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Ethnic minorities and their health needs: Crisis of perception and behaviours

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Introduction

The importance of collecting patient ethnic data has received attention in the literature across the world (Sugarman et al., 2009; NHS Health Scotland, 2009; Casey, 2008; Hong et al., 2007; Department of Health, DH, 2005; Richardson et al., 2003). Eliminating ethnic and racial health inequalities is one of the primary aims of health providers internationally (Karve et al., 2011). The poor health status of certain racial and ethnic groups has been well documented in the literature. An expert panel (Smedley et al., 2003) reviewing more than 600 articles for The Institute of Medicine (2003) report in the United States, 'Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care' concluded:

“Racial and ethnic minorities tend to receive a lower quality of healthcare than non-minorities, even when access-related factors, such as patient insurance status and income, are controlled. The sources of these disparities are complex, are rooted in historic and contemporary inequities, and involve many participants at several levels, including health systems, their administrative and bureaucratic processes, utilization managers, healthcare professionals and patients.” Is this UK, US or international?

The above quote summarises some of the challenges in tackling health disparities while dealing with ethnic minorities. This paper argues that “much more needs to be done to ensure we are hearing the voices of more diverse groups who are often excluded from engagement through issues such as language difficulties or mobility issues” (DWP, 2009: 29). Other policy guidance (DH, 2010; DH 2005) highlights the need for understanding ethnic issues related to users of NHS services in the UK. The amelioration of racial and ethnic disparities in health is at the forefront of many public health agendas (Washington, 2005).

The paper addresses important policy, operational and cultural issues confronted by the prehospital emergency care setup which has a unique role in the healthcare safety net (Wankhade, 2011) in providing care to a very diverse population including members of ethnic and racial minorities (DH, 2005a). Competent decision making by the emergency care practitioners requires patient-specific information and the health provider's prior medical knowledge and clinical training (Richardson et al., 2003). Commentators (Hong et al., 2007; Richardson and Hwang, 2001) argue that it is vital for health providers to gather and assess credible information about individual patient's symptoms, medications, risk factors, health-beliefs and health-related behaviours. There will be serious difficulties if the health provider and the patient come from different backgrounds, have difficulties in cross-cultural communication, and this may adversely affect the quality of diagnostic and clinical decision making for minority patients (Babitsch et al., 2008; Richardson, 1999; Lavizzo-Muurey and Mackenzie, 1996). The situation can be further compounded if ethnicity data is either not monitored or collected.

The paper is structured as follows. The first section throws light on the current evidence surrounding ethnic monitoring and prehospital emergency care. The second section analyses population census data to emphasise the growing number of minorities and the impact on healthcare delivery. Then in

the third section the paper details strategies to deal with bias towards race and ethnicity to address the healthinequalities. Finally the paper concludes with some suggestions for improving practice.

1. Ethnicity and race monitoring in the prehospital emergency care

There is growing evidence that quality of care delivered to minority patients is unequal to that received by the majority white community (Karve et al., 2011; Walls et al., 2002; Mandelberg et al., 2000; O’Brien et al., 1997; Young et al., 1996). Several studies have documented evidence of racial and ethnic disparities in the provision of emergency care. Frequent users of prehospital and emergency care provisions have been characterised as disproportionately poor, male, members of minority groups, alcoholics and socially isolated. Table 1 summarises some of these characteristics discussed in the literature.

Table 1: Frequent user characteristics

Patient characteristics	Key Study findings	Study references
Poverty	Frequent emergency service users disproportionately poor and more likely to be on state benefits	(Lucas and Sanford, 1998;Purdie et al., 1981)
Race	Frequent emergency service are often from minority groups	(Lucas and Sanford, 1998; Ullman et al., 1975)
Alcohol and drug abuse	In addition to homelessness and poverty, alcoholism and in some cases, drug abuse is also associated with frequent use of emergency services provisions Frequent emergency service users disproportionately poor and more likely to be on state benefits	(Spillane et al., 1997; Mannon , 1976)
Violence	Violent death is also closely associated with frequent use Frequent emergency service users disproportionately poor and more likely to be on state benefits	(Boyle, 2008; Hansagi et al., 1990)

Hong et al., (2007, pp. 151-153) found evidence of race, ethnicity and socioeconomic status (SES) in the use of emergency departments in the US. Applying the four SES factors- income, employment status, education and insurance status, the study concluded that race and ethnicity base disparities in the use of emergency care provisions were due to the confounding effects of socioeconomic status of the patients. The study confirmed that black and Hispanic patients were approximately, twice as likely as white patients to be routine users of the emergency departments (ibid, p. 153).

