

# Preconception care: A pragmatic approach for planned pregnancy

Sir,

Preconception care is defined as the care comprising healthy behavior practices applied before conception and thereby modifying biomedical, behavioral, and social risks for better pregnancy outcome. Growing recognition on “continuum of care” from adolescence, prepregnancy, childbirth and postnatal period, childhood and through reproductive age for improving pregnancy outcome, and reduction of maternal and neonatal mortality emphasizes the need of preconception care. However, wide gap exists in the continuum of care because of the misperception that healthy behavior is needed only during pregnancy. However, by the time, most of the women recognize their pregnancy; most of the fetal organs have been formed.<sup>[1]</sup>

Over the years, progress in the maternal, newborn, and child health (MNCH) outcomes has been slow with the fact that around half of the pregnancies are unplanned.<sup>[1]</sup> Evidence from various studies has found that reproductive history (such as early marriage, risky sexual behavior, short interval between pregnancies, and illegal abortion), systemic diseases, folic acid supplementation, prepregnancy weight, sexually transmitted infections, oral and mental health, violence and abuse, certain medication use and environmental toxins and radiation exposure, substance abuse, smoking, alcohol use, immunization against certain diseases, and family history of genetic disorders are the different factors associated with MNCH outcomes.<sup>[2]</sup>

To improve the quality outcome of current and subsequent pregnancy, women who planned to conceive should practice preconception care. Opportunistic prepregnancy advice should be considered for women of reproductive age group to reduce the wide gap in the continuum of care.<sup>[2]</sup> The main components of preconception care are physical assessment, risk screening, vaccinations, and counseling.<sup>[3]</sup>

Risk assessment is based on physical examination, reproductive life plan, reproductive history, other medical history, mental health, medication use and other toxins exposure, substance abuse, certain infections, immunization, family history of genetic disorders, nutritional assessment, and laboratory testing. Prepregnancy health checkups include interconception

care, vaccination against rubella, hepatitis B, human papillomavirus, varicella and influenza, assessment of risk of chromosomal or genetic disorders depending on family history, age, and ethnicity.<sup>[3,4]</sup>

Counseling of women regarding possible teratogenic effects of certain drugs, toxins, chemicals, and health consequences of tobacco use, alcohol and substance abuse on the fetus should be carried out. Screening should be done for diseases with direct impact on fetal health such as periodontal diseases, urogenital and sexually transmitted infection and also for mental health to detect anxiety, depression, domestic violence, and other psychosocial stressors which will enable the mother to take care of pregnancy in a qualitative manner. Laboratory testing includes complete blood count, blood grouping and typing, urine analysis, screening for diabetes, thyroid disorders, HIV, gonorrhea, and syphilis.<sup>[3,4]</sup>

Interventions include supplementation of folic acid, appropriate birth spacing, adequate control of pregestational diabetes and hypertension, proper management of hypothyroidism, vaccination against rubella and hepatitis B, avoidance of teratogenic drugs, tobacco use, and alcohol. Health promotion through health education, optimizing nutrition, and managing risk factors should be ensured.<sup>[3,5]</sup>

Above all, the need for creating awareness on preconception care and promotion of proper reproductive planning are the topmost priorities to practice preconception care.

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## Conflicts of interest

There are no conflicts of interest.

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