link between the intake of food and HIV/AIDS vulnerability. Poor quality and quantity of food inevitably contributes to loss of immunity, and results in malnourishment (Colecraft, 2008). Malnourishment weakens the immune system, which decreases resistance to infections (as does being infected with HIV) and both conditions are associated with susceptibility to other infections (Colecraft, 2008; United Nations World Food Programme (WFP), 2008). Also, malnutrition promotes the progression of any infection in an HIV positive person, resulting in increased morbidity and earlier death (Colecraft, 2008).

8.4.2 Health and hygiene

The homes of the street children were an environment hazardous to health, as they lived and slept in an open space around domestic animals, domestic garbage and human and animal excrement, and used contaminated river water (see Chapter Six, p.167 and p.174). The children were therefore susceptible to sanitation-related pathogens. Exposure to such an environment introduces infectious diseases that threaten life such as flu, cholera, worm infections, colds and tuberculosis (Van Rooyen & Hartell, 2002).

The demographic details showed that only about one third of the young people in the study thought of themselves as having a good health status. The most common health issues reported were: coughs; fever; diarrhoea; chest pain; pneumonia and tuberculosis; lumps in the groin; jaundice; headaches, and fracture-related

problems (see Chapter Seven, p.195). Diarrhoea and skin diseases were also common especially during the rainy season, and most of them were vulnerable to cold in the winter (ILO, 2001). Street children have been shown to be three times more likely to have diarrhoea than slum children (Greska et al., 2007). Living in an environment where there is a susceptibility to infection and a compromised immune system, increases the chance of secondary infection and the development of AIDS. Many of the children suffered from coughs, fever, diarrhoea and pneumonia, and if they were indeed infected by HIV, would be likely to progress to AIDS quickly, shortening their life span. Van Rooyen & Hartell (2002) also link infection to malnutrition, and suggest that low immunity causes susceptibility to opportunistic infections, which then turns into a risk of acquiring HIV and AIDS.

8.4.3 Work activities

The study found that the boys commonly worked as rag pickers while girls most often worked as prostitutes. Rag picking is the dominant type of work, and one of the worst forms of child labour among street children in Nepal (International Labour Office in Nepal, 2004; Southon & Gurung, 2006). ILO (2001) reported that rag picking poses risks for the children's health and affects their physical development. The work can be hazardous and the children are vulnerable to being contaminated with bacteria or other infections, and the risk of cuts and wounds being inflicted by sharp metal pieces, broken glass or other material is very high (ILO, 2001). My study showed that cuts, puncture wounds and lacerations were common features on the children, which was evidence that their working activities exposed them to an unhealthy, hazardous and polluted environment.

The children sometimes slashed themselves for different reasons, such as to show love or anger. Risky tattoo-making practices, carried out by the children on themselves, were also revealed (see Chapter Six, p.177). The children appeared to give no thought to the HIV risks involved in making cuts, puncture wounds and

slashes or to injuries acquired due to the nature of their work. Thus, in the street living situation, infections may occur due to hazardous work which, combined with malnutrition, may impact on immunity, causing a risk of further infection including HIV and progression to AIDS. Colecraft (2008) points out that inadequate food reduces the resistance of the body, which weakens the immune system causing susceptibility to HIV, and that further infection caused by their work can affect progression to the development of AIDS.

Food, health and hygiene, and the nature of the children's work, are therefore interlinked with each other, and the effects of any one of these elements can influence the others and cause malnutrition. Malnutrition is not a specific condition but develops through a continuum process because of the cumulative effects of poor food and poor hygiene. Inadequate food decreases immunity, which may lead to infection, and in turn, unhygienic living increases the chance of reinfection, which induces an even higher level of malnutrition. The nature of the children's work has an additional impact, as poor food and heavy work may cause malnutrition.

The progression of HIV to AIDS is influenced by the nutritional status and the general health of a person, in conjunction with any infection which they have; therefore, HIV/AIDS epidemics become more acute in an unhygienic situation (Kamminga & Wegelin-Schuringa, 2003), thus HIV and the development of AIDS is linked to everyday living situations (WHO, 2009). The living situation of the children, including their eating patterns, health and hygiene and working activities are a direct threat in terms of vulnerability to developing AIDS quickly amongst those who are already affected by HIV. WHO (2009) also report that the development of AIDS is linked to food, hygiene and everyday living conditions.

The effects of abuse and drug-abusive behaviour in terms of progression to AIDS were explained earlier. Van Rooyen & Hartell (2002) reported a link between malnutrition, drug abuse and the development of AIDS, and also suggest that

drugs lower immunity and increase AIDS progression in people who have HIV (Van Rooyen & Hartell, 2002). Once infected with HIV, street children are more susceptible to opportunistic infection which may lead to a rapid progression to AIDS, mainly because of poor health and lower immunity. This study discovered that children in the street were at risk of HIV/STIs and AIDS due to their risk-taking sexual behaviour and livelihood risks. I describe these multiple risk factors as street risk factors.

8.5 Aggravating Risk Factors: Lack of Knowledge Regarding HIV, AIDS and STIs- Vulnerability to Aggravation

8.5.1 Knowledge regarding the difference between HIV, AIDS and STIs

Understanding and knowledge in relation to HIV, AIDS and STIs is an important aspect of public health prevention strategy. It is crucial to know that AIDS is the later stage of HIV infection that occurs in an HIV infected person who is not on antiretroviral treatment. AIDS is the status of the disease after HIV infection has led to other multiple or serious infections being acquired; it is most often fatal, and STIs aggravate the situation. HIV and AIDS have significantly different meanings that should be understood however the terms are used in a combined form and this can cause confusion (Tadele, 2003). Previous studies have not explored children's understanding of the difference between HIV, AIDS and STIs or the importance of knowledge in health-seeking behaviour. Yet the behaviour of any individual may be affected to some extent by their knowledge of the issues. Some studies have specified AIDS (Anarfi, 1997; Gurung, 2004; Kruger & Richter, 2003; Pakistan Voluntary Health and Nutrition Association (PAVHNA), 2004; Swart-Kruger & Richter, 1997), some have specified HIV (Wutoh et al., 2006) and others have used both terms together (Tadele, 2003).

In the light of the importance of understanding the difference between HIV, AIDS and STIs, participants were asked about HIV, AIDS and STIs respectively. This study showed that most of the children on the street had heard of both the terms

HIV and AIDS, which is consistent with other studies (Anarfi, 1997; Gurung, 2004; Kruger & Richter, 2003; Lockhart, 2002; Pakistan Voluntary Health and Nutrition Association (PAVHNA), 2004; Southon & Gurung, 2006; Swart-Kruger & Richter, 1997). However, most of the children responded differently and almost all of the the respondents were uncertain, confused or misinformed about these terms HIV, AIDS and STIs, which was again similar to previous studies (Kruger & Richter, 2003; Swart-Kruger & Richter, 1997; Tadele, 2003). None of the respondents provided a correct inclusive answer regarding general knowledge on HIV, AIDS and STIs respectively, and most only gave fragmented or half sentences. However, this study's findings were different from those of CPCS (2007), which reported that only 38% of the street children in their study did not know about HIV/AIDS.

For the purpose of this study, attention was focused on the children's knowledge of how to prevent HIV/AIDS and STIs. An understanding of AIDS prevention means that one knows about the consequences of HIV infection, and this can help to change risky behaviour and attitudes to care and treatment of HIV, as well as STIs. There is a close relationship between knowledge about AIDS and how people think about protecting themselves from getting the disease (Anarfi, 1997). Therefore, the children were asked about the modes of transmission of HIV and occurrence of AIDS. It was found that the children had no knowledge regarding AIDS occurrence. All the respondents provided a 'don't know' response when asked about this; they regarded the terms HIV and AIDS together, without knowing their separate meanings and the differences. Their perceptions suggested either that HIV and AIDS were two different diseases, or they used the two different terms in a combined form, seeing it as just a single term for only one disease. The study clearly demonstrated that the street children were confused about the modes of occurrence of AIDS, or did not know about AIDS. The children's lack of knowledge about the difference between HIV and AIDS confirms the findings of other studies (Kruger & Richter, 2003; Swart-Kruger & Richter, 1997; Tadele, 2003). Kruger & Richter (2003) also mentioned a lack of

awareness among children about HIV infection and the progression of AIDS. This means that children in the street have a lack of knowledge regarding the latency period between HIV infection and the chances of the occurrence of AIDS. It also shows that the children do not know that HIV is symptomless, or that someone with HIV is able to be infected or to transmit infection throughout the latency period. The significance of not having knowledge regarding AIDS is a fundamental concern of this study; it relates these signs of their lack of knowledge to the importance of care and treatment of HIV. This study also showed that young people lacked concern about protected sex, and lacked awareness about the risks of secondary infections and the fact that even diarrhoea can kill an HIV infected individual.

8.5.2 Knowledge regarding HIV transmission

None of the respondents in this study were able to respond with inclusive knowledge of the modes of HIV transmission. However, all the respondents had correct knowledge of at least one mode of transmission. Most of them knew that unprotected sex transmits HIV, and this knowledge is considered a major mode of preventing HIV transmission where an HIV epidemic is blooming due to heterosexual intercourse. This finding is supported by other studies, which showed that children knew about HIV transmission occurring through unprotected sex (Gurung, 2004; Southon & Gurung, 2006; Wutoh et al., 2006). The second response from the children about the modes of transmission was the sharing of syringes. None of the children spontaneously included other means of HIV transmission, such as from mother to children during birth, through breast feeding or blood transfusion. The findings of this study were very similar to those of Wutoh et al. (2006), who found that most children knew about the transmission of HIV primarily through unprotected sex, followed by contaminated blades and needles. PAVHNA (2004) also reported that transmission through syringes was the second main response, and that was followed by transmission through blood transfusion and from mother to child during birth. Previous studies conducted in

Nepal also reported unprotected sex, sharing of needles and blood exchange as the most common responses regarding HIV transmission (Gurung, 2004; Southon & Gurung, 2006), showing that the children did not have inclusive knowledge about transmission.

Children in my study had a number of misconceptions. For example, while many children strongly believed that a person who was a prostitute was at risk of HIV transmission, they also linked certain other groups with prostitutes, such as street girls who worked in discos, restaurants, cabin restaurants and guest houses, regarding them as risks for HIV infection. This is supported by other studies, which found that children perceived HIV infection to be likely through sex with certain groups of people (Dube, 1997; Kruger & Richter, 2003; Lockhart, 2002; Swart-Kruger & Richter, 1997; Tadele, 2003)**.** However, some children in this study believed that prostitutes and street girls were not risks for HIV transmission, which was consistent with the findings of a study in Ethiopia (Tadele, 2003), which reported the belief that prostitutes were safer groups than school girls and ordinary girls, as the former were (mistakenly) thought to be forced to use a condom. Similarly, in this study, children claimed that college girls were a 'risk' group. Children also associated characteristics such skin colour and size with risk for HIV transmission. Some other responses in the study showed that the children felt that drug abusers, rich people and people returning from abroad were risks for HIV transmission, but that poor people, married people and virgin girls were not perceived as risk groups. Worryingly, children believed that homosexual sex was not a risk factor for HIV transmission, a finding also reported by Lockhart (2002), who stated that children in his study regarded homosexual activities as 'not real sex', and so were not a risk. Conversely, other studies have shown children's perceptions that homosexual sex is indeed a risk for transmission of HIV (Kruger & Richter, 2003; Swart-Kruger & Richter, 1997).

This study revealed that children linked HIV to bodily appearance and many had the belief that a healthy looking person could not have HIV. This is consistent with other studies which found the perceptions of health can lead to assumptions

that there is no risk of contracting HIV from healthy people (Southon & Gurung, 2006; Swart-Kruger & Richter, 1997; Tadele, 2003).

In this study, various misconceptions were held about the modes of transmission. These included transmission by: physical contact, such as skin contact, touching, sitting together and unhygienic situations, (Anarfi, 1997; Pakistan Voluntary Health and Nutrition Association (PAVHNA), 2004; Swart-Kruger & Richter, 1997); mosquito biting (Dube, 1997; Gurung, 2004); breathing close to each other (Kruger & Richter, 2003; Swart-Kruger & Richter, 1997), and sharing food (Anarfi, 1997; Dube, 1997; Swart-Kruger & Richter, 1997; Tadele, 2003). Some responses were related to a type of food, such as meat, which was thought to transmit HIV. Supporting these findings, Southon & Gurung (2006), reported that major misconceptions existed amongst children in Nepal. These perceptions illustrate a lack of understanding of HIV infection and transmission, and increase susceptibility to HIV infection. Yet the fact is that HIV transmission can occur through body fluids such as blood and other secretions.

