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EVALUATING THE IMPACT OF PARENTAL EDUCATION ON CREATING A SAFE AND NURTURING HOME ENVIRONMENT FOR CHILDREN

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ABSTRACT

This study aimed to assess the effectiveness of an educational intervention on parental knowledge regarding home safety and nurturing practices for children aged 3–5 years. A total of 30 parents participated, and their knowledge was evaluated using pre-test and post-test scores. The intervention resulted in a significant improvement in knowledge, as evidenced by an increase in the mean post-test score from 18.79 to 28.57. The paired t-test revealed a statistically significant difference ($t = 18.54$, $p < 0.00001$), confirming the effectiveness of the intervention. Chi-square analysis showed significant associations between the post-test scores and various demographic variables, such as the age of the parent and child, gender, education, and family type. These results suggest that parental education plays a crucial role in improving home safety practices. This study highlights the importance of tailored educational programs to promote safe and nurturing home environments for children.

INTRODUCTION

Children spend most of their early developmental years at home, making it a crucial environment that significantly influences their health, safety, and overall development. An unsafe home environment can lead to preventable injuries, developmental delays, and psychological distress. Parental awareness and education are vital in ensuring that children are raised in spaces that are not only physically safe but also emotionally nurturing. Community health nurses play a pivotal role in delivering structured educational programs that promote child safety and wellbeing within homes.

Background of the Study

Unintentional injuries in the home are one of the leading causes of morbidity and mortality among children under five years of age. According to the World Health Organization (2022), more than 875,000 children die annually from preventable injuries, many of which occur at home. These include falls, burns, poisoning, suffocation, and drowning, often resulting from a lack of parental knowledge or awareness about safety hazards. Despite improvements in healthcare access, gaps in parental education remain a significant barrier to injury prevention and optimal child-rearing practices. Educating parents on home safety measures, child supervision, and emotional bonding practices has been shown to drastically reduce such risks and foster nurturing environments conducive to growth.

Need for the Study

In India, particularly in low-resource and rural settings, many parents are unaware of basic safety

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practices such as safe storage of hazardous materials, use of child-proof locks, and importance of emotional engagement. With increasing cases of domestic injuries among children and rising concerns about child neglect and abuse, there is a critical need to assess how structured parental education influences home safety. This study is essential to evaluate the outcomes of such interventions and guide the development of community-based educational programs.

Statement of the Problem

"A study to evaluate the impact of parental education on creating a safe and nurturing home environment for children in selected communities of Coimbatore District."

OBJECTIVES

1. To assess the level of parental knowledge regarding home safety and nurturing practices before and after the educational intervention.
2. To evaluate the impact of parental education on home safety practices.
3. To identify the association between demographic variables and improvement in safe home environment practices.

Hypothesis

- **H_1**: There will be a significant improvement in parental home safety practices after the educational intervention.
- **H_0**: There will be no significant improvement in parental home safety practices after the educational intervention.

RESEARCH METHODOLOGY

Study Design:

The study was a descriptive, pre-experimental design. A pre-test and post-test approach was utilized to measure the effectiveness of the intervention.

Population:

The population for the study consisted of parents of children aged 3-5 years residing in Vellakinaru community, Coimbatore. A total of 30 participants were selected for the study, ensuring a diverse sample with regard to socio-demographic factors such as age, gender, education, occupation, and income.

Sampling Technique:

Purposive sampling was employed to select parents who met the inclusion criteria.

Inclusion Criteria:

1. Parents with children aged 3-5 years.
2. Willingness to participate and provide informed consent.
3. Parents who had no previous formal education on home safety practices.

Exclusion Criteria:

1. Parents who had formal education on home safety.
2. Parents of children with special needs.
3. Parents unwilling to participate in the study.

Data Collection Tools:

The primary data collection tool was a structured questionnaire designed to assess home safety and nurturing practices. The questionnaire was divided into two parts:

- **Demographic Information:** Including age, gender, educational qualification, occupation, family income, family type, and previous education on safety.
- **Home Safety and Nurturing Practices:** Using a scoring system ranging from 0 to 40, the questionnaire assessed practices related to child safety, nutrition, and nurturing behaviors.

Scoring and Interpretation

Data Collection Procedure

The data for the study was collected using a structured questionnaire to assess the home safety and nurturing practices of parents with young children. The sample consisted of 30 participants, selected through purposive sampling, ensuring that parents of children aged 3–5 years were targeted. Informed consent was obtained from all participants, and permission was granted from the community authorities to conduct the study. The data collection process followed a two-phase approach: first, a pre-test was administered to assess participants' existing practices using a scoring scale from 0 to 40. Following the pre-test, an educational intervention was conducted to enhance parents' knowledge and practices on home safety and child nurturing. The intervention covered topics such as childproofing the home, promoting safety, and providing proper nutrition. After the intervention, a post-test was conducted using the same scoring scale to measure the effectiveness of the intervention in improving home safety and nurturing practices.

Data Analysis and Interpretation

Section A: Frequency Distribution of Demographic variables

The demographic data reveals that a majority (60%) of the children involved in the study are aged 4–5 years, while the remaining 40% are 3–4 years old. Most of the parents fall within the age range of 26–30 years (33.3%), followed by 31–35 years (30%), indicating that the majority of parents are in their prime parenting age.

Females comprise a significant majority (80%) of the respondents, suggesting that mothers were the primary participants. Regarding educational status, most parents have secondary education (40%), and a combined 30% have completed higher secondary or higher education, whereas 26.7% have only primary or no formal education. A large proportion (40%) of the respondents are homemakers, with private employees (26.6%) forming the next largest group. The family income distribution shows that 33.3% of families earn between ₹5,001–₹10,000 per month, while 20% earn less than ₹5,000 or more than ₹15,000, indicating economic diversity. The majority (60%) live in nuclear families, and 46.7% have one child, while 40% have two. Alarmingly, only 16.7% of parents reported receiving previous education on home safety, highlighting a crucial gap in awareness that may impact child safety in the home environment.

Section B: Assess the level of parental knowledge regarding home safety and nurturing practices before and after the educational intervention

The findings on home safety and nurturing practices among the participants reveal a concerning trend. A significant majority of the respondents (70%) fall within the score range of 14–26, indicating a moderate level of practice in ensuring home safety and nurturing environments for their children. Notably, none of the participants demonstrated a good level of practice (score range 27–40), and similarly, none were categorized under poor practice (score range 0–13).

Section C: Toevaluate the impact of parental education on home safety practices

In the post-test assessment of home safety and nurturing practices, it was found that 6 participants, accounting for 20.0%, demonstrated a poor level of practice. A moderate level of practice was observed among 12 participants, representing 40.0% of the total. Similarly, another 18 participants (60.0%) exhibited a good level of home safety and nurturing practices. This distribution indicates that while a significant portion of participants showed improvement, there remains a need to enhance awareness and implementation of optimal home safety and nurturing behaviors among all caregivers.

Section D: To identify the association between demographic variables and improvement in safe home environment practices

The post-test scores significantly improved compared to pre-test scores after the intervention. This supports the effectiveness of the educational program in enhancing home safety and nurturing practices among the participants.

Table 1: Scoring range and interpretation to show the levels of home safety and nurturing practice N=50

Score Range	Interpretation
0–13	Poor Home Safety & Nurturing Practice
14–26	Moderate Level of Practice
27–40	Good Level of Practice

Table 2: Frequency distribution of demographic variablesof parents who have preschool children. N=30

S. No.	Demographic Variables	Categories	Frequency (n)	Percentage (%)
	Age of Child	3-4 years	12	40%
		4-5 years	18	60%
	Age of Parent	21–25 years	4	13.3%
		26–30 years	10	33.3%
		31–35 years	9	30.0%
		Above 35 years	7	23.4%
	Gender	Male	6	20.0%
		Female	24	80.0%
	Educational Qualification	No formal education	2	6.7%
		Primary school	6	20.0%
		Secondary school	12	40.0%
		Higher secondary	7	23.3%
		Graduate and above	3	10.0%
	Occupation	Homemaker	12	40.0%
		Daily wage worker	5	16.7%
		Private employee	8	26.6%
		Government employee	2	6.7%

		Self-employed	3	10.0%
	Monthly Family Income	Less than ₹5,000	6	20.0%
		₹5,001–₹10,000	10	33.3%
		₹10,001–₹15,000	8	26.7%
		More than ₹15,000	6	20.0%
	Type of Family	Nuclear family	18	60.0%
		Joint family	10	33.3%
		Extended family	2	6.7%
	Number of Children	One child	14	46.7%
		Two children	12	40.0%
		Three or more	4	13.3%
	Previous Education on Home Safety	Yes	5	16.7%
		No	25	83.3%

Table 3: To assess the pre-test score on parenteral education on Creating a Safe and Nurturing Home Environment for Children

