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**MULTI-DISCIPLINARY EDUCATION WITHIN THE
HEALTH CARE PROFESSIONS.**

Barbara Wood.

A thesis submitted in partial fulfilment of the requirements
for the degree of Doctor of Education awarded by the University
of Huddersfield.

September 2001.

MULTI - DISCIPLINARY EDUCATION WITHIN THE HEALTH CARE PROFESSIONS.

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ABSTRACT.

The aim of this study was to investigate the perceptions held by health care professionals, of multi-disciplinary education. In addition, possible areas for the development of a multi-disciplinary approach were identified. The research focused on the views of nurses, physiotherapists, radiographers, speech therapists and occupational therapists.

The study adopted a case study methodology, incorporating a mixed-method approach in terms of data collection. A questionnaire was used to review the perceptions of multi-disciplinary education amongst health care professionals, and interviews were then conducted with a sample of the respondents to explore their views further.

From the outset, the research process assumed a multi-disciplinary perspective. During the study it became clear that organisational and professional factors were important influences on how health care professionals perceived multi-disciplinary education. The research appeared to indicate that the idea of “multi-disciplinary education” is a problematic concept and that multi-disciplinary education is acceptable, where it is appropriate. Most of the professions involved recognised the benefits of the process, but were anxious to protect the integrity of each individual profession, in the long term. Moreover, they maintained that the medical profession needs to be included in the process. The organisational findings were, primarily, that multi-disciplinary education might benefit from a cross-agency approach.

Perhaps significantly, it was suggested that multi-disciplinary education should be introduced at the pre-registration stage. It was apparent that teamwork does not always occur in practice and that this was an area that could be a focus for multi-disciplinary education. The research concluded that there should be joint ownership of any multi-disciplinary education programme across professions and organisations.

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ABBREVIATIONS

CAIPE	Centre for the Advancement of Interprofessional Education
CCETSW	Central Council for Education and Training in Social Work
DESS	Department of Economics and Social Science
DOH	Department of Health
ENB	English National Board for Nursing, Midwifery and Health Visiting.
L	Lecturer
N	Nurse
NHS	National Health Service
NHSE	National Health Service Executive
NHSME	National Health Service Management Executive
OT	Occupational Therapist
P	Physiotherapist
PAM	Professions Allied to Medicine
R	Radiographer
SCOPME	Standing Committee on Post-Graduate Medical and Dental Education
ST	Speech Therapist
UKCC	United Kingdom Central Council
WHO	World Health Organisation

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CHAPTER 1

INTRODUCTION

This study of the way in which health care professionals are educated and of multi-disciplinary education has been written at a time of great change within both the National Health Service (NHS) and the education system. One example of this change process is that many health care professionals are seeking to obtain degree status alongside the move of health care education into Higher Education.

The study has also been conducted during a period when Higher Education institutions are realising the practicalities of being self-financing and independent. The NHS is faced with similar challenges from the radical proposals in the Government's reform papers *The New NHS: Modern, Dependable* (DOH, 1997) and *A First Class Service: Quality in the NHS* (DOH 1998b). Both these developments have had major effects on recruitment into health care professions and enrolment on to courses such as midwifery and pre-registration nursing. Human Resource and workforce planning have also felt the effects of these two major developments, in providing future health care professionals of the right quality and quantity to meet the various and complex health needs of our society in the 21st century.

In the United Kingdom, more health care is being undertaken in the community than ever before, as a direct result of government policy, re-allocation of resources and a cost-effective approach to health care. Efficiency, purchasing and providing, fundholding and

accountability are key words of the 21st century health care (Humphreys and Quinn, 1994).

Many professionals and agencies may be involved in the care of the chronically ill, the elderly or minority groups, and the need to give both patients and their families a voice is recognised. The new approach to health care education is to produce the doctor, dentist, nurse or therapist who is adaptable, flexible and a good communicator and collaborative team worker, and who shares the same goals as other health care professionals (Miller et al, 1999a).

Recent major legislative changes, in particular the Children Act (DOH, 1989b) and the NHS Community Care Act (DOH, 1990) emphasise the importance of professional collaboration in the delivery of quality services. There is an assumption that this will happen automatically in the workplace, although structural, organisational and attitudinal factors all help to inhibit team development (Mackay, 1993). Multi-disciplinary education can, however, help to change attitudes by increasing knowledge and understanding about other professionals' potential contributions towards patient care.

It is about looking at the workforce in a different way, as teams of people rather than as different professional tribes. For too long we have planned and trained staff in a uni-professional/uni-disciplinary way without a clear and comprehensive look at the future.
(DOH, 2000, p9)

The concept of multi-disciplinary education is a modern day one, which could be perceived to be a solution with regard to the improvements in health and social care. This

concept has grown in popularity amongst health's governing bodies and health care workers, and been documented in policy documents as a way forward to resolve repeated health service failures. (DOH, 1999).

Thus competency-based, multi-disciplinary education continues to remain high on the central government agenda; the idea being that a sharing of learning encourages interprofessional understanding and inter-agency co-operation, thus providing patient/client benefits through a more co-ordinated service. Fraser (1998) suggests good health care increasingly depends on how well the professionals concerned are able to work together. The idea of professionals forming a complex inter-related system when working together for patient care, is as much part of the work as the practical tasks of admission and discharge of patients, and rehabilitation of stroke patients. Tope (1996) provides evidence that patients have little more than a tenuous link with influencing the care they receive and that many patients remain passive recipients of care, because they are actively discouraged by the professions who feel they know best. She indicates that there is:-

1. A general lack of communication and co-ordination between professional groups and agencies;
2. A general lack of understanding of changing and emerging professional roles and responsibilities to meet the demands of the health service;
3. A general lack of clinical competence in practice with the underpinning evidence base to support the care given.

Considering all these issues it is not surprising that multi-disciplinary education is seen as a pivotal concept in the pursuance of a more effective and efficient health and social care service which supports and develops collaborative and co-ordinated multi-disciplinary learning amongst health and social care workers (NHSME, 1993).

This chapter provides firstly, background information on the history of health service training and secondly, an introduction to multi-disciplinary education. More importantly, it aims to give a background to the issues of this study; its aims, rationale and significance.

There are several reasons why this research is particularly timely. These are:

1. Much educational research focuses on change from the perspective of planners and managers, rather than from the perspective of the teachers who have to deliver and handle the change, or from the point of view of the students who may well have changes imposed upon them. This research will attempt to address this problem by focusing on “field” experiences of a teacher of health care education, and, of practitioners who work within the field of health care.
2. The Government *Making a Difference* initiative (DOH, 1999), which was developed in response to concerns expressed by clinicians as to the current “fitness for purpose” of newly qualified health care professionals, challenges institutions to take up multi-disciplinary education. As a result of this document, Higher Education institutions were invited to bid to become pilot sites for a new

programme of training for students of nursing. The institution within which I work was successful in its bid.

3. There is a lack of research into the amount of multi-disciplinary education currently available and its effectiveness and efficiency.
4. The scope of the findings may have relevance to all education institutions that offer programmes for health care professionals.

The above mentioned indicators can be employed in guiding policy makers towards improving existing education provision and practices, and enhancing their capacity to improve multi-disciplinary curriculum implementation.

The exact level of support for multi-disciplinary education amongst professional groups at clinical level, has not been fully established, nor has the extent of Higher Education institutions' planned involvement in multi-disciplinary education. This study has adopted a local focus within the Yorkshire region and has sought the views and the attitudes of professionals regarding their perceptions and experiences of multi-disciplinary education.

The term multi-disciplinary education is *obscure and somewhat ill-defined* according to Damant (1994, p.69). It is a policy-driven concept, but it

seems to survive on the basis of an ideology rather than by pragmatic and scientific reasoning.
(Damant, 1994, p.69)

This is particularly problematic within a health context, since for example, differing professions use different terminologies to refer to similar processes. Hence for the purposes of this study multi-disciplinary education refers to a number of students from different health professions attending part, or the whole, of a course together. It refers to the opportunities for students to learn together. For instance, an interdisciplinary team comprising a nurse and a physiotherapist among a range of health care professionals, may treat a patient injured in a road traffic accident. One important aspect of this type of health care environment is that professionals from different specialisms are able to practise the skills of communicating their views about the appropriate approaches to clinical treatment of the patient.

The ultimate aim of multi-disciplinary education must be to prepare health professionals for shared care, and central to this collaborative working must be the concept of teamwork. Research in this area has tended to concentrate on negotiation between professionals as a form of bargaining, underpinned not only by the individual's interests, but also by the professional's interests. The effect of training seems to be very influential in this process. Both Roth (1984) and Strauss (1994) describe the process of negotiation amongst different health professional groups, whereas Goldie (1997) has investigated the use and effect of a variety of strategies by different health professionals to maximise their potential in pursuit of their goals. The tragic Bristol scandal of 2000 which uncovered excessively high mortality rates in paediatric surgical cases due to medical malpractices, highlights this lack of negotiation and meaningful communication between health care professionals. The professionals allied to medicine in Bristol, felt unable to speak up and

challenge medical practices. All health professionals working in clinical areas with patients should be able to demonstrate increased skills of negotiation, hence showing understanding of the predominant ideologies of their own profession but also that of other disciplines. A key recommendation of the 1999 United Kingdom Central Council document *Fitness for Practice*, is for greater shared learning to take place between nurses, doctors and other health professionals, and suggests that well-planned, multi-disciplinary learning opportunities can provide the means to promote multi-disciplinary understanding and communication (UKCC, 1999).

This study seeks to explore the perceptions of whether multi-disciplinary working actually constitutes teamwork or whether there just exist groups of people who work in the same place. Multi-professional working entails some degree of teamworking, whether at a formal or informal level. For instance, deciding on the most appropriate teamwork for a patient can sometimes be decided informally within the confines of a clinical area amongst the appropriate clinicians. Whereas, within a case conference scenario, treatment is also decided, but this is done much more formally. Professionals may be members of formal or informal teams (or both), since all professionals are commonly seen to be part of a wider, intangible team. The extent to which members *work as colleagues rather than in a superior-subordinate relationship* (WHO, 1988, p.23) is a crucial factor in distinguishing between when *teamwork exists and when in fact it does not ...* (Thomas and Carney, 1993, p.417). The assumption underlying multi-disciplinary education is that

it will bring together diverse skills and expertise to provide more effective, better co-ordinated, better quality of services for patients. (Thomas and Carney, 1993, p.421)

Arguably we need to get rid of our historical and uni-disciplinary ways of working and seek models of multi-disciplinary education that are both visionary and effective. What is totally ineffective is the fragmented piecemeal approach towards implementing multi-disciplinary education so often used by institutions when trying to grapple with this model of learning.

The author suggests that to overcome this current approach, the emphasis must be on collaboration, joint service and education planning; and for agencies to work together it is necessary that some learning together should occur and it must be recognised that multi-disciplinary education provides a model for joint working.

In the Oddie Report (DOH, 1970) it was identified that the role of professionals was changing and consequently there was a need to review patterns of training. It was felt that recruitment problems could be eased by providing retraining opportunities, employing part-time married staff, developing post-registration training and research, and recognising the contribution which can be made by the “helpers” to supplement the work of trained staff. The report concluded there should be

short joint courses for helpers able to help with any or all of the remedial professions.
(DOH, 1970, p.64)

Professor Carolyn Miller and colleagues (1999b) suggest that multi-disciplinary education should encompass those areas where health disciplines have the most in

common: namely communication, understanding, team awareness and teamwork strategies.

Students should address negotiation and common management issues as a multi-professional group at all stages in the education process. (Miller et al, 1999b, p.9)

Four years ago the Centre for the Enhancement of Interprofessional Education (CAIPE), published criteria for effective multi-disciplinary programmes. Such programmes should:-

1. Concentrate on the needs of service users and carers;
2. Promote collaboration between professionals;
3. Encourage professionals to learn with, from and about each other;
4. Promote good practice;
5. Foster respect for the integrity and contribution of each profession;
6. Promote professional satisfaction. (CAIPE, 1996)

Whatever the hurdles, the author would suggest greater multi-disciplinary education within the health care professions is now being discussed amongst health care professionals themselves. In today's climate of visible change, the professions will possibly need either to initiate a move to greater co-operation themselves, or allow others to do it for them.

Yet how advanced are the education providers locally? Most health care professionals are seeking to obtain degree status yet it could be suggested that the actual level of support for multi-disciplinary education at the service level has not been fully established locally; nor has the extent of planned involvement by the education providers. It appears that they have failed to take the initiative to develop and enable their staff to benefit from multi-disciplinary courses. The fragmented, piecemeal approach has the hallmarks of failure as outlined by Tope (1996), even before its implementation. Sills stated that:

professions have many virtues but they also have vices, including isolationism, preciousness, tunnel vision and the propensity for reactionary defensiveness.
(Sills, 1981, p.352)

Bower (1972) cited in Snyder (1981) suggested:

fragmentation is a major problem in the health care delivery system.
(Snyder, 1981, p.116)

Barriers have been identified out of seemingly scant empirical evidence and articulated by those persons who are antagonistic towards change of the traditional methods. Such persons highlight the imminent loss of professional identities and, if allowed, could damage any well -founded initiative.

In the light of the above, the aims of the study were to:

1. To investigate the concept of multi-disciplinary education within health care.

2. To analyse the perceptions of health care practitioners towards a multi-disciplinary education.
3. To analyse the perceived barriers towards multi-disciplinary education.
4. To explore the concept of multi-disciplinary teamwork and its influence upon multi-disciplinary working.
5. To explore areas of learning that health care workers believe could be multi-disciplinary.

To enable me to achieve these aims I have chosen a case study approach. The use of a case study design in research has a long and distinguished history in many disciplines (Cresswell, 1988). Case study has antecedents in the disciplines of sociology, anthropology, history and psychology and the professions of law and medicine, each of which has developed procedures for establishing the validity of case study for their respective purposes according to Simons (1980). She also suggests case study in education is comparatively recent. Yin (1993) suggested that case studies are essential for social science and that they are used extensively in practice-orientated professions. In recent years in nursing and midwifery research, there has been an increase in the use of case studies. Sandelowski (1998) attributed this to a shift in acceptability of case studies both as a research strategy and a means of addressing the holistic nature of care and treatment in practice-based disciplines. By using case studies, the researcher can become more focused while investigating the persons and the events leading up to the present situation.

Yin (1993) suggested there were three types of case studies, which are:

1. Exploratory
2. Descriptive
3. Explanatory

For the purposes of the study an exploratory and descriptive approach is used to define the research aims and to present a detailed description of a phenomenon within its context.

It is intended that five groups of health care professionals, namely:

Nurses

Physiotherapists

Speech Therapists

Occupational Therapists; and

Radiographers

from a Trust hospital will be surveyed and interviewed. The Trust serves the community within a city in the Yorkshire region of England, called Stanfield, for the purposes of this study.

Stanfield has a population of approximately 250,000 people. It used to rely heavily on the coal mining industry, until privatisation and the closure of all the local collieries.

Likewise, the thriving textile industry has declined, although there remain some mills albeit only two in number. This decline of what were traditional industries within the surrounding localities led to the development of a mixed industrial infrastructure, eg. high technology companies, light engineering and a thriving retail industry. Over the last six years the city centre has seen major developments with the building of a shopping centre and the emergence of many high profile retail businesses converging on Stanfield. This busy city centre has a museum, art gallery with examples of the local sculptor Henry Moore, libraries and its own Further Education College which offers a wide variety of courses for full and part-time students.

One reason for the growth in popularity is Stanfield's location. It is situated within two miles of the extensive motorway network namely M1, M62 corridor and the A1. Many offices and industrial warehouses have been built recently close to this network of highways with others currently before planners for development. Housing within the area is mixed. There are streets of terraced houses that were once at the heart of the mining community, although many new housing developments have been constructed in recent years.

Corner shops do exist, but the development of most major supermarkets within the area has contributed to many closing their doors permanently. Stanfield is a multi-cultural city, but there are few facilities specifically aimed at ethnic minorities.

There is an excellent variety of schools none of which are said to be failing by government standards. Surprisingly, Stanfield has a wealth of Independent schools all of

which perform highly in the Independent Schools League tables, and which are supported by parents from far afield of Stanfield.

Until ten years ago Stanfield had six hospitals to serve the local community, each ministering to the needs of its own client group, eg. a care of the elderly hospital, a psychiatric hospital and maternity hospital. Now only three hospitals exist with specialisms merging together to form large units, and the transfer of mental health provision into the community. The hospital buildings are old and in need of much repair and refurbishment. Some buildings that were intended to care for the sick and injured during the Second World War still remain as busy acute medical, surgical and maternity areas today. There has been investment in some services, eg. Day Care facilities and Accident and Emergency facilities, but the lack of funding in the wards is evident immediately upon entering them. Staffing levels are low across all the professions and the increased number of patient complaints received reflects this. Since the introduction of the internal market within the National Health Service in 1991, Stanfield has yet to balance its books at the end of each financial year. This financial deficit has implications for staffing levels for the next financial year.

Until 1998, Stanfield Trust had its own College of Health, which provided both pre- and post-registered education for nurses and physiotherapists. That year saw the integration of this college with a local Higher Education institution. Whilst no medical school is based at Stanfield, students from a neighbouring regional Trust do some of their clinical placements within Stanfield Trust. Hence, there are many opportunities for multi-

disciplinary working within Stanfield. Post-registration education within the College of Health offered a wide variety of long courses (six months and over in length full-time), short courses (less than six months in length) and many individual study days. Most of the courses offered were specialist in nature, for example Intensive Care Course, Coronary Care Courses, Orthopaedic and Peri-Operative Day Care Courses. While the curricula were written principally for qualified nursing staff, there were many aspects of the courses that were applicable to other health care professionals. For example, advanced cardio-pulmonary resuscitation is applicable to all health professionals, whether it is being learnt for the first time, or attended as a yearly update. Communication is another area that would lend itself to multi-disciplinary education across the professions. These are to name but a few of the generic subjects that could be shared with other health professions. However, despite timetables and course specifications being sent to other departments the attendance by other health care professionals was virtually nil.

The integration of the College of Health into higher education saw the transfer of a wide portfolio of health care education into a new and expanding institution. The University has strong links with industry, commerce and the arts. There is the facility for excellent work placements; some available as overseas exchange visits. Pre-registration nursing students for example, have the opportunity to take part in exchange visits with Norway, Finland and Ireland. Post-registration nursing students are given the opportunity to work farther afield and opportunities in America, Canada and Greece have been taken up by students undertaking specialist nursing courses. Students are recruited from all over the UK, the EU and more than 60 different countries.

There are eight schools within the University, offering a broad range of academic programmes, ranging from accountancy and education to architecture and computing. The University is in one of the largest towns in the country without city status. It has a distinct identity and is within easy reach of major cities. With over 17,000 full-time, part-time and “sandwich course” students the percentage of graduates entering employment on completion of their course exceeds the national average.

The newly created School of Human and Health Sciences (formerly the College of Health) has nearly 4,000 students on academic and vocational undergraduate programmes. Some 2,000 are studying full-time and there are 300 postgraduate students studying a wide range of behavioural and life sciences. Special facilities include psychological laboratories, the podiatry clinic and the gait analysis laboratory shared by physiotherapy and podiatry students. Flexible methods of learning, support increased student choice and the opportunity for shared learning. For example, many computer-based packages have been developed and are readily available on the University web site. Part-time study is available on both pre and post registration nursing courses for all students.

I currently work as a Principal Lecturer in the School of Human and Health Sciences, Department of Nursing. My background is in Nursing, and I qualified in London, as a Registered Nurse 24 years ago. Once I qualified I chose to specialise in Intensive Care Nursing and later, Childrens Nursing. Having worked in clinical practice for a further four years, I then decided to enter nurse education. My initial teacher training was

undertaken at a local Polytechnic and then advanced training three years later in the same institution. I successfully completed my Master's Degree in Education Management five years ago. In my 20 years experience of teaching both pre- and post-registered nurses in a variety of institutions, I have never had the opportunity to teach multi-disciplinary groups. One reason for this is the curriculum is designed using sets of principles and underpinning philosophies that reflect the specific disciplinary outcomes. So, when one tries to separate elements from different programmes to make them fit together it is like unravelling a knitted jumper and attempting to re-knit it to a new pattern. It never works as well, and the motivation is never the same. Perhaps what remains is a gaping hole, and curricula developed in isolation.

My current teaching responsibilities are mainly on the BSc in Nursing and the Diploma of Higher Education in Nursing Studies programmes, with particular responsibility for teaching Children's Nursing. All students entering either programme undertake a common foundation programme of 18 months before progressing to their chosen nursing branch for the second 18 months. The programme runs for 45 weeks of the year and is three years in length.

The whole course is organised around five major themes. There are shared modules but these are only shared in the sense that the different branch students of nursing come together for joint sessions. This tends to occur frequently during the 18 months foundation programme and less frequently during the branch specific modules in the final 18 months. The five themes are:

1. Nursing Theory and Practice;
2. Human Development;
3. Research and Information Management;
4. Professional Issues and Management of the Care Environment;
5. Personal Development and Interpersonal Skills.

The curriculum is designed using sets of outcomes and underpinning philosophies that reflect the main nursing branches, ie. adult nursing, children's nursing, mental health nursing and learning disabilities nursing.

Whilst the academic study takes place at the University, students undertake clinical practice in hospital and community placements throughout the Region. The University has excellent relationships with many Trust institutions and there exists a Partnership Agreement with many of these Trusts to allow health care students access to clinical areas for practice placements. Successful students achieve a BSc in Nursing or a Diploma in Higher Education in Nursing Studies plus professional registration as a nurse on the United Kingdom Central Council Professional Register for Nurses, Midwives and Health Visitors.

Within the next chapter I intend to discuss and analyse the historical and current, education and training of health care professionals at national and international levels. Health care development will be discussed in relation to the socialisation of professions,

and the effects of professional power and how these may affect the provision of multi-disciplinary education.

CHAPTER 2

REVIEW OF THE LITERATURE

i. Introduction

This chapter examines the education and training of health care professionals at both national and international levels. Health care professional development is discussed in relation to the socialisation of professions, the effects of professional power, teamworking, the influence of higher education and the way in which these affect the provision of multi-disciplinary education. Over the past decade, successive governments have called for health and social care professionals to work together more closely for the benefit of the patients and clients who use the National Health Service. The importance is emphasised of a multi-disciplinary approach to health care, in which all professionals who contribute to a patient's care, work not just alongside each other, but *interprofessionally*, as a team. The aim is to provide a seamless service for its users (DOH, 1988; DOH, 1989a).

To underpin this approach, the Government's education and training directives have highlighted the need for more shared learning between the health and social care professions. The argument is that those who learn together will work together more readily than if they had learned in separate professional groups, and consequently will deliver better patient care.

The Department of Health paper *The Health of the Nation* (DOH, 1992), pointed to the need for partnerships between individuals and organisations for the improvement of health care. The Department of Health (DOH, 1993b) focused on alliances to provide multi-disciplinary solutions, supported by multi-disciplinary education.

The justification for multi-disciplinary education has sprung from recognition of the limitations of existing professional practice in the health system, combined with a realisation that there is a set of hitherto neglected competencies that need to be mastered. However, research into multi-disciplinary education and evaluation of its effects on later professional practice and quality of care are hampered, for two reasons. One is the marginal status of multi-disciplinary education, and the other is the inherent difficulty in distinguishing its effects from those of other curricular components and of the social environment (WHO, 1997).

During the last five years, the NHS Executive's (NHSE) *Education and Training Planning Guidance* has consistently emphasised the need for multi-disciplinary education and teamwork. For example, its 1995 planning guidance stated that:

Education commissioners should actively explore opportunities to commission multi-disciplinary education and training initiatives which provide opportunities for shared learning. (NHSE, 1995, p.46)

The responsibility for planning and commissioning education and training in the National Health Service (NHS) began to be devolved from regional health authorities to local

education consortia from 1996. In June 1997, the NHSE further defined the future work of the consortia to include promoting:

... shared learning to support team-working across professional and organisational boundaries, preparing the health care workforce to provide a coherent service within a primary care led NHS and across health and social care boundaries. (NHSE, 1997, p.32)

Batchelor and McFarlane (1980) suggest that one of the first references to a multi-disciplinary team was in the Dawson Report of 1920 when the Primary Health Care Team concept was discussed. However, very little change followed until 1951 when the Cope Committee:

considered co-ordination of training 'so far as is appropriate and practicable', to be particularly applicable to the rehabilitation group of professionals. (Lloyd, 1971, p.74)

A report by the Department of Economics and Social Science, Welsh Hospital Board in 1963, suggested:

rationalising teaching services and school accommodation by combining schools in the initial stages where there are some subjects common to some syllabuses.
(DESS, 1963, p.14)

Also recommended was the integration of physiotherapists and remedial gymnasts. They suggested that the training of health care professionals could be rationalised with savings in teacher time and improvement of interdisciplinary understanding.