8.5.3 Knowledge regarding HIV prevention

In this study all the respondents knew that condom use was the main mode of HIV prevention. Condom use was the most common response regarding HIV prevention, followed by avoidance of sharing syringes. Almost all of the respondents reported only one way to prevent HIV/AIDS: either the use of condoms or avoidance of the sharing of syringes .This confirmed that most of the children knew at least one method of HIV prevention (see Chapter Seven, p.217). Children had strong feelings about the importance of condom use to protect from HIV. Feelings of guilt were revealed by the children, as they expressed regret about themselves having had unprotected sex, and they presumed that they might have contracted HIV. This was clear evidence that they knew that protected sex prevents HIV. Tadele (2003) also reported that children were conscious that condom use was the best way to prevent HIV, and fully understood the

consequence of not using them. Nevertheless, this study revealed that unprotected sex was widespread, and condom use virtually non-existent or inconsistently used. Despite significant numbers of children being well informed about the importance of condoms, unprotected sex was frequently reported in other studies too (Gurung, 2004; Kruger & Richter, 2003; Pakistan Voluntary Health and Nutrition Association (PAVHNA), 2004; Southon & Gurung, 2006; Swart-Kruger & Richter, 1997; Tadele, 2003); this showed the use of condoms was found to be low in previous studies in Nepal. Also, these studies found a low level of condom use even though the children were aware of AIDS (Anarfi, 1997), even though they were aware of STIs (Kaime-Atterhog et al., 2007) and even if they regarded themselves as being in danger of contracting diseases (Anarfi, 1997). This suggests that condom awareness seems to be limited only to cognitive understanding and is not translated to everyday behaviour. This demonstrates that knowledge alone is not sufficient to bring about positive changes in sexual behaviour. The reasons for not using condoms were mentioned above (see Chapter Seven, p.210).

Importantly, this study identified some misconceptions about the use of condoms. The children associated the necessity for condom use with certain groups in the population, and believed that homosexuals did not need condoms. They believed that condom use was not essential for homosexual sex, even though this leads to a significantly higher risk of acquiring HIV and STIs. The risks of unprotected sex amongst homosexuals have already been stated. The findings of this study are consistent with those of other studies, in which children linked the necessity for condom use with certain groups of the population (Anarfi, 1997; Kaime-Atterhog et al., 2007), such as ‘bad’ and promiscuous boys (Kaime-Atterhog et al., 2007) in Kenya. Supporting the findings of this study, the use of condoms was found to be low in previous studies in Nepal (Gurung, 2004; Southon & Gurung, 2006), as well as in other studies (Kruger & Richter, 2003; Lockhart, 2002; Moon et al., 2001; Swart-Kruger & Richter, 1997; Tadele, 2003; Wutoh et al., 2006).

8.5.4 Knowledge regarding HIV/AIDS symptoms

As this study aimed to find out about the children's understanding with respect to HIV and AIDS, it was important to note what terms they used for their responses. In response to the question regarding HIV/AIDS symptoms, children used the term HIV, and expressed ideas that were linked with bodily appearance, such as: sunken eyes; becoming thin or skinny like a skeleton; looking weak and drowsy; looking tired or ill; looking dark, and having little appetite and thought that the absence of these symptoms would mean that they could not have HIV. Similar responses were found in a study in South Africa in relation to perceived AIDS symptoms, such as: becoming thin; being weak; having sunken eyes and dry lips; losing hair; bleeding, and paralysis (Swart-Kruger & Richter, 1997).

The previous study reported that the children did not know about the two different stages of HIV and AIDS, or the nature of the occurrence of AIDS (Swart-Kruger & Richter, 1997). Tadele (2003) reported body loss, balding hair, coughing and lesions on the lips being described as AIDS symptoms. This study also showed that HIV/AIDS symptoms were associated with defects in the sexual organs, such as: sores and blisters on the organs; having no seminal discharge; a reduced desire to have sex, and a non-erectable penis. A comparison between the information obtained from this study about the symptoms of HIV, and responses relating to AIDS, demonstrated that children on the street had a lack of knowledge regarding HIV and the progression of AIDS. In response to questions about the symptoms of HIV/AIDS, none of the participants stated that AIDS might be caused by any infection or disease.

8.5.5 Knowledge regarding HIV/AIDS testing and treatment

In order to find out about their knowledge regarding accessing HIV/AIDS treatment, the respondents were asked whether HIV is curable and where HIV can be tested. Nearly half of the children perceived that HIV is incurable and a few

stated that it is curable. Some of them said that HIV is curable and AIDS is incurable. Some children thought that they could get treatment in hospital although a few respondents did not know where to go for treatment. Some said that HIV tests could be done at blood donation centres and only two respondents stated that HIV could be tested at Teku Hospital (Tropical and Infectious Disease Hospital, the government hospital where people can get free treatment for HIV and STIs). Only one respondent talked about VCT (Voluntary Counselling and Testing). The findings reveal that very few children know where to get treatment or how to access HIV/AIDS testing and counselling. There were a few misperceptions about the treatment provided by the health sector and medical doctors in Nepal, in that the children believed that HIV treatment could only be done abroad, not in Nepal.

8.5.6 Knowledge regarding STIs transmission, prevention, symptoms and treatment

STIs and HIV are closely interlinked to each other in terms of their modes of transmission and prevention, and hence having knowledge of STIs is crucial. Anarfi (1997) states that if someone acquires STIs, that indicates that the person has a higher chance of contracting HIV. Thus, with respect to knowledge about vulnerability, it is essential to incorporate STIs within public health approaches to HIV. Given the importance of STIs, the present study incorporated STIs in order to understand the children's knowledge about HIV/AIDS risk and vulnerability. This study identified that the children had a lack of knowledge regarding STIs. Less than a quarter of the respondents reported that the modes of transmission for STIs were through sex. Of those, only two of the respondents stated that STIs were transmitted through unprotected sex; these findings are supported by other studies. (Anarfi, 1997; Tadele, 2003).

A wide range of misperceptions was revealed relating to STIs transmission, including the idea that STIs could be transmitted through injecting drugs or

drinking inadequate water. Some of the responses were related to unhygienic conditions, and suggested that STIs could be transmitted through being dirty or using a dirty toilet. Also, a few children said that scratching the skin with a nail could pass on STIs. The findings were consistent with those of a study in Ethiopia, where Tadele (2003) reported a lack of STIs knowledge among children. Regarding STIs prevention, except for three individuals, most of the children did not know that STIs could be prevented by using a condom. Some of the misperceptions regarding STIs prevention were that STIs could be prevented by cleanliness, avoiding alcohol and cigarettes, and the use of masks.

After comparing the information regarding modes of STIs transmission and prevention, it seemed that the children appeared to think of STIs as if they were associated with respiratory infections rather than sexually transmitted infections. Very few participants mentioned that STIs were sexually transmitted diseases and prevented by condom use. Less than half of the respondents reported correctly that STIs symptoms included itching and sores around the genitals. Also, the children were confused about whether STIs are curable; some respondents suggested that STIs were curable, and some said incurable. Comparison of all the data related to understanding of HIV/AIDS and STIs, including several sets of information (differences between HIV, AIDS and STIs, knowledge about transmission, prevention, symptoms, treatment and testing) illustrated that children on the street had no knowledge, or little knowledge, and were confused, ignorant or misinformed

If the children apply their understanding of HIV/AIDS and STIs and transform this limited knowledge into behaviour, this in itself creates personal risks in terms of vulnerability to HIV/STIs, including AIDS. Acquiring the requisite knowledge regarding HIV and AIDS is essential for any individual. The absence of this knowledge affects their ability to prevent HIV and AIDS as well, as explained above. Since the main modes of transmission and prevention of HIV are similar to those of STIs, having no knowledge about STIs is also an indication of a lack of

knowledge about HIV. This is evidenced by the fact that knowledge regarding HIV was found to be low among the children. Lack of knowledge regarding the transmission and prevention of STIs is a further cause for concern, given that this lack of knowledge in street children indicates a threat of also acquiring HIV/STIs, as well as the occurrence of AIDS.

8.6 Perpetuating Risk Factors: Negative Treatment Attitudes-Vulnerability to Perpetuation

8.6.1 Negative attitudes towards treatment

In the course of discovering the children's knowledge and perceptions regarding HIV/AIDS and STIs, the attitudes of the children towards these issues were also identified. This study showed that the children were hesitant about going for STIs medical treatment; they delayed seeking care, and were shy about the treatment. These issues of negligence, hesitation and delaying treatment are corroborated by the ethnographic data (see Chapter Six, p.177). The study also revealed the children's practices with regard to improper use of medicine and incomplete dosage of medicine (Chapter Seven, p.224).

This study showed that a significant number of respondents had acquaintances that had HIV and, in some cases, STIs, and some knew people who had died due to their infections. These children's acquaintances had died at a young age, showing significant evidence of the effects of negligence, hesitation, delaying treatment or lack of treatment, including self medication, and seeking friends' help (see Chapter Seven, p.224). The treatment practices of children revealed in this study were found to be similar to those found in other studies (Anarfi, 1997; Iqbal, 2008; Kaime-Atterhog et al., 2007; Nigam, 1994; Olley, 2006; Raffaelli et al., 1993). Such treatment practices have negative implications. The use of medicine without a proper diagnosis will be incorrect, and an incomplete dose may cause a relapse or deterioration of health.

One of the common reasons for the children's lack of interest in accessing HIV treatment was monetary issues. The children asserted that the price of HIV treatment was not affordable for poor people, and that only rich people could access HIV treatment. The issue of poverty as the main reason hindering children from accessing treatment was also found in other studies (Kaime-Atterhog et al., 2007; Milky & Ahammed, 2000). Children used alternative forms of treatment such as traditional healers or visiting a sage (*baba)* to obtain herbal treatment for HIV. The children's use of traditional healers has also been found in other studies (Dube, 1997; Kruger & Richter, 2003; Milky & Ahammed, 2000; Olley, 2006). Some of the children had a negative attitude to treatment, in that they believed that death was assured after HIV infection, which made them think that HIV treatment was futile.

8.6.2 Underlying negative attitudes towards HIV/AIDS

The study revealed several other attitudes, especially those linked to reinfection of HIV and STIs, and progression to AIDS. The children were asked what other people would think of them if they had HIV/AIDS, and what they would think about other people who had HIV to learn about their underlying thoughts regarding people having HIV/AIDS. Almost all the children expressed views associated with stigmatizing behaviour, such as blame, fear, accusation and alienation. Some gave mixed responses that included love and care, yet still would keep their physical distance. Gurung (2004), found that 50% of the respondents in his study would not touch HIV-infected people but would maintain verbal contact. My study showed that the children's perceptions of HIV were driven by stigma and believed that HIV infection was the result of wrongdoing and a promiscuous nature, and would ignore them due to fear of HIV transmission through physical contact. They had the perception of being stigmatised if they disclosed having HIV, such as by being ignored, accused, discriminated against or insulted. This

was similar to the findings of Tadele (2003), who mentioned that children would hesitate to disclose their status for fear of disrupting social relationships.

The sexual behaviour of those children who had HIV was difficult to understand, but seemed to be linked to underlying stigma. Children who really were infected would not disclose their status. Questions were put forward hypothetically in order to discover their attitudes and what they would do in terms of sexual behaviour if they had HIV. A few boys said that they would go for sex because of their desire for sex, and the girls would continue to have sex in order to maintain their subsistence. However several boys indicated that they would attempt suicide if they believed they were HIV positive. Suicidal thoughts in children who have HIV have been found in other studies (Kruger & Richter, 2003; Tadele, 2003). Low feelings may hinder any individual from accessing care and treatment. My study found that children who had low feelings were careless about protection and prevention.

The study showed some worrying attitudes among both boys and girls. They mentioned that they would intentionally have sex if they had HIV, in order to transmit it to others. A girl mentioned transmitting HIV intentionally so that she could get married to the man of her choice after disclosing that they both were infected (see Chapter Seven, p.226). Negative feelings associated with revenge were reported in a study in South Africa (Swart-Kruger & Richter, 1997).

The findings of the study highlighted that the children's negative underlying thoughts were associated with their lack of access to care and treatment. As a result of internal negative feelings, they devalue themselves, which inhibits access to services and treatment opportunities. Dlamini et al.(2007) report that internal stigma inhibits disclosure of HIV status and fear of disclosure, due to underlying stigma, reduces access to care, support and treatment. Stigma leads HIVinfected people to avoid utilising health care services (Centres for Disease Control and Prevention (CDC), 2010; Dlamini et al., 2007) and this will also be a barrier to

receiving HIV prevention services (Centres for Disease Control and Prevention (CDC), 2010).

The study confirms the children have lack of knowledge regarding the HIV, STIs and AIDS and its relationships that these three are different but health connected. Negative attitudes towards care and treatment and people living with HIV/AIDS hence children in the street are risk to acquire HIV/STIs and AIDS.

8.7 Sexual networking at societal level

This study clearly identified that the children engaged in multiple sexual relationships. The findings of the study revealed that street girls worked as prostitutes and had sexual partners from any group within the male population, including street boys; in addition, both prostitutes and street girls were sexual partners of street boys. Figure 8-1 below illustrates how the children created a sexual web and extended sexual relationships. The behaviour of the prostitutes was central to the formation of this web of sexual relationships. The sexual networking and the sexual web developed due to the fact that the street children are a population who have had several sexual partners $(X)^n$, and have had partners who have had several other partners (Figure 8-1). The figure represents the prostitutes have had a multiplicity of partners $(X)^n$ who have also had several other partners $(X)^n$, and they are also the potential partners of the children.

