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# A Pilot Study to Assess the Effectiveness of Peer-led Health Education on Knowledge Regarding the Adverse Effects of Self-medication among Mothers of Under-five Children in Selected Rural Community of Salem

C. Nithyakalaivani[1,*], K. Tamizharasi[2]

***Abstract***

*Child health is the most crucial factor determining the growth of children, especially during their first five years of life. In recent years, the relatively low immune response in this age group has resulted in outbreaks of diseases and infections. Self-medication involves the use of drugs without consulting a physician for the treatment or prevention of ailments. Self-medication is a potentially unsafe practice with various risks, including drug interactions, antibiotic resistance, misdiagnosis, habituation, allergic reactions, incorrect self-diagnosis, delays in seeking medical advice, and the risk of dependence and abuse. Under-five mothers may be influenced by numerous factors to engage in self-medication, and these factors need to be addressed adequately to facilitate learning. The study aims to evaluate the effectiveness of peer-led health education in enhancing knowledge about the adverse effects of self-medication among mothers of children under five. A study was conducted among 30 mothers who have children under five in selected villages of Mallur Block, Salem District. Instruments used to collect data were a demographic questionnaire and a structured interview schedule to assess knowledge on the adverse effects of self-medication. After the pretest, health education on the adverse effects of self-medication was given by a peer educator. The level of knowledge in the pretest was inadequate. 24 (80%) after intervention, the second post-test score was moderately adequate, 24 (80%). The study concludes that the practice of self-medication among mothers of under-five children is high after intervention; they gained knowledge regarding the adverse effects of self-medication, and their practice of administering self-medication was reduced to its maximum. It is necessary to raise awareness about access to healthcare systems, even for minor illnesses to ensure the health of children. Regular and ongoing health education is essential at the community level to inform people about the dangers and potential risks associated with self-medication.*

***Author for Correspondence**
C. Nithyakalaivani
E-mail: nithyavishalyarajesh@gmail.com

[1]Research Scholar, Department of Nursing, Sri Gokulam College of Nursing, Salem, Tamil Nadu, India
[2]Professor Cum Principal and Research Guide, Department of Nursing, Sri Gokulam college of Nursing, Salem, Tamil Nadu, India

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## INTRODUCTION

Child health is the most crucial factor determining the growth of children, especially during their first five years of life. In recent years, however, a relatively low immune response in this age group has resulted in the outbreak of certain diseases and infections.

Despite being 15% of the total population, children under five years of age account for 80%

of deaths in most developing countries. About 20% of newborn babies die before they reach the age of 5, and 33–35% of these deaths are caused by acute respiratory tract infections (WHO).

Self-medication is potentially an unsafe practice with many risks that include drug interactions, antibiotic resistance, misdiagnosis of illness, insufficient dosage, habituation, allergic reactions, incorrect self-diagnosis, delays in seeking medical advice when needed, and the risk of dependence and abuse [1, 2].A study was done to review the usage of self-medication and antibiotics among children under five years old in 961 families in Italy. 72% of the children were given antibiotics while suffering from fever and cough. The study results indicated that the prevalence of self-medication was higher in cases of fever and cough [3].

A study was conducted to assess the use of self-medication by parents of children during febrile episodes among 600 parents with children under 14 years old in France. Approximately 48.2% of parents administered medication without knowing the cause or appropriate treatment. Antipyretics were prescribed by 97.2% of parents, while antibiotics were commonly used, with their systematic use alongside antipyretics in 45.7% [4].

A study in China aimed to assess the factors influencing self-medication in children aged 1 to 5, with a total of 2798 children participating. The findings revealed that 38.2% of primary caregivers in rural regions engaged in self-medication for their children, in contrast to 18.7% in urban areas [5, 6].

A comprehensive review and meta-analysis were conducted on factors influencing self-medication in a sample of 950 children in China. The overall prevalence of self-medication in children was found to be 57%. The combined prevalence of primary influencing factors related to caregivers included 73% for those residing in rural areas, 55% for females, 75% for individuals with incomes less than $716, 77% for the middle-aged and elderly, and 72% for those with educational levels below a bachelor's degree. Regarding the self-medication process for children, 19% of caregivers did not peruse the instructions, 28% overlooked adverse effects, 49% autonomously adjusted dosages, 49% were aware of over-the-counter medications, and 41% misconceived antibiotics [7].

