Reviewer's report

Title: Antibiotic Use in Paediatric Upper Respiratory Tract Infections: A Cross-sectional Study of Knowledge, Beliefs and Practices of Children's Caregivers in Trinidad and Tobago, West Indies

Version: 1 Date: 19 August 2004

Reviewer: Pauline Jolly

Reviewer’s report:

General

Overall, this is an important topic and the paper could be published provided the authors improve the quality of the manuscript. Although the text does not read well in certain places, the discussion and conclusion seem to be well written.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Antibiotic Knowledge Scale, Statistical Analysis, Tables and Results

Under results the authors state that the median antibiotic knowledge score was used to separate respondents into low antibiotic knowledge and high antibiotic knowledge groups. They state that 249 (60%) caregivers had a median score at or above 12 and 168 had a score of less than 12. The median is the middle measurement in a set of data. Therefore, there should be as many observations larger than the median as there are smaller. The data should be reanalyzed using the correct median score.

Although the authors make reference to a previous paper that they published they should have presented information on the questionnaire used to generate the data presented in this paper. What was the design? Was it piloted? What was the maximum possible score for the antibiotic knowledge items? How many items were on the questionnaire?

The authors should decide on the number of common drugs that were included on the antibiotic knowledge test. On page 5 under Analysis, sentence two reads” ….nine common antibiotics were included” and sentence three states that eight common drugs were included. The last sentence under Analysis reads” Categorical variables were compared using the chi-square (x2-test). The authors should state what was determined and which variables were included.

Results

The question “Are antibiotics safe” is ambiguous. This may explain why only 49 caregivers gave the response expected by the authors. This question should probably be thrown out. On page 6, line 4, the authors incorrectly presented the number who gave the “correct” response as 59 instead of 49 caregivers.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
Abstract. The abstract is too wordy and would read better if shortened. For example, the sentence which reads “Several caregivers (39%-89%) had inappropriate beliefs about antibiotics” should be dropped. This sentence is vague and the information is not evident from the data presented in the Tables. There is no explanation of where or how people who self-treat with antibiotics get the antibiotics.

Introduction. The introduction needs to be revised and should highlight the reason why the study was conducted, i.e. what is unique about what the authors are trying to present.

Methods. Too much detailed information is provided under Study Setting. For example, the information on the counties and municipalities is unnecessary.

Results. Did the authors ask which antibiotics were administered to the children and the age of each child?
How many children suffered allergic reactions or adverse side-effects as a result of self-administration of antibiotics?
Explain why a higher proportion of caregivers with low AKS would demand antibiotic prescriptions compared with a lower proportion of caregivers with high AKS score.
Explain where caregivers are getting the antibiotics that they use for self-treatment. Did the authors ask the caregivers this question?
What is the definition of compliance as it is presented in the results?
How were participants informed about antibiotics?
What role did urban and rural residence play?

Tables. The Tables should be formatted for journal publication, e.g. remove all unnecessary horizontal and vertical lines. Keep the format of the Table headings consistent and use the same font. The numbers in Table 2 do not add up. Remove NS from Tables. Be consistent in the way that statistically significant values are identified on the Tables. This is done in a different way on each Table. Table 4 is not understandable as presented and is not referred to in the text. Paragraph 4 on page 6 which presents information on URTI episodes in children is confusing.

References. The presentation of the references is not consistent. References should consistently conform to the Journal format.

Discretionary Revisions (which the author can choose to ignore)