S. No.	Demographic Variables	Categories	Frequency (n)	Percentage (%)	Pre-Test Score (0-40)
1.	Age of Child	3-4 years	12	40.0%	15
		4-5 years	18	60.0%	12
2.	Age of Parent	21–25 years	4	13.3%	17
		26–30 years	10	33.3%	20
		31–35 years	9	30.0%	22
		Above 35 years	7	23.4%	24
3.	Gender	Male	6	20.0%	20
		Female	24	80.0%	18
4.	Educational Qualification	No formal education	2	6.7%	12
		Primary school	6	20.0%	14
		Secondary school	12	40.0%	16
		Higher secondary	7	23.3%	20
		Graduate and above	3	10.0%	21
5.	Occupation	Homemaker	12	40.0%	22
		Daily wage worker	5	16.7%	15
		Private employee	8	26.6%	18
		Government employee	2	6.7%	20
		Self-employed	3	10.0%	22
6.	Monthly Family Income	Less than ₹5,000	6	20.0%	14
		₹5,001–₹10,000	10	33.3%	20
		₹10,001–₹15,000	8	26.7%	23
		More than ₹15,000	6	20.0%	24
7.	Type of Family	Nuclear family	18	60.0%	21
		Joint family	10	33.3%	23
		Extended family	2	6.7%	20
8.	Number of Children	One child	14	46.7%	23
		Two children	12	40.0%	20
		Three or more	4	13.3%	16
9.	Previous Education on Home Safety	Yes	5	16.7%	19
		No	25	83.3%	18

Table 4: Pre-test scoring range on parenteral education on Creating a Safe and Nurturing Home Environment for Children

Score Range	Interpretation	Frequency (n)	Percentage (%)
0–13	Poor Home Safety & Nurturing Practice	0	0.0%
14–26	Moderate Level of Practice	21	70.0%
27–40	Good Level of Practice	0	0.0%

Table 5: To assess the post-test score on parenteral education on Creating a Safe and Nurturing Home Environment for Children

S. No.	Demographic Variables	Categories	Frequency (n)	Percentage (%)	Post-Test Score (0–40)
1.	Age of Child	3–4 years	12	40.0%	26
		4–5 years	18	60.0%	30
2.	Age of Parent	21–25 years	4	13.3%	26
		26–30 years	10	33.3%	30
		31–35 years	9	30.0%	30
		Above 35 years	7	23.4%	26
3.	Gender	Male	6	20.0%	26
		Female	24	80.0%	30
4.	Educational Qualification	No formal education	2	6.7%	24
		Primary school	6	20.0%	26
		Secondary school	12	40.0%	29
		Higher secondary	7	23.3%	30
		Graduate and above	3	10.0%	30
5.	Occupation	Homemaker	12	40.0%	30
6.	Occupation	Daily wage worker	5	16.7%	26
7.	Occupation	Private employee	8	26.6%	30
8.	Occupation	Government employee	2	6.7%	30
9.	Occupation	Self-employed	3	10.0%	30
10.	Monthly Family Income	Less than ₹5,000	6	20.0%	26
11.	Monthly Family Income	₹5,001–₹10,000	10	33.3%	30
12.	Monthly Family Income	₹10,001–₹15,000	8	26.7%	31
		More than ₹15,000	6	20.0%	32
13.	Type of Family	Nuclear family	18	60.0%	30
		Joint family	10	33.3%	30
		Extended family	2	6.7%	26
14.	Number of Children	One child	14	46.7%	30
		Two children	12	40.0%	28
		Three or more	4	13.3%	26
15.	Previous Education on Safety	Yes	5	16.7%	30
		No	25	83.3%	28

Table 6: Association of Level of Pre Test Knowledge Score of Nursing students with Selected Demographic Data

Category	Frequency (n)	Percentage (%)
Poor	0	00.0%
Moderate	12	40.0%
Good	18	60.0%

Table 7: Paired t-test to evaluate the impact of parental education on home safety practices

Test Type	Mean Score	Mean Difference	t-Statistic	p-value	Interpretation
Pre-Test	18.79				
Post-Test	28.57	**9.79**	**18.54**	< 0.00001	**Significant improvement**

Table 8: Chi square Test to see the association between demographic variables and improvement in safe home environment practices.