These findings however need careful interpretation. Multiple classifications of race and ethnicity can exist. Race and ethnicity as a variable denotes a genetic and biological component to the relationship (Osborne and Feit, 1992). But using genetics to understand the healthcare needs of social groups has its own limitations. Untangling this relationship is often a difficult task and deserves attention in the race or ethnicity based health disparities literature (Hong et al., 2007, p. 153). There are further ambiguities regarding the role socioeconomic status plays in the race/ethnicity differences in the use of prehospital emergency care. Such a short list of evidence

almost certainly reflects a clear research gap and the scant attention to this area by emergency medicine researchers. Further research may help to uncover many more such disparities in emergency health care.

The importance of gathering and assessing the information about individual patients has been well defined in the UK NHS. Factors including globalisation, the expansion of the European Union, and government initiatives in meeting standards of care by meeting the shortfalls in highly skilled professions through controlled migration, are making the UK population ever more ethnically diverse. Without racial monitoring information, NHS organisations may find it difficult to demonstrate their statutory obligations under the Race Relations (Amendment) Act, 2000. The Department of Health (DH) guidance (2005) includes training material for staffs which are involved in monitoring and collecting patient ethnicity data and also provides good examples of information leaflets. Many NHS organisations offer patient sixteen ethnic groups to choose from when registering their details. Ethnicity is subjective, complex, and multifaceted, reflecting socio-cultural aspects of people's lives therefore basing diagnosis or clinical management decisions on such broad information can be risky (Casey, 2008, p. 10). Moreover, consent and confidentiality of the patients has to be respected suggesting no one can be forced into giving their ethnic group against will (DH, 2005, p. 40).

Emergency care practitioners often work in highly challenging and unstable situations as part of prehospital care. Adequate means of assessment of pre-hospital care has not yet evolved due to the complexities and number of variables which make the development of indicators difficult (MacFarlane and Benn, 2003). Further, there is a dearth of evidence on interactions between the Emergency Ambulance Service (EAS) and older people. Emergency care staffs routinely deal with various traumatic situations such as road traffic collisions, cardiac arrest, falls and stroke and deal with seriously injured patients needing urgent life support and transportation to the Emergency Departments (ED). In such situations it may be difficult to take consent from these patients about why personal ethnic details are needed, who will have access to this data, and more importantly that this information will not be used to discriminate against specific groups or people (Casey, 2008, p. 11). The decision-making process by the emergency care practitioner may be predicated upon uncertainty within a very demanding and challenging environment.

In England, fundamental structural reforms to reorganise the National Health Service (NHS) have been undertaken by the coalition government since coming to power in 2010. With effect from 1st April 2013, the commissioning of the prehospital emergency care has moved from the erstwhile Primary Care Trusts (PCTs) to the new Clinical Commissioning Groups (CCGs) which have been entrusted to commission all aspects of healthcare, thus setting the tone for huge changes, including the EAS, both structurally and financially.

We have argued elsewhere (see Halsall et al., forthcoming) the various implications of these changes on the prehospital care delivery. The dangers of exacerbation of the postcode lottery by way of distribution of ambulance resources may prove real since the CCGs may be making decisions for providing the levels of health care based upon cost of the services provided by NHS and private providers (Nuffield Trust, 2010). This can adversely impact on patient trust and turn them into "customers" who will shop around trying to get the best treatment for their ailment (Health Service

Journal, 2010). A recent example is in Manchester, where the patient transport service (PTS) contract to take the patients to the hospitals has been secured by the bus and train operator Arriva taking over from the North West Ambulance Service (BBC, 2012).

Some of the initial concerns about the skills and competence of the CCGs, especially in the early years, in handling £70 billion of public funds remain unaddressed. The disbanding of the PCTs and loss of management experience (especially in commissioning the prehospital care) will be felt in the short term. Both the PCTs and the ambulance trusts were reorganised in 2006 and had made significant management investments in developing a good relationship as purchaser and providers (Ham et al., 2010). It will take further time to develop these new relationships with the CCGs.

