World Health Organization

GLOBAL MALARIA PROGRAMME

Updated WHO Policy Recommendation (October 2012)

Intermittent Preventive Treatment of malaria in pregnancy using Sulfadoxine-Pyrimethamine (IPTp-SP)

During the last few years, WHO has observed a slowing of efforts to scale-up intermittent preventive treatment of pregnant women (IPTp) for malaria with Sulfadoxine-Pyrimethamine (SP) in a number of countries in Africa. While there are several reasons for this, confusion among health workers about SP administration for IPTp may also be playing a role. For this reason, WHO is clarifying its recommendations, and urging national health authorities to disseminate these recommendations widely and ensure their correct application.

In several countries in Africa, some *Plasmodium falciparum* parasites carry quintuple mutations linked to SP resistance which are associated with *in vivo* therapeutic failure to SP. IPTp with SP remains effective in preventing the adverse consequences of malaria on maternal and fetal outcomes in areas where a high proportion of *Plasmodium falciparum* parasites carry these quintuple mutations[1] . Therefore, IPTp with SP should still be administered to women in such areas.

All possible efforts should be made to increase access to IPTp with SP in all areas with moderate-to-high transmission in Africa, as part of antenatal care services. Based on a recent WHO evidence review[2], the following updated recommendations are provided:

- In areas of moderate-to-high malaria transmission, IPTp with SP is recommended for all pregnant women **at each scheduled antenatal care visit**. WHO recommends a schedule of four antenatal care visits.
  - The first IPTp-SP dose should be administered as early as possible during the 2nd trimester[3] of gestation
  - Each SP dose should be given at least 1 month apart
  - The last dose of IPTp with SP can be administered up to the time of delivery, without safety concerns

[1] The findings of an observational study in Tanzanian women in an area with high levels of quintuple mutation strongly associated with drug resistance and where the parasite dhps resistance mutation of codon 581 was also present showed increased placental parasite density and inflammatory changes in women reporting IPTp with SP use. This needs further investigation although it is important to note that this specific dhps resistance mutation is currently not common.

[2] Report available on the WHO-GMP website at the following URL:
http://www.who.int/malaria/mpac/sep2012/iptp_sp_erg_meeting_report_july2012.pdf

[3] IPTp administration should be avoided during the 1st trimester of gestation but should start as soon as possible in the 2nd trimester. The fact that a woman has entered the second trimester can be determined by the onset of quickening or by measurement of fundal height by ANC health personnel.

- IPTp should ideally be administered as directly observed therapy (DOT)
- SP can be given either on an empty stomach or with food
- Folic acid at a daily dose equal or above 5 mg should not be given together with SP as this counteracts its efficacy as an antimalarial[4]
- SP should not be administered to women receiving co-trimoxazole prophylaxis

- In some countries where IPTp with SP is currently being implemented, transmission of malaria has been reduced substantially. In the absence of information on the level of malaria transmission below which IPTp-SP is no longer cost-effective, such countries should not stop IPTp.[5]

- There is currently insufficient evidence to support a general recommendation for the use of IPTp-SP outside Africa.

- Monitoring of IPTp-SP effectiveness and safety of multiple doses is essential and should continue. Research is ongoing to define the best methodology for such monitoring; this will be shared when available.

[4] WHO recommends daily iron and folic acid supplementation in pregnant women at the dose of 30-60 mg of elemental iron and 0.4 mg of folic acid, to reduce the risk of low birth weight infants, maternal anaemia and iron deficiency at term.

[5] Cost-effectiveness modelling studies are on-going to address this question. Risk-benefit of SP administration needs also to be taken into account when considering recommendations on IPTp implementation.