Reviewer's report

Title: A mediation approach to understanding socio-economic inequalities in curative health-seeking for children in Egypt

Version: 1
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Reviewer: Salvatore Italia

Reviewer's report:

This article deals with socioeconomic predictors of health-seeking behaviour for children in Egypt. From Public Health view, the topic is of relevance, and the study is based on data from a large survey that was conducted in 2008. However, since 2008, the Egyptian society may have experienced major changes (in 2011, the Arab Spring started in Egypt) and the results may not exactly reflect the current situation.

The research question is well defined, the methods are described in detail, the data are sound. The whole manuscript is written well, and all tables/figures were thoroughly designed.

I have only some discretionary revisions (DR) and some minor essential revisions (MER):

Background
MER Fifth paragraph (Page 5 Line 20)
“… 7.8% of children were reported to have had ARI and 8.5% diarrhea.” I suppose this should be 7.6% and 8.4%, respectively, since these values are given in the abstract and in table 2

Methods
DR First paragraph (Page 6 Line 15)
You mention that more than one child per family were included in your analysis, if there lived 2 or more children in the households. According to table 1, 60.5% of the families had 2, 3, or 4 children. I am not sure, whether these observations are really independent (I suppose they are not), and whether it would have been better to consider only 1 child per family (e.g., only the youngest of those for whom diarrhea and/or ARI was reported), since the mothers’ behaviour in case of illness may be very similar for all her children. On the other hand, only a few families may have reported diarrhea/ARI for more than one child within the observation period of 2 weeks. You may just report, how many mothers reported diarrhea and/or ARI for 2 or more of their children. If this number should be considerable, you may further conduct your analysis by including only one child per family, and compare the findings with the results from the current manuscript.

DR Second paragraph (Page 6 Line 17)
Measure of SEP: The quoted source (Reference 14) explains which variables were used for constructing socio-cultural capital and economic capital, but not how both variables are calculated. Evidently, both variables can also have negative values (e.g., in table 1, the mean for children with diarrhea and ARI). You could e.g., add a reference that explains how the variables are calculated.

MER Third paragraph (Page 7 Lines 3-5)
“The first step in assessing health-seeking behaviours for curative care to analyse the reporting of diarrhea and ARI in the two-week period preceding the survey among children under-five years (0-59 months old).”
Is there a word missing in this sentence, e.g., “was”? # … was to analyse the reporting….

Results
MER Second paragraph (Page 10 Lines 19/20)
“Among the 1,952 children for whom one or more illness was reported, 28.7% had only fever. Among the sample of 1,390 children with diarrhea or ARI….”
I suppose, 562 had only fever (1,952-1,390), thus 562/1952 = 28.79% # better round it to 28.8%.

MER Paragraph ARI health-seeking (Page 12 Line 25/26)
“socio-cultural capital was marginally associated with lower odds of reporting ARI (p=0.066).”
This p-Value is reported with 0.061 in Table 4. Please check/correct.

Discussion
MER Page 15 Line 7
“… to determine whether this is difference in period prevalence is a result …” # supposably, one “is” should be deleted.

DR
I would suggest to add in the limitations that the findings are based on data from 2008, and that owing to the political events/changes the prevalence rates/predictors may vary now.

Table 2 (DR)
I noticed that the item for whether treatment was sought is named “sought treatment” for diarrhea (table row Nr 2) and “received treatment” for ARI (Table row Nr 6). It might be better to use the same term for both diseases.
Reference list (MER)
I noticed that some Journals are abbreviated (e.g., Nr 3, Nr 22 while for other references the journal is given with the full name (e.g., Nr 4, Nr 7).
The journal is given with “Lancet” in Ref 28, and with “The Lancet” in Ref 8.
Reference 9: please check whether the link still works. I tried, but did not get to the page.
Reference 24: in pubmed, the first author is given with Walker CL. Please check.
Reference 26: I found 7 authors in pubmed, but in the manuscript only 2 authors are mentioned. Please check.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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

Declaration of competing interests:
I declare that I have no competing interests