

3 social media sites. We analysed the brand presence and page content on each site and assessed the use and effectiveness of age restrictions.

Results Facebook was the most-used social media site, with an average reach across the observation period ranging from 39% in males aged 6–14 to 91% among females aged 15–24. The average impressions per month varied between 697 million and 2,717 million. YouTube had a similar average reach (41–81%) while Twitter had a considerably lower usage in the age groups studied. All 5 of the alcohol brands studied maintained a brand website, facebook page and twitter page, while 3 of the 5 also hosted a YouTube channel. Features such as the 'like' button on facebook and the use of competitions and games enable spread of brand engagement through the network.

Age restrictions to alcohol brand content varied across the sites. Facebook users under the age of 18 years were not able to access 'official' alcohol brand pages, although most user-generated content and some brand-generated applications were still accessible. By contrast, YouTube and Twitter did not maintain age-restriction with users of all ages able to view and interact with brand content.

Conclusion Social media sites are heavily used by children and young adults. Their exposure through these sites to alcohol marketing warrants intervention.

PS30 THE JOINT EFFECT OF UNEMPLOYMENT AND CYNICAL HOSTILITY ON ALL CAUSE MORTALITY

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Background Unemployment as well as hostility has been associated with mortality and morbidity. Hostility and socioeconomic position, including unemployment is highly associated. One of the hypothetical models on the relation between hostility, health and life context, states that hostility moderates the relationship between health problems and stressful conditions in the environment, such as unemployment. The aim of this study is to analyze the joint effect of labor market exclusion and hostility on all cause mortality.

Methods This study is based on The Danish Longitudinal Study on work, Unemployment and Health, a survey carried out in the Spring 2000 among a random sample of 40 and 50 year old men and women and an oversampled group of previously unemployed individuals. The survey included self-reported measures on employment, education, age and hostility, measured by the eight-item Cynical Distrust Scale.

The exposure variable was: 1) employed-not hostile; 2) employed - hostile; 3) unemployed- not hostile and 4) unemployed - hostile. Outcome was defined as all-cause mortality. We used Cox's proportional hazard regression model, with age as the underlying time scale and with entry time January 1st 2000. All individuals who reported not working due to illness at the time of the survey were excluded in the analyses. The joint effect of unemployment and hostility was assessed as departure from multiplicativity.

Results Employed men and women who were hostile did not have an increased mortality risk. Unemployed men had an increased risk of mortality even when they were not hostile HR=2.30 (95% CI, 1.27–4.16) and the joint effect of unemployment and hostility was higher than what would have been expected from their separate effects, HR=2.57 (95% CI, 1.50–4.42). Unemployed women did not have a significantly increased mortality risk if they were not hostile HR=1.35 (95% CI, 0.73–2.50), however, the joint effect of unemployment and hostility was higher than what would have been expected from their separate effects, HR=2.23 (95% CI, 1.17–4.24).

Conclusion The joint effect of unemployment and hostility is a novel finding, indicating that the health damaging consequences of unemployment are accentuated by hostility.

PS31 PATTERNS OF PARTNERSHIP SMOKING DURING PREGNANCY

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Background Partner's smoking status is an important predictor of maternal smoking in pregnancy; however there are few UK-wide surveys which look at these effects. We investigated partnership smoking, quitting and cutting down during pregnancy in the UK's Millennium Cohort Study.

Methods We used multinomial logistic and linear regression to investigate retrospective self-reported smoking status and reductions in cigarettes smoked of mothers and their partners. All analyses were weighted for the complex sampling design and non-response, both unadjusted and adjusted for socio-demographic status.

