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Spotting fetal growth problems early could cut UK stillbirths by 600 a year

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The authors say spotting it early could substantially reduce the risk, and this needs to become a cornerstone of safety and effectiveness in antenatal care.

Stillbirth rates in the United Kingdom are among the highest in developed countries. They have often been considered unexplained and unavoidable, and their rates have changed little over the last two decades.

Recently, doctors have found that many stillborn babies fail to reach their growth potential, prompting a renewed focus on what causes fetal growth restriction. So a team of researchers at the West Midlands Perinatal Institute in Birmingham set out to assess the main risk factors associated with stillbirth in a multiethnic population.

Using NHS records, they identified 92,218 normally formed singleton babies, including 389 stillbirths, from 24 weeks of gestation, delivered during 2009-11 (a stillbirth rate of 4.2 per 1,000 births). They then assessed several maternal and fetal risk factors for stillbirth and calculated the proportion of stillbirths that could be potentially avoided if these risks were removed.

These included mother's age, parity (the number of times she had given birth), body mass index, mental health history, pre-existing diabetes, high blood pressure or heart disease, smoking in pregnancy, alcohol consumption, and fetal growth problems.

First, third and subsequent pregnancies were associated with an increased risk of stillbirth compared with second pregnancies, but high maternal age carried no increased risk in this population which excluded congenital anomalies. Ethnicity (African, African-Caribbean, Indian and Pakistani) carried a higher risk, as did deprivation and unemployment of the mother or her partner.

Maternal obesity (BMI of 30 or more), smoking, pre-existing diabetes, a history of mental health problems, and fetal growth restriction were all associated with a significantly increased risk.

As potentially modifiable risk factors, maternal obesity, smoking in pregnancy and fetal growth restriction together accounted for 56% of all stillbirths.

However, the strongest risk factor was fetal growth restriction, which carried a fourfold higher risk of stillbirth compared with normal growth pregnancies. This increased to an eightfold risk if it was not detected during pregnancy, accounting for 32% of all stillbirths in the study.

Yet the authors point out that the presence of fetal growth restriction is currently missed in most pregnancies.

They estimate that 71 stillbirths in their study population could have been avoided through better antenatal recognition. Extrapolated to the UK population, this would represent 600 fewer stillbirths per year.

"Our study shows that while there are several risk factors for stillbirth that can be ascertained from the outset of pregnancy, the single largest factor is fetal growth restriction, which is currently not well predicted and not recognised antenatally in most pregnancies," say the authors. "Most normally formed singleton stillbirths are potentially avoidable … and preventive strategies need to focus on improving antenatal

detection," they conclude.

In an accompanying editorial, two experts from the University of Auckland say this study adds "important new insights" about modifiable risk factors for stillbirth, but that efforts to improve detection of fetal growth restriction must be intensified.

  More information: Paper: www.bmj.com/cgi/doi/10.1136/bmj.f108 , Editorial: www.bmj.com/cgi/doi/10.1136/bmj.f416

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