ABSTRACT

Background: Early childhood is a sensitive period of child's development which makes foundation for well-being and learning of children throughout their entire life. Acute respiratory infection constitutes a significant global health burden particularly among under five children and cause of sickness and deaths in this vulnerable age group.

Objectives: To explore barriers related to prevention and management of acute respiratory infection in under five children. To determine the effectiveness of need based interventional package on knowledge, practice of mothers regarding prevention and management of acute respiratory infection in under five children and frequency and number of ARI episodes in under five children.

Methods: Mixed method approach was used. In phase I, exploratory design was used to explore barriers related to prevention and management of ARI among mothers of under five children. In Phase II, randomized controlled design was adopted. Multi stage cluster random sampling technique was adopted to select villages. Two randomly selected village were allocated to experimental and control group. Screening of children was done with structured ARI screening tool. Semi structured questionnaire was used to assess risk factors of ARI. Mother's knowledge and practice, frequency of symptoms and number of ARI episodes in under five children were assessed at baseline. Need based intervention package was administered to experimental group. Post test was conducted at 1st month, 3rd months and 6 months after implementation of intervention.

Results: Findings of study emerged main themes related to barriers such as inefficient parental skill of care, low self-efficacy, cultural beliefs, family environment and time

constraint. The risk factors of ARI identified were preterm birth of child (25.81%), low birth weight baby (30.23%), first birth order of child (27.67%), overcrowding in the house (35.34%), Indoor smoking (38.13%), use of smoky fuel (07.44%), house located nearby dusty main road (34.18%), open drainage system (27.90%), family history of respiratory infection in last six months (03.72%). The post-test knowledge and practice score of mothers increased significantly at 1st month, 3rd months and 6th months. The significant decrease in percentage of presence of ARI at 1st, 3rd and 6 months was observed in experimental group after intervention than in control group.

Conclusion: It is concluded that need based intervention package was effective in enhancing mother's knowledge and practice related to prevention and management of ARI and reducing frequency and episodes of ARI in children

Keywords: *Need based intervention package, Acute respiratory infection, frequency and episodes of ARI, Under five children.*