The report concluded that:

since co-operative behaviour patterns are established during the training years, we believe that there should be considerable rationalisation of effort in providing shared training. (DESS, 1963, p.21)

A number of reports explored this notion more fully, including:

- Lloyd (1971), described the development of the first purpose built combined training institution at the New University Hospital of Wales. This was built in response to a locally identified need for cost-effective, multi-disciplinary education and training.
- The Department of Health (DOH, 1978) recommended common core curricula should be considered for students of various disciplines in human biology. This was implemented by the University of Surrey in 1980 (Gomes, 1985).
- A conference held in Edinburgh in 1969 identified core aspects of health care and how general practitioners and district nurses could work together (Wilkie, 1982).
- The Council for Professions Supplementary to Medicine (1970) emphasised the need for multi-disciplinary schools for health care professionals and the need to identify common ground in the syllabuses. The report gave examples of the work done at Cardiff and Salford Schools of Physiotherapy and gave suggestions on topics suitable for shared learning. The report concluded that closer integration between the remedial professions is essential. This report also suggested common training or a common course in basic subjects and sharing common accommodation.

- The Department of Health in 1973 was concerned with the misuse and waste of professional skills. As a result the McMillan Report (DOH, 1973) recommended integrating psychiatric and physical fields and combining the professions of physiotherapy and occupational therapy. In the same year the Department of Health (DOH,1972b) came to a similar conclusion in its publication of the Burt Report and recommended professions allied to medicine should combine during their initial training courses.
- The Department of Health published the Briggs Report in 1972 (DOH, 1972a) and recommended that Colleges of Nursing and Midwifery and also Colleges of Health, consider implementing multi-disciplinary education after noting that:

recent developments in a number of places where nurse education is being carried out side by side with studies like occupational therapy, physiotherapy, radiography and others. (DOH, 1972a, p.56)

Other recommendations were that nurse education should have an introduction to the work of related professions such as paramedics and social work. During the 1970s there were various individual attempts to introduce multi-disciplinary education at the universities of Edinburgh, Manchester, Glasgow and Liverpool (Scott-Wright, 1976, p.74).

Following this series of reports a number of publications have advocated closer co-operation between students of various disciplines and endorsed the concept of multi-disciplinary teaching (Benyon, 1978). In the case of a person with a learning disability, it was recommended that common training between local Authority and NHS staff should

be initiated and that a new caring profession for the person with a learning disability should emerge gradually (DOH, 1978).

In 1976 Scott-Wright produced her paper on multi-disciplinary education advocating the need for members in the health care professions to share their experiences and practices to enhance patient care. Jones (1985) identified a multi-disciplinary course that had been successfully evaluated by its participants (nurses, physiotherapists and social workers) run at the University of Nottingham in 1976. He reported a major multi-disciplinary seminar organised by the Council for the Education and Training of Health Visitors (CETHV), followed in 1979 by a handbook of exercises as an aide to shared training (Jones, 1985). In 1979 a multi-disciplinary symposium was held at the University of Nottingham (Jones, 1985).

During the 1980s there was a variety of articles and reports relating to multi-disciplinary education. Two important publications related to multi-disciplinary teams and team work, (Batchelor and McFarlane, 1980 and Barber and Kratz, 1980). Several authors reported on work on multi-disciplinary education of Primary Health Care Teams (Brookes et al, 1981). Other references to Primary Health Care Teams continued to be produced during the 1980s (Owen, 1987; Bell, 1988; Runciman, 1989).

More general aspects of multi-disciplinary education were covered by other authors (Fielding, 1987; Faulkner, 1988; Runciman, 1989). Runciman (1989) reports on a common foundation course of 12 weeks for Health Visitors and District Nurse students at

Queen Margaret College, Edinburgh which had been evaluated very well by the students and recommends further multi-disciplinary sessions for these groups.

An important development from this reference is that in 1983 a Joint Working Party was set up between the National Board for Nursing, Midwifery and Health Visiting for Scotland and the Scottish Council for Postgraduate Medical Education:

The research will consider whether teamwork can be strengthened through educational processes. (Runciman, 1989, p.33)

There are several references to aspects of multi-disciplinary education in work related to Project 2000, the new preparation for practice for nursing, common core curriculum and Higher Education (Pashley and Henry, 1989; Gilling, 1989; Turner, 1989). Gilling (1989) suggests that the time is right for curriculum developers of health care education to consider seriously the integration of multi-disciplinary aspects in their curricula. Turner (1989) supports this and also suggests a time may come when providers of health care education may be forced to rationalise their programmes unless they consider multi-disciplinary education as a way forward for health care practitioners.

ii. Review of the International Literature

The status of multi-disciplinary education has reached a higher profile outside the United Kingdom and the development of multi-disciplinary education has tended to be designed and implemented earlier and more extensively in the USA, Australia and Canada than in the United Kingdom. In conjunction with this, the move of health care professional

education from hospital-based institutions to higher education institutions has occurred earlier and tended to be linked with the development of degree status courses. In 1963 Norway made nurse education administratively independent of hospitals as reported by Gibbs and Rush (1987). By 1966 a multi-disciplinary course was established at the Medical Centre of the University of San Francisco and at the University of Quebec in 1967 (Scott-Wright, 1976).

In 1969 Kenneth gave an encouraging report on a course which provided:

senior medical and nursing students with joint clinical learning experiences and patient care responsibilities.

The course organisers concluded this may be:

a significant step toward this end

of increasing collaboration between health care professionals and maximising

the effectiveness of the health services.

(Kenneth, 1969, p.46-49)

In 1971 Leninger provided a comprehensive review of multi-disciplinary education in the USA and outlined various curriculum models that had been introduced in the United States. Whilst some, he suggested, appeared to work better than others, all promoted the culture of health care professionals recognising they could learn from each other and work harmoniously within a team in practice.

Further multi-disciplinary courses are recorded at the University of Cincinnati in 1972, the School of Public Health and Tropical Medicine, Tulane University Texas, and McMaster University Ontario (Scott-Wright, 1976). Scott-Wright also stated that multi-disciplinary courses were established at the Hebrew University in Jerusalem, Ife University in Nigeria and the National Council of Universities in Venezuela. In contrast she reported there was not much activity in Europe (Scott-Wright, 1976).

In 1976 some Australian states developed multi-disciplinary schools for under-graduates (Pickett, 1977) and a survey by Rezler in 1977 identified 19 universities in the USA offering interdisciplinary courses for health care professionals, although nurses and allied health students were the most frequent participants (Rezler et al, 1981).

A course on collaboration between social workers and general practitioners during their vocational training at the Erasmus University, Rotterdam in 1978 was described by Scheik (1979) as an exciting innovation with much to be learned from the experience. By 1980 Norway had all its pre-registration nurse education in their regional university system and multi-disciplinary education was embedded within the curriculum (Gibbs and Rush, 1987). At the University of Colorado Health Science Centre a multi-disciplinary course for third year nursing students and first year medical students was described as *favourable* by Turnbull (1981, p.44). The course was concerned with health issues, health professions and families, and lasted twelve weeks. It had been running for three years.

The unfavourable opinions of medical students regarding multi-disciplinary education in the USA were outlined in 1981 by Rezler and Giannini. They also reported that multi-disciplinary education in medical schools had been tried on a large scale at the University of British Columbia with a degree of success.

A review of the implementation of multi-disciplinary education within the health services in Belgium is described in 1981 by the World Health Organisation. Watson (1982) illustrated the changes in Australian nurse education, which clearly indicated a move towards multi-disciplinary education albeit on a small scale. In 1983 Regan and Schutze described developments in health care professional education and identified multi-disciplinary courses at Stony Brook University of New York and Michigan State University.

iii. Review of the National Literature

The Children Act (DOH,1989b) and the *NHS and Community Care Act* (DOH,1990) emphasise the importance of professional collaboration in the delivery of quality services. The implementation of these Acts has required changes in service delivery which brings the professional responsibilities of nurses and other health professionals, eg. Physiotherapists and Social Workers, closer together. However, such organisational change, combined with the present market philosophy, has introduced competition which has set differing professions and organisations against one another (Barr, 1994). Thus, achieving the goal of multi-disciplinary co-operation, is no easy task.

Resistance to collaboration between the NHS and Social Services Departments based on professional boundary maintenance was commented on forty-one years ago in the Younghusband Report (1959). Boundary maintenance remains an issue today. Rodgers (1997) suggests that in a climate of uncertainty and resource constraints, professionals will seek to safeguard and defend their territory. Williams (1992) believes that many professionals working in welfare services feel under attack. There may also be the fear of what Spratley and Pietroni (1994) describe as losing professional skills into a general interprofessional *porridge*.

Further barriers to co-operation may arise from particular professions having a limited knowledge of the roles of other professions and their potential contribution to a given situation. For successful collaboration to take place, professionals must have a clear understanding of each others' roles and have an appreciation of the benefits of the enhanced care delivery that co-operation can bring.

Professional validating bodies have advocated the need for multi-disciplinary education. The United Kingdom Central Council for Nursing, Midwifery and Health Visiting, Code of Professional Conduct (UKCC, 1992), states that they are expected to

work in a collaborative and cooperative manner with health care professionals.

The Central Council for Education and Training in Social Work recognise in the Rules and Requirements for the Diploma in Social Work (CCETSW, 1995), that competence in social work practice demands that professionals be able to

network and form effective working relationships between ... other professionals.
(CCETSW,1995, p12)

The contribution of multi-disciplinary educational experiences to the achievement of such competence has been recognised by CCETSW and the Nursing Board's commitment to a number of projects that have sought to clarify the potential of a multi-disciplinary approach (ENB and CCETSW, 1986). There is a growing body of opinion that multi-disciplinary education can facilitate shared working and ultimately improve service provision.

The Standing Committee on Post-Graduate Medical and Dental Education has produced a working paper for consultation on multi-professional working and learning (SCOPME, 1997) and a final report with recommendations published in 1999. The working paper was based on consultations and written evidence across a number of health professions. It presents views on organisational and education contexts for multi-disciplinary education, which it says has:

... entered a new phase which is about preparing practitioners to operate within a multiprofessional context in the clinical environment. This approach requires a new set of skills centering on how professionals interact with one another in the clinical environment ... how professionals form teams, how they plan together and make decisions together within the clinical context. (SCOPME, 1997, p.54)

This paper makes a specific point about the skills required to operate in a multi-disciplinary team, citing forming teams, planning and decision-making, as distinct from theoretical knowledge. It concludes with the view that:

... the time is now right for some principles to embed a multiprofessional approach into systems for health care delivery and medical and dental education.

(SCOPME, 1997, P.62)

In the final report (SCOPME, 1999) it is interesting to note, in view of these earlier statements, that skills training is not needed:

A skills training approach in team-working is neither necessary nor appropriate. If individuals are provided with autonomy and a climate of equity and mutual respect between different professions, then a multiprofessional group will develop its own ways of working and learning effectively together.

(SCOPME, 1999, p.24)

Some multi-disciplinary education is already taking place, as discussed earlier, but the majority of activities are at post-qualifying level (Horder, 1991). Collaboration in qualifying programmes has been directed at learning disabilities nursing following the 1979 Department of Health Report (DOH, 1978) but there may be more potential for sharing at this level. Tope (1996) has argued that attention should focus on examining the feasibility of multi-disciplinary education at the beginning of individuals' professional careers, before they qualify.

An example of this could be that if women are to benefit from the best quality maternity care, then midwives and doctors should work closely together and this is perhaps especially true of midwives who work in the community, and also of general practitioners. (DOH, 1993a). It is true to suggest that the multi-disciplinary co-operation and respect needed between these two groups if they are to produce a "seamless" service has not always been present (Porter, 1997).

Horder (1991) states that:

health care requires collaboration and teamwork, that patients or clients can suffer when it is missing and that joint education helps to foster it.

(Horder, 1991,p566)

Indeed the Centre for the Advancement of Interprofessional Education (CAIPE) has identified the principles and characteristics of such an education (CAIPE, 1996) and they read as a panacea for multi-disciplinary co-operation and respect. Multi-disciplinary education is said to allow the development of a shared philosophy, thus promoting teamwork, an unfragmented service and overall improvement in the quality of care. This is very much in line with the views expressed by Brooking (1998).

Multi-disciplinary education should tend to focus on the needs of clients and their supporters rather than on the needs of the individual professional groups involved, argued (Stosiek, 1996). It should promote the involvement of clients and their supporters, thus enabling a wide range of views on service priorities to be discussed. Each profession is said to come to a better understanding of the role of the other professional, and enhanced trust and communication can reduce the potential for conflict.

Horder (1991) reports that prejudice is apparently removed as stereotypes are proved false. She believes each profession will identify what is considered to be central to good practice and thus a common frame of reference will be developed so that differing professional cultures are understood but professional identity is not threatened. Horder continues to state that multi-disciplinary education can promote the self-knowledge of

each of the professions involved and should serve to increase professional satisfaction. This is probably especially true if the sessions are recognised in some way by the regulatory bodies and also carry educational credits. However, Brooking (1998) argues that there may well be sensitivities related to the form of any assessment chosen and by whom it is chosen.

Alexander and Smith (1998) when examining areas of maternity care which they felt were appropriate for multi-disciplinary education, suggested the following examples: the management of obstetric emergencies; resuscitation of baby/mother; decision-making and risk management; postnatal psychological disturbances; infant feeding; communication and inter-personal skills. Yet however great the potential, they continue, the ultimate test must be in how such initiatives are evaluated. It has been difficult to discover what is being done in the area of multi-disciplinary education for the maternity services and the following are offered as examples, although there appears to be little formal evaluation available.

A Joint Medical/Midwifery Post Graduate Education project is based within the School of Health of Liverpool John Moore's University and delivers part-time theoretical and practical programmes for midwives, doctors and general practitioners. Accreditation has been gained for Masters level credit, for PGEA purposes and from the ENB.

A new venture is the transfer of the Division of Midwifery from the school of Nursing and Midwifery to a new Department of Obstetrics, Midwifery and Gynaecology within

the Faculty of Medicine and Health Sciences of the University of Nottingham. The reasons given, according to Alexander and Smith (1998), for the transfer are predominantly the benefits claimed for multi-disciplinary education. The results of this alliance are awaited with interest.

Alexander and Smith (1998) also report on the Maternal and Neonatal Emergencies Training Project which consists of a two-day residential course at Nottingham where midwives, obstetricians and GPs undertake lectures, workshops and a written, oral and practical examination. Members of all three professions also undertake the teaching and assessment. It is based closely on the North American Advanced Life Support in Obstetrics Programme and is based around the use of mnemonics that can be easily remembered at times of stress. A randomised control trial is being carried out for evaluation purposes.

Critical Appraisal Skills workshops have been run for a number of health professionals both hospital-based and community-based, according to Hogston et al (1998). The object of these workshops has been to assist all those involved to take part in the debate about evidence-based practice.

The Association for Community-Based Maternity Care is the only national body concerned with maternity care which is multi-disciplinary, including clients, midwives, hospital-based consultants and GPs according to Alexander and Smith (1998) and both

those who speak at and those who attend the biannual study days reflect this multi-disciplinary approach.

The practical update for GPs in intrapartum care according to Stosiek (1996) is strictly speaking an example of multi-disciplinary teaching. It deserves a mention because it appears to be unique in that it was developed by the Centre for Midwifery Studies at the University of Portsmouth, following an approach by the local GP tutor. Each GP undertaking the course worked two full shifts with a Midwifery lecturer on a labour ward and the group then spent a morning with the lecturers and a consultant obstetrician discussing case scenarios. Problem solving is said to be a particularly useful educational method in a multi-disciplinary situation (CAIPE, 1996). Stosiek (1996) states that the aims of the course were to enable the professional groups involved to explore their roles in relation to the changing patterns of maternity care and to facilitate teamwork, but it was also hoped that GPs would be more willing to enable women to give birth in the outlying GP maternity units. Post-graduate educational credits were available and the evaluations were very positive.

iv. The Higher Education Agenda

The majority of universities provide education for a number of health care professions. Professional health care programmes are affected by the personnel needs of the educational consortia, and since these vary annually, the contracted number of places for each profession will also vary, resulting in a considerable incentive to provide

programmes which allow the switch of professional numbers without altering staff numbers or departmental structures.

The economics of professional education also push universities towards a multi-disciplinary approach (DOH, 1998a). In pre-registration education, programme content tends to be scientific knowledge. There is a tendency to suggest that anatomy is anatomy, whoever is learning it. If this is accepted, the subject can be provided in lectures to all groups simultaneously. Whatever the subject, such universal provision tends to be seen as appropriate at a foundation level. In post-registration education there is an equivalent issue, with many programmes focusing on common content and outcomes (Svensson, 1996). The result is less serious, because more senior professionals can apply learning to their own context themselves.

Ross and Broh (2000) suggest the higher education agenda promotes a pattern of multi-disciplinary education which assumes commonality rather than utilising and valuing differences. It values large-group, didactic teaching rather than small-group interaction and, in pre-registration education, tends to move provision to the early part of the programme.

Ross and Broh (2000) conclude that health service and higher education agendas tend to move multi-disciplinary education in opposite directions in pre-registration education. If the NHS views the multiprofessional agenda as sufficiently important, consortia must be

encouraged to specify in contracts and be allowed to pay the extra costs incurred by education providers (Ross and Broh, 2000).

The Centre for the Advancement of Interprofessional Education (CAIPE) included in its report on multi-disciplinary education in mental health, many useful observations as to what constitutes good practice (CAIPE, 1996). Examples given include both planning and provision which the report states must be carried out by all the professions and agencies involved so that there is equal commitment from all the stakeholders and their status is perceived to be equal. An analysis of needs and priorities would be helpful in order to ensure that the initiative has a clear purpose and both clear and realistic learning outcomes, argues CAIPE. Alexander and Smith (1998) suggest that discussing the professional education already provided may identify some useful areas for sharing and, also, that it is important that funding for the venture is adequate.

Interactive educational methods used to explore topics of mutual concern are said to be most effective (CAIPE, 1996), but some groups of participants, perhaps doctors in particular, may find adapting to such methods difficult. Equal status amongst participants is essential (CAIPE, 1996). The report continues to suggest the evaluation of the initiative needs to consider the benefits to the practitioners, their employer and service users, and that plans should be made for maintaining the impetus of the collaboration.

The UKCC (1997) identified broad objectives that could be classified as a blueprint for multi-disciplinary education, in which education providers are challenged to maximise

opportunities for multiprofessional learning. It is suggested that these programmes should be student-focused and practice-led initiatives with more effective modes of delivery. The English National Board (ENB,1995) produced a *statement of intent* emphasising their commitment to collaboration and sharing within a multi-disciplinary arena, through their continued support and commissioning of research. Moves towards achieving greater collaboration and multi-disciplinary learning environments between health professionals are also supported by the United Kingdom Central Council for Nursing, Midwifery and Health Visiting (UKCC, 1992). Given this, it is important that the professional development of teachers is considered as a means of developing adequate facilitation of multi-disciplinary educational environments.

Until the 1980s the conventional approach to the education of nursing, midwifery and health visiting teachers was *separatist*, as individual disciplines learnt in isolation from each other and from the broader range of professionals undertaking teacher preparation programmes (Clifford, 1998). Only a few exceptions to this policy existed within the UK, where teacher preparation was within a shared environment. The institutions where programmes were delivered were approved by the English National Board, and on successful completion of such a programme, candidates were entitled to register with the United Kingdom Central Council.

The relocation of health care education into higher education has produced different approaches to curriculum development, notably in the provision of modular programmes (Clifford, 1998). Atkins (1998) suggests that one of the features of modular programmes

in higher education, is that they create an opportunity for students from different disciplines to learn together. She continues by explaining that this should benefit health care delivery where there is also an increased emphasis on teamwork in contrast to defined roles for discrete professional groups or disciplines. In recognition of this, it has become possible to become a teacher of nursing, midwifery or health visiting after successfully completing a multiprofessional programme. Shared learning has been defined as:

a planned approach within a curriculum leading to shared knowledge and experience between groups undertaking teacher preparation programmes. (ENB, 1990, p.35)

This implies that, in a shared learning environment, student teachers are purposely grouped together to learn from and about each other within the curriculum context.

A study designed to evaluate multi-disciplinary education in educational programmes of preparation for nursing, midwifery and health visiting teachers in England by Mhaolrunaigh et al. in 1998, suggests modular schemes are seen as a flexible way of addressing core elements in a curriculum and, where core elements can be identified across different programmes, opportunity is created to enable students to share learning. However, they also argue that, unless the teachers leading the modules take steps to create a multi-disciplinary learning environment, there remains limited contact between student groups.

Paradoxically, modular approaches to programmes common in higher education institutions today have created multi-disciplinary learning environments and have, in some ways, inhibited sharing and learning from and about each other. Shaw (1994) suggests the risk of this situation occurring supports the notion that multi-disciplinary education should be only defined in terms of interactive learning within programmes.

Mhaolrunaigh et al's (1998) study highlighted the need for the preparation of teachers to facilitate multi-disciplinary education. However, the type of preparation necessary was not so well defined. The respondents felt that they had gained from their experiences of multiprofessional learning, but whether the transferability of skills is sufficient for their subsequent role in nurse education was not clear. Interestingly, respondents noted that it is economically valuable to pool professionals within the same environment. This is in contrast with opinions in some parts of Europe, where financial resources have been reported as a barrier to multiprofessional learning because of the unequal distribution of resources across continuing education for different professionals (Goble, 1994).

Teachers who have experimented with multi-disciplinary education have reported the following advantages in a study by Tope (1996):

1. *It develops the ability of students to share knowledge and skills collaboratively, and thereby provide individuals and the community with health care more efficiently.*
2. *It enables health care students to become competent in the teamwork needed for the solution of priority health problems. It also helps to develop mutual respect and understanding between health team workers.*
3. *It helps to "decompartmentalize" curricula and to prevent the development of a corporate mentality, which is a factor in resistance to multi-disciplinary education.*

4. *It permits the integration of new skills and areas of knowledge that have a role to play in health care.*
5. *It helps teachers, students and clinicians to communicate more easily among themselves.*
6. *It promotes multi-disciplinary research, often in new or neglected areas, to ensure all the pertinent aspects of a problem are considered.*
7. *It requires and promotes interdepartmental and interdisciplinary understanding and cooperation within institutions responsible for training and research.*

(Tope, 1996, p.65-66)

Barr (1995) suggests that multi-disciplinary educational experiences are developed by teachers within pre- and post-registration courses for nurses, midwives and health visitors and that multi-disciplinary programmes are accelerating. Consequently, multi-disciplinary education is perceived as being appropriate for the situation in which new teachers are finding themselves in the universities. Barr (1995) suggests that there is evidence that multi-disciplinary education should be an important consideration for the future organisation of education for health care.

The impact of multi-disciplinary education in Project 2000 courses was evident, according to Mhaolrunaigh et al (1998). However, it appeared that it did not meet with approval in all instances. This suggests that although teachers and students might perceive multi-disciplinary education as a benefit to education at different levels (Tope, 1996), in practice, the processes are reliant on more than just sharing the environment. This supports the need for more in-depth analysis of what actually occurs within a multi-disciplinary learning environment and highlights the question of how, between whom and to what ends multi-disciplinary education can benefit health care provision (Barr, 1994).

The consumers of health care have expressed their desire to receive integrated services that reflect their needs rather than emphasising professional boundaries (ENB/CCETSW, 1992). This suggests that the inclusion of other agencies such as the voluntary services along with professional groups in multi-disciplinary education initiatives is essential to successful outcomes. These changes require more than collaborative efforts between different professional groups in the development and delivery of programmes.

Mhaolrunaigh et al's (1998) study highlighted the evidence that teachers will be required to work much more collaboratively with colleagues to facilitate multi-disciplinary education within multi-disciplinary health care provision in the future. Teachers of nursing, midwifery and health visiting are working in higher education to deliver new programmes alongside teachers from other professions. This should bring many challenges in collaborating and developing approaches to multi-disciplinary education in the future education of health care practitioners.

According to the World Health Organisation (WHO, 1988) multi-disciplinary education is not an end in itself but a means of ensuring that different types of health care practitioners can work together to meet the health needs of people. The WHO believe multi-disciplinary education for health care practitioners has an important place in strategies for achieving health for all. Very concerned with primary health care and membership of primary health care teams, the WHO advocates multi-disciplinary education for all members of these teams.

Primary health care ... relies, at local and referral levels, on health workers, including physicians, nurses, midwives, health visitors, social workers, auxiliaries and community workers as applicable, as well as traditional practitioners as needed, suitably trained socially and technically to work as a health team and to respond to the expressed health needs of the community. (WHO, 1987, p.12)

This statement refers to the membership of a typical primary health care team, which is the central concern of this study and how they learn. The priority health care needs of communities are not usually amenable to medical care alone. The health problems are often complex. The health of individuals and groups, and the principal preventable problems of morbidity and mortality, are mostly determined and influenced by economic, social and cultural factors as well as by the physical environment. Health development, therefore, requires an approach that influences all these factors within the broad framework of family, community, work and leisure (Chartier, 1984).

