synthesis. 18 papers were deemed to be 'high' quality, five 'medium', the rest 'low'. Meaningful statistical associations were observed between the exposure (childhood SEP) and the outcome (ACEs/maltreatment) in the vast majority of studies, including all bar one of those deemed to be high quality. Low SEP is therefore clearly a determinant of ACEs/maltreatment: the longitudinal nature of many studies means the association is most likely causal.

Conclusion The relationship between childhood SEP and ACEs is clear, but under-researched. More evidence exists in the maltreatment literature. With UK child poverty levels predicted to increase markedly, any policy approach which ignores the socio-economic context to ACEs is flawed. Policy needs to help those currently affected by childhood adversity; but to prevent further adversity, it must also address the key socio-economic drivers.

OP63 TRAJECTORIES OF SOCIO-ECONOMIC POSITION FROM BIRTH TO ADULT AGE AND SUBSEQUENT MORTALITY: THE UPPSALA BIRTH COHORT MULTIGENERATIONAL STUDY

^{1,2}I Koupil*, ¹A Heshmati, ^{1,3}A Goodman, ⁴G Mishra. ¹Dept. Public Health Sciences, Stockholm University, Stockholm, Sweden; ²Dept. Public Health Sciences, Karolinska Institutet, Stockholm, Sweden; ³Faculty of Epidemiology and Population Health, London School of Hygiene and Tropical Medicine, London, UK; ⁴School of Public Health, University of Queensland, Brisbane, Australia

10.1136/jech-2019-SSMabstracts.42

Background Several theoretical life course models (critical period, sensitive period, accumulation) have been proposed, all of which may be relevant for understanding of when and how socioeconomic inequalities in health arise. Our aim was to investigate whether the effect of socio-economic position on all-cause mortality accumulates over the life course or if some periods of the life course are more important than others.

Methods We followed 3,951 men and 3,601 women born in Uppsala, Sweden, in 1915–1929 with known SEP at birth (age 0), during childhood (10 years), in adulthood (30-45 years) and in later life (50-65 years) from September 1980 until emigration, death, or until December 2010. Data on parents', partner's and own occupational status (a measure of SEP), marital status, deaths and emigrations were abstracted from birth records, parish records, school records, Census 1930 and routine registers. From the eligible sample who were alive and living in Sweden in September 1980 (n=11,336), 67% (n=7552) had SEP recorded at all four-time points. We compared a set of nested Cox proportional regression models, each corresponding to a specific life course model (critical, sensitive and accumulation models), to a fully saturated model, to ascertain which model best describes the relationship between SEP and mortality. An alternative analysis employed latent class trajectories of SEP across same four time points. Analyses were stratified by gender.

Results The effect of SEP across the life course on all-cause mortality was best described by the sensitive period model in both genders with social advantage in later life (ages 50–65 years) having the largest protective effect (HR 0.80, 95%CI 0.73–0.87 in men and HR 0.82, 95%CI 0.75–0.91 in women). A linear accumulation model also provided a good fit of the data for women. Only 5% and 12% of individuals experienced downward and upward social mobility during

childhood respectively. The sensitive period model indicated that being advantaged at age 10 appeared to be more protective than at birth for males, while there was no difference between SEP at birth and age 10 in their effect on all-cause mortality among women. Additional adjustments for marital status did not affect the results appreciably and main results were also consistent with analyses that employed latent class trajectories of SEP.

Conclusion Our results lead to a conclusion that an individual's socio-economic position over the life course, including during early childhood does affect their risk of all-cause mortality in later life. These findings indicate that improvements in social conditions at any stage of the life course can contribute to reducing mortality at old age.

OP41 THE HEALTH OF PEOPLE EXPERIENCING MULTIPLE FORMS OF SOCIAL EXCLUSION: A SYSTEMATIC REVIEW

¹EJ Tweed*, ²C Sumpter, ¹R Thomson, ³D Lewer, ⁴P Southworth, ⁵A Kirolos, ⁶A Story, ⁷A Hayward, ⁸S Hwang, ⁹R Aldridge, ¹SV Katikireddi. ¹*MRC/CSO Social and Public Health Sciences Unit, University of Glasgow, Glasgow, UK;* ²Department of Public Health, NHS Forth Valley, Stirling, UK; ³Collaborative Centre for Inclusion Health, University College London, London, UK; ⁴NHS Dumfries and Galloway, UK; ⁵Usher Institute, University of Glasgow, Glasgow UK; ⁶University College London Collaborative Centre for Inclusion Health and UCLH Find and Treat Service London, UK; ⁷Institute of Epidemiology and Health Care, University College London, London, UK; ⁸Centre for Urban Health Solutions, St. Michael's Hospital and Department of Medicine, University of Toronto, Toronto, Canada; ⁹Institute of Health Informatics, University College London, London, UK

10.1136/jech-2019-SSMabstracts.43

Background People with a history of homelessness, imprisonment, substance use, sex work, or serious mental illness experience much higher rates of ill-health and premature death than the general population. There is substantial overlap in these experiences in the population, and they may interact in important ways to influence health. However, the health outcomes associated with these experiences in combination have not previously been reviewed.

We therefore aimed to synthesise existing evidence on allcause mortality; cause-specific mortality; morbidity from conditions appearing in ICD-10; self-rated health; and quality of life among people with lifetime exposure to more than one of the following: homelessness; imprisonment; substance use; sex work; or serious mental illness.

Methods We searched Medline, Embase, and Psycinfo using search terms for the above exposures and outcomes, in consultation with a medical librarian. Eligible studies comprised peer-reviewed English-language articles from high-income countries published since 1998 reporting at least one relevant outcome for people with lifetime exposure to two or more exposures of interest, in comparison to people with one or no exposures. Screening was undertaken independently by two authors using Covidence, with risk of bias assessed using a modified Newcastle-Ottawa Scale. Findings were summarised using a pre-specified narrative synthesis plan. The protocol was registered with PROSPERO (CRD42018097189).

Results Searches retrieved 15,948 unique citations. After full text screening of 1,583 studies, initial results from 293 studies for which data extraction has been completed are presented here. Of these, 73% were cross-sectional studies. The most common exposure combinations were imprisonment & substance use (33%) and serious mental illness & substance use (26%); only 11 data points (1%) reported outcomes associated