Results Seventy-six percent of women had respondent partners, 22% were couples who both smoked around the time of the pregnancy (unweighted N=2,954). Of these smoking couples, 37% of women quit during their pregnancy, 41% cut down, and 23% smoked the same amount (persistent smokers), respective percentages for partners were 16%, 25% and 56%. Compared to women who quit, women who cut down were more likely to have a partner who was a persistent smoker (RRR 7.6, 95% CI 4.9 to 11.7), or a cut-down smoker (5.7, 3.8 to 8.5). Compared to persistent smokers, those who cut down were slightly heavier smokers (women mean difference 1.1 cigarettes/day, partners 2.0). Women who cut down reduced average consumption to 6.3 a day (mean reduction 9.3, 95% CI 9.0 to 9.8) and partners to 10.1 (8.7, 8.1 to 9.3). There was no difference in the effect of partners' persistent smoking on the risk of women cutting down or persistent smoking (P=0.38), but partner cutting down was a significantly larger predictor of women cutting down compared to women continuing to smoke (P=0.02). After reduction, women whose partners cut down smoked an average of 2.2 more cigarettes more than those whose partners quit (P=0.043). There was no evidence of variation in reduction for those who had partners who quit and those who were persistent smokers (d=0.87, P=0.42). **Results** were robust to adjustment for socio-demographics; fully adjusted results will be presented.

Conclusion Most women cut down and this was associated with partner cutdown, however this strategy was limited as partners were more likely to be persistent smokers. Significant reductions in the maternal number smoked were achieved, but the influence of partner smoking (whether persistent or cut down) may limit reduction. Cutting down as a strategy has questionable impact on in-utero exposure and may put at infants at risk for environmental tobacco smoke exposure postpartum. For maximum effect, partner and targeted couples interventions are warranted.

PS32 BREAST CANCER SCREENING UPTAKE IN DIFFERENT ETHNIC GROUPS IN LONDON

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Background Breast screening uptake is lower in London than other areas of England. Knowledge of cancer screening programmes varies between ethnic groups, and previous studies have shown variation in uptake between broad ethnic groups. This study aimed to determine whether breast cancer screening uptake varies between 16 ethnic groups in London.

Methods Information on women resident in London who were sent a breast cancer screening invitation between 31/03/2006 and 31/12/2009 was obtained from the London Quality Assurance

Reference Centre. Women aged 50–52 who had a first call invitation (a first invitation to the national screening programme) in this period, and women aged 50–69 who had a routine recall invitation (after previously having a mammography as part of the screening programme) were analysed. Where ethnicity was not known, multiple imputation was used. First call and routine recall data were analysed separately. Screening uptake in different ethnic groups was assessed using logistic regression, and adjusted for age at invitation, socioeconomic deprivation and screening area. Data for the six individual screening areas were also analysed separately.

Results Data on 159,078 women were included in the first call analysis, and on 496,438 women in the routine recall analysis. Ethnicity information was available for 475,478 (72.5%) of these women. Compared with White British women, all other ethnic groups were less likely to attend their first call screening invitation. White British women were also most likely to attend for routine recall screening sessions. Some screening areas showed less variation, with women from several ethnic groups having similar screening uptake to White British women.

Conclusion Breast cancer screening attendance varies by ethnic group for both the first invitation and for subsequent invitations after previously being screened, with White British women more likely to attend. Collaboration between areas to find successful practices for engaging with different communities should improve breast cancer screening uptake.

PS33 HEALTH-SEEKING BEHAVIOUR IN THE ERA OF FREE HEALTHCARE IN URBAN SLUMS IN SIERRA LEONE

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Background Sierra Leone has child health statistics which are amongst the worst in the world. In April 2010, the Government of Sierra Leone launched a Free Health Care Initiative (FHCI), eliminating user fees in government facilities for children under the age of five, as well as pregnant and lactating women. Data from Ola During Children's Hospital (ODCH), the country's only government-run tertiary paediatric hospital, suggests that the FHCI has increased service utilisation. However, mortality rates remain high and delayed presentation is a major factor contributing to poor outcomes. This study sought to understand health-seeking behaviour in the era of Free Health Care, as a means of addressing barriers to the delivery of timely paediatric care for the urban poor.

