

## OP54 ABSTRACT WITHDRAWN

## OP55 HEALTH, HAPPINESS AND WELLBEING IN THE TRANSITION FROM ADOLESCENCE TO ADULTHOOD: APPLYING AN "EQUITY LENS" TO AN OVERVIEW OF SYSTEMATIC REVIEWS OF POPULATION LEVEL INTERVENTIONS

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**Background** Adolescence is a key period for health and development. There is evidence for interventions to promote health in adolescence, yet health inequalities persist into adulthood. Whilst there is robust data describing socioeconomic inequalities in adult health, there is comparatively less on adolescent health, and we have little insight on what works to tackle inequities in adolescence. We aimed to apply an "equity lens" to systematic review evidence on population interventions for adolescent health. Specifically, we aimed to synthesise systematic review evidence on the equity impact of population interventions designed to improve health, happiness and wellbeing in children and young adults aged 10–24 years.

**Methods** A rapid systematic review of reviews (an overview) was conducted. We systematically searched the Cochrane Database of Systematic Reviews; Health technology assessments (HTA); Campbell Collaboration; EPPI; Joanna Briggs Library; and Database of Reviews of Effects (DARE), MEDLINE, EMBASE, CINAHL, PsycINFO and PubMed for systematic reviews published in English between 01 January 2005 and 07 March 2016. Two reviewers independently applied pre-specified selection criteria. Methodological quality was independently assessed using the ROBIS tool. Disagreements were resolved through discussion. Key data relating to the review focus, including information on the review aim, participants, interventions, comparisons and outcomes were extracted. Data on whether reviews reported the socioeconomic characteristics of primary studies, differential effects, or the delivery of population interventions with disadvantaged groups were also collated. Data were synthesised within evidence tables, categorised according to themes and subthemes.

**Results** We identified 35 310 reviews, screened 1953 abstracts and retrieved 566 full text articles. 150 reviews, assessed as either low risk of bias or unclear risk of bias were included in the final synthesis. Evidence was mapped across 9 topic areas; mental health and wellbeing; tobacco free living; preventing drug abuse and excessive drinking; sexual and reproductive health; violence and abuse free living; active living; healthy eating; obesity and general health. The majority of reviews did not describe the socioeconomic characteristics of primary studies, and examination of the differential impact of population interventions varied widely across topic areas.

**Conclusion** Systematic review evidence on the equity impact of population interventions for adolescents is limited. To the

best of our knowledge, this is the first overview to synthesise review evidence with a focus on transition from adolescence to adulthood. This work provides important insights on how we can advance a focus on equity and considers the implications for addressing inequalities in adolescent health.

## OP56 EFFECTS OF NATIONAL HOUSING QUALITY STANDARDS ON HOSPITAL EMERGENCY ADMISSIONS: A QUASI-EXPERIMENT USING DATA LINKAGE

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**Background** National housing quality standards are being applied throughout the UK. A housing improvement programme was delivered through a local authority to bring nearly 9000 homes up to the Welsh Housing Quality Standard (WHQS). Homes received multiple elements, including new kitchens, bathrooms, windows and doors, insulation, and heating and electrical systems, through an eight-year rolling work programme. The study aimed to determine the impacts of the different housing improvements on hospital emergency admissions for all residents.

**Methods** Intervention homes, council homes that received at least one element of work, were data linked to individual health records of residents. Counts of admissions relating to respiratory and cardiovascular conditions, and falls and burns, were obtained retrospectively for each individual in a dynamic housing cohort (January 2005–March 2015). The intervention cohort criterion was for someone to have lived in any one of the intervention homes for at least three months within the intervention period. Counts were captured for up to 123 consecutive months for 32 009 individuals in the intervention cohort and analysed using a multilevel approach to account for repeated observations for individuals, nested within geographic areas. Negative Binomial regression models were constructed to determine the effect for each element of work on emergency admissions for those people living in homes in receipt of the intervention element, compared to those living in homes that did not meet quality standards at that time. We adjusted for background trends in the regional general population, as well as for other confounding factors.

**Results** People of all ages had 34% fewer admissions for cardiovascular and respiratory conditions, and fall and burn injuries while living in homes when the electrical systems were upgraded, compared to the reference group (IRR=0.66, 95% CI 0.58–0.76). Reduced admissions were also found for new windows and doors (IRR=0.78, 0.70–0.87), wall insulation (IRR=0.80, 0.73–0.87) and garden paths (IRR=0.81, 0.73–0.90). There were no associations of change in emergency admissions with upgrading heating (IRR=0.92, 0.85–1.01), loft insulation, (IRR=1.02, 0.93–1.13), kitchens (IRR=1.01, 0.87–1.18), or bathrooms (IRR=0.99, 0.87–1.13).

**Conclusion** Improving housing to national standards reduces the number of emergency admissions to hospital for residents. Strengths of the data linkage approach included the