Insufficient consultations with the patients, even less with ethnic and minority groups have taken place to explain the significance of these fundamental changes to the prehospital urgent care since the pace of the reforms are driven centrally. There are huge implications for the various users of the emergency care. The budget cuts will increase the pressure of those at the 'coalface' as it were, so the ambulance service will be expected to respond quickly, but with fewer frontline staff and/ or fewer support staff. This will probably mean less time with patients. If this is the case, then the special needs of patients are more likely to be neglected, including specific requirements of those from ethnic minorities. In a time of crisis, therefore, it is all the more important, not less so, to respond to ethnic minority needs (as well as the needs of other groups such as older people, disabled people) in a sensible, well-trained manner. Such issues are developing within a context in which "Demand for health and social care is predicted to outstrip supply" (NW Forum on Ageing/5050 Vision, 2009: 40), therefore the ambulance service will be required to, on the one hand, deliver more effectively to excluded or marginalised groups, while on the other hand ensuring that more general emergency needs within the population are also met (DH, 2005).

An ethnically diverse and aging population poses significant challenges for the emergency care network including an increase in long-term conditions, and higher expectations and demands from user groups. Variations in health experiences and providing culturally competent services can be only be addressed via good information about the use and perception of the ambulance service (Halter et al., 2006). Evidence about the safety and effectiveness of alternatives such as rapid response teams (RRTs) in which clinical assessments are completed by a team of different staff using patient at risk (PAR) tools to identify deteriorating or potentially at risk patients is quite limited (see Ramzan, 2011). Equally there are few rigorous trials reported, with conflicting evidence regarding the role which can be played by paramedics with extended skills (Snooks et al., 2002).

2. Ethnicity and population data in the UK

It has been well documented in the social science discipline that ethnic minorities experience high levels of inequality within British society. This inequality can be attributed to social and economic indicators. By using population census data past studies have argued that British Asian groups, in particular Bangladeshi and Pakistani, have experience high levels of deprivation in urban areas. As Rees and Phillips (1996, p. 279) note 'The Bangladeshi and Pakistani groups exhibit quite a high degree of spatial segregation from Whites and are significantly more segregated than Indians, any of the Black Groups and Other – Asian groups.' There are numerous other studies that have examined

the high levels of inequalities within the British Asian community (Halsall, 2007; Peach 2006; Platt, 2002; Dorsett, 1998; Modood, 1997). However, in recent years there has been a contradiction to this argument that certain British Asian groups are experiencing high levels of inequality and segregation (Finney and Simpson 2009; Simpson 2005). Nevertheless, what is striking is the level of health inequalities within particular ethnic groups. A report published by the Parliamentary Office of Science and Technology (2007, p. 1) concluded that:

“Black and minority ethnic (BME) groups generally have worse health than the overall population, although some BME groups fare much worse than others, and patterns vary from one health condition to the next. Evidence suggests that the poorer socio-economic position of BME groups is the main factor driving ethnic health inequalities. Several policies have aimed to tackle health inequalities in recent years, although to date, ethnicity has not been a consistent focus.”

The report goes on to add that there are three common examples of ethnic health inequalities which are: (1) Cardio-vascular disease; (2) Cancer; and (3) Mental health. One way of measuring different ethnic minority social and economic indicators is analysing population census data. This is a fairly recent phenomenon because the first question on ethnic groups occurred at the 1991 census. The results of the 2011 census for England and Wales have recently been published. In December 2012 the Office for National Statistics launched an illustrative overview of the ethnic and national identity in England and Wales for 2011. The results were formulated from the 2011 Census. Overall the Office for National Statistics (2012, p. 1) concluded that *‘England and Wales has become more ethnically diverse with rising numbers of people identifying with minority ethnic groups in 2011.’* When making comparisons from the 1991, 2001 and 2011 censuses overall the ethnic minority population in the United Kingdom has increased. Table 2 illustrates key identifiers indicating ethnicity drawn from the 2011 Census.

