World Malaria Day
25th April 2017

For World Malaria Day 2017 we have decided to build on the momentum from last year by keeping the theme: "**End Malaria for good"**.

Malaria remains both a major cause and a consequence of global poverty and inequity: its burden is greatest in the least developed areas and among the poorest members of society. Many of those most vulnerable – especially young children and pregnant women – are still not able to access the life-saving prevention, diagnosis and treatment they so urgently need.

According to the World Malaria Report 2016, in 2015, there were 212 million new cases of malaria and 429,000 deaths. One child dies from malaria every two minutes.

We can be the generation that ends malaria – one of the oldest and deadliest diseases in human history.

The CDBPH produced this booklet as part of the "World Malaria Day, 2017". You will find below, plain language summaries of Cochrane systematic reviews on the malaria prevention and management.

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Pour la Journée mondiale du paludisme 2017, nous avons décidé de développer l'élan de l'année dernière en gardant le thème: « mettre fin au paludisme pour de bon ».

Le paludisme reste à la fois une cause majeure et une conséquence de la pauvreté et des inégalités mondiales: son fardeau est plus important dans les régions les moins développées et chez les membres les plus pauvres de la société. Beaucoup de ceux qui sont les plus vulnérables - en particulier les jeunes enfants et les femmes enceintes - ne sont pas toujours en mesure d'accéder à la prévention, au diagnostic et au traitement dont ils ont besoin de façon urgente.

Selon le Rapport mondial sur le paludisme 2016, en 2015, il y avait 212 millions de nouveaux cas de paludisme et 429 000 décès. Un enfant meurt du paludisme toutes les deux minutes.

Nous pouvons être la génération qui met fin au paludisme - l'une des maladies les plus anciennes et les plus mortelles de l'histoire humaine. Le CDBPS a produit cette brochure dans le cadre de la "Journée mondiale de lutte contre le Paludisme, 2017". Vous trouverez ci-dessous, des résumés simplifiés de revues systématiques Cochrane, sur la prévention et la prise en charge du Paludisme.

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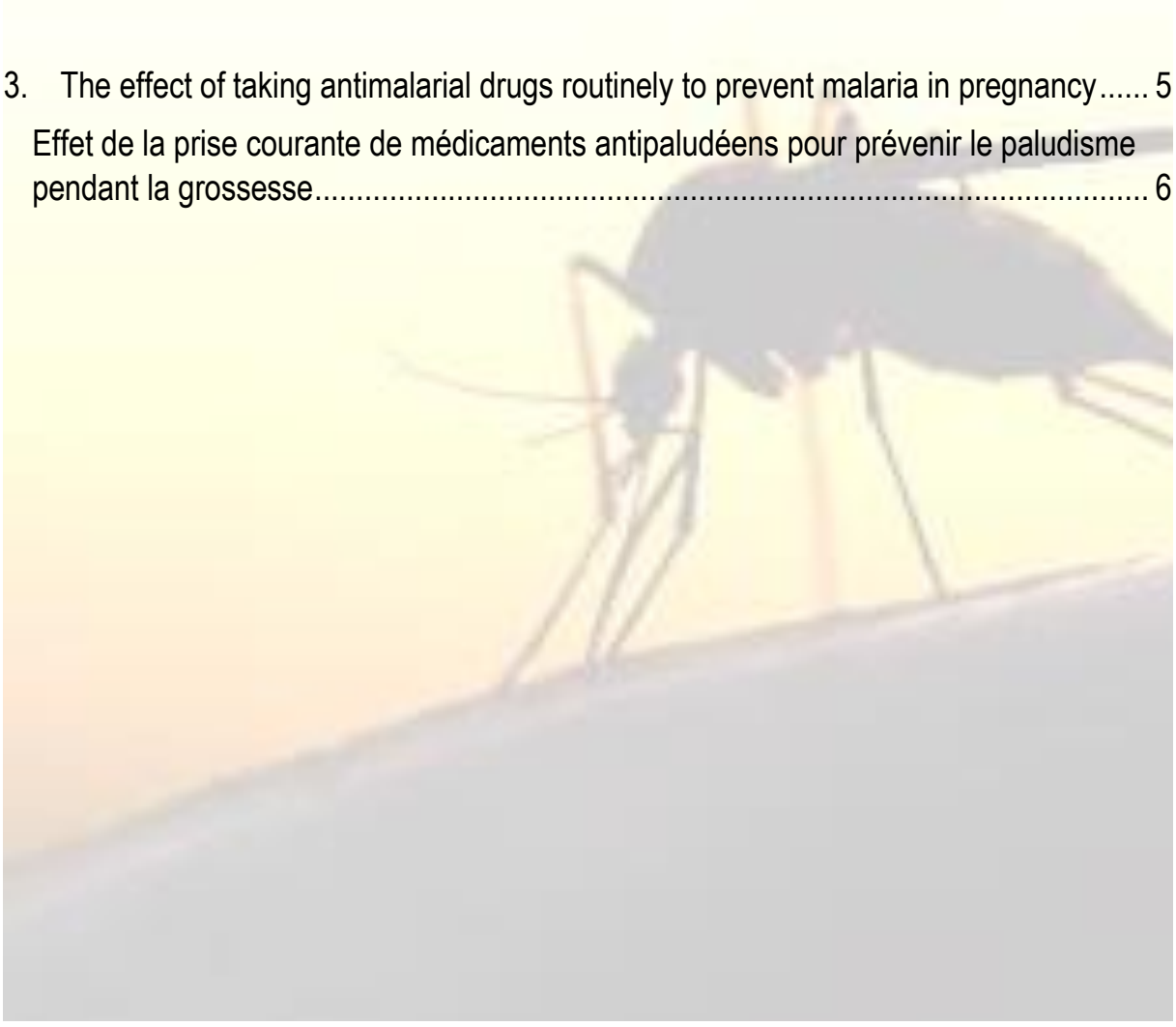

