Reviewer's report

Title: Irrational use of antimalarial drugs in rural areas of eastern Pakistan: A random field study

Version: 4 Date: 13 March 2012

Reviewer: Tido von Schoen-Angerer

Reviewer's report:

The manuscript has been improved along most of the comments. Further language editing is needed, in particular of the discussion section which needs to improve logical flow, reduce repetition and length.

Minor Essential Revisions
1. Background section: Correct spelling of “Mafloquine” => mefloquine
2. On inappropriate use of antimalarials: “There is a scarcity of published literature on this issue (Haak, 2002)” – this is not quite true and reference certainly outdated for this
3. Blood sampling section: “special emphasis was also given to children aged 5-11 years, who are more vulnerable to the disease” – still not clarified what this means as methodology; delete this or explain
4. Value of drug prices: US$ now included but exchange rate too approximate: For example table 3, 831.00 PKR = 400 USD, while http://www.xe.com/ucc/ converts to = 350 USD. Table 3 also still misses the per unit cost
5. Discussion section still not adequately revised:
   o Should be revised for logical flow, repetition and length. For example, initial paragraphs (until “...resulting in excessive use of antimalarial drugs (Nsimba et.al., 2002).”) are partially redundant or belong in the introduction section.
   o Results (e.g. detailed figures of drug values) don’t need to be repeated from result section.
   o Use of the term “the masses” is derogative and better replaced with the term population.

Discretionary Revisions
1. Abstract conclusion: “...may lead to toxic effects of these drugs among the users.” This is too strong, as most antimalarials well tolerated, suggest “may lead to side effects”
2. Background: Side effects of anti-malarials: limit to those that are clinically apparent or demonstrable by readily available laboratory tests (eliminate language such as “change in lysomotropic effect, change in liver cell pharmacological action, increase in the number of lysosomes in liver cells along with an increase in enzyme autophagy”) – this comment relates to the newly
introduced language

3. Result section: malarial parasite incidence. Change order of sentences in this section: “Total 744 blood samples were collected (496 males, 248 females) and the blood examination rate (BER) of the total study population was 3.18”. should be followed by “The microscopic results showed no malarial parasites in the population sampled and thus malaria Parasite Incidence (PI) during the 11 months study period was zero (Table 1).”, then text section beginning with “Among those who attended the health facility...”. This comment relates to the newly introduced language

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests