

Assessing the Impact of Cultural Beliefs on the Use of Evidence-Based Treatment for Diarrhea in Developing Countries: A Systematic Review

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ABSTRACT

Diarrhea is the fourth leading cause of children under five worldwide. Recommendations for diarrhea treatment include oral rehydration therapy, continued feeding, zinc supplementation, and antibiotic use if indicated. The use of these therapies is lower than expected in developing countries. This study aims to determine how cultural beliefs impact the use of evidence-based approaches for diarrhea treatment, specifically in developing countries. A systematic review of primary research articles was done to assess knowledge of and attitudes towards evidence-based treatments, analyze care-seeking behaviors, and identify beliefs attached to treatment practices. Most cultural beliefs fall into the following themes: misconceptions about evidence-based treatments; feeding practices; home remedies and herbal medicines; inappropriate use of medications; and traditional healers and spiritual beliefs. The results show the possibility for working with traditional healers and the local population to gather more data about beliefs and practices. This information can be used to develop culturally sensitive treatment programs that can operate within the framework of local beliefs and practices.

INTRODUCTION

Diarrhea is the fourth leading cause of death in children under five worldwide, with 80% of deaths occurring in Africa and South Asia. If the water lost through the stool is not replenished, this can lead to dehydration, which is the most common cause of death. Oral rehydration salts – the gold standard for diarrhea treatment – are encouraged for fluid replenishment and are widely available in packets that can be mixed with water. If oral rehydration salts are not available, fluid solutions can be made using low cost ingredients. Children with diarrhea should continue to receive regular meals to maintain their nutritional status and improve chances of survival. Zinc tablets allow for proper immune system function and can improve the effectiveness of oral rehydration salts. Despite the proven interventions to treat diarrhea, morbidity and mortality due to this condition is still high. As of 2015, only 49% of children under five with diarrhea are receiving oral rehydration therapy or recommended home fluids. Non evidence-based therapies, such as traditional medicines and herbal medicines, are used in some communities. To increase coverage of evidence-based diarrhea treatment, WHO and UNICEF aim to change behaviors through community involvement, education, and health-promotion activities. In order to modify community behaviors, it is essential to understand community beliefs in areas with high rates of diarrhea and diarrhea-related deaths.

METHODS

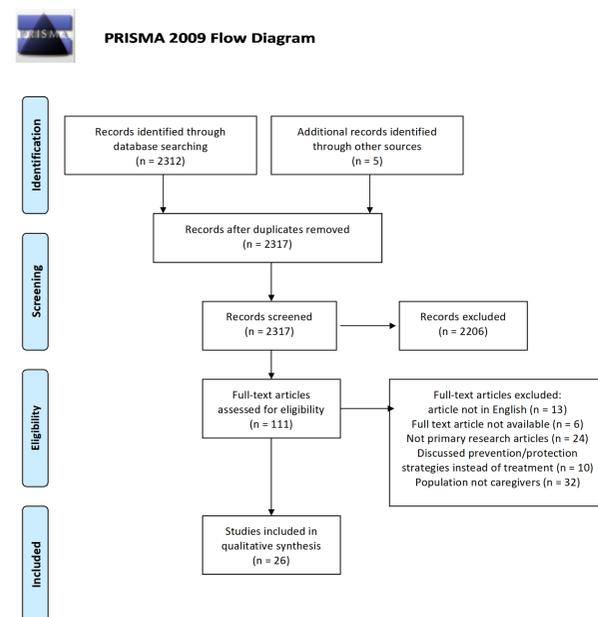


Figure 1: PRISMA flow diagram showing process for article selection for systematic review.

Databases used: PubMed, Embase, Web of Science, Scopus, Anthropology Plus

Keywords: diarrhea/diarrhoea, developing countries, treatment, beliefs, attitudes, knowledge, practices, culture, healers, fluid therapy, ORT, ORS, zinc

Screening criteria: title and abstract

Data analysis: country/region of study, publication year, type of study, population studied, narrative description of beliefs that caregivers held

DISCUSSION

Analysis of the data showed commonalities between countries, with beliefs falling into five themes. Misconceptions about evidence-based treatments, feeding practices, home remedies and herbal medicines, and inappropriate medication use can be attributed to lack of knowledge. In these situations, educational interventions for caregivers and medication providers may be useful. With respect to spiritual beliefs and use of traditional healers, education about evidence-based treatments may be futile. Caregivers who believed that diarrhea was caused by supernatural forces believed that only a traditional or faith-based healer could cure the illness. Working alongside traditional healers may help in connecting with the local community and facilitating the transfer of knowledge in a manner that is accepted by caregivers. Seeing traditional healers as opportunities for collaboration rather than opposing forces in the treatment of diarrhea may be the most effective approach to overcome cultural barriers to care. Limitations to this study include the lack of substantial public health data from developing countries and the small catalog of articles that address cultural beliefs and barriers to care.