These studies show that children under five are at risk of problems from self-medication, emphasizing the need for creating awareness. Though the rise in self-medication practice is greater, it is still more prevalent in the under-five child population, where unsafe use of antibiotics, analgesics, antipyretics, and vitamin supplements is more common. Peer-led education is a credible approach that influences mothers to modify their behavior positively.

In view of the given facts and interest in the topic, the researcher felt a great need to assess the effectiveness of peer-led health education on knowledge regarding the adverse effects of self-medication among mothers of under-five children in a selected rural community of Salem [8].

## OBJECTIVES

1. To evaluate the understanding of the adverse effects of self-medication among mothers with children under five.
2. To assess the impact of peer-led health education on awareness of the adverse effects of self-medication among mothers with children under five.

To associate the pre-test and post-test knowledge scores regarding adverse effects of self-medication among mothers of under-five children with their selected demographic variables.

## METHODOLOGY

### Research Approach

The research approach used for the present study is quantitative approach.

**Table 1.** Research design.

| Pre-test | Intervention | Post-test (on day 7 and 30) |
|---|---|---|
| $O_1$ | $X_1$ | $O_2$, $O_3$ |

*$O_1$: Pre-test on knowledge regarding adverse effects of self-medication to mothers of under-five children*
*$X_1$: Administration of peer-led health education*
*$O_2$: Post-test on day 7 of the intervention*
*$O_3$: Post-test on day 30 of the intervention*

**Research Design**

The design employed in the current study is quasi-experimental, utilizing a one-group pre-test and post-test design (Table 1).

**Setting**

A quasi-experimental one group pre and post-test design was used to assess the effectiveness of knowledge regarding adverse effects of self-medication among mothers of under-five children (n = 30) in Veingampatti Village, Salem using simple random sampling method.

**ETHICAL CONSIDERATION**

Approval to conduct the study was granted by the Institutional Ethical Committee of Sri Gokulam Hospital in Salem. Written permission to collect data was obtained from the Director of Public Health and Preventive Medicine in Chennai and the Deputy Director of Health Services in Attur, following a comprehensive review of the research proposal and tools. Mothers of children under five provided written consent after being briefed on the study's purpose and significance, along with assurances of data confidentiality.

**Content Validity of the Tool**

The tools' content validity was ensured through consultation with seven experts specializing in nursing, pharmacology, and paediatrics. The experts were asked to assess the items for accuracy, appropriateness, relevance, clarity of language, content organization, measurability, and readability. The content validity index (CVI) of semi-structured interview schedule on demographic variables and structured interview schedule to assess knowledge on adverse effects of self-medication was analysed. The content validity indices of the tools were 97% and it is satisfactory. The recommendations provided by the experts were integrated leading to minimal modifications to the tools and the finalized tool was employed for data collection [9, 10].

**Translation of the Tool**

The semi-structured interview schedule on demographic variables and structured interview schedule to assess knowledge on adverse effects of self-medication were translated into Tamil. A Tamil expert assessed the appropriateness of the translation, and the validity of the translation was confirmed through back translation.

**Reliability of the Tool**

After the pilot study, the reliability of the tool was assessed by using the test-retest method by administering it to mothers of under-five children. The reliability coefficient (Cronbach's Alpha) of the knowledge questionnaire was determined to be r = 0.96. Study participants provided their informed consent. Pre-test and post-test on knowledge regarding the adverse effects of self-medication was assessed by using the structured interview schedule on a knowledge questionnaire [11].

**Setting**

There are two HUDs (Health Unit District) in Salem District, namely Salem HUD and Attur HUD. The researcher has selected Attur HUD to conduct the present study by flipping the coin. Among the

eight rural block PHC areas (Attur, Ayyothiyapattinam, Thammapatty, Panamarathupatti, Ariyapalayam, Thalaivasal, Belur, and yercaud) under Attur HUD, the investigator has randomly chosen Panamarathupatti Block PHC area through lottery method to collect the data.

Under the Panamarathupatti Block PHC, there are four PHCs functioning (Panamarathupatti PHC, Thumbalpatti PHC, Mallur PHC, and Kondalampatti PHC). The investigator has again randomly chosen Mallur PHC area using lottery method to conduct the study.

Under Mallur PHC, there are six HSCs namely, Ammapalayam, Nalikalpatti, Parapatti, Seivanthapatti, Vazhakuttapatti, and Veingampatti. The investigator selected one HSC—Veingampatti through random selection of HSCs through lottery method.

