magnitude. There were inverse associations between adult depression/anxiety with sports/recreational activity (−0.06) and activity at work (−0.07). Lower educational level was associated with a higher level of activity at work (0.31) and a lower level of sports/recreational activity (−0.12).

Conclusions We found that the effect of childhood socio-economic adversity on adult physical activity was entirely mediated by educational attainment. The association between adolescent depression/anxiety and activity was entirely mediated by current mental health problems. These results highlight the importance of education in reducing the adverse effect of childhood socio-economic conditions on adult physical activity. Furthermore, addressing current mental health status should be seen as a priority for policies aimed at physical activity in adulthood.

070 PHYSICAL ACTIVITY ACROSS ADULTHOOD AND PHYSICAL CAPABILITY IN MID-LIFE: FINDINGS FROM A BRITISH BIRTH COHORT STUDY

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Background Maintaining high levels of physical capability with age is important given that low levels are associated with increased risk of losing independence, health problems and mortality. Studies of older people provide evidence to suggest that physical activity may be beneficial for the maintenance of physical capability however it is unclear whether the effects of physical activity accumulate over the lifecourse.

Objectives To test the associations between physical activity levels, assessed by self-report of participation in sports and recreational activities prospectively at three ages across adulthood (36, 43 and 53 years), and objective measures of physical capability at age 53 year; to examine whether any associations found are independent of physical activity levels at other ages and other potential confounders.

Design Prospective cohort study.

Setting England, Scotland and Wales.

Participants Approximately 2400 men and women from the MRC National Survey of Health and Development, followed up since birth in March 1946.

Main outcome measures Grip strength, standing balance and chair rise time assessed by nurses during home visits at age 53 year.

Results Physical activity levels at all three ages in adulthood were positively associated with chair rise and standing balance performance. These associations were maintained after adjustment for sex, height, weight and socio-economic position with those people who were categorised as being most active performing better in these two tests than people reporting no activity. In models which included physical activity at all three ages simultaneously, there was evidence of independent positive effects of participation in sports and recreational activities at all three ages on chair rise performance and at ages 43 and 53 years on standing balance performance. Differences in mean chair rise time (1/time(s) × 100) between the most active and least active groups were: (at age 53 year: 0.30 (95% CI 0.14 to 0.46); at ages 36 and 43 year: 0.36 (0.18, 0.54)) after adjustment for activity levels at the other two ages and covariates. There was no evidence of associations between physical activity levels at any age and grip strength in women and in men only physical activity at age 53 year was associated with grip strength.

Conclusions Evidence of independent effects of physical activity at different ages across adulthood on chair rise and standing balance performance in mid-life suggests that there are cumulative benefits of physical activity across adulthood for physical capability in mid-life. Increased activity should therefore be promoted earlier in life.

071 DIFFERENT EFFECTS OF BODY MASS INDEX AND PHYSICAL ACTIVITY ON THE RISK OF ANKLE, WRIST AND HIP FRACTURES IN POSTMENOPAUSAL WOMEN

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Objective To compare the relationship between body mass index (BMI) and physical activity for the risk of ankle, wrist and hip fractures in a large prospective study of postmenopausal women in the UK.

Methods In 1996–2001, women recruited into the Million Women Study completed a self-administered questionnaire asking about body size, physical activity, disease history, and lifestyle and reproductive factors. Incident ankle, wrist and hip fractures were identified through self-report in a follow-up questionnaire completed an average of 3.2 years after recruitment. RRs and CIs for each fracture site in postmenopausal women by BMI and physical activity at recruitment were calculated using Cox regression models, adjusted for socio-economic status, smoking and other health and lifestyle factors.

