(0.04,1.98) than men whose fathers were in the highest occupational classes. After adjustment for occupational activity most associations in men were fully attenuated although an association between own lower educational levels and stronger grip remained.

**Conclusion** For women, lower SEP was associated with weaker grip strength suggesting that strategies to reduce women's exposure to socioeconomic adversity across life are likely to be beneficial for their peak grip strength. For men, lower SEP appears to be associated with stronger grip strength at age 46 years related to higher levels of occupational activity. As there is evidence from other studies that the association between SEP and grip strength reverses in later life this suggests strategies may be needed to help men of lower SEP maintain this midlife advantage as they age and retire.

# Friday 17 September

Mental Health, 09.00 - 11.30

## OP55 SOCIAL DETERMINANTS OF ANTENATAL DEPRESSION AND ANXIETY AMONG WOMEN IN SOUTH ASIA: A SYSTEMATIC REVIEW & META-ANALYSIS\*

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Background Pregnancy is a time of major psychological changes making pregnant women more susceptible to depression and anxiety. Prevalence is higher among women living in Bangladesh, India and Pakistan, compared to high-income countries, due to poor understanding and lack of mental health integration within antenatal care. Antenatal depression/ anxiety is associated with adverse outcomes including postnatal depression, low birth weight and impaired fetal development. Existing systematic reviews provided only limited information, including a lack of meta-analysis, on the social determinants of antenatal depression or anxiety in these South Asian countries. This review aimed to identify, synthesise and appraise the evidence on the social determinants associated with antenatal depression and anxiety in women living in Bangladesh, India and Pakistan.

Methods We searched five databases (MEDLINE, Embase, PsycINFO, Scopus, Web of Science) and PROSPERO using keywords and MeSH headings. Two investigators screened all search results independently. Supplementary searches included hand searching reference lists and citation searches using Google Scholar. Observational studies published between 1st January 2000 and 4th January 2021 were included if they were in the English language, used validated tools for measuring depression/anxiety in pregnant women and reported statistical associations or raw numbers. Quality of included studies were assessed using the Newcastle-Ottawa scale. Summary estimates were obtained using random-effects model. Heterogeneity and publication bias was measured using the I<sup>2</sup> statistic and Egger's test, respectively. The review was registered on PROS-PERO (reference: CRD42020167903).

**Results** The searches identified 3,372 studies; following deduplication, 1,987 studies remained for screening. Following screening and supplementary searches, a total of 34

studies were included in this review (with 27,379 women). Meta-analysis of Adjusted Odds Ratios (AOR) found that Intimate partner violence (AOR 2.48, 95% CI 1.41–4.33), unplanned pregnancy (AOR 1.53, 95% CI 1.28–1.83), male gender preference (AOR 3.06, 95% CI 1.40–6.72) and poor relationship with in-laws (AOR 2.69, 95% CI 1.25–5.80) were significantly associated with antenatal depression.

**Conclusion** Screening tools to identify pregnant women at high risk of antenatal depression should be integrated within antenatal care to prevent adverse outcomes. Knowledge of social determinants will inform the development of such screening tools and interventions. One limitation of this review is the language restriction; however, international journals largely publish in English. Future research involving qualitative studies to understand the mechanisms within the associations are needed.

#### OP56 PERINATAL DEPRESSION IN MIGRANT AND REFUGEE WOMEN ON THE THAI-MYANMAR BORDER: DOES SOCIAL SUPPORT MATTER?

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10.1136/jech-2021-SSMabstracts.56

**Background** Migrant and refugee women are at risk of perinatal depression due to multiple stressors experienced before, during and after the migration trajectory. In low-income settings, continued hardships following resettlement and limited access to mental health services may pose additional challenges. Social support has consistently been identified as protective against perinatal depression. This study assesses the associations between three different forms of social support received, perceived and partner support - and perinatal depression among migrant and refugee women living on the Thai-Myanmar border.

Methods We conducted a cohort study on the Thai-Myanmar border of women recruited in their first trimester of pregnancy. Depression status was assessed using a clinical interview in the first, second and third trimesters and at one month post-partum. Received support, perceived support and partner support were measured in the third trimester. Associations between social support and perinatal depression were assessed using logistic regression with separate models for migrants and refugees. A series of multivariable regression models were built using stepwise estimation with demographic, socio-economic, migration, obstetric and psychosocial variables sequentially added to the model.

**Results** Of 568 women participating in the study, 451 (233 migrants; 218 refugees) had complete data for social support measures and were included in the current analysis. The prevalence of perinatal depression was 38.6% in migrants and 47.3% in refugees. Migrants reported higher levels of received, perceived and partner support than refugees. In the final model, after controlling for all other variables, higher

levels of received support remained significantly associated with a lower likelihood of perinatal depression in migrants (adjusted odds ratio 0.82; 95% CI 0.68–0.99). In the final model for refugees, all three social support measures were dropped from the model. Among both migrants and refugees, a previous history of depression and experiences of trauma were strongly associated with perinatal depression after controlling for all other variables.

