workers have been disadvantaged by the pandemic and current working modes. We aimed to examine the impact of COVID-19 on the mental health of UK workers by industry and social class category and to investigate whether any observed impacts differed by age, gender, and country of residence within the UK.

Methods We used the UK Household Longitudinal Study (Understanding Society) to analyse data from adults in paid employment, who participated in pre-COVID-19 Waves [9 (2017/19) and 10/11(2018/20)] and in at least one COVID-19 wave. Our primary outcome was probable psychological distress, defined by 'caseness' (a score of 4+) in the General Health Questionnaire-12 (GHQ-12) and exposures included industrial sectors (classified using the UK Standard Industrial Classification) and social class (using the Eight Class National Statistics Socio-economic Classification). We fitted mixedeffects logistic regression models, adjusting for age, gender, employment type, financial situation and UK country of residence and used inverse probability weights to account for attrition and non-response, to estimate odds ratios (ORs) with 95% confidence intervals (95%CI). Subsequently, we stratified by gender, UK country of residence, and age group.

Results Our final sample includes 44,500 observations (Prepandemic period=13,314, pandemic period=31,186) across 7,075 individuals. GHQ-caseness increased for workers in most industries during the pandemic; especially in 'Accommodation and Food Services' (OR:3.2; 95%CI:1.9,5.4). Analysis by social class showed that 'Small employers and own account' workers were the most affected (OR:2.9; 95% CI:2.1,4.0). Our stratified analysis by industry demonstrated the largest increase in GHQ-caseness between the pre and pandemic periods to be by gender in the 'Accommodation and Food Services' sector (OR:9.6; 95%CI:3.2,29.0 for men; OR:2.0; 95%CI:1.2,3.4 for women); whereas by social class the largest increase was observed when stratifying by UK country of residence for 'Small employers and own account' workers (non-England: OR:8.8; 95%CI:4.1,18.8; England: OR:2.5; 95%CI:1.6,3.9).

**Conclusion** Our findings indicate that the pandemic has significantly affected the mental health of UK workers. Policies with a decentralised element are needed, prioritising support to certain industrial sectors and the self-employed/small business owners, as well as for particular demographic groups (e.g. men in the 'Accommodation and Food Services' industry) who are in an excessively high risk.

### OP64 COMMUNICATION ACROSS MATERNAL SOCIAL NETWORKS DURING THE UK'S NATIONAL LOCKDOWN AND ITS ASSOCIATION WITH POSTNATAL DEPRESSIVE SYMPTOMS

<sup>1</sup>Emily Emmott<sup>\*</sup>, <sup>1,2</sup>Sarah Myers. <sup>1</sup>UCL Anthropology, UCL, London, UK; <sup>2</sup>BirthRites Independent Max Planck Research Group, Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany

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**Background** Postnatal depression (PND) is highly detrimental for both mother and baby, with a pre-COVID-19 estimated prevalence of up to 23% in Europe. Low social support is a key risk factor for developing PND. Social distancing measures designed to limit COVID-19 transmission likely created unprecedented barriers for mothers to access social support. We explore how social support networks existed during the UK's first national lockdown amongst London mothers with infants, and their associations with postnatal depressive symptoms.

Methods Using self-reported social network data from 162 London-based mothers with infants aged  $\leq 6$  months collected in May-June 2020 (during the first lockdown), we conduct a concurrent design mixed-method study. We quantitatively describe communication within maternal support networks, using quasi-Poisson regression models to analyse associations with postnatal depressive symptoms using the Edinburgh Postnatal Depression Scale (EPDS). In parallel, we thematically analyse open-text data to explore and understand the experiences of mothers with infants during England's lockdown.

Results Quantitative findings: Levels of depressive symptoms were high in our sample, with 47.5% of participants meeting the >=11EPDS cut-off for potential postnatal depression.On average, women kept in contact with 10-11 people remotely (via WhatsApp, Zoom etc), and saw one family member other than their partner, suggesting high compliance with lockdown rules. The number of seen in person, and remote communication with a higher proportion of those not seen, negatively predicted depressive symptoms (RRR = 0.950 - 0.996 across models). However, a higher proportion of relatives seen in person was associated with increased depressive symptoms (RRR=1.003; 95% CI 1.001-1.006), suggesting family members may have broken lockdown rules to support mums in need. Qualitative findings: We identified four themes. Some mothers in our sample felt lockdown 'protected' family time which led to better bonding, often facilitated by high levels of support from the partner (theme 1). However, many experienced the 'burden of constant mothering' without anyone around to help (theme 2). Mothers felt remote contact was 'not as good' and led to reduced or inadequate support (theme 3). Mothers grieved for lost opportunities for them and their baby, and worried about the developmental impact on their baby (theme 4). Overall, these experiences coexisted with feelings of isolation, exhaustion, worry, inadequacy, guilt, and increased stress.