Mallur PHC area has total population of 37761, male population of 19695, female population of 18074, and under-five children population of 3242. The healthcare facilities in this area includes a Government PHC and six health sub centers, seven private clinics run by registered allopathic medical practitioner, four private multispecialty hospitals within 7 km radius and one government medical college and hospital within 12 km distance. There are 26 private allopathic pharmacies functioning in this area. In Veingampatti HSC area, there are 674 mothers of under-five children [12–15].

## DATA COLLECTION PROCEDURE

A sampling frame of those who administer self-medication to their under-five children was prepared. In the sampling frame, 33 mothers of under-five children were selected using the lottery method. The demographic variables were collected from the mothers of under-five children who were allotted as a sample using a semi-structured interview schedule. A pre-test on knowledge regarding the adverse effects of self-medication was assessed with a structured interview schedule questionnaire. Among the mothers, three mothers who scored 70% or above in their pre-test were chosen as peer-led health educators who were trained by the investigator. The investigator educated them, assessed their post-test score, and returned a demonstration of their teaching. The expected post-test score is 100%, and the health teaching score is above 80%. The investigator gave training instructions, educated them regarding teaching skills and AV aid usage, and instructed them to avoid extra information apart from the content in the health education plan. The trained peer-led health educator gave peer-led health education on the adverse effects of self-medication. The investigator has closely monitored peer-led health education by scrutinizing the diaries maintained by the peer educators, telephonic guidance, and random visits. A post-test was administered to both groups on the 7th and 30th days following the intervention [16–18].

## RESULTS

### Part I: Demographic Variables of Mothers of Under-five Children

Table 2 shows that most of the mothers {9 (30%)} of under-five children belong to the age group of 21–25 years. However, the lowest percentage {3 (10%)} of them were in the age group above 40 years. In terms of the educational background of mothers with children under five, the majority had completed high school education, accounting for 40% (12 mothers). However, the lowest percentage were postgraduate mothers {1 (3.3%)}. Major percentage of fathers {7 (23.3%)} had higher secondary education and the lowest percentage of them {2 (6.7%)} were diploma qualified.

Considering the occupation of mother and father, the highest percentage were homemakers among mothers {10 (33.3%)} and the lowest percentage {1 (3.3%)} had their own business. Majority of the fathers {9 (30%)} were doing agriculture and farming, and the lowest percentage of fathers {2 (6.7%)} were earning daily wages. Regarding the religious affiliation of mothers with children under five, the majority were adherents of Hinduism, constituting 66.7% (20 mothers). Only a few {2 (6.7%)} belonged to Islam. According to family's monthly income, the highest percentage {10 (33.3%) earns between ₹ 25001–50000/month and the least percentage had monthly income {1 (3.3%)} between ₹ 15001–20000/month.

