12,997 (78%) and 13,145 (71%) had a cohort participating partner, respectively. However, partner participation was much lower in BiB: 3131/11,538 pregnancies (27%) had a cohort participating partner. Consistently across all cohorts, in pregnancies with cohort participating partners, mothers were more likely to be living with their partner before birth of the child, be white and have a university degree. They were consistently less likely to have no qualifications and their babies were less likely to be born preterm or have a low birthweight. We saw relatively stable effect estimates within cohorts for associations between maternal smoking and offspring birthweight regardless of whether we used the full sample, the sample where fathers participated (selected either through stratification or adjusting for partner smoking), or the sample where fathers did not participate.

Conclusion Overall, these results show partner selection is unlikely to cause strong selection bias in estimates of maternal effects. This suggests that, although inclusion of partner data with high levels of non-random missingness has the potential to introduce selection bias, in practice, the biasing effect appears to be small. This also has implications for studies of partner effects in their own right.

P64

HOW DO CHANGES IN INDIVIDUAL OR HOUSEHOLD INCOME IMPACT ON MENTAL HEALTH FOR WORKINGAGE ADULTS? A SYSTEMATIC REVIEW

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Background Lower incomes are associated with poorer mental health (MH) and wellbeing, but the extent to which income has a causal effect (rather than reflecting reverse causation or confounding factors such as education) is debated. We synthesised evidence from studies measuring the impact of changes in individual or household incomes on MH and wellbeing for working-age adults (16–64 years).

Methods We searched MEDLINE, Embase, Web of Science, PsycINFO, ASSIA, EconLit and RePEc for randomised controlled trials (RCTs) and quantitative non-randomised studies (NRSs) – PROSPERO registration CRD42020168379. We included studies measuring effects of income change on any MH or wellbeing outcome. Screening and risk of bias (RoB) assessment were completed independently by two reviewers, using ROBINS-I for NRSs and RoB-2 for RCTs. As per Cochrane guidance, we conducted narrative synthesis based on direction of effects (benefit vs harm) for relevant datapoint(s) within each included study, and compared findings by RoB. Meta-analysis is in progress.

Results Of 16,521 hits screened, 17 RCTs and 118 NRSs (67.0% longitudinal) were included. Most studies were from high-income settings (71.9%), with 26.7% from USA. RoB was high: 102 studies (75.6%) were rated serious/critical, with confounding being the highest-rated RoB domain in 81.1% of these studies. Where known (53.7% of studies), the most common income sources studied were cash transfers (20.2%), natural disasters/welfare policy changes (7.5%) and lottery wins (5.2%). For mental health, 80.4% of 112 datapoints reported beneficial effects of income (95%CI 73.0–87.7%, sign test p<0.001). For wellbeing outcomes 86.5% of 74 datapoints reported a beneficial effect (95%CI 78.7–94.3%,

p<0.001). However, effect sizes were small: for low/moderate RoB datapoints, binary exposures (i.e. increases/decreases in income of any amount) were associated with median 0.089 standard deviation (SD) improvement/worsening in outcome respectively (IQR 0.162, n=24); a 1SD increase/decrease in continuous exposures was associated with median 0.008 SD improvement/worsening (IQR 0.276, n=4). Studies with low/moderate RoB were slightly less likely to report beneficial effects compared with serious/critical RoB studies (77.6% vs 84.7%, p=0.257).

Conclusion Income increases are linked to improved MH and wellbeing, but on preliminary synthesis effect sizes appear small in the most robust studies. Income provision alone may not be adequate to improve mental health – given that more generous welfare policies are known to be linked with better population MH, it is possible other elements such as conditionality or financial security are also important.

P65

POTENTIAL ALCOHOL USE DISORDER (AUD) AMONG MEN WHO HAVE SEX WITH MEN (MSM) IN IRELAND – FINDINGS FROM THE EUROPEAN MSM INTERNET SURVEY (EMIS) 2017

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Background Alcohol consumption is a major public health concern in Ireland. Alcohol use disorder (AUD) disproportionately affects men who have sex with men (MSM). However, little is known about the prevalence of AUD in this group in Ireland specifically, and the characteristics of MSM who may struggle with this.

Methods The European MSM Internet Survey 2017 was an online, self-completed, anonymous questionnaire among MSM in Ireland. Standardised questions were used to explore a variety of topics. The validated CAGE-4 questionnaire was used to screen for potential AUD, defined as a CAGE-4 score of ≥ 2 out of 4. Multivariable-adjusted logistic regression analysis was used to identify factors associated with potential AUD.

Results In total, 1,793 MSM met inclusion criteria, and 31% screened positive for AUD. We observed higher odds of possible AUD among MSM who were bisexual (vs. gay/homosexual) (aOR 1.48 95%CI 1.01–2.18), native to Ireland (vs. non-native) (aOR 1.49 95%CI 1.12–1.96), unemployed (vs. employed) (aOR 1.80 95%CI 1.02–3.16), had used illicit drugs in the previous year (vs. none) (cannabis only, aOR 1.74 95%CI 1.14–2.63) (other illicit drugs, aOR 2.28 95%CI 1.67–3.09), reported anxiety/depression (vs. none) (aOR 1.73 95%CI 1.12–2.66), and MSM who experienced homophobic abuse (vs. never) (aOR 1.55 95%CI 1.09–2.22). Student MSM were less likely to screen positive for AUD (vs. employed) (aOR 0.65 95%CI 0.46–0.93).

Conclusion The prevalence of AUD appears to be higher in the MSM population compared to the general male