shops, healthcare, and usual activities due to restrictions. Findings emphasize the issue of loneliness and isolation for some of the participants, especially those living alone, as well as fear of the virus, with restrictions leading to a loss of purpose for some, along with related effects on mental health (e.g. worry, anxiety). For some, these issues appeared to link to a reprioritisation of their behaviours (for example, exercise and diet were deprioritised). Coping strategies used by participants included finding ways to keep busy and to do physical activity safely, maintaining social contact online or by telephone, and having an optimistic or positive outlook, a 'do what you can' attitude.

Conclusion Analysis is ongoing and will further aim to explore how older people's experiences and behaviours might have changed over the duration of the pandemic. The findings from this study could improve understanding of how community-living older adults could be supported to be more resilient in the face of a variety of changing circumstances that might impact their health and well-being.

P53

EFFECTS OF COVID-19 PUBLIC HEALTH SAFETY MEASURES ON BIRTHS IN SCOTLAND BETWEEN MARCH AND MAY 2020

¹Louise Marryat*, ²Lydia Speyer, ³Bonnie Auyeung. ¹School of Health Sciences, University of Dundee, Dundee, UK; ²School of Psychology, University of Edinburgh, Edinburgh, UK

10.1136/jech-2021-SSMabstracts.141

Background To combat the wide-spread transmission of COVID-19, many countries, including the Scotland, have imposed nationwide lockdowns. This included changes to NHS maternity and ante/postnatal services and policies. Little is known about how these lockdown measures affect pregnant mothers and their offspring. This study aimed to explore the impact of COVID19 public health safety measures on birth outcomes in Scotland.

Methods Using routinely collected health data on pregnancy and birth in Scotland, this study compares all births (N = 11220) between March and May 2020 to births in the same period in 2018 (N = 12428) to investigate the potential effects of lockdown measures introduced in Scotland in spring 2020. A variety of maternal and infant outcomes were analysed: **induction of labour** (yes, no), **mode of delivery** (unassisted vaginal delivery, planned caesarean section, emergency caesarean section, other (e.g. use of forceps)), **analgesia during labour** (none, gas and air, opioids, epidural, spinal anaesthetic, general anaesthetics, other), **birth outcome** (live-birth, stillbirth, infant death), **APGAR score** (<3, 4-<7, >7), **age of gestation**, **birthweight**, **length of hospital stay**, and **feeding method on discharge** (breastfeeding, formula, mixed feeding, other). Data were analysed using Mann-Whitney U tests for continuous outcomes and chi-square tests of independence for nominal outcomes. If the chi-square test was significant ($\alpha < 0.05$), post-hoc tests (Fisher's exact tests) were conducted to examine all possible comparisons. These were corrected for multiple comparisons using Bonferroni adjustment.

Results Overall there were few statistically significant differences between births in 2018 and 2020: women in 2020 were more likely to require spinal anaesthetics compared to using no pain relief air ($P = .035$), gas and air ($P < .001$) or opioids ($P < .001$) as well as more likely to have an epidural

compared to using gas and air ($P < .001$) or opioids ($P < .001$). Mothers giving birth during the pandemic also tended to combine breastfeeding and formula-feeding on discharge ($\chi^2(3) = 19.09$, $p < .001$): post-hoc tests revealed that women were more likely to combine breastfeeding with formula-feeding than to exclusively breastfeed ($P < .001$) or exclusively formula-feed ($P < .001$). Finally, women stayed in hospital for fewer days ($Z = -10.90$, $p < .001$) and more often had an epidural or a spinal anaesthetic compared to women giving birth in 2018.

Conclusion In conclusion, findings of the current study suggest that lockdown measures implemented in Scotland as a response to the COVID-19 pandemic had limited effects on maternal and neonatal outcomes. While these findings are reassuring, future research is needed to gain better insights into the impact of COVID-19 and associated lockdown measures on maternal and child health.

P54

PHASE 2 OF THE NORWICH COVID-19 TESTING INITIATIVE: AN EVALUATION

¹Tara Berger Gillam*, ²Jeannette Chin, ³Karim Gharbi, ⁵Mark Hitchcock, ⁴Rose Davidson, ³Neil Shearer, ¹Nick Steel. ¹Health Services and Primary Care Research Group, University of East Anglia, Norwich, UK; ²School of Computing Sciences, University of East Anglia, Norwich, UK; ³Earlham Institute, Norwich, UK; ⁴Faculty of Medicine and Health Sciences, University of East Anglia, Norwich, UK; ⁵UEA Health and Social Care Partners, University of East Anglia, Norwich, UK

10.1136/jech-2021-SSMabstracts.142

Background Phase 2 of the Norwich Testing Initiative (NTI2) was a SARS-CoV-2 PCR testing programme at the University of East Anglia, which ran from September to December 2020. It aimed to identify asymptomatic COVID-19 infections and limit outbreaks on campus. The NTI2 evaluation explored testing uptake, positivity rates, isolation compliance and the links between viral load and symptoms.

Methods All staff and students (21,762) were eligible for testing. Users registered for the programme using a web application, which collected personal, demographic and location data. Users collected tests from a central location on campus, self-administered a nasopharyngeal swab and returned tests to a drop-off point. PCR testing was conducted by two laboratories. All those with a positive result were contacted by telephone for self-isolation advice and support. At this point symptom, isolation and location data were collected. The programme used a broader definition of COVID-19 symptoms than that used by NHS Test and Trace. Data were encrypted and stored in a data warehouse. Microsoft Excel was used to collate, clean and analyse the data.

Results 188 of 6537 (2.9%) users tested positive for COVID-19. The majority (82%) were students aged 18–24 years. Positivity rates were highest in students (3.5%), those living on campus (6.5%) and BAME groups (4%). There was clustering of cases in university halls: positivity rates in halls varied between 0% and 31%, with 18% of halls containing over half the cases on campus. Positivity rates spiked near the beginning of the programme and then declined over the course of the term. 99/187 (53%) cases reported symptoms of COVID-19. 37/99 (35%) symptomatic cases were not isolating. There was no significant relationship between PCR C_t values and self-reported symptoms.

Conclusion NTI2 may have contributed to a decline in cases of COVID-19 during the testing period, as the incidence of