Results Among 599 550 postmenopausal women, 5114 reported an ankle fracture, 8565 reported a wrist fracture, and 754 reported a hip fracture during follow-up. When compared to lean women (BMI<22.5 kg/m^2), obese women (BMI≥30 kg/m^2) had an increased risk of ankle fracture (RR 2.47; 95% CI 2.32 to to 2.63), but a decreased risk of wrist fracture (RR 0.68; 95% CI 0.64 to to 0.72) and hip fracture (RR 0.29; 95% CI 0.23 to to 0.37) (χ^2<0.001 for the effect of BMI for each fracture site). Physical activity had little influence on the risk of either ankle fracture or wrist fracture, but women who reported strenuous physical activities up to once per week or more often were at a lower risk of hip fracture than women who reported less frequent activity (RR 0.65; 95% CI 0.56 to to 0.76).

Conclusions BMI and physical activity have different effects on the incidence of fracture at different sites. While obese women are at increased risk of ankle fracture they are at lower risk of wrist fracture and hip fracture. Physical activity has no marked influence on ankle and wrist fracture but is protective against hip fracture.

Adolescence

072 UNDERSTANDING SOCIAL AND CULTURAL INFLUENCES ON THE RELATIONSHIPS AND SEXUAL EXPERIENCES OF YOUNG BRITISH PAKISTANIS IN LONDON: IS THERE UNMET SEXUAL HEALTH NEED?

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Background and aim Health services should take account of cultural and faith diversity. Pakistanis are the UKs second largest ethnic group and one of the largest Muslim communities. However, relative to other ethnic minority groups, there is a paucity of sexual health research among this group. Using community-based qualitative research we explored the social and cultural influences on sexual attitudes and experiences of young Pakistanis in East London to determine whether there is unmet sexual health need and implications for service development.

Design Between June and September 2008, 30 in-depth one-to-one interviews (60–90 min) were conducted with young Pakistanis

(n=22) and community workers working with Pakistani youth (n=8). Young Pakistanis were purposively selected across community settings: aged 16–25, born in UK and/or had been through UK secondary school. Interviews aimed to establish key life, social and cultural issues, with focus on relationship type and formation and perceived need/support. Interviews were recorded and transcribed verbatim. Analysis was thematic using "Framework" approach.

Results Many themes emerged which have a bearing on, and shape young Pakistanis' experiences of, relationships. Most experience parental restrictions on socialising and mixing with the opposite sex. For girls, behaviour is further monitored by older brothers and for both sexes "community policing" is an extension of this. However, young people have developed creative strategies to circumvent these restrictions and despite faith and cultural norms, relationships do take place, primarily in secrecy. This presents what are described as "conflicting pressures", "double worlds", and "multiple realities", which young people negotiate and move between, balancing different value systems. There were striking gender differences in perceptions and types of relationships and intimacy. For young women the ideal was a relationship for marriage. However, many described partners as "bad boys" and "gangster types" and some relationships were considered pressurised and "unhealthy". The young men made distinctions between girls deemed "wifey material" and those for casual relationships. Older boys (18+) were sexually active with partners from a range of ethnic backgrounds. Condom use was inconsistent. Though not sexually active, some of the other young people had experienced mutual touching and/or oral sex. Few had good sexual health knowledge and would not know where to access help.

Conclusions The secrecy within which young Pakistanis have relationships and the pressures and gender roles they negotiate mean that many may not receive the support they need. This has implications for the delivery of appropriate preventative and curative sexual health services.

073 VARIATIONS IN THE USE OF PUBLICLY FUNDED ORAL CARE IN NORTHERN IRELAND: RESULTS FROM AN ANALYSIS OF ADOLESCENTS IN THE NORTHERN IRELAND LONGITUDINAL STUDY

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Background A socio-economic gradient in use of health care has been observed in a number of situations. These have been used to assess the performance of systems as well as frame discussion on system design. Examination of patterns at an aggregate level may mask important differences between types of care that could lead to different policy advice.

Aims To identify whether differences in registration and use related to socio-demographic characteristics exist in respect of publicly funded oral health care in Northern Ireland and if so to identify the nature of differences in care.

Methods NHS reimbursement data were linked to census and vital statistics data within the Northern Ireland Longitudinal Study. Data cover 28% of the population in Northern Ireland and in this study cover a period from 2003 to 2008. Data for individuals aged 11 or 12 in April 2003 that include registration status, reimbursement on a per item basis, gender, community background, siblings and also the social class and education of household reference person (HRP) were extracted. A series of multivariate analyses were used to examine the relationship between registration and use of care as a function of socio-demographic characteristics.