At the Aga Khan University in Karachi, medical and nursing students participate together in community assessment activities. First year medical students and second year nursing students plan together how they will approach a selected community, and then go on to meet the community leaders and develop a relationship of understanding and trust (Bryant, 1987).

During their basic education and training in their chosen profession the different types of health care worker acquire different views on the nature of health and health care, according to Bryant (1987). He suggests these views come to occupy a fundamental place in the way they think and suggests they are usually strongly reinforced by the work environment. Traditionally the profession of medicine created doctors who were self-

reliant and independent. Their education emphasised expertise, autonomy and responsibility more than interdependence, deliberation and dialogue. The ritual humiliations of medical training that instil individual mastery of knowledge help maintain this (Davies, 2000). Nursing traditions have been different, emphasising hierarchy and bureaucratic rule following. Even if these have diminished, along with deference to doctors, nurses still work “around” others. Individually, nurses and doctors may strive to overcome the lingering images of their professions, but there is a weight of tradition, including a tradition of gender thinking according to Davies (2000), to contend with. She suggests that nursing is no more conducive to collaborative working than is medicine, and suggests both need to change if a collaborative model is to work.

Different types of health care worker have different patterns of thinking argues Bligh (1990). Even though nurses, for instance, must learn a great deal of factual information that applies to their practice, their profession is usually regulated in such a way that they are not given the authority to take responsibility for certain decisions, which are reserved for the doctors. Although the Nurses, Midwives and Health Visitors Act 1996 gave the nursing profession the opportunity to broaden their role and therefore their accountability, few practitioners responded to it initially.

Pre-registration education programmes in nursing, medicine and other health care professions should aim at producing generalist practitioners who are able to see each patient or client both as a whole person and as part of society (WHO, 1997).

Davies (2000) questions whether there is more to working together in health care than making sure that the work of one profession dovetails with that of another and asks the question:

Is there really any content in the "co" words, so popular in government policy documents - coordination, cooperation and collaboration? (Davies, 2000, p.23)

v. Teamwork

A great deal has been written about teams and teamworking. Much applies to teams set up to focus on a specific problem or task, rather than the ongoing and less clear-cut nature of teamwork in the NHS, and can be difficult to apply to current clinical work. Teamwork in primary care has been extensively documented (eg. Pritchard and Pritchard, 1994; West and Pillinger, 1996).

Mandy (1996) reviewing the characteristics of successful interdisciplinary teams, draws on the work done by Clark et al (1986) and selects five main attributes to successfully working in teams:

1. Goal directedness - a central purpose, or clear, recognisable idea which serves as a central focus for the work (Petrie, 1976), which is embodied in a concept or model transcending disciplinary boundaries.

In a health care team, members come together to promote patients' health. However, the role of care may be very different in the minds of team members.

2. Disciplinary articulation - all members understanding each other's role and recognising areas of overlap within the traditional boundaries.

Hilton (1996) suggests this is one of the main areas for education to address to combat fragmentation and isolation within multi-disciplinary work.

3. Communication - appreciating how other disciplines understand knowledge and the methods by which it is gained and used.

Besides differences in language used by different professions, the same terms may be interpreted differently (Pietroni, 1991).

4. Flexibility - to include valuing different perspectives, accepting changes in authority and status and willingness to take on challenges.

The influence of status differences between nurses and doctors has long been recognised. The management of such differences can be crucial in productive teamwork.

5. Conflict resolution - this can include understanding the difference between accountability and responsibility of different team members and knowing what is expected of them (McKenna, 1981).

Sands et al (1990) argue that when a common value base, language and conceptual framework are established, the team may see conflict as an opportunity for growth and integration.

Such examples identify important characteristics of successful and less successful teams, but do not address how they can be attained. Reviewing teamwork in health care, Embling (1995) concluded that while *multiprofessional teamwork* is a well-accepted strategy:

recent management and health care literature presents a positive picture of teamwork, yet often seems difficult to achieve in practice. (Embling, 1995, p.144)

Embling identifies potential barriers to effective teamwork as problems of leadership, decision-making and team membership, concluding that:

understanding key teamwork issues may be an important first step for health care teams who wish to improve their performance. (Embling, 1995, p.144)

Nurses' roles in the multi-disciplinary team have important historical and social antecedents, which some authors have argued are the key to understanding its development. The dominance of medicine over nursing has been traced through the history of women's and men's roles in health. For example, Collier (1986) traced how cure and treatment became associated with written knowledge and the technical skills of medicine; care, associated with women's work, depended upon unwritten knowledge and was difficult to appraise and value financially. Corner (1996) argues that such dominance

made much of nurses' therapeutic role invisible, and defined illness in terms of medical management.

Multi-disciplinary working entails some degree of teamworking, whether at a formal or an informal level. Professionals may be members of formal or informal teams, since all professionals are commonly seen to be part of a wider, intangible team. The extent to which members work as colleagues rather than in a *superior-subordinate relationship* (WHO, 1988, p.6) is a crucial factor in distinguishing between when teamwork exists and when in fact it does not. The assumption underlying team care is that it will bring diverse skills and expertise to provide more effective, better co-ordinated, better quality of services for clients. Sources of underlying conflict within teams relate to interprofessional attitudes and beliefs, status and power differences and role boundaries, which affect the nature of interaction and team functioning therein. The WHO (1988) defined teamwork as:

coordinated action and commonly agreed goals; a clear awareness of, and respect for, others' roles; supportive cooperative relationships and mutual trust; effective leadership; open, honest and sensitive communications. (WHO, 1988, p.32)

In practice, this may not occur as professionals may not collaborate, share information, meet together or *may not even know who else is involved* according to Jones (1997).

Researchers are beginning to understand what working together can achieve. The settings are different - how work groups in the private sector can perform better according to Haskins et al (1998), how democracies can involve people more directly (Held, 1996);

and how conflict can be resolved (Dukes, 1996) - but the messages are all the same. Working together rather than alongside, can energise people and result in new ways of tackling old problems. In the NHS today, for example, patients are encouraged to participate at all levels from Trust meetings to their own treatments by giving people the support and information they need to have a meaningful dialogue with managers and clinicians and to make an input into how services are run. Zeldin (1999) suggests health care professionals need to encourage real *conversations* at work - ones that start to create a dialogue between people who have not yet understood what they can achieve in common. He continues by stating that what characterises the new models of collaboration is the recognition that it is not what people have in common but their differences that make collaborative work more powerful than working separately.

Working together means acknowledging that all participants bring equally valid knowledge and expertise from their professional and personal experience. Affirmations, acknowledgement and recognition are important, but it is the questions and challenges that arise from the differences that are vital, argues Held (1996).

The 1990 Community Care policy document promoted inter-agency and multi-agency collaboration where the objective must be to provide a service in which the boundaries between primary health care, secondary health care and social care do not form barriers from the perspective of the service user. Here, the emphasis is on collaboration, joint service planning and joint assessment. For agencies to work together, as expressed earlier, it is necessary that some training together should occur and it must be recognised

that good joint training provides a model for joint working and helps the latter to work more efficiently (Held, 1996). Again, this movement is policy-directed and Held points out that professions and organisations may prefer not to collaborate unless compelled to do so. There has been relatively little attempt to focus on multi-disciplinary behaviour particularly in the application to welfare policies in Britain. Factors which influence multi-disciplinary collaboration include the nature of organisational relationships, the environmental context, the degree of *organisational homogeneity* and the extent of *organisational exchange* (Held, 1996, p.61).

Davies (2000) explores the various conditions it takes to create a suitable environment for working together. Firstly, she suggests, participants have to welcome challenge. They need to be confident enough to face the unfamiliar; and respectful and trusting enough to listen openly to others. Secondly, there must be ground rules. Inequalities of power can make it near impossible for the less powerful members of a group to speak out.

The increasing emphasis on the delivery of integrated, client-centred health services in Canada demands that health professionals have a sound knowledge of the services provided by their colleagues as well as the knowledge and skills to work effectively with those colleagues in multi-disciplinary teams (Morton, 1996). It appears logical then, to develop an educational programme that addresses ways in which such knowledge may be obtained and used (Browne et al, 1995). Implementation, however, has proven to be problematic (Lynch, 1981) with the result that relatively few multi-disciplinary courses have been incorporated into curricula (Jones, 1997).

Finding time to discuss and debate these issues in professional curricula across disciplines has proven difficult to coordinate for a variety of reasons. Barr (1995) gives the example of different faculties scheduling similar learning events, eg. clinical skills, communication and sociology with no multi-disciplinary sharing of experiences at all.

Much existing literature focuses on interprofessional factors and Davies (2000) identified that these are over-emphasised and that organisational factors need to be addressed. Hence, the extent to which respondents are involved in multi-disciplinary education is examined, to determine whether shared learning development also needs to have an inter-agency focus and to identify any inter-agency barriers to this initiative.

vi. Barriers to Multidisciplinary Education

Medicine has a long tradition in higher education, and medical education is largely provided by the older universities. In contrast, the recent entry of nurse education into higher education has most commonly been through institutions only recently awarded university status (Ross and Broh, 2000).

These newer universities also cater for other health and social care professions, which preceded nursing into higher education. Schools of Nursing often joined universities with existing health and social care programmes, including some nursing provision. Fraser (1998) suggests, the scale of the newcomer and its perceived potential to irrevocably change the culture of pre-existing provision has often meant that such schools maintain a semi-independent status. Ross (2000) suggests there are four potential reasons that

underpin organisational barriers to multi-disciplinary education. Firstly she talks about incompatibility, although suggests faculties may work within university guidelines even though these guidelines may be different. Secondly, she suggests lack of leadership as a barrier. Although faculties retain a degree of autonomy, she suggests there may be no one person in a position to encourage co-operation. Thirdly, complex accounting she contends, has replaced the informality of reciprocal arrangements with formal identification of cross-faculty teaching time. Lastly Ross contends initiatives may flounder because staff in one faculty are not familiar with staff, programme organisation or student profiles in another.

As with any university programme, the size of cohort in health and social care programmes is partially at the whim of applicants. No-one can produce a cohort if there are no candidates and there is considerable risk involved when institutions reduce standards of entry to fill places. Pre-registration programmes for health and social care professions must contend with a further problem in relation to contractual arrangements with education purchasing consortia. These groups of NHS trusts determine their personnel requirements annually and use these figures to calculate how many higher education places they are willing to fund. The number of places universities can offer is also affected by the professional bodies, who may determine the number of students which local care environments can support (Freeman et al, 1999).

Minority professional groups see lectures as being tailored for the majority group, but, the position of the majority professional group is not without its problems according to

Freeman et al (1999). She suggests difficulties relate to small group learning initiatives and especially to situations where shared learning between professions was a requirement. In particular, there were never sufficient members of the smaller professional groups to distribute round all the small groups. Yet, the English National Board (ENB, 2000) support the notion that strategies, which facilitate interactive teamwork such as group tutorials, seminars or problem-based learning should be used in small mixed groups to promote multi-disciplinary understanding.

Flexibility and working in partnership is to be a key feature of the re-focused education programmes for health care practitioners. Both *Making a Difference* (DOH, 1999) and *Fitness for Practice* (UKCC, 1999) emphasised the importance of these two aspects in relation to curriculum delivery. In support of both reports the English National Board, in their guidance for curriculum writers, recommend that multi-disciplinary teaching and learning:

which aims to encourage integration and collaboration in learning should be an integral part of pre-registration nursing and midwifery programmes. (ENB, 2000, p.13)

The English National Board also suggest that shared learning opportunities which enable health and social care students to learn together should be planned and sequenced so as to:

promote multi-disciplinary understanding, co-operation and communication for team working. (ENB, 2000, p.13)

Both *Making a Difference* (DOH, 1999) and *Fitness for Practice* (UKCC, 1999) suggest students should be prepared to work in multi-disciplinary teams and therefore require the appropriate communication skills, understanding of roles of others and team awareness to be able to do this.

The Department of Health Consultation Document on the review of workforce planning (DOH, 2000, p.5), stresses the importance that the NHS workforce is enabled *to deliver the best, most effective, care for patients; because caring for people is what the NHS is all about*. This report is in response to longstanding concerns about the way in which the NHS educates and uses its staff, and whilst it may be considered radical and wide-ranging in its recommendations, two main areas emphasised are:

- *teamworking across professional and organisational boundaries;*
- *maximising the contribution of all staff to patient care, doing away with barriers which say only doctors or nurses can provide particular types of care; and*
- *modernising education to ensure that staff are equipped with the skills they need to work in a complex, changing NHS.* (DOH, 2000, p.5)

CHAPTER 3

METHODOLOGY

This chapter examines the choice of research methods and the related methodological issues which had to be addressed during the research design phase and throughout the study. In selecting the design it was necessary to have a general appreciation of a variety of designs and to relate these to the aims of the research, in order to enable the writer to select the ones which were appropriate to this particular study.

Whilst recognising the purpose of both qualitative and quantitative research is the same in that both aim to contribute to knowledge about a particular subject, quantitative methods rely heavily on acquiring data that is numerical and can be statistically interpreted. Qualitative methods on the other hand, are primarily concerned with in-depth study of human issues in order to understand their nature and the meanings they have for the individuals involved.

Questionnaires are a widely-used data collection method adopted by nurses, and perhaps because of this, research which has not produced quantitative data has tended to be presented in nursing literature as of lower status and less “scientific” than experimental quantitative methods. Couchman and Dawson (1990) confirmed these views when they represent quantitative and qualitative techniques as a continuum with standardised questionnaires generating “hard” data, and “depth interviews” producing “soft” data and theory, an analysis which suggests implicit evaluative connotations.

Whilst considering an appropriate method for this study, it appeared through a review of the literature on research methods, that many books written for nurses reflected a quantitative and experimental paradigm.

To try to avoid this, the research process for this study was planned and structured using a mixed-method approach involving a combination of a questionnaire survey and semi-structured interviews. These were employed within an over-arching case-study design.

i. The Nature of the Case Study

Case study is an ideal methodology when a holistic, in-depth investigation is needed (Feagin, Orum and Sjoberg, 1991). Case studies have been used in varied investigations, particularly in sociological studies. Yin (1993) and Stake (1995), who have wide experience in this methodology have developed robust procedures. When these procedures are followed, the researcher will be exploring methods as well developed and tested as any in the scientific field, according to Tellis (2000). In Yin's writings the essence of case study is that it is an enquiry in a real-life context, as opposed to the contrived contexts of experiments. He suggested that case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident. Yin recognised this as a technical definition and added that a case study inquiry:

- *Copes with the technically distinctive situation in which there will be many more variables of interest than data points, and as one result;*
- *relies on multiple sources of evidence, with data needing to converge in a triangulating fashion, and as another result;*

- *benefits from the prior development of theoretical propositions to guide data collection and analysis.*

(Yin, 1994, p.13)

Stake (1995), another leading exponent of case study research, has carried out many case studies and written extensively about them. In 1995 he brought together his ideas in *The Art of Case Study Research*. Whilst Yin's work tends towards the positivist (scientific) paradigm, Stake's is firmly within the interpretive paradigm. Stake described a case study design as:

the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances.

(Stake, 1995, p.11)

Yin, identified some specific types of case studies, namely: exploratory - sometimes considered a prelude to social research; explanatory - used for doing causal research; and descriptive - which as in this study, requires the theory to be developed before starting the project. Stake (1995) included three others: intrinsic - when the researcher has an interest in the case; instrumental - when the case is used to understand more than what is obvious to the observer; and collective - when a group of cases is studied.

A case study is a research method which focuses on the circumstances, dynamics and complexity of a single case, or a small number of cases. It enables the experience of participants and issues in context to be addressed. Attention is given to the diversity of perspectives, openness of design, and progressive analysis of issues within the research. Case study research also gives greater prominence to the nature of the case itself, and the factors which make it different from the other cases of a similar kind (Bowling, 1997).

The major researchers in the field, including Yin (1994), Stake (1995), Feagin et al (1991) assert that sampling is not a major feature of the approach. However, selecting cases must be done so as to maximise what can be learned in the period of time available for the study. By seeking to understand as much as possible about a small group of subjects, case studies specialise in “deep data”, or “thick description” - information based on particular contexts that can give research results a more “human face”. This emphasis can help bridge the gap between abstract research and concrete practice by allowing researchers to compare their first-hand interview data with the quantitative results obtained through questionnaire.

The case study approach is a comparatively flexible method of scientific research. Because its project designs seem to emphasise exploration rather than prescription or prediction, researchers are comparatively freer to discover and address issues as they arise in their data collection. In addition, the looser format of case studies allows researchers to begin with broad questions and narrow their focus as their investigation progresses rather than attempting to predict every possible outcome before the investigation is conducted (Bowling, 1997).

The unit of analysis was felt to be a critical factor in this study. This Trust was chosen because in terms of its size, ie. the number of acute and long-stay beds available, specialist services provided, and population it served, it is in the middle of the range for the country. It is not a regional centre nor is it a small district hospital, it is an average-sized Trust with approximately 600 beds in total. Numbers are necessarily small as the

cases are intensively explored retrospectively and currently through, for example, detailed observations, information from records, and as in this study questionnaires and interviews. This study is designed to present a perspective from the viewpoint of the participant. It is selective, focusing on issues that are fundamental to understanding the system being examined. To enable this, multiple research methods and methodological triangulation, are employed in order to investigate complex situations, to ensure construct validity and increase confidence in the interpretation. Morse (1991) supports this type of approach and states that the process of methodological triangulation offers the researcher greater confidence in the validity of the results, when complementary findings are obtained through the use of two or more different research methods. He suggests that complementary findings in a study can make a more valid contribution to theory and knowledge development. The crucial factor in the concept is that triangulation attempts to overcome the deficiencies inherent in a single method, by the use of multiple methods which counterbalance each other, so overcoming threats to the validity of findings (Denzin, 1978). Snow and Anderson (1991) asserted that triangulation can occur with data, investigators, theories and methodologies. The need for triangulation arises from the need to confirm the validity of the processes. In case studies, this could be done by using multiple sources of data (Yin, 1994). This emphasis on the use of triangulated research methods was echoed by Denzin (1989), who argued that triangulation elevates the researcher:

above the personal biases that stem from single methodologies. By combining methods and investigators in the same study, observers can partially overcome the deficiencies that flow from one investigator or one method. (Denzin, 1989, p.42)

Methodological triangulation is used in this study to improve the rigour and validity of the study, not purely as a means of demonstrating the researcher's ability to take more than one philosophical perspective as suggested by Morse (1991).

Triangulation undoubtedly provides a structure for combining research methods, with the aim of exploring the concept or phenomenon of research more fully. This combination of methods may, however, encompass two or more quantitative measures, two or more qualitative approaches, or a combination of both. What is important is that the methods chosen are appropriate to the research question. As Field and Morse (1985) indicated, the use of inappropriate methods may detract from the researcher's ability to generalise from the results.

This requirement that appropriate methods be used reflects Denzin's original purpose for triangulation: validation of results through confirmation. Having commented on many social researchers' lack of flexibility or rigour when choosing methods, Denzin (1978) argued that methods are not absolute either and may be likened to a kaleidoscope: depending on how they are approached, held and acted on, different observations will be seen.

In order to promote validity through methodological triangulation, Denzin (1978) identified two approaches:

- Within-method

- Between-method

For the purposes of this study, the latter approach is used. It combines quantitative and qualitative approaches in the examination of one concept, and appeared to offer the greatest chance of obtaining valid results. Campbell and Fiske (1959) argued that the use of more than one method helps to ensure that any variance reflected in results is that of the trait or variable, not the method. It is this issue of method bias, or weakness, that underpins the concept of between-methods triangulation. Denzin (1978) suggested that the rationale for this strategy is that the flaws of one method are often the strengths of another. He also suggested that by combining methods, observers can achieve the best of each while overcoming their unique deficiencies.

The researcher supports the notion that the research tools used must be complementary, hereby enabling the strengths of each tool to help to overcome the weaknesses in the other. Hence in this study a questionnaire has been chosen to gather information from a large cohort, which will result in numerical data from a large number of respondents, even though there may be some lack of depth in the data. These limitations will be minimised as the survey will be accompanied by a smaller number of interviews. More detailed information will be gained from these and, although the number of respondents is limited, this may help to confirm and clarify the results from the larger cohort. Statistical findings from the quantitative method may validate themes arising from the qualitative data. Either method alone would have limitations regarding validity, but used together a clearer and more detailed picture may be revealed.

This case study is based on a modification of the methodology devised by Yin (1994):

1. Design the case study protocol:
 - (a) determine the required skills
 - (b) develop and review the protocol
2. Conduct the case study:
 - (a) prepare for data collection
 - (b) distribute questionnaire
 - (c) conduct interviews
3. Analyse case study evidence:
 - (a) analytic strategy
4. Develop conclusions and recommendations based on the evidence.

A draft protocol was developed by the researcher following a literature survey of the topic which would help in developing the draft questions. Some of the early criticisms of the case study as a research methodology was that it was unscientific in nature, and because replication was not always possible. The literature contains major refutations by Yin (1994), Stake (1995), Feagin et al (1991) and others whose work resulted in a suggested outline for what a case study protocol should include. Yin (1994) reminded the researcher that there is more to a protocol than the instrument. He asserted that the development of the rules and procedures contained in the protocol enhance the reliability of case study research. In line with Yin's recommendations, the following sections were considered as a protocol for this study:

- The research aims, issues surrounding case study research and a description of the topic under study.
- Field procedures - credentials for access to data sources and location of those sources.
- Case study questions - the researcher needs to keep in mind the focus of the study throughout.
- A guide for the case study report - the outline and format the finished study will take. The researcher felt this is often omitted from case study plans, probably because investigators view the finished document so far in the future. It would appear case studies do not have a widely accepted reporting format - hence the experience of the researcher is a key factor. This researcher assumes this lack of guidance on format is that each case study is unique, the data collection, research questions and the unit of analysis cannot be placed into a fixed mould as in experimental research. Indeed, this is one of the attractions of case study research.

The researcher felt the discipline imposed on her by this protocol is important to the overall progress and reliability of the study. It helps keep the researcher's focus on the main task and aims, while the process of development brings out problems that would only be faced during the actual investigation.

ii. The Research Design

Published research on health and health services is often multi-disciplinary (Barr, 1994; Walby and Greenwell, 1994; Silver, 1998; Miller et al, 1999b) and includes

investigations by many different health care professionals. One consequence of this multi-disciplinary activity is that a wide range of qualitative and quantitative, descriptive and analytical research methods and designs is available. This diversity should enrich the approach to research design, although there has been a tendency in research on health services to focus mainly on experimental methods. All methods and designs have their problems and limitations, and the over-reliance on any one method or design, at the expense of using multiple research methods, to investigate the phenomenon of interest can lead to *a very limited toolbox* (Pope and Mays, 1993, p.317), sometimes with questionable validity (Webb,1966), and consequently to a limited understanding of the phenomena of interest.

Surveys can be designed to measure certain phenomena in a population, ie. in this study five groups of healthcare professionals. The aims of the survey design were to obtain the respondents' attitudes towards, and experiences of, multi-disciplinary education for health care professionals. The main reasons for using the survey method were that it allowed a large number of people to be examined quickly; it ensured respondents' anonymity and would not be too costly. Also this method of data collection is easy to administer and enables direct comparisons to be made between groups and individuals with data that is quantifiable.

The postal questionnaire, whilst being less of a social encounter than the interview, was actually used to minimise social desirability and interviewer bias. It is a common method of covering a large research population relatively quickly and more economically than

interview methods. The usual strategy is to mail respondents a questionnaire to complete at home, with a reply envelope for its return. For this study, the internal mailing system within the hospital Trust was utilised.

A large pool of items was generated from the literature which reflected the concepts within the aims of the study. This conceptual framework was constructed using the evidence from the literature, the views of professionals and academics, and the writers' personal experience of considering multi-disciplinary learning initiatives for undergraduate health care students.

iii. The Pilot Questionnaire

Individual items in the questionnaire were examined by six experts representing different health care professions who were asked to rate the relevance of each item. They were also asked to comment on clarity, format and ease of completion and their suggestions were incorporated into the final questionnaire. Brief instructions for completion and a definition of "multi-disciplinary education" were included to ensure the respondents understood the concept being investigated and that responses were related to the same definition. An introductory letter accompanied each questionnaire sent to the respondents.

iv. Semi-Structured Interviews.

The semi-structured interviews ensured a degree of qualitative research that allowed access to respondents' schema:

a personal framework of beliefs and values with which they selectively build meaning and significance in events. (Jones, 1985, p.67)

The advantage of the semi-structured interview technique is that it allows for the interviewees' spontaneous expression which can then be directed toward the information gathering objectives of the interviewer.

