In 2015, an estimated 303 000 women died from pregnancy-related causes and 2.6 million babies were stillborn, half occurring during the third trimester. Many of these adverse outcomes can be prevented by quality healthcare during pregnancy and childbirth. Within the continuum of care, antenatal care (ANC) provides a platform for critical healthcare functions including health promotion, prevention, screening and diagnosis of diseases. Implementing timely and appropriate evidence-based practices during ANC can improve maternal and fetal health. Furthermore, it is an opportunity to communicate with and support women, families and communities at this very pivotal time in the course of their lives.

On 7 November 2016, the World Health Organization released its comprehensive recommendations on routine ANC for pregnant women and adolescent girls. In accordance with a human rights-based approach, the guidance is intended to respond to the complex nature of the issues surrounding the practice, organisation and delivery of ANC within the health systems, and to prioritise person-centred care and well-being—not only the prevention of death and morbidity.

A positive pregnancy experience, defined as 'maintaining physical and sociocultural normality, maintaining a healthy pregnancy for mother and baby (including preventing or treating risks, illness and death), having an effective transition to positive labour and birth, and achieving positive motherhood (including maternal self-esteem, competence and autonomy)', is a key consideration for the guideline.

Recognising that improving a woman’s experience of care can be critical to transforming ANC services and contributing to thriving families and communities, the guideline focuses on the following questions: What are the evidence-based practices during ANC that improve outcomes and lead to a positive pregnancy experience? How should these practices be delivered?

The guideline includes recommendations related to antenatal nutrition, maternal and fetal assessment, preventative measures, interventions for common physiological symptoms (e.g. nausea, heartburn, constipation), as well as health systems interventions to improve ANC utilisation and quality of care. In addition, current WHO recommendations on malaria, tuberculosis and HIV for women during pregnancy were integrated for a consolidated package of ANC. A full list of recommendations can be accessed in six languages. Focusing on routine ANC, these recommendations aim to complement existing WHO guidelines on the management of complications during pregnancy.

In developing these recommendations, evidence from different sources was synthesised, assessed and considered (effectiveness reviews, qualitative evidence syntheses, test accuracy reviews and mixed method reviews). Decision-making and formulation of recommendations were based on a number of criteria including evidence on harms and benefits, values, resources, equity, acceptability and feasibility.

Since the launch of the WHO ANC model, also known as focused (FANC) or basic ANC (BANC), ANC utilisation has increased in low- and middle-income countries (LMICs). This model was a goal-orientated approach to delivering evidence-based interventions at four critical
times during pregnancy. Recent evidence suggests that the FANC model, which was developed in the 1990s, is associated with more perinatal deaths than models comprising at least eight ANC contacts. A secondary analysis of the WHO ANC trial suggested that the increase in perinatal mortality is more likely to be due to increased stillbirths. The contacts during the third trimester are at critical time points that may allow assessment of well-being and interventions to reduce stillbirths. Moreover, evidence suggests that an increase in the number of antenatal care contacts, irrespective of the resource setting, seems to be associated with an increase in maternal satisfaction compared with fewer ANC contacts. Therefore the new guidance recommends a minimum of eight contacts between the pregnant woman and the healthcare providers.

The new WHO ANC model highlights that a woman’s ‘contact’ with her provider should be more than a simple ‘visit’ but should be an opportunity for good quality care including medical care, support, and timely and relevant information throughout pregnancy. The guideline uses the term ‘contact’ as it implies an active connection between a pregnant woman and a provider that is not necessarily implicit with the word ‘visit’. The new model recommends pregnant women to have their first contact during the first 12 weeks’ gestation, with following contacts taking place at 20, 26, 30, 34, 36, 38 and 40 weeks’ gestation. Increasing maternal and fetal assessments to detect complications, improving support and communication between healthcare providers and pregnant women, increases the likelihood of positive pregnancy outcomes.

In addition to increased contact, the guideline includes several other changes to the previous focused antenatal care (FANC) model. WHO is recommending early pregnancy ultrasound before 24 weeks for accurate gestational age ascertainment, identifying multiple pregnancies and fetal anomalies. Ultrasound assessment of gestational age is critical for identifying preterm birth risks as well as monitoring optimal fetal growth. The implementation and impact of this recommendation on health outcomes, facility utilisation, and equity should be monitored, and health system support (logistical, infrastructural, human capacity) for provision of services, referral and management of identified complications will be important components of implementation. Furthermore, the guideline incorporates nutrition during pregnancy and includes recommendations on counselling about healthy eating and keeping physically active during pregnancy to prevent excessive weight gain as well as recommendations on the routine daily use of iron and folic acid supplements throughout pregnancy. Some micronutrient supplements were recommended in specific contexts only. In addition, health systems interventions such as midwife-led continuity of care, community-based interventions to improve communication and support, and task-shifting components of antenatal care delivery are intended to inform the implementation of quality ANC programmes. As comprehensive as the current recommendations are, the guideline development process also identified several knowledge gaps such as antenatal screening of gestational diabetes mellitus (GDM) and future updates will also aim to include more extensive health system-level recommendations on how to improve utilisation and quality of antenatal care.

We believe the new recommendations with increased contact will also facilitate the integrated delivery of key maternal, immunisation, antimalarial, tuberculosis and HIV interventions using an ANC platform, thus strengthening the health systems. Through this integrated service delivery approach, the guideline aims to create a momentum for countries to re-think and re-design their health systems to ‘provide women with respectful, individualized, person-centred care at every contact by practitioners with good clinical and interpersonal skills’. This also means health systems should ensure that all providers are empowered and equipped with the necessary skills and supplies. Considering the importance of adaptation and implementation of the new ANC model within different health systems, the recommendations allow flexibility for countries to apply various options both for the content and delivery of ANC based on their specific needs and context. In the guideline, for each recommendation and for the new WHO ANC model as a whole, implementation considerations have been discussed at length to facilitate the adaptation and implementation at country level. WHO will continue to work with countries and partners further to develop tools for country adaptation and implementation as part of the work on improving quality of care throughout the continuum of care. Quality improvement processes will be crucial for this guidance to make a lasting impact on maternal and newborn outcomes.

WHO envisions that ‘every pregnant woman and newborn infant receives good quality care throughout pregnancy, childbirth and the postnatal period’, where quality refers to provision and experience of care from a health systems perspective. There is now an urgent need to develop appropriate indicators that go beyond capturing the number of visits for national and global monitoring. In 2017, at the beginning of the Sustainable Development Goals (SDGs), this is an opportunity to consolidate and increase the progress made during the past decade within strengthened health systems, and to expand the agenda to go beyond survival, with a view to maximising the health and the well-being of women, families and communities.

**Disclosure of interests**
None declared. Completed disclosure of interests form available to view online as supporting information.
Contribution to authorship
ÖT drafted the first version of the commentary. JPP, TL, MB, OTO, AP and AMG provided feedback and edits and approved the final version of the commentary.

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