



A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING EARLY DETECTION OF LEPROSY AMONG MOTHERS OF SCHOOL CHILDREN IN SELECTED COASTAL AREAS, KOLLAM

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ABSTRACT

Introduction: The research work undertaken was “A study to assess the effectiveness of structured teaching programme on knowledge regarding early detection of leprosy among mothers of school children in selected coastal areas, Kollam”. The objectives of the study were to assess the knowledge regarding early detection of leprosy among mothers of school children, to assess the effectiveness of structured teaching programme on knowledge regarding early detection of leprosy among mothers of school children and to find out the association between pre-test knowledge score regarding early detection of leprosy among mothers of school children and selected demographic variables. **Materials and Method:** The researchers used pre experimental one group pre test post test research design. The study was conducted among 60 mothers of school children in pallithottam area, Kollam. The samples were selected by using non probability purposive sampling technique. The researchers collected the data using self structured knowledge questionnaire and the data was analysed using descriptive and inferential statistics. **Result:** The study results showed that the mean posttest knowledge score 12.716 with SD 3.856 was significantly higher than the pretest mean score 8.783 with SD 3.189 with a mean difference of 3.927. Since the calculated paired ‘t’ value 11.52 was greater than the table value (1.96) at 0.05 level of significance. So structured teaching programme was effective in improving the knowledge regarding early detection of leprosy among mothers of school children. There was no significant association between pretest knowledge score regarding early detection of leprosy and selected demographic variables such as monthly income of family and there was significant association between pretest knowledge score regarding early detection of leprosy and selected demographic variables such as age, number of children, occupational status, educational status.

KEYWORDS: Effectiveness; Structured teaching programme; Early detection of leprosy.

INTRODUCTION

Leprosy, a chronic infectious disease caused by *Mycobacterium leprae*, continues to be a public health concern in various parts of the world. Despite significant progress in medical science, early detection remains pivotal in preventing complications and promoting effective treatment. According to the World Health Organization (WHO), about 208,000 people have leprosy (Hansen's disease) worldwide. Most cases are found in Asia and Africa. The prevalence rate of leprosy in India decreased from 0.69 per 10,000 people in 2014–2015 to 0.45 in 2021–2022. The Government of Kerala's Department of Health and Family Welfare has a vision of making Kerala leprosy-free by 2025. Mothers, as primary caregivers and influencers in households, play a crucial role in the early recognition of health issues,

including infectious diseases like leprosy. Therefore, focusing on this demographic group becomes paramount in addressing the broader health concerns prevalent in the coastal areas of Kollam.^[1]

Objectives

- To assess the knowledge regarding early detection of leprosy among mothers of school children.
- To assess the effectiveness of structured teaching programme on knowledge regarding early detection of leprosy among mothers of school children.
- To find out the association between pretest knowledge score regarding early detection of leprosy among mothers of school children and selected demographic variables.

Hypothesis

- **Hypothesis (H₁):** There will be significant difference between the mean pre-test knowledge score and mean post -test knowledge score regarding early detection of leprosy among mothers of school children after administrating structured teaching programme.
- **Hypothesis (H₂):** There will be significant association between the pre-test knowledge score regarding early detection of leprosy among mothers of school children and selected demographic variables.

MATERIALS AND METHODS

- Research approach: Quantitative research approach
- Research design: Pre- experimental one group pre - test post -test research design
- Population: Mothers of school children
- Sample: Mothers of school children, children studying in Infant Jesus L.P School
- Sampling technique: Non Probability Purposive sampling technique
- Setting: Infant Jesus L.P School, Pallihottam, Kollam.
- Data collection method: Using a self structured knowledge questionnaire

Inclusion criteria

The mothers who are:

- In the age group of 23-42 years
- Mothers of school children studying in Infant Jesus LP school
- Living in coastal areas.
- Able to read and write Malayalam.
- Willing to participate.

Exclusion criteria

The college students who are:

- Exposed to previous formal education regarding Leprosy.
- Not willing to participate in the study.
- Mothers who were absent during the time of data collection.

Data collection process

The data collection process was scheduled after communicating the purpose and significance of the study with the participants. The data were collected through self structured knowledge questionnaire.

Ethical approval and informed consent

Formal permission received from the school authority and consent letter from the participants. Formal permission received from the institutional ethical committee.

Tool

Section A: Demographic proforma which include age, number of children, occupational status, educational status, monthly income of family.

Section B: Self Structured knowledge questionnaire.

Reliability

The researchers established reliability of the tool by using test-retest method. Reliability co-efficient calculated was 0.84 for the self structured knowledge Questionnaire.

Analysis

1. Descriptive statistics: Demographic variables were analyzed using frequency and percentage.
2. Inferential statistics: Chi square test was used to find out the association between pretest knowledge score and selected demographic variables and paired t test was used to analyse the effectiveness of structured teaching programme.