Oakley (1981) sought to use feminist approaches to research which would not exploit her female respondents, as traditional methods often do. Similarly, the writer attempted to be sensitive to the views and perceptions of the interviewees rather than adopt:

a purely exploitative attitude to interviewees as sources of data. (Oakley, 1981)

Oakley (1981) suggests that all research is political, to some degree - and some respondents were aware of the policy drive behind multi-disciplinary education, yet were sceptical about what it was intended to achieve.

A review of the literature contributed to the construction of the interview schedule:

interviewers must have knowledge of the subject domain being explored in order to obtain valid and complete data during the interview. (Barriball and While, 1994, p.330)

The schedule was further revised when it became evident that some terminology used was from the nursing field and therefore not applicable to the other health care respondents. The interviews were between 20 and 30 minutes long, and audio-taping

permitted *access to the interactions between respondent and interviewer which help validate the accuracy and completeness of the information collected* (Barriball and While, 1994, p.332). Probing techniques were also used to explore the apparent meanings which lay behind respondents' answers. In this way, it was hoped that any potential misrepresentation of interviewees' intended meanings was avoided and ambiguities were clarified. Probing was also used to detect what was implicitly stated, as well as what was explicitly stated. Prompts used were open-ended, *with the interviewer only using terminology already used by the interviewee* (Tomlinson, 1998, p.10). Thereby, specific procedures were utilised to strengthen the validity of the data. The writer felt that many of the responses provide rich and quotable material which enlivens the final study.

Reliability in interviewing is related to issues of interviewer bias and interviewer competence (Field and Morse, 1985). Yin (1994) suggested that the researcher must possess or acquire the following skills: the ability to ask relevant questions and to interpret the responses; be a good listener; be adaptive and flexible so as to react to various situations; have a firm grasp of issues being studied, and be unbiased by preconceived notions. Interviewers must be trained to appear and speak in a neutral, non-judgemental manner according to Bowling (1997). She suggests they must never appear surprised or disapproving in relation to a response, and must display a uniform manner, expressing only polite interest. Questions were asked in a non-biased and non-leading way. Minimising interviewer bias is related to the use of techniques and approaches described previously. But, no two interviews are the same, so that loss of standardisation

in the interview schedule must be compensated for by the interviewer's interviewing skills, to ensure comparability of interviews. The investigator must be able to function as a senior investigator (Feagin, Orum and Sjoberg, 1991). Whilst designing the case study protocol, as recommended by Yin (1994), the researcher's 27 years of experience in both academia and health care was adequate preparation for this project.

Watts (1988) emphasised the importance of *methodological congruity*, which ensures the data analysis is consistent or compatible with the general underlying philosophy of research. Interview recordings were played and replayed to take account of data on the tapes such as emphasis, mood, and intonation which may crucially elaborate meaning. Notes were made of the tapes to try to provide an accurate record. Content analysis involved the process of becoming familiar with the data and identifying relationships and repetition of themes within the data (Field and Morse, 1985). Each interview was analysed independently, to preserve its individual significance and identify its exclusive aspects. Then they were analysed for each theme or concept, to elicit comparisons and ensure that themes and concepts were mutually exclusive. In this way *the constructions of the research participants* were retained (Jones, 1995, p.97).

The issue of generalisation is a frequent criticism of case study research. It is often suggested that the results are not widely applicable. Yin (1994), in particular, refuted that criticism by presenting a well-constructed explanation of the difference between analytic generalisation and statistical generalisation. He suggested analytic generalisation used

previously developed theory as a template against which to compare the empirical results of the case study. Stake (1995) argued for another approach centred on a more intuitive, empirically-grounded generalisation. He termed it *naturalistic* generalisation. His argument was based on the harmonious relationship between the reader's experiences and the case study itself. He expected that the data generated by case studies would often resonate experientially with a broad cross-section of readers, thereby facilitating a greater understanding of the phenomenon.

v. The Sample.

The sample in this study, consisted of five different groups of health care professionals who all worked within the Trust: nurses, physiotherapists, speech therapists, occupational therapists and radiographers. Contact was initially made with the chief executive of the Trust, outlining the research proposal and aims and requesting permission to approach staff members. Having gained this, I then visited the personnel department of the Trust and requested a list of the names of staff working within the five named professional groups.

Each list for each group of professions was in alphabetical order, and hence they were organised in a systematic way. To ensure a more even spread of the sample across the professions and to select a smaller sample from the larger population, systematic random sampling was employed. The target sample size for the questionnaire was 150, and the total eligible population was 1,560, and thus a 1:10 sampling ratio was selected. To ensure an equal spread of respondents the sampling started at name three on the list.

Women respondents constituted 88% of the sample due to the female-dominated workforce in the health care professions selected.

For the interviews a further systematic random sample was employed of those used for the survey. This captured a representativeness of each professional group.

vi. Ethical Issues Considered

The principle of informed consent comes from the respondents' rights to freedom and consent. Informed consent has been defined by Diener and Crandall as *the procedures in which individuals choose whether to participate in an investigation after being informed of facts that would be likely to influence their decision*. (Diener and Crandall, 1978).

According to Cohen and Manion (1997), this definition involves four elements: competence, voluntarism, full information and comprehension. "Competence" implies that mature, responsible adults will make informed decisions when they are given all the details. "Voluntarism" implies that participants are willing and where risks are known, the participants freely choose to take part. "Full information" implies participants have all information available, although details regarding analysis are not always available upon commencing a piece of research. Lastly, "comprehension" refers to the fact that participants fully understand the situations they may be putting themselves into whilst taking part in the investigation. Prior to commencing this study, letters were sent to each potential respondent giving a clear explanation of the purpose of the study. An outline of the benefits that could reasonably be expected from the results of the study and an offer to answer any questions concerning any aspect of the study were also included within the

introductory letter. Finally, it was made clear that each respondent was free to withdraw consent and discontinue participation at any time during the study.

An individual's *right to privacy* is usually contrasted with public *right to know* according to Cohen and Manion (1997, p.38), and they suggest *right to privacy* may easily be violated during the course of an investigation or denied after it has been completed. Sensitivity of information that may be given was considered and the venue for the interviews was given considerable thought. Researchers have a duty to protect and ensure participants' anonymity and to keep research data confidential at all times according to Frankfort-Nachmias and Nachmias (1992). At no time should participants' identity be revealed throughout the investigation, nor should readers be enabled to identify the respondents from the data supplied. This was taken into account when developing the questionnaires. No identifying or coded marks or details were included, thereby guaranteeing complete anonymity. Whilst a respondent agreeing to be interviewed clearly cannot be guaranteed anonymity, confidentiality was promised.

The promise of confidentiality is another method of protecting a respondent's privacy. Those respondents who agreed to be interviewed, were assured that no-one would be able to make the connection between the information given and themselves. To reassure each respondent, I tried to explain clearly the meaning and limits of confidentiality of the study. This is supported by Kimmel (1988) who notes that some respondents may refuse to co-operate if the assurance of confidentiality is weak, vague, not understood or thought likely to be breached.

CHAPTER 4

PERCEPTIONS AND BENEFITS OF MULTI-DISCIPLINARY EDUCATION

When the interview data had been transcribed, there appeared to be four broad themes. The first considered perceptions of the term multi-disciplinary education; the second considered barriers to multi-disciplinary education; the third theme was that of multi-disciplinary teamworking, and the fourth, the initiatives that may lend themselves to multi-disciplinary education.

This chapter will discuss the first theme - one of perceptions of multi-disciplinary education which included views on appropriate multi-disciplinary learning and the potential benefits.

The term multi-disciplinary education was problematic for some respondents - four physiotherapists, three occupational therapists and two nurses. The occupational therapists were unfamiliar with the term and could only suggest what it implied to them, while the physiotherapists indicated it was a term specifically used by the health service. Speech therapists use the terms “joint learning” and “joint training”. The terms “shared” and “joint” were viewed as similar, but there were distinctions between “training” and “learning”. Only speech therapists indicated that learning is not necessarily associated with training and that education does not always produce learning!

I would see more of a difference between the term “learning” and “training” ... as opposed to the “multidisciplinary” and the “joint”. I would say that people can learn in lots of different ways without involving training. I think learning is more of a practical thing - people learning skills ... which I don’t think you can always learn through education ... (st)

One physiotherapist described how differing health and social services terminologies, in relation to training and education, can themselves be major barriers to the organisation of training -

When I say “training” I mean every little bit of teaching that may go on in the physiotherapy department, whereas when the health services say “training”, they mean training in a very literal practical sense ... and they seem to have some sort of a hierarchy where education was the thing that professionals got, not training; whereas, if I’d said “let’s have some joint education”, then everyone would have been happy. (p)

Two radiographers elaborated on distinctions between health and social services definitions. Radiographer A indicated that health service multi-disciplinary education is too narrowly focused around medical and health issues -

in the past, it has tended to be centred more around medical-type things. I’ve always felt that we’ve responded to them when it’s particularly about a health issue, when really they’ve got a lot more skills - for instance, health visitors and child development ... (r)

Another distinction between health and social services “multi-disciplinary” education and “joint training” is that, to the health services, the former is learning between different professions, whereas social services are composed of only one professional group - social workers. One occupational therapist stated:

In social services, they tend to have only one group that we call a professional group and that's the social workers and therefore, if you're talking about multidisciplinary learning among professionals, they'd be looking outside their organisation to share learning with, but if you said "do you do much joint training" and you didn't use the word "professionals", yes I would say there is joint training between home care and fieldwork or between day care and residential staff. (ot)

She stressed other important differences between the two organisations are that the majority of social services training does not lead to formal qualifications. It is set up on a spontaneous basis and the training is centrally organised (by training sections) for organisation-wide staff, whereas the health services training and education is more credentialist-orientated, highly structured and is organised on a professional basis. Whilst this is partially true, there is some structured continuing professional development for social services, although this does tend to be locally facilitated.

There is a more informal training structure; the health service is rather more geared towards you getting your certificates and getting your qualifications. Training in the social services is much more pragmatic - it's what you need to know - well, let's put on a course to do it; training in the health service is structured much more along professional group lines. (ot)

A final point of distinction is that social services training operates from an organisational perspective and the training seeks to make possible the organisational aims, whereas health services education and training generally operates from individual, professional perspectives. (This last point should be qualified by data from the nursing interviewees - where nurses' educational needs were partially determined by whether the chief nurses' primary orientations were to the organisational or the individual nurse's needs.)

In nursing, we tend to see ourselves as being, “well, no-one else can tell us that - we can only learn from nurses. (n)

Despite a striking lack of consensus as to what the term meant, multi-disciplinary education has long been considered an effective way of equipping professionals to provide a service which is, to all intents and purposes, “seamless,” although delivered by health and social care professionals who have maintained their discrete professional identities:

...professional education should ... prepare individual practitioners for ... collaborative working ... to enable each professional to retain certain unique areas of skill and knowledge, while sharing overlapping aspects of knowledge and skills ... The lack of early multidisciplinary training helps to perpetuate misunderstandings about different professional approaches and their underlying values. (n)

Some of the nurse interviewees’ particular philosophies for professional education were explored. One respondent made a distinction between “shared multi-disciplinary” learning and “shared generic learning”. Her understanding of shared multi-disciplinary learning was that it required the different professions to undertake to learn skills pertaining to other professions (over and above shared multi-disciplinary learning around the commonalities of different professions). Two different nursing interviewees (A and B) seemed to have a multi-disciplinary educational philosophy, which was translated into structuring their respective clinical environments, ie. integrating nursing, midwifery, radiography and therapy professions.

Nurse A: in those areas which are very clinical and practical ... on the shopfloor, if you like, the various groups are expected to work together and all the professions would have to be blind not to see that they do work together, and therefore can learn together.

Nurse B: *we work together 365 days of the year and on the whole we work well, but we never learn together. I mean learn in the classroom not on the ward ... we learn together on the ward although it's informally.*

Relating the above data to existing literature - a joint strategy devised by the ENB and CCETSW (1992) required that the term “shared learning” be used rather than “joint” or “shared training” and indicated plans to promote *shared multi-disciplinary learning at all levels of education and training* (ENB and CCETSW, 1992, p.12). Other government papers, eg. Working Paper 10 (DOH,1989c), all used the term “training” although this particular paper stated *that this should not be taken to imply any value judgement about whether any particular activity is education or training*. Hence, there is a degree of unfamiliarity and lack of clarity as to the terms used, which clearly still exists today. This is supported by the findings of Clifton et al (1993, p.6) and their recommendations that *guidance and clarification be provided on the distinction between joint and shared training (and) the concept of shared learning*.

This concept was problematic for the majority of respondents:

the workplace is changing ... the words multidisciplinary and shared learning no longer have much meaning ... all these words have come to mean something and nothing to everybody, and they're thrown about ... that's actually what's happening in the workplace ... because there are pressures from different directions to require ... organisations to work together ... to cut costs people are being shunted from A to B. (p)

The notion of whether or not it was appropriate was important here. Shared multi-disciplinary education was viewed as perfectly acceptable, where “appropriate”, but there are instances where it is not viewed as “appropriate”. Respondents usually gave more

than one reason (and sometimes several reasons) for where multi-disciplinary education would not be appropriate. They identified a number of difficulties relating to implementing or creating shared multi-disciplinary learning opportunities.

Twenty respondents indicated that there is still a need for profession-specific learning - therefore, shared multi-disciplinary learning would be appropriate as a supplement to that, but not as a replacement.

I would only want to share sessions that are applicable to all health care workers. I wouldn't want to learn with them all the time. (n)

I came into the health service to be a physiotherapist and therefore expected to train with other people who wanted to be physiotherapists, not generic workers. Maybe some things could be generic but not much. (p)

Why do I need to know about nursing ... I mean if I'd wanted to be a nurse I'd have trained to be a nurse. (ot)

If you mean can I learn anything from other professions, yes I think I probably can, but I'd rather stick with radiology. (r)

I think one of the points is we choose to be speech therapists, and educationalists shouldn't forget that. (st)

Appropriate multi-disciplinary education also needed to address the knowledge backgrounds of different professional groups. Ten respondents indicated that it needed to be made clear what levels of knowledge were going to be delivered by multi-disciplinary education, so that it was pitched at a level which was actually suitable for all the participating disciplines. One respondent suggested that it should operate on a

need to know basis; the need to know in basic sciences ... anatomy and physiology is fairly even to start with; you can have a scale there of where people can learn up to a continuum to where ... to stop. (p)

Two other respondents also signified that the differing educational preparation levels of various professional groups needed to be addressed. Fifteen of these respondents additionally stressed that the knowledge delivered by these programmes must be specifically relevant to the participants. Three physiotherapists, two radiographers, two occupational therapists and eight nurses all identified the need for profession-related topics.

There are courses we look at and it's open to x, y and z; not perhaps as meaty for my needs - a bit watered down ... a bit too general perhaps. (ot)

The age of health care practitioners appeared to be a factor in attitudes towards multi-disciplinary education. The results of the survey suggested that respondents in the 40-49 age group disagreed that multi-disciplinary education would make a positive contribution to their profession.

(Chi sq 17. 811 [df = 4] p< 0.05)

Balancing the needs of participants with diverse educational and professional backgrounds is not an easy task, but an essential one if the shared multi-disciplinary learning is to be educationally valid. Where this is not addressed there is the possibility of dilution of the knowledge content and the multi-disciplinary aspect is seen to be less beneficial, for some participants. Previous research which supports the above was produced by Jones (1986) who emphasised the importance of balancing the experience

and background knowledge of professions to avoid domination by any one profession.

Hutt (1990) highlighted the difficulties of achieving the right balance of students, and content from each discipline. Similarly, Scott Wright (1976, p.72) identified earlier that deciding *what depth and breadth of knowledge can profitably be shared* is important.

One respondent, a physiotherapist, pointed out that there are difficulties in determining what the commonalities are between professions, that could be shared. Another physiotherapist felt that clinically-focused multi-disciplinary education would be inappropriate for physiotherapists' clinical needs:

... we are so specialised that no other profession could share clinical skills with us. (p)

Two radiographers felt that there were no real professional links between their profession and physiotherapy, in one case stating:

I know my colleagues in physiotherapy, but we don't integrate professionally because we clash ... we have no common denominator. (r)

This is significant in that, if there is a perception among radiographers, that there are no links with some other professions, then this raises questions about the extent of their role within multi-disciplinary learning. A total of 2.6% of the respondents to the questionnaire strongly disagreed with the statement that multi-disciplinary education could enable them to appreciate the roles of other professionals; while 10% agreed with the statement. Two

of the nurse respondents thought that the appropriate role of multi-disciplinary learning was to develop “patient-focused care”:

... yes, if it helped facilitate patient-focused care so that we were all working towards the same agenda. After all, that is what we came into the health service for, isn't it? (n)

All respondents surveyed, 25% felt that there might be hidden agendas behind the development of multi-disciplinary shared learning programmes. A speech therapist and a physiotherapist wanted reassurance that the multi-disciplinary agenda was not simply a cost-cutting exercise:

I'm always concerned that different ways of learning, of teaching, aren't seen as cost-cutting exercises and if someone convinced me that wasn't the thing, I can see no negative effects. (st)

Eight respondents felt that staff might perceive multi-disciplinary education as a threat either to their professional identities or to their professional roles:

... my interpretation of this, is that I, and my profession, might loose all the aspects of our roles that make us a profession within our own right we fought hard for recognition. (ot)

Nurses are now gaining the respect they have sought for many years. We have our own body of knowledge and can evidence the care we deliver ... would that go? (n)

... we would fight tooth and nail not to loose the specialist aspects; I am a physiotherapist not a nurse or a doctor. We mustn't lose sight of all the hard work that goes into us qualifying. (p)

All respondents surveyed, 32.5% agreed with question 19 that multi-disciplinary education would undermine their professional specialism.

Two physiotherapists indicated that the issues which were to be addressed by multi-disciplinary education were not necessarily self-evident and that support for it was going to be dependent on the nature of those issues. A radiographer and a speech therapist indicated that the aims of multi-disciplinary education needed to be made more explicit:

... I think it has to be identified what you're actually going to achieve from it. (r)

...it (multidisciplinary education) could be set up to achieve one or more of a number of aims as long as we know what they are prior to subscribing to the course. (st)

Of the seven respondents who did not indicate any fears about instances where multi-disciplinary education was not appropriate, three respondents nevertheless qualified this with cautionary notes.

A nurse emphasised that the initiative must come from practice and not be driven by education, so that it is not perceived as “threatening” by the professions. Another nurse emphasised the need to measure outcomes of shared learning “in terms of quality and service given”. Finally, a radiographer indicated the perception of the multi-disciplinary agenda was important:

... it's peoples' perceptions of what they'd be doing by multidisciplinary education; if they think they're coming to learn something that they haven't learned before, then they're quite keen; it depends on what they perceive the agenda as - if you're bringing them together to learn to work together, there can be resentment, in a sense. (r)

In the respondents' perceptions of what multi-disciplinary shared education was, five respondents perceived that there was a growing demand for professional “generic

workers”. A radiographer and a nurse believed that fundholders would be looking for the “lowest common denominator”. Another radiographer expressed fears about the management problems involved:

If all the generic workers are working generically, who actually controls them? That's my fear, I suppose. (r)

One of these respondents, an occupational therapist, clearly disassociated her/himself from the concept:

... although, if you go on to think more about the generic therapists you might just have a key worker who can get the whole lot done ... that's just an idea ... it's not my idea ... I don't hold with it... (ot)

Two respondents, nurses, felt that skill-mixing was threatening their professional identities, by employing unqualified nursing assistants. One nurse believed that:

skill mixing should be looking at increasing skill mix between nurses and doctors, not nurses and nursing assistants. (n)

And the second respondent indicated that the threat of skill-mixing in an organisation may hinder any multi-disciplinary educational development. The need to avoid “skill diluting” was stressed by a nursing respondent:

... the trouble is that a lot of other things can be happening in the organisation which they perceive to be a threat ... so, if you look at skill-mix or deskilling, these words that are bandied about - if people are feeling that their particular profession is at risk, for whatever reason, you may well have a barrier ... (n)

Hence, there is a perception among some respondents that the drive for multi-disciplinary education and the issues of “skill-mixing” and “generic workers” are linked. Clifton et al (1993, p.22) also found that *it was feared that joint training in particular could “dilute” the specific content of professional training and the competence of professional staff.* Shaw (1994) argued that multi-professional training itself was a response to threats to professional employment by the use of skill-mixing.

Despite the above perceptions of certain latent agendas of multi-disciplinary education, there was some agreement on a number of its beneficial goals. The most common belief cited was that multi-disciplinary education would lead to an understanding of other professions - whether it be a broad understanding of professions or, more specifically, an insight into the particular skills, roles or changing roles of professions; or developing understanding through changing stereotypes and misconceptions. Seven of the nurse respondents, two radiographers, two physiotherapists and one occupational therapist identified this advantage.

I think the effect of understanding somebody else's role would be a massive positive effect; from a speech therapist's point of view, we find that a lot of people don't know what we do ... physio's have a higher profile ... and people know what they do because they're a massive profession and there's loads of nurses and basically, people know what they do but people don't seem to know what occupational therapists do. People think we just stuff bunnies and make cups of tea! (ot)

This is supported by 59.8% of respondents to the questionnaire who agreed that multi-disciplinary education would enable them to gain insights into others' professional skills. A second frequently cited belief was that multi-disciplinary education would enable a better organisation of care and services - components of this theme included a more

coordinated service, better overall management of patients, focusing on common objectives and striving for seamless care:

... some of the problems that I have at the moment, as a senior radiographer, is general care of the patient, so that the radiographer doesn't think that their role starts when the patient arrives in the x-ray room and finishes at the point where the patient walks out of the x-ray room ...that the nurse isn't the only person responsible for the care of the patient. It's this within departments ... the breaking down of barriers. (ot)

Multi-disciplinary education would also enable expansion of a knowledge base - through pooling or increasing knowledge; by learning from others or through the identification of knowledge gaps. Thirteen respondents identified this within their perceptions of multi-disciplinary education. This type of learning would lead to improvements in care according to three nurses, two physiotherapists and two speech therapists:

... we'd all be working from the same agenda and the patients would know exactly each carer's role ... there would be no duplication. (n)

Patients must get tired of repeating their details to different people whilst they are in hospital. If we all worked together this would be avoided, but, we don't, so it will continue until someone sorts us out. (st)

From the patient's point of view repetition must be a nightmare and it's only happening because we don't work together, we all stick to our little bit even though the poor patient may have already provided the information. (p)

... there's more likely to be a seamless service for the patient if people are doing what the patient needs rather than what professional boundaries or professional misconceptions dictate. (n)

Nine respondents (four nurses, two radiographers, two physiotherapists and one speech therapist), thought that multi-disciplinary education would lead to advances in the

delivery of care or services - by identifying gaps or overlaps; through more efficient use of skills, expertise or resources or by a quicker service delivery.

Sometimes I find myself doing jobs that the nurses would normally do, yet they need doing at that time. But I know when I've gone the nurse will come and do it all again. This is what I mean by overlaps. (r)

I brought a patient a set of crutches we'd ordered for him but when I came to give them to the patient, he'd already got a set from stores. The nurse had organised them. Luckily they were the correct size. (p)

Six respondents believed that multi-disciplinary education would promote shared problem solving and dealing with issues jointly:

Case conferences work extremely well, but unfortunately they are so few and far between. If your ward manager and consultant are committed to them then they work, but this is so rare to have this understanding. (p)

Four respondents believed that multi-disciplinary education would avoid duplication in education delivery:

After all, we all learn similar topics ... in fact some doctors would benefit from understanding what others' roles are. They learn physiology too, don't they, so what's the problem? (p)

In this cost conscious culture wouldn't you think people would have realised they could save money by joining groups together. There must be so much duplication in education. Either they have plenty of funding or else they haven't done their research. (r)

... duplication could be avoided if we shared more resources ... or even education, we all learn about similar subjects. Money saved could be put towards improving the facilities for the patients. (p)

... I think it (multi-disciplinary education) would be cost efficient, but it would have to be selective. I wouldn't want to lose my professional status. (p)

These respondents, plus two nurses, added that they thought multi-disciplinary education would improve the inter-agency approach by increasing inter-agency understanding, reducing inter-agency conflict or through the development of common assessments across different professions. One respondent stated:

... at the moment most of the multi-disciplinary learning I do is with social workers and what seems to happen is that you get a greater role of the other profession and a more in-depth appreciation of that role; that there wouldn't be this battling between the two services and maybe, in an ideal world, an assessment done by one profession would be accepted as good enough by the other and they wouldn't have to go through two whole processes ... (ot)

Five respondents, two nurses, a radiographer, a speech therapist and a physiotherapist believed that multi-disciplinary education would either identify commonalities between professions or enable the development of a universal terminology or common body of basic knowledge:

... we all mean the same thing but talk in different languages, no wonder patients get confused. (n)

It may enable us to communicate as a group of health professionals all talking the same language, one that patients can understand. (n)

... certain topics lend themselves to shared teaching and learning, this might bring us together with a common body of knowledge. (r)

A lot of the core elements of training are the same across all the professions; so it is wasteful to teach them in isolation ... Also, as, increasingly, health care focuses on team approaches to delivery of care, it makes sense to get these teams together right at the time that they are learning their jobs if you like. (sp)

It's about core curricula; it's about looking at how professions are structured in terms of their initial training and education. (p)

Whilst many benefits of multi-disciplinary education were identified by respondents, two respondents indicated, it is essential to evaluate whether any multi-disciplinary education process provides these gains, by measuring the outcomes of shared multi-disciplinary education. Moreover, as another respondent stressed, it is important, in any multi-disciplinary programme, to develop:

... some sort of measure about how shared it really is or whether it's just a shared taught course or whether it's shared learnt. (n)

This study supports the research by Clifton et al (1993) among purchasers and providers of education, which found that joint and shared approaches to training promote *inter-agency co-operation* and lead to the development of a *broader knowledge and skill base* (Clifton et al, 1993, p.17).