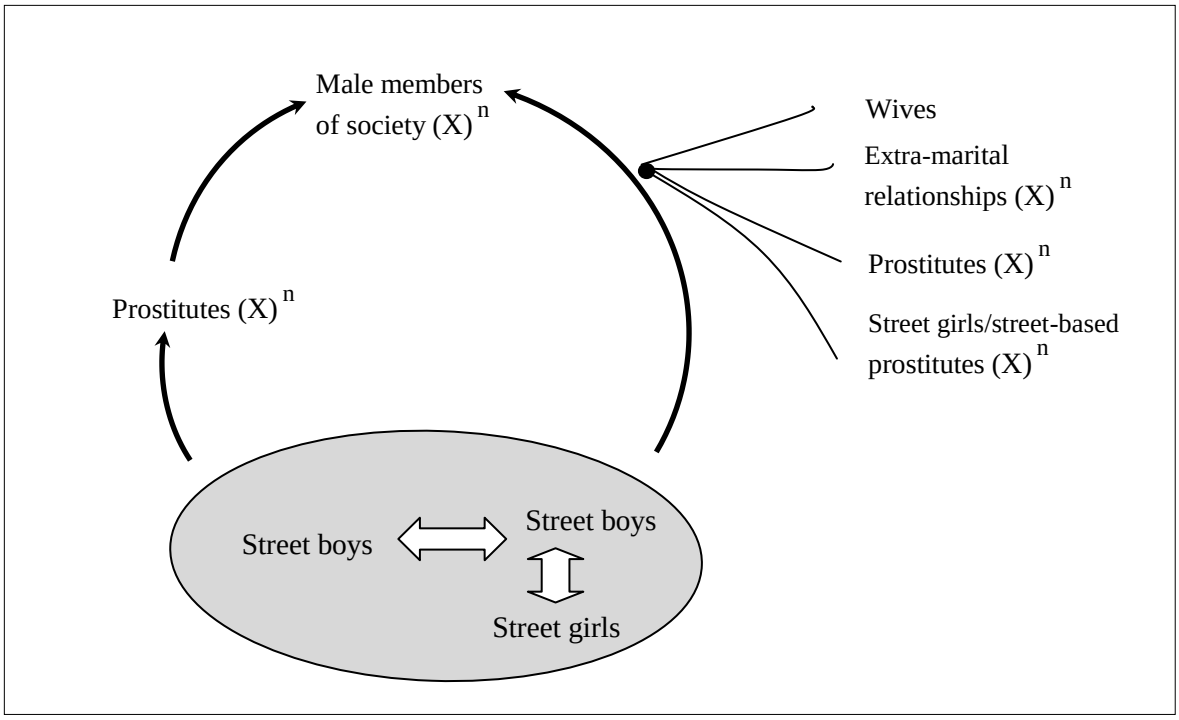

Figure 8-1 Model demonstrating sexual networking in extended sexual relationships

There was a range of evidence which identified that the street children were a high risk group within the population (see Chapter Eight). The findings of this study revealed that more than half of the participants had experience of STIs and knew that their friends had STIs (see Chapter Seven, p. 222). This experience of STIs among themselves and their acquaintances was an indication of unprotected sex and multiple partners. STIs among children is identified as a marker of high-risk sexual behaviour (USAID, 2005). This study demonstrated cross-generational sex, paying sex and STIs symptoms among the children which are features of high-risk sexual behaviour (USAID, 2005). This study showed that the children had acquaintances who were HIV-infected and in some cases had died due to AIDS. Evidence of HIV infection and death due to AIDS suggests the spread of HIV and AIDS (International Labour Office in Nepal, 2004).

USAID (2000) describes sexual workers as being central to HIV epidemics, as they have a high turnover of partners and they have a high probability of being

exposed to infection and passing on infection. They are seen as the group with the most potential for risk of HIV infection and transmission (Catherine & Catherine, 2001; Weber et al., 2002), because within developing countries many of the initial cases of HIV were discovered among sex workers (Catherine & Catherine, 2001).

Ghys et al. (2001) state that the partners of sex workers are also at particularly high risk of HIV infection, since sex workers risk infecting their partners as condom use during sex is very low. Sex workers, including their partners, have played a great role in heterosexual HIV epidemics in many countries. Ghys et al. (2001) also state that STIs/HIV among street girls, and their risky behaviour, indicate the potential chance of further spreading HIV to their clients, who in turn serve as a bridging population to the general population and to their wives and girlfriends, and also to other sexual workers.

This study showed that street children were also the sexual partners of female and male prostitutes and that the street children also worked as prostitutes (see Chapter Seven, p.209 and Chapter Six, p.179). Prostitutes are sexual partners of street boys, who in turn are sexual partners of prostitutes amongst the street girls (see Chapter Eight, Figure 8-1, p.266). Previous literature has shown that prostitutes have multiple partners and engage in risky sex (UNESCO/UNAIDS, 2001).

Prostitutes are also a vulnerable group as they lack the ability to negotiate safer sex (UNESCO/UNAIDS, 2001), and the findings of this study similarly showed that street girls lacked the ability to insist on safer sex. Due to the prevailing nature of established sexual networking among the street children, and their high-risk sexual behaviour (Figure 8-1, p. 266), they are potentially a bridging population, who play a bridging role in transmitting and acquiring HIV and STIs within and outside of their circle and transmit it widely to the general population. The phenomenon continues as their clients in turn spread the infection (see Figure 8-2, p.268).

There are some other factors that facilitate the establishment of sexual networking. Some of the street boys were found to be bisexual, and the boys were also susceptible to bisexual abuse (see Chapter Eight, p.239 and p.245). Lockhart (2002) describes the bisexual behaviour of children as a further bridging role in transmitting infection to the general population. Sexual mixing between groups is therefore a process of spreading infection to the general population, thus increasing the likelihood of an HIV epidemic (USAID, 2000).

The evidence of the children's underlying thoughts (low feelings, negative attitudes) is also a potentially important factor in extending the sexual web of relationships (see Chapter Eight, p.263). Their negative attitudes directly suggest that the children are not only at risk of HIV/STIs among themselves, but also likely to pass on infection to the general population at societal level (see Figure 8-3, p.272). Therefore these children are a bridging population for the wider spread of HIV/STIs in society.

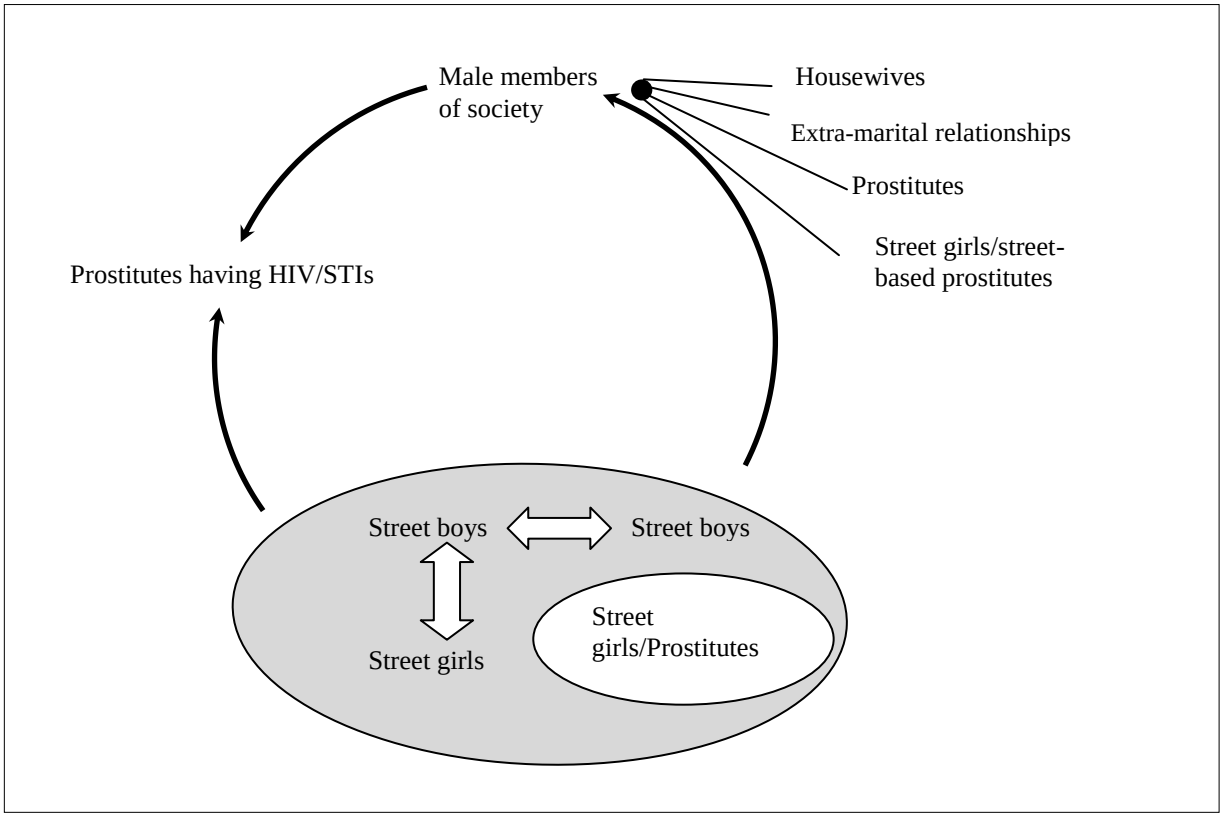

Figure 8-2 Model demonstrating HIV/STIs transmission through bridging population in web of sexual relationships

8.8 Causes and Consequnces of Risk and Vulnerability to HIV/STIs and AIDS among Street Children

The study has systematically explored the complex relationships between four domains of interlinking risk factors and vulnerability to HIV/STIs and AIDS. Pre-street risk factors include mistreatment by parents, which pushes the children into living on the street. Once they start to live in the street they are vulnerable to *exposure* to HIV/STIs. They engage in sexual risk-taking behaviour in the streets, which makes them vulnerable to HIV/STIs *infection.* Their lack of knowledge regarding HIV, STIs and AIDS aggravates their vulnerability to HIV/STIs, which leads to *reinfection*. Children engage in high risk-taking sexual behaviour which is determined and is influenced by their lack of knowledge, and triggers HIV and STIs. Hence the street risk factors (sexual risk-taking behaviour) and aggravating risk factors (lack of knowledge regarding HIV/STIs and AIDS) are interlinked and cause vulnerability to HIV and STIs *infection* and *re-infection*.

Children have negative treatment attitudes and negative underlying thoughts associated with people having HIV/AIDS, which in turn undermine the likelihood of seeking treatment. Together with the existing street risk factors (high-risk sexual behaviour and habitat risk factors), and aggravating risk factors (lack of knowledge regarding HIV, AIDS and STIs), the perpetuating risk factors (negative attitudes to treatment) mean that without particular forms of action, HIV prevalence is unlikely to be reduced have wider implications in terms of HIV/STIs risk and vulnerability as the perpetuating factors fail to change existing status of HIV, AIDS and STIs. Any untreated infected individual is highly susceptible to both transmitting and acquiring infection, thus making a vicious circle at one end, whereby the consequent onset of AIDS in any HIV infected individual at other end that worsens the situation and leadng to death at an early age, so decreasing the life span (see Figure 8-3, p.272). Negative attitudes associated with HIV/AIDS and STIs perpetuate these risks. Perpetuating risks increase vulnerability to the *perpetuation and progression* of HIV/STIs and AIDS for any individual by becoming infected and re-infected in a cyclical manner. The recurrence of HIV

and/ or STIs in any HIV-infected individual without treatment enhances progression of the HIV status, eventually leads to AIDS and premature death.

This study has confirmed that being on the street renders children vulnerable to AIDS in several ways. The study has drawn attention to a large range of influences related to HIV/STIs vulnerability and the *deterioration* to AIDS status due to the living conditions of street children (see Chapter Six). Therefore, from the time they leave home and enter the space, they become at risk of contracting HIV/STIs and AIDS. Perpetuating risk factors, overlapping with habitat risk factors, further deteriorate the AIDS situation of any individual. Thus, street risk factors related to habitat risk factors cause vulnerability to deterioration of AIDS status. Perpetuating risk factors lead to the development of AIDS by the reinfection and progression of HIV and STIs, and the livelihood risk factors deteriorate the AIDS status, so they each buffer the effects of the other, thereby enhancing the deterioration of the AIDS status. Furthermore, whilst living on the street, drugs and other abusing behaviours are common practices, which add to the effects of the sexual risk-taking behaviour and also influence the livelihood risk factors, so triggering the deterioration of AIDS status.

In the population of street children, HIV-related risk factors are tied to complex, interwoven sets of problems which lead to *exposure to HIV, infection, reinfection, reinfection and progression (perpetuation),* and *deterioration* vulnerability regarding HIV/STIs and AIDS. These combined effects of the risk factors are interlinked and complex in their influence on each other, and some potentiate the effects of others. The interlinking and perpetuating risk factors further the phenomenon of HIV/STIs and AIDS in a cyclical form (see Figure 8-3, p.272). It is clear that children on the street are at risk of HIV/STIs as well as to AIDS, thus increasing mortality. This complex picture is visually depicted in the diagram below which also shows how these risk factors also extend to societal transmission of HIV.

