Health inequalities are highest among White Scottish, similar for British and Irish, and significantly lower for Asians and Other Whites. This suggests that cultural and/or behavioural factors may reduce the effect of material deprivation on health.

## OP18 — ETHNIC VARIATIONS IN INFANT MORTALITY IN ENGLAND AND WALES 2006–2012: A NATIONAL COHORT STUDY USING ROUTINELY COLLECTED DATA

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**Background** Marked ethnic variations in infant mortality have been documented in England and Wales. The reasons why certain ethnic groups have higher rates remain generally unknown. We aimed to evaluate ethnic variations in infant mortality, adjusting for deprivation and mother's migration status and to explore the contribution of preterm birth to these variations.

**Methods** Routinely collected birth and death registration data on all singleton live births (gestational age $\geq 22$ w) in England and Wales, 2006–2012 were linked to other routine data on infant's ethnicity and gestational age. We analysed infant mortality by ethnic group using logistic regression in STATA to adjust for maternal sociodemographic characteristics (age, area deprivation, migration status and marital status/registration type) and gestational age.

**Results** In the 4,634,932 births analysed, crude infant mortality rates were highest in Pakistani, Black Caribbean, Black African, and Bangladeshi infants (6.92, 6.00, 5.17 and 4.40 per 1000 live births, respectively vs. 2.87 in White British infants). Adjustment for maternal sociodemographic characteristics changed the results little. Further adjustment for gestation significantly attenuated the risk in Black African (OR 1.17, 95% CI 1.06–1.29) and Caribbean (OR 1.02, 95% CI 0.89–1.17) but not in Pakistani (OR 2.32, 95% CI 2.15–2.50), Bangladeshi (OR 1.47, 95% CI 1.28–1.69), and Indian infants (OR 1.24, 95% CI 1.11–1.38).

The association between ethnicity and infant mortality differed significantly between term and preterm infants (p<0.001 for interaction). In term infants, all three South Asian groups had a higher risk not explained by maternal characteristics or gestation. In preterm infants, adjustment for gestational age (<28, 28–31, 32–33, 34–36 weeks) fully explained the higher risks in Black African and Caribbean infants, but not in Pakistani and Bangladeshi infants. A sensitivity analysis excluding deaths due to congenital anomalies did not fully explain the excess risk in Pakistani infants.

**Conclusion** South Asian and Black infants have higher infant mortality compared with White British infants which is not explained by deprivation, migration status or other maternal characteristics. A higher proportion of infants born at younger gestational age appears to explain the increased risks in preterm Black African and Caribbean infants but not in the South Asian groups.

This large national study provides insight into ethnic inequalities in early life to inform policy, practice, and future research. Findings suggest that strategies targeting the prevention and management of preterm birth in Black African and Caribbean mothers and babies would help to reduce ethnic inequalities in infant mortality. Different strategies may be required in South Asian groups.

## OP19 — ROMA POPULATIONS AND HEALTH INEQUALITIES: A SYSTEMATIC SCOPING REVIEW OF MULTIPLE INTERSECTING DETERMINANTS

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**Background** There is growing evidence that Roma populations in Europe experience significantly poorer health–including higher rates of communicable and non-communicable diseases, poorer self-rated, child and maternal health–and shorter life expectancy than majority populations. Health outcomes are often worse than for others in similar social positions, suggesting the differences are not simply the effect of poverty. Roma women are thought to be worst affected. However, data pertaining to the multiple social inequalities affecting Roma populations, their interaction and cumulative effect on health over time, have yet to be explored. The aim of this paper is to critically review the state and shape of the research evidence on the multiple intersecting determinants of health for Roma populations in Europe.

**Methods** Studies were identified by searching four bibliographic databases (MEDLINE, Science Citation Index, Social Sciences Citation Index and Scopus), screening reference lists, consulting key informants and searching organisational websites. Any empirical studies (quantitative and qualitative) that explored more than one influencing factor in the pathway to poor relative health for Roma populations residing in the 53 countries of the WHO European region were included. Two reviewers carried out screening, data extraction and quality appraisal; disagreements were discussed by the wider team. This was followed by a narrative synthesis to explore the interactive effects of multiple axes of inequality.

**Results** From 2043 bibliographic records, 37 studies met our inclusion criteria. The median number of influencing factors explored through qualitative and quantitative methodologies was 2 (range 1–5) and 3 (range 1–11) respectively. Quantitative studies focus most strongly on factors that are well-defined and relatively easily turned into health indicators using available datasets, namely: poverty (10 studies) and other indicators of socio-economic status including education (13 studies), housing (9 studies) and employment (9 studies). Very few studies unpick interactive effects; instead testing each factor's contribution to poor health independently. On the other hand, qualitative studies tended to explore "Roma culture" (11 studies) and the impact of discrimination/racism on health behaviour (10 studies). There is a lack of gender-disaggregated data and little analysis of the impact of social policy on the health of Roma populations.

**Conclusion** Evidence for associations between determinants and health outcomes among European Roma populations is patchy. Research needs to pay more attention to the health impact of social policies that have the potential to reinforce (as well as mitigate) the exclusion of Roma populations and the disadvantages experienced by women.