The next chapter explores potential barriers to multi-disciplinary education.

CHAPTER 5

PERCEIVED BARRIERS TO MULTI-DISCIPLINARY EDUCATION

Despite an awareness that multi-disciplinary education was an agenda item both within the health service and higher education, many of the interviewees identified barriers to its achievement, and to the working it might inspire. This perception related mainly to resistance from certain professional groups.

Some respondents were aware that there was still a difference in perception between health work as a science and as an art, and consequently a split between the different professional groups emerged. One occupational therapist, speaking about her concern that the pharmacy department was being moved from the health school in a local university, to a specifically science-based faculty said:

They have just moved from a three to a four year training; they probably now see themselves as scientists and not part of the health team. It gives the impression "our training is longer than yours therefore because we know more than you we are more important" ... I'm not saying this is what they say, but, what does all this say to you?

(ot)

One nursing respondent commented on the fact that doctors saw their training as needing to be separate:

It's a culture thing ... an elitist thing. I find it quite exciting and when I talk about it on the ward, the doctors either ignore me, or, make a joke by saying unless they get a free lunch out of it they won't be going. I think they don't think they will get any recognition out of it ... credits. We have tried time and time again to develop frameworks within

which to work on the ward, and we've provided the evidence to show it works, but you only need one doctor to pooh-pooh it and the whole thing collapses. (n)

This is supported by the ENB (1999) who stated that some doctors were unprepared to take part in learning experiences (other than as teachers), but they were also perceived to be unwilling to learn from researched practice. They reported on an instance where evidence of best practice had been identified. This was seen by some doctors as inadmissible on the grounds that it had neither resulted from randomised controlled trials, nor been conducted by medical staff.

One consultant was saying that if no doctors are involved then it is not valid. He actually put this in a letter of complaint to our director of nursing, that as far as he was concerned he wouldn't acknowledge this resource. (ENB, 1999, p.47-48)

Fifteen respondents, eight nurses, three physiotherapists, three radiographers and an occupational therapist, were critical of the negative attitudes to multi-disciplinary education by the medical staff. Two of the physiotherapists believed that the Professions Allied to Medicine (PAM) felt threatened by the nursing influence within multi-disciplinary care and indicated that this was so:

... by definition, in an in-patient situation, then the nurse manager or the ward manager tends to assume a more leading role, because they have the overall responsibility for the patients' management in the ward ... it can make things more difficult. (p)

We always have to report to the nurse in charge. On some wards I dare not walk on without checking first it's OK to treat my patient. And if I come when the nurses are busy with the patient they make it plainly obvious I should come back later ... this can be pretty annoying. Nurses rule! ... mind I suppose they do have ultimate responsibility for the patients. (p)

Four respondents, a nurse, a speech therapist and two radiographers signified that there was general resistance to multi-disciplinary working and learning, manifested either by negative attitudes or “professional tribalism” (r).

It's a nice idea in theory but I doubt it will ever come off ... too many people have too much to lose ... as I told you earlier, I trained to be what I am not a nurse or a physio and I'm not going to lose it now. I suppose you think I'm elitist. (r)

I'm all for it, but I know many of my colleagues won't go to a study day if it's run by nurses. It's a shame really. I've been to a couple and they were very good, even if you just use them to make contacts ... the literature usually goes straight in the bin. Pity really because we hardly get any days that are only for us. (r)

They're all run by nurses and so aren't appropriate for me ... I don't know why we keep getting the flyers in our department ... they never go on the notice board. (st)

Some topics would be interesting but it's not my scene really. I prefer to be with other nurses ... we have more in common and can talk about the same things. Others wouldn't understand. (n)

Overall, approximately one fifth of respondents believed that there was resistance by the professions to shared multi-disciplinary education - these may be non-specific insecurities or, in the case of nurses, they may lack confidence to express their ideas in the presence of other health professionals.

I'd probably be scared in case I said something wrong so I prefer to say little whenever others (other professionals) are around ... I'm sure my knowledge is sound and I always keep up to date, but I don't feel I'd be taken seriously by some of them. (n)

Despite feeling confident in practice another nurse stated:

... it would depend who was in the group ... I mean if doctors were there I'd probably say nothing ... funny really 'cos I'm not afraid to speak up on the ward; in fact I often have to

tell the doctors what to do. A classroom would be different though, I'd feel I had very little to contribute even though I'm sure I must have. (n)

... if I felt confident enough then I'd speak out but, I'd find it awesome to be in with a mixed group, especially if the medics were in there. (n)

It appeared that age was sometimes a significant variable in experiences of multi-disciplinary education. A chi square test of age with question 8 in the questionnaire, suggested a significant difference between age of respondents in terms of whether multi-disciplinary education had been supported during their training. The youngest group had experienced a greater incidence of multi-disciplinary education.

(Chi square = 8.752; [df = 2]; p<0.05)

There are territorial issues surrounding roles, role overlaps and skills according to four respondents, for example:

Nursing skills, for instance, are extending quite rapidly into what was traditionally thought of as medical territory - it challenges professional boundaries and things like that. (n)

Like I've mentioned to you before, I wouldn't want to lose everything I've trained hard for and I feel by sharing my knowledge I'd be de-valuing my skills and watering down, so to speak if you know what I mean, my profession. I don't feel as though I need to know about anyone else's skills, I'm quite happy practicing my own. (ot)

These boundaries surrounding knowledge ownership, manifested in resistance to sharing information or sharing records:

... if I had my way I'd have separate records from the others, a separate physiotherapy record card, then we wouldn't have to share the same documentation with the nurses and the occupational therapists ... doctors have their own records after all. (p)

One nurse even intimated ownership of a particular patient:

... I don't like it when the physio's undo all my hard work I've just spent all shift sorting out. They're my patients after all, I'm responsible for them. (n)

This need to maintain professional identity, standards and value systems is a theme that pervades much of this chapter. To a varying degree, professionals saw this as conflicting with the perceived drive “to go multi-disciplinary”. This need to maintain professional identity is supported by Thurgood’s (1992) findings, that professional power was seen as a major inhibitor in the development of multi-disciplinary education. A total of 45.5% of respondents surveyed, agreed with question 17, that multi-disciplinary education would threaten their professional status.

Stereotypical assumptions about other professions were highlighted by three respondents:

... nurses aren't graduates ... god help us all when they are. (p)

Nurses training is mostly skill based, there is very little theory. (p)

... they (physiotherapists) really think they're something special just because they do degree training. All they do is help people cough and keep them moving. (ot)

One senior nurse thought boundary issues are particularly problematic for professional managers:

I think maybe you begin to see the implications for the patient as you get higher up the managerial tree ... you start to see more what fighting for your profession does ... and what it doesn't do for the patient ... (n)

She continued by suggesting the professional managers are trying to maintain the professional boundaries:

... well, it's in their interest to keep their own patches. If there were amalgamations there would be job losses wouldn't there. (n)

According to Pirrie (1999) there is considerable suspicion regarding the reasons for the promotion of multi-disciplinary education by the NHS Executives, and the staff resource implications of integrated workforce planning were rarely made explicit to those most likely to be affected, ie. the staff. One senior nurse commented:

Some of my colleagues are suspicious ... is to disempower various professional groups and to foster the idea of a single mixed profession, a generic worker that is less skilled, has less autonomy as a professional group, less power ... such an argument would be supported by the reactionary element in the medical profession ... equally, I could see that the government would be quite happy to disempower nurses in particular, but lots of other groups. (n)

Two respondents indicated that the development of multi-disciplinary education needs the support of professional bodies and a senior nurse indicated:

the professional bodies take stances and make it difficult for the colleges to actually develop courses quickly ... (n)

She also commented on the Department of Health Working Paper 10 Policy Document (DOH, 1989c). A move to separate medical education from other professional education is contradictory to the promotion of multi-disciplinary shared education. As well as maintaining professional standards, the professional bodies were perceived by a few to play an important role in the promotion and maintenance of distinctive professional cultures. One nurse described the professional bodies as “a policing organisation”, and certainly in terms of the prescribed number of theory and practice hours this is apparent in the development of nursing curricula. My own experience in developing post-registration programmes has been severely constrained by the requirements of a particular professional body.

A nurse referred to an external inhibitor which is directly linked to the control over course development and innovation exercised by the professional bodies. She explained, the fact that allied courses come up for validation at different times means:

that it is going to be more difficult for them (course organisers) to start changing bits of their courses. (n)

The existence of separate levies for medical and dental education and training and non-medical education and training was also perceived to do little to facilitate educational initiatives involving a range of different professional groups, including the medical profession.

In the author's department, course organisers have identified a number of logistical factors which they consider could impede multi-disciplinary course implementation and development. There is a widespread perception that multi-disciplinary education works best when all professional groups are represented in roughly equal numbers. In the author's pre-registration site, the disparity in student numbers amongst various groups of health care workers made this difficult to achieve. The ratio of nurses to physiotherapists is 15:1. Teachers feel that planning, consultation and evaluation make undue demands on their time.

Duncanis and Golin (1992, pp.21-22) pointed out that the professional associations attempt to exert control within the profession by certification and disciplinary procedures and may also attempt to exert control over the practice of other professions.

The findings from the respondents regarding medical domination are reflected in the concept of the *doctor-dominated system*, suggested by Duncanis and Golin (1992, p.81). References to the perceived threat among professions allied to medicine, by nursing and its role in the ward hierarchy, was echoed in Reed's study (1993) of the attitudes of nurses to physiotherapists, which indicated that nurses could limit physiotherapists' access to patients. Resistance by doctors, to multi-disciplinary education is reflected in Thurgood's research (1992) and reiterated in this study.

Over 40% of respondents indicated that there were organisational barriers to multi-disciplinary education. These included barriers posed by organisational structures, organisational constraints and differing philosophies between organisations.

Two respondents, one nurse and one radiographer, referred to problems of overcoming organisational rules and regulations regarding training, when setting up shared initiatives. In addition, a physiotherapist pointed out that Health Service training was set up “along professional group lines”, and focused on professional qualifications, while other groups’ training, and she referred to social services, targeted organisational needs. She remarked that the health service’s framework was highly formalised, in contrast to social services’ “more pragmatic” approach.

One nurse indicated that the health service is:

... hierarchically based much more so than the private hospitals I've worked in. There is much less red tape and fewer different tiers of management to negotiate with, maybe because the hospitals/organisations are smaller. (n)

One radiographer and a physiotherapist pointed out that there are communication problems involved in developing multi-disciplinary courses across organisations:

We hardly talk to each other ... not that we don't want to; it's just that we are always so busy there's never anytime, only when we have a department meeting do we get to discuss these types of issues. Although I can't say I remember this ever being discussed and we never invite other health care workers to our meetings anyway. (r)

... it is a big problem (communication) in the health service and I doubt multi-disciplinary initiatives will be high on anyone's agenda. The health service has such rigid communication structures. (p)

She continued by suggesting:

... the organisational structure of hospitals doesn't lend itself to multi-disciplinary education. (p)

An occupational therapist stated:

... a breakdown of communication between professions, lack of knowledge of when and how to use each profession in the care of the patient, and the need for combined knowledge in clinics to reduce referral problems and give better holistic care is desperately needed. (ot)

All the respondents did see the need to engage in clear, detailed communication related to patient care and concerns of individual members of the team. Five respondents stated that time should be set aside for discussion and debate, both informally and within regular forums, in which all professionals would be valued.

Even a lunch time forum, open to everyone would help. We could discuss any issue from patient care to future practices and eat our lunch at the same time. (ot)

... weekly meetings but after about three weeks no-one came except for the nurses on our ward. Shame really because we had some good discussions initially ... we argued with the physio's about the merits of using sterile water down endotracheal tubes prior to physio. They couldn't give us a reason why they continue to do it, they've just always done it that way. (n)

One respondent suggested where roles are enacted at the boundaries between organisations for example, community carers, health services apply organisational pressure via rigid regulations:

... to control what people do.

(n)

Duncanis and Golin (1992) have indicated that *the size and type of organisation, its referral and treatment policies, its communication channels and administrative structure are some of the variables that comprise the organisational context* - which affect multi-disciplinary working and which need to be taken into account in multi-disciplinary education. The authors also point out that *the organisation is based on some belief or theory of the nature of man, the nature of society ... it may also be based on a specific theory that conditions its structure, goals and activities* (Duncanis and Golin, 1992, p.77). The latter explains differing inter-organisational value bases and perspectives which, according to Jervis (1992) are *relative to the cultural climate of the agency* and which are illustrated in respondents' comments above. Health organisations have been historically dominated by the "medical model", so that, for example, within nursing *knowledge was narrowly defined in medical terms* (Spence and Taylor, 1994, p.187). Renshaw and Gardner (1990) developed joint professional training which dealt with the former by focusing on the *non-medical aspects of care*. The need for organisational learning, as suggested above, was advocated in a Department of Health document (DOH, 1990, section 2.10), while Renshaw and Gardner (1990) reported that joint training helps develop trust between agencies, which could improve the relations between the various authorities.

Two respondents, a nurse and a physiotherapist, suggested that differing pay scales between health and social services are a source of conflict and that there are poor relations between some authorities as a result of this:

We get paid more than social service workers and I think that creates a big divide between us. That might be one reason this has never taken off with social services ... social workers can be a bit strange; they're not the kind of group to mix with other health professions. (n)

I think when we are all equal in the eyes of each other, even down to pay and conditions, then more sharing will happen. But if there are no relationships or shared learning between us, then you have a situation where you get an uncoordinated care package ... as happens currently. (p)

One senior nurse suggested that organisational restructuring in the NHS:

... inhibits the development of long-term strategies for education and care. One of the difficulties, when you've got health and social services working together is that management structures are different and managers can suddenly completely destroy a team without even thinking about it. (n)

Four respondents felt that there were already severe constraints on organisational finances, which made developing multi-disciplinary education difficult:

We just don't have the resources to put into developing initiatives like this. (p)

..... there's increasingly going to be a fight for survival with the market forces coming in. (ot)

We don't have the money for basic equipment and staff let alone developing new programmes of training. (r)

"There is the additional pressure of there being a duty to provide and yet, not having the resources to provide." (n)

Jervis (1992) emphasised the importance of organising training around the professionals and suggested that it can be remarkably cost efficient. Pirrie (1999) suggested the existence of separate levies for medical and dental education and training; and non-

medical education and training could be perceived to do little to facilitate educational initiatives involving a range of different professional groups, including the medical profession. Three respondents indicated that increasing workloads on staff additionally hindered multi-disciplinary, shared education developments and this was supported by others who emphasised that pressure of time and staffing constraints were further obstacles to attendance at study days.

We're so busy all the time that education is bottom of the agenda. We never get to go on any of the study days even if we ask ... it's usually not this time we're too short staffed. (n)

Staff shortages and long term sickness mean education is not considered a priority. Patient care must always come first, but just now and again it would be nice to go on a study day or a course. (n)

The college used to ask us for representatives to help them with curriculum planning, but we never were able to go ... there just wasn't enough staff. (p)

One radiographer suggested that organisational size made co-operation between departments:

... difficult, there are already severe curricular demands on students which were fulfilled at the expense of clinical skills without the added demands posed by multi-disciplinary learning. (r)

One occupational therapist pointed out that health and social services both have different value bases:

... something as fundamental as equal opportunities, anti-discriminatory practice ... obviously, in social services they are quite keen on that ... but I've soon picked up that there's a real difference in the attitude of health people to the attitude in social services. (ot)

She continued by suggesting that the two organisations also have different definitions of service users:

... they (social services) call them clients - we may call them patients, and the organisational aims of the health services are to meet the health needs of people, whereas in social services the aim is to meet the "social needs", although that distinction holds up some of the time, but I'm sure more or less falls down, in a sense.

She believed that health authorities and staff are seen to be narrowly focused:

... more centred on health problems, rather than the whole person like social services do.

One nurse indicated that there is a need for general organisational understanding, including understanding:

... the way others organise their organisations so we are aware that our agency and our job affects our approach to our work too. (n)

Duncanis and Golin (1972) have argued that:

... the size and type of organisation, its referral and treatment policies, its communication channels and administrative structure are some of the variables that comprise the organisational context. (Duncanis and Golin, 1972, p.77)

They suggest this may affect multi-disciplinary working and may need to be considered in multi-disciplinary education. The former authors also point out that *the organisation is based on some belief or theory of the nature of learning, the nature of society, goals and*

activities (Duncanis and Golin, 1972, p.77). The latter explains differing inter-organisational value bases and perspectives which, according to Jervis (1992) are *relative to the cultural climate of the agency* relative and which are illustrated in the respondent's comments above.

A senior nurse stated:

I believe firmly it's all about members of one profession having respect for members of another profession. I see disrespect day in and day out whilst at work and I really do think it's because we don't truly understand each other's role. Also, a lot is created by some of the old school, but, there aren't that many of them left now so perhaps the time is right to change the culture. (n)

This is supported by Renshaw and Gardner's (1990) study which dealt with the above and considered the broader aspects of care.. They concluded multi-disciplinary education develops trust between professions and ultimately this could improve relations.

Salford Community Health Council (1997) in their annual report claimed the domination of professionals, the mistrust and difficulties exhibited between the professions and the patients, and the difficulty in securing continuity of care was a frequent reason patients gave for not feeling involved in their own care. A subsequent report published by Salford Community Health Council (1997, p.5) identified as a concern that many of the problems which patients experience on the Women's Unit are due to *poor co-ordination and communication between medical, nursing, social work, primary care, community health and chaplaincy staff.*

The term “generic practitioner” was one that came up on occasions and one which aroused considerable suspicion. A physiotherapist expressed fears about :

It may well be we will have a Health Service which is made up mostly of generic workers who do the bread and butter care...it would be a cost-effective option for management. I agree, there would have to be some specialist practitioners but they would be a minority.
(p)

Two respondents, both nurses, suggested:

The time will come I think, when there will be people employed to do many of the fundamental tasks involved in caring for people.
(n)

... care assistants are taking more and more nursing duties on board now ... it must be a cheaper option for management. They get the training to perform the skills, but it is mainly in-house study days. There are care assistants from all areas within the service.
(n)

The latter indicated that the threat of skill-mixing in an organisation may hinder any multi-disciplinary educational developments:

...surely they are inter-linked, which ever term you use, it boils down to the fact that if they do look to employing generic workers then our jobs will be at risk. I'm not convinced you can separate this issue and multi-disciplinary education....surely one could encourage the other. You'll have a major barrier to overcome if that is the case. (n)

It is evident that such fears need to be taken seriously and addressed if the principles and practices of multi-disciplinary education are to find widespread acceptance amongst health care professionals.

Five respondents considered that multi-disciplinary education would improve the understanding and reduce conflict between the professions. These respondents incorporated two nurses, one radiographer, one physiotherapist and one occupational therapist.

I have done courses with other health care workers and probably the most useful aspect was the discussions and the debates....they gave me greater understanding of their roles than actually working alongside these people on the wards. (n)

I suppose I have a very simplistic view of the role of the nurse.....its not meant to be disrespectful, but I've never spent any quality time with a nurse. We all have our own jobs. If we were given the opportunity to discuss care issues then I'd probably have a better understanding, but, we don't have that luxury. It's all about getting the job done, whoever does it, and getting it done as quickly as possible with the minimal of resources. (ot)

Unless you actually work on the wards, no- one has any idea of the pressures people feel....and yes, conflict does occur it's inevitable. We work hard with very little that when someone asks you something outside your re-mitt its very frustrating especially when you don't know who to turn to. (r)

Colleagues within my own department express concerns regarding the introduction of multi-disciplinary education. Nurses, for example, are educated in specific single-purpose schools usually within universities. The educational setting varies not only from country to country but also inside particular countries. This practice of educating health professionals in different settings and different educational institutions is seen as a common obstacle.

Whilst some professions have come together for their pre-registration education, the remainder are still isolated in their traditional red-brick universities. Even though some have come together there is still no shared learning, take us for example. (l)

The presence of students or health care workers with different levels of education and with different educational and occupational backgrounds was highlighted as a concern:

... how on earth can I be expected to teach a lecture hall full of students when they are all hoping to be in different professions and I haven't got a clue about their educational background. Look at nursing ... their entry gate has just been widened, they take anyone who can fill in a form (laughing), but seriously, I couldn't deal with students with different levels of education. Nor would I want to, after all our professional standards are high and I want to keep them that way. (1)

When prompted about experimenting with different methods of teaching and learning as a solution he /she stated:

... no, all my lesson plans are done. I don't have time to re-do them all, nor would I want to. (1)

One difficulty foreseen by the World Health Organisation (WHO, 1988) in planning and implementing programmes that are likely to reduce considerably the scope of multi-disciplinary education is how to adjust and co-ordinate the curricula of the different professional categories so that the demands of common multi-disciplinary learning can be met, whether in the field or in educational institutions.

The difficulties and problems vary widely according to individual circumstances and place:

I feel totally inexperienced to teach multi-professional education ... how would I evaluate students' competencies what's more to the point, what suitable methods of assessing the specific competencies that are needed are there, I don't know? (1)

There is a lack of learning and teaching materials and other resources for learning teamwork skills. Also, there'd have to be a massive staff development programme ... I can't see the university financing that, can you? (1)

Individuals feel uncomfortable with the idea of learning and perhaps being assessed with those from different professions, I know I would. (1)

The author would suggest a position such as this is likely to have an impact on the success, or otherwise, of any multi-disciplinary initiative.

This was debated many years ago and many of us were enthusiastic, but no-one seemed to take the initiative to drive it forward and so we all became disillusioned. There was a genuine commitment at the time, especially at my level ... I'm not sure about higher up, but the ideas just faded away. (1)

CHAPTER 6

TEAMS AND TEAMWORKING

The new professional, in becoming a member of the workforce in a clinical area, faces a huge change in role and responsibilities. Although students train for their qualified role for anything from three to five years, many still experience a cultural shock on leaving the relative protection of student status. This relates to new roles they are required to fulfil and to the new context of accountability within which they must fulfil these roles (Sinclair, 1997). For the first time, new professionals are stable members of a clinical environment and have an opportunity to take up full membership of a multi-disciplinary team. Payne (2000), suggests professionals must foster close positive relationships with their own work groups so that they may build them into co-operative, multi-disciplinary networks and empowering, participative service networks.

It has been stated earlier in the study, that one goal of multi-disciplinary education is to facilitate staff to work together. Implicit in the concept of a multi-disciplinary team is the fact that each professional has its own specific contribution. Other research has shown (Field and West, 1995) that in order to achieve effective teamwork, not only does each professional group need to understand their own role within the team, but also appreciate the role of other health care professionals. It has been highlighted earlier in the study, that there is resistance among the professions to that process of working together. Hence, respondents were asked to address the issue of teamwork - whether teamwork is perceived to occur in practice; whether it is seen to be an area that needs development and what are the specific problems encountered within teams and teamworking.

Eight respondents believed that multi-disciplinary working was good; six respondents indicated that there was room for improvement and an additional five respondents believed that the multi-disciplinary team was not working collectively.

