Public health measures to counter nutritional stress during pregnancy

To the Editor: Meeting nutritional demand is of paramount significance in any stage of life to ensure positive health. Safeguarding maternal nutritional requirements during pregnancy deserves ancillary attention as the diet has an inarguable impact on the health of both the mother and the newborn baby.[1] In a study that was carried out in India in seven states (Himachal Pradesh, Haryana, Assam, Orissa, Kerala, Tamil Nadu and Madhya Pradesh) on 1 751 pregnant women, it was revealed that 84% of the study participants suffered from nutrition-related iron deficiency.[2] Another multi-country study reported that the prevalence of anaemia in pregnant women was 63%, 68% and 74%, in Nepal, Bhutan and Bangladesh, respectively.[3] Multiple studies from different developing countries have also established nutritional imbalance in pregnancy in different settings.[4,5]

The nutrition of the foetus in the intrauterine period is an important predictor of infant growth, development and survival.[6]

The nutritional status of a woman has been regarded as a significant determinant of multiple child health-related parameters, such as:

- Mortality.[1,7]
- Birthweight.[1,6,7]
- Perinatal survival.[7,8]
- Intellectual impairment.[9]
- The risk of having a small-for-gestational age infant.[6,10]
- Intrauterine growth retardation.[9,10]
- Neonatal hypothyroidism.[9]
- Birth defects.[11]
- Brain development.[1,11]

At the same time, maintaining the nutrition of mothers during pregnancy helps women to achieve desired weight gain,[7] stabilise haematological parameters[12] and regulate liver and placental function.[11]

Despite numerous advantages being attributed to dietary practices in the antenatal period, maternal and newborn health indicators appear well short of the desired targets (Millennium Development Goals 4 and 5), especially in women from developing countries where more than 40% of pregnant females are of poor socio-economic status.[6,8,10]

The findings of various studies have revealed multiple reasons for poor nutritional status in the antenatal period, such as:

- The illiteracy of the women.
- Poor socio-economic status.
- Inappropriate management of physiological conditions associated with the pregnancy.
- Inadequate access to health professionals and health centres.
- Weak healthcare delivery systems.
- Poor dietary knowledge of outreach workers.
- Myths and misconceptions which are prevalent in pregnancy.
- The limited reach of national health programmes and welfare strategies.[1,7,9,13]

In ideal circumstances, a woman's nutritional status should be assessed prior to conception with the aim of optimising maternal and newborn health. Pregnancy-related dietary changes should be advocated from adolescence, with relevant alterations during the antenatal period.[14] As the nutritional status of women during pregnancy is influenced by variable determinants, a strategy to regulate the same should be designed with the active involvement of all stakeholders in a comprehensive manner, yet should be flexible, with ample scope for possible modifications based on local settings.

Measures can be implemented to improve the health of mother and child in the short, as well as the long term, such as:

- Communicating specific and consistent information about diets and their role in maintaining the optimum health of mother and child.[14]
- Empowering women to make the right eating choices during pregnancy.[7]
- Educating women and family members to adopt a selection of nutrient-rich, yet affordable food.[7]
- Implementing administrative reforms to improve the nutritional and societal status of girls and women.[13]
- Strategically formulating and implementing steps to eliminate myths and misconceptions associated with dietary practices during pregnancy.[7,9]
- Expanding the reach of welfare programmes to disadvantaged sections of people by networking with nongovernmental organisations and by involving community members.[13]
- Encouraging the daily supplementation of macro- and micronutrients, e.g. iron, calcium, folic acid, iodine, multivitamins and zinc.[9]
- Avoiding alcohol and tobacco.[9]

To conclude, nutrition plays a critical role in the antenatal period. Enabling women to make an informed choice about food selection, with regular follow-ups, could help to achieve the primary aim of a healthy mother and a healthy child at the end of the pregnancy.

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SOUTH AFRICAN ACADEMY OF
FAMILY PHYSICIANS

1st Announcement

17th National Family Practitioners' Congress (2014)
Family Medicine for all: Implementing community-orientated primary care

Time: 20-22nd June 2014 (Friday lunch time to Sunday lunch time).

Venue: University of Pretoria (Hatfield Campus), Pretoria South Africa

We are partnering with the IPA movement in the organisation of the congress.

The role and skills of generalist doctors and how it relates to the generalist team to implement COPC will be the focus. The academic program will also include skills training e.g.: Pain management, change of lifestyle counselling, using data to improve practice and management of chronic illness.

Research will be the focus of the Friday afternoon while the Saturday and Sunday will be aimed at the specific needs of General Practitioners in private and public sector.

Other members of the COPC team will be invited and accommodated in the program.

Further announcements on registration, abstracts etc will follow shortly.

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