Table 2: England and Wales Ethnic Data, 2011 Census

- The UK White ethnic group accounted for 86.0 per cent of the usual resident population in 2011, a decrease from 91.3 per cent in 2001 and 94.1 per cent in 1991;
- Across the English regions and Wales, London was the most ethnically diverse area, and Wales the least;
- The Any Other White category had the largest increase across the ethnic groups, with an increase of 1.1 million (1.8 percentage points) between the 2001 and 2011 Censuses;
- The Asian/Asian British ethnic group categories had some of the largest increases between the 2001 and 2011 Censuses. People identifying as Pakistani and Indian each increased by around 0.4 million (0.5 percentage points and 0.6 percentage points respectively).

Source: Adapted from: Office for National Statistics, 2012, pp. 1-6

When examining closely the ethnic health inequalities there are some revealing trends within different ethnic minority groups. The most remarkable trend is the rise of psychotic illness in the Black Caribbean ethnic minority population and as Nazroo and Iley (2011, p. 80) note the 'Black Caribbean people are three to five times more likely to be admitted to a psychiatric hospital with a diagnosis of first episode of psychosis than white people....' Research undertaken by the Association of Public Health Observatories (2004) discovered that health inequalities between ethnic groups are well documented in the National Health Service (see Table 3).

Table 3: **Key findings of inequalities between different ethnic minority groups.**

- The health experience of different ethnic groups is not uniform e.g. the percentage of the population that report their health as 'not good' is highest among the Pakistani and Bangladeshi populations. People born in these countries, but living in England and Wales, have the highest mortality rates from circulatory disease. However, those born in Ireland and Scotland have the highest mortality rates from all causes of death combined and from cancer;
- A higher than average proportion of admissions due to coronary heart disease is found in the Pakistani, Bangladeshi, Indian and Mixed White & Asian ethnic groups, reflecting the higher prevalence of CHD in these groups;
- A higher than average proportion of admissions due to diabetes is found in the Asian groups, Black Caribbean and Black Other group in most regions, reflecting the higher prevalence of diabetes in these groups
- The Indian and Pakistani groups have a higher than average proportion of hospital episodes for cataract surgery, reflecting reports of a higher prevalence of cataracts in these groups. This is consistent with their higher prevalence of diabetes, a known risk factor for cataracts
- Among ethnic minority groups, Black Africans comprise the largest proportion of those seen for HIV care in all regions. Along with the other ethnic group, Black Africans also have the highest rates of tuberculosis.
- The highest treatment rates for drugs misuse are in the Mixed group and lowest in the Asian group.
- The worst patient experience was found in the Asian group across all regions.

Source: Adapted from: Association of Public Health Observatories, 2004 pp. 4-5.

In the North West of England there has been much critical discussion on health inequalities in ethnic minority groups and as Lee *et al* (2001, p. 8) have recommended:

"The expectation is that improving access to health services for Black and Ethnic Minorities will improve the health experiences of these groups and reduce the variations in health which exist between these groups and the White population. Ensuring equal access to health care (for equal need) would appear to be the most attainable (and the most just) equity goal for health services."

3. Strategies to address disparities in emergency care

As shown above, race and ethnicity is a complex socio-cultural issue and ethnic minorities are disproportionately affected by multiple barriers to care including financial, linguistic, institutional, cultural and systematic factors. Flores et al., (2002) draw attention to linguistic issues and a low English-speaking proficiency as one of the key challenges in addressing disparities in the prehospital emergency care coupled with lack of adequate translators, inadequate understanding of treatment and diagnostic by emergency care practitioners. In another study in Germany (Babitsch et al., 2008, p. 82), the results showed that good communication despite language barriers is crucial in providing medical care that is satisfactory to both patient and doctors, especially in emergency situations. The study argued that the use of professional interpreters for improved communication and the training of medical staff for improved intercultural competence are essential for the provision of adequate health care in a multicultural setting. Further, the effects of stereotyping, prejudice and bias towards patients of differing ethnicity and race or socioeconomic status on emergency care staff attitudes, behaviours and expectations can be equally substantial.

