

birth and risk of preterm birth, But there are few analyses in which outcomes of birth, within a specific country, are classified by both mother's country of birth and ethnicity.

Setting Live singleton births in England and Wales of babies whose ethnicity was recorded as being Black African or Black Caribbean in 2005 and 2006.

Aim To compare rates of preterm birth and low birth weight in this group of babies born to mothers born in African and Caribbean countries or England and Wales.

Method In England and Wales birth weight and mother's country of birth are recorded at birth registration whereas ethnic group of baby and gestational age are recorded in the data set generated when the NHS number, a national unique patient identifier, is issued. Linking these two data sets has made it possible to assess the association between mother's country of birth, baby's ethnicity and birth outcomes. Data from the linked data set were used for the analysis. Countries were grouped according to UN geographical regions.

Results Mothers of babies of African ethnicity, born in Eastern or Northern Africa had significantly lower odds than those born in England and Wales of having a preterm baby. This remained significant after adjusting for mother's age at birth and sex of baby. In terms of low birth weight, after adjusting for gender, mother's age at birth and gestational age, mothers of babies of African ethnicity born in Middle and Western Africa had significantly lower odds of having a low birth weight baby compared with those born in England and Wales. Similarly, after adjusting for the available confounders, mothers of babies of Caribbean ethnicity, born in the Caribbean countries had lower odds of having a low birth weight baby compared with mothers born in England and Wales.

Conclusion Generally, preterm birth and low birth weight rates of babies of African or Caribbean migrant women born in England and Wales seems to be higher than those who migrated to England and Wales having themselves been born in African or Caribbean countries. Further research is needed about the possible causes of this difference in birth outcomes.

P48 MODIFYING HEALTH PROMOTION INTERVENTIONS FOR ETHNIC MINORITY GROUPS: SYSTEMATIC OVERVIEW OF GUIDELINES AND REVIEWS

doi:10.1136/jech.2010.120477.48

¹E Davidson, ¹J J Liu, ²U Yousuf, ³R Bhopal, ⁴M Johnson, ⁵M White, ⁶G Netto, ⁷M Deverill, ¹A Sheikh. ¹General Practice section, Centre for Population Health Sciences, The University of Edinburgh, Medical School, Edinburgh, UK; ²Aberdeen Royal Infirmary, Aberdeen, UK; ³Public Health Sciences section, Centre for Population Health Sciences, University of Edinburgh, Medical School, Edinburgh, UK; ⁴Mary Seacole Research Centre, De Montfort University, Leicester, UK; ⁵Institute of Health & Society, Faculty of Medical Sciences, Newcastle University, Newcastle upon Tyne, UK; ⁶School of the Built Environment, Heriot-Watt University, Edinburgh, UK; ⁷Institute of Health and Society, University of Newcastle, Newcastle upon Tyne, UK

Background Some UK ethnic minority groups experience disproportionate levels of morbidity and mortality when compared with the majority White population. For these populations, access to and use of health promotion interventions may be limited. Adaptation of smoking cessation, physical activity and nutrition interventions of proven effectiveness for the majority population could represent an efficient strategy for reducing persistent health inequalities when adapted for minority ethnic populations.

Objectives To identify the high-level evidence for health promotion interventions which have proven effectiveness for the general population and construct a framework of effective interventions, including any recommendations relating to ethnic minority populations.

Design A systematic overview was conducted with two reviewers independently searching and identifying guidelines and systematic

reviews of interventions for smoking cessation, improving nutrition and physical activity. SIGN, NICE and Clinical Evidence databases were searched for relevant guidelines. Cochrane Library, Campbell Collection, HTA reviews and DARE databases were searched for systematic reviews. Data on the effectiveness of interventions were extracted.

Results 19 guidelines were identified as relevant. 2399 systematic review records were identified and assessed for eligibility. 187 systematic reviews were included in the final analysis. The guidelines revealed a large evidence base for smoking cessation interventions, but highlighted major gaps in relation to how best to increase physical activity and improve nutrition. There was little advice in these guidelines on how to adapt interventions to meet the needs of ethnic minority populations. The 187 systematic reviews were screened to identify any additional effective interventions not included in the guidelines. All effective, evidence-based interventions have been compiled into a summary framework. The 187 systematic reviews were also subjected to a detailed assessment of the population composition to determine whether any subgroup analysis for ethnic minority groups was undertaken. Approximately half of the reviews reported the inclusion of ethnic minority groups; however, no reviews conducted subgroup analyses according to ethnicity and ethnic-specific recommendations were scarce.

