Vitamin A supplementation in pregnancy for reducing the risk of mother-to-child transmission of HIV

Summary

Over 1000 new cases of mother-to-child transmission of the human immunodeficiency virus (HIV) occur worldwide every day, making this the main route of transmission of HIV infection in children. Vitamin A deficiency affects about 19 million pregnant women, mostly from the WHO regions of Africa and South-East Asia. Both HIV infection and pregnancy are considered to be risk factors for vitamin A deficiency. During pregnancy, vitamin A is essential for maternal health and for the healthy development of the fetus. Member States have requested guidance from the World Health Organization (WHO) on the effects and safety of vitamin A supplements for HIV-positive pregnant women as a public health strategy.

WHO has developed the present evidence-informed recommendations using the procedures outlined in the WHO handbook for guideline development. The steps in this process included: (i) identification of priority questions and outcomes; (ii) retrieval of the evidence; (iii) assessment and synthesis of the evidence; (iv) formulation of recommendations, including future research priorities; and (v) planning for dissemination, implementation, impact evaluation and updating of the guideline. The Grading of Recommendations Assessment, Development and Evaluation (GRADE) methodology was followed to prepare evidence profiles related to preselected topics, based on up-to-date systematic reviews. An international, multidisciplinary group of experts participated in two WHO technical consultations, held in Geneva, Switzerland, on 19–20 October 2009 and 16–18 March 2011, to review and discuss the evidence and draft recommendation, and to vote on the strength of the recommendation, taking into consideration: (i) desirable and undesirable effects of this intervention; (ii) the quality of the available evidence; (iii) values and preferences related to the intervention in different settings; and (iv) the cost of options available to health-care workers in different settings. All guideline group members completed a Declaration of Interests Form before each meeting. An External Experts and Stakeholders Panel was involved throughout the process.

Vitamin A supplementation in HIV-positive pregnant women is not recommended as a public health intervention for the prevention of mother-to-child transmission of HIV (strong recommendation). The quality of the available evidence was found to be moderate for mother-to-child transmission of HIV and child death, and very low for maternal death. All pregnant women, including those living with HIV/acquired immune deficiency syndrome (AIDS), should be encouraged to receive adequate nutrition through consumption of a healthy balanced diet.

---

1 This publication is a WHO guideline. A WHO guideline is any document, whatever its title, containing WHO recommendations about health interventions, whether they be clinical, public health or policy interventions. A recommendation provides information about what policy-makers, health-care providers or patients should do. It implies a choice between different interventions that have an impact on health and that have ramifications for the use of resources. All publications containing WHO recommendations are approved by the WHO Guidelines Review Committee.