CHAPTER VII

SUMMARY

The research was carried out to explore barriers on prevention and home-based management of acute respiratory infection and effectiveness of need based interventional package on knowledge, practice of mothers and occurrence of frequency and number of episodes of acute respiratory infection was assessed.

Objectives of the study

1. To explore barriers related to prevention and management of acute respiratory infection in under five children
2. To identify risk factors of acute respiratory infection in under five children.
3. To determine the effectiveness of need based interventional package on knowledge of mothers regarding prevention and management of acute respiratory infection in under five children
4. To determine the effectiveness of need based interventional package on practice of mothers regarding prevention and management of acute respiratory infection in under five children
5. To determine effectiveness of need based interventional package on frequency of symptoms and number of episodes of acute respiratory infection in under five children

Variables of the study

Independent variable: Need based interventional package

Dependent variables: Mother's knowledge and practice and number of ARI episodes in under five children.

Conceptual Framework for present study was based on Health Belief Model (Rosenstock) published in 1974.

Methodology

A Mixed method research approach was adopted. It was conducted in two phases. In First phase, administrative permission was obtained from administrative authority (District officer) of Narela subdivision in north Delhi region. Door to door home visiting was done to identify mothers having under five children and written informed consent was taken. Focus group discussion was done among mothers of children less than age of five years to explore barriers related to prevention and home management of ARI and developed need based interventional package for mothers.

In Second phase, selected two villages (Lampur and Singhola) allocated to experimental and control group through concealed random allocation. Door to door home visiting was done to identify mothers of children less than five years of age. Written informed consent was obtained after explaining about purpose of study. ARI Screening tools was used to screen the children and identify presence of acute respiratory infection. Structured interview was conducted and information regarding socio-demographic variables were collected. Pre-intervention knowledge of mothers in experiment and control group was assessed with the help of structured knowledge questionnaire and practice by self-reported practice scale. After this, Intervention was administered to mothers in experimental group by inviting mothers to nearby anganwadi center. Altogether researcher completed administration of intervention to 121 mothers in 8 weeks. Post intervention assessment of frequency of symptoms and number of ARI episodes among under five children, knowledge and practice of mothers was done at $1^{st,}$ 3^{rd} and 6^{th} month from experimental and control group

Results

The following major findings were identified.

Barriers related to prevention and management of ARI at home among mothers having children less than the age of five years

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 reported by mothers about prevention and home management of ARI in under five children.

Risk factors of ARI in under five children

Significant risk factors of ARI identified were preterm birth of child, low birth weight baby, open drainage system, indoor smoking by family members, overcrowding in house, pets in house, house located nearby road, unclean fuel used for cooking, open waste disposal, inadequate ventilation of house, pre-lacteal feeding, non-exclusive breastfeeding, early initiation of weaning

Socio-demographic variables of mothers

- Majority of mothers were belonging between 26 to 30 years of age group, most of the mothers were graduates, most of the families were nuclear family, majority of mothers were having two children and had no exposure to educational session on ARI in both experimental and control group.
- The baseline socio-demographic variables of mothers in both groups were homogeneous.

Effectiveness of need based interventional package on knowledge of mothers

The mean knowledge scores of mothers at baseline assessment were almost similar in both experimental (14.70± 1.726) and control group (14.81 ± 3.814). In experimental group there was 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 which 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 experiment and control group at 3rd month and 6th month ($p<0.001$). Therefore, researcher rejected the null hypothesis and accepted the research hypothesis.

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

Effectiveness of need based interventional package on practice of mothers

The mean practice score of mothers were almost similar in experiment (24.56±4.243) and control groups (25.89± 4.269) at baseline assessment. In experimental group there was cconsistent 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) which 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

($p<0.001$). Thus, researcher rejected the null hypothesis and accepted research hypothesis.

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.

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

- At the baseline, frequency of symptoms of ARI in terms of presence of ARI, nasal discharge, sore throat and cough were almost similar in experiment and control group.
- Significant decrease in frequency of symptoms of ARI 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 ($Q = 32.77$, $p = <0.05$) compared to control group.
- Significant reduction in number of episodes of ARI ($p=0.004$) in children of experimental compared to control group after 6 months of intervention

Therefore, researcher rejected null hypothesis and accepted research hypothesis.

Summary

This chapter included summary of research statement, objectives, variables, methodology and results.