**Conclusion** Results suggest the strict lockdown in the UK may have increased the risk of postnatal depression, reflected in the high levels of PND symptoms and poor maternal experiences in our sample.

## OP65 MENTAL HEALTH INEQUALITIES IN DISRUPTIONS TO HEALTHCARE, ECONOMIC ACTIVITY AND HOUSING DURING COVID-19: FINDINGS FROM 12 UK LONGITUDINAL POPULATION SURVEYS

<sup>1</sup>Michael J Green<sup>\*</sup>, <sup>2</sup>Giorgio Di Gessa, <sup>3</sup>Jane Maddock, <sup>4</sup>Eoin McElroy, <sup>5,6</sup>Ellen J Thomson, <sup>3,7</sup>Praveetha Patalay, <sup>6</sup>Helena L Davies, <sup>6</sup>Jessica Mundy, <sup>8</sup>Anna J Stevenson, <sup>9,10</sup>Alex SF Kwong. <sup>1</sup>*MRC/CSO Social and Public Health Sciences Unit, University of Glasgow, Glasgow, UK*; <sup>2</sup>*Institute of Epidemiology and Health Care, UCL, London, UK*; <sup>3</sup>*MRC Unit for Lifelong Health and Ageing, UCL, London, UK*; <sup>4</sup>*Department of Neuroscience, Psychology and Behaviour, University of Leicester, Leicester, UK*; <sup>5</sup>*Department of Twins Research and Genetic Epidemiology, Kings College London, London, UK*; <sup>6</sup>*Social, Genetic and Developmental Psychiatry Centre, Kings College London, London, UK*; <sup>7</sup>*Centre for Longitudinal Studies, UCL, London, UK*; <sup>8</sup>*Centre for Genomic and Experimental Medicine, University of Edinburgh, Edinburgh, UK*; <sup>9</sup>*Division of Psychiatry, University of Edinburgh, Edinburgh, UK*; <sup>10</sup>*Population Health Sciences, University of Bristol, Bristol, UK* 

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Background The COVID-19 pandemic with its associated virus suppression measures have disrupted many domains of

life for many people. Increasingly it is recognised that negative disruptive impacts of the pandemic are not experienced equally and may exacerbate existing inequalities. People already suffering from psychological distress may have been especially vulnerable to disruptions. We investigated associations between pre-pandemic psychological distress and disruptions to healthcare, economic activity, and housing, and whether these associations were moderated by age, sex, ethnicity or education.

Methods Data were from 59,482 participants in 12 UK longitudinal adult population surveys with both pre-pandemic and COVID-19 surveys. Participants self-reported disruptions since the start of the pandemic to: healthcare (medication access, procedures, or appointments); economic activity (negative changes in employment, income or working hours); and housing (change of address or household composition). These were also combined into a cumulative measure indicating how many of these three domains had been disrupted. Logistic regression models were used within each study to estimate associations between pre-pandemic standardised psychological distress scores and disruption outcomes. Analyses were weighted for sampling design and attrition, and adjusted for age, sex, education, ethnicity, and UK country. Findings were synthesised using a random effects meta-analysis with restricted maximum likelihood. Effect modification by sex, education, ethnicity and age was assessed using group-difference tests during meta-analysis.

Results While exact prevalence varied between studies, prepandemic psychological distress was generally more common among women, ethnic minorities, younger age groups, and those with less education. One standard deviation higher psychological distress was associated with raised odds of health care disruptions (OR 1.40; 95% CI: 1.29-1.51; Heterogeneity I<sup>2</sup>: 79.4%) and with experiencing disruptions in two or more of the three domains examined (OR 1.22: 95% CI: 1.14-1.31; Heterogeneity I<sup>2</sup>: 75.8%), but not specifically with disruptions to economic activity (OR 1.03; 95% CI: 0.95-1.13; Heterogeneity I<sup>2</sup>: 89.5%) or housing (OR 1.00; 95% CI: 0.97-1.03; Heterogeneity I<sup>2</sup>: 0.0%). We did not find evidence of these associations differing by sex, ethnicity, education, or age group.