Conclusions The evidence base reviewed provides specific guidance on effective interventions for smoking cessation, but generic advice for increasing physical activity and improving nutrition. Identification of the range of evidence-based interventions for these three areas has led to the development of a summary framework that can be utilised for health promotion. Interventions already found to be effective in the majority population are, if appropriately adapted, likely to prove effective in minority ethnic populations. This work will advance current guidance on how to approach adaptation.

P49 MODIFYING HEALTH PROMOTION INTERVENTIONS FOR ETHNIC MINORITY GROUPS: SYSTEMATIC REVIEW OF EMPIRICAL EVIDENCE

doi:10.1136/jech.2010.120477.49

¹J J Liu, ¹E Davidson, ²R Bhopal, ³M Johnson, ⁴M White, ⁵M Deverill, ⁶G Netto, ¹A Sheikh. ¹General Practice section, Centre for Population Health Sciences, The University of Edinburgh, Medical School, Edinburgh, UK; ²Public Health Sciences section, Centre for Population Health Sciences, University of Edinburgh, Medical School, Edinburgh, UK; ³Mary Seacole Research Centre, De Montfort University, Leicester, UK; ⁴Institute of Health & Society, Faculty of Medical Sciences, Newcastle University, Newcastle upon Tyne, UK; ⁵Institute of Health and Society, University of Newcastle, Newcastle upon Tyne, UK; ⁶School of the Built Environment, Heriot-Watt University, Edinburgh, UK

Background Health promotion interventions have proved to be cost-effective strategies to reduce morbidity and mortality associated with smoking, physical inactivity and poor diet in the general population. Some ethnic minority groups are disproportionately affected by these lifestyle factors, and existing evidence suggests that adapting evidence-based health promotion interventions for these populations may prove to be an effective strategy to tackle health inequalities.

Objectives To identify health promotion interventions for smoking cessation, increasing physical activity and improving nutrition which have been adapted for African-Caribbean, South Asian and Chinese-origin populations and to document how this has been achieved and with what effect.

Design A systematic review was conducted with two reviewers independently searching, identifying, extracting and critically appraising empirical studies of adapted interventions. The databases searched include MEDLINE, EMBASE, ASSIA, Psycinfo,

CINAHL, BIOSIS, Cochrane, ISI Web of Science, Lilacs, Campbell and SCEH.

Results In total, 48 740 records were identified. 95 empirical studies were identified as relevant and included in the analysis. The majority of adapted intervention studies took place in the USA, conducted with African-Caribbean origin populations and these predominantly involved women. All studies conducted with Chinese-origin populations took place in the USA while the majority of studies with South Asian-origin populations were conducted in the UK. Multi-component interventions targeting physical activity and nutrition were the most common followed by smoking cessation interventions. Interventions utilised a variety of adapted methods, resources and/or settings. The components of the adaptation process identified include methods such as ethnically matching programme facilitators; subsidising gym memberships and promoting low-cost alternatives to usual exercise options. Resources include culturally targeting materials (eg, using ethnic actors in videos and including photos of foods commonly consumed by the population in promotional material); utilising existing community resources (eg, religious leaders) and accommodating for differing linguistic and language competencies. Settings include holding interventions in familiar locations and utilising culturally appropriate scenarios to elicit behaviour change.

Conclusions A large body of evidence exists for adapted interventions. Identification of the components involved in the adaptation process for ethnic minority populations is a critical step for building on existing adaptation principles. Furthermore, this study will enable the development of a framework to guide the adaptation of mainstream evidence-based guidelines to be salient for different populations and contexts.

P50 "PUSHING AGAINST THE HILL": A QUALITATIVE STUDY OF IRISH TRAVELLER HEALTH IN THE 21ST CENTURY

doi:10.1136/jech.2010.120477.50

J Turner, R NicChárthaigh, B Quirke, J Kilroe, N A Hamid, C Kelly, C C Kelleher, R G Moore, for the All Ireland Traveller Health Study group. *UCD, Dublin, Ireland*

Background Travellers are a distinct minority grouping, characterised by a nomadic tradition and shared cultural traditions, who experience poor health and social disadvantage.

