Socioeconomic status key risk for premature births

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Women who live in poorer areas, are older mothers, smokers or are Aboriginal have a higher risk of having a preterm baby, according to a University of Sydney study published in the *Australian and New Zealand Journal of Public Health*.

This study looked at risk factors for a baby being born before term especially any association between preterm birth and low socioeconomic status (SES).

Using data from the NSW Midwives Data Collection (MDC) for 1994-2004 enabled the researchers to use an universal and ongoing dataset which provided demographic, pregnancy, and birth-related parameters for all babies born in all public and private hospitals and at home in NSW.

Lead author, Deborah Donoghue from the University’s Centre for Rural Health said:

"Such a large and reliable data set allowed us to divide the babies into four groups based on how early they were born. These groups were term, less than two months early, two to three months early, and more than 4 months early. This allowed us to look at factors that are at play in the different groups of babies such as 'very preterm' or those born at 28 to 31 weeks' gestation," she said.

For mothers from areas of most disadvantage and least resources, the risk of having a baby born at least three months early was 45 per cent higher than mothers from the least disadvantaged areas. While 28.5 per cent of all mothers resided in an area classified as 'most disadvantaged', this rose to 33.7 percent for mothers giving birth to very preterm babies.

"Our study found a strong association between socioeconomic deprivation and an increasing risk of preterm birth in more than 800,000 babies, even after adjusting for other key determinants including maternal age, Aboriginality, smoking and clinical conditions," she said.

"The risk of having a preterm baby was also significantly higher for older mothers, and this risk increased with increasingly preterm birth, consistent with previous research."

Ms Donoghue said the study found the risk factors for having a preterm baby was also high for Aboriginal women.

"Aboriginal women in Australia have substantially poorer health as measured by a range of health indicators. Even after controlling for socioeconomic disadvantage, Aboriginal women were at a substantially increased risk of preterm birth, and the magnitude of this increase was similar to the risk associated with smoking during pregnancy.

"However, it is the many potentially modifiable factors related to socioeconomic status (SES) such as maternal education, paternal occupation and income that offer the most promise for intervention."

**More information:** Donoghue, Deborah; Lincoln, Douglas; Morgan, Geoffrey; Beard, John. "Influences on the degree of preterm birth in New South Wales." *Australian and New Zealand Journal of Public Health* [http://dx.doi.org/10.1111/1753-6405.12132](http://dx.doi.org/10.1111/1753-6405.12132)

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