People say they are working as part of a team, but I know they're not. If I ask them something about an aspect that is multi-disciplinary ... not their own, they either can't answer or at worst they're really not interested. (p)

Four respondents said colleagues often claimed a team existed when in fact it didn't:

The nurses say they work in teams, but whenever I go down to the wards there doesn't appear to be any signs of teamwork to me. They talk about red teams and yellow teams, but they seem pretty intermingled to me. (ot)

I think people pay lip service to working in teams. The nurses are the worst offenders. At the end of the day they may have up to thirty patients to care for, their job is to see that gets done ... teamwork goes out of the window. (r)

We talk about working in teams but sometimes it just isn't possible ... especially if it's a really busy day. It's easier for the physio's because they only visit their own patients. We can't ignore the other patients on the ward just because they belong in someone else's team. (n)

It's the way to be seen to be working ... it's supposed to give some structure to the working day. Show me where it works consistently. (n)

A radiographer believed that the radiographer's role within the multi-disciplinary team was limited anyway:

... certainly radiographers are not involved a great deal in what goes on. (r)

The existence of hierarchies and power structures is not in keeping with the "multi-disciplinary team" definition. (p)

Four respondents complained that medical staff were difficult to work with within the team:

They (medical staff) can be really awful. If they get out of bed the wrong side we usually cop for it when they come onto the wards. If I did this I'd be disciplined, but they get away with it. I've even heard them being rude to patients ... mind you I did report it, but it never got any further than the shop floor. (n)

Sometimes if they want to do their own thing they will do it irrespective of their colleagues opinions. They can do that within reason, sometimes they won't even listen to colleagues with greater experience. How's that for teamwork! But some of them are just grateful for your advice and they recognise you do have a lot of experience. (n)

I've had battle royals with doctors, but if they don't want to listen and take appropriate advice from the experts then they don't. (p)

Generally they are not teamplayers; they will ask if they really need something but they prefer to go their own sweet way. (ot)

Three respondents, two nurses and a radiographer indicated that the medical staff are assuming positions at the top of the hierarchy:

... most are very appreciative of my advice and opinions, but occasionally the odd one (doctor) really thinks they're above us all. They have no idea about equality and valuing colleagues. (r)

They (doctors) sometimes elevate themselves to the top of the hierarchy when things are not going their way. They've got a nerve really ... when I think of the times I've stopped them making disastrous mistakes, especially drug doses. You'd think they'd be grateful and recognise greater experience, but that would be seen to be acknowledging weakness. (n)

There aren't many of the old school left now on my ward; those coming through now don't always think they're superior beings. (n)

Power, according to Payne (2000) subsists in factors which are independent of individuals. He suggests, for example, medical knowledge is more powerful than social

knowledge because it has had longer to establish itself as a widely accepted system of knowledge. He continues to suggest, medical knowledge is backed by widely accepted social assumptions valuing scientifically created knowledge, whereas social knowledge is claimed to be less scientific. Perhaps this goes some way to explaining why the medical staff are seen to assume some higher legitimate power.

A physiotherapist suggested:

Responsibility, at ward level, is not shared between the team members as it should be, but is always centred with the senior nurses. (p)

An occupational therapist and a radiographer suggested there were problems with communication:

... how can I work as a team member when I sometimes don't get a hand-over from the nurse in charge. I end up doing what I think is right at the time. It might be there is information I need to know from the night shift, but I've a fat chance of finding out especially if the ward is busy. (ot)

If an x-ray has been ordered on the ward round sometimes I'm not informed until hours later. I've brought this up with the Sister ... she suggested I come on the ward round, but I'm busy sorting out clinic patients at that time. (r)

Two respondents indicate the benefits of teamworking but others suggested that teamwork is actually difficult to achieve:

We all know the benefits of teamworking, but in reality it is very difficult to be consistent in its application. I know the patients like it but if staff are off sick or whatever, then, we have to re-arrange the workforce just to get the job done. That means teams don't exist. Management can't have it all ways, either the work is done or it isn't, and if it wasn't, patient complaints would soon arise, and then what would happen! The managers would

be down on us like a ton of bricks. Politics hinders teamwork ... we seem to be working for politics not for the patients anymore. (n)

Staff shortages, for whatever reasons, make teamwork impossible some days. Then we are accused of inconsistent care. We know the patients like it ... because they've told us so, but sometimes it's just impossible. When it's like that I get so disheartened, so do the rest of the staff ... I feel I haven't done my job as it should have been done. (n)

I've seen colleagues, not physio's, refuse to work in a team. They say they prefer to work by themselves because they are autonomous and, can get the job done better on their own. (p)

Two respondents commented on the difficulty in bringing disciplines together to discuss care:

When we're busy sometimes we just can't be spared to go to the case conference or on the ward round even though they are discussing patients we've looked after. So how can we discuss shared care? (n)

We are so short of staff at the moment, people off sick and vacancies not being filled that it's often impossible to attend the multi-disciplinary meetings to discuss the patient's care. It can be so frustrating especially if it's your patient they're discussing. I know management have been told about the situation, but nothing has been done. (n)

One respondent, a physiotherapist, commented on the lack of team co-ordination:

If the person in charge of the ward isn't a strong leader then co-ordination is very hit and miss. Some wards I go on and when I see who is in charge I know I'll get a good report. Others, I just have to ... well ... almost guess based on yesterday's treatment. This should be an aspect of preparation upon qualifying. (p)

Another respondent, a radiographer, commented on the absence of common objectives and a failure to focus on the patient:

All the health professions seem to have their own agendas. There seems to be no common ground anymore. I know we all talk about the patient, but I sometimes think the patient is at the bottom of peoples' agendas. People seem to have their own vested interests these days. It's very sad really. I came into the health service to play my part in helping people get well and I think the majority did too, but we seem to have lost the plot along the way somewhere. The whole culture within health care needs to change. (r)

Culture relates to the informal aspects of organisations rather than their official elements which are often typified by portrayals of structure according to Coleman (2000). She suggests culture focuses on the values, beliefs and norms of individuals and how these perceptions coalesce into shared organisational meanings. O'Neill et al (1994) explain the contemporary significance of this concept.

The importance of understanding organisational culture lies in the notion that the officially agreed and sanctioned areas of organisational activity produce only a partial picture of how and why an organisation functions as it does. Service managers, therefore, need an analytical framework in order to identify the undocumented, unofficial and intangible elements which influence the way the organisation functions.

(O'Neill, Lofthouse, Bush, 1994, p.103)

Over 40% of respondents interviewed believed that there is a need for training in teamwork. These comprised eight of the nursing respondents, three physiotherapists, two radiographers and a speech therapist. Team development and teambuilding were also suggested areas for training. The speech therapist felt it was difficult to train people in teamwork, as such, while an occupational therapist didn't see the necessity:

... there is no inter-reaction problems that I can think of between the professions. (ot)

Five nursing respondents indicated that they either had some input into teamwork training as part of their initial professional education or they were involved in some currently, but that this was not multi-disciplinary:

I did a communication module during my training and we did teamworking then, but it is difficult to operationalise in practice. The real world is sometimes beyond our control.(n)

We did lots of role play sessions around teamwork. I think we even did an assignment on it. I don't think it's the nurses who should attend post-reg courses on teambuilding, it's the medical staff and some of the others. (n)

I'm doing a communication module at the moment and teambuilding is part of it. Yes I'll certainly share it with colleagues when I've finished it, but perhaps if other professions were on the module too then trying to implement it in practice would be easier. As it is, it will just be me on my own. (n)

The process of teambuilding aids working together and helps identify a shared direction, according to two nursing respondents. A physiotherapist stated:

teams themselves should identify the need for development, they can facilitate their own change. (p)

She continued:

There is no one approach to team development and the team can be introduced to different models of teamwork and group dynamics. (p)

An occupational therapist suggested:

... a team does not need to come together physically but it is necessary to point out to people that they're often members simultaneously of more than one team. (ot)

Eight respondents emphasised that teambuilding needs to be experiential, ie. developed within the practice setting:

... it should be grounded in reality. (n)

There perhaps needs to be an ongoing programme for all members of staff within a Unit so that skills can be practiced developmentally. (n)

There needs to be the opportunity to put the theory into practice, teambuilding should be experiential learning. Where better to learn it than in the clinical areas. (p)

One respondent, whilst an advocate for multi-disciplinary education quickly stressed her belief that it should be profession -specific for her:

In-service training departments should be involved in developing teambuilding programmes. It's no good individual wards or departments doing their own thing, surely that defeats the object. Mind I would still want input from my own profession, even perhaps be led by a physio tutor. (p)

Payne (2000) suggests people, without realizing it, sometimes produce *service user-benefit* explanations of power which conceal their own advantage. For example, professionals produce *expert knowledge* arguments which may have some justification in them, but also, perhaps mainly reinforce their personal power (Payne, 2000, p145)

Whereas a nurse respondent felt quite differently:

I wouldn't mind who led the programme as long as it was run off-site. We are always disturbed if things are organised on the ward. The telephone never stops ringing, relatives are always knocking on the door so we rarely ever complete any sessions. (n)

Carpenter and Hewstone (1996) support this view by recommending the learning environment should be both physically and emotionally comfortable.

An occupational therapist stressed that the training needs to be multi-disciplinary; while a physiotherapist emphasised that the patient should be central to the process. She also stressed:

... there must be joint objectives for the patient set. (p)

This is supported by Hilton (1996) who discusses the value of encouraging initiatives where small multi-disciplinary teams of students work on clinical placements and focus on the care of patients and meeting the patients' needs. Research done by Ellis (1993) identified many examples in which professional assessments failed to meet users' definitions of need. Ellis' account of her research indicates many instances in which health and social care practitioners could be seen as not meeting needs but as practising a form of surveillance whereby what they saw was constructed through their own professional discourses. She suggests that these instances are themselves constructed and constrained by practitioners' own lack of control over time and resources, leading to practices that *are more consistently directed towards ensuring their own survival than advocating on behalf of users and carers* (Ellis, 1993, p.39). It appeared that age was a significant variable. A chi square test of age with question 14 in the questionnaire suggested a significant difference between age of respondents and whether multi-disciplinary education was viewed as helping to ensure flexible health care provision. (Chi sq 20 : 477 [df = 6] p<0.05)

Ellis (1993) concludes that user-centred community care requires a shift in emphasis towards *the politics of negotiation* acknowledging that definitions of need are contested.

This view is echoed by Opie (1997) who stresses:

For the team to move beyond its repetitious modes of interaction, the familiarity of which reinforces their value, requires an awareness of the different roles played by the team and the involvement and resulting representations of clients. (Opie, 1997, p.76)

Two respondents indicated that training in teamwork involves developing mutual respect and an in-depth understanding about another's input, and what was valuable to learn from others:

Unless we respect each others' roles and understand how we all have an important role to play the exercise would be pointless. (n)

The organisational culture needs to change before we can all work properly as a team. There needs to be respect amongst the individual professions for a starter. I think we should start with targeting the medical profession. (p)

Funnell et al (1993) argue that the prestige, status and experience of participants and the importance of pre-event information are clear considerations. Yet Scott Wright (1976, p.74) stressed the need for equity within teams and defined this as *the ability to work as colleagues rather than in a superior-subordinate relationship*. Jones' study (1986) supports this view and suggests medical domination should be questioned as some doctors are reserving the right to lead teams. One nurse respondent supported this view:

... they (the doctors) will always try and take over if they think they can get away with it. Especially if it's high profile and it will look good for them. I feel undermined sometimes.(n)

Nurses' confidence in their own role in health care teams suffers through their lack of control over their work conditions and their lack of control over decisionmaking. Kennedy (1997), in a study on causes of nurses' stress, reports that whereas working in a

team was a positive aspect of nurses' work, poor communication with other professionals, particularly doctors, was rated negatively. A case study reported in the Nursing Times (1997), described a nurse's experience of being *grilled by three managers* and a consultant who wanted to know why she had given a patient information about his heart condition, which had led to the patient refusing to co-operate with an exercise test. An attempt to work outside the medical dominated team had led to a loss of confidence and difficulty in working effectively.

Opie (1997) in a review of research concerning professional teamwork, identifies significant problems, including difficulties in interprofessional teamwork and professional resistance to user-centred discourses. She notes the difficulties as being:

... lack of interprofessional trust resulting in complicated power relations between professions; an overabundance of or, alternatively, an absence of conflict; lack of clear structures and directions; unclear goals; the dominance of particular discourses resulting in the exclusion of others; the existence of tensions between professional discourses resulting in potentially unsafe practices; lack of continuity of members; difficulty of definition of terms; the production of client discussions which, far from addressing client goals, marginalize them and contribute to client's disempowerment; and an absence of teams' examination of their processes. (Opie, 1997, p.74)

Historically, "health" has most frequently been couched in medical terms. Little recognition has been given to the psychosocial aspects of health, and traditional dominant and subordinate roles have been reinforced in patient relationships (Lynch, 1981). The professionals who have held dominant positions in the past are argued to have been the most reluctant to change (Field and West, 1995).

Eleven respondents suggested that medical staff should be included in teamworking and multi-disciplinary education. This is supported by 87% of the respondents surveyed who suggested doctors would benefit from a multi-disciplinary learning environment. The theme of trust, mutual respect and equity was emphasised strongly by most of the respondents:

One of the cardinal things is about recognising everybody's role and recognising mutual respect and trusting colleagues in each discipline. (ot)

Gersick (1988) supports this notion and suggests putting teams together may be a management tool to get the various professions to trust and respect each other. Trust has been viewed as a pre-requisite for effective team functioning (Meyerson et al, 1995). Historically, team members have relied on interpersonal similarity and common background and experience in order to establish a basis for trust, which in turn contributes to a willingness to work together.

This seeking mutual respect and trust is seen not just as a matter of social nicety but a practical means of managing change and transition and thus ensuring continuity in successful working relationships.

There are people who have left and others who have joined at various times, but that change has been smooth because the principle of teamwork always applies. (r)

One respondent suggested it was important to develop a knowledge of the rationale behind what another professional was doing, and to gain an understanding into the

boundaries between the different roles and how they could best overlap for the good of the patient. Within this was the notion that value was attached to the development of a comprehensive picture of the skills and knowledge base from which another professional operated. The author would suggest if patients are to receive the best health care service it is imperative that students of health care professions work together effectively and share their knowledge to better meet the needs of their patients. Respective patient communities have demonstrated that multi-disciplinary experiences during education increase the likelihood that future professionals will work collaboratively (Ivey et al, 1988, pp.189-195).

Twelve respondents indicated that all professions should be included when forming teams, and this is supported by the results from the survey: 94% of respondents answered “all of the above” to question 21.

A team includes, or rather should include, every possible health care worker. Everyone has a role and therefore a contribution to make otherwise the job would not exist in the first place. (ot)

I think we are very selective when we choose our teams. We tend to think only of the nurses, doctors and therapists, but there are many others that were rarely included. There is sharing. I mean the traditional role was that the doctor - the consultant - was the powerful figure but there is much more sharing in all sorts of areas ... we're trying to involve as many professionals as possible. (n)

One respondent disagreed and suggested that teams should be brought together with the relevant professionals only:

Teams need to be selective. Why waste people's time and department's finances if those people do not need to be part of that particular team. Oh, it's like everything else, we

take things to extremes to avoid upsetting people. We need to be rational in today's climate. (p)

She continued to suggest that some professional groups can share teamwork preparation only at a basic level, whilst a radiographer stated:

... we don't work with physio's or they with us, because there's no coming-togetherness of the two. (r)

This respondent appeared to have a limited interest in, and understanding of, other's roles. Whilst other respondents have identified role clarity as being of fundamental importance to the functioning of teams, this respondent's strong sense of role boundaries implied that no encroachment would be entertained. Professional boundaries have historically been strong in the health care professions (Shakespeare, 1997; Bulger, 1995; Satin, 1986) leading to concerns that group decisionmaking is more time-consuming because boundaries need to be negotiated. Of those respondents surveyed 31.2% believed that multi-disciplinary education would undermine their professional specialism.

I don't always have time to discuss who's going to do what treatment I just know I have sixteen patients to treat and need to get on with them. If I discussed each one with every person who might be involved it would be lunchtime before I got started. (p)

The time required to negotiate can be seen as being disadvantageous to patients:

Time spent talking is less time spent with the patients. (p)

The respondents who felt all groups of health care workers should be involved suggested it should be a multi-agency approach. The multi-agencies that need to be involved are not just the acute sector but, also the community health sector, housing and voluntary agencies. Other agencies and services mentioned included residential homes, the police, the ambulance service and schools. One respondent particularly mentioned that community care is an area which demands a multi-agency approach. One respondent addressed this issue in relation to community care for the mentally ill:

... they say there's a strategy for community care - I'm not convinced there is, because we're not looking after the mentally ill in the community very well and I think that social services, health and the government have a lot to do in getting us to work as a team more on this one. (n)

A nurse emphasised the need to include the voluntary organisations and stressed their important role within community care delivery. She suggested:

... it would improve discharge planning and link staff's objectives and prepare those, who currently work in the acute sector, but, may move into the community. (n)

The World Health Organisation (WHO, 1988) stressed the need for equality within teams and defines this as *the ability to work as colleagues rather than in a superior-subordinate relationship* (WHO, 1988, p.6). This report recognised that health workers could carry out their numerous tasks and responsibilities more efficiently if they were members of carefully composed teams of people with various types and degrees of skill and knowledge. They believed a team:

... as a whole had an impact greater than the sum of the contributions of its members.
(WHO, 1988, p.7)

The concept of teamwork, the report suggests, implies a co-ordinated delivery of health care in the form of *preventive, promotive, curative and rehabilitative services including nutrition programmes, environmental control, fertility programmes and communicable disease control* (WHO, 1988, p.7).

One of the most noticeable aspects separating the majority of the team from the more peripheral team members was their highly-developed awareness of being “a team”, and the values which they all held to be important in order to function effectively. Being a teamplayer was almost as important as being a skilled professional for three respondents:

Teamwork is so important to patient care. I wouldn't consider myself a professional if I didn't work with the others. I wouldn't be doing the best for my patients. (n)

How can we fulfil our obligations to our clients unless we all work together. Surely that is one criteria of being a profession. (p)

I consider myself a skilled professional, but if I worked in isolation then I'd reconsider that view. (n)

Multi-disciplinary education does emphasise teamwork according to Pashley (1998) in the belief that different health care professionals need to work together to provide better patient care. The author believes complex patient problems frequently require the skills and knowledge of several professionals and that teamworking is more complex than just working together. This is supported by a physiotherapist:

When we have difficult cases and decisions to make, we must sit down and analyse those problems looking at all the issues. That requires knowledge and experience to make those type of informed decisions. (p)

Surely then, each team member must at least have a working knowledge of each other's potential contribution to managing a particular problem and a willingness to share that knowledge within a team or a collaborative group. Areskog (1988) believed:

Objectives should aim to develop communication skills, capabilities and readiness to handle conflict situations as well as an aptitude for group work, critical thinking, analysis, creativity and self-learning. They should also increase understanding of the patient's situation and should develop the ability to work as part of a team.
(Areskog, 1988, p.253)

Nurses traditionally play a subordinate role in health care teams, and the processes of disempowerment are not changed by the rhetoric of collaborative teamwork. Melia (1987) found that student nurses learned a range of versions of the nature of nursing work with different expectations by conforming to expectations in each setting, with consequent limitations on students' confidence and assertiveness. Melia notes how nurses deal with internal tensions in relationships with other professionals:

when it comes to its dealings with other health care disciplines the group must be able to produce and rely upon a united front ... the students learn not to expose the difference as they pass between segments during their training - instead they fit in and move on.
(Melia, 1987, p.183)

The next chapter examines subject areas respondents thought might lend themselves to multi-disciplinary education.

CHAPTER 7

SUBJECT AREAS FOR SHARING

This chapter explores the respondents' views on which areas of learning could be multi-disciplinary and the educational approaches needed to facilitate successful multi-disciplinary teaching.

One respondent, a radiographer, upon initial questioning, could not identify any areas where shared multi-disciplinary education could occur:

I don't know, I'm not an educationalist. (r)

Four physiotherapists saw more similarities and scope for shared learning with other professions allied to medicine:

I can see connections between physio and occupational therapy because there's a lot of overlap there already. (p)

These areas included anatomy, physiology, medical sciences, psychiatry, counselling, personal and professional development and specialist areas like neuro-rehabilitation.

I think there must be many topics that lend themselves to be taught across the professions. Has anyone researched it? (p)

My sister is a nurse, and I know we do similar things like anatomy and physiology, communication skills. These types of sessions could be taught together, but there would have to be group work and discussions to teach communication skills. Chalk and talk would be no good. (p)

Three respondents commented on the educational strategies that might need to be employed to ensure interactive education. These ranged from case studies to didactic lectures. If didactic lectures are followed by singular professional small-group teaching, there would be no additional multi-disciplinary education and no opportunity for students to learn from each other.

Anatomy, physiology and psychology are similar between physiotherapists and radiographers. (p)

A study by Miller et al (1999) supports this by suggesting there is an emphasis in initial education on common learning in biological and behavioural science, compared with a broader role-based agenda in post-qualifying education. Their survey highlighted major differences in the nature of interactions expected between students in multi-disciplinary groups. Many, especially in pre-qualification education, did not require any interaction between professions, and can be typified as bringing students together because they were considered to have common learning needs, rather than learning they could share. They concluded, such “common learning” is particularly prevalent as part of foundation studies. Miller et al (1999) assert that a major assumption underpinning many multi-disciplinary developments in pre-qualifying education is that because a discipline (anatomy, physiology, sociology) is part of the common intellectual currency of a number of professions, it necessarily constitutes appropriate common learning. This may be the

case, but it may hide the fact that each profession needs to draw differently from the discipline in breadth and depth of knowledge and that different examples will make the knowledge “real” for different professions. There may be a tendency to believe anatomy is anatomy, whoever is learning it (although the assumption of a common learning need may be ill-founded). However, for example, in anatomy this may relate to the whole systems or detailed selection of concepts (physiotherapists need more detailed knowledge of the musculoskeletal system than doctors or nurses; doctors need more detail of the urinary system). In post-qualifying education, the programmes have common aims and outcomes, but I would suggest this is less important, as experienced qualified professionals can apply the principles to the context of care.

Cohort sizes are usually dependent upon the applicants. At pre-qualifying level cohorts also have to abide by contractual arrangements with education purchasing consortia. Groups of NHS trusts determine their staffing requirements annually and use these figures to calculate how many university places they are willing to fund. The number of places a university can offer is also dependent upon the professional bodies, who may determine the number of students which local care environments can support. Given these factors, it is hardly surprising that respondents identified considerable differences in the size of potential cohorts and the subjects that could be shared. A number of respondents identified that students saw lectures as being tailored for the majority group, and a number suggested that even if lectures could be specifically aimed at a multi-disciplinary audience, there might be unease in the minority factor in the audience.

The lecturers would have to find issues of relevance to all the groups involved to avoid any perception of bias. (r)

Two nurses and an occupational therapist identified a possibility for shared learning between nursing and social work, although one senior nurse felt it would only be feasible in certain areas, like counselling:

I can see there could be opportunities for shared learning, but all I can think of at the moment is something like counselling. (n)

Two nurse respondents suggested that a lot of training for health visitors could be joint:

... working in a community environment. We see many more nurses working out in the community now and the number is increasing. (n)

Communications and community working would go well together. The health visitors spend a lot of their course looking at these aspects, and nurses are working out in the community much more now. I'm sure there could be joint training there. (n)

A speech therapist felt that psychology, sociology and learning about physical illnesses were common to nursing and social work:

I can see similarities between nursing and social work, but I'm not sure if we would fit in here, possibly not. Although there must be some areas of similarity, I'd have to think about it carefully. (st)

Later in the interview she went back and suggested:

Thinking about your earlier question, of course we have a lot in common with social work too. Psychology, gathering information and health care service and delivery are

very much part of our training too, but we never get the opportunity to share any of this ... we all work independently. (st)

Two respondents commented that multi-disciplinary education at an early point in pre-qualification education could interfere with professional socialisation, resulting in students and future qualified professionals with a less clear sense of their own identity. They believed that students had a singular professional focus during their early education, which they maintained until they had sufficient confidence to move into the multi-disciplinary arena. A speech therapist expressed strong concern about early multi-disciplinary education and the content of programmes:

I agree there needs to be some commonality, but we are always a small professional group and, I would be concerned that the content, the focus and the practice experience were geared to the majority. (st)

The respondents in the 20-29 age group in the survey, were the only group who agreed that all programmes for health care professionals should contain an element of multi-disciplinary education. Eight nurses in the interviews, suggested that there could be multi-disciplinary learning between nurses and doctors around skills like phlebotomy and taking cervical smears; while another felt that nurses could teach doctors:

... caring and interpersonal skills. (n)

Cardio-pulmonary resuscitation is the first thing that springs to mind. I know when I first went on an up-date, there were doctors there. (n)

Communication skills and inter-personal skills definitely. (n)

We could teach them a lot about how to communicate with people and they could perhaps teach us how to be more scientific. (n)

These statements reveal some underlying perceptions of restrictions on the professional groups with whom learning could be multi-disciplinary and the areas in which it could be shared. When further probed, the respondents suggested areas for more widespread multi-disciplinary education.

