

## Background

It is well-documented that diarrhea is a common complication of measles infection in the acute phase of the disease, the 5-week period starting 1 week before rash onset and ending 4 weeks after rash onset [1-12]. However, it is unclear if the increased risk of diarrhea extends longer than 1 month after rash onset. Shahid et al., found in a study in Bangladesh, that children were at increased risk of dysentery for 5 months following measles infection [13]. This led Feachem et al. to speculate that there may be a "post-measles diarrhea" phenomenon that occurs in the 4–26 weeks following measles rash onset [14]. It would appear to support their hypothesis that measles vaccine trials have shown decreases in all-cause mortality

## Results

Literature search

A total of 732 documents were identified in the database search. Seventy-one abstracts met the initial screening criteria, and those documents were retrieved for full text review. Twelve additional documents were identified by review of the references of the documents retrieved in the initial search and retrieved for full-text review. Six articles representing five unique studies were deemed authors found that the increased risk of diarrhea caused by measles seems to be limited to the period immediately following rash onset. However, the authors did not present results for the period 8-

They followed the cohort and additional severe cases for 12 months. There was no significant difference in mortality between measles cases and non-measles cases observed at any of the time points during follow-up. At 1 month of follow-up and 6 months of follow-up, there was a significantly higher rate of gastroenteritis among severe cases of measles (7/22, 32%), compared to uncomplicated cases of measles (4/42, 9.5%). It is not stated by the authors what proportion of the gastroenteritis cases experienced diarrhea and how many experienced only vomiting or other gastrointestinal symptoms. There was no significant difference in incidence of gastroenteritis at 12 months of follow-up between the groups, and there was no significant difference in mortality at any time point during followup. Only three deaths were observed in the cohort and severe cases during 12 months of follow-up. Two were in the severe measles group by the 1-month follow-up visit and one between the 1-month and 6-month follow up visits. One death occurred in the uncomplicated mea-

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Published: 7 November 2017

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