Reviewer's report

Title: Sex education in India: exposure and opinions of adolescent students in Mumbai: A cross-sectional survey

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Reviewer: SRIKALA BHARATH

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Review of the Manuscript

Sex Education in India: Exposure and Opinions of Adolescent Students in Mumbai

The article stresses an important factor - need for sex education in schools in India. Authors need to be appreciated for their efforts towards this.

Discretionary Comments:

1. The title needs correction: Urban Mumbai is not India; hence Sex Education in India is misleading.

2. The discussion starts with the Phrase: “This is the first study in India which explores opinions and preferences” – since the questionnaire uses ‘forced choices’ it is actually not a true exploration. Many of the references which the authors have quoted have looked at this issue – probably not as the main area of research or discussion.

3. Though the authors have indicated low rate of refusal it must be remembered that the junior colleges students in India usually follow the instructions of the college authorities without much resistance.

(Major) Mandatory Comments:

1. Article quotes the ban of sex education in schools in 2007 in a country where the prevalence of HIV is high. However it does not delve why the sex education was banned in 2007 in secondary schools – mainly following a Western model with little cultural sensitivity.

2. Authors have focussed only on Contraception and STIs (In fact this is indicated by a phrase in the questionnaire (STI – Infectious disease contracted by having sex). Sex Education is a much wider concept and should not be restricted only to the two issues mentioned above. Authors conclusion that the above two issues constitute knowledge is a reductionist view of sex education. Hence some of the conclusions are overarching.

3. The questionnaire used is very general - actually does not assess what adolescents understand by sex education and what sort of sex education they received in the school and what sort of sex education they prefer to be given.

4. Scrutiny of the descriptives in Table 1 is very informative. First the students have multiple sources of information for STI and contraception. The authors have
focussed on certain differences but not on others. For example they have focussed that female students (72.2%) got information from school in comparison to males (48.5%). There are other differences which have been ignored – many of the female students also indicated getting information from parents and other family members (50.5%) while only 18.1% of males got information from parents or other family members. They have not discussed the lack of differences in other source of information. Statistical Significance needs to be worked out before discussing such frequencies as there may no difference at all except in percentages. The focus on ‘information for females from school’ is probably to highlight how important it is to have formal sex education in schools. But that is a linear way of looking at one’s own data and not looking at the data in it totality.

5. If authors continue to use the same tables, they need to discuss effective methods of imparting sex education in adolescents including schools in India. For example, parents need to be sensitized to discuss issues pertaining to sexual health especially with their adolescent girls (probably mothers) as 50% got information from family members.

6. Table 2 needs to be looked at again. There the gender mentioned is ‘male’. In the discussion it is ‘female’. However the authors themselves have said that the variance was only 9%.

7. As mentioned earlier the preferences of the adolescents (from whom they would prefer the sex education information) need to be viewed with caution as there are ‘forced choices’.

8. Authors also need to comment on the contradictions – most females get information on STI and contraception from family members / school (? Mothers / teachers) many males got the information from friends. But they preferred ‘Doctors’ to provide information. Why – is it because

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

**Quality of written English:** Acceptable

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