Prevalence of Giardia lamblia infection in the city of Riyadh, Saudi Arabia

Sir,

I have read with interest the article of Dr. Al-Tukhi et al. entitled “Prevalence of Giardia lamblia infection in the city of Riyadh, Saudi Arabia.” I fully agree with the authors that water, personal hygiene and sanitation are the main contributing factors in the spread of intestinal parasitic infections and in particular Giardia lamblia infection. However, I found some points that need clarification:

1. Regarding the used technique; formalin ethyl acetate concentration method for detecting Giardia cysts or trophozoites in the stool. It is well known that this concentration procedure is efficient in recovering protozoan cysts and helminth larvae and eggs including oerculated and Schistosoma eggs. Moreover less distortion of protozoan cysts occurs with this technique than with the zinc sulphate method. Thus the used technique is not valid in detecting the trophozoite as mentioned in the methodology of the concerned article.

2. On what basis could the authors classify the study sample into low, middle and high socioeconomic status. I think that their classification was on the geographical location rather than the standard of living of the population. However the classification according to income per se is not the only factor used for determining the socioeconomic status.

3. The authors mentioned an excellent explanation when discussing the higher prevalence of adult Saudi females than males (50.9% and 11.8%, respectively). However, I found the explanation of the higher positivity rate of the non-Saudi males (15%) than of the non-Saudi females (6%) needs further clarification since the mentioned factors such as personal hygiene, improper washing of raw fruits and vegetables are common factors for both sexes.

4. The mentioned positivity rates among Saudi and non-Saudi males and females are not clear and should be written in a table form.

5. I think that there is typing mistakes in Table 3 regarding the total of males and females.

Reply

Sir,

Thank you for your letter dated 10 November 1996. I have seen the comments of Dr. Hassan Bassiouny of the High Institute of Public Health, Alexandria University regarding our paper: (Prevalence of Giardia lamblia infection in the city of Riyadh, Saudi Arabia). I want to clarify some points for Dr. Bassiouny:


2. The study sample was designed on several basis: (a) the geographical locations and (b) questionnaires which explain full details about the study subjects including water supplies, use of latrines, number of family living in the same house and monthly income.

3. Higher positivity rate in non-Saudi males vs females (15%, 6%) is mainly due to less care being taken by non-Saudi bachelors. Some of them live singly or in groups and food handling is likely to be less hygienic especially in group eating. It has been know for expatriates to return from home vacation with giardiasis and other parasitic disease infections.

4. The positivity rate among males and females of all nationalities is explained as 22.5% in males and 48.5 in females where the positive cases are 104 and 67 among the 462 males and 138 female subjects.

5. Thank you for drawing our attention to the
printing mistake in Table 3. The total number for females should read 139 and for males 461. The authors thank Dr. Bassiouny for his valuable comments.

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References