**Table 2.** Distribution of mothers of under-five children according to their demographic variables (n = 30).

| S.N. | Demographic variables | f | % |
|---|---|---|---|
| 1. | *Age of the mother* | | |
| | a. 21–25 years | 9 | 30 |
| | b. 26–30 years | 7 | 23.3 |
| | c. 31–35 years | 4 | 13.3 |
| | d. 36–40 years | 7 | 23.3 |
| | e. >40 years | 3 | 10 |
| 2. | *Educational status of mother* | | |
| | a. No formal education | 3 | 10 |
| | b. Primary school education | 6 | 20 |
| | c. High school education | 12 | 40 |
| | d. Higher secondary education | 4 | 13.3 |
| | e. Diploma | 2 | 6.7 |
| | f. Graduate | 2 | 6.7 |
| | g. Post graduate | 1 | 3.3 |
| 3. | *Educational status of father* | | |
| | a. No formal education | 4 | 13.3 |
| | b. Primary school education | 3 | 10 |
| | c. High school education | 4 | 13.3 |
| | d. Higher secondary education | 7 | 23.3 |
| | e. Diploma | 2 | 6.7 |
| | f. Graduate | 6 | 20 |
| | g. Post graduate | 4 | 13.3 |
| 4. | *Occupation of mother* | | |
| | a. Homemaker | 10 | 33.3 |
| | b. Daily wages | 2 | 6.7 |
| | c. Agriculture and farming | 9 | 30 |
| | d. Private employee | 2 | 6.7 |
| | e. Government employee | 6 | 20 |
| | f. Own business | 1 | 3.3 |
| 5. | *Occupation of father* | | |
| | a. Not employed | 2 | 6.7 |
| | b. Daily wages | 2 | 6.7 |
| | c. Agriculture and farming | 9 | 30 |
| | d. Private employee | 6 | 20 |
| | e. Government employee | 8 | 26.7 |
| | f. Own business | 3 | 10 |
| 6. | *Religion* | | |
| | a. Hinduism | 20 | 66.7 |
| | b. Christianity | 3 | 10 |
| | c. Islam | 2 | 6.7 |
| | d. Others | 5 | 16.7 |
| 7. | *Monthly income* | | |
| | a. ₹ 50001 and above | 2 | 6.7 |
| | b. Between ₹ 25001 to ₹ 50000 | 10 | 33.3 |
| | c. Between ₹ 20001 to ₹ 25000 | 7 | 23.3 |
| | d. Between ₹ 15001 to ₹ 20000 | 1 | 3.3 |
| | e. Between ₹ 10001 to ₹ 15000 | 5 | 16.7 |
| | f. Less than ₹ 10000 | 5 | 16.7 |
| 8. | *Type of family* | | |
| | a. Nuclear | 7 | 23.3 |
| | b. Joint | 10 | 33.3 |
| | c. Extended | 13 | 43.3 |
| 9. | *Source of information* | | |
| | a. No information | 3 | 10 |
| | b. Health professional and pharmacist | 13 | 43.3 |
| | c. Previously prescribed medicine | 2 | 6.7 |
| | d. Social media | 10 | 33.3 |
| | e. Relatives and friends | 2 | 6.7 |

Regarding the type of family, nearly half of them belong to extended family {13 (43.3%)} and the lowest percentage were in the nuclear family {7 (23.3%)}. According to the source of information, the highest percentage {13 (43.3%)} were health professionals and pharmacists, and the lowest percentage {2 (6.7%)} were relatives and friends.

Table 3 illustrates that regarding the child birth order, most of the children were in birth order I {14 (46.7%)}. The lowest percentage of children {3 (10%)} were in birth order III and none of them were in birth order IV. In terms of gender, most of the children {16 (51.6%)} were male, and the lowest percentage {15 (48.4%)} were female. The breakdown of under-five children by age in months reveals that the highest percentage, accounting for 29.03% (9 children), falls within the 49–60 months category. Following that, 25.80% (8 children) were in the 37–48 months range, 16.12% (5 children) were in both the 13–24 months and 25–36 months categories, and the lowest percentage, at 12.9% (4 children), was in the 0–12 months category.

**Part II: Level of Knowledge among Mothers of Under-five Children Regarding Self-medication**

Table 4 illustrates that the majority of the mothers of under-five children {24 (80%)} were having inadequate pre-test knowledge score of 24 (80%), whereas in post-test I, {23 (76.7%)} mothers had moderate knowledge, in post-test II, 24 (80%)} were having a moderate level of knowledge. It indicates that the knowledge about the adverse effects of self-medication among mothers with children under-five was improved through peer-led health education (Figure 1).

**Table 3.** Distribution of under-five children according to their personal data (n = 30).

| S.N. | Demographic variables | f | % |
|---|---|---|---|
| 10 | ***Personal data of child*** | | |
| 10.1 | *Birth order of under-five children* | | |
| . | Birth order-I | 14 | 46.7 |
| | Birth order-II | 13 | 43.3 |
| | Birth order-III | 3 | 10 |
| | Birth order-IV | 0 | 0 |
| 10.2 | *Sex of the child* | | |
| | Male | 16 | 51.6 |
| | Female | 15 | 48.4 |
| 10.3 | *Age of the child in months (under five years)* | | |
| | 0–12 months | 4 | 12.9 |
| | 13–24 months | 5 | 16.12 |
| | 25–36 months | 5 | 16.12 |
| | 37–48 months | 8 | 25.80 |
| | 49–60 months | 9 | 29.03 |

**Table 4.** Frequency and percentage-wise distribution of the mothers of under-five on level of knowledge regarding adverse effects of self-medication (n = 30).

