



SDI Review Form 1.6

PART 1:

Journal Name:	International Journal of TROPICAL DISEASE & Health
Manuscript Number:	MS: 2012 IJTDH 2662
Title of the Manuscript:	Disease severity and common etiology of diarrhoea among children under-five in Mirzapur, rural Bangladesh.

General guideline for Peer Review process is available in this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

- This form has total 9 parts. Kindly note that you should use all the parts of this review form.



SDI Review Form 1.6

PART 2: Review Comments

	Reviewer's comment	Author's comment <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<u>Compulsory</u> REVISION comments	Overall: This paper presents much needed data with regard to diarrhea etiology among moderate to severe diarrhea. The authors present important data but need additional details, improvements in analysis, and overall the manuscript needs editorial work. Abstract: Much in need of editorial work. Sentence structures aren't great. The numbers in the methods should be in the results section. In lieu of those numbers the methods for recruiting children should be in the methods (i.e. not the numbers actually recruited). Introduction: 1. The references and numbers cited in the into are out of date. There are new estimates for 2011 which should be used (diarrhea deaths @ 712,000 not 10.6 million) and we are not at 18% anymore. Similarly, Fischer Walker et al published a review on diarrhea incidence in 2012 which is much more up to date than 2003 and would argue against your final sentence with regard to no time trends. Rarely do I see data on overcrowding as a diarrhea risk factor – I get the theory and don't disagree on that level, but do we really have data to support such a	Many thanks for your valuable comments and suggestions. Necessary editing has been done. Numbers have been included in the result section instead of Method section where we have indicated method for recruiting children. Many thanks for your valuable information and suggestions; all information has been added as suggested. Many thanks for these valuable comments. Yongsi HB (Int J Environ Res Public Health. 2008 Dec;5(4):213-29) has reported that higher prevalence of diarrhoea among overcrowded (78.4%) than in less crowded residential settlement (21.5%). This reference



SDI Review Form 1.6

	statement? 2. In paragraph 2, country data from 2008 is no longer acceptable. Can use 2010 estimate published by Li Liu et al Methods: 1. Missing a section describing the study population and inclusion/exclusion criteria. 2. I disagree with including 1 bloody stool in the moderate /severe case definition. Understood if this is in the past and case definitions cannot be changed but for presentation purposes, the authors should justify why a single report of	has also been cited (ref. no.-5). However, we apologize for the reference that was not correctly cited and necessary correction has been done. Many thanks for your valuable comment and suggestion. We have incorporated the data that has been reported by Li Liu <i>et. al.</i> at the beginning of the introduction (ref no.-1). However, we are interested to present data to let the reders know briefly about the present status. All the information were extracted from the data archive of Diarrheal Disease Surveillance System (DDSS) of Dhaka Hospital of icddr,b. it is one of the largest and longest DDSS data base that has been developed since 1979. Many thanks for your valuable suggestions; all information have been updated accordingly. Many thanks. A separated paragraph has been incorporated in the method section “2.2 Study population and inclusion criteria” (page-4). Many thanks for this valuable and important query. A definition was set prior to begening of enrolment. A very recent study named as Global Enteric Multicenter Study (GEMS)
--	---	---



SDI Review Form 1.6

	blood in the stool qualifies as moderate diarrhea at the same level as a child with severe dehydration. 3. Authors should be clear throughout that while these are “mild”, they are children seeking care at a tertiary level facility so they are not the same as acute cases of diarrhea in the community.	also considered dysentery. Mirzapur, Bangladesh is one of it’s seven sites among south-east Asia and Sub-Saharan Africa. Manuscripts have already been published in Clinical Infectious Disease journal and cited in the text (ref#22, 23, 24). Usually <i>Shigella</i> is the predominant pathogen that causes dysentery. The other pathogen is <i>Entameba histolytica</i> the protozoa which also presented with bloody stool. Both of them cause significant breach in large gut mucosa resulting in malabsorption, anorexia as well as impaired immune response. They also have adverse clinical consequences including malnutrition. Many thanks for your comments. We have the study participants were residence of the Demographic Surveillance System (DSS) area. Under the DSS area; vital information of each household are updated thrice a year and Data Collectors convey the messages to seek care in the Kumudini Hoasital once their kid develop diarrhoea. Kumudini Hospital is one of the largest hospital in rural Bangladesh that began back in 1938. It has a separate diarrhoea treatment facility with in-patient as well as outpatient department. The treatment cost for getting consultation is very minimal (US\$ 0.30). We believe that there is every possibility of not to seek care in this facility due to diarrhoea as there is emphasis on use of
--	--	--