S. No.	Demographic Variables	Chi-Square Value	Degrees of Freedom (df)	p-value	Association
1	Age of Child	25.98	1	0.0000	Significant
2	Age of Parent	30.00	3	0.0000	Significant
3	Gender	24.08	1	0.0000	Significant
4	Educational Qualification	30.00	4	0.0000	Significant
5	Occupation	30.00	4	0.0000	Significant
6	Monthly Income	30.00	3	0.0000	Significant
7	Type of Family	30.00	2	0.0000	Significant
8	Number of Children	30.00	2	0.0000	Significant
9	Previous Education on Safety	23.23	1	0.0000	Significant

Figure 1: Denotes the age of the child

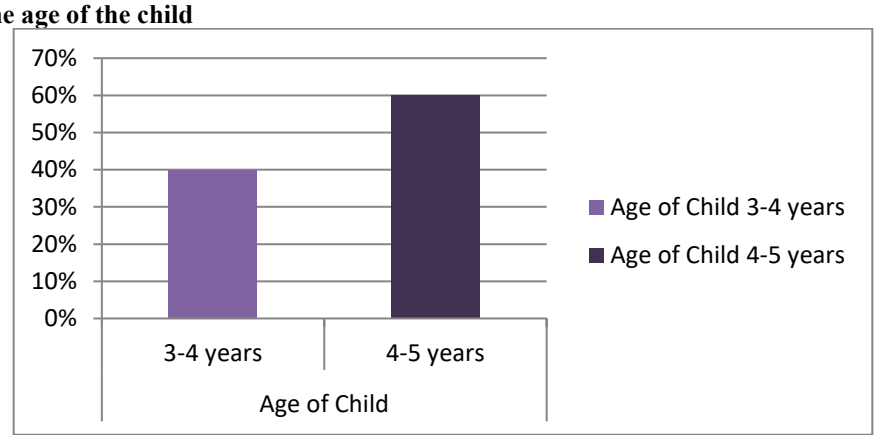
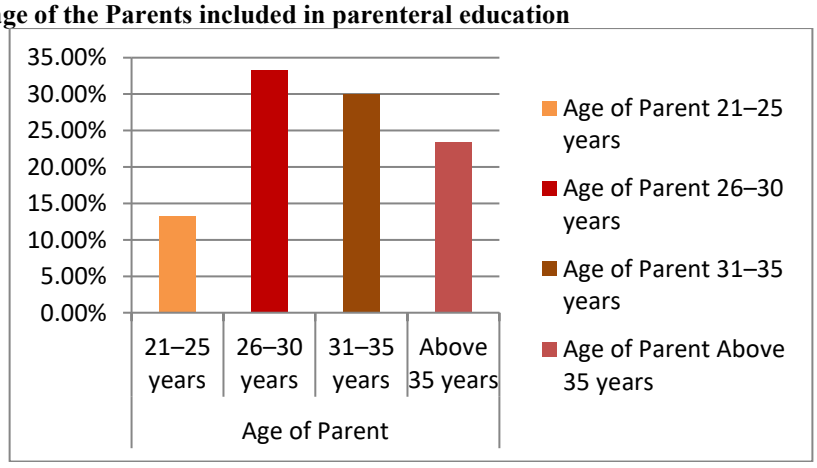


Figure 2: Denotes the age of the Parents included in parenteral education



RESULTS AND DISCUSSION

The findings of the study revealed that the structured educational intervention significantly improved parental knowledge on home safety and nurturing practices for children aged 3–5 years. The pre-test mean score was 18.79, indicating a moderate level of awareness among parents. Following the intervention, the post-test mean score increased to 28.57. A paired t-test showed a

mean difference of 9.79 with a t-value of 18.54 and a p-value of less than 0.00001, which confirms that the improvement in knowledge was statistically significant. Furthermore, the Chi-square analysis demonstrated a significant association between the post-test scores and various demographic variables, including the age of the child and parent, gender, educational qualification, occupation, monthly income, type of family, number of children, and previous education on safety. These results suggest that demographic characteristics influence the effectiveness of educational interventions. The study aligns with existing literature that emphasizes the role of parental education and socio-economic factors in enhancing home safety and child-rearing practices.

The structured educational intervention proved to be highly effective in increasing parental knowledge about creating a safe and nurturing home environment. This highlights the need for regular and targeted educational programs for parents, especially in early childhood settings, to promote safety, prevent injuries, and support the holistic development of children.

CONCLUSION

The educational intervention significantly enhanced parental knowledge regarding home safety and nurturing practices, as evidenced by the marked improvement in post-test scores. The statistical analysis confirmed that the intervention was effective in imparting crucial safety information, with a clear and positive impact on parents' awareness and preparedness. The study underscores the importance of such educational programs in empowering parents, especially in early childhood, to create safer and more supportive home environments. Given the significant associations between demographic factors and knowledge gains, tailored interventions considering socio-economic and educational backgrounds could further optimize the effectiveness of such programs. Overall, this research highlights the need for ongoing efforts to educate parents on home safety and child-rearing, which can play a vital role in preventing accidents and fostering a nurturing environment for children's growth and well-being.

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