| Level of knowledge | Maximum scores | Pre-test | | 1st Post-test | | 2nd post-test | |
|---|---|---|---|---|---|---|---|
| | | f | % | f | % | f | % |
| Inadequate | 1-6 | 24 | 80 | 2 | 6.7 | 1 | 3.3 |
| Moderately adequate | 7-13 | 5 | 16.7 | 23 | 76.7 | 24 | 80 |
| Adequate | 14-20 | 1 | 3.3 | 5 | 16.7 | 5 | 16.7 |
| **Overall** | 20 | 30 | 100 | 30 | 100 | 30 | 100 |

Table 5 reveals that in the pre-test mean, SD was 9.37±2.51 and the first post-test mean, SD was 12.77±2.21; in the second post-test mean, SD was 13.57±1.92, the t value was 10.388 post-test I and

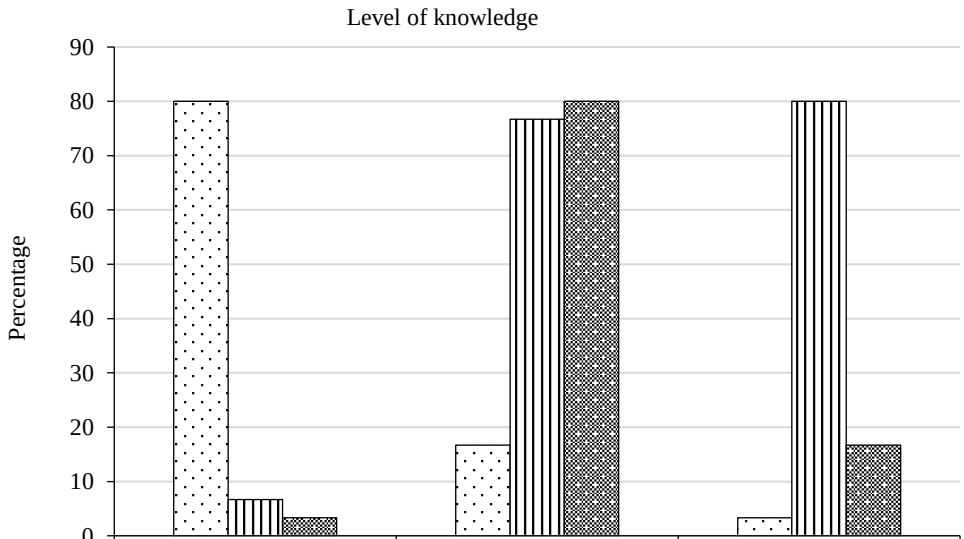
 

in II post-test 9.424 which is greater than the table value, which shows peer-led health education was highly effective in improving knowledge regarding the adverse effects of self-medication among mothers of under-five children.

Table 6 shows that there is a significant difference ($p<0.01$) in the overall mean pre-test knowledge and found a significant difference in the right practice to administer drugs (9.37±2.51), whereas there were no significant differences found in the mean post-test-1 and mean post-test-2 knowledge scores (12.77±2.21, 13.57±1.92). This shows that peer-led health education was effective in improving the knowledge of mothers regarding the adverse effects of self-medication. Thus, the differences found in mean scores were not true differences.

**Part III: Association of Pre-test and Post-test Knowledge of Mothers of Under-five Children with their Demographic Variables**

Table 7 shows that there was no significant association found between the pre-test level of knowledge with the age of the mother**s,** educational status of mothers, educational status of the fathers, occupation of the mother, occupation of the father, religion, monthly income, type of family, source of information, child birth order, child sex, and age of child.




| | Pre-test | 1st post-test | 2nd post-test |
|---|---|---|---|
| Inadequate | 80 | 16.7 | 3.3 |
| Moderately adequate | 6.7 | 76.7 | 80 |
| Adequate | 3.3 | 80 | 16.7 |

**Figure 1.** Distribution of the mothers of under-five children on level of knowledge regarding adverse effects of self-medication.

