

Stillbirth: Looking at the potential causes

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Background

The global stillbirth rate is estimated to be 18.4 per 1000 births, or around 2.6 million cases globally per annum. These deaths have deep and long-lasting effects on parents, healthcare providers, and society. One of the major challenges to preventing stillbirths is the lack of information about why they happen¹. In the UK, attention is focused on antenatal identification of high-risk pregnancies. Current national guidelines recommend identifying women with any known risk factors for stillbirth as high risk². Fetal movements are perceived as a sign of fetal wellbeing, with reduced fetal movements (RFM) associated with poor perinatal outcome. Antenatal investigation of RFM aims to exclude fetal death and identify pregnancies at risk of adverse outcome³.

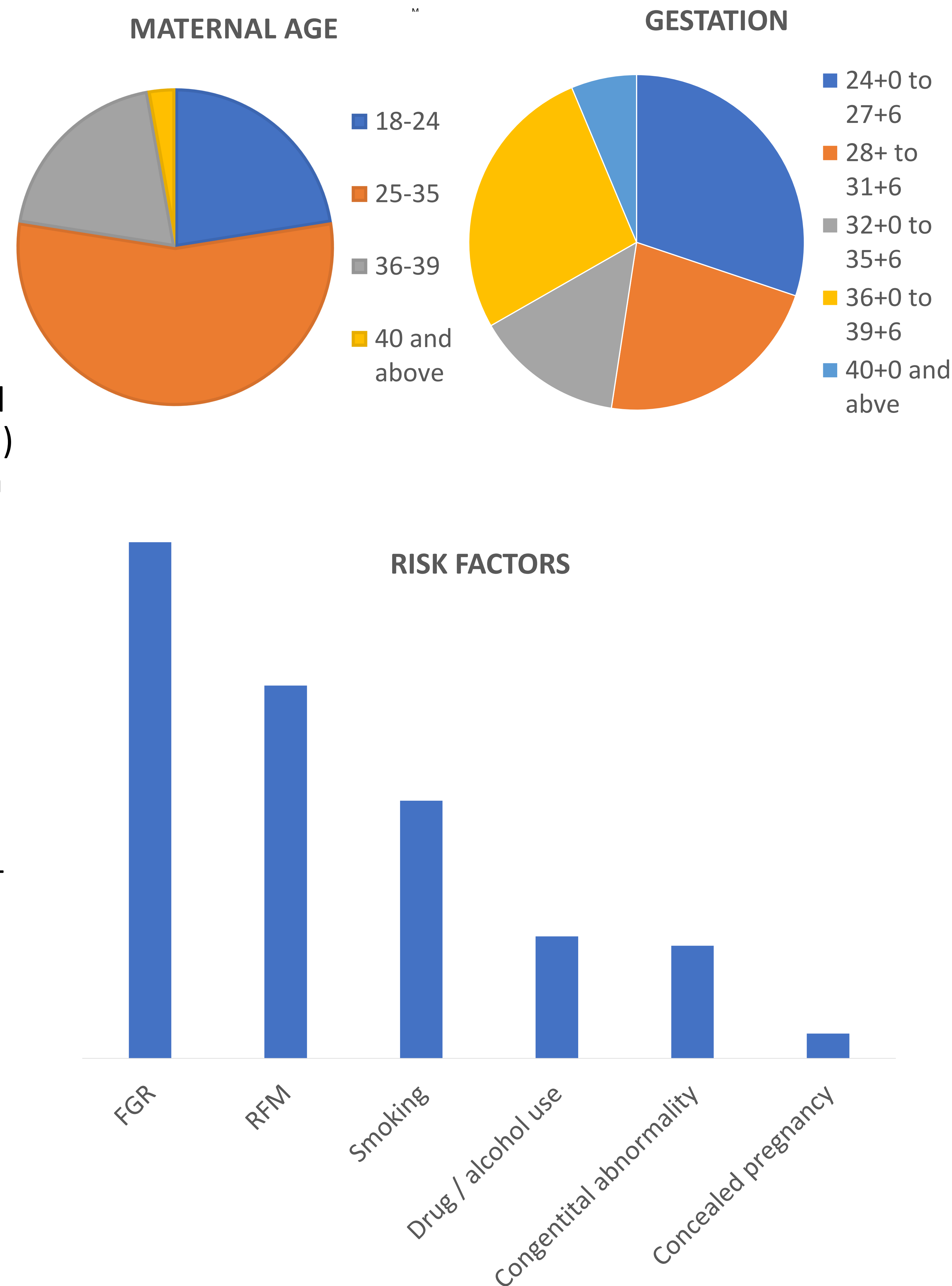
University Hospital Wishaw does not currently have a local RFM guideline.

Methods

This study was a retrospective audit performed at University Hospital Wishaw, NHS Lanarkshire. 77 stillbirths occurred between May 2017 and November 2022. 24 risk factors for perinatal mortality were identified and data regarding these risk factors was recorded for each case form Badger Net maternity records.

References

1. Reinebrant, HE, et al. Making stillbirths visible: a systematic review of globally reported causes of stillbirth. *BJOG* 2018; 125: 212– 224.
2. Townsend, R, et al. Prediction of stillbirth: an umbrella review of evaluation of prognostic variables. *BJOG: Int J Obstet Gy.* 2021; 128: 238– 250.
3. Bellussi, F et al. Fetal Movement Counting and Perinatal Mortality, *Obstetrics & Gynecology*: February 2020 - Volume 135 - Issue 2 - p 453-462



Results

22.5% of the stillbirths occurred at maternal age 18-24, 55.0% at age 25-35, 19.7% at age 36-39 and 2.8% at maternal age 40 and above. 30.1% were delivered at gestational age between 24 and 27+6 weeks, 22.2% between 28 and 31+6 weeks, 14.3% between 32 and 35+6 weeks and 26.9% between 36 and 39+6 weeks gestation. 6.3% of the stillbirths occurred at 40+0 weeks gestation and above. Of the 24 risk factors the most frequently found in association with still birth were fetal growth restriction, reduced fetal movements and maternal smoking. 60.5% of still births were growth restricted babies. 43.7% were associated with one or more episodes of reduced fetal movements. 35.2% of cases were associated with maternal smoking. Drug / alcohol use, antenatally diagnosed congenital abnormality and concealed pregnancy were noted in 14.3%, 13.2% and 2.9% of cases respectively.

Conclusions

Maternal reporting of reduced fetal movement is associated with stillbirth and other adverse perinatal outcomes. Maternity services at University Hospital Wishaw introduced the "Nurture ribbon" in 2018. This ribbon is to be tied to an everyday object such as keys, and serves as a prompt to encourage women to think “is my baby moving normally?” when they see it. If not, women are informed to contact Maternity Triage immediately. 3 women presented with recurrent episodes of reduced fetal movements and were found to have intrauterine deaths at <34 weeks gestation. The 3 women who presented with first episode of reduced fetal movement were found to have intrauterine death at >40 weeks gestation. 70% of small for gestational age babies were identified on scan, however the remainder did not get serial growth scans as they were not considered high risk for fetal growth restriction. All women who were smoking at booking were offered appropriate referral to cessation services.