with recruitment in two phases; contacting Directors of Public Health (DsPH) directly and snowballing through key contacts. Other professionals were interviewed where recommended by DsPH. Face-to-face or telephone interviews were digitally recorded and transcribed verbatim, and data analysed using the framework method.

**Results** Public health professionals (n=14) in ten LAs were interviewed, including DsPH (n=5) and consultants (n=5). Participants viewed evidence use as an important part of their roles, and had a high level of relevant skills. However, public health teams and individuals differed in the extent to which they used systematic reviews. Some consultants used systematic reviews extensively; for other participants, while they were highly valued in principle, their value and impact in practice was limited by various barriers and the nature of decision-making in LAs. Barriers included time constraints, a lack of relevant reviews, limited applicability to LA context and the role of evidence in a political organisation. Evidence, including systematic reviews, was sometimes used to directly inform decisions but also used tactically. Participants regularly engaged with research evidence outside the decision-making process, often through a personal commitment to maintaining knowledge.

**Conclusion** Systematic reviews are used in LA public health in various ways but use varies and is limited by a range of factors. Decision-making processes can be complex, with systematic reviews used in conjunction with other evidence types, and therefore research use should be seen within the political context. This qualitative study developed understanding of systematic review use but a limitation is that there may be professionals less committed to evidence use that were not included in the sample.

**OP93**

THE MENTAL HEALTH IMPACT OF UNIVERSAL CREDIT INTRODUCTION ON WORKING AGE UNEMPLOYED INDIVIDUALS ACROSS ENGLAND: DIFFERENCE-IN-DIFFERENCE ANALYSIS OF THE UNDERSTANDING SOCIETY HOUSEHOLD LONGITUDINAL STUDY

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**Background** An increase in mental health problems and a widening in inequalities has occurred in a period of austerity and welfare reform. Universal Credit (UC) was introduced for unemployed people first in the UK in 2013, to simplify the benefit system by bringing six legacy benefits together into one means tested benefit. Qualitative research suggested potential negative mental health impacts. We assessed this natural policy experiment, taking advantage of the variation in UC introduction across local authority areas to see whether the introduction of UC was associated with an increase in self-reported psychological distress.

**Methods** We conducted a difference-in-difference analysis using longitudinal data from the Understanding Society Household Panel Survey on 88,060 working age (16–64) adults who participated between 1991 and 2018. We linked UC data from the DWP by local authority, month and year to identify when UC was introduced in each area. The primary outcome was self-reported psychological distress using the continuous General Health Questionnaire-12 (GHQ-12) measure, with high scores indicating increased psychological distress. We compared the change in mental health of unemployed people after UC was introduced in their local authority area to individuals who were not unemployed, and not affected by UC. Analysis was conducted in STATA-14.2 and accounted for confounding variables such as year, age, sex, having dependents, and marital status.

**Results** 18% (n=15,847) had a spell of unemployment at some time between 1991 and 2018. 3058 of these were unemployed in an area where UC had been introduced. When UC was introduced in an area the mental health of the unemployed deteriorated, whilst we did not see a deterioration in the mental health of those not unemployed. The trends in mental health in these two groups prior to the introduction of UC were parallel. The difference-in-differences in total GHQ-12 scores showed that the introduction of UC on an area was associated with a rise in psychological distress amongst the unemployed (β=0.27, 95% CI 0.09, 0.45, p=.003) relative to those not unemployed.

**Conclusion** Our analysis shows that the introduction of UC has led to an increase in psychological distress amongst unemployed individuals. UC has the potential to positively transform the benefit system, however our analysis, alongside the growing body of evidence suggests that in its current form UC has a negative impact on peoples mental health, and actions to address this are needed to help tackle the UK mental health crisis.

**OP94**

HEALTH AND PRODUCTIVITY COSTS OF VIOLENCE AGAINST WOMEN AND GIRLS

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**Background** Violence against Women and Girls (VAWG) is widely recognized as a violation of human rights and a challenge to public health. In recognition of the dearth of knowledge of the impacts and costs due to VAWG, particularly in fragile and developing contexts, the UK Department for International Development (DFID) funded this research to investigate the social and economic costs of VAWG in Ghana, Pakistan and South Sudan (2014–2019), as part of its wider What Works to Prevent Violence research and innovation programme.

**Methods** This study used a mixed method approach including both quantitative surveys of individual women, households, and businesses, and qualitative inquiry methods including key informant interviews, participatory focus groups, and individual in-depth interviews. The direct health-related effects on women are measured by the out of pocket health expenditure incurred by women experiencing violence. The indirect mental health-related effects are quantified by productivity loss which is estimated as women missing work, being late at work or being not being mentally present at work. The study also estimates various health-related scores: Depression, Disability and Acute Illness scores, and compares women who experience violence and who do not.
DISPARITIES IN BREAST CANCER SCREENING UPTAKE ORAL HEALTH, DISABILITY AND PHYSICAL FUNCTION:
reduced uptake was observed for individuals in receipt of all
VAWG. Investment by government and donors in the prevention of
lined in this study together build a strong economic case for
the countries studied. The health and economic impacts out-
potential burden that VAWG places on the health sector in
the overall economy.