The complex model is extended form of pre- existent theoretical framework (see Figure 3-1). The model of the understanding of the risk and vulnerability as shown in the figure 8-3 produced by compiling the risk factors emerged from the findings of the indepth interviews (see Figure 7-2) and ethnography (see Chapter Six). Succinct phrases were added and explained in a coherent manner to describe the meaning of the four hierarchical themes. The newly emerged theory explains in detail the four domains of risk factors that are vulnerable to HIV/STIs and AIDS in street children (see Figure 8-3).

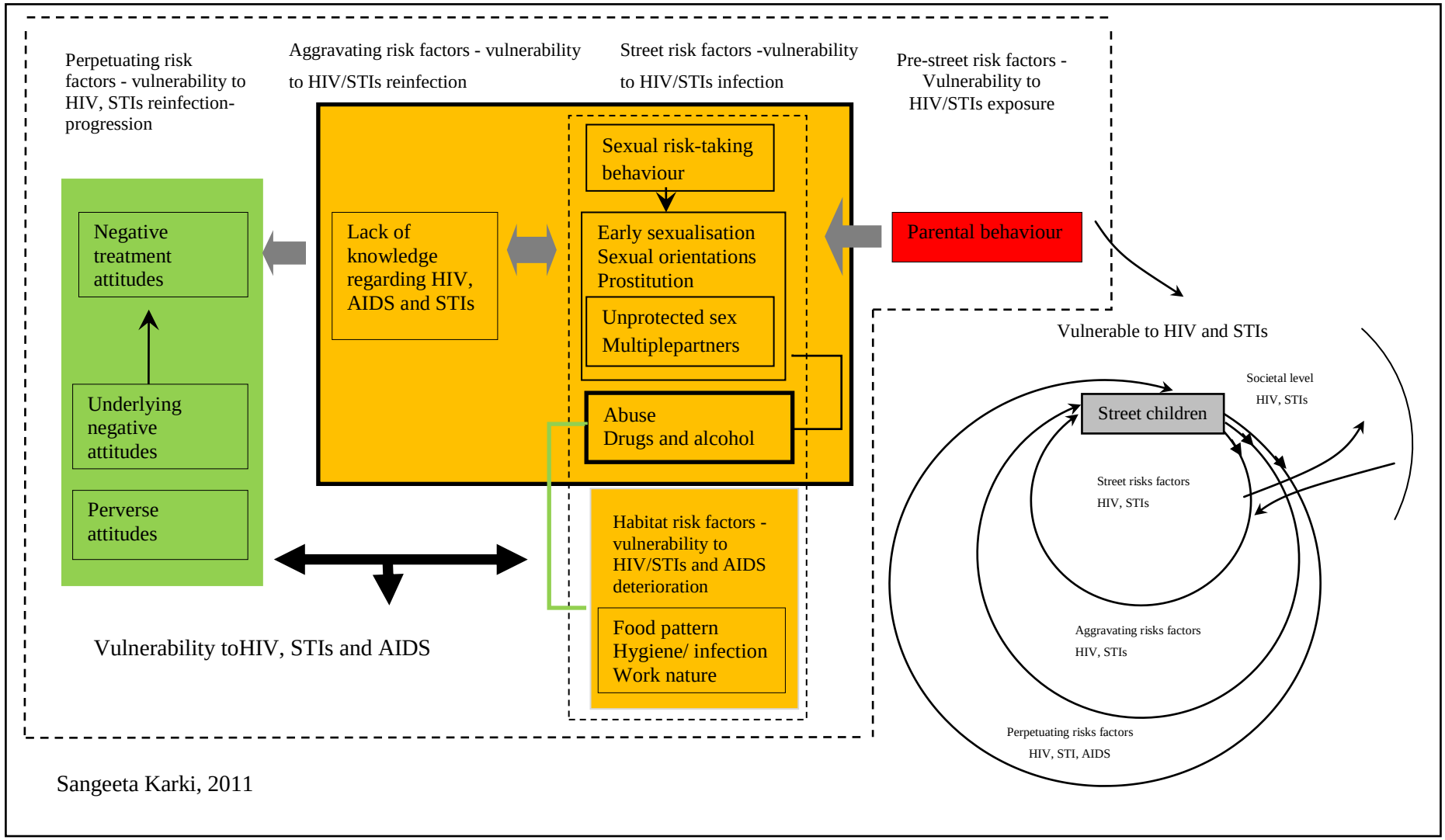

Figure 8-3 Model of the phenomenon of HIV/STIs and AIDS risk and vulnerability among street children at societal level

8.9 Significance of Findings

On the basis of the findings, I argue that there is need for a specific focus on the needs of street children. Using the public health approach as my theoretical starting point, I propose a model for the development of interventions to address HIV/STIs and AIDS risk and vulnerability for street children, which can be utilised at policy and practice level.

8.10 CAP Intervention Model: Pubic Health Approach

The study has clearly demonstrated HIV/STIs and AIDS risks and vulnerability to street children is a public helath problem. And risks and vulnerability are not limited among the children; they extend to the broader societal level widely (see Figures 8.2 and 8.3).

Kaime-Atterhog et al. (2007) suggest that risky sexual behaviour of street children can signal the early stage of an AIDS epidemic, even if the reported rates of HIV and STIs are low. Kaime-Atterhog et al. (2007) further report that a *high* rate of HIV infection among street youths is the sign of incidence of AIDS among street youth, and that these figures can be expected to rise as the epidemic progresses. Interpreting the report of Kaime-Atterhog et al. (2007), in relation to the findings of this study, leads me to speculate that, even though the exact number of HIV and STIs infected street children in Nepal is not known, given the evidence of the children's high-risk sexual behaviour, an early stage of an AIDS epidemic in the country might be indicated. Furthermore, if the number of street children infected with HIV is high, then AIDS incidence can be expected to increase as the epidemic progresses. The study suggested many children knew of friends who had died of AIDS, which is another indication of the spread of HIV/STIs, and also shows that there are unreported HIV cases present among children.

The risk of acquiring HIV/STIs due to high-risk sexual behaviour was enhanced due to the negative treatment and attitudes to which street children were exposed,

and the deprived living situations they had to endure. The findings of this study revealed that sexual risk-taking behaviour (multiple partners and unprotected sex) are interlinked with intimate relationships and subsistence, which eventually lead to children's inability to negotiate protected sex. These circumstances are a great challenge in terms of bringing about changes in behavioural patterns, and suggest the need for targeted programmes aimed at prevention of risk at a *pre-street* stage, before harm occurs, and the testing and treatment of street children who are vulnerable to infection.

The most common approaches to HIV/AIDS prevention programmes for children are the 'Abstain from sex, Be faithful and Condom use' (ABC) and 'Knowledge, Attitudes, Practices and Beliefs' (KAPB) approaches (World Bank, 2003). The aim in the implementation of the ABC approach is to change risky sexual behaviour, while the KAPB approach, which is actually a survey, is designed to discover the extent to which children are at risk of acquiring HIV, in order to increase awareness of HIV/AIDS and to help in identifying priority areas for action. However, while changes in risky norms and behaviour are essential for the prevention of HIV/STIs among street children, I argue, on the basis of my findings, that the adoption of the ABC or KAPB strategies is inappropriate for this population. Firstly, advocating abstaining from sex is an unrealistic aim in circumstances in which sex work is essential for survival. Secondly, street children do not have ready access to condoms and, even when they do, the children in my study were often so young and therefore so small that they reported that adult condoms often did not fit. This raises the difficult issue of whether condoms should be made for children. A third reason why these approaches are not likely to be effective is that the information produced requires a higher level of literacy than was common in my sample and, as an especially marginalised group; information on prevention and testing had not reached them.

Some programmes designed for children of the street offer a variety of services, including provision of shelter and food; education, pre-vocational and vocational training, and a health-related prevention and substance abuse programme (see

Chapter One). Despite the fact that all of these programmes have an overall goal of promoting better conditions for street children, without knowing the risks and vulnerabilities they face these programmes are unlikely to be effective. WHO has developed the public health approach to combating HIV/AIDS for the wider population but this does address the needs of any particular group (WHO, 2008). However my study shows that it is not possible to control the spread of HIV/STIs-among especially marginalized groups without specific guidance. More recently, this position has gained popularity (WHO, 2011).

In revealing the four domains of risk and vulnerability of street children in this study, my model seeks to target each of these domains using three approaches. As the needs and circumstances of street children are complex, so too are the solutions for reducing the risks they are exposed to. I have called this the CAP model (see Figure 8-4, p.277), which illustrates the combination of three approaches: the Community-based approach (primary intervention level-associated with family and community), the Awareness approach (secondary intervention level- associatedwith acquiring holistic knowledge regarding HIV, AIDS and STIs) and the Public health approach (tertiary intervention level-associated with acquiring knowledge regarding health and hygiene related diseases, treatment access to encounter opportunistic infections).

The central aim of the model is to prevent children from being exposed to HIV/AIDS and STIs risk and vulnerability. The adoption of the community-based approach (primary intervention level) focuses primarily on preventing children (and in this respect borrows from the public health philosophy) from becoming street children. However, it is a long term process which attempts to reduce the number of children on the street over time. A community-based approach would be the most significant and holistic element in a programme for the prevention of risk and vulnerability regarding HIV/STIs and AIDS, since it addresses the root causes of the problems that lead to children moving to live on the streets, whereas providing knowledge of the subject and treatment of HIV/STIs and AIDS, though necessary, are reactive and do not prevent risk and vulnerability.

By considering the evidence of risk and vulnerability, the CAP model focuses strongly on two further perspectives: the awareness approach (secondary intervention level) and the public health approach (tertiary intervention level), which should also be incorporated in the intervention programme. Policies established on the basis of public health aspects would have a potential impact on the health of the children. The details of all elements of each perspective are explained below.

The model is formulated specifically to address the HIV/STIs and AIDS risk and vulnerability issues of street children. The successful implementation of the combination of these three approaches (Community Based Approach- primary intervention level, Awareness Based Approach- secondary intervention level and Public Health Approach- tertiary intervention level) would intervene in the cycle of HIV/STIs and AIDS risk and vulnerability, and thus reduce the morbidity and mortality of the children. It is speculated that the effects of all three levels of intervention would lead to a decline in the number of children on the street, as well as decreasing the risk of, and vulnerability to, HIV/STIs and AIDS. At the least, only the effects of the community-based approach (primary intevention level) would reduce the number of children on the street, which would be an important achievement at asocietal level and thereafter in the country level. This CAP model would dovetail with more traditional public health approaches which include the systematic use of strategies of information to ensure the control of diseases (WHO, 2011). The CAP model links theory, research and practice together, aims to address the children's needs in the short term, and also seeks to prevent future risk and HIV transmission in the long term. The evidence to support the model is discussed in the following sections.

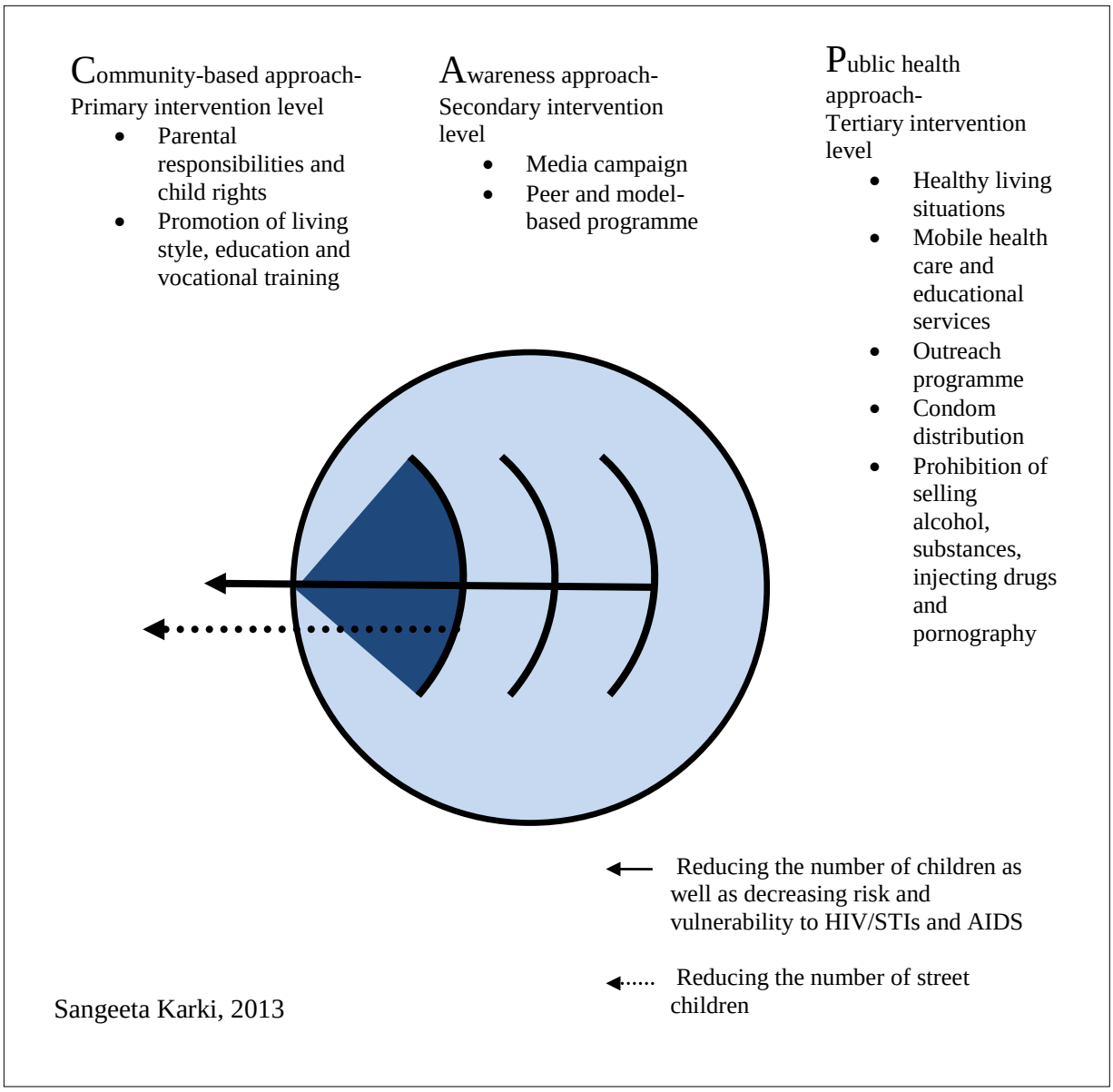

Figure 8-4 CAP intervention model for HIV/STIs and AIDS among street children

8.10.1 Community-based Approach- Primary Intervention Level

Surviving on the street means that children have a greater chance of being exposed to risky sexual behaviour and risk of infection and diseases. This study showed that the overarching reason for children to leave their homes and move to living on the streets is parental behaviour. The risks of HIV/STIs and AIDS among children start from the time they leave home and are removed from the protective environments of family and community. This is a significant turning point in the journey to HIV/STIs risk and vulnerability that exposes children to AIDS and early death. It is also a significant learning point for the government and responsible authorities to address the implications of child maltreatment in the home, parental behaviour and family breakdown as policy issues in preventing HIV/AIDS.