Results A clear socio-economic gradient was evident in respect of registration status. Adolescents whose HRP was long term unemployed or never worked were registered for 6 months (from a maximum of 54) less and consumed 8.3% less expenditure than those whose HRP was professional. While those from lower social backgrounds consumed 24.4% less expenditure on orthodontic services, with respect to extractions and conservative treatment, adolescents whose HRP was long term unemployed or never worked consumed 35.6% and 25.8%, respectively, more expenditure than those whose HRP was professional, other variables controlled for.

Conclusions A publicly funded demand led service can produce a pattern of service provision that disproportionately reflects the preferences of the affluent at the expense of the needs of the less affluent. This might be masked by analysis of data at an aggregate level. The pattern of service provision that results may from a societal perspective be neither efficient (cost effective) nor equitable. The disaggregated analysis of registration and utilisation patterns in this study highlights the potential for such distortion where public funds support demand led provision by for profit providers.

074 WHO THINKS TEENAGERS ARE A PROBLEM? CROSS-SECTIONAL EVIDENCE ON PERCEPTIONS OF ANTI-SOCIAL BEHAVIOUR, HEALTH AND PLACE

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Objective Perceptions of anti-social behaviour (PASB) are a policy priority and linked to numerous social harms including experience of ASB. National survey findings have associated PASB with individual and area level deprivation, potentially adding to the multiple disadvantages said to contribute to health inequalities. We ask whether PASB have independent associations with ill health compared to other individual and neighbourhood characteristics for residents of deprived inner-city neighbourhoods (Glasgow, UK).

Methods Randomly selected adult residents of 14 deprived neighbourhoods answered face-to-face structured questionnaires. A stepwise logistic regression (clustered by area) produced a multivariate model including self-rated measures of health, GP visits, psychosocial wellbeing, homes, neighbourhoods, and demographic characteristics. Perceiving teenagers hanging around to be a serious neighbourhood problem was the dependent variable.

Results 6008 adults participated (50% response). Regular annual GP visits (>6) were associated with PASB (OR 1.29; p=0.011; 95% CI 1.06 to 1.56), as was GP visits (>0) for mental health reasons (OR 1.44; p=0.020; 95% CI 1.06 to 1.96). PASB was inversely associated with self/collective efficacy (OR 1.25; p=0.028; 95% CI 1.02 to 1.53); self-esteem (OR 1.56; p<0.001; 95% CI 1.30 to 1.87); trust (OR 1.53; p<0.001; 95% CI 1.19 to 1.96); feeling safe (OR 1.71; p<0.001; 95% CI 1.41 to 2.06); social support (OR 1.94; p<0.001; 95% CI 1.45 to 2.59); age (OR 2.33; p<0.001; 95% CI 1.56 to 3.50); living with children (OR 1.20; p=0.001; 95% CI 1.06 to 1.37) home condition (OR 1.31; p=0.006; 95% CI 1.08 to 1.58); home security (OR 1.31; p=0.042; 95% CI 1.01 to 1.71); neighbourhood exposure (OR 1.60; p=0.015; 95% CI 1.09 to 2.34); rating of police (OR 1.65; p<0.001; 95% CI 1.34 to 2.02). PASB was positively associated with fuel poverty (OR 1.43; p=0.011; 95% CI 1.09 to 1.87); neighbour contacts (OR 1.60; p=0.005; 95% CI 1.10 to 1.71); neighbourhood decline (OR 2.42; p<0.001; 95% CI 1.84 to 3.89); noisy environment (OR 1.23; p=0.042; 95% CI 1.01 to 1.50), and area type (OR 1.59; p<0.001; 95% CI 1.33 to 1.91). General health and longstanding illness were not associated with PASB after adjustment (p>0.05).

Conclusion National surveys link PASB to socio-economic status but the deprived communities we surveyed have relatively little socio-