**Table 5.** Effectiveness of peer-led health education on knowledge regarding adverse effects of self-medication among mothers of under-five children (n = 30).

| **Peer-led health education** | **Maximum score** | **Score** | | **Pre Vs 1st post-test** | | **Pre Vs 2nd post-test** | |
|---|---|---|---|---|---|---|---|
| | | ***Mean*** | ***SD*** | ***Mean difference*** | ***'t' value p-value*** | ***Mean difference*** | ***'t' value p-value*** |
| Pre-test | 20 | 9.37 | 2.51 | 3.40 | t = 10.388 p<0.001*** (HS) | 4.20 | t = 9.424 p<0.001*** (HS) |
| 1st post-test | 20 | 12.77 | 2.21 | | | | |
| 2nd post-test | 20 | 13.57 | 1.92 | | | | |

**-P<0.05, significant and **-P<0.01 and ***-P<0.001, Highly-significant*

**Table 6.** Effectiveness of peer-led health education on knowledge areas regarding adverse effects of self-medication among mothers of under-five children (n = 30).

| Knowledge domains | Test | Maximum score | Peer-led health education (n = 30) | | 't' value | p-value |
|---|---|---|---|---|---|---|
| | | | *Mean* | *SD* | | |
| Meaning of self-medication | Pre-test | 1 | 0.53 | 0.5 | 2.97 | 0.004 |
| | 1st post-test | 1 | 0.8 | 0.41 | 1.07 | 0.286 |
| | 2nd post-test | 1 | 0.8 | 0.41 | 1.07 | 0.285 |
| Reason for self-medication | Pre-test | 1 | 0.47 | 0.51 | 0.776 | 0.441 |
| | 1st post-test | 1 | 0.6 | 0.49 | 0.261 | 0.795 |
| | 2nd post-test | 1 | 0.67 | 0.47 | 0.266 | 0.791 |
| Common conditions for administering self-medication | Pre-test | 1 | 0.5 | 0.51 | 2.193 | 0.032 |
| | 1st post-test | 1 | 0.8 | 0.41 | 0 | 1 |
| | 2nd post-test | 1 | 0.83 | 0.37 | 0.328 | 0.743 |
| Adverse effects of self-medication | Pre-test | 7 | 3.1 | 1.21 | 1.519 | 0.134 |
| | 1st post-test | 7 | 4.73 | 1.11 | 0.879 | 0.382 |
| | 2nd post-test | 7 | 5.23 | 1.19 | 2.372 | 0.021 |
| Side-effects of drugs | Pre-test | 6 | 2.8 | 1.88 | 1.953 | 0.056 |
| | 1st post-test | 6 | 3.7 | 1.66 | 1.438 | 0.155 |
| | 2nd post-test | 6 | 3.93 | 1.41 | 1.411 | 0.164 |
| Dangers of self-medication | Pre-test | 1 | 0.53 | 0.51 | 2.470 | 0.016 |
| | 1st post-test | 1 | 0.53 | 0.51 | 0.510 | 0.612 |
| | 2nd post-test | 1 | 0.57 | 0.5 | 0.510 | 0.612 |
| Right practice to administer the drugs | Pre-test | 3 | 1.43 | 0.89 | 3.084 | 0.003 |
| | 1st post-test | 3 | 1.57 | 0.86 | 3.02 | 0.003 |
| | 2nd post-test | 3 | 1.53 | 0.89 | 3.099 | 0.003 |
| **Overall** | Pre-test | 20 | 9.37 | 2.51 | 3.312 | 0.002 |
| | 1st post-test | 20 | 12.77 | 2.21 | 1.468 | 0.147 |
| | 2nd post-test | 20 | 13.57 | 1.92 | 0.583 | 0.562 |

The age of mothers is correlated with the post-test knowledge level of mothers with children under five. Hence, the hypothesis $H_5$ is accepted at $p< 0.05$ level for the above demographic variables. There is no association found between the II post-test level of knowledge with the educational status of mothers, educational status of fathers, occupation of mothers, occupation of fathers, religion, monthly income, type of family, source of information, child birth order, child sex, and age of child respectively.

## DISCUSSION

The results of the present study show that a majority of mothers of under-five children belong to the age group of 21–25 years {9 (30%)}. The majority of mothers had completed high school education, accounting for 40% (12 mothers). The primary percentage of fathers, constituting 23.3% (7 fathers), had completed higher secondary education. Regarding the occupation of mothers and fathers, the highest percentage were homemakers, comprising 33.3% (10 mothers), and the majority of fathers were engaged in agriculture and farming, representing 30% (9 fathers). In terms of family monthly income, the highest percentage, at 33.3% (10 families), earned ₹ 25001–50000/month. Analysing the age distribution of children under five, the highest percentage, 29.03% (9 children), fell within the 49–60 month category. Subsequently, 25.80% (8 children) were in the 37–48 month range, 16.12% (5 children) were in both the 13–24 month and 25–36 month categories, and the lowest percentage, at 12.9% (4 children), was in the 0–12 month category. These findings agreed with the study's findings that most participants belonged to the age group of 49 to 60 months.