RESULTS

The study was conducted at Infant Jesus L.P School, Pallihottam, Kollam. A total of 60 mothers of school children were participated. The study results shows that 25% of mothers of school children had poor Knowledge, 68.3% had average knowledge, 6.6% mothers of school children had good Knowledge regarding early detection of leprosy in pretest. After administering structured Teaching programme regarding early detection of leprosy as an intervention, 38.33% had good knowledge, 46.6% had average knowledge and 15% had poor knowledge regarding early detection of leprosy among mothers of school children in post test. the mean pre-test knowledge score was 8.783 and Mean posttest knowledge score was 12.716 and the mean difference between the pre-test Knowledge score and post-test knowledge score was 3.927. The paired 't' test value was 11.52, it was greater than the table value(1.96), at 0.05 level of significance.

Percentage distribution of participants as per demographic variable

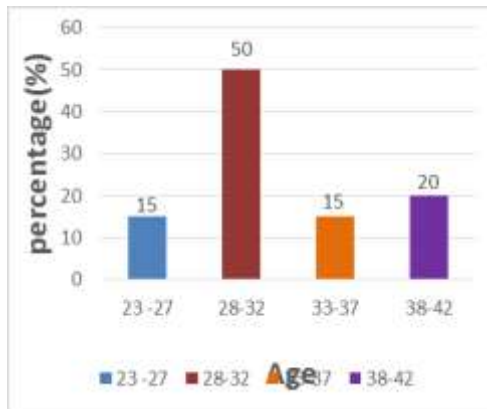


Figure 1

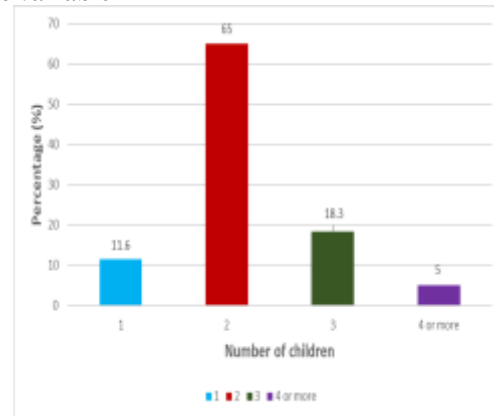


Figure 2

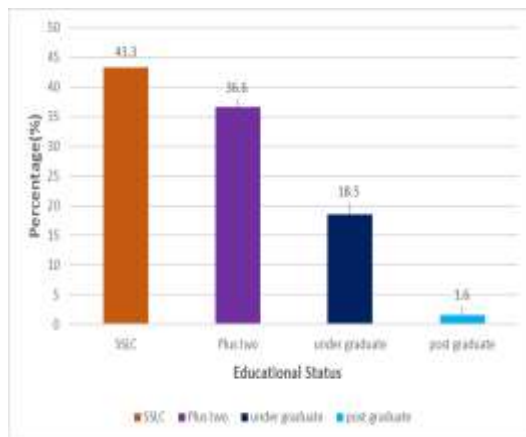


Figure 3

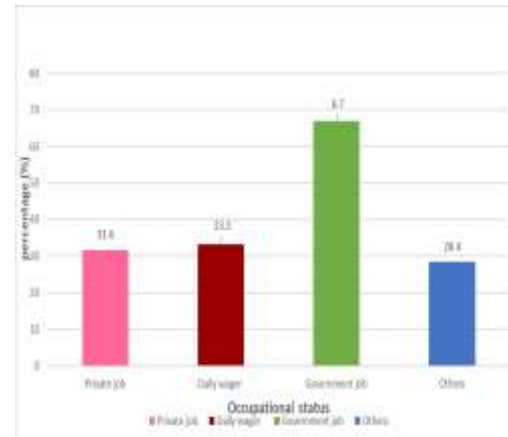


Figure 4

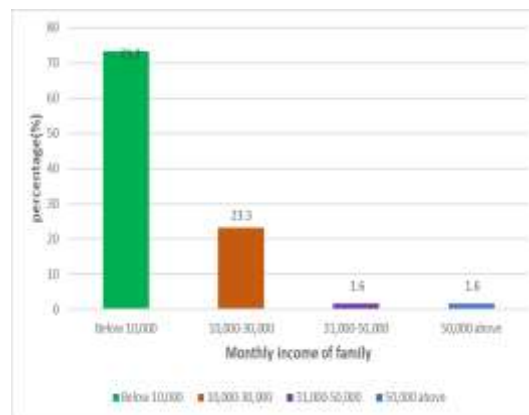


Figure 5

- 50% belongs to 28-32 years of age, 20% belongs to 38-40 years of age, 15% belong to 23-27 and 15% belongs to 33-37 years of age.
- 65% of mothers having two children, 18.3% of mothers having 3 children, 11.6% of mothers having one child and 5% of mothers having 4 or more children.
- 33.3% were works as daily wager, 31.6% works in private sector, 28.4% has other job and 6.7% works in government sector.
- 43.3% were SSLC, 36.6% were plus two, 18.5% were under graduate and 1.6% were post graduate.
- 73.3% of mothers had their monthly income of family below Rs 10,000, 23.3% of mothers had their monthly income of family above Rs 10,000-30,000, 1.6% of mothers had their monthly income of family Rs 31,000-50,000 and 1.6% of mothers had their monthly income of family above Rs 50,000.