Conclusion Those suffering from psychological distress before the pandemic have been more likely to experience healthcare disruptions during the pandemic, and clusters of disruptions across multiple life domains. Individuals suffering from distress may need additional support to manage these disruptions, especially in relation to healthcare. Otherwise, considering psychological distress was already unequally distributed, the pandemic may exacerbate existing inequalities related to gender, ethnicity, education and age.

**OP66** 

### HOW THE DESIGN AND NATURE OF GAMBLING MARKETING AFFECTS CONSUMERS: FINDINGS FROM A CONTENT ANALYSIS OF ADVERTISING AND IN-DEPTH INTERVIEWS WITH SPORTS BETTORS AND YOUNG **PEOPLE DURING THE COVID-19 PANDEMIC IN THE** UNITED KINGDOM

<sup>1</sup>Nathan Critchlow\*, <sup>1</sup>Ashley Brown, <sup>2</sup>Craig Donnachie, <sup>1</sup>Kate Hunt, <sup>2</sup>Heather Wardle, <sup>1</sup>Kathryn Angus. <sup>1</sup>Institute for Social Marketing and Health, University of Stirling, Stirling, UK; <sup>2</sup>School of Social and Political Sciences, University of Glasgow, Glasgow, UK

10.1136/jech-2021-SSMabstracts.66

Background Gambling advertising often contains a multitude of information about inducements and incentives, in addition to details of the specific gambling product marketed and other promotional features. Research suggests that consumers are more likely to misjudge the likelihood of winning or benefiting as the complexity of the gambling product offered increases. As part of a larger study concerning the impact of COVID-19 on gambling behaviours and marketing, we explored how gambling products and inducements are marketed in the United Kingdom (UK) and how inducements are received, and perceived, by gamblers.

Methods Two data sources are synthesised from the 'Betting and Gaming COVID-19 Impact Study'. An in-depth content analysis was conducted on a stratified random sample of gambling adverts (n=200) from seven media activities in UK (March-May 2020). Coding captured information about the gamble promoted (e.g. suggested odds and wagers), inducements (e.g. new customer offers, free bets), and how Terms and Conditions (T&Cs) were communicated. In-depth telephone interviews were conducted (July-November 2020) with sports bettors (n=16) and young adults (n=11) in the UK to explore experiences and practices related to gambling. Data were analysed thematically using the framework method.

Results Gambling adverts routinely featured complex information about the gambling products promoted and associated inducements. The design of adverts appeared carefully curated so that promotional and branding aspects had greater prominence than practical information about how inducements operated and eligibility to participate and benefit, if such T&Cs appeared at all. In the interviews, participants perceived gambling advertising to be ubiquitous. While several participants underplayed the influence that gambling advertising and marketing had on their gambling activity, some explicitly said that the content had a negative impact on their gambling, including the adoption of novel and potentially 'riskier' gambling behaviours (e.g. online casino games). A few highlighted a lack of transparency in relation to T&Cs underpinning inducements offered by gambling operators, which, in turn, compounded adverse gambling experiences.

Conclusion The way that gambling products and inducements are marketed in the UK is complex and likely to challenge comprehension by consumers. Bettors routinely recall awareness of, and engagement with, a variety of gambling marketing activities, and highlight concerns about the reach and impact that marketing may have, particularly on vulnerable groups such as young people and problem gamblers.

# Friday 17 September

Tobacco, 13.00 - 15.30

#### OP67 WHEN MY WORKPLACE IS YOUR HOME: DOMICILIARY WORKERS' EXPOSURE TO SECOND-HAND TOBACCO SMOKE

<sup>1</sup>Ruaraidh Dobson\*, <sup>2</sup>Evangelia Demou, <sup>1</sup>Sean Semple, <sup>1</sup>Institute for Social Marketing and Health, University of Stirling, Stirling, UK; <sup>2</sup>MRC-CSO Social and Public Health Sciences Unit, University of Glasgow, Glasgow, UK

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Background Second-hand smoke (SHS) exposure at work is a cause of serious ill-health. Consequently, many countries have