The 2003 *Academic Emergency Medicine* national consensus conference on “Disparities in emergency Health Care” (Biros et al., 2003) discussed several follow-up strategies to address disparities in emergency care. These include:

1. **Increased awareness** and continued efforts to inform emergency care practitioners of the irrationality of disparities at both individual and institutional levels. This will help to address bias against patients from minority groups.
2. **Disparities profiling** involving retrospective review and regular reporting of individual clinician data regarding an area in which disparate care is known to occur may help overcome the lack of awareness or tendency toward denial of individual emergency care staff.
3. **Zero tolerance for stereotypical behaviours** by emergency care staff that label or denigrate the patients. Efforts should be made to develop an organisational culture in which such expressions are regarded as unacceptable and unprofessional.
4. **Training staff in cross-cultural competences** should be provided to all emergency care staff and integrated into medical education at all levels. This will help staff to be adept in communicating and caring for patients from differing backgrounds and culture.
5. **Providing enhanced linguistic services** to patients from minority groups will go a long way in addressing some of the communication challenges faced by emergency care practitioners. Properly trained interpreters are available to assist in the care of patients who are not fluent in English. For instance, the ambulance services in the UK use the service of ‘language line’, a private service provider if the 999 caller has difficulty in speaking English.
6. **Increased workforce diversity among** emergency care staff will not only promote cultural competence through interactions with diverse colleagues, it will also help to serve that the emergency care providers more closely resemble it users.

7. **Use of evidence based clinical guidelines and pathways** will further help to decrease clinical disparities by minimising individual discretions and decreasing uncertainties. Monitoring adherence to clinical protocols can then be used to track clinical disparities at the organisational level.
8. Further, **increased research** into such an important topic will further help to address some of the issues discussed in this paper in light of the cited evidence. Epidemiologic research is needed to precisely characterise various diseases in specific population subgroups.

(Adapted from Richardson et al., 2003, pp. 1186-87)

Conclusions

We have argued in this paper that there is considerable evidence to suggest that racial and ethnic disparities exist in the provisions of emergency healthcare and the wider healthcare. Careful scrutiny of our clinical practice and diligent implementation of strategies to eliminate disparities will free prehospital emergency care from the individual behaviours and systemic processes that result in the delivery of disparate care to members of racial and ethnic minority groups (Richardson et al., 2003).

In our view it is essential that research is funded into EAS interactions with a range of ethnic minority and other groups, utilising the White population as a control group, in order to develop a fuller picture of the inequalities that exist, and so that strategies such as those detailed above can be further developed. We further argue that the current funding cutbacks that face the public sector should not be at the expense of such important research, that has a major policy dimension for the NHS in general, and the EAS in particular.

References

Association of Public Health Observatories (2004) Indications of Public Health in the English Regions: (4): Ethnicity and Health, London, Public Health England.

Babitsch, B., Braun, T., Borde, T., and David, M (2008) Doctor's perception of doctor-patient relationships in emergency departments: What roles do gender and ethnicity play? BMC Health Services Research, 8, pp. 82-93.

BBC News (2012) Arriva to take patients to hospital in Greater Manchester (BBC News, 9th October 2012) <http://www.bbc.co.uk/news/uk-england-manchester-19883403>

Biros, M.H., Adams, J.G., and Cone, D.C. (2003) Executive Summary: Disparities in Emergency Health Care, Academic Emergency Medicine 10,11, pp. 1153-54.

Boyle, D.J. (2008) Individual-Level and Socio-Structural Characteristics of Violence: An Emergency Department Study, Journal of Interpersonal Violence, 23, 8, pp. 1011-1026.

Casey, A. (2008) Emergency Nurse, 16, 2, pp. 10-11.

