Children dying before their first birthday

Headlines

Infant deaths contribute significantly to inequalities in life expectancy across Kirklees. The number of such deaths has been unacceptably high in recent years in the north of Kirklees, but is reducing.

Different groups are disproportionately affected by infant mortality as the causes are complex and varied. White women with unhealthy behaviours, particularly smoking, and certain sections of the Pakistani communities, where genetic factors can contribute to infant deaths, experience more infant deaths.

Mortality rates are higher in Batley and Dewsbury.

Why is this issue important?

Infant deaths contribute significantly to inequalities in life expectancy across Kirklees. The rate locally was amongst the highest in England, but is reducing. It varies across both localities and social groups. Infant deaths are affected by a range of factors including behaviours, genetic factors, deprivation and access to services.

The infant mortality rate for Kirklees in the period 2009-11, was 5.3 per 1000 live births and is a downward trend since 2002-04. Although this has reduced it remains slightly above the regional average of 5.2 per 1000 live births and well above the England and Wales rate of 4.2 per 1000 live births[1]. If the infant mortality rate for Kirklees was the same as that for England and Wales, about six infant deaths would not have occurred in 2009.

What significant factors are affecting this issue?

The factors causing these high rates have been examined, first in north Kirklees for deaths between 2002-06[2], and for the whole of Kirklees between 2002-08. Factors were identified in the earlier report for specific action[2]. These were reinforced by the 2010 review, which confirmed such factors as higher for Kirklees.

Of the 270 Kirklees infant deaths between 2002-08:

- 61% were in north Kirklees, 3% had a mother aged under 18 years and 58% were male.
- Nearly half (48%) of the deaths occurred in the first seven days of life and 70% by 28 days of life, similar to nationally. Almost 1 in 3 (31%) lived less than 24 hours.

- The causes of infant deaths are complex and varied[3]. The main reasons for infant deaths locally were similar to nationally[2]. Prematurity and congenital abnormalities were the main causes of death in Kirklees, accounting for 73% of deaths. Given the level of prematurity in white babies, then it is not surprising that this was their main cause, 43%, then congenital abnormality (25%). Conversely, congenital abnormalities were the main cause of death for Pakistani babies, 52%, followed by prematurity (25%).
- Low birth weight is a known risk factor for infant deaths. In England and Wales, almost half of all infant deaths occurred among very low birth weight babies (under 1,500 grams). Babies of low birth weight (less than 2,500 grams) are also more likely to die in the first year of life[4]. Overall, nearly 6 in 10 (58%) were of low birth weight. Low birth weight can occur when babies are born prematurely (before 37 weeks) or when they reach term but have retarded growth. In Kirklees overall, more than half (55%) were born prematurely, before 37 weeks gestation, especially white babies in north Kirklees (65%). So, nearly 1 in 8 of full term babies had a low birth weight.
- Nearly half (47%) of the deaths were white babies with 38% of Pakistani origin.. However less than 1 in 3 births (31%) were to women of south Asian origin. Maternal lifestyle and behaviours such as smoking, alcohol use and poor nutrition also impact on infant mortality rates, making low birth weight and/or pre term delivery more likely. 1 in 4 of all mothers smoked at antenatal booking. This hides the 55% of white north Kirklees women. No Pakistani women admitted to smoking. Smoking during pregnancy is a major cause of low birth weight.
- 11% of mothers drank alcohol at antenatal booking, especially white mothers, 23%.
- Nearly half (48%) of mothers were at least overweight, especially those of Pakistani origin, 60%. Obesity was worse in north Kirklees with nearly 1 in 4 (23%) mothers obese - more Pakistani, 32%, than white, 17%, but there was still an issue in south Kirklees with 69% of Pakistani origin women being overweight or obese.
- Being obese increases the risk of diabetes. About 1 in 12 (8.3%) mothers were recorded as having a form of diabetes (Type 1, 2 or gestational), especially Pakistani mothers.
- Access to services such as booking for antenatal and maternity care in pregnancy and access to genetic information and counselling for those potentially affected by inherited genetic conditions varies and can also impact on the level of mortality. Overall there was a very high uptake (over 90%) of antenatal non-genetic and infectious disease screening. Total genetic screening uptake was over 2 in 3, with a

rate of over 90% in the Pakistani population. Late booking dropped dramatically with the introduction of genetic screening at 12 weeks gestation, in 2007.