Long term policies must aim at fixing the root cause of children becoming street children, rather than simply prioritizing the most visible problem, i.e. children who are living on the streets. Therefore a community-based approach, which focuses on family, household and community strengthening, with the aim of minimising the reasons why children run away from home, is important. The participation of local leaders and police, and the efforts of child advocates, will increase effectiveness. Police personnel are the most likely people to intervene in family violence situations, and to come into contact with children who have left violent families and are now living on the streets. Training on children's needs and conflict resolution would enable the police to be more effective, as they work in areas of high as well as low concentrations of street children. Implementation of a community-based intervention strategy would aim to reduce the number of children on the street.

8.10.1.1 Parental responsibilities

As discussed in Chapter Seven, the study showed that children's rights in relation to abuse and family life were not safeguarded, and this was a major reason why

many children ran away from home. Policies and programmes that target parents, to discourage unkind behaviour to children and support them in fulfilling their responsibilities, would reduce the level of child mistreatment. The study suggested that step-parents are the most likely perpetrators of child victimization and maltreatment, and greater efforts are needed to promote the legal requirements for reporting abuse of with children to authorities.

Upholding the legal rights of children, reporting of mistreatment and strong action to combat abuse might alter the unkind behavioural pattern of some parents. The purpose of a strong policy on children's rights is to protect children from high-risk situations, to support parents in the appropriate care and treatment of children, and to discourage children from leaving home.

8.10.1.2 Living style and earning opportunity

Many children in this study were involved in prostitution as a means of economic survival. With low levels of education and high levels of illiteracy, the children had few options. The authorities responsible for working with street children should prioritise the safeguarding of the children's future and should seek to prolong life (UNICEF, 2011). While meeting basic needs such as shelter, food and education or training are essential and must be assured for children, these activities will not, of themselves, reduce vulnerability to HIV acquisition; it is also important to ensure that children are equipped with appropriate knowledge and strategies they can implement when in situations of risk.

The government can make differences to the plight of street children by considering them as trainable, and providing them with compulsory training as a priority for increasing chances of employment. Depending on the child's age and education, government targets, through a separate agenda which includes compulsory education, vocational training and employment for earning, would be beneficial. The earning opportunity provided by the acquisition of skills would encourage children to leave the street and might be another way to reduce the

incidence of street children. Empowering children by increasing skills would also build up their confidence and autonomy; empowering them may also help in reunification with their families. Furthermore, providing children with the motivation and support to sustain themselves may help them to engage in safe sexual behaviour.

8.10.2 Awareness Approach- Secondary Intervention Level

The study evidenced that children had little or no knowledge regarding HIV/AIDS and STIs, and engaged in high-risk sexual behaviour (see Chapters Six and Seven). Having no knowledge regarding HIV/AIDS and STIs may influence their risky sexual behavioural pattern. In other words, their lack of knowledge increases the chance that they will engage in risk-taking sexual behaviour. Without having knowledge regarding HIV/STIs and AIDS and risky sexual behaviour, it is difficult to anticipate risk-free sexual behaviour. It is therefore essential to run awareness programmes specifically for street children regarding HIV and AIDS, in order to promote behavioural change.

Considering the findings in the study which showed that the children had no understanding regarding STIs, the incorporation of STIs in the awareness programme is urgently required, along with the HIV/AIDS prevention programme (see Chapter Seven). USAID (2000) reported the importance of the impact of STIs information on HIV prevention programmes. An awareness programme without providing a respective understanding of HIV, AIDS and STIs would be insufficient.

The findings of the study identified the sharing of syringes and re-use of syringes after cleaning with water, as well as the sharing of needles during the tattoo-making process. Also it revealed that children make cuts and slashes, which are further sources of risk and potential HIV transmission. The study also found that

the lack of awareness of universal precautions related to blood and used health hardware are a risk for hazardous diseases, including HIV.

The programmes will therefore need to go beyond risky sexual behaviour and address other behaviours that present risks, and should also aim to change the negative attitudes many street children have towards AIDS, since this may be a reason why the children do not seek treatment. Given that sex is the major mode of HIV transmission, promotion of condom use and provision of condoms should be foremost in HIV/STIs intervention programmes. However, the particular problem of children not being able to use condoms because of size needs to be addressed. An approach which includes campaigns to change attitudes towards high-risk behaviour, and which enables street children to access and use condoms would be a sign of a caring health service. It is essentially important that messages about the importance of condoms, where to find condoms, and how to use a condom, are incorporated in the approach. Another finding of the study was the need for the dissemination of information about the use of condoms to people of all sexual orientations and practices, and not only to certain groups and certain orientations.

Information and communication are important strategies for HIV/STIs and AIDS awareness and prevention programmes. The use of media to provide information depends on the targeted population, due to its effectiveness occurring differently. The overall aim of this approach should be to provide inclusive knowledge regarding HIV, AIDS and STIs respectively, and to reduce stigma. Programmes that target the specific situation of street children such as poverty and illiteracy would be more appropriate that programmes that are overly general.

8.10.2.1 Poverty and illiteracy

This study suggested that the street children are surviving in extreme poverty. The modern means of communication such as radio and television are not accessible to this population group. Although radio and television are broadcast at a national

and international level which is widely accessible, this is not the most suitable format for children on the street. In providing public information about HIV prevention, it is important that health authorities recognise that many street children are out of reach of electronic media.

Children in this study did not read leaflets and the level of education was very low; this suggests the need for different forms of communication that are appropriate for the needs of this population. A media campaign involving the use of print media such as pamphlets, leaflets or newspapers designed for those who are literate, might not active in an awareness programme for street children. Since the street children have a lack of education, the use of easily understandable printed media are appropriate to distribute knowledge. If the printed materials are understandable, clear and in the local language, this will help them to grasp the information. The free distribution of simple text such as that used in comic books, along with stickers, posters and booklets with clear illustrations designed for street children, would work well for transferring knowledge regarding HIV/AIDS/STIs and other related diseases. Picture books that show the different types of diseases such as HIV/AIDS and STIs at various stages would also be effective.

8.10.2.2 Activities and interests

This study revealed that street children have a sense of solidarity and tight relationships with their friends. They have strong networks through which they provide each other with protection and support, and there was also evidence of hierarchies of power, with some children clearly having more street authority than others. Utilizing the strengths and resilience of children, and methods that are particularly appealing to children, may be an appropriate means of engaging them in discussion about HIV and AIDS. For example, the inclusion of street drama and plays by their peers in a communication and awareness campaign might be an active means of increasing awareness. Children may take interest in drama which they can easily understand and remember, and which they can interpret in their real life. A peer-based programme might be one effective way of raising

awareness for children, as it would give practical knowledge and influence behavioural change. Similarly, street educational video film, street documentaries and talks could also be included in the communication and awareness campaign. Use of children in such programmes and performances would make use of the inter-personal relationships that exist among street children, and may be more effective than other methods.

Also, the children were found to be interested in watching movies. I observed that they talked about actors and actresses and tried to imitate and copy their activities. A role-model based programme, and the use of actors, actresses, singers or comedians who are well known in the society, might be helpful to disseminate information related to HIV/STIs and AIDS among street children. Plays, drama and comedy performed by role models would work in the intervention programme.

Launching a programme of songs, games and poems for children could also be interesting and would be useful. They might become interested to hear and learn from these, and may interpret them in their real life if the information was heard from influential members of society. The focus on such activities might open up talk on issues relating to sex and sexuality, which in turn would contribute to reducing stigma. Such a campaign would need to be reinforced widely across the country, within the context of a national policy on HIV/AIDS and STIs transmission, prevention and treatment.

8.10.3 Public Health Approach- Tertiary Interevntion Level

HIV is asymptomatic and of an incurable nature, which makes it different to STIs, though these are closely interlinked to each other in terms of both prevention and transmission. HIV/AIDS prevention programme requires a multi-sectoral approach, led by health sector (WHO, 2008) and which utilizes a general public

health approach alongside specific interventions such as the model I have proposed.

However, since HIV/AIDS and STIs are preventable communicable diseases and manageable infections, and are influenced by living situations, it would be best to include a public health approach in the model for an HIV/AIDS and STIs intervention programme. A public health approach which includes comprehensive efforts on prevention, treatment and care, and support for the well-being of children, is needed.

The public health approach focuses on health education programmes to increase health knowledge about communicable diseases including HIV/AIDS and STIs, how these are transmitted and how one can protect oneself. It advocates health and treatment access, and screening to reduce the rate of infection within a targeted population. As, the WHO (2011) suggests responses to HIV/AIDS should be intigerated into other health services and programmes.This approach incorporates a range of diseases, especially HIV-related diseases such as STIs, tuberculosis, diarrhoea and skin infections. Furthermore, the approach promotes access to care and treatment for persons living with HIV/AIDS and STIs, and has the overall effect of reducing the prevalence of HIV/STIs in the wider population. It often involves specific activities such as decreasing the rate of STIs and HIV infection by promoting the use of condoms and addressing drug abuse (including injecting drugs). The approach also aims to help children to live in a healthy environment, in order to combat opportunistic infections.

8.10.3.1 Living environments

Children in the street use the public environment for their survival. They survive in a dirty environment where litter and waste are disposed of, and live in a place which is not adequately protected from health risks. They lack the basic resources that they need for healthy living, such as toilets and clean water (see Chapter Six).

This makes them more vulnerable to health problems and hygiene-related infections. Living on the street is hazardous to health and has a serious impact on HIV as well as AIDS, which has already been explicitly explained (see Chapter Eight, p.249). The findings of this study are similar to the view of Panter Brick (2002), who says that living in the street environment is the worst health hazard for children.

The urgent basic need for these children is public health promotion. The basic needs for these children are proper healthy shelters, healthy food and provision of physical health care. These basic needs are urgently required in terms of reducing the risk of HIV/AIDS among street children.

If the state aimed to ensure that open spaces, parks and pavements remain clean, and that clean public toilets and safe drinking water are available, this would bring about a change in the health status of the children. A healthy living environment would enable children to dispose of their human waste hygienically, and to use clean water for their cleanliness and drinking purposes. The provision of a healthy public infrastructure would decrease the chance of contracting opportunistic infections associated with HIV/AIDS, for children who are already at risk of contracting HIV/AIDS.

8.10.3.2 Environment-related health status

The majority of the children in this study reported that they had ill health, suggesting the need for a comprehensive intervention programme with free access to screening for the common environment-related diseases such as diarrhoea, tuberculosis, jaundice and pneumonia. The children in this study did not access health care and treatment; instead, there was evidence of negative attitudes. Importantly, the study found that they are a mobile population group. For this reason, mobile health care providers should put effort into primary care so that street children would be able to access treatment quickly, which would protect

them from fatal illness. An integration of the systems that manage free distribution of medicine for such common diseases and infections would reduce mortality and morbidity.

Mobile health care and education services that include access to HIV/STIs testing, along with treatment for common infections, would be an appropriate means of getting services to the places where the children live and work. This would provide the opportunity to simultaneously screen for HIV/STIs, to provide treatment for AIDS and infections, provide health counselling and decrease the spread of sexually transmitted infections. The launching of a street-based clinic would facilitate learning about HIV status and provide understanding about sexually transmitted infections.

