AIMS For a better birth...

Antenatal Care

AIMS Journal, 2013, Vol 25 No 4

Vicki Williams asks if it is care that improves pregnancy outcomes rather than check-ups

It is considered known that antenatal care is linked to improved pregnancy outcomes, but is it really? There is much debate over what constitutes effective care in both high and low-income nations, and considerable academic speculation over what impact interventions are actually having on maternal and infant health.

It seems that 'care' has become confused with the practice of goal-orientated visits for testing, screening and treatment, and it does not take much searching of the literature to bring up reports and reviews which look critically at the issue. It may just be that being cared for, nurtured and supported has a much greater impact on the health of a mother and her child than the constant medical search for what might be 'wrong', where the basic assumption is that something must be, if only you search hard enough to find it. All the perceived benefit of current antenatal practice stems from the belief that you need to screen a largely healthy population to detect early signs of and risk factors for disease, and follow it up with timely intervention.

The usefulness of any screening programme can be evaluated using the Wilson and Jungner principles[1] which look at interventions and desired outcomes in the light of their impact on public health, effectiveness of screening tests and predictability of the disease, and compares the effectiveness of prevention or early treatment with expectant management (waiting to see what happens) and treating the disease at the point where it occurs in a way that causes problems. It is far from clear that antenatal screening fits the criteria for an effective programme.

Antenatal care as currently provided follows the model which began in early 20th century Europe and appeared to make large improvements in the health of women and babies. When it was hypothesised that medical visits in pregnancy were a good thing, more were added to the schedule, and in some areas women may have as many as 16 routine appointments, with more and more added if anything is 'found' that 'worries' the 'care' team, yet in other areas women struggle to get an appointment with a midwife. A review of the evidence for antenatal appointments found that 'the number, timing and content of antenatal visits appear to be more a matter of ritual than evidence-based health care.'[2] The pattern of this medical activity remains largely unchanged, with new technologies, tests and interventions being added as they become available, without evaluation of their benefit and old ones remaining long after their usefulness has been disproved. A prime example of this is ultrasound, thoroughly explored in the AIMS book Ultrasound? Unsound![3]

Late 20th Century trials of antenatal appointment schedules found that there were no differences in the physical outcomes regardless of visit frequency. The review concluded that in countries with well-established obstetric services the number of appointments could be reduced without risking the health of the mother or her child.[2'4] A further review[5] evaluated these changes, and generated more questions than answers. It appears that there is little difference in outcomes for women, but in lowincome countries there is a small but statistically significant increase in fetal death where there is little antenatal care.

However, the reviewers failed to identify, or even speculate on, a cause and suggest that it may still be a chance finding, or related to factors outside the scope of the studies. It also seems that it is difficult to evaluate 'quality versus quantity' in antenatal care, fewer visits with higher quality information for women may be as effective as an increased number of medically-led visits.

The 2001 review[2] also compared the effectiveness of routine antenatal care provided by midwives and GPs with care led by obstetric teams. Results from both groups were similar, and there was no difference in perinatal outcomes.

It is also worth noting that many women value social and emotional support and find that the current frequency and structure of appointments does not meet those needs. Research by Judith Rooks suggested that social support from midwives, such as that provided by caseloading midwives and models such as the Albany, was the only thing to impact on outcomes.[5]

Maternal and fetal health is important for overall public health and it is possible to identify early signs or risk factors for at least some of the major causes of ill-health. However, there is less evidence that antenatal interventions fulfill the remaining criteria. There also appears to be a gap in the consideration of the effectiveness of antenatal screening alongside the more general improvements in the health of a population. It is also very much the case that all currently evaluated measures place the physical outcomes high on the agenda, but pay scant regard to the emotional wellbeing of women and children. In addition, one of the biggest issues presenting a thorn in the side of the evaluators of effective care is not

women who mindfully opt out of the system preferring self-care, it is that those women at highest risk of problems (such as those with low education, low socioeconomic status, low residential stability, very young mothers) are also least likely to engage with intervention programmes designed to help in those very situations.7

Is it perhaps time to not only assess the effectiveness of current antenatal activities, but to reassess the whole ethos of antenatal care so it empowers, informs and emotionally supports all women so they can better care for themselves?

References

1. Wilson J & Jungner G (1968) 'Principles and Practice of Screening for Disease'. WHO Public Health Papers. Geneva: World Health Organization.
2. Carroli G, Rooney C, Villar J (2001) How effective is antenatal care in preventing maternal mortality and serious morbidity? An overview of the evidence.*Paediatric and Perinatal Epidemiology* , 15: 1-42. doi: 10.1046/j.1365-3016.2001.0150s1001.x
3. Lawrence Beech B, Robinson J (1994) Ultrasound? Unsound! AIMS
4. Strong, T (2002) *Expecting Trouble: What Expectant Parents Should Know About Prenatal Care in America*. New York University Press.
5. Vogel JP et al (2013) *Reproductive Health*, 10:19. doi:10.1186/1742- 4755-10-19
6. Rooks, JP (1999) The Midwifery Model of Care.*Journal of Nurse-Midwifery* 44: 370–374. DOI: 10.1016/S0091-2182(99)00060-9
7. Downe S, Finlayson K, Walsh D and Lavender T (2009) 'Weighing up and balancing out': a meta-synthesis of barriers to antenatal care for marginalised women in high-income countries.*BJOG: An International Journal of Obstetrics & Gynaecology*, 116: 518–529. doi: 10.1111/j.1471-0528.2008.02067.x