

A retrospective analysis of variations in antenatal care initiation in an ethnically diverse maternal population in the UK with high levels of area deprivation

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European Journal of Public Health 28 suppl\_1

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Background: Research has indicated differential utilisation of antenatal care among ethnic minority mothers in the UK. However, links between ethnicity, area deprivation and the timing of antenatal care initiation remain poorly understood. This study investigates variations in antenatal care initiation among mothers residing in an ethnically diverse area in the UK with high levels of area deprivation.

Methods: Data were derived from an on-going retrospective cohort study using routinely collected anonymous data of live singleton births over a 9 year period from 2007-2016 in a maternity unit catering to an ethnically diverse population. Logistic regression and Geographical Information Systems (GIS) were used to examine the associations between antenatal care initiation and ethnicity with and without adjustment for area deprivation.

Preliminary results: Among 45695 births recorded on the Ciconia Maternity information System, great majority (80%) of mothers lived in neighbourhoods that are in the three most deprived area quintiles and 34.4% belonged to one of the ethnic minority groups. One fifth (20.8%) of mothers initiated antenatal care late after 12 weeks of gestation. Late initiation was the highest among Black African (34.2%) and Black Caribbean (29.0%) groups who were more than twice as likely than the White British group to initiate antenatal care late (Odds ratio [OR]= 2.65 and 2.08 respectively). The risk appeared to remain after adjustment for area deprivation.

Conclusions: Ethnic minority mothers from some groups are at substantially higher risk of initiating antenatal care late compared to White British mothers regardless of the level of area deprivation.

Main messages: Mothers from some ethnic minority groups are at substantially higher risk of initiating antenatal care after 12 weeks of gestation compared to White British mothers. Area level deprivation has very little effect on ethnic variations in antenatal care initiation.