Information regarding sexual and reproductive health, including the availability of contraceptive and free health care facilities, is a necessary component of an effective health programme.Talks about acceptance of HIV infected people, sharing information and talking openly about HIV could reduce stigma and so help people to seek testing, prevention and treatment services andsupport.

Planning and designing mobile health care and education services to frequently target the children would be beneficial to them in several ways, such as by identifying their general health situation; enabling treatment for common health problems; identifying HIV/STIs infected children by frequent screening, and distributing condoms and providing information about general health and hygiene, including HIV/AIDS and STIs.

8.10.3.3 Treatment accessibility

Only one participant in this study responded with reference to voluntary counselling and testing (VCT) services, and only two mentioned the government hospital for treatment. On the contrary, almost all of children responded by

showing negative attitudes towards treatment. Treatment facilities and VCT services are essential in an intervention strategy to address the problems of children on the street. Integration of such facilities, by hospitals or organisations included in an outreach programme, would give priority to the children's easy access to treatment and increase their ability to approach services quickly and readily. The ready availability of VCT services would reduce the stigma surrounding HIV and encourage children to support and care for those affected. Voluntary counselling and HIV testing is crucial in the area of HIV prevention and care programming for children, and is essentially an entry point for social support services and associated medical care for those infected with HIV. The study suggested a strong underlying stigma about HIV/AIDS, and therefore it is essential to inform children that they would be treated anonymously and in confidence.

8.10.3.4 Unprotected sex

Condoms should be distributed freely to the children, as the authorities' expectation of children buying condoms themselves is unrealistic. Free condoms should be sufficiently available in nearby stores, eateries and cyber cafes, and any places with which the children become involved. By prioritising the distribution of condoms, a public health approach that adopted a separate programme to distribute condoms would help the children to access an adequate supply. However, the distribution of condoms by the other settings mentioned above would be a helpful method to include in the programme.

8.10.3.5 Use of drugs, alcohol and pornography

The use of drugs and alcohol is part of the culture of the street children. Children at a tender age used alcohol and drugs, which has a significant effect on health. The consumption of drugs and alcohol influences HIV/STIs and AIDS directly and indirectly. Early exposure to pornography potentially effect young children. It

is important to address the ready availability of pornography to children in the public health approach to the HIV/STIs and AIDS intervention strategy. Selling and buying alcohol drugs/injecting drugsand pornographic materials to or for children should be strictly prohibited.

8.11 Challenges in Tackling the Risks and Vulnerability

Tackling the risks and vulnerability of children living on the streets is a challenge. Firstly, street children are highly mobile and difficult to track; secondly, they engage in hazardous and illegal activities, which means they must operate in clandestine ways and, thirdly, they are shunned by society and therefore do not have access to mainstream services. These issues are discussed in full in Chapters Six and Seven. Of particular significance is the finding that the children had little knowledge about HIV/AIDS and STIs, and even where they had some knowledge, this was not translated into changes in behaviour. This is confirmed by the fact that the study suggested the children knew the importance of condoms as a means of prevention of HIV, yet condom use was non existent or inconsistent (see Chapter Eight, p.257). Therefore, the knowledge which they have is not reflected in their behaviour.

These findings suggest that existing approaches and policies may not be appropriate to reach and influence this particularly vulnerable population. The overriding challenge is how to intervene in order to reduce HIV/AIDS and STIs risks. HIV/AIDS intervention strategies discuss the need for behavioural change and the requirement for knowledge regarding HIV/AIDS. In the case of street children, although knowledge is required to influence risky behaviour and so minimise the risk and vulnerability, a policy system based just on providing knowledge to change attitudes and behaviour is clearly not an adequate solution.

Given the prevailing situation, a programme promoting condom use is urgently required, and the emergence of condom use promotion in any of the prevention

programmes would be effective. A prevention programme could be judged to be successful on the basis of consistent use of condoms. However, considering the circumstances suggested in this study, trying to change their behaviour by forcing them without understanding the situation might not be successful. It may be worth mentioning the uncomfortable truth that there is a need for condoms to be made which are child-sized. This is very controversial, but I think could potentially make a huge contribution to the welfare of street children worldwide.

Also, as the study demonstrated, their risky sexual behaviour (unprotected sex and multiple partners) was associated with subsistence. It is unrealistic to provide suggestions to change their multiple partner behaviour, as that is their source of subsistence. This study suggested that the girls' inability to negotiate condom use was associated with fulfilment of their needs (see Chapter Seven). Therefore I would argue that there are difficulties in putting forward suggestions to change high-risk sexual behaviour.

Therefore, improving the living situation of street girls by offering work opportunities, and so boosting their low self-esteem, would break the vulnerability pattern. Facilitating girls in building up self-esteem would encourage them to negotiate protected sex, which is highly crucial for HIV/STIs intervention.

I conclude that empowering, supporting activities and motivation for the children are the factors most needed to boost their confidence and self-esteem in order to prevent risk and vulnerability to HIV/STIs and AIDS. It would help them to negotiate safer sex and be able to say 'no' to unprotected sex. Empowering girls would give them autonomy, and that would support them in not having to engage in risky multiple sexual relationships to fulfil their needs. Therefore, bringing the idea of empowerment into the programme would be the best approach to reduce the risks and vulnerability of children who lack the ability to negotiate safer sex. Making the HIV/STIs and AIDS intervention policy oriented to gender sensitive issues is essential, due to the girls' socio-economic situation.

8.12 Summary of the Chapter

In this chapter, the key findings from the study have been discussed in relation to a public health approach and key literature. The study explicated the cumulative effects of HIV/STIs and AIDS risks and vulnerability by compiling the four domains of risk and vulnerability, which provide an understanding of the *complete* phenomenon of the HIV/STIs and AIDS risk and vulnerability of street children and the relationships of these factors to broader society. A model (Figure 8-3) was used to demonstrate an understanding of the phenomenon of interlinking risks and vulnerability. This ways in which the links between these risk factors establish sexual networking and contribute to the spread of HIV/STIs to broader society were also illustrated. I introduce the concept of holistic approach (CAP model) which is a public health strategy targeting the specific need of street children. Challenges in tackling the HIV/AIDS risks and vulnerability of street children are also presented.

9 CONCLUSIONS AND RECOMMENDATIONS

9.1 Introduction

In this chapter I briefly review the findings of the study and highlight its contribution to knowledge to the field of HIV/AIDS prevention for especially vulnerable groups of children, such as street children. Recommendations for policy and programming based on the public health approach that has been the constant theoretical strand running throughout the thesis are suggested. While the knowledge generated by this study is derived from the application of a public health framework, the findings raise critical questions about whether the universal strategies to HIV prevention that underpins much public health policy are effective in targeting groups who are socially excluded and unlikely to be reached by broad health campaigns. My study suggests that there is need for greater attention to the social factors that contribute to exclusion from the outset and which in turn, increase levels of vulnerability to health risks such as HIV/AIDS. Vulnerability to HIV and STI and the risks these present for developing AIDS emerge primarily as *outcomes* of the social exclusion that street children face and the living conditions and behavioural factors that this leads to. While focusing on risk factors may be important for secondary and tertiary level intervention, in contrast to much of the literature on public health and HIV/AIDS, my research shows that in respect of street children, identification of risk is largely an 'end-point' activity that may come too late to be an effective platform for preventative services. The study points to the need to integrate public health policy with policy and programming for the support of families and protecting the rights of children from abuse in order to prevent the preconditions which increase children's likelihood of becoming street children in the first place. This integrated model is symbolised conceptually in the diagram above. In concluding this chapter I highlight the contribution to knowledge this study makes, discuss some of the research limitations and make suggestions for future research.

9.2 Summary of the Study

This study is about the risks and vulnerability of street children regarding HIV/AIDS and STIs. The definition of risk used throughout the thesis is in line with that suggested by WHO (2008) (see Chapter Two, p.48) in relation to the study of HIV risks and vulnerability; vulnerability means the probability or likelihood of an individual becoming infected with HIV as a consequence of certain behaviours and practices (risk factors). Risk, on the other hand, refers to external factors which may be outside the control of the individual, which may heighten, or lessen, the vulnerability. The meanings of HIV, AIDS and STIs, and the inter-relationship of these separate but connected health problems, are central to this thesis, and have been discussed fully in Chapter One.

Within this conclusion chapter, I provide a summary of the research aims and restate the theoretical justification and preliminary conceptual framework which underpinned the study and which, in turn, led to the research questions and research design. I also highlight the distinctive contribution to knowledge that the study makes. In the second part of the chapter I revisit the main findings and show how these are supported by other studies and, finally, I discuss recommendations for programme development and review some implications for policy and practices.

Through the analysis of the literature I identified that the risks street children encounter are not only those that pertain to living on the streets, but that consideration also needs to be given to the risks they faced beforehand, since these are the prime determinants of the decision to live on the streets. I further identified risks arising through behaviours and environment, which actually perpetuate and increase the probability of HIV infection. Drawing on the notion of four sets of risk factors: pre-street risks, street life risks, aggravating risks and perpetuating risks, I developed a theoretically derived (public health approach) conceptual framework, (see Chapter Three, p.92), which provided justification for the research and generated the aims and objectives of the study; this offered a

theoretical rationale for the methodology and the lens for the data analysis (see Chapter Four).

The review of the literature showed that there were significant gaps in the information about street children's knowledge of the ways of acquiring HIV and STIs, about their attitudes to HIV/AIDS and about their sexual behaviours. Whereas other studies have been fragmented, or have focused only on narrow aspects of children's lives, I sought to discover the complete phenomenon of the risks and vulnerability of street children concerning three health problems that are intricately connected, HIV, AIDS *and* STIs, whilst also compiling the primary reasons for, and effects of, being on the street. There are no published studies which examine the links between all of these issues for children living on the streets in Nepal. Given that sexually transmitted infections increase HIV probability, and HIV risks increase probability of the early onset of AIDS, this study therefore provides new synergies in our understanding about the interconnections of these risks for street children, and in this respect makes a distinctive contribution to knowledge. The aims of the study were to explore in what ways children become street children and in what ways they are exposed to the risk of acquiring HIV/STIs through living on the street, as well as how these risks accumulate to increase vulnerability to AIDS which eventually shortens their life span. In summary, the study aimed to discover the causes and consequences of the risks of, and vulnerability to, HIV infection for street children (see Chapter One).

The public health approach to HIV prevention has informed this study throughout, providing the theoretical basis for the conceptual framework, which in turn guided the methodology (questions formulation, sampling sufficiency, data collection strategies and informed the analytical process). The sequences and flow of the research process are discussed in the Methodology Chapter (Chapter Four), and demonstrate congruent methodological coherence. The schematic illustration of methodology is presented in activity flow diagram (see Figure 4-1, p.100). Triangulation was evidenced through the use of two approaches: ethnographic

observation and in-depth interviews, with the rich contextualisation provided by the ethnography enabling me to fully explore the research questions identified from the outset. A systematic analysis of the interview data, through the identification of codes and themes, was carried out in a meticulous manner and led to four major themes that connected to the research questions (parental mistreatment; high-risk sexual behaviour; lack of awareness regarding HIV/AIDS/STIs, and negative attitudes to HIV/STIs and people living with HIV/AIDS) (see Figure 4-2, p.120). Information regarding children's the living conditions however emerged primarily from the ethnography aspect of the study and this added the theme of habitat-related risks (see Chapter Six).

Triangulating methods of observation and in-depth interviews played a significant role in the establishment of the robustness of the study. Moreover, combining these methods has been identified by other researchers as a suitable strategy for collecting data on HIV and street children (see Chapter Four). In this study, integrating these methods to create an ethnographic case study approach (in which the 'case' examined was a specific social problem within a specific group) provided me with a deep and wide understanding of the HIV/STIs and AIDS risks and vulnerability. This particular form of case study research design is appropriate in a study that seeks to test and develop theory (as in this instance) and draws on the ideas of researchers such as Horgan (2006) and Fisher & Ziviani (2004) who argue that the case study concept can be applied to a specific problem or issue by exploring the views of multiple respondents. The findings are based on data from 28 participants and, although supplemented by ethnographic observation of a larger group of children, one of the limitations of the research, in common with other qualitative studies, is that it is not possible to generalise from a small sample. Nevertheless as Horgan (2006) emphasises, a theory-based ethnographic case study using a wide range of respondents increases the applicability of findings to other settings. There were however, several challenges with the approach adopted, and these have been detailed explicitly in Chapter Five, my reflective chapter. The sensitive topic of this study also raised complex ethical

issues which are discussed in Chapter Four (p.124). In conducting this study, I have sought to ensure that it complies with the standards for qualitative research suggested by (Lincoln & Guba, 1985): credibility, dependability; conformability and transferability and I believe the trustworthiness of the research is established.

The study confirmed that children 'of' the street are at risk of acquiring HIV/STIs and also of developing AIDS, which shortens their life span. This risk also extends to the societal level in that, without access to information, and prevention and treatment services, the behaviours that many street children are forced to engage in are likely to increase HIV transmission to other groups through sexual networks. The four domains of risks and vulnerability identified in this research are interconnected, with factors from one domain affecting another. The study discovered the ways in which these risks contribute to AIDS vulnerability, not only among street children, but also within broader society. Through my analysis of the findings of the study, I developed a new model of understanding of the complete phenomenon of HIV/STIs and AIDS risks and vulnerability for children in the street (Figure 8-3, p.270); in accordance with this, the original theoretical framework (Figure 3-1, p.91) was extended.

