and health characteristics. Health and well-being outcomes included: self-rated health measured on a five-point scale, and life satisfaction, feeling that life is worthwhile, happiness, and anxiety, measured on eleven-point Likert scales. We conducted a causal mediation analysis to quantify natural indirect effects representing how much of the effect of disability acquisition on each outcome was explained by barriers to participation including employment, economic life, transport, leisure activities, social contact and accessibility. We used multiple imputation with 50 imputed datasets to account for missing data and conducted analyses in Stata/SE 15.

Results There was evidence that people who had recently acquired a disability had poorer health and well-being compared to people with no disability. Barriers to participation explained 13% (95% CI 11%, 14%) of inequalities in self-rated health, and were higher for all measures of well-being: life satisfaction (43%, 95% CI 39%, 47%), feeling that life is worthwhile (36%, 95% CI 31%, 40%), happiness (46%, 95% CI 39%, 53%) and anxiety (27%, 95% CI 24%, 31%).

Conclusion Despite methodological limitations including strong assumptions about confounding and potential selection bias from missing data, this is the first study to quantify how much of the inequalities in health and well-being between people with and without disabilities are explained by social barriers to participation. We found that a substantial proportion of the inequalities in health and well-being experienced by people with recently acquired disabilities were driven by social barriers to participation. The findings that some of these differences are socially produced have important policy implications, highlighting modifiable factors amenable to public health interventions to target the mechanisms causing the health inequalities.

P63 ADVERSE PREGNANCY OUTCOMES AND LONG-TERM RISK OF MATERNAL RENAL DISEASE: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Background Adverse pregnancy outcomes, like hypertensive disorders of pregnancy (HDP), gestational diabetes (GDM) and preterm delivery, are associated with increased risk of long-term maternal cardiovascular and cerebrovascular disease. Comparatively little is known about whether adverse pregnancy outcomes increase the risk of maternal renal disease. We aimed to investigate associations between adverse pregnancy outcomes (HDP, GDM, preterm delivery) and long-term maternal chronic kidney disease (CKD) and end-stage kidney disease (ESKD), by synthesising the results of relevant published studies.

Methods A systematic search of PubMed, EMBASE and Web of Science was undertaken from inception of databases to 31 July 2018. Case-control and cohort studies published in English were eligible for inclusion if they provided original effect estimates for associations between adverse pregnancy outcomes (HDP, GDM, preterm delivery) and maternal renal disease (primary outcomes: CKD, ESKD; secondary outcomes: renal hospitalisation, mortality due to renal disease). Two independent reviewers extracted data and assessed risk of bias. Random effects meta-analyses were conducted using RevMan 5.3 to determine the pooled adjusted odds ratio (AOR) and 95% confidence interval (95%CI) for each association between each adverse pregnancy outcome and CKD or ESKD respectively. Subgroup analysis by HDP subtype was performed.

Results Of 5,120 studies retrieved, 21 studies met inclusion criteria (37 adjusted effect estimates in total, including 4,483,847 participants). HDP was associated with significantly increased odds of ESKD (AOR 6.58, 95%CI 4.06–10.65, based on nine effect estimates), CKD (AOR 2.08, 95%CI 1.06–4.10, based on eight estimates), and renal hospitalisation (AOR 2.29, 95%CI 1.42–3.71, based on six estimates). The magnitude of association was dependent on HDP subtype: AOR for preeclampsia and ESKD was 4.87 (95%CI 3.01–7.87); for gestational hypertension and ESKD was 3.65 (95% CI 2.34–5.67); for other HDP (including chronic hypertension ± superimposed preeclampsia) and ESKD was 14.67 (95%CI 3.21–66.97). Preterm delivery was associated with increased odds of ESKD (AOR 2.16, 95%CI 1.64–2.85, based on three estimates). GDM was associated with increased odds of CKD among black women (AOR 1.78, 95%CI 1.18–2.70), but not white/Caucasian women (AOR 0.81, 95%CI 0.58–1.13, based on four estimates).

Conclusion Women who experience adverse pregnancy outcomes have increased odds of long-term renal disease, particularly those exposed to HDP. This study was limited by small numbers of studies in each individual meta-analysis, restricting the ability to assess for publication bias. Long-term follow-up should be optimised for women who experience adverse pregnancy outcomes, and preventive interventions may be warranted to reduce their risk of clinically significant renal disease.

P64 SELF-HARM AMONG THE HOMELESS POPULATION IN IRELAND: A NATIONAL REGISTRY-BASED STUDY OF INCIDENCE AND ASSOCIATED FACTORS

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Background Suicide rates are higher among the homeless population than the general population, and the homeless are recognised as a priority group for suicide prevention. Self-harm is a strong predictor of future suicide, particularly repetition of self-harm. Little is known about the incidence of self-harm, and its associated predictive factors, among the homeless. The purpose of this study was to quantify the burden of self-harm among the homeless population in Ireland, and to assess factors associated with self-harm and repeated self-harm.

Methods Data on self-harm presentations to all 34 hospital emergency departments in Ireland were collected by the National Self-Harm Registry Ireland (NSHRI). Index and repeat presentations from 2010–2014 were included for the homeless and fixed residence populations. Individuals with no fixed abode, or who lived in recognised accommodation for the homeless, were recorded as being homeless. Age-standardised incidence rates (ASIR) of self-harm were calculated using NSHRI data and national population estimates from the

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Census of Ireland. Factors associated with self-harm and repetition of self-harm were compared between the homeless and those living at fixed residence using multivariable-adjusted logistic regression models.

