## Abstracts

Symptoms of depression, socioeconomic position and physical disability were adjusted for.
Results No associations were found between marital status or number of household occupants and DASH scores. Being fully retired compared to still being in main occupation was associated with a 0.73 ( $95 \%$ CI: 0.16 to 1.30 ) increase in DASH points when adjusting for sex, socioeconomic position, symptoms of depressions and physical disability. When stratifying for sex, an increase in DASH points of 0.84 ( $95 \%$ CI: 0.041 to 1.63 ) was seen in females but not males fully retired.
Conclusion Results so far from this study suggest that being retired at $60-64$ years, compared to still being in main employment, may be associated with improved diet quality, especially in females.

Next analyses will consider other social health exposures, including functional aspects of social relationships, and other indices of dietary intake.

## P19 THE MODIFYING EFFECTS OF OBESITY ON THE ASSOCIATION BETWEEN AIR POLLUTION AND STROKE; A SYSTEMATIC REVIEW

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### 10.1136/jech-2020-SSMabstracts. 115

Background The impact of ambient air pollution on stroke is well-documented. However, the modifying effect of obesity on the association is unclear. Recent research has proposed that obese individuals are more susceptible to the effects of air pollution. The objective is to systematically screen, appraise and synthesise the evidence examining modifying effects of obesity status on the association between air pollution and stroke.
Methods Databases searched include Scopus, PubMed and Web of Science. All empirical studies published in English between January 1st 1990 - March 30th 2019 were included for review. Data items were extracted using a standardised data extraction table. A narrative synthesis of the study results was completed. Included studies were quality assessed using the Joanna Briggs Institute and modified case-crossover appraisal tools. All evidence sourced were graded according to the Scottish Intercollegiate Guidelines Network (SIGN) level of evidence criteria.
Results Of 668 titles were identified, 218 had their full-text reviewed and seven met eligibility criteria. Five cohort studies (including a nest case-crossover), one cross-sectional study and one ecological study were included in the review. Findings across studies were limited. In summary, three studies found some evidence consistent with obesity worsening the association between air pollution and stroke. Inconsistencies in exposure used and measurement, outcome assessment, and data linkage methodology existed across studies. While the overall level of evidence assigned by the SIGN criteria was good, and the review included mainly high quality cohort studies with a low risk of confounding or bias, misclassification of exposure may be present.
Conclusion Some evidence exists to suggest modifying effects of obesity on the association between air pollution and stroke. However, evidence is very weak and hampered by different
study designs and outcome assessments. Thus, further research using large, nationally representative studies with stringent outcomes and exposure measurement methods in addition to fixed linking methodology between air-pollution and health data are needed while continuing the appropriate adjustment for confounding factors.

## P20 A SYSTEMATIC REVIEW OF THE BURDEN OF hYPERTENSION, ACCESS TO SERVICES AND PATIENT VIEWS OF HYPERTENSION IN HUMANITARIAN CRISIS SETTINGS

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10.1136/jech-2020-SSMabstracts. 116

Background Globally, the number of people affected by humanitarian crises, relating to both conflicts and natural disasters, remains at record levels. Many crisis affected populations live in settings where the epidemiological transition is underway. Even now, ischaemic heart disease and stroke combined contribute a similar proportion of deaths as conflict and terrorism in Syria, $33.83 \%$ and $36.13 \%$ respectively. Following the UN high level meeting on NCDs and the global commitment to Universal Health Coverage (UHC), there is increasing effort being invested in developing guidelines and processes for the management of NCDs, especially hypertension in humanitarian settings.

The objective of this study was to contribute to the discussion by answering the following points:

1. Prevalence and incidence of hypertension in populations directly affected by conflict or natural disasters.
2. Proportion diagnosed with hypertension who are aware of the diagnosis, are receiving treatment, and have achieved control.
3. Proportion with hypertension who sought treatment but did not receive it.
4. Patient knowledge of and attitude to hypertension.

Methods A literature search was carried out in five databases, looking for peer reviewed publications published since 1999. Grey literature was also searched using Google and non-governmental organisations' web pages. The population of interest was non-pregnant, non-military adults who were directly exposed to a crisis since 1999. All study types were included. Eligibility assessment, data extraction and quality appraisal were carried out in duplicate.
Results After deduplication, 11703 abstracts were screened resulting in 402 papers for full-text review. Sixty-three studies were included in the narrative synthesis. The studies reported on a wide range of crises including the wars in Syria and Iraq, the Great East Japan Earthquake, Hurricane Katrina and Palestinian refugees in the Middle East. There were few studies from Africa or central Asia. The studies predominantly assessed prevalence of hypertension and this varied with geography and age of the population. Access to care, patient understanding and patient views on hypertension were poorly examined. Most of the studies had a high risk of bias due to methods used in the diagnosis of hypertension and in the selection of representative populations.

