

SYSTEMATIC REVIEW

Interventional Study on Improvement of Mothers Knowledge Regarding Danger Signs In Children Under-Five Years of Age: A Systematic Review of Literature

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ABSTRACT

Introduction: To make the world better, in 2015, 195 nations agreed with United Nations to accomplish few goals – Sustainable Development Goals. 3rd Goal is Good Health & Wellbeing. To achieve this good health and wellbeing, the UN set few targets -one of them is ending all preventable death under five years of age. To keep preventable death low among those under five years of age, mother's need to make aware in the simplest way. **Methods:** A systematic review of literature and database searched with relevant keywords. Total 234 studies spanning over 2005-2019 has been reviewed. Analyzed from reviewed study it's pertinent that mothers/caregivers need to make aware regarding danger signs in children under five years to keep morbidity and mortality low in this age group. **Results:** In searched 234 studies only 2 found interventional in design that too not on preventable danger signs, others are descriptive. **Conclusion:** Delay in the identification of danger signs in children and subsequent delay in decision making to seek treatment can make preventable disease fatal. So need more interventional studies to make mothers aware.

Keywords: Danger signs, mothers knowledge, interventional study, Under-five children

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INTRODUCTION

To achieve SDG 3 we need to work together as no institution can take total care of us unless and until we make ourselves aware. Studies have shown that mortality and morbidity are high among the under-five age group and causes of under-five mortality are to some extent preventable. In 2015, about half of the global under-five deaths occurred in sub-Saharan Africa & 32 % in South Asia. Almost 40% of under-five death occurred in 2015 is due to infectious diseases & conditions such as pneumonia, diarrhea, malaria, meningitis, tetanus, HIV & measles (1). Mentioned diseases are all most preventable and considered as danger signs for children under five years of age. It was shown that roughly 45 per cent of all deaths in children under the age of five occur during the newborn period. Globally, more than half of the under-five deaths are attributable to under-nutrition (2). Among other causes inability to recognize danger signs is one of them (3). Any delay in identification of

danger signs or initiation of treatment of danger signs means the child is more likely to die from the illness. The objectives of this systematic review are to find out mothers knowledge on danger signs in children under five years of age and to find out the interventional study on improvement of mother's knowledge regarding such danger.

MATERIALS AND METHODS

The researcher reviewed 234 studies spanning over 15 years (2005-2019). A systematic review is done, PRISMA guidelines followed and narrative description analyzed. The inclusion criterias include interventional research design, sample are mother's of under-five children, the study focuses on danger signs of children, mothers knowledge on danger signs in children, published original article, articles are written in English. The exclusion criterias include descriptive research design, articles only focused on neonatal danger signs, mothers knowledge on danger signs in children under-five years of age, context related to the African country. Electronic database consisting of PubMed, Scopus, ProQuest, Cochrane and Google scholar were used as source of search.

The search strategy started by using keywords (danger signs in children, mother’s knowledge on danger signs, interventional study on mothers awareness about danger signs in children etc) and got almost 900 articles in different databases. Then we limit publication year from 2005-2019 (published in last 15 years), so that the focus and build literature would be based on recent information. The search result comes down to 234. In ProQuest database differently searched and the result shows 113. Then searched 30 from 113, primarily selected 16 relevant to the topic. In PubMed, 10 out of 99 were relevant. In Google Scholar 16 out of 20 searched articles, were found to be primarily relevant. Then the strategy for literature review started with Boolean operators, kept the limit to 75 relevant articles (4,5).

The article was selected by using a PRISMA diagram in 4 stages (Figure 1). In the first stage identified articles from all search engines. The second stage involved screening, based on title and abstract. After that those who met inclusion criteria were included. In the third stage, eligibility was selected based on articles with full text and original. The fourth and final stage article that was relevant to the topic was reviewed systematically. All searched articles were exported to Zotero for easy evaluation and bibliography management. After that

data were extracted and obtained from the various studies.

RESULTS

The data was extracted from each of the articles as per PRISMA guidelines. All articles were reviewed well; experts felt the need to make mothers aware regarding danger signs in children under five years of age. All articles show the importance of knowledge on danger signs to lessen under-five morbidity to some extent.

DISCUSSION

Healthy home practices and illness care become increasingly important as the newborn grows into a youngster. Children and newborns are affected by a lack of or inadequate quality of care. To raise awareness among caregivers about recognizing dangerous symptoms in children under the age of five and to facilitate timely referral.

The first five years constitute the foundations of the child’s physical, mental growth and development. The child needs regular health supervision throughout infancy and for several years afterwards (7). It also found from another study that awareness regarding under five danger signs are more among higher educated mothers (8).

So at home, if proper identification of danger signs is not done then health facility-related delays can contribute to subsequent delays of treatment initiation and newborn deaths. These delays, particularly at the domestic level, are critical because delays in identifying the danger indications of infant diseases lead to interruptions at other levels, including the commencement of proper medication and/or transfer to a more equipped and trained clinic. As a result, it is important to make changes to the mother’s awareness regarding danger signs in children less than five years of age. This review sought to determine the mother’s knowledge on recognized danger signs & the process of improvement of knowledge (9).

This systematic review discusses the awareness of mothers regarding danger signs in children under five years of age is very much necessary. Out of 234 articles, 232 are descriptive. That description is based on neonatal danger signs. Though neonate is a part of children under five years of age, still reviewer felt the need to include a total under five years, not a section of it.

CONCLUSION

All searched articles are descriptive. To achieve SDG 3 we need to focus on the preventive aspect. For that need more interventional study to make mothers aware

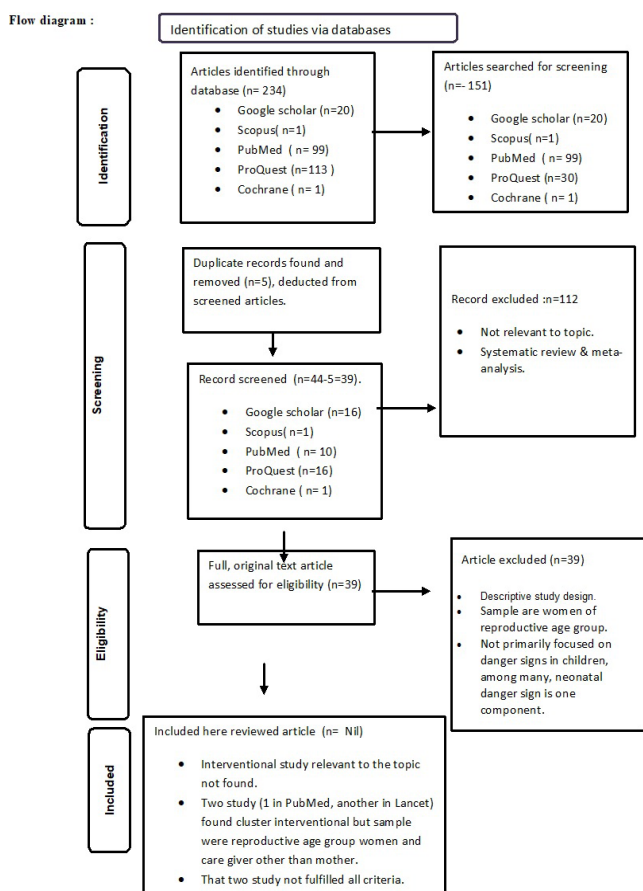


Figure 1: Flow diagram of the systematic review process following PRISMA

of danger signs in children, if mothers are aware of it they will take the proper decision regarding treatment seeking.

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