

CHAPTER V

DISCUSSION

In this chapter, results of present study are discussed in relation to the findings from other studies

Barriers related to prevention and home management of acute respiratory infection among mothers of under five children

Present study reported that lack of awareness, following old traditional practices for management of ARI, low parental self-efficacy, family issues like dependent on family decision for child health, lack of cooperation from spouse/family at home in child rearing and time constraints were barriers in prevention and home management of ARI in children below age of five years were reported by mothers.

Similar findings were identified by Thi et al. (2023) revealed various barriers expressed by mothers in caring of child with ARI viz. psychological factors, difficulty in daily care activities and lack of resources. They also reported that lack of confidence, unable to recognize early symptoms and lack of education limited mother's ability to take care of her child in proper way.⁹³

Further similar results by Chand et al. (2022) in which mothers reported few barriers for prevention of ARI like poor traditional support and norms, poor accessibility to health care as they live in rural areas.⁹⁴

Findings of present study were supported by result obtained by Thaw et al. (2019) in that caregiver's perception was at moderate level and preventive behavior among caregivers were at poor level during sickness of child with ARI.⁹⁵

Research done by Rashid et al. (2001) in which mothers stated that humoral imbalances, supernatural causes and negligence were responsible for respiratory illness among under five children. They also expressed the importance of family role in decision making for care of child and had said that they relied more on home care and traditional practices for recovery of child with illness.⁹⁶

Risk factors of acute respiratory infection in under five children

In present study risk factors of ARI were- low birth weight, 56 (26.79%) children in experiment group and 74 (33.48%) in control group. Born preterm 28 (13.39%) children in experiment group and 83 (37.55%) in control group and related to nutritional history during infancy period, 36 (17.22%) and 73 (33.03%) children received pre-lacteal feed in experimental and control group respectively, 38 (18.18%) in experiment group and 36 (16.28%) in control group did not receive exclusive breast feeding till 6 months, 68 (32.53%) in experiment group and 66 (29.86%) in control group were practicing for bottle feeding, 49 (23.44%) in experiment group and 57 (25.79%) in control group had initiated weaning early before six months. Regarding history of illness, 30 (14.35%) children in experimental group and 27 (12.21%) children in control group had history of illness in past six months. Regarding environmental characteristics, majority of the houses had open drainage system in both 79 (65.28%) experimental group and 85 (63.90%) control group, 36 (29.75%) in experiment group and 61 (45.86%) in control group were doing indoor smoking by family members, 40 (33.05%) in experimental and 49 (36.84%) in control group had overcrowding in house, 47 (38.84%) houses in experimental group and 38 (28.57%) houses in control group were located to nearby road, 37 (30.57%) in experiment

group and 44 (33.08%) in control group had pets in house, 38 (31.40%) in experiment group and 33 (24.81%) in control group doing open waste disposal.

Similar finding by Ranji et al. (2021) reported preterm baby, family history of any allergic condition, crowded home, poor sanitation, presence of smoke inside the house were risk factors of ARI in children below age of five years.⁹⁷

Further results are supported by Smithayadav et al. (2018) smoky cooking fuel, absence of smoke vent and smoking inside the house were significant risk factors of ARI in children under the age of five years.⁹⁸

Similarly study by Chavan et al. (2018) highlighted that low socio-economic status, pre-lacteal feeding, low birth weight, delay in starting breast-feeding and immunization status were significant risk factors of ARI in children below age of five years.⁹⁹

The results were further supported by Maharajan et.al (2017) in which results revealed that crowding, kuccha house and dampness inside the room had significant association with presence of ARI in children below age of five years.¹⁰⁰

Further similar results reported by Sharma et al. (2013) low socio-economic status (79.3%), overcrowded houses (63.7%), poor cross ventilated house (70.4%), smoking by parents (55.6%), smoky cooking fuel (67.4%) and low birth weight of child (54.8%) were significant risk factors of ARI.¹⁰¹

Similarly, research done by Prajapati et al. (2012) observed low birth weight baby, late initiation of breastfeeding and birth order of child were significant risk factors of ARI.¹⁰²

Effectiveness of need based interventional package on knowledge of mothers

Results showed consistent increase in mean post-test knowledge score at 1st month (15.02 ± 2.580), 3rd months (18.88 ± 2.586) and 6th month (20.94 ± 2.28) compared to baseline score (14.70 ± 1.726) in experimental group and increase was statistically significant within the group ($F = 215.31, p < 0.05$). However, the control group did not show any significant change in the mean post-test knowledge score at 1st month, 3rd month and 6th month within the group ($F = 0.38, p = 0.89$). Significant difference in mean knowledge score was observed between experimental and control group at 3rd month and 6th month ($p < 0.001$). Hence, it could be interpreted that need based interventional package was effective in enhancing knowledge score of mothers in experiment compared to control group.