9.3 Summary of the Main Findings and Implications for Policy and Practices

The street children are deprived, and lack basic needs. The lives of the children are hazardous due to environmental and behavioural factors. They are without parenting care, and therefore are responsible for their own lives, so they are struggling to survive independently. They adopt several strategies for survival, such as survival sex, which is the girls' main living strategy. Pre-marital sex is widely practiced among the children, even though this is counter to social norms. The children in this study shared attitudes, values, goals and practices in a gang or group, and in this way created a sub-cultural group in society. The activities of the

children showed that they have distinct ways of living which deviate from their earlier cultural socialisation and incorporate different social values.

Moreover, the current study revealed that street children are victimised by other people in society. The children reported that the police, who were supposed to protect them, often abused them. People have negative attitudes towards children who live on the street. The study highlighted that the children are branded as dirty, burglars, thieves, petty criminals and prostitutes. It seemed that people did not think about the circumstances which the street children faced, and did not understand their problems. Moreover, I got the impression that children are possibly used by organ transfusion mafia (see Chapter Six, p.169). These factors meant that the children are an excluded group within the wider population and furthermore, the organisations that were set up to assist street children were viewed with suspicion, and also considered exploitative by the children. Therefore, there were no organisations which appeared to be effective, or to advocate effectively for the needs and rights of the children.

As stated earlier, in 1990 the government of Nepal ratified the Convention on the Rights of the Child (CRC) 1989 (Child welfare scheme and UNESCO, 2005). The framework of the CRC emphasises the protection of children's rights in every place and at all times. Its intention is to prevent any harm to, and improve the life of, any child under the age of 18. It legally binds governments to promote the rights and welfare of the child including basic elements necessary for subsistence, such as food, shelter, health care to live a healthy life, and the right to protection from diseases (UNICEF, 2011).

However, Nepal has many of the negative indicators which impact on the protection of children's rights, such as poverty, internal conflict and poorly developed infrastructure and policy and, while government agencies and NGOs may be making some strides towards improving the lives of children, the marginalization and neglect of street children is marked. There is a clear need for

more to be done, not only because street children have individual rights as human beings, but also because the neglect of their care and health has implications for wider society in terms of HIV/AIDS. Also, the study suggested that street children are an excluded population group, while they have arguably the greatest needs, including even basic needs such as food and water. However, the evidence showed that these issues are overlooked.

The present scenario shows that the health situation of the children is the worst issue, and is such that they are at risk of acquiring HIV/STIs and AIDS. The apparent situation of the children is worrisome. There are some organizations supporting street children (see Chapter One, p.34), but the study revealed the children's negative impressions of these organizations (see Chapter Seven, p.201), even though they knew they are intended to help them. It is essential to identify the reasons that children are not seeking those organizations, and why they have negative attitudes to them and that effort are made to promote the facilities of the children's welfare system.

Children mistreated in the family have made a journey to come onto the street, where children are surviving without having basic needs. When looking closely at their living situation, it is clear that the nation has been unable to address this issue, which puts the children at risk of acquiring HIV/STIs and AIDS, and will shorten their lives eventually. Therefore, programmes which challenge the stigmatisation of street children are needed.

Policies are necessary to address the unhealthy living situation with a view to reducing risks to the children's health and an impending AIDS epidemic. This study identified the existing problems, which should contribute to encouraging policy makers to devise a welfare support programme for street children, in order to reduce the risk of HIV/STIs AIDS and reduce morbidity and mortality. Compulsory laws and programmes enforced by the government would facilitate their better health status and be helpful for the children as a population in

desperate need of help. Furthermore, I have proposed the CAP model, explained above, which can be adopted for HIV/STIs and AIDS intervention.

9.4 Main Contribution of the Study to Scholarship

There are several ways in which this study contributes to knowledge:

1. Firstly, as one of the few studies to examine the interlocking factors that link STIs, HIV and AIDS among an especially marginalised group of children as well as the factors that lead to them becoming street children and those that impact their daily lives, I have developed the notion of the 'complete phenomenon' of street children. This conceptual model shows how the risks that the children face begin before they live on the street are compounded by the environments and behaviours they have to adopt in order to survive on the streets, and that ineffective policies, programmes and services perpetuate the risks to children themselves and to society more widely. Significantly, the study shows these as interlinking risks which feed on each other to propel street children into HIV/STIs and AIDS vulnerability (see Figure 8-3).

2. Secondly, the research identifies the cyclical ways in which these interlinking risks impact and are impacted by the wider societal level through sexual networks, multiple partnering and unsafe sexual practices that street children engage in and are subjected to. The children were identified as a bridging population for HIV transmission and though they are largely spurned by wider society, paradoxically they are also widely sexually exploited. What young people present therefore as a daily survival mechanism (involvement in prostitution) turns out in reality to be a threat to the young person's survival in the long term as well as for others as sexual networks spiral into families and communities. Clearly further research is needed to examine whether there is a correlation

between the growth in the numbers of street children, the increase in children infected by HIV and the rates of prevalence of HIV in a general population however, what emerges unequivocally is the need for specific measures to protect street children from sexual abuse and exploitation.

3. The third way in which this study contributes to knowledge is in the finding that the 'turning point' for risk to HIV/AIDS occurs at a much earlier point in the child's experience than that suggested by many public health prevention programmes and that interventions that target family support and parental mistreatment may go a long way to preventing risk of AIDS as an outcome for children. This suggests the need for a fundamental rethinking of public health policy to ensure it is more aligned with other forms of social policy with integrated prevention programmes being developed which address the root causes of street living for children.

4. The study has also produced findings that point to the need for a highly specific approach if the prevalence of HIV and AIDS-related deaths are to be decreased among street children. For example, misinformation, myths and lack of knowledge emerged as a particular risk factor and yet most HIV prevention strategies utilise methods of public education that are not readily accessed by children who live on the streets (e.g. leaflets, media campaigns, posters). Another example concerns the use of condoms. The study suggests that interventions which promote the use of condoms would need to take into account myths that surround their use among this group of children (for instance, that condoms are not needed in homosexual sex since this is not regarded as "real" sex) and the fact that condoms are not made in sizes that are appropriate for young children. The study has also contributed the understanding that, not only are the lack of knowledge and behavioural patterns of the children risk factors for contracting HIV/STIs, but that children's living situation influences the possibility of HIV

developing more speedily into AIDS thus reducing the life span of future generations.

9.5 Implication of the Public Helath Approach

Public health, "is fundamentally an effort to promote . . . shared goals" of "reducing disease, saving lives, and promoting good health," and is thus "a species of communitarianism" in (Wiley, 2012). Taking Wiley's ideas further (and thus expanding the concept of public health), the species of communitarianism that is likely to be most effective in reducing the prevalence of disease, saving the lives of street children and promoting good health would be one that recognises the role of families and communities in prevention of non-health problems that may impact the health of children in the long term, such as parental mistreatment and the breakdown of the family. The innovative public health approach advocated in my recommendations includes the systematic use of strategies to prevent children leaving home to live on the streets based on the knowledge that once they do, they become quickly exposed to risky behaviour that then leads to the risk of HIV and other STIs.

The first set of specific technical recommendations then, focus on the prevention of children from becoming street children through community-based programmes. The second set of recommendation focuses on providing targeted knowledge (information, education and communication) in ways that street children might better access to protect them from risky behaviour. The third set of recommendations focus on HIV/STI testing, counselling and includes access to treatment for other infections. This includes information and strategies that specifically encourage condom use to promote protected sex, and discourages the use of drugs and alcohol. This set of recommendations also emphasises the interaction between prevention and treatment. These recommendations are set out within a framework which I have named the CAP (community/awareness and prevention-based) Intervention Model and I suggest this broader model (combining both health and social policy) expands the public health concept from

its focus on preventing communicable diseases and managing infections to one which is more likely to be effective in meeting the requirements outlined by WHO (2008) which states that an effective public health approach prevents or controls the problem from happening in the first place or prevents it reoccurring. The CAP model is a holistic approach as its implementation prevents the problem from happening at the root level and the strength of the model therefore is its potential capacity to curb the growth of HIV epidemics. The model has been developed out of this study of street children however it is equally useful as an approach in tackling other marginalised groups, especially in relation to children.

9.6 Public Health Challanges

The study showed that street children are at increased risks themselves of HIV-AIDS and that through their sexual networks and their sexual exploitation, they are a bridging population in the wider transmission of HIV/STIs. The study reveals clear evidence that risky sexual behaviours are normalised among this group. Cultural factors which might prevent these behaviours among children in other situations are subsumed by a sub-culture generated by the need for survival on the streets and which give rise to a different set of values and social codes. In this context, the transmitting and acquiring of HIV/STIs is considered inevitable or is minimised. There are signs that the spreading of diseases in this group of population and in the society is becoming a public health challenge in Nepal. By using the public health measures as shown in the CAP Model to introduce a range of complementary interventions (such as community-based family support, awareness and education programmes, programmes to decrease infectious disease, drugs and alcohol controlling measures, distribution of condoms, and the improvement of the environment in which street children live e.g. clean drinking water, filtration and sewage treatment to improve sanitation) would improve the health status of children and would combat the risk regarding HIV/STIs and AIDS. It s beyond the scope of this thesis to explore the ways in which the model

could be implemented, or to identify the resources or constraints to implementation however shows how the knowledge produced by the study can be used in practice.

9.7 Recommendations

The study is important not only for the new knowledge it has produced but also because it expands the concept of the public health approaches in ways that could significantly improve the health of children. Public health officials, stakeholders and planners will recognize the need to address the HIV/STIs and AIDS risks among street children and the study will also be helpful in support of their work. The information produced by the research, the conceptual model of risk and vulnerability and the CAP Model for policy and programming provide guidelines that can be used by national public health officials, researchers of HIV/AIDS/STIs, programmers, nongovernmental organisation, including community and civil society, organisations working for children, and health workers. These may also be of interest to international funding agencies, the scientific media, health policy-makers and advocates. The location of the study and its socio-cultural context is specific to one country however the findings may have broader application and relevance for the control and prevention of HIV among street children in other developing countries.

9.8 Study Limitations and Recommendations for Future Research

In spite of the contribution this study makes to knowledge of HIV prevention among street children, it also has some limitations and as a result there remain areas in need of further investigation as shown below:

Responsible authorities who are working for street children do not yet seem to have ‘identified areas of priority’ to reduce risks. This research has identified the

health risks that might lead to the spread of diseases. The study has suggested that the children practice risky sexual behaviour and that this increases their chances of contracting and transmitting HIV/STIs. Also, their living situation on the street puts them at risk of acquiring HIV/STIs and eventually AIDS, which will increase morbidity and mortality. The primary reason for them becoming street children is highlighted as the dynamics of the family. If children were helped at an early stage, and not forced to become street children, the study suggests that the chance of exposure to HIV/STIs would be minimal; this is because societal norms and cultural values would remain intact and would inhibit the behaviours that lead to HIV.

My suggestion for future research would be an investigation into the families of the street children, to investigate parental attitudes, views and behaviour in a broader context, in order to learn the root factors that pushed these children onto the street. Finding the cause of the children becoming street children at a root level would help to prevent children from being exposed to conditions in which they are forced to survive without the protection and support of families.

Also, the study confirmed that the living situation has impact on HIV and the progression of AIDS. Food and hygiene is an increasingly important concern in the context of HIV/STIs and AIDS. The health of the children was found to be poor; therefore research needs to be conducted into the further health services that would be required to sufficiently reduce the risk of morbidity and AIDS related death.

The research was qualitative in nature. The purpose of the research was to explore in depth, the risks and vulnerabilities of street children in relation to HIV/AIDS and STIs. It also focused on identifying the kinds of sexual behaviour and opinions that exist among street children, and possible reasons for their behaviour. However the study did not explore how many street children have knowledge on specific topics or engage in certain behaviours. Since the research has used a case

study approach with a small number of participants, the outcome of the research is not for generalisation to the wider population. Further quantitative research could be recommended to verify the outcome. A further limitation of the study is that the research was restricted to only one area of Nepal. Similar research in other parts of the country, or cross-cultural studies could be beneficial in understanding the issues that affect street children. Ethnography proved to be very useful for understanding the street children's behaviour and the conditions in which they lived their lives. The time given in this research for the observation was restricted because of limited resources. An extended period of observation in the field could provide further information on potential risk behaviours and practices regarding HIV/AIDS and STIs. Another critical limitation of the study is that it was not gender or age specific. However age and gender emerged as important factors (see findings chapters) and there is a clear need for research which examines at a deeper level, the ways in which gender and age intersects with risks of HIV-AIDS. Despite these limitations, the study provides valuable information about children's vulnerability to HIV/STIs and the risks they face of developing AIDS.

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APPENDICES

Appendix A: Research Participatant Information Sheet

Risks and Vulnerability to HIV, STIs and AIDS among Street Children in Nepal: Public Health Approach

Street children may have a low level of literacy and may not understand what the researcher intends to do. This information sheet will help the researcher to explain about the research before starting interview. This is not a letter to give to participants to read. Street children in Nepal are unable to write and read English and the researcher will translates this information sheet into Nepali and will simplify the language to ensure it is age-appropriate, culturally appropriate and reflects the language of street children.