**Conclusion** Our findings highlight the importance of received social support to perinatal depression in migrant women on the Thailand-Myanmar border. Experience of trauma and prior depression also strongly predicted perinatal depression. The perinatal period offers a valuable window of opportunity to ask women about their mental health. Our results suggest women should also be asked about support networks available, trauma and past episodes of depression. Future research should focus on testing community-level and public policy interventions to nurture support networks for migrant and refugee women in their resettlement destinations.

## OP57 VALIDATED SCREENING TOOLS FOR COMMON MENTAL DISORDERS IN PERINATAL WOMEN IN INDIA: A SYSTEMATIC REVIEW AND META-ANALYSIS

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10.1136/jech-2021-SSMabstracts.57

Background Common mental disorders (CMD) in the perinatal period are associated with significant adverse outcomes for women and their families. Prevalence of perinatal CMD is significant in low- and middle-income countries such as India, where women living in socio-economic deprivation, those experiencing intimate partner violence and those with low societal status are at high risk of perinatal mental disorders. Early detection and treatment of perinatal CMD can minimise adverse effects and improve outcomes. However, tools must be validated against a gold-standard locally to assess their psychometric validity and ensure they are culturally appropriate. We aimed to systematically review and synthesise the current evidence on screening tools for perinatal CMD that have been validated in India.

Methods We searched MEDLINE, Embase, PsycINFO, Global Health, Cochrane Library, Web of Science and Google Scholar without language or date restrictions using search terms for CMD, perinatal status, screening and India. Studies assessing the validity of a screening tool for CMD against a gold standard in women who were pregnant or up to 12 months postpartum in India was included. Two reviewers independently screened titles, abstracts and full-texts and extracted data. Study quality was assessed using the QUADAS-2 tool. We used bivariate and hierarchical summary receiver operating characteristic models to calculate pooled summary estimates of sensitivity and specificity.

**Results** We identified 8306 records of which 2838 were duplicates, 5390 were excluded by title and abstract and 76 were excluded by full-text. Five additional records were identified through grey literature searches. Seven studies were included in the review of which six (1003 participants) were included in meta-analysis. All included studies assessed the validity of the Edinburgh Postnatal Depression Scale (EPDS) in identifying perinatal depression. No studies tested the validity of screening tools for perinatal anxiety. At a threshold of  $\geq$ 13 the EPDS had a pooled sensitivity of 88.9% (95% CI 77.4–94.9) and pooled specificity of 93.4 (95% CI 81.5–97.8). Two studies had a low risk of bias across all domains; all others had unclear or high risk of bias across at least one domain.

**Conclusion** The EPDS appears to be psychometrically valid for identifying perinatal depression in India. There is a scarcity of evidence around the validity of other screening tools for perinatal CMD in India, with no studies of screening tools for perinatal anxiety identified. Evidence reviews should include rigorous searches of the grey literature to avoid missing studies published in non-indexed journals. Further research is required to inform decisions around screening tools for the identification of women with perinatal CMD in India.

# OP58 PREVALENCE OF PERINATAL ANXIETY IN LOW- AND MIDDLE-INCOME COUNTRIES: A SYSTEMATIC REVIEW AND META-ANALYSIS

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10.1136/jech-2021-SSMabstracts.58

**Background** Perinatal anxiety is associated with adverse outcomes for women and their infants. Women in low- and middle-income countries (LMIC) may be at higher risk of perinatal anxiety disorders.

Aims We aim to systematically review the evidence on prevalence of perinatal anxiety and calculate pooled prevalence estimates of antenatal and postnatal anxiety among women living in LMIC.

Method We searched MEDLINE, Embase, PscyhINFO, Global Health and Web of Science to identify studies assessing prevalence of perinatal anxiety in LMIC. Studies published since January 2016 were included. Screening and data extraction was conducted independently by two reviewers. Pooled prevalence estimates were calculated using random-effect meta-analyses and sources of heterogeneity explored through subgroup analyses and meta-regression.

**Results** We screened 9494 titles and abstracts and reviewed 710 full-texts. We included 56 publications (54 studies) in the systematic review and 54 in meta-analysis. The pooled prevalence of self-reported anxiety symptoms was 29.2% (95% CI 24.5–34.2; I2 98.7%; 36 studies; n=28,755) antenatally and 24.4% (95% CI 16.2–33.7; I2 98.5%; 15 studies; n=6370) postnatally. The prevalence of clinically-diagnosed anxiety disorder was 8.1% (95% CI 4.4–12.8; I2 88.1% 5 studies; n=1659) antenatally and 16.0% (95% CI 13.5–18.9; n=113) postnatally.

**Conclusion** Perinatal anxiety represents a significant burden in LMIC, with one in four women experiencing symptoms during pregnancy or postpartum. Research remains lacking in a significant proportion of LMIC, particularly in the lowest income countries. Further research should guide application of screening tools in clinical settings to identify women with anxiety disorders in order to provide appropriate treatment.