- Dorsett, R. (1998) *Ethnic Minorities in the Inner City*, Bristol, Policy Press.
- DH (2005) *A Practical Guide to Ethnic Monitoring in the NHS and Social Care*, London: Her Majesty's Stationery Office.
- DH (2005a) *Taking Healthcare to the Patient: Transforming NHS Ambulance Services*, London: Her Majesty's Stationery Office.
- DH (2010) *Equity and Excellence: Liberating the NHS*, London: Her Majesty's Stationery Office.
- DWP (2009) *Empowering Engagement: A Stronger Voice for Older People*, The Government response to John Elbourne's Review, London: Her Majesty's Stationery Office.
- Flores, G., Rabke-Verani, J., Pin, W., and Sabharwal, A. (2002) The importance of cultural and linguistic issues in the emergency care of children. *Paediatrics Emergency Care*, 18:271–84.
- Halsall, J., P. (2007) 'English Muslims and the debates in segregation' *Global Built Environment Review*, 6(2), 28-37.
- Halsall, J. P., Wankhade, P. and Cook, I. G. (forthcoming) 'The Big Society in a Time of Crisis: the Impact on Public Health' *Illness, Crisis and Loss*, Vol. 21, No. 3.
- Halter, M., Marlow, T., Tye, C., and Ellison, G., T., H (2006) 'Patients' experiences of care provided by emergency care practitioners and traditional ambulance practitioners: a survey from the London Ambulance Service,' *Emergency Medical Journal*, Vol 23(11) pp. 865-866.
- Ham, C., Smith, J. and Eastmure, E. (2011), *Commissioning integrated care in a liberated NHS*, Nuffield Trust.
- Health Service Journal (2010), GPs 'face patient revolt over reform plans', 22 November 2010).
- Hong, R., Baumann, B.M., and Boudreaux, E.D. (2007) The Emergency Department for Routine Healthcare: Race/Ethnicity, Socioeconomic Status, and Perceptual Factors. *The Journal of Emergency Medicine*, 32, 2, pp. 149–158.
- Finney, N., Simpson, L. (2009) 'Sleepwalking to Segregation?': Challenging Myths about Race and Migration, Bristol, Policy Press.
- Hansagi, H., Allebeck, P., Edhag, O., and Magnusson G. (1990) Frequency of emergency department attendances as a predictor of mortality: nine-year follow-up of a population-based cohort. *Journal of Public Health Medicine*. 12, pp. 39–44.
- Houghton, C., Casey, D., Shaw, D. and Murphy, K. (2011), Ethical challenges in qualitative research: examples from practice. *Nurse Researcher*, Vol. 18, No. 1, pp. 15-25.
- Karve, S.J., Balkrishnan, R., Mohammad, Y.M. and Levine, D.A. (2011) Racial/Ethnic Disparities in Emergency Department Waiting Time for Stroke Patients in the United States, *Journal of Stroke and Cerebrovascular Diseases*, 20, 1, January–February pp. 30–40.

Lavizzo-Mourey, R. and Mackenzie, E.R. (1996) Cultural competence: essential measurements of quality for managed care organizations. *Annals of Internal Medicine*. 124, pp. 919–21.

Lee, B., Syed, Q., and Bellis, M. (2001) Improving the Health of Black and Ethnic Minority Communities: A North West of England Perspective, The University of Liverpool, Department of Public Health.

Lucas, R.H. and Sanford, S.M. (1998) Analysis of frequent users of emergency care at an urban university hospital. *Annals of Emergency Medicine* 32, pp. 563–8.

MacFarlane, C., and Benn, C. (2003) 'Evaluation of emergency medical services systems: a classification to assist in determination of indicators,' *Emergency Medicine Journal*, Vol. 20(2), pp. 188-191.

Mandelberg, J.H., Kuhn, R.E., and Kohn, M.A. (2000) Epidemiologic analysis of an urban, public emergency department's frequent users. *Academic Emergency Medicine*, 7.pp. 637– 46.

Mannon, J.M. (1976) Defining and treating "problem patients" in a hospital emergency room. *Medical Care*. 14, pp. 1004–13.

Modood, T. (1997) *Ethnic Minorities in Britain*, London, Policy Studies Institute.

Nazroo, J., and Iley, K. (2011) 'Ethnicity, Race and Mental Disorder in the UK,' In Pilgram, D., Rogers, A., and Pescosolido, B. (eds) *The Sage Handbook of Mental Health and Illness*, London, Sage, Chapter 5, pp. 80-102.

NHS Health Scotland (2009) Achievement and challenges in ethnicity and health in NHS Scotland: Final Report by National Resource Centre for Ethnic Minority Health. Available at <http://www.sahf.org.uk/uploads/docs/files/41.pdf>

Nickens, H.W. (1995) The role of race/ethnicity and social class in minority health status. *Health Services Research*, April; 30(1 Pt 2), pp. 151–162.

North West Forum on Ageing/ 5050 Vision (2009) Everybody's future: A North West Regional Framework for Ageing: Responding to demographic change, http://www.5050vision.com/uploads/publications/jun_09/5050_Everybodys_Future_Exec_Summary_2_Apl_09rh_1245926714.pdf (accessed 5 July 2011).

Nuffield Trust (2010) NHS resources and reform: Response to the White Paper Equity and Excellence: Liberating the NHS, and the 2010 Spending Review, http://www.nuffieldtrust.org.uk/members/download.aspx?f=/ecomm/files/NHS_resources_and_reform_Oct2010.pdf (accessed 8 November 2010).