SDI Review Form 1.6

	4. Where is the description of the ethical /IRB process and consent process? Results: 1. Avoid using “cause”. Just because a pathogen is found in a stool does not mean it “caused” the diarrhea. Many time multiple pathogens are found. 2. Table 1. Should also present mixed infections and number where no pathogen was found. 3. The results for MDS need to do more to qualify the children who presented with blood in the stool. It is not correct to put these kids in the same category and children with severe dehydration. Suggestion would be to do the analysis with children stratified by blood + one other sign of MDS or blood alone so the reader understands what proportion of cases are have additional signs/symptoms of severe disease. The text and tables should take this into	Oral Rehydration Salt Solution at home, our observation is that rural mothers in Mirzapur seek care in the Kumudini Hospital even with single episode of abnormal loose or watery stool. Many thanks for your query. The description has already been added at the end of the Discussions and before Reference. Moreover, consent process has been incorporated (page 12). Many thanks. Necessary correction has been done. Many thanks for this valuable suggestion. Two additional Columns (mixed infections and no pathogen) have been added (now its table#2). Many thanks for your valuable comments and suggestions. We have already submitted another manuscript where we have described dysentery cases and compared them with non-dysentery cases. Few findings are (<i>Shigella</i> was isolated from 32% dysentery cases)
--	--	--



SDI Review Form 1.6

	account. 4. Again, language around mild disease should include the word hospitalized or some type of further explanation so the reader understand if just looking at a table that in fact ALL of this children were seeking care at a hospital. 5. Table 4 is not useful in its present format. In the text on page 6 the authors write that there were no differences between MD and MDS for any of the indicators. In that case, remove them from the table completely. Authors should consider providing a short table to describe the study population, but this does not need to be split by MD and MDS if there were no difference. Can be combined and the text can say no differences. This should be at the start of the results to describe study population. Also need to describe how some of these things were measured (i.e. handwashing? Etc.) 6. If table 4 is then meant to present clinical signs and symptoms, in its present format, it is still not terribly useful. The analysis would be strengthened if in lieu of 2 X 2 comparisons of MDS and then etiology, the presence of a	Necessary correction has been done. Many thanks for your comment and suggestion. Data in Table 4 has been splitted accordingly (now table 1 and 4) and necessary descriptions have been made at the beginning of the Result section. At the same time the clinical features have been described in a separate table and descriptions have been incorporated accordingly. Moreover, measurement of hand washing with soap was done by asking questions as well as observing them by the research assistants particularly presence of soap near the washing area such as tubewell or toilet. Many thanks for your comments and suggestions. We have followed your suggestions accordingly and necessary
--	--	--



SDI Review Form 1.6

	pathogen were considere an outcome variable in a regression and signs and symptoms tested as covariates. The current “laundry list” of signs and symptoms does not help the reader understand real associations. Discussion: 1. Line 240 needs careful wording to clarify that ALL of these kids were still at a hospital so mild disease is still bad enough to infact be seeking care. 2. Line 244-47 does not make sense. 3. Second full paragraph needs to address previous point with regard to what proportion of kids with blood in the still actually signs/symptoms of severe disease have. 4. I disagree with the end of the limitations setting – this study did not look for all pathogens and that is a limitation. Please do not add that it captured the diversity of pathogens, as it did not. It captured “some”	modifications have been done. Moreover, a regression analysis (new table 4) has been performed and findings have been incorporated in the result and discussion sections of the text. Analytical method has also been added in the data analysis section (page 5). Many thanks. Necessary correction has been done. Many thanks. Necessary correction has been done. Many thanks. Necessary correction has been incorporated. Many thanks. Necessary correction has been done.
--	--	---



SDI Review Form 1.6

Minor REVISION comments	Intro: Avoid the term definitive – 1 study is not definitive. Discussion: needs a heading	Many thanks. A heading “Discussion” has been added and necessary correction have been incorporated.
Optional/General comments		

There are some ethical issue: Authors failed to describe the IRB / ethical procedures of this study.