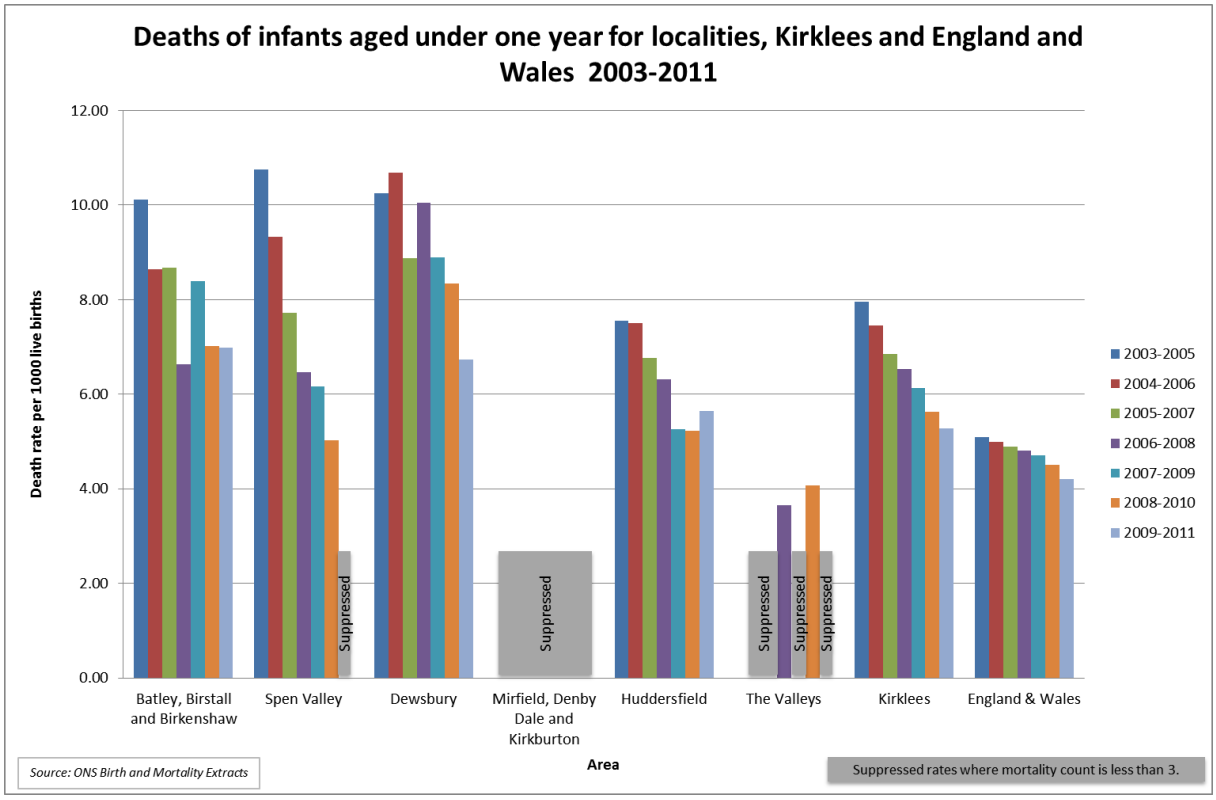
Which groups are most affected by this issue?

The factors described above suggest which groups are disproportionately affected by infant deaths. These include:

- Women with unhealthy behaviours, particularly smoking.
- Fathers in routine occupational groups. For Kirklees, infant mortality rates in routine and manual groups for 2006-2008 was 8.3 per 1000 live births, which is higher than the rate for Kirklees in that period of 6.3 per 1000 live births. For England and Wales, the infant mortality rate for babies with fathers in routine occupations was twice that for babies with fathers in the higher managerial occupations (5.5 and 2.8 deaths per 1,000 live births respectively)[4].
- Certain sections of the Pakistani communities, where genetic factors can contribute to infant deaths.
- Births registered by the mothers alone (sole registrations) are a disadvantaged group with a higher infant mortality rate than the routine and manual group and a higher proportion of teenage mothers. In Kirklees, around 340 births each year are sole registrations. The rate in this group was 8.9 per 1,000 live births for 2006–2008. Although the numbers are small and do fluctuate, in the most recent three year period 2006-2008, this rate is higher than that seen for all births inside marriage or jointly registered and also higher than that for the routine and manual groups[5].

Where is this causing greatest concern?

There is considerable variation across the localities in Kirklees, with particularly high rates in Batley and Dewsbury. Rates in Huddersfield south were worse than the Kirklees 2009-11 average rate (5.3), at 5.9. Batley was the area with the highest rate, 8.8, with Dewsbury continuing to improve to 6.7, still above average but an improvement over the last 5 years. Care needs to be taken in interpreting these rates as the numbers involved are now very small and can suggest fluctuations as a result.



Views of local people

Considerable consultation has taken place with local mothers. As a result the infant death programme has prioritised tackling the key factors of early antenatal booking, supporting women who find engaging with antenatal care difficult, improving the health behaviours of women of childbearing age[6] and increasing genetic awareness amongst the Pakistani populations as well as a range of other issues. This work must continue to involve local women in both identifying issues and possible solutions.

These views are also shaping the work on factors that affect infant deaths described above e.g. consultation on maternity services in south Kirklees[7], Maternity Services Liaison Committee, genetic awareness work, women of childbearing age pilots.

What could commissioners and service planners consider?

Key factors that would reduce infant mortality locally include:

- Community engagement, including communication and information about what to do when pregnant and about genetic conditions.
- Communication with professionals, addressing myths around infant deaths.
- Support for professionals to recognise the challenges of how to address IM in relation to close marriage with clients and patients.

- Understanding local women's experiences engaging with maternity and midwifery services, celebrating the positives and addressing the negative experiences. Sharing experiences with maternity service commissioners and providers to enable service reshaping and development that reflects the needs of diverse local communities.

Service specifications

Infant deaths are affected by a wide range of factors and commissioners should consider how the factors described above are addressed when new service specifications are drawn up or existing specifications reviewed. Consider extending the focus of activities to include Batley as well as Dewsbury.

Messages and staff training

Front line workers can help with the communication of key messages to relevant communities. Consideration needs to be given to how routine staff training covers this. When necessary, staff should be supported in accessing more specialist training e.g. around delivering genetic awareness messages.

Community engagement and awareness

Offering a range of resources that supply accessible information for the target groups on the extent, causes, and preventative factors of IM, and where support can be accessed.
Universal healthy lifestyle messages.
Consanguinity and genetics awareness where communities are likely to practice close marriage.
Commission the delivery of semi-formal awareness sessions through formal educational routes. This would enable learning and understanding as well as discussion about the topics through multi-lingual delivery.
Ensure experiences and stories are heard and recorded (formally or informally) through appropriate channels, to build local insight and influence service planning and delivery at strategic and operational levels.

References

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