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Editorials

Perinatal mortality in the Netherlands

Consistently poor performance indicates that it is time for change

The Netherlands' consistently poor performance in the European perinatal mortality league is a cause for concern. Neither the concern nor the performance are new. They culminated in the late 1970s and mid-1980s when home births were erroneously put forward as the explanation.[1] A new height was reached when the Peristat project showed that at the turn of this century the Netherlands had the highest perinatal mortality in the European Union.[1] Five years on, nine new EU members have expanded the league from 15 to 24, but this has brought little change.[2] In 2004, perinatal mortality was 10 per 1000 in the Netherlands, higher than in all but one of the new EU members,[2] and still 9.8 per 1000 in 2006.[3]

Admittedly, the European perinatal mortality league is a poor relation of the European football league, not just because it takes four years before the results are announced.[2] Not all teams play by the same rules. Some nations register births for babies ≥500 g; others from 22, 24, or 28 weeks' gestation; and some have different rules for live births and stillbirths.[2] Methods for ascertaining these differ too, and—not infrequently—there are often large discrepancies between the actual number of deaths and the number that are registered.[4 5] So, all teams decide for themselves whether a point was made or not. There is no umpire to ensure equity in rules and ascertainments and no video taped playback to verify this. Although we assume that fair play prevails, national pride in reaching the top should never be underestimated.

Not all perinatal deaths are registered.[4] Registration is influenced by maternity benefits, birth premiums, funeral obligations, and abortion policies, such as whether terminations are legal, until what stage in pregnancy they are allowed, and how they are registered.[2]

So, what is the cause of the Netherlands' poor performance? Over the years explanations have shifted from home birth to better registration; a higher proportion of older mothers, twin pregnancies, and ethnic minorities; lack of screening for congenital anomalies; and non-intervention policies around severely preterm birth. Unfortunately, the media have shed more heat than light on whatever explanation is on offer.

Better registration is an issue. Undoubtedly, the former low mortality (before the 1970s) was based on extensive under-registration,[1 4] not just at the borderline of fetal viability.[1] Is it better now? In contrast to its southern neighbour, Flanders, which has a single register, the Netherlands has three—a national register for primary maternity care (LVR1), another for secondary care (LVR2), and a third for neonatal care (LNR). A great deal of pride and energy is invested in combining these to avoid double counting.[6] A further registry (PRN) has been devised for that purpose, but it still registers fewer late neonatal deaths than the civil registration.[5]

Participation in the LNR has never been good. In 2000, Dutch data lagged a year behind data from the other EU members. In 2004, births attended by general practitioners (about 5% of the total number) were still missing, and participation was incomplete.[7] Nationwide registration of in vitro fertilisation has been available since 1996, but pregnancy outcomes were lacking until 2003. Registration is certainly better, but is it good enough?

Ethnic origin is also complex. It is illegal to register ethnicity in several EU countries,[8] and data are available only for nationality or country of birth.[2] In the Netherlands, ethnic origin is defined as being of Dutch ancestry or not of Dutch ancestry (this last group is often differentiated into Western or non-Western, although the distinction is somewhat unclear).[8] The criteria of the Netherlands' bureau for statistics do not match those of the perinatal registrations, and classification depends on the perception of the health professional who registers the birth.[9] Much attention has been devoted to the health outcomes of people of non-Western origin. As a group, their outcomes are poorer than for people of Dutch origin, but the factors that contribute to this—such as poor use of health services and the high incidence of congenital malformations, preterm birth, teenage pregnancy, grand multiparity, and single mothers—vary among different ethnic groups.[9]

People of non-Western origin are mainly concentrated in the large cities. In 2002-6, 43% of births in the four largest cities (Amsterdam, Rotterdam, the Hague, and Utrecht), were among these ethnic groups compared with 11% in the rest of the country.[10] Perinatal mortality is higher in these cities than in the rest of the country (11.1 per 1000 *v* 9.3 per 1000), even

though there are fewer congenital malformations (22 per 1000 *v* 25 per 1000), probably because of better access to screening and termination of pregnancy.[10] However, in the underprivileged suburbs, non-Western people invariably have lower perinatal mortality than people of Western origin.[10] Also, mortality in the rest of the Netherlands is higher in people of Western (8.8 per 1000) and non-Western (12.8 per 1000) origin than in 19 EU countries that register deaths from 500 g or 22 weeks onwards.[2 10]

Dutch maternity care has a long tradition of not being proactive,[7 11] in the confidence that Mother Nature knows best. This has also resulted in high maternal mortality from hypertensive disease, mostly because diagnosis and treatment came too late.[12]

There are indications that things are changing.[7] Denial of the poor performance has dissipated, ultrasound screening has been instituted, and audits of various kinds have sprung up.[7] Whether these changes will improve outcomes remains to be seen.

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