Methods Data was collected via focus group discussions and key informant interviews in Freetown. Men and women with at least one child below the age of five under their care were included. Participants were selected from neighbourhoods in Freetown where Ola During Children's Hospital (ODCH) represented the nearest secondary care facility to their usual place of residence. Focus groups were facilitated in Krio, the national language, guided by a pre-designed survey tool. Discussions were audio-recorded, transcribed and translated into English. Data analysis was conducted by the research team using a thematic framework.

Results Preliminary analysis reveals several factors contributing to delays in accessing appropriate care for sick children:

Indirect costs: Transportation, child-minding, lost income, cost of prescribed medicines and unsanctioned charges for care that continue to be levied.

The negative perceptions of ODCH staff and facilities: Perceived disrespectful, discriminatory or unfair treatment within the health facility.

Numerous healthcare options more easily accessible: Private pharmacies, self-treatment at home using traditional (herbal) or allopathic remedies.

Poor insight into disease: Deficiencies in caregivers' ability to recognise at what time during illness progression seeking healthcare would result in the highest cost benefit ratio.

Non caregiver factors: Long queues, perceived complicated referral process between FHC facilities, and reduced opening hours.

Conclusion User fees represent a major barrier to accessing timely and appropriate care for poor children. However, the elimination of official charges for paediatric care in Sierra Leone has brought to the surface several critical factors, beyond direct costs, which also impact upon healthcare utilisation. Understanding the processes and determinants which modulate health seeking behaviour is fundamental to efforts to improve health outcomes for the most vulnerable children.

PS34 RECORDING AND MANAGEMENT OF OBESITY IN PRIMARY CARE, 1997-2006

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Background Primary care services play a potentially important role in the diagnosis and management of obesity but little evidence exists on current routine practice. The aim of this study was to describe the recording of body mass index and interventions used in the management of body weight in UK primary care in different categories of body weight.

Methods A retrospective cohort study was implemented using the UK General Practice Research Database (GPRD). Participants were aged between 18 and 100 and had a diagnosis of obesity and/or a record indicating a weight management intervention between 1997 and 2006. Diagnoses of obesity were identified by a medical code for obesity or a body mass index (BMI) record of $\geq 30\text{kg/m}^2$. Interventions were identified by medical and therapy codes and included advice on diet, body weight control or exercise, referral to specialist care for obesity or prescription of anti-obesity drugs.

Results Patients ($n=69,102$) with a diagnosis of obesity or who received a weight management intervention were identified at 128 UK general practices. Average BMI rose slightly over the study period from 35.0kg/m^2 in 1997 to 35.8kg/m^2 in 2006, with a higher proportion of patients gaining rather than losing or maintaining their weight each year. Monitoring of BMI was infrequent with just 48% of patients previously identified as obese having a BMI recorded in 2006. The proportion of patients with one or more interventions for weight control recorded increased from 29% in 1997 to 37% in 2006. The most frequent intervention throughout the study period was the provision of dietary advice, recorded in 13,097 (40.7%) patients in 2006 compared to 3,401 (32.3%) in 1997. Prescription of anti-obesity drugs increased by almost 60-fold over the study period. The proportion of morbidly obese patients ($\text{BMI} \geq 40\text{kg/m}^2$) receiving a weight control intervention in 1997 was 38%, rising to 63% in 2006. In obesity category I ($\text{BMI} 30\text{--}34.9\text{kg/m}^2$) the proportion receiving treatment was 43% in 1997 and 53% in 2006 and in category II ($\text{BMI} 35\text{--}39.9\text{kg/m}^2$) 41% and 56% respectively.

Conclusion Monitoring of obesity in diagnosed patients was inconsistent in this population with less than half having a BMI recorded in each year of the study. The frequency of interventions for weight management increased substantially in primary care between 1997 and 2006.

PS35 THE ROLE OF TIME PREFERENCE IN SMOKING CESSATION: A LONGITUDINAL ANALYSIS OF DATA FROM THE HOUSEHOLD INCOME AND LABOUR DYNAMICS OF AUSTRALIA SURVEY, 2001-08

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