A further eight respondents suggested multi-disciplinary education could occur around communications and some of these and additional respondents specified groupwork skills, interviewing and listening skills, skills around interacting effectively with patients, delivering bad news and assertiveness skills:

Listening skills are vital today. We get such a diversity of clients that it's quite essential to be able to listen to what they're saying to you. Probably something like this should be taught across all the health care professions. (n)

We all interview patients and all ask similar questions, they (the patients) must get sick of repeating themselves. It comes back to us working in isolation and not as a team. But, interviewing skills would be most useful if taught together. (n)

Telling patients and their families bad news. Certainly we and the doctors seem to do this most and from my experience nurses are generally better at it. But if this was taught together we'd present a united front and we'd all be saying the same. (n)

One radiographer suggested issues around receiving and collating information from patients and giving information to patients would be an area to consider:

... as I'm not sure any of us are any good at it. (r)

Six respondents, four nurses, a physiotherapist and an occupational therapist, indicated counselling as an area for multi-disciplinary learning, and one of the nurses also specified bereavement counselling:

Bereavement counselling is so specialised and something many of us do, wouldn't it be nice to be able to be taught together and by the experts. (n)

Two nursing respondents felt topics with a “patient-centred” focus and a senior nurse suggested that the role of multi-disciplinary learning should be:

... to develop patient-focused care and how we can look at patients holistically. (n)

Three nurses, a physiotherapist and a speech therapist suggested that management was a definite area for multi-disciplinary education and one senior nurse specified that there could be shared management training between health and social services:

... particularly looking at purchasing and contracting skills. (n)

Three nurse respondents and a physiotherapist felt that assessment needed to be an area of multi-disciplinary education, while an occupational therapist identified the discharge process as an important area in need of attention:

discharging is so important, it's an area we all need to come together to make sure we get it right. Perhaps this is something that needs addressing in multi-disciplinary groups.(ot)

Audit and quality were specified by the senior nurse as perhaps requiring a multi-disciplinary approach:

Audit is something that affects us all. Quality drives the health service. We are all accountable for our standards. We need to be co-ordinated in our approach. A multi-disciplinary approach would be good. (n)

Research and research techniques were highlighted by one nurse:

I think we have a lot to learn from each other in research. We (nurses) have been told we're not scientific enough to be credible with some of our theories. Other professions, particularly the medical profession find it hard to recognise qualitative research as research. If there was more shared teaching in research then maybe this might be reduced. Also, there might be some scope for some joint research. (n)

A physiotherapist and a speech therapist suggested that there were areas in all the clinical specialities where there could be multi-disciplinary learning and that the specialities couldn't be the focus.

Rehabilitation in general, and rehabilitating specialist patient groups, like the multiple sclerosis and stroke patients, need a multi-disciplinary approach. (p)

Rehabilitating stroke patients is an area of particular interest for me and, it does require the skills of all the health professions. We need a co-ordinated approach. It's about teamwork and sharing skills and knowledge to get these patients back on their feet to lead some kind of quality life once they leave hospital. (st)

Critical care was another specialist area that was highlighted as needing a multi-disciplinary approach and shared learning would have benefits:

... in intensive care we all work as a team, but there are times when we clash because we may have a different view about something. The unit is not the place to debate it, so, occasionally we become fragmented. Yet if we had some shared multi-disciplinary education these issues could be overcome. (n)

A need for more community education and transferability of skills from acute to community sectors, was identified and the value of generic community health degrees was highlighted.

Three nurse respondents identified legal issues as needing attention, including the general legal framework, the Mental Health Act and:

the EEC legislation around health and safety, around risk management, the legal issues of confidentiality around HIV and AIDS and then there's the medico-legal debate. (n)

Three respondents, a nurse, a physiotherapist and a radiographer suggested the structure and organisation of the health service and related issues including:

... looking at health care provision and health work in society. (p)

Morals and ethics of health care. (n)

The organisation's philosophy and its aims. (r)

A senior nurse suggested that there is a big core of common knowledge, and several other respondents volunteered knowledge gaps that they thought needed addressing, including

health promotion, sexuality and sexual dysfunction, child development, cultural issues, medical and surgical conditions, pharmaceuticals, social welfare and statistics.

In terms of particular interprofessional issues, three respondents offered suggestions:

There is a need to bring all the disciplines in a speciality together routinely to understand the core skills for that speciality. (n)

If we all came together we could thrash out the underlying philosophies and focus on commonalities instead of differences. (p)

The practice development units are very much into multi-disciplinary working. They have outcomes developed for the whole team and they are cross-referred with all members of the team. (n)

A senior nurse suggested there should be a multi-disciplinary learning around organisational values:

... for example equal opportunities and anti-racist and anti-discriminatory practice. (n)

According to one respondent:

I always think that we have different values anyway to people in the other professions, but maybe we shouldn't have - we're all to do with caring for people. (r)

This notion of health care professionals having common ground in that they are all concerned with patient care, was supported within the survey. 62% of those surveyed listed improving patient care as a perceived advantage of multi-disciplinary education.

A general issue highlighted within several interviews, is that there are some “generic needs” common to all professionals. Four respondents suggested that there is a core of common skills, which all should possess. One respondent suggested:

I'd hope we'd move to some sort of service in the future, where there are some sort of basic level of skills that were cross-discipline and we work as a team in implementing them. (n)

An important aspect of the multi-disciplinary teamwork learning agenda relates to the development of shared strategies for clinical interventions and for professional interaction and joint practices to facilitate the above. A physiotherapist specified that:

... in nearly every clinical activity, there are elements of it that you can break down and say those are broad and could be shared by all, but you've got to have your analysis of the whole of what the tasks are. (p)

One nurse respondent stated:

Common to all professional roles is a requirement for professionals to be reflective and to question practice. (n)

Hence, there is some agreement on fundamental areas for sharing learning, although, the bias is towards people skills, issues around developing good practice. There is more diversity and less agreement on clinically-orientated development of multi-disciplinary learning.

One senior nurse talked in terms of the focus of branches for nurses and particular pathways for social work students, and she suggested that the greatest common ground and most scope for sharing lay in the areas of mental health and learning disability, but suggested that possibilities for sharing in adult and paediatric branches might increase as they became more community-focused.

A physiotherapist believed that sharing learning was most appropriate in areas which focus on community care and the associated service users. However, others saw the child care curriculum, particularly child development, as equally important. The other area particularly mentioned by the physiotherapist as having potential for sharing was that of drug and alcohol studies.

In terms of the subject areas that could be shared, a significant degree of overlap was evident from colleagues in social work and health care teachers. Most frequently mentioned by both groups were the discipline areas of sociology, psychology and social policy. Other subject areas that both nurse and social work teachers had a high level of agreement on, were interpersonal and communication skills, law, teaching, management and ethics.

The issue of shared placements was highlighted by a teaching colleague, who believed there was considerable potential in such an approach. However, a number of provisos were recommended:

Placements would need to be ones where social workers and nurses worked together and where quality supervision was available. Also, there would have to be clear guidelines regarding the expectations of the students and that the timing of such placements was crucial. Otherwise they might not be taken seriously ... students get moved for all sorts of reasons, usually not educational ones. (1)

Students of social work and nursing are located in the same placement settings, but I believe this has occurred coincidentally, and it is debatable whether shared learning took place. This is supported in the Placements in Focus document (DOH, 2001) which aims to:

- *support the development of innovative ways of increasing and making best use of practice placements which reflect the varied communities and situations in which health care professionals work,*
- *improve the quality assurance procedures relating to students' practice experience,*
- *focus on common expectations across the health professions* (DOH, 2001, p5)

Two respondents suggested that whatever subjects are taught as core sessions, the preparatory work required, the delivery and as another three respondents suggested, the assessment of programmes was a crucial element if multi-disciplinary education was to be successful. This supports the Placements in Focus (DOH, 2001) recommendation that *there is a need for a dynamic and a proactive approach to the organisation, provision and assessment of practice experience* (DOH, 2001, p9).

If you are to bring programmes together, say for communication skills, then the communication between the various programme leaders is essential in the first stage. Without this how would you establish individual roles within the teaching team? (n)

Such negotiation was not simply concerned with the practical aspects of programme design and delivery, it was also seen to be about resolving issues of responsibility and ownership and engendering:

... a shared vision. (n)

This is supported by the DOH (2001), which suggests the programme of education and learning opportunities available during particular practice experiences must be considered together by education and service staff to ensure the coherence of the overall programme.

Another aspect of preparation that was mentioned by a number of respondents was the need for teaching teams to identify clearly the goals of multi-disciplinary aspects of programmes. Clarity of expectations regarding student outcomes was seen as necessary for the identification of appropriate shared aspects that met the required competencies of each profession.

You would have to make sure the learning outcomes were appropriate and at the right level for each of the professions within the group. Some of the core sessions would be similar irrespective of professions I would think. Communication skills is a generic subject that could be taught across all professions and I'm sure there are other subjects too. (p)

This respondent also stipulated that:

It would also be necessary for retaining an appropriate degree of separation to ensure that the professional boundaries are not breached. (p)

I think the core subjects could have the same learning outcomes, but there would have to be specific objectives for the different professions otherwise we'd be going down the generic worker route. (n)

Objectives for multi-disciplinary programmes, should aim to *develop communication skills, capabilities and readiness to handle conflict situations as well as an aptitude for group work, critical thinking, analysis, creativity and self-learning* according to Areskog (1988, p.251).

Three respondents believed that ways could be found around the inevitable timetabling problems, provided sufficient time was given for negotiation and staff were committed to the venture.

I can see there being lots of problems with rooms and timetables, but if preparation and planning time were set aside then these could be minimised. (n)

We have problems now with timetable changes and room sizes and double bookings. I often have to change rooms, but surely if everyone involved got together and co-ordinated everything then many of these problems would be ironed out. (n)

You'd have to make sure you had rooms big enough to accommodate large numbers. You could have quite large numbers if all the core sessions were held at the same time. (n)

Carpenter and Hewstone (1996) suggest the learning environment should be both physically and emotionally comfortable and that learning outcomes should be clear and interactive teaching techniques used to break down professional barriers between learners.

Regarding the delivery of the core sessions, it was widely felt that each profession involved in the programme should contribute to the delivery of the core sessions. This did not appear to reflect a desire to retain ownership of particular teaching areas, as a number of respondents felt it was appropriate to teach according to expertise:

I guess I wouldn't mind being taught by a nurse as long as the subject was one that was appropriate for all professions. (p)

I'd prefer to be taught by my own profession, but I realise there are others who are as capable to teach some subjects. (p)

The profession specifics need to be taught by the appropriate professionals, but there are subjects that can be taught by the experts to all health care professionals in a group. (n)

In terms of the method of delivery, a number of respondents favoured there being a substantial amount of active learning in programmes.

There could be some wonderful debates and discussions between the group. Mind, I think you'd need a good adjudicator at times. (n)

Active group participation was viewed as educationally sound and as necessary to produce the interaction required to improve future collaboration:

To enable us to work as a team in practice, it needs to start in the classroom. There needs to be more working together in groups to discuss issues that are relevant to us all. If we can't discuss in a classroom then we've no chance on the wards. (p)

A number of educational approaches were suggested, which included student-led seminars on core themes of relevance to all health care professions: a case study approach; shared task-based exercises; debates, role-play and self-directed learning.

Kirschner (2001) suggests the use of integrated IT environments to facilitate interactive multi-disciplinary education. *Blackboard* is one example where integrated learning and teaching could be facilitated.

However a number of respondents also stated that there was a need for some formal input:

... in order to gain some common conceptual understanding. (p)

In self-directed learning the focus is on the individual, but, doctors also learn from their work with patients, on teams with other health care professionals, and in consultation with colleagues. Explanations of organisational learning, point to the potential power of adding together what each individual in an organisation knows in order to create some new way for the organisation to perform its functions. Multi-disciplinary education, it is argued, fosters this type of learning. Senge (1990) asserts that organisations can learn, and that multi-disciplinary education can be enhanced by changes in educational programmes and climate. Watkins and Marsick (1993) define a learning organisation as one that provides continuous learning opportunities, supports multi-disciplinary collaboration and fosters links between professionals and other relevant individuals outside the organisation. Knowles (1975) suggested adults learn more effectively using a range of learning opportunities involving task-centred or problem solving approaches. Teamwork was suggested by numerous respondents as a core subject appropriate to all health care professionals:

Understanding key teamwork issues is an important first step for health care professionals who wish to improve their performance in practice. (r)

Mandy (1996) reviewing the characteristics of successful multi-disciplinary teams, draws on Clark et al (1986) who select the main attributes of teamwork teaching. Firstly, goal directedness gives the group a central purpose, a clear recognisable idea which serves as a central focus for the group. Secondly, disciplinary articulation would enable all members of the group to understand each others roles and recognise any areas of overlap. Communication, according to Mandy (1996), enables people to appreciate how other disciplines understand knowledge and the methods by which it is gained and used. If group members do not understand each others' cognitive maps they will not understand how others interpret the same phenomena differently.

Thirdly, flexibility is crucial to include valuing different perspectives, accepting changes in authority and status, and lastly, conflict resolution. This is critical in understanding the difference between accountability and responsibility of different team members and knowing what is expected of them.

Sands et al (1990) argue that when a common value base, language and conceptual framework are established, the team may see conflict as an opportunity for growth and integration.

The question of whether multi-disciplinary learning should be accompanied by shared assessments was mentioned by two respondents. One believed assessments clearly needed to be different whilst the other respondent believed the general principles of multi-disciplinary areas could lend themselves to shared assessments:

..... provided the application of principles to the different professional roles was evident. (p)

The final chapter considers the key findings of this study.

CHAPTER 8

CONCLUSION

The key findings of the research are summarised within this chapter. In Chapter Four, the concept of multi-disciplinary education, its appropriateness and its benefits were explored. Overall, the terminology used is problematic - there appears to be a lack of universal agreement concerning its inherent meaning and some uncertainty as to what it is actually seeking to achieve. Ownership of the term is seen to reside mainly with the health service and more specifically, with nursing. There is a need for clarification with regard to the former and a need for joint ownership (across professions) in respect of the latter. There was a perception that the development of multi-disciplinary education was linked with such issues as skill-mixing and the training of generic workers. Several respondents perceived that the maintenance of professional power, by certain sectors of workers, are linked to perceptions of the development of multi-disciplinary programmes of education. From these examples in the data, it can be inferred that the non-medical professions are unsure as to whether multi-disciplinary education is an attempt at professional integration. The possible development of the latter was clearly indicated in a radiographer's comments:

it depends on what your multi-disciplinary education is going to be, doesn't it? ... what are you saying multi-disciplinary education will be - taking the commonality of each professional training and putting those together ... or are you looking to break down barriers between what is taught to nurses about nursing and radiographers about radiography ... are you going to start teaching the nurses to do radiography and the radiographer to do nursing and the radiographer to do physio ... is that what you're saying? (r)

This is not to suggest that the respondents did not recognise the intrinsic value in multi-disciplinary education - on the contrary, there was a high level of agreement on the possible benefits of multi-disciplinary education. Yet it was clear that each profession is individually striving to maintain its occupational integrity. Despite some degree of professional demarcation, within a multi-disciplinary collaborative context, there does appear to be some merging of occupations taking place.

A majority of respondents felt that there is still a need for profession-specific learning and the concept of “appropriate” multi-disciplinary education was important to most interviewees, ie. there were clearly-defined boundaries, beyond which multi-disciplinary education was not appropriate.

It became evident from the data, that addressing inter-agency aspects would be important within any multi-disciplinary educational development. Fox and Dingwall (1985) suggested that professional differences may be overemphasised and that organisational factors should be examined. Professional differences which could inhibit multi-disciplinary educational developments were explored within Chapter Five. Perceived threats to the integrity of each individual profession and perceptions of non-participation by medical staff are a source of scepticism and conflict. Additionally, there are design factors involved (which can influence the actual process itself) including a need to avoid domination by any one profession; to address the differing educational preparation levels and knowledge backgrounds of participants; to ensure that the content of any programme is specifically relevant to all professions in attendance; and that the structure and size of

multi-disciplinary learning groups must be such as to allow interaction between participants.

Other professional aspects which interviewees discussed included creating awareness of the increasing diversity of health care workers providing care; understanding differing organisational structures and value bases and a need for organisational learning, in general. Some respondents suggested there must be joint ownership of multi-disciplinary programmes across the professions. Financial constraints may mean that the institutions with which education can be shared may be limited to those which offer income-generated potential. Financial constraints at service level cover a multitude of aspects that are perceived to constrain multi-disciplinary education. There was a considerable degree of suspicion regarding the reasons for the promotion of multi-disciplinary education by the NHS Executives and, at the policy-making centre, the Department of Health itself. The personnel implications of integrated workforce planning are rarely made explicit to those most likely to be affected, ie. the “non-medical” workforce. Several respondents clearly felt multi-disciplinary education may be a potent inhibitor to their maintaining their professional identities. This need to maintain professional identity, standards and value systems is a theme that pervades much of the data. The term “generic worker” was raised again, by several respondents. It is evident that such fears need to be taken seriously and addressed if the principles and practices of multi-disciplinary education are to find widespread acceptance “on the shopfloor”.

Several respondents suggested the professional bodies were widely perceived to play an important role in the promotion and maintenance of distinctive professional cultures. Overall, the data suggests that there is widespread and largely uncritical support for the notion of “multi-disciplinary education per se”. Nevertheless the respondents did highlight a number of barriers relating to its implementation.

The key beliefs and values held by the respondents in relation to teamworking were explored in Chapter Six. The degree of fragmentation experienced by these different professionals made it extremely difficult for the writer to form the opinion that people who shared a common goal and were working together towards that goal could be defined as a team. The lack of a sense of cohesion as a team meant that monoprofessional orientation appeared to be high amongst the respondents. Activities appeared fragmented at times, even though the team were geographically located together and met throughout a working day, and met as “teams”. However, to all intents and purposes, team members took divided stances, often seeing other professionals within the group as “others”. Since, however, these professionals did actually interact by the very nature of the job in hand, the writer would suggest the nature of their separate ways of being, would be clearly visible to the patients, and consequently this would affect the way patients were dealt with.

The differences in belief systems underpinning the different roles which the professions occupied led to a separating of the “team”, and the values which they all held to be important in order to function effectively. The perception of dislocation from the nurses was a source of much comment among the respondents and lack of communication was

suggested as a cause. The medical interaction (or lack of it) was highlighted as problematic throughout the data and it was suggested that the medical profession is so solidly entrenched that they find it hard to recognise competence and equality within other professional groups. There appears to remain the assumption that even though status symbols should not be a priority, some professionals are still more equal than others. The writer would suggest it is evidently clear that old patterns of working within complex and sophisticated organisations negate the very essence of an “integrated and seamless service” so often advocated. Indeed, following a multi-disciplinary event hosted in February 2001 by the author’s institution, the aim of which was to begin a process of examination of the relationship between the education provider, health care providers and commissioners of health services regarding the mechanisms for determining education provision, the Dean reported:

Our external reputation is strong and I believe that we now have the opportunity to become one of the leading centres for the development of multi-professional and multi-disciplinary education.

(Frost.S, 2001, unpublished)

Several respondents suggested that by withholding or divulging information at crucial moments, one individual can exert tremendous power over the other members.

Lastly, several respondents suggested a multi-agency approach should be seen to be in operation within health care delivery, in line with government recommendations and to

enhance the delivery of patient care. According to Payne (2000) the government interprets public concern about health and social care as a worry about whether patients will consistently get the best possible treatment and whether professionals are bringing services together to overcome major barriers between different organisations. An example would be in mental health and child protection; where high profile cases of failure suggest we are not getting this right for the service users who need help and protection and the public who need to feel safe and have confidence in what they are having done for them.

The final theme explored the subject areas that could be shared and, the educational approaches the respondents felt were appropriate if multi-disciplinary education was to be successful. Although there was a high level of agreement regarding the subject areas that could be shared, there were difficulties regarding the subjects that could be considered as “core” to all professions. However, there was relatively strong agreement that communications, counselling and “patient-focused care” were suitable as themes. Several respondents mentioned either the physical or the behavioural sciences and general issues around health or the health service were also seen as important. Assessment and discharge processes, legal issues, management, community care and community education received some support (while quality and audit received less agreement). Rehabilitation, care of the elderly, critical care, learning disabilities, mental health, child protection and cancer care were specialist areas which could provide foci, some respondents indicated. There was little agreement on specific clinically-orientated domains for multi-disciplinary education. Several respondents made suggestions

regarding knowledge gaps, interprofessional issues, inter-agency issues and possible learning techniques, which could be addressed. Interactive education methods used to explore topics of mutual concern perhaps would be most effective but some groups of participants, perhaps doctors, may find adapting to such methods difficult.

The concept of multi-disciplinary education is a modern-day phenomenon, which is perceived to be a utopian solution to the improvement of health and social care. Over the past decade it has become encapsulated in policy documents as a way forward to resolve repeated service failure particularly to the elderly, the mentally ill, the disabled and the young (DOH, 1996; DOH, 1997; DOH, 1998a). The concerns raised include: communication and co-ordination between professional groups and agencies; lack of understanding of changing and emerging professional roles and responsibilities to meet the demand of the service, and clinical competence with the underpinning evidence base knowledge is not uniform.

Considering these issues it is not surprising that multi-disciplinary education is seen as a crucial concept in the pursuit of a more effective and efficient health and social care service which supports and develops collaborative and co-ordinated multi-disciplinary working amongst health and social care workers (NHSME, 1993).

This must surely be the challenge for health care educators and practitioners alike in this new millennium. There is an argument that we should move away from our historical and mono-disciplined ways of working and seek ways of multi-disciplinary education that are

both visionary and effective. The current piecemeal approach so often used by institutions is ineffective (Tope, 1996; Barr, 1998).

When the writer reflects on this process it is not surprising it does not work. Each curriculum is designed using sets of principles and underpinning philosophies that reflect the specific professional outcomes. So trying to adjust or alter programmes to make them fit is like moving a carpet, it never goes back the same way and never looks as good as it did!

At face value, the data collected highlights evidence that appears quite daunting. Yet we ignore it at our peril. It requires a different set of skills underpinned by a wider, and perhaps different knowledge base. A comprehensive strategic framework needs to be formulated which incorporates those values and beliefs that are common to all professional groups, which ensures that there is an identified structure and curriculum model, and that there is joint funding and commissioning for multi-disciplinary education. From the writer's experience, it is also about working with the resisters to change and those who Beattie (1994) contends develop "realistic" behaviours when there is a threat to their professional identity and group.

It is therefore crucial in ensuring success that teachers and assessors are adequately prepared to undertake the role of teaching across professions and specialities. Successful multi-disciplinary education can only come about through commitment, motivation and adequate resources together with a strategic plan from both the professions and the

educational institutions. It may be argued that it is the duty of all health care educators to rise to this challenge and to try out new ways of working. There may of course, be a measure of failure at the beginning. Yet, most importantly, the profession should learn from the experience and continue to develop and meet the challenge until we get it as right as we possibly can.

REFERENCES

Alexander, J. and Smith, L. F. P. (1998) Educating the carers, in Marsh, G. N. and Renfrew, M. J, (eds) *Community based maternity care*, Oxford, Oxford University Press

Areskog, N. H. (1988) The Need for Multiprofessional Education in undergraduate Studies, *Medical Education*, No.22, pp.251-252

Atkins, J. (1998) Tribalism, loss and grief: issues for multi-professional education, *Journal of Interprofessional Care*, 12, 3, pp.303-307

Barber, J. H. and Kratz, C. R. (1980) *Towards Team Care*, London, Churchill Livingstone

Barr, H. (1994) *Perspectives on Shared Learning*, London, CAIPE

Barr, H. (1995) *Interprofessional Education in health and Social Care, The Report of a United Kingdom Survey*, London, CAIPE

Barr, H. (1998) Competent to collaborate, *Journal of Interprofessional Care*, Vol.12, pp.181-187

Barriball, K. L. and While, A. (1994) Collecting data using a semi-structured interview - a discussion paper, *Journal of Advanced Nursing*, 19 (2), pp.328-335

Batchelor, I. and McFarlane, J. (1980) Multi-Disciplinary Clinical Teams, *Kings Fund No RC12 Project Paper*, September 1980

Beattie, A. (1994) Healthy alliances or dangerous liaisons? The challenge of working together in health promotion, in Leathard, A, (ed) *Going Interprofessional*, London, Routledge

Bell, R. (1988) Defining a Common Care, *Senior Nurse*, Vol.8, No.4

Benyon, G. R. J. (1978) Multi-disciplinary education in geriatrics. An experimental course at Middlesex Hospital, *Age and Ageing*, Vol.7, No.4, November 1978, pp.193-200

Bligh, D. (1990) *Education Matters*, London, Cassell Academic

Bowling, A. (1997) *Research Methods in Health*, OU Press

Brookes, O. Hendy, A. and Parsonage, A. (1981) Towards the Reality of the Primary Health Care Team: An Educational Approach, *Journal of Royal College of General Practitioners*, August 1988, 31, pp.491-495

Brooking, J. (1998) Doctors and Nurses: a personal view, *Nursing Standard*, Vol.6, No.12, pp.24-28

Browne, A. Carpenter, C. Coledge, C. and Drover, G. (1995) Bridging the Professions: An Integrated and Interdisciplinary Approach to Teaching Health Care Ethics, *Academic Medicine*, Vol.17, No.11, pp.1002-1005

Bryant, J. (1987) The New Economics of Health-Care, *New England Journal of Medicine*, 317(11):714

Bulger, R. J. (1995) Generalism and the Need for Health Professional Education Reform, *Academic Medicine*, Vol.70, pp.31-34

Campbell, D. T. and Fiske, D. W. (1959) Convergent and discriminant validation by the multitrait-multimethod matrix, in *Nurse Researcher*, Vol.3, No.2, 1995, pp.81-88

Carpenter, J. and Hewstone, M. (1996) Shared learning for doctors and social workers: evaluation of a programme, *British Journal of Social Work*, Vol.26, pp.239-259

CCETSW (1995) *Rules and requirements for the diploma in social work*, London, CCETSW

CAIPE (1996) Principles of Interprofessional Education, *CAIPE Bulletin* 11:1

Chartier, L. (1984) An Experiment in Interdisciplinary education, *Canadian Nurse*, Vol.81, No.7, pp.10-15

Clark, P. G. Spence, D. L. and Sheehan, J. L. (1986) A service/learning model for interdisciplinary teamwork in health and ageing, *Gerontology and Geriatrics Education*, Vol.6, No.4, pp.3-15

Clifford, D. (1998) *Social Assessment Theory and Practice: A Multi-disciplinary Framework*, London, Arena

Clifton, M. Brown, J. and Shaw, I. (1993) *Learning disabilities and the specialist nurse - targets for action*, York, University of York

Cohen, L. and Manion, L. (1997) *Research Methods in Education*, New York, Routledge

Coleman, P. (2000) Interactions between nurses during handovers in elderly care, *Journal of Advanced Nursing*, 32 (2), pp.277-285

Collier, M. F. (1986) Invisible care and invisible women, *International Journal of Nursing Studies*, Vol.23, No.2, pp.95-112

Corner, J. (1996) A new forum for research debate and advice, *Palliative Medicine*, 10(1):49-50

Couchman, W. and Dawson, J. (1990) *Nursing and Health care research, a practical guide*, London, Scutari

Council for Professions Supplementary to Medicine (1970) *Report and Recommendations of Remedial Professions*, London.