RESULTS

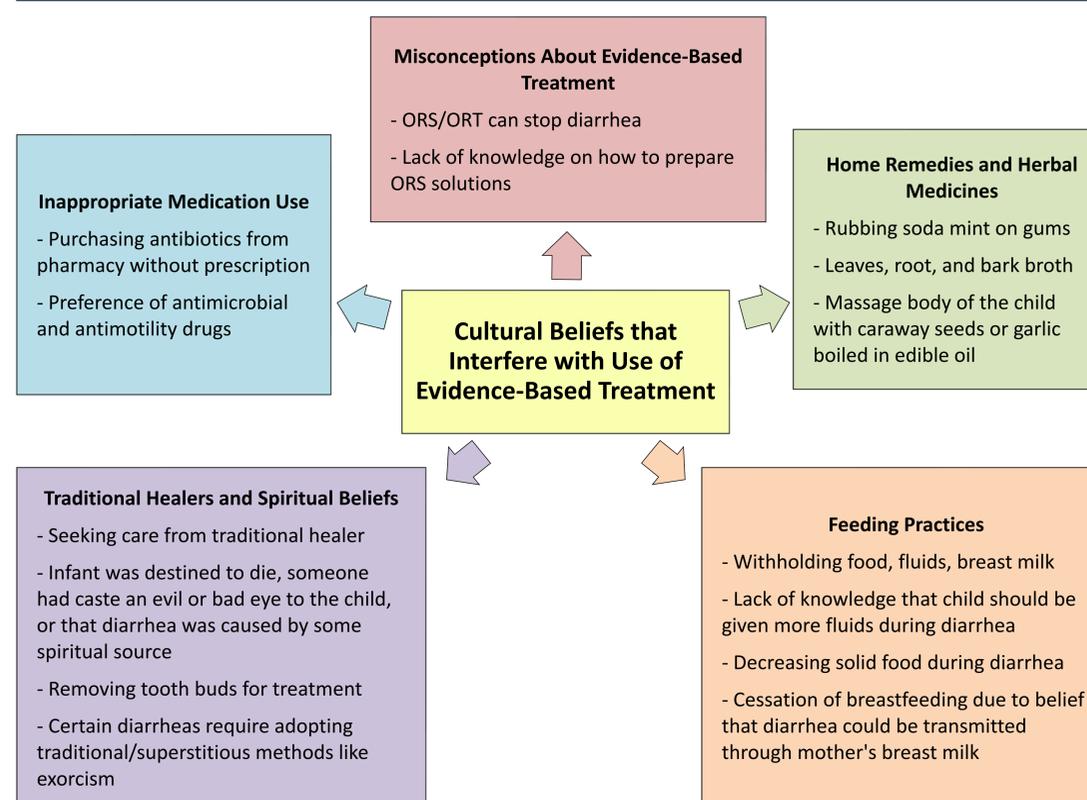


Figure 2: Five themes identified from analysis of 26 primary research articles regarding diarrhea treatment.

CONCLUSION

Diarrhea is a large cause of under-five mortality worldwide. The WHO has recommended the use of oral rehydration salts, continued feeding, zinc tablets, and antibiotics in the case of dysentery, but the use of these evidence-based treatments is still low. A systematic review of articles reveals cultural beliefs that interfere with the use of evidence-based approaches, relating to misconceptions about evidence-based treatments; feeding practices; home remedies and herbal medicines; inappropriate medication use; and traditional healers and spiritual beliefs. Many of these beliefs can be corrected through educational interventions. Spiritual beliefs are more difficult to overcome and more research is needed in this area. Working with traditional and spiritual healers can help develop culturally sensitive interventions that can operate smoothly in the context of local beliefs and practices.

ACKNOWLEDGMENTS

I would like to thank my mentor, Dr. Patrick Connell, for his guidance in developing the research question and completing the systematic review. I would also like to thank Dr. David Beyda, Director of the Global Health Program, and Dr. Matthew McEchron, Director of Scholarly Projects, for their assistance throughout the course of this project.