O'Brien, G.M., Stein, M.D., Zierler, S., et al. (1997) Use of the ED as a regular source of care: associated factors beyond lack of health insurance. *Annals of Emergency Medicine* 30, pp. 286 –91.

Osborne, N.G. and Feit, M.D. (1992) The use of race in medical research. *The Journal of American Medical Association (JAMA)* 267, pp. 275-9.

Office for National Statistics.(2012) Ethnicity and National Identity in England and Wales 2011, London, HMSO.

Parliamentary Office of Science and Technology.(2007) Ethnicity and Health, Postnote, Number 276, London, HMSO.

Platt, L. (2002) Poverty among Ethnic Minority Groups in Britain: Parallel Lives? CPAG.

Peach, C. (2006) 'Muslims in the 2001 Census of England and Wales: Gender and economic disadvantage,' *Ethnic and Racial Studies*, 29(4), 629-655.

Purdie, F.R., Honigman, B., and Rosen, P. (1981) The chronic emergency department patient. *Annals of Emergency Medicine* 10, pp. 298–301.

Ramzan, I. (2011) 'Using a patient at risk tool in the community,' *Emergency Nurse*, Vol 19(3), pp. 22-25.

Rees, P., and Phillips, D. (1996) 'Geographical patterns in a cluster of Pennine,' In Radcliffe, R. (ed) *Ethnicity in the 1991 Census, Volume 3, Social Geography and Ethnicity in Britain*, London, HMSO, Chapter 8, 271-292.

Richardson, L.D. and Hwang, U. (2001) America's health care safety net:intact or unraveling? *Academic Emergency Medicine*, 8:10, pp.56–63.

Richardson, L.D., Irvin, C. B., and Tamayo-Sarver, J. H. (2003) Racial and Ethnic Disparities in the Clinical Practice of Emergency Medicine.*Academic Emergency Medicine* 10, 11, pp.1184-88.

Richardson, L.D. (1999) Patients' rights and professional responsibilities: the moral case for cultural competence. *Mount Sinai Journal of Medicine*. 66. pp. 267–70.

Simpson, L. (2005) *New Study Shows Racial Mixing, Not Segregation, in the UK*, University of Manchester, Cathie Marsh Centre.

Smedley, B.D., Stith, A.Y., Nelson, A.R., eds. (2003) *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, Appendix B. Washington, DC: Institute of Medicine of the National Academies, 2003.

Snooks, H., Williams, S., Crouch, R., Foster, T., Hartley-Sharpe, C., and Dale, J. (2002), 'Emergency response to 999 calls: alternatives for cases that are neither life threatening nor serious,' *British Medical Journal*, Vol. 325(9359), pp.330-333.

Spillane, L.L., Lumb, E.W., Coughlin, D.J, Wilcox, S.R., Clark, J.S., and Schneider, S.M. (1997) Frequent users of the emergency department: can we intervene? *Academic Emergency Medicine* 4, pp. 574–80.

Sugarman, J., Citlani, C., Andrusiek, D., et al., (2009) Is the enrollment of racial and ethnic minorities in research in the emergency setting equitable? *Resuscitation* 80, pp. 644–649

Ullman, R., Block, J.A., and Stratmann, W.C. (1975) An emergency room's patients: their characteristics and utilization of hospital services. *Medical Care*. 13, pp. 1011–9.

Walls, C.A., Rhodes, K.V., Kennedy, J.J. (2002) The emergency department as usual source of medical care: estimates from the 1998 national health interview survey. *Academic Emergency Medicine* 9, pp. 1140–5.

Wankhade, P. (2011), Performance measurement and the UK emergency ambulance service: Unintended Consequences of the ambulance response time targets; *International Journal of Public Sector Management*, Vol. 24, No. 5, pp. 382-402.

Washington, D. (2005) 'Racial/Ethnic variations in veterans/ ambulatory care use,' *American Journal of Public Health*, Vol 95(12), pp. 2231-2237.

Young, G., Wagner, M., Kellerman, A.L., Ellis, J., and Bouley, D. (1996) for the 24-hours in the ED Study Group. Ambulatory visits to hospital emergency departments: patterns and reasons for use. *The Journal of the American Medical Association (JAMA)*, pp. 460–5.