Results There were 58,747 presentations of self-harm in total, of which 3.9% were among the homeless. The ASIR of self-harm was 30 times higher among the homeless (5,572 presentations per 100,000) compared with those living at fixed residence (187 presentations per 100,000). Intentional overdose was the most common method of self-harm for all; relative to those with fixed residence, homeless individuals were significantly more likely to use minor tranquillisers (47% vs 39%, χ^2:p<0.001) or street drugs (19% vs. 6%, χ^2:p<0.001) for overdose. Homeless people had significantly higher odds of self-harm repetition within 12 months (vs. fixed residence, AOR 1.46, 95%CI 1.21–1.77). Within the homeless population, the odds of self-harm repetition were significantly increased among those who engaged in self-cutting (vs. overdose, AOR 1.76, 95%CI 1.17–2.65) and those who did not receive psychiatric review at index presentation (vs. reviewed, AOR 1.54, 95%CI 1.05–2.26).

Conclusion There is a disproportionate burden of self-harm among the homeless. Those who present with self-cutting, and who do not receive psychiatric review at index presentation, are particularly vulnerable to repetition. Although this study only reflects self-harm presenting to hospital, and assumes no change in homelessness status during follow-up, it is the largest study of self-harm among the homeless conducted to date. The results may be used to strengthen suicide prevention efforts through earlier recognition of high-risk homeless individuals.

P65 HYPERTENSION IN PREGNANCY PREVALENCE, RISK FACTORS AND OUTCOMES FOR WOMEN BIRTHING IN IRELAND

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Background Hypertensive disorders of pregnancy account for nearly 18% of all maternal deaths world-wide. They are associated with increased risk of maternal and neonatal morbidity, adverse pregnancy outcomes and long-term health risks for both mother and baby. This study aims to determine prevalence, risk factors and outcomes associated with hypertensive disorders of pregnancy (Pregnancy-induced hypertension, pre-eclampsia, eclampsia, HELLP, hypertensive disorder of pregnancy unspecified).

Methods Data on maternity hospital discharges (ICD codes O00-O99) for women giving birth in Ireland in 2016 were extracted from Hospital In-Patient Enquiry (HIPE) using Health Atlas. Women discharged following delivery were identified using ICD-10 codes O80-O84 for delivery. Those with a diagnosis of a hypertensive disorder of pregnancy were identified using ICD-10 codes O10-O16. Frequencies and descriptive statistics were used to present prevalence rates of hypertensive disorders of pregnancy. Pearson's Chi-square and multivariate analyses were conducted to identify risk factors. Data was analysed in SPSS version 25 and JMP version 9.

Results Of 60,188 births, 3531 women (5.9%) had a hypertensive disorder of pregnancy. Rates were higher among women with pre-existing diabetes, gestational diabetes, obesity and those age ≥40years (p<0.001). Women with a diagnosis of a hypertensive disorder of pregnancy had a higher risk of poor foetal growth (OR 2.6), preterm labour and birth (OR 3.7), placental abruption (OR 2.0), long labour (OR 1.4), instrument–assisted delivery (OR 1.2), caesarean section (OR 1.8), postpartum haemorrhage (OR 1.6) and length of stay ≥6 days (OR 5.6).

After adjusting for all factors, obesity (OR 4.3) pre-existing diabetes (OR 3.5), gestational diabetes (OR 1.5) and being aged ≥ 40 years (1.5) remained significantly associated with being diagnosed with a hypertensive disorder.

Conclusion As the number of overweight and obese pregnant women, women giving birth aged ≥ 40 years, and those with pre-existing diabetes mellitus or new onset gestational diabetes increase rates of hypertensive disorders of pregnancy will likely become more common obstetric risks. They therefore represent a significant public health concern. These findings can help inform strategies for identifying factors associated with hypertensive disorders of pregnancy.

P66 TAKING NUDGE DIGITAL WITH FOOD CHOICE AT WORK: FROM EVALUATION TO PRACTICAL APPLICATION IN EVERYDAY WORKPLACE SETTINGS

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Background Evidence on effective workplace dietary interventions is limited. The Food Choice at Work trial assessed the comparative effectiveness of a workplace dietary intervention involving nutrition education and system-level dietary modification both alone and in combination versus a control workplace on employees' dietary intakes, nutrition knowledge and health status. An economic evaluation assessed the cost-effectiveness of the interventions from the perspective of healthcare providers in terms of QALYs and employers in terms of monetary benefits (reduced absenteeism).

Methods Four manufacturing workplaces in Ireland were allocated to control, nutrition education (Education), system-level dietary modification (System-level) and nutrition education and system-level dietary modification (Combined). Nutrition education included group presentations, individual consultations and detailed nutrition information. System-level dietary modification included menu modification, fruit price discounts, strategic positioning of healthier alternatives and portion size control. Data on dietary intakes, nutrition knowledge, health status, QALYs and absenteeism were obtained at baseline and at 7–9 months follow-up. Multivariate analysis of covariance compared changes across the groups. The economic evaluation included cost-utility and cost-benefit analyses.

Results Follow-up data were obtained for 541 employees (18–64 years) (64% of 850 recruited). There were significant positive changes in intakes of saturated fat (p=0.013), salt (p=0.010) and nutrition knowledge (p=0.034) between baseline and follow-up in the combined intervention versus the control. Significant changes in BMI (– 1.2 kg/m2 (p=0.047) were also observed in the combined intervention. System-level modification yielded the highest additional QALYs (€ 101.37/QALY) and annual net benefit for employers (€ 56.56/employee).

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