Cresswell, J. W. (1988) *Qualitative Inquiry and research Design: Choosing Among Five Traditions*, Thousand Oakes, Sage

Damant, M. (1994) Shared learning between Health Visitors and District Nurses: Placebo or Panacea? *Journal of the Royal Society for Health*, pp.69-74, April 1994

Davies, C. (2000) *Changing Practice in Health and Social Care*, London, Sage

Denzin, N. K. (1978) *Sociological Methods: A Sourcebook*, New York, McGraw Hill

Denzin, N. K. (1989) *The Research Act: A Theoretical Introduction to Sociological Methods*, Englewood Cliffs, Prentice Hall

DESS (1963) *Annual Report, Welsh Hospital Board*, Cardiff, Wales.

Diener, E. and Crondall, R. (1978) Ethics in Social and Behavioural Research, in Cohen, L. and Manion, L. (eds) *Research Ethics in Education*, London, Routledge

DOH (1970) *Oddie Report*, London, HMSO

DOH (1972a) *Report of Committee on Nursing (Briggs Report)*, London, HMSO

DOH (1972b) *Burt Report*, London, HMSO

DOH (1973) *McMillan Report, The Remedial Professions*. London, HMSO

DOH (1978) *Report of the Committee of Enquiry into Mental Handicap Nursing and Care*, London, HMSO

DOH (1988) *Griffiths Report*, London, HMSO

DOH (1989a) *A Strategy for Nursing*, Press Release 89/141

DOH (1989b) *The Children Act*, London, HMSO

DOH (1989c) *Working for Patients - Working Paper 10: Education and Training*. London, HMSO

DOH (1990) *National Health Service and Community Care Act*, London, HMSO

DOH (1992) *The Health of the Nation*, London, HMSO

DOH (1993a) *Targeting Practice: The Contribution of Nurses, Midwives and Health Visitors*, London, HMSO

DOH (1993b) *Report of the Taskforce on the Strategy for Research in Nursing, Midwifery and Health Visiting*, London, HMSO

DOH (1996) *Primary Care: delivering the future*, London, HMSO

DOH (1997) *The New NHS: Modern, Dependable*, London, HMSO

DOH (1998a) *The Green Paper: Our Healthier Nation*, London, HMSO

DOH (1998b) *A First Class Service: Quality in the NHS*, London, HMSO

DOH (1999) *Making a Difference: Strengthening the nursing, midwifery and health visitors contribution to health and health care*, London, HMSO

DOH (2000) *A Health Service of all the talents: Developing the NHS workforce*. London, HMSO

DOH (2001) *Placements in Focus*. London, ENB/DOH

Dukes, E. F. (1996) *Resolving public conflict: transforming community and governance*, Manchester, Manchester University Press

Duncanis, A. J. and Golin, A. K. (1992) “*The Interdisciplinary Health Care Team: A Handbook*”, Maryland, ASC

Ellis, R. (1993) *Quality assurance in health care*, London, Arnold

Embling, S. (1995) Exploring multi-disciplinary teamwork, *British Journal of Therapy and Rehabilitation*, Vol.2, No.3, p.144

ENB/CCETSW (1986) *Report of the joint working group co-operation in qualifying and post-qualifying training*, London, ENB/CCETSW

ENB (1990) *Regulations and guidelines for the Approval of Institutions and Courses*, London, ENB

ENB/CCETSW (1992) *A Joint Strategy for Shared Learning*, London, ENB

ENB (1995) *The Boards response to nursing, midwifery and health visiting education: a statement of intent*, London, ENB

ENB (1999) *Researching Professional Education*, London, ENB

ENB (2000) *Education in Focus*, London, ENB

Faulkner, A. (1988) Effective Communication, *Senior Nurse*, Vol.8, No.3, March 1988, pp.5-6

Feagin, J. Orum, A. and Sjoberg, G. (1991) *A case for the case study*, Chapell Hill, University of North Carolina Press

Field, P. A. and Morse, J. M. (1985) *Nursing Research: The Application of Qualitative Approaches*, London, Chapman Hall

Field, R. and West, M. (1995) Teamwork in primary health care: 2 perspectives from practice, *Journal of Interprofessional Care*, Vol.9, No.2, pp.123-130

Fielding, P. (1987) Research in the Nursing Care of Elderly People, *Developments in Nursing Research*, Vol.5, pp.161-209, Chichester, Wilby

Fox, S. and Dingwall, R. (1985) An Exploratory Study of Variations in Social Workers and Health Visitors Definitions of Child Mistreatment, *British Journal of Social Work*, 15(5):467-477

Frankfort-Nachmias, C. and Nachmias, D. (1992) *Research Methods in the Social Sciences*, London, Edward Arnold

Fraser, I. (1998) Research on health care organisations and markets - the best and worst of times, *Health Services Research*, 32(5), pp.669-678

Freeman, M. Miller, C. and Ross, N. (1999) *Shared Learning and Clinical Teamwork: new directions in education for multiprofessional practice*, London, ENB

Funnell, P. Gill, J. and Ling, J. (1993) Competence through interprofessional shared learning in Saunders, D. and Race, P. (eds) *Aspects of Educational and Training Technology*, London, Kogan Page

Gersick, C. J. (1988) Time and Transition in Work Teams: Towards a New Model of Group Development, *Academy of Management Journal*, Vol.31, No.1, pp.9-41

Gibbs, I. and Rush, B. (1987) Higher Education: The Coping Stone of Nursing Education? *Journal of Advanced Nursing*, 1987, No.12, pp.659-669

Gilling, C. M. (1989) A Common Care Curriculum for Nurses, Midwives and Health Visitors, *Nurse Education Today*, 1981, pp.82-92

Goble, R. (1994) "Multi-professional education in Europe", in Leathard, A. (ed). *Going Inter-professional: Working Together for Health and Welfare*, London, Routledge

Goldie, N. (1997) The division of labour among the mental health professions - a negotiated or an imposed order? In Stacy, M. (ed) *Health and the Division of Labour*, London, Croom Helm

Gomes, J. (1985) Co-operation through core courses, Bard Nursing Award Community Outlook, *Nursing Times*, January 1985, pp.31-35

Haskins, M. E. Liedtka, J. and Rosenblum, J. (1998) Beyond teams: towards an ethic of collaboration, *Organisational Dynamics*, Spring, pp.34-50

Held, D. (1996) *Models of democracy*, Cambridge, Polity Press

Hilton, R. (1996) Fragmentation within interprofessional work, *Journal of Interprofessional Care*, Vol.9, No.1, pp.33-40

Hogston, R. Smith, L. and Alexander, J. (1998) Shared learning for community based maternity care, *Nurse Education Today*, 18 (6), pp.429-43

Horder, J. (1991) Interprofessional Cooperation, *Lancet* 338(8766):565-566.

Hutt, M. D. (1990) Hurdle - the cross functional barriers to strategic change, *Sloan Management Review* 36(3):22-30

Humphreys, J. and Quinn, F. (1994) Health Care Education: towards a corporate paradigm, in *Health Care Education: The Challenge of the Market*, pp.1-8, London, Chapman Hall

Ivey, S. L. Brown, K. S. Teske, Y. and Silverman, D. (1988) A Model for Teaching About Interdisciplinary Practice in Health Care Settings, *Journal of Allied Health*, Vol.26, No.2, pp.63-69

Jervis, P. (1992) *Perspectives on adult education and training in Europe*, Leicester, National Institute of Adult Continuing Education

Jones, R. V. H. (1985) "The Analysis of Depth Interviews", in Walker, R. (ed) (1985) *An Introduction to Applied Qualitative Research*, Aldershot, Gower

Jones, R. V. H. (1986) Working Together - Learning Together, *Occasional Paper* 33, London, The Royal College of General Practitioners

Jones, I. R. (1995) Health care need and contracts for health services, *Health Care Analysis*, Vol.3, pp.91-98

Jones, D. A. (1997) "Putting Patients First": A philosophy in practice, *Health Affairs* 16(6):115-120

Kennedy, H. (1997) *Learning Works - widening participation in further education*, Coventry, FEFC

Kenneth, H. Y. (1969) How Medical and Nursing Students Can Learn Together, *Nursing Outlook*, Vol.17, Part 11, pp.46-49

Kimmel, A. J. (1988) *Ethics and values in applied social research*, London, Sage

Kirschner, P. A. (2001) Using Integrated Electronic Environments for Collaborative Teaching and Learning, *Learning and Instruction*, Vol10, supp1, pp1-9

Knowles, M. S. (1975) *Self-directed learning: a guide for teachers and learners*, Chicago, Follett

Leinger, M. (1971) This I Believe ... About Interdisciplinary Health Education for the Future, *Nursing Outlook*, Vol.19, Part 12, pp.787-791

Lloyd, K. N. (1971) A Combined Training Institution at the New University Hospital of Wales, *Physiotherapy*, February 1971, pp.73-75

Lynch, B. L. (1981) Team Building: Will it Work in Health Care? *Journal of Allied Health*, Vol.10, No.4, pp.240-247

McKenna, P. M. (1981) Role negotiation, *Nursing Leadership*, Vol.4, pp.23-28

Mackay, L. (1993) *Conflicts in Care: Medicine and Nursing*, London, Chapman Hall

Mandy, P. (1996) Interdisciplinary rather than multidisciplinary or generic practice, *British Journal of Therapy and Rehabilitation*, Vol.3, No.2, pp.110-112

Melia, K. M. (1987) *Learning and Working - The occupational socialization of nurses*, London, Tavistock

Meyerson, D. Weick, K. E. and Kramer, R. M. (1995) Swift Trust and Temporary Groups, in Kramer, R. (ed) *Trust in Organisations*, CA, Sage

Mhaolrunaigh, S. Clifford, C. and Hicks, C. (1998) An Evaluation of Shared Learning in Educational Programmes for Preparation for Nurse, Midwife and Health Visitor Teachers, London, ENB

Miller, C. Ross, N. and Freeman, M. (1999a) *The role of collaborative/shared learning in pre and post registration education in nursing, midwifery and health visiting*, London, ENB

Miller, C. Ross, N. and Freeman, M. (1999b) *Shared Learning and Clinical Teamwork: new directions in education for multiprofessional practice*, London, ENB

Morse, J. M. (1991) Approaches to qualitative-quantitative methodological triangulation, *Nursing Research*, Vol.40, No.1, pp.120-123

Morton, P. (1996) *Co-operative Learning and Social Studies: Towards Excellence and Equity*, USA, Kagan

NHSE (1995) Education and Planning Guidance, *EL* (96), p.46

NHSE (1997) Devolution of Responsibilities to the NHS consortia, *EL* (97):32, Leeds, NHSE

NHSME (1993) *Training for the Future*, UK, HMSO

Oakley, D. (1981) A Practical Guide to Political Effectiveness – the case for federal-funding for Nursing Research, *Nursing Research* 30 (6): 360-365.

O'Neill, J. Lofthouse, M. and Bush, T. (1994) *Managing the Curriculum*, London, Pitman

Opie, A. (1997) Teams as author: Narrative and knowledge creation in case discussions in multi-disciplinary health teams, *Sociological Research Online*, 2(3) u63-u76

Owen, J. (1987) Learning from Each Other, *Nursing Times*, February 1987, pp.15-18

Pashley, G. and Henry, C. (1989) Vital Links, *Nursing Times*, Vol.85, No.27, July 1989, pp.70-71

Pashley, G. (1998) Concepts of Care: Developments in health and social welfare. *Nurse Education Today* 18 (8) 676.

Payne, M. (2000) *Teamwork in Multiprofessional care*. London, Macmillan

Petrie, H. G. (1976) Do you see what I see? The epistemology of interdisciplinary inquiry, *Journal of Aesthetic Education*, Vol.10, pp.29-43

Pickett, B. (1977) Multidisciplinary Education in the Health Sciences, *Australasian Nurses Journal*, December 1977, pp.10-11

Pietroni, P. C. (1991) Stereotypes or archetypes: a study of perceptions among health care students, *Journal of Sexual Work Practices*, Vol.5, No.1, pp.01-02

Pope, M. L. and Mays, K. (1993) Opening the black box: an encounter in the corridors of health services research, *BMJ*, Vol.306, pp.315-318

Porter, S. (1997) A participant observation study of power relations between nurses and doctors in a general hospital, *Journal of Advanced Nursing*, Vol.16, pp.728-735

Pritchard, P. and Pritchard, J. (1994) *Teamwork for Primary and Shared Care*, Oxford, Medical Publications

Pirrie, A. (1999) "Rocky Mountains and tired Indians: on territories and tribes", *British Educational Research Journal*, 25, 1, 113-126

Reed, J. (1993) "The Relationship between semi-professions in acute and long-term care of elderly patients", *Journal of Clinical Nursing*, Vol.2, pp.81-87

Regan, P. F. and Schutze, H. G. (1983) *Education for the Health Professions Policies of the 1980's*. An OECD/CERI Report, Stockholm, Almquist and Wibsell International

Renshaw, P. D. and Gardner, R. (1990) Process versus Product Task Interpretation and Parental Teaching Practice, *International Journal of Behavioural Development*, 13(4), pp.489-505

Rezler, A. G. and Giannini, G. (1981) Interprofessional Education in Medical School, *Medical Education*, 1981, Vol.15, pp.237-241

Rodgers, J. (1997) Collaboration among health professionals, *Nursing Standard*, Vol.9, No.6, pp.25-26

Ross, C. E. and Broh, B. A. (2000) The roles of self-esteem and the sense of personal control in the academic achievement process, *Sociology of Education*, 73 (4), pp.270-284

Roth, J. (1984) Staff inmate bargaining tactics in long-term treatment institutions, *Sociology of Health and Illness*, 6, 2, pp.111-131

Runciman, P. (1989) Health Assessment for the Elderly at Home: The case for shared learning, *Journal of Advanced Nursing*, Vol.199, No.14, pp.31-33

Salford Community Health Council (1997) Salford CHC Annual Report, in Tope R, *The Impact of Interprofessional Education in the South West Region*, NHS Executive

Sands, R. G. Stafford, J. and McClelland, M. (1990) I beg to differ: conflict in the interdisciplinary team, *Social Work in Health Care*, Vol.14, No.3, pp.55-72

Satin, D. G. (1986) The Future of Geriatric and Interdisciplinary Education, *Educational Gerontology*, Vol.12, pp.549-561

Sandelowski, M. (1998) The call to experts in qualitative research, *Research in Nursing and Health*, 21(5)

Scheik, F. (1979) A course on collaboration between social workers and general practitioners during their vocational training, *Medical Education*, 1979, Vol.13, pp.31-33

Scott Wright, M. (1976) *The Relevance of Multi-Disciplinary Education in the Health Care Team*, King Edwards Hospital Fund, pp.72-83

Senge, P. (1990) *The fifth discipline*, New York, Doubleday

Shakespear, R. (1997) Multiprofessional Education and Training, in Pietroni, P. C. Bar, H. and Schmidt, M. H. (eds) *Journal of Interprofessional care*, UK, Wace Journals

Shaw, I. (1994) *Locally Based Shared Learning*, London, Centre for the Advancement of Interprofessional Education

Sills, D. L. (1981) Qualitative and Quantitative Social Research, *Contemporary Sociology*, 10(3):351-354

Silver, S. (1998) A multi-disciplinary health faculty team: formation and first year production of problem-based learning in gerontology/geriatrics. *Journal of Allied Health*. 27 (2) 83-88.

Simons, H. (1980) Towards a science of the singular in Stake, R. E. (ed) *The Art of Case Study Research*. London, Sage

Sinclair, S. (1997) *Making Doctors: An institutional apprenticeship*, Oxford, Berg

Snow, D. A. and Anderson, L. (1991) Researching the homeless, in Feagin, J. Orum, A. and Sjoberg, G. (eds) *A Case for Case Study*, pp.148-173, University of North Carolina Press, Chapel Hill

Snyder, M. (1981) Preparation for Nursing Students for Health Teams, *International Journal of Nursing Studies*, Vol.18, pp.115-122

Spence, L. and Taylor, S. (1994) *Individual commitments to lifetime learning - individuals' attitudes*, Sheffield, Employment Department

Spratley, J. and Pietroni, M. (1994) *Creative collaboration: interprofessional learning priorities in primary health and community care*, London, Marylebone Centre Trust

Stake, R. E. (1995) *The Art of Case Study Research*, London, Sage

SCOPME (1997) *Multiprofessional Working and Learning: sharing the educational challenge, The Consultation Paper*, London, SCOPME

SCOPME (1999) *Equity and Interchange: multiprofessional work and learning*, London, The Stationery Office

Stosiek, A. (1996) Associated Community Based Care, in Hogston, R. (ed) Shared Learning for Community Based Maternity Care, *Nurse Education Today*, 18 (6), pp.429-432

Strauss, A. (1994) *Psychiatric ideologies and institutions*, Free Press of Glenco

Svensson, R. (1996) The interplay between doctors and nurses: a negotiated order perspective, *Sociology of Health and Illness*, Vol.18, No.3, pp.379-398

Tellis, W. M. (2000) Results of a Case Study on Information Technology at a University, www.nova.edu/SSSS/QR/QR3-4

Thomas, R. V. R. and Carney, R.H. (1993) Working with Community Mental Health Professionals – a survey among general practitioners, *British Journal of General Practitioners*, 43 (375):417-421

Tope, R. (1996) *Integrated interdisciplinary learning between health and social care professionals*, UK, Avebury

Thurgood, G. (1992) Multiprofessional Teaching and Learning, *Nursing Times* 45 (16) 342-345

Tomlinson, P. (1998) *Flexible learning, flexible teaching, The Flexible learning framework and current educational theory*, Sheffield, Employment Department

Turnbull, E. (1981) Health Care Issues as on Interdisciplinary course, *Nursing Outlook*, Vol.29, pp.42-45

Turner, C. (1989) Project 2000: Learning from the American Experience, *Senior Nurse*, Vol.9, No.4, April, pp.4-8

UKCC (1996) *Nurses, Midwives and Health Visitors Act*, London, UKCC

UKCC (1999) *Fitness for Practice*, London, UKCC

UKCC (1997) *Nursing, Midwifery and Health Visiting Education Forum*, London.

UKCC

UKCC (1992) *Code of Professional Conduct*, London, UKCC

Walby, S. and Greenwall, D. (1994) *Medicine and Nursing, Professions in a Changing Health Service*. London, Sage

Watkins, P. and Marsick, V. J. (1993) *Sculpting the learning organisation, lessons in the art and science of systemic change*. California, Jossey-Bass

Watts, M. H. (1988) *Shared Learning*, Harrow, Scutari

Watson, J. (1982) Traditional v tertiary ideological shifts in nursing education, *The Australian Journal*, Vol.12, No.2, pp.44-56

Webb, E. J. (1966) Unobtrusive Measures, in Bowling, A. (ed) *Research Methods in health*, OU Press

West, M. A. and Pillinger, T. (1996) *Team Building in primary Health Care. An Evaluation*, London, Health Education Authority

WHO (1981) *Health Services in Europe*, 3rd Edition, pp.17-23

WHO (1987) *Community-based education of health personnel*, Geneva, WHO, pp.31-40

WHO (1988) *Learning Together to Work Together for Health*, Geneva, WHO

WHO (1997) *Community-based Education of Health Personnel, Technical Report Series No.746*, pp.31-40

Wilkie, E. (1982) Shared Care and Shared Responsibility, *Health Bulletin*, Vol.40, Part 3, pp.145-148

Williams, F. (1992) Somewhere over the rainbow, universality and diversity in social policy, in Manning, N. and Page, R. (eds) *Social Policy Review No.4*, London, Social Policy Association

Yin, R. (1993) *Applications of Case Study Research*, London, Sage

Yin, R. (1994) *Case study research: Design and Methods*, Beverly Hills, Sage

Younghusband Report (1959) *Report of the working party on social workers in the local authority, health and welfare services*, London, HMSO

Zeldin, T. (1999) How work can be made less frustrating and conversations less boring,
BMJ 319, pp.1633-1635

APPENDIX

8. During your training, was multi-disciplinary education supported within the programme? Yes
No

9. Since qualifying, have you participated in any multi-disciplinary education? Yes
No

If you answered "No" to question 9, please move on to question 13.

10. In what capacity did you participate? Teacher
Course member

11. How would you rate the quality of the programme(s) Very Good
Good
Average
Poor
Very Poor

12. How would you rate the group dynamics. Very Good
Good
Average
Poor
Very Poor

13. Multi-disciplinary education would contribute positively to my profession.

Strongly Agree Agree Unsure Disagree Strongly Agree

14. Multi-disciplinary education would help ensure a flexible health care provision into the 21st century.

Strongly Agree Agree Unsure Disagree Strongly Agree

15. All programmes/courses for health care professionals should contain an element of multi-disciplinary education.

Strongly Agree	Agree	Unsure	Disagree	Strongly Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16. Multi-disciplinary education causes confusion between professional roles.

Strongly Agree	Agree	Unsure	Disagree	Strongly Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

17. Multi-disciplinary education would threaten my professional status.

Strongly Agree	Agree	Unsure	Disagree	Strongly Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

18. Multi-disciplinary education enables me to appreciate the roles of other professions.

Strongly Agree	Agree	Unsure	Disagree	Strongly Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

19. Multi-disciplinary education undermines my professional specialism.

Strongly Agree	Agree	Unsure	Disagree	Strongly Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

20. Multi-disciplinary education enables me to gain insights into others professional skills.

Strongly Agree	Agree	Unsure	Disagree	Strongly Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21. Which other health care professionals would benefit from a multi-disciplinary learning environment?
You may tick more than one box.

- Doctors
- Nurses
- Occupational Therapists
- Physiotherapists
- Radiographers
- Speech Therapists
- All of the above

Others (please state).....

22. List 3 advantages of multi-disciplinary education

- 1.
- 2.
- 3.

23. List 3 disadvantages of multi-disciplinary education.

- 1.
- 2.
- 3.

May I take this opportunity to thank you for your participation. Please return the completed questionnaire in the envelope provided.

INTERVIEW SCHEDULE

Multi-disciplinary Education Within the Health Care Professions.

1. What do you understand by the term multi-disciplinary education (in the context of professional education)?
2. What do you think about the idea of sharing learning – between health professionals and between health and social services professionals?
3. What do you think are the positive effects of multi-disciplinary education?
4. What would you suggest are the negative effects of multi-disciplinary education?
5. In your opinion, how effective is multi-disciplinary teamwork, at the clinical level?
6. What would be the effects, on the multi-disciplinary team, of shared education among health and social services staff?
7. Do health care professionals need some form of education in teamwork?
8. Should multi-disciplinary education be introduced at pre-registration level (before professional socialisation occurs – prompt)?
9. Which professional groups should be involved?
10. Are there any areas common to health and social services professionals' education where multi-disciplinary education could occur?
11. Can you suggest any other areas where multi-disciplinary education could occur?
 - Knowledge (prompts)
 - skills
 - clinical areas

12. Are there any (other) barriers to multi-disciplinary education, do you think?