1. Antimalarial drugs as a treatment of anaemia in children living in malaria-endemic areas

Children living in malaria areas may develop severe anaemia, often caused by malaria infection, and this can cause death if not treated properly. Intermittent preventive treatment (IPT) is a course of malaria treatment given regularly to these children in order to prevent infection and malaria illness. It has been suggested that IPT could be used to treat children with anaemia in these areas. We aimed to find all the studies looking at treating anaemic children with IPT in order to see what the overall effect is. We examined the evidence available up to 4 December 2014.

We included six trials in this review, with a total number of 3847 participants. In all the trials, one group received IPT and the control group received placebo. Three trials were done in low malaria endemicity areas and the other three in high endemicity areas. In some trials, iron supplements were also given to children, which is also a treatment for anaemia, and we took this into consideration when analysing the data.

Our results did not find that the number of children who died or were admitted to hospital was lower in the group receiving IPT, irrespective of whether they received iron (*moderate quality evidence*); and there was no difference in the number of children with anaemia at the end of follow-up (*moderate quality evidence*). Average haemoglobin levels were higher in the IPT group compared to the placebo group, but the effect was modest (*low quality evidence*).

Although our results show that there are small benefits in haemoglobin levels when treating anaemic children with IPT, we did not detect an effect on death or hospital admissions. However, three of the six included trials were conducted in low endemicity areas where malaria transmission is low and thus any protective effect is likely to be modest.

Citation: Athuman M, Kabanywanyi AM, Rohwer AC. Intermittent preventive antimalarial treatment for children with anaemia. Cochrane Database of Systematic Reviews 2015, Issue 1. Art. No.: CD010767. DOI: 10.1002/14651858.CD010767.pub2.
http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD010767.pub2/epdf

2. Strategies to increase the ownership and use of insecticide-treated bednets to prevent malaria

Researchers in the Cochrane Collaboration conducted a review of the effect of different strategies to increase people's ownership and use of insecticide-treated bednets to prevent malaria. In February 2013 they identified 10 relevant studies. Their findings are summarized below.

What is malaria and how can insecticide-treated bednets prevent it?

Malaria is a life-threatening disease caused by a parasite. A person becomes infected from being bitten by a mosquito carrying the parasite. People with malaria may have symptoms such as chills, fever, vomiting, diarrhea, and jaundice. About 40% of the world's population is at risk of malaria, mostly in the poorest countries.

Insecticide-treated bednets fit over a bed and act as a barrier between insects and the person sleeping. The bednets are dipped in insecticide, a chemical that kills or repels mosquitoes and effectively prevent malaria. Insecticide-treated bednets cost money and it is important to find ways of ensuring that people who need them own them. Even when people own bednets they may not always use them properly. To be effective, bednets need to be used every night. They must also hang properly and be treated with enough insecticide. It is important to measure whether different strategies not only increase people's ownership but also people's use of bednets.

What this research says:

The studies included in this review took place in Africa and India. In five of the studies, people were either given insecticide-treated bednets free, or could buy them at a subsidized price or full market price. In the other five studies, people were educated about how to use the bednets properly, for instance through visits at home or through information on the radio, on television and in the community. The included studies show the following:

Providing free insecticide-treated bednets:

- Probably increases the number of people who own bednets compared to providing subsidized bednets or bednets offered at full market price.
- Probably leads to little or no difference in the use of bednets compared to providing subsidized bednets or bednets offered at full market price.