Objective To explore in-depth a series of important issues related to the social determinants of health with members of the Irish Traveller community.

Setting This paper presents data from 26 focus groups conducted with the Traveller community in the Republic of Ireland (ROI) and Northern Ireland (NI). The data presented are a sub-study of the All-Ireland Traveller Health Study. The focus groups incorporated a geographical spread, a gendered and age-related perspective and compared and contrasted the findings across ROI and NI.

Methodology Participatory methodology ensured that the Traveller community was consulted throughout the research progress and ingress was achieved. The focus groups were recruited via the Traveller Health Network. Peer researchers were co-trained by Pavee Point, the Traveller stakeholder organisation and by university research staff to act as co-facilitators and mediators. Focus groups were transcribed and thematically analysed using grounded theory and the constant comparison method and were validated by inter-raters.

Results The analysis produced rich data which reached saturation. Key thematic issues arose from the data. These non-comprehensively included rapid historical changes in the economic, cultural and policy arenas have impacted on the traditional lived experience of Travellers; nomadism has decreased whilst accommodation problems have increased marginalisation and isolation; a recognised sense of loss of Traveller culture, sense of identity and self esteem but a resilience and determination to seek new forms of meaning;

new cultural conditions impacting directly on the quality of life and health chances influencing social and institutional opportunities and barriers; High rates of discrimination perceived in NI and ROI; Irish Traveller community is not a homogenous community; major concerns regarding the increase in drug culture in ROI, although less marked in NI; education as a continuing source of concern during the educational process and beyond; new mass communication technology embraced by some (younger/literate) Travellers as an important source of information, exchange and sociability.

Conclusion The findings echo and reinforce previous evidence but also highlight novel issues. Based on their own account, Travellers continue to face multiple health challenges that impact directly upon their physical and mental health. It is a time of flux and disembodying mechanisms in the broader culture that can generate both positive and negative developments. Travellers have interpreted these experiences as "pushing against a hill".

Health services/Policy

P51 SURVIVING INTENSIVE CARE: A SYSTEMATIC REVIEW OF HEALTH CARE RESOURCE USE AFTER HOSPITAL DISCHARGE

doi:10.1136/jech.2010.120477.51

¹NI Lone, ¹M Seretny, ²K M Rowan, ³T S Walsh, ¹S H Wild, ¹G D Murray. ¹Centre for Population Health Sciences, University of Edinburgh, Edinburgh, UK; ²Intensive Care National Audit and Research Centre, London, UK; ³Department of Anaesthesia, Critical Care and Pain Medicine, University of Edinburgh, Edinburgh, UK

Background Intensive care units (ICUs) are an expensive resource. However, this expense does not end at hospital discharge. ICU survivors continue to experience significant morbidity. As the demand for ICU is likely to increase substantially, there is a need to establish how much health care resource survivors consume following discharge from hospital. This will enable appropriate service planning and policy development to meet the needs of these patients, and will improve the precision of economic evaluations relating to ICU.

Aims We conducted a systematic review to determine the reported use of major health care resource by ICU survivors following discharge from hospital and to identify factors associated with increased resource use.

Methods Studies were included if the study population derived from an adult, general ICU population, health care resource use was reported at the patient level and the publication was in the English language. Two reviewers independently screened abstracts, rejecting those clearly not meeting inclusion criteria. A single reviewer then retrieved the full texts and assessed them for inclusion. Costs were inflated to 2009 using the consumer price index and converted to US dollars using the purchasing power parity method.

Results From 3522 articles, nine fulfilled criteria for inclusion. Two studies were conducted in the UK; three in Canada and four in the USA. Six studies used a cohort design; the remaining three collected data as part of a trial. The number of patients for which resource use was reported ranged from 66 to 963. Mean age ranged from 40 to 66. There was substantial variation in the cost categories included in each study. Following standardisation to a common currency and year, variation in resource use was apparent (range \$1610–\$45 173). Studies undertaken within the USA reported the highest costs; those in the UK reported substantially lower costs. The larger proportion of resource was consumed in secondary care (range 53–96%). Factors associated with increased resource use included increasing age, co-morbidities and organ dysfunction score.

Conclusion This review is the first to bring together the literature relating to post-hospital discharge health care resource use for survivors of ICU. There was substantial variation in the cost of resource use between studies. Given the paucity of identified studies and their