

care. Major congenital anomaly remains the main cause of death in stillbirths and early neonatal deaths. FGR continues to appear as a significant associated factor with perinatal mortality. Improved antenatal detection is a potentially modifiable factor. As recommended by the Institute of Obstetrics and Gynaecology, second trimester fetal anomaly ultrasound scanning should be universally available for all pregnant women in Ireland. A public health education programme on perinatal deaths and modifiable risk factors should be developed.

P79 THE PREVALENCE AND CORRELATES OF TOBACCO SMOKING IN IRISH UNIVERSITY STUDENTS, FOCUSING ON SOCIAL SMOKING AND SELF-IDENTIFICATION OF SMOKERS; A CROSS-SECTIONAL STUDY

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10.1136/jech-2019-SSMabstracts.230

Background Social smoking is becoming increasingly common, emerging as a separate and distinct pattern of smoking behaviour to regular smoking. Smoking denial, too, has become more prevalent, with those who engage in smoking behaviour often not self-identifying as smokers. This study aims to examine the prevalence of smoking and social smoking in Irish university students and the self-identification of same, along with assessing other factors for any association they may have with smoking behaviour, namely smoking identity, frequency of tobacco consumption and alcohol and drug use.

Methods A cross-sectional study was carried out in the form of a web questionnaire distributed to undergraduate students of University College Cork (UCC). 1,606 initial responses were collected. Exclusion criteria were applied, removing graduate students, those who had incorrectly completed the questionnaire and a small number of duplicates, yielding a final sample size of 1,434 and a final response rate of 10.4%. Data were analysed using IBM SPSS software and the method of analysis included both chi-square testing and multinomial logistic regression analyses.

Results 58.2% (n=834) of respondents are smokers with 77.2% (n=644) of those being social smokers. Social smoking has significant associations with a number of smoking characteristics including decreased frequency of habit (OR=0.084; 95% CI=0.044–0.160; $p<0.001$), sourcing tobacco from others (OR=2.211; 95% CI=1.401–3.489; $p<0.001$), less inclination to quit (OR=0.426; 95% CI=0.231–0.792; $p=0.007$) and being influenced to smoke while drinking (OR=3.698; 95% CI=1.461–9.362; $p=0.006$) or if others are smoking (OR=3.085; 95% CI=1.495–6.365; $p=0.002$). While 76.8% of regular smokers self-identified as smokers, only 12.3% of social smokers self-identified as smokers (OR=0.078, 95% CI=0.040–0.153; $p\leq 0.001$). Smoking in general is associated with substance use and misuse (OR=2.754; 95% CI=1.613–4.705; $p<0.001$) in comparison to non-smokers.

Conclusion Social smoking is a prevalent behaviour in university students and constitutes the majority of smoking behaviour amongst those surveyed. The difference in results between social smoking and regular smoking groups reinforces that social smoking is a distinct smoking pattern. There is a vast discrepancy in the self-identification of smokers and their smoking behaviour, more so amongst social smokers than

regular smokers. Limitations of this study included low response rate and potential for self-selection bias. Further study could be carried out in this area with regards to smoking interventions and potential need to target these groups specifically in public health campaigns.

P80 THE JOINT CONTRIBUTION OF SOCIOECONOMIC CIRCUMSTANCES AND ETHNIC GROUP TO VARIATIONS IN PRETERM BIRTH, NEONATAL MORTALITY AND INFANT MORTALITY IN ENGLAND AND WALES – A POPULATION-BASED RETROSPECTIVE COHORT STUDY USING ROUTINE DATA FROM 2006 TO 2012

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10.1136/jech-2019-SSMabstracts.231

Background Neonatal and infant mortality rates in England and Wales have declined in recent years. However, disparities in outcomes persist. This study aimed to describe the variation in risks of adverse birth outcomes across ethnic groups and socioeconomic circumstances, and to explore the evidence of mediation by socioeconomic circumstances on the effect of ethnicity on birth outcomes.

Methods The data came from the 4.6 million singleton live births in England and Wales between 2006 and 2012. Socioeconomic circumstances was measured using the Index of Multiple Deprivation (IMD). We estimated the slope and relative indices of inequality to describe differences in birth outcomes across IMD, and the proportion of the variance in birth outcomes across ethnic groups attributable to IMD. We investigated mediation by IMD on birth outcomes across ethnic groups using structural equation modelling.

Results Neonatal mortality, infant mortality and preterm birth risks were 0.2%, 0.3% and 5.6% respectively. Babies in the most deprived areas had 47% to 129% greater risk of adverse birth outcomes than those in the least deprived areas. Minority ethnic babies had 48% to 138% greater risk of adverse birth outcomes compared with white British babies. Up to a third of the variance in birth outcomes across ethnic groups was attributable to differences in IMD, and there was strong statistical evidence of an indirect effect through IMD in the effect of ethnicity on birth outcomes.

Conclusion There is evidence that socioeconomic circumstances could be contributing to the differences in birth outcomes across ethnic groups.

P81 THE ASSOCIATION BETWEEN AIR POLLUTION AND ACUTE HOSPITAL ADMISSIONS IN DUBLIN 2007–2016

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10.1136/jech-2019-SSMabstracts.232

Background Outdoor air pollution has a significant impact on human health and has been declared a 'public health emergency' by the World Health Organisation. An estimated 14,400 years of life are lost annually in Ireland due to 1200 premature deaths caused by air pollution. Cardiovascular disease and stroke are the commonest causes of premature death, followed by respiratory disease. Numerous studies worldwide