Providing education for the appropriate use of insecticide- treated bednets:

- May increase the number of adults and children under five using bednets (sleeping under bednets).

Providing incentives to encourage use of insecticide-treated bednets:

- Probably leads to little or no difference in ownership or use of bednets compared to those who did not receive an incentive.

A possible side effect when providing free or subsidized insecticide-treated bednets may be that the governments and institutions who pay for the bednets take this money from other priority issues. However, none of the included studies measured whether these or any other side effects had occurred.

Citation: Augustincic Polec L, Petkovic J, Welch V, Ueffing E, Tanjong Ghogomu E, Pardo Pardo J, Grabowsky M, Attaran A, Wells GA, Tugwell P. Strategies to increase the ownership and use of insecticide-treated bednets to prevent malaria. Cochrane Database of Systematic Reviews 2015, Issue 3. Art. No.: CD009186. DOI: 10.1002/14651858.CD009186.pub2.
http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD009186.pub2/epdf

3. The effect of taking antimalarial drugs routinely to prevent malaria in pregnancy

Pregnancy increases the risk of malaria and this is associated with poor health outcomes for both the mother and the infant, especially during the first or second pregnancy. For this reason, women are encouraged to try and prevent malaria infection during pregnancy by sleeping under mosquito bed-nets, and by taking drugs effective against malaria throughout pregnancy as chemoprevention.

This Cochrane Review looked at all drug regimens compared to placebo. The review authors sought to summarise and quantify the overall effects of chemoprevention. Seventeen trials were included, all conducted between 1957 and 2008, and all but two in countries of Africa.

For women in their first or second pregnancy, malaria chemoprevention prevents moderate to severe anaemia (high quality evidence); and prevents malaria parasites being detected in the blood (high quality evidence). It may also prevent malaria illness. We don't know if it prevents maternal deaths, as this would require very large studies to detect an effect.

In their infants, malaria chemoprevention improves the average birthweight (moderate quality evidence), and reduces the number of low birthweight infants (moderate quality evidence). We are not sure if chemoprevention reduces mortality of babies in the first week, month and year, as again studies would need to be very large to show these effects.

Effet de la prise courante de médicaments antipaludéens pour prévenir le paludisme pendant la grossesse

La grossesse augmente le risque de paludisme, et avec lui une mauvaise santé pour la mère et l'enfant, en particulier au cours de la première ou deuxième grossesse. Pour cette raison, les femmes sont encouragées à tenter de prévenir l'infection paludéenne pendant la grossesse en dormant sous une moustiquaire et en prenant des médicaments efficaces contre le paludisme pendant la grossesse à titre de chimioprévention.

Cette revue Cochrane a examiné tous les schémas thérapeutiques par rapport à un placebo. Les auteurs de l'analyse ont cherché à résumer et quantifier les effets globaux de la chimioprévention. Dix-sept essais ont été inclus, tous menés entre 1957 et 2008, et tous sauf deux dans des pays d'Afrique.

Pour les femmes en cours de première ou deuxième grossesse, la chimioprévention du paludisme empêche l'anémie modérée à sévère (preuves de haute qualité) ainsi que la détection du parasite causant le paludisme dans le sang (preuves de haute qualité). Elle peut également prévenir l'apparition du paludisme. Nous ne savons pas si elle empêche les décès maternels, car il faudrait de très grandes études pour détecter un effet sur ce paramètre.

Chez les nourrissons de ces femmes, la chimioprévention du paludisme améliore le poids de naissance moyen (preuves de qualité moyenne) et réduit le nombre de nourrissons hypotrophiques à la naissance (preuves de qualité moyenne). Nous ne sommes pas certains que la chimioprévention réduise la mortalité infantile au cours de la première semaine, du premier mois et de la première année, car il faudrait, ici aussi, des études très vastes pour démontrer un tel effet.

Citation: Radeva-Petrova D, Kayentao K, ter Kuile FO, Sinclair D, Garner P. Drugs for preventing malaria in pregnant women in endemic areas: any drug regimen versus placebo or no treatment. Cochrane Database of Systematic Reviews 2014, Issue 10. Art. No.: CD000169. DOI: 10.1002/14651858.CD000169.pub3. http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD000169.pub3/epdf

Centre pour le Développement des Bonnes Pratiques en Santé

Tél. +237 242 081 919
Email: camer.cdbpsh@gmail.com
Site web: www.cdbph.org
Observatoire du Médicament (OdM) au Cameroun : www.newsinhealth.cm
Cameroun, Yaoundé Avenue Henry Dunant – Messa