Evaluation of the effectiveness of structured teaching programme on knowledge regarding early detection of leprosy among mothers of school children.

Knowledge score	Mean	Standard deviation	Mean difference	Paired 't' value
Pre test	8.783	3.189	3.927	11.52
Post test	12.716	3.856		

t=1.96, *significant at 0.05 level of significance.

The data presented in this table 3 shows that the mean post test score (12.716) was greater than mean pre- test score (8.783) on knowledge regarding early detection of leprosy among mothers of school children. The mean difference between pretest and post test knowledge score was 3.927. The paired 't' value 11.52 was greater than the table value (1.96), at 0.05% level of significance, so the structured teaching programme was effective. Hence

the hypothesis (H_1) which states that there will be significant difference between the mean pretest and mean posttest knowledge score regarding early detection of leprosy was accepted. It shows that structured teaching programme was effective in increasing the knowledge regarding early detection of leprosy among mothers of school children.

Association between the pretest knowledge score and selected demographic variables.

Sl. No	Demographic variables	Pretest knowledge score			df	Chi square value	Table value	Level of significance
		Poor	Moderate	Good				
1.	Age							
	23-27	3	3	3	6	18.13	2.45	S
	28-32	8	18	4				
	33-37 38-40	2 2	7 10	0				
2.	Number of children							
	1	1	6	0				
	2	7	26	5	6	5.395	2.45	S
	3	4	7	0				
	4 or more	2	2	0				
3.	Occupational Status							
	Private Job	5	12	2				
	Daily Wager	0	16	4	6	7.556	2.45	S
	Government Job	1	3	0				
	others	5	10	2				
4.	Educational Status							
	SSLC	8	18	0	6	8.785	4.30	S
	Plus Two	7	13	2				
	UG	0	9	2				
	PG	0	1	0				
5.	Monthly income of family							
	Below 10,000	11	31	2	6	0.1	2.45	S
	10,000-30,000	4	9	1				
	31,000-50,000	0	1	0				
	Above 50,000	0	1	0				

There was no significant association between pretest knowledge score regarding early detection of leprosy and demographic variable such as monthly income of family. There was significant association between pretest knowledge score regarding early detection of leprosy and demographic variables such as age, number of children, occupational status, educational status.

DISCUSSION

A case control study conducted on socio demographic and environmental correlates of leprosy in New Civil Hospital, Surat from September 2011 to February 2012. The sample size was 75 selected through convenience sampling technique. The demographic variables are age, sex, family size, religion, caste, year of education, source of water for drinking purpose, source of water for domestic purpose, type of floor. There was no significant association between pretest knowledge score and

demographic variables such as age, religion, sex, caste, years of education, type of floor and there was significant association between pretest knowledge score and demographic variables such as source of water for drinking purpose, source of water for domestic purpose and family size.^[2]

A cross-sectional study on knowledge, beliefs and attitude towards leprosy in students was conducted at schools of Jaipur district during August 2010- February 2011. The study population comprised of total 1099 students. Using simple random sampling technique the sample size was achieved. The results show that in both rural and urban group 76.07% and 72.69% of students had awareness about leprosy. Only 5.8% urban and 3.2% rural students were aware of leprosy treatment centre in their area. Almost 50% of students in both groups showed positive attitude towards leprosy patients and 30-50% of students were neutral.^[3]

A quasi-experimental study to assess the effectiveness of structured teaching programme on knowledge and attitude of self-care management among leprosy clients conducted in selected leprosy colony, Coimbatore district during June and July of 2010. Sample size was 30 selected using purposive sampling technique. The mean pretest score was 28.13 and mean post-test score was 34.37 after administering structured teaching programme on knowledge and attitude of self-care management regarding leprosy. The paired t-value was 12.15.^[4]

CONCLUSION

More rapid diagnosis and administration of treatment are regarded as critical measures to ensure that current control strategies continue to reduce the burden of leprosy. Studies targeting early diagnosis of patients are notoriously inefficient and require a significant degree of expertise to ensure proper diagnosis. There is an urgent need to develop and extend the range of proven interventions, specifically those that address the needs of women, those that explore and develop the health promotion potential of people previously affected by leprosy and those that exploit the potential of individuals with leadership roles within the community.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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