Author's response to reviews

Title: A systematic review of effectiveness and safety of different regimens of levonorgestrel oral tablets for emergency contraception

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### Responses to Reviewers

**Reviewer: Norman Goldstuck**

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<tr>
<td><strong>1</strong></td>
<td>In Table 2 we are told that there is a 99% pregnancy prevention by 1.5mg levonorgestrel. This is not true. Many of the women who do not become pregnant would not have become pregnant anyway for various reasons. During the introduction the authors state that one of the outcomes they will assess is &quot;the proportion of pregnancies prevented&quot;. This is then equated with the number of women in the studies who do not become pregnant which is something altogether different which fatally flaws the study. Actually we mentioned this point in table-3 not in table – 2. Moreover, we have written 92.99% not 99%. We also agree that many of the women who do not become pregnant would not have become pregnant anyway for various reasons. We cannot rule out the possibility that prevention of pregnancy may occur by some other natural means rather than effect of drug. This limitation of the studies is included in limitation section.</td>
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<td><strong>2</strong></td>
<td>They fail to separate pharmacological studies (which they report very well) with clinical studies &amp; this leads to examples like Table 1 which makes no sense. In this Table which is difficult to follow because reference numbers are not given to studies we learn that there was a double blind study by Croxatto et al. This was a pharmacological study. There has never been a double blind study to evaluate emergency contraception efficacy. This is why it has taken so long to determine how effective it might be. The study by Tremblay et al was in france not South Africa. It was really difficult for us to differentiate studies as pharmacological or clinical study. We would appreciate, if the respected reviewer would give us valuable suggestion in this regard. We have included reference numbers of the studies in every table. The study of Croxatto et al was double blind study, which was written in their study design section in page 443 in their article. <em>(Contraception 2004, 70:442–450.)</em> The study by Tremblay et al was conducted in Potchefstroom.</td>
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<td>University in South Africa according to their materials and method section in page 328 in their article. <em>(Contraception 2001, 64:327–331.)</em></td>
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<td>3</td>
<td>Although not part of the systematic review no paper on emergency contraception is complete without reference to the work of James Trussell who has shown by reference to day of cycle of unprotected sex that levonorgestrel 1.5mg is 50% effective at best.</td>
<td>We have included the reference in our revised version. <em>(reference number 5)</em></td>
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<td>4</td>
<td>There is no mention of the effect of weight on the efficacy of levonorgestrel. This is very topical as increased BMI rapidly reduces the effect of levonorgestrel.</td>
<td>As most of the studies that we included in this review did not demonstrate much about the effect of body weight on the efficacy of LNG. So, we could not mention this point strongly.</td>
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<td>5</td>
<td>This is a topic in desperate need of a good systematic review but this misses the mark.</td>
<td>We have tried our best to do the work methodically and hope this explains the matter smoothly.</td>
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<td>6</td>
<td>The paper needs to be redone with a clinician with a well defined protocol which should be deposited in PROSPERO before redoing the study</td>
<td>We have consulted with a clinician whose name was acknowledged in Acknowledgement section.</td>
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</table>

**Reviewer : Abdul Mazid**

1. The Authors has clearly stated the objectives of the study.
2. The Review has summarized the pharmacokinetics data of levonorgestrel from different studies which seemed to be good collection and reference for future use of the drugs in pregnancy control.
3. These are some mistakes in spelling and language. Authors are suggested to correct those.

Spelling and language mistakes were reviewed.