Conclusion The results of this study on the socioeconomic
cost of VAWG highlight the need for crucial action by a wide
range of actors, from local authorities and community leaders
to national government. Moreover, the results suggest the
potential burden that VAWG places on the health sector in
this study together build a strong economic case for
investment by government and donors in the prevention of
VAWG.

Results In all the three countries, this study finds health
expenditure to be the predominant out of pocket cost
incurred by women experiencing violence. Women who expe-
rience violence also have statistically significant higher depres-
sion, disability and acute illness scores, and thus indicate the
broader health impacts of VAWG. These health impacts affect
the overall productivity of women experiencing violence.
Approximately 80 million productivity work days in Pakistan,
6.5 million productivity work days in Ghana, and 8.5 million
productivity work days in scaled population of South Sudan
are lost due to women experiencing any violence. The pro-
ductivity loss indicates the significant impact VAWG has on
the overall economy.

Conclusion The results of this study on the socioeconomic
cost of VAWG highlight the need for crucial action by a wide
range of actors, from local authorities and community leaders
to national government. Moreover, the results suggest the
potential burden that VAWG places on the health sector in
the countries studied. The health and economic impacts out-
lined in this study together build a strong economic case for
investment by government and donors in the prevention of
VAWG.

Methods
Breast screening records were obtained from the
National Breast Screening System (NBSS) and were subse-
sequently linked to 2011 Census data within the Northern Ire-
land Longitudinal Study (NILS). This resulted in a cohort of
57,328 women who were followed through one complete
three-year screening cycle of the National Health Service
(NHS) breast screening programme. Psychotropic medication
receipt was derived from a centralised prescribing database
and classified according to prescriptions in the three months
preceding screening invite. Other individual and household-
level cohort attributes known to be associated with breast
screening uptake were derived from Census records. Logistic
regression was employed to calculate age-only and fully-
adjusted odds ratios (ORs) and 95% confidence intervals of
attendance at breast screening.

Results
Over a third of women received at least one prescrip-
tion for psychotropic medication in the three months prior to
screening invite and these women were 15% less likely to
attend screening (OR 0.85: 0.81–0.88). Although significantly
reduced uptake was observed for individuals in receipt of all
types of psychotropic medication, attendance was particularly
low for women prescribed antipsychotics (OR 0.63: 0.56–
0.70), anxiolytics (OR 0.61: 0.57–0.66), or hypnotics (OR 0.68:
0.63–0.72). Additionally, there was evidence that this
association was further influenced by severity of mental illness
(as assessed by duration of medication usage).

Conclusion This study advances our current understanding of
the factors contributing to suboptimal breast screening uptake
rates, confirming the existence of disparities in breast screen-
ing uptake for individuals with poor mental health in the
United Kingdom (U.K), and for the first time, demonstrating
that the observed disparities vary according to the type and
severity of mental disorder examined. The extension of this
association to common mental disorders is of particular con-
cern given the high prevalence of these disorders worldwide.

OP111 ORAL HEALTH, DISABILITY AND PHYSICAL FUNCTION:
RESULTS FROM STUDIES OF OLDER PEOPLE IN THE UK
AND USA

Background Disability and poor physical function have major
impacts on the health and well-being of ageing populations.
Poor oral health (tooth loss, periodontal (gum) disease, dry-
ess of mouth) are also very common health problems in
older populations, and adversely impact nutrition and quality
of life. Studies suggest that poor oral health in older age is
associated with disability, however most studies have limited
oral health measures. We investigated the association of a
range of objectively and subjectively assessed oral health
markers with disability and physical function in two popula-
tion-based studies of older people in the UK and USA.

Methods Cross-sectional analyses were conducted in the British
Regional Heart Study (BRHS) comprising men aged 71–92
(n=2147) from 24 British towns, and the US Health, Aging
and Body Composition (HABC) Study comprising men and
women aged 71–80 (n=3075). Assessments included objective
measures of oral health (periodontal disease, tooth count), and
subjective measures (dry mouth, self-reported oral health, den-
tal service use), and disability [mobility limitations, Activities
of Daily Living (ADL) and Instrumental Activities of Daily
Living (IADL)], and physical function (grip strength, gait
speed, chair stand test). Logistic regression models, adjusted
for confounding variables, were used to examine the associa-
tions between oral health and disability and physical function.

Results
In the BRHS, dry mouth, tooth loss, and cumulative
oral health problems (≥3 problems) were associated with
greater risks of mobility limitations, problems with ADL and
IADL; these remained significant after adjustment for con-
firming variables (OR=2.68, 95% CI=1.94–3.69; OR=1.76,
95% CI=1.15–2.69; OR=2.90, 95% CI: 2.01, 4.18, respectively).
Similar results were observed in the HABC Study for mobility
limitations and ADL (for ≥3 oral health problems, OR=2.19, 95%