Domain wise analysis revealed increase in knowledge of all domains i.e information on ARI, prevention and home-based management of ARI in experiment compared to control group in post-tests.

Results are supported by a research done by Bhatti et al. (2020) in which it was reported that there was positive effect of educational intervention in increasing mother's knowledge score related to prevention of ARI.¹⁰³

Similarly study by Nafishal et al. (2018) showed significant improvement in mean post-test than mean pre-test mother's knowledge score after implementation of health promotion intervention.¹⁰⁴

Similarly study by Joshy et al. (2018) revealed significant gain in knowledge score of mothers in intervention group compared to control group after introducing information booklet.¹⁰⁵

Findings further supported by Singh (2015) which showed significant improvement in mother's knowledge score and preventive practices of ARI after implementation of planned health education and also showed significant association of mother's knowledge score with their demographic data.¹⁰⁶

Effectiveness of need based interventional package on practice of mothers

Results showed consistent increase in mean post-test practice score of mothers at 1st month (26.28 ± 1.885), 3rd month (27.01 ± 1.848) and 6th month (30.20 ± 1.749) compared to baseline score (24.56 ± 4.243) in experimental group and increase was statistically significant within the group ($F = 404.3$, $p < 0.001$). However, the control group did not show any significant change in the mean post-test practice score at 1st month, 3rd month and 6th month within the group ($F = 0.79$, $p = 0.578$). Significant difference in mean practice score was observed between experimental and control group at 1st month, 3rd month and 6th month ($p < 0.001$). Hence, it could be interpreted that need based interventional package was effective in improving practice of mothers in experiment group than control group.

Domain wise analysis revealed increase in practice of all domains i.e preventive measures of ARI and home-based management of ARI in experiment compared to control group in post-tests.

Results were supported by Kadu et al. (2020) which showed significant improvement in mother's practice score regarding prevention of pneumonia in children under five years of age after providing planned intervention. They concluded that intervention was significantly effective in using educational strategies to create awareness among mothers.¹⁰⁷

Similarly, study done by Dharamarajlu et al. (2022) showed that mean practice and knowledge score of mothers significantly improved after implementation of video assisted teaching.¹⁰⁸

The result of present study highlighted the improvement in mother's knowledge and practice about prevention and home-based management of ARI in under five children after implementation of need based intervention package. Literature findings also supported that need based community intervention significantly improves the awareness of mothers.

Effectiveness of need based interventional package on frequency of symptoms and number of episodes of ARI in under five children

Results of present study revealed significant decrease in frequency of ARI from baseline to observation in 1st month, 3rd month and 6th month in children of experiment group compared to control group ($Q = 31.08$, $p < 0.05$). Similarly, significant decrease in frequency was found in children of experimental group with regard to nasal discharge ($Q = 43.58$, $p < 0.05$), sore throat, ($Q = 24.27$, $p < 0.05$), cough ($Q = 32.77$, $p < 0.05$). Hence, it could be interpreted that need based interventional package was effective in decreasing frequency and number of episodes of ARI in children

Similarly, Zhao et al. (2022) after doing umbrella review summarized effectiveness of non-pharmaceutical intervention viz. use of mask, physical distancing, hand hygiene and oral hygiene were effective in reduction of frequency of respiratory infection in below age of five years in community setting.¹⁰⁹

The findings discussed above demonstrated that the Need Based Intervention Package was successful in lowering the frequency of symptoms and the number of ARI

episodes. These findings were also supported by the literature discussed above that need-based community interventions have positive impact in reduction of occurrence of acute respiratory infection in children below age of five years in our country.

Strength of the study

1. Mixed method approach was adopted for study.
2. Exploratory focus group discussion was used to explore various barriers related to practice of mothers about prevention and home management of ARI in under five children.
3. Need based interventional package was developed after identifying barriers about prevention and home-based management of ARI among mothers of children less than age of five years.
4. Control group was included for comparison of study findings.
5. Mothers and children were followed up till six months after intervention.

Limitations of the study

1. Responses given by mothers regarding frequency and number of ARI episodes in under five children during follow up visits were taken into consideration for analysis of data.
2. Home based management practices performed by mothers for children having ARI were not observed by investigator.

Summary

This chapter included the discussion on results of the study as per objectives. The results were contrasted with similar studies conducted on a comparable sample.