**Table 7.** Association between pre-test and 2nd post-test level of knowledge regarding adverse effects of self-medication among mothers of under-five children and selected demographic data (n = 30).

| S.N. | Demographic variables | Pre-test | | | | 2nd post-test | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | *df* | *χ2* | *Table value* | *p-value* | *df* | *χ2* | *Table value* | *p-value* |
| 1. | Age of the mother | 8 | 11.24 | 15.507 | 0.188 NS | 8 | 21.30 | 15.507 | 0.006* HS |
| 2. | Educational status of mother | 12 | 10.83 | 21.026 | 0.54 NS | 12 | 9.188 | 21.026 | 0.687 NS |
| 3. | Educational status of father | 12 | 12.73 | 21.026 | 0.389 NS | 12 | 11.045 | 21.026 | 0.525 NS |
| 4. | Occupation of mother | 10 | 10.96 | 18.307 | 0.361 NS | 10 | 11.184 | 18.307 | 0.344 NS |
| 5. | Occupation of father | 10 | 7.514 | 18.307 | 0.676 NS | 10 | 6.420 | 18.307 | 0.779 NS |
| 6. | Religion | 6 | 1.813 | 12.592 | 0.936 NS | 6 | 1.813 | 12.592 | 0.936 NS |
| 7. | Monthly income | 10 | 12.91 | 18.307 | 0.229 NS | 10 | 10.746 | 18.307 | 0.378 NS |
| 8. | Type of family | 10 | 12.91 | 18.307 | 0.229 NS | 4 | 4.04 | 9.488 | 0.400 NS |
| 9. | Source of information | 8 | 11.09 | 15.507 | 0.196 NS | 8 | 5.523 | 15.507 | 0.700 NS |
| 10. | Age of the child | 2 | 1.071 | 5.991 | 0.585 NS | 2 | 1.741 | 5.991 | 0.419 NS |
| 11. | Child birth order | 8 | 4.158 | 15.507 | 0.843 NS | 8 | 4.202 | 15.507 | 0.838 NS |
| 12. | Child sex | 2 | 1.563 | 5.991 | 0.458 NS | 2 | 1.741 | 5.991 | 0.419 NS |

*P>0.05 NS- Not significant,* P<0.05 S-Significant,** P<0.01 HS- Highly significant at p<0.05 level*

The study's result revealed that there was a significant difference between the pre-test and post-test levels of knowledge regarding the adverse effects of self-medication among mothers of under-five children, and peer-led health education was effective at the post-test mean; SD was 13.57±1.92; the t-value was 10.388 in the post-test; and from the pre-test mean, SD was 9.37±2.51 ($p<0.05$). The study results were like a study conducted. The results revealed that after a structured teaching program on the adverse effects of self-medication among mothers of under-five children, their mean pre-test knowledge scores, which were 15.49, improved to a post-test knowledge score of 24.85. There is a correlation between the age of mothers and the post-test knowledge level of mothers of children under five. This finding aligns with a study conducted that indicated a relationship between the age of mothers of under five children and their knowledge scores ($x = 0.089$) concerning the adverse effects of self-medication.

## CONCLUSION

This study was conducted in Mallur Block PHC areas, where Vengampatti village was allotted. The pre-test on knowledge regarding the adverse effects of self-medication was assessed using a questionnaire. After the pre-test, the health education on the adverse effects of self-medication was carried out in groups by the peer educator. The post-test was carried out on both the 7th and 30th days following the pre-test. The study's outcomes indicated the feasibility of its implementation, as no practical challenges were encountered during the administration of the questionnaire. Mothers of children under five in the chosen area demonstrated high cooperation. Hence, the investigator felt it was convenient to conduct the health teaching in the study setting area. The study did not project any major problems with the study's design. This research studied the feasibility, acceptability, and effectiveness of the peer-led health education programme on the adverse effects of self-medication

among mothers of under-five children. It was found that the health education program was acceptable and feasible to implement among mothers of under-five children, since many of them were not aware of it. The results of the present study suggest that it is worth implementing a health education program through the peers who are residing in the local community and conducting further research focusing on a number of participants and addressing various aspects.

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