I am Sangeeta Karki, a PHD student at the School of Human and Health Sciences, University of Huddersfield, England. Before you decide to take part in my research, you need to know why I would like to involve you and why the research is being done. Please take time to listen the following information that I am going to explain to you. If there is anything that is not clear to you, or if you would like to know more please feel free to ask me.

If you need to contact me, my contact details have been written at the bottom of this sheet.

REASONS FOR STUDY-

I am here to find out about the risks you may face in contracting HIV-AIDS or other sexually transmitted diseases. I would appreciate you taking the time to be interviewed. I expect the interview will take around two hour.

Findings of this research will be useful for the government and health/social workers in providing AIDS prevention and treatment programmes. It is also hoped that this research will be used for programmes to reduce the transmission of HIV and STIs.

MAY I WITHDRAW FROM THIS STUDY?

Withdrawing consent- This study is completely voluntary. Even after your agreement to participate in the study, certainly, you are free to withdraw your consent or say 'no' midway during the interview. You may withdraw at any time without giving a reason. You don't have to answer all of the questions.

If you agree to take part in the study:
I will ask you about your insights on issues regarding causes that you may face in contracting HIV-AIDS or other sexually transmitted diseases.

WHAT HAPPENS AFTER THE INTERVIEW?

Anonymity - The interview will be recorded or noted. You can decide whether or not your interview can be taped. You will not be identifiable in any documentation that is written or published from this research. All information will be fully anonymised to eliminate any traces of your identity.

WILL THE INFORMATION BE CONFIDENTIAL?

Confidentiality - Confidentiality will be maintained throughout the research. Information you provide will not be divulged to anyone else without permission or when it is not necessary. Only the researcher and her supervisors will be able to look at any records. Information will be securely locked away in a safe place and computer data will be pass-word protected. The findings will be used in future also and will maintain confidentiality.

WHAT WILL HAPPEN IF I GET DISTRESSED DURING THE INTERVIEW?

If you become distressed during the interview or if it seems that you need help, you will be given the contact details of organisations that may be able to assist you.

WHAT WILL HAPPEN NEXT IF I AGREE TO PARTICIPATE?

Informed consent- Before the interview starts, you will be given a consent form. After reading the consent form, you and researcher will sign the consent form as an approval to proceed into the interview or if you don't wish to sign in the consent form verbal consent will be accepted.

I hope you will agree to participate. Many thanks for your anticipated co-operation. If you have any queries, more information may be obtained from the researcher.

Researcher
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Appendix B: Interview Consent Form for Street Children

Risks and Vulnerability to HIV, STIs and AIDS among Street Children in Nepal: Public Health Approach

Identification code:

Name (Optional):

	Yes	No
I have been fully informed of the nature and aims of this research and consent to taking part in it. (Translated in Nepali)-		
I understand that I can stop the interview at any time without giving any reason and that I can choose not to answer any questions if I so wish (Translated in Nepali)-		
I give my permission/do not give my permission for my interview to be tape recorded. (Translated in Nepali)-		
I know that I can ask for the tape recorder to be turned off, if I wish (Translated in Nepali)-		
I give permission to be quoted (by use of a false name). (Translated in Nepali)-		
I understand that the information from the study will be kept in secure conditions at the University of Huddersfield and will not be seen by anyone except the researcher and her supervisors (Translated in Nepali)-		
I understand that my identity will be protected by the use of a false name within the research report and that I will not be identified in any way.(Translated in Nepali)-		
I understand that the some of the direct quotation used during the interview will be used in future research purpose but anonymity will be maintained.(Translated in Nepali)-		
I understand that if I become distressed during the study, I will be given details of an agency I can contact for help. (Translated in Nepali)-		

Additional Comments:

Participant's Signature: **Date:**

Researcher's Signature: Sangeeta Karki Date

Two copies of this consent from were completed: One copy to be retained by the participant and one copy to be retained by the researcher.

Appendix C: Demographic Status of Participants

No	Name used in the thesis	Nick Name	Gender	Age	Cast	Region of origin	School attendance	Family composition	Live	Living with	Work	Marrital status/friend	Health status	Medical condition
1	13, Male	Bijaya	M	13	Bogati	Kavre	Up to 1	4	Street	Friend	Begging	Girl friend	Weak	No
2	16, Male	Arjun	M	16	Tamang	Sarlahai	Up to 4	4	Street	Friend	Tourist guide	5 Girl friend	Average	HIV screening test
3	18, Male	Sunil	M	18	Roka	Bolkhu	Up to 3	7	Street	Friend	Begging	Girl friend	Poor	Ribs fracture treatment
4	14, Male	Prem	M	14	Khadka	Jhapa	Up to6	8	Street	Friend	Parking	Girl friend	Good	Hand fracture treatment
5	18, Male	Vola	M	18	Bika	Kavre	Up to 3	11	Street	Friend	Catering	No	Poor	No
6	15, Male	Binod	M	15	Nepali	Dhading	Never	6	Street	Friend	Pickpocket	Girl friend	Poor	Blood check
7	17, Male	Janak	M	17	Tamang	Kathmandu	Up to 3	6	Street	Friend	Rag pciking	Married/sepe	Average	Blood check
8	16, Male	Kumar	M	16	Khadka	Ramechep	Up to1	10	Street	Friends	Rag/garbage picking	Girl friend	Poor	Head wound hit while sleeping
9	15, Male	Anil	M	15	Sonam	Argakhachi	Up to 4	7	Street	Friends	Rag picking	Girl friend	Good	Leg fract/Police hit
10	20, Female	Gita	F	20	Rai	Bara	Up to 3	6	Street	Alone	Casual labourer	Married/sepe		Cough, fever
11	23, Female	Saru	F	23	Rai	Kathmandu	Up to 7	6	Street	Street child	Prostitution	Married/sepe	Good	No
12	14, Female	Parvati	F	14	Tamang	Sindhuli	Up to 5	5	Street	Street child	Prostitution	Marrie/sep	Poor	Pneunomonia,cough, fever
13	14, Female	Puja	F	14	Magar	Ramechap	Up to 4	3	Street	Street child	Prostitution	Married	Poor	Diarrhoea,fever
14	16, Male	Binod	M	16	Magar	Unknown	No	Unknown	Street	Street	Thief/rag pick/ casual labourer	Married/Sepe	Good	Blood test
15	18, Male	Dev	M	18	Gurung	Dharan	Up to 4	5	Street	St child	Rag picking	No	Good	No
16	16, Male	Madan	M	16	Bika	Nala	Up to 3	5	Street	Friends	Rag picking	No	Good	hand fracture /chest pain

17	14, Male	Kiran	M	14	Khadka	Unknown	Upto 1	Unknown	Street	Friends	Rag picking	No	Good	None
18	18, Male	Manoj	M	18	Ghimire	Kathmandu	Up to 1	Join fam /8	Street	Frinds	Pick pock/begging/rag picking	No	Average	Chest pain
19	20, Female	Kamala	F	20	Gurung	Kathmandu	Upto 5	7	Street	Male friend/stchil	Prostitu/pick pocket	Married/sep	Average	STIs/sore/burn/cure
20	18, Male	Guru	M	18	K.C	Kathmandu	Up to1	5	Street	Friend	Pickpocket/thief/begging/conductor	N0		Blood test
21	15, Female	Anita	F	15	KC	Sarlahi	Up to 3	10	Street	Friend	No	No	Poor	Cough/fever
22	19, Male	Bikas	M	19	Chettri	Jajorkot	No	8	Street	Friend	No	No	Average	No
23	13, Male	Saroj	M	13	Bika	Sayanja	Up to 4	6	Street	Friend	Begging	No	Average	Chest pain
24	15, Female	Sunita	F	15	Mandal	Saptri	Up to 8	5	Street	Boy friend	None	Boy friend	Averge	None
25	18, Female	Sona	F	18	Shrestha	Pokhara	Up to 5	6	Street/rented	Friend	Prostitution	Married/sep	Average	Bleeding nose/mouth/cough
26	14, Male	Bikas	M	14	Nepali	Sayanja	No	4	Street	Friend	Begging/rag picking	No	Good	dog bite/injection
27	16, Male	Pravin	M	16	Pariyar	Dhading	No	4	Street	Friends	Begging/rag picking	No	Good	Juindice/chest pain
28	23, Female	Sunita	F	23	Shrestha	Sindhupalchok	Up to 8	5	Street/lodge	Alone	Prostitution	Married/sep	Good	T.B/ STIs
29	20, Female	Sapana	F	20	Tamang	Nuakot	None	None	Street	Husband	Prostitution	Married	Poor	None
30	20, Male	Roshan	M	20	Dhungel	Jhapa	Upto 5	4	Street	Friends	Robbery/rag picking	Married/sep	Average	Lums in gorin/chest pain/ difficult breath
31	18, Male	Dipak	M	18	Chettri	Hetuda	Up to 2	7	Street	Friends	Robbery/pickpocketing	No	Poor	Never
32	18, Male	Bibek	M	18	Thapa Magar	Butwal	No	4	Street	Friends	Pick pocket/rag picking	No	Poor	Antiribies
33	22, Male	Anil	M	22	Gurung	Lamjung	Up to 10	8	Street	Friends	Casual labourer	No	Good	Never

Appendix D: Observation Guide

How the living situations of street children are at risk for HI/AIDS and STIs vulnerability from the following?

1) Settings: The physical aspects of the places in where the street children live. How is their living situation in health and hygiene aspects?

2) People: What are the characteristics of the street children who are present in the location, and why are they there?

3) Connections: What is the relationship between the street children with the people in the setting?

4) Activities: What activities are happening in the location?

5) Behaviour: What are the street children doing?

6) Signs: Are there any clues that provide evidence about meanings and behaviours regarding food, health, sex and sexuality and drug abusing behaviour?

7) Time: At what times do behaviours and events occur?

8) Goals: What are the street children in the setting trying to accomplish in relation to HIV/AIDS and AIDS risks and vulnerability?

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Appendix E: Interview Guide for the Indepth Interviews

IDENTIFICATION CODE:

1. DEMOGRAPHICS

1. Gender:

   Male Female

2. Age
3. Cast:
4. Region of origin
5. Did you ever attend school? What level of schooling did you reach?
6. Family composition (who is in the child's family of origin)
7. Where do you live
8. With whom do you live

- with roommate(s)
- Alone
- With Children
- Family members (specify)
- Others

9. Do you work? What type of work you do?
10. Marital status/partner/girl/boy friend –
11. How would you describe your health:

- Good
- Average
- Poor

12. Do you have any medical conditions you are aware of (specify)

Have you received treatment for any medical condition (specify – how long ago, form of treatment, effects of treatment, any difficulties accessing treatment)

2. REASONS FOR BEING ON THE STREET

2.1. Please can you tell me your story of how you came to be living and working on the streets?

3. KNOWLDGE OF HIV/AIDS & STIs TRANSMISSION

3.1 Would like to ask you some questions about Sexually Transmitted Infections and HIV/AIDS?

3.2 Can you tell me what an STI is, what HIV is and what you think AIDS is?

3.6 How is AIDS different to HIV?

3.3 How can one get/transmit HIV or STIs?

3.4 Who do you think is most at risk for HIV/STIs transmission?

3.5 Is it possible for a healthy-looking person to have HIV virus?

4. KNOWLEDGE OF HIV/AIDS & STIs PREVENTION

4.1THE PUROPOSE OF CONDOM USE

4.2 What do you think the condom use is?

4.3 Is there anything a person can do to prevent HIV/AIDS and STIs**?**

5. KNOWLEDGE OF HIV/AIDS & STIs TREATMENT

5.1 Do you know a place where you could go to get an HIV/STIs test?

5.2 Where can you go for HIV/STIs treatment?

6. SEXUAL BEHAVIOUR

6.1 Would you be willing to tell me about your sexual experiences (if any) and who are your sexual partners are/have been?

CONSISTENT USE OF CONDOM

6.3 Would you think to use condom every time you had sex?

SEXUALITY-

6.2 What types of sexual act you perform most? Why/ would you tell me why you prefer same sex?

PROSTITUTION-

6.4 Have you ever paid for sex/being paid for sex?

SEXUAL ABUSE-

6.5 Have you ever been forced to have sex- would you be willing to tell me about it?

7. DRUGS AND ALCOHOL ABUSE

7.1 Would you be willing to tell be about if you have used any drugs?

Yes-what types of drugs you used commonly?

7.2 Do you drink alcohol – can you describe how it affects you

7.3 Have you ever had sex while you were drunk or after using drugs?

8. ATTITUDES TOWARDS HIV/AIDS & STIs

8.1 What are your underlying thoughts about HIV/AIDS?

8.2 Do you think people would think less of you, hate you, think more of you, or would it make no different in how people you know think of you if you were tested for HIV.

8.3 Would you disclose your HIV status – why/why not and to whom?

8.4 What are your views about people who are infected with HIV/STIs? Would you care/hesitate someone you know has HIV/SITs?

8.5 How do you feel going to treat HIV & STIs? Is necessary/ curative treatment?

8.6 What would you think to have sex if you are having HIV & STIs? Would you think to protect others/or revenge?