



EDITORIAL

Does antenatal care reduce maternal mortality?

Maternal health has many valued outcomes, but maintaining focus on maternal death is crucial in areas where the mortality burden is high.¹ Maternal mortality is estimated as 500000 maternal deaths each year, of which 99% occur in developing countries and the range in developing countries is 40-800 maternal deaths per 100000 live births, with an average of 450 maternal deaths per 100000 live births.² The care a pregnant woman receives from a healthcare professional over the course of her pregnancy is referred to as antenatal care (ANC), which has been recommended by the Ministry of Health in the UK since 1929 and it is used to detect early signs of complications, followed by a timely intervention if any found; but this care also focuses on educating the pregnant woman on a range of topics, including well-being, birth preparedness, complication readiness, and breastfeeding.^{3,4} The recommendation for care is as follows: from as early in pregnancy as possible (before or after 16 weeks), with the next visit at 24 and 28 weeks, from 28 weeks fortnightly until 36 weeks, from 36 weeks weekly until the onset of labour.⁴ During these visits the healthcare professional measures uterine height, checks foetal heartbeat, tests urine, and measures the mother's blood pressure.⁴ This same structure of ANC has been adopted worldwide, and has been adapted today within the Focused Antenatal Care (FANC) approach, endorsed by the World Health Organization (WHO).⁵ FANC is a goal-oriented ANC approach that promotes the health of mothers and their babies through targeted assessments of pregnant women to facilitate in:

1. identification and treatment of already established disease,
2. early detection of complications and other potential problems that can affect the outcomes of pregnancy,
3. prophylaxis and treatment for anaemia, malaria, tetanus, and sexually transmitted infections including HIV and urinary tract infections, and
4. individualized care and advice to help maintain normal progress and preparedness for delivery.

Does ANC reduce maternal mortality?

It is widely recommended that women have at least four ANC visits during pregnancy. ANC is thought to prevent high-risk complications in pregnancy, but evidence for this is lacking for many outcomes. It is unlikely to impact on some major causes of maternal mortality, such as haemorrhage and obstructed labour.^{3,6} These types of emergencies are prevented through prompt recognition and emergency care, which ANC does not provide. However, it aims to educate the woman on recognizing signs of these types of complications, which can help to save their lives and promote birth preparedness. ANC also provides effective interventions for preventing and treating certain conditions, such as anaemia, preeclampsia and eclampsia, external cephalic version to detect a breeched position, and infections, some of which impact on the health of the newborn as well as the mother, e.g. malaria, HIV, tetanus, syphilis, gonorrhoea, bacteriuria.^{3,6,7} The main causes of direct maternal mortality suggested by Maine (1991)⁷ are shown in the following Fig. 1.

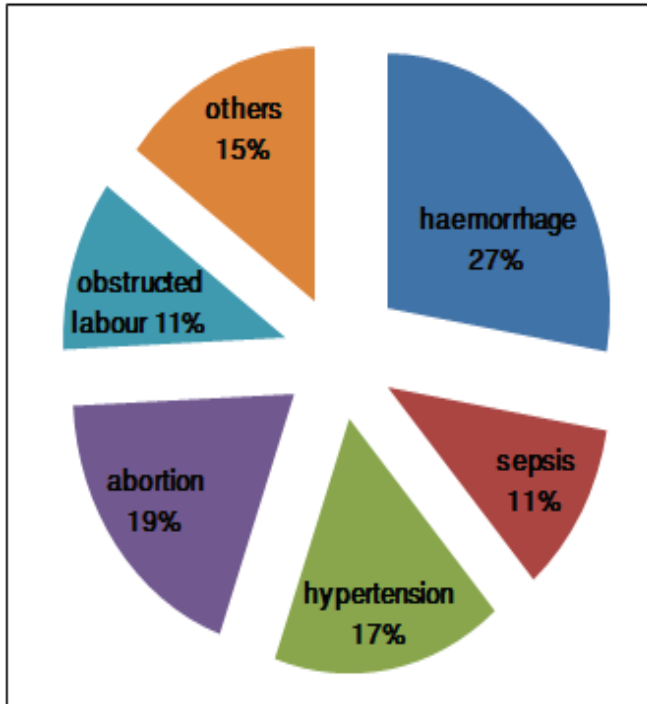


Fig. 1. The main causes of direct maternal mortality.⁷

The overall aim of ANC is to produce a healthy mother and baby at the end of pregnancy.⁸ ANC has long been regarded as a core component of routine maternal and child health services, and receives the largest allocation of budgetary resource in many developing countries.⁹ These strategies target a predominantly healthy population of pregnant women in order to screen and detect early signs of or risk factors for disease, followed by timely intervention, originally with the aspiration of reducing maternal and perinatal mortality and morbidity.¹⁰ Interestingly, it is noted that ANC is well-proved process, which helps to identify the problems related to maternal morbidity and mortality through relevant physical examinations and those who have taken minimum numbers of ANC services from health professionals in different government and non-government hospitals, they faced less maternal health related complications that resulted less maternal morbidity and mortality.

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