



A COMPARATIVE STUDY TO ASSESS THE LEVEL OF KNOWLEDGE REGARDING IMMUNIZATION AMONG FIRST-TIME MOTHERS AND EXPERIENCED MOTHERS ATTENDING SELECTED COMMUNITY HEALTH CENTRES, COIMBATORE.

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ABSTRACT **Background:** Immunization is an effective public health measure for preventing vaccine-preventable diseases. Mothers' knowledge plays a crucial role in ensuring timely childhood immunization. **Objectives:** To assess and compare the level of knowledge regarding immunization among first-time mothers and experienced mothers and to determine its association with selected demographic variables. **Methods:** A comparative descriptive research design was adopted. The study was conducted among 100 mothers (50 first-time mothers and 50 experienced mothers) attending Thudiyalur and Idikarai Primary Health Centre, Coimbatore. Participants were selected using a non-probability purposive sampling technique. Data were collected using a structured knowledge questionnaire and analyzed using descriptive and inferential statistics. **Results:** The study was expected to identify differences in the level of knowledge regarding immunization between first-time mothers and experienced mothers and to determine the association between knowledge and selected demographic variables. **Conclusion:** The findings were expected to provide evidence for planning health education programmes to improve mothers' knowledge regarding childhood immunization.

KEYWORDS : Immunization, Knowledge, First-time Mothers, Experienced Mothers, Community Health Centres.

INTRODUCTION:

Immunization is one of the most effective and cost-efficient public health interventions for preventing vaccine-preventable diseases and reducing childhood morbidity and mortality. It protects children against serious infectious diseases and contributes significantly to improved child survival worldwide.¹ Mothers play a vital role in ensuring that children receive vaccines according to the recommended immunization schedule. Adequate knowledge regarding the benefits, schedule, and importance of immunization helps mothers make informed decisions and promotes timely vaccination of children.² First-time mothers may have limited practical experience and depend mainly on healthcare professionals for immunization-related information, whereas experienced mothers often gain knowledge through previous childcare experiences. Comparing the knowledge of these two groups helps identify gaps in awareness and the need for targeted health education.³ Therefore, the investigator felt the need to conduct a comparative study to assess the level of knowledge regarding immunization among first-time mothers and experienced mothers attending selected Community Health Centres, Coimbatore.

Statement Of The Problem:

A Comparative Study to Assess the Level of Knowledge Regarding Immunization Among First-Time Mothers and Experienced Mothers Attending Selected Community Health Centres, Coimbatore.

OBJECTIVES:

- To assess the level of knowledge regarding immunization among first-time mothers attending selected Community Health Centres, Coimbatore.
- To assess the level of knowledge regarding immunization among experienced mothers attending selected Community Health Centres, Coimbatore.
- To compare the level of knowledge regarding immunization between first-time mothers and experienced mothers attending selected Community Health Centres, Coimbatore.
- To determine the association between the level of knowledge regarding immunization and selected demographic variables among first-time mothers and experienced mothers attending selected Community Health Centres, Coimbatore.

OPERATIONAL DEFINITION:

Comparative Study:

In this study, a comparative study referred to the comparison of the level of knowledge regarding immunization between first-time mothers and experienced mothers attending selected Community Health Centres, Coimbatore.

Knowledge:

Knowledge referred to the understanding and awareness of first-time mothers and experienced mothers regarding childhood immunization,

including its importance, immunization schedule, benefits, vaccine-preventable diseases, and possible side effects, as measured by the structured knowledge questionnaire.

Immunization:

Immunization referred to the process of protecting children from vaccine-preventable diseases through the administration of vaccines according to the National Immunization Schedule.

First-Time Mothers:

First-time mothers referred to mothers who had only one living child aged 0–5 years and attended the selected Community Health Centres, Coimbatore.

Experienced Mothers:

Experienced mothers referred to mothers who had two or more children, with at least one child aged 0–5 years, and attended the selected Community Health Centres, Coimbatore.

Selected Community Health Centres:

Selected Community Health Centres referred to Thudiyalur and Idikarai Primary Health Centre, Coimbatore.

Assumptions:

- First-time mothers may have lower knowledge regarding immunization than experienced mothers.
- Experienced mothers may have better knowledge regarding immunization due to their previous childcare experience.
- Mothers may cooperate and provide honest responses during data collection.
- The level of knowledge regarding immunization can be measured using a structured knowledge questionnaire.

DELIMITATIONS:

- The study was limited to first-time mothers and experienced mothers attending selected Community Health Centres, Coimbatore.
- The study was conducted at Thudiyalur and Idikarai Primary Health Centre, Coimbatore.
- The study included only mothers who were willing to participate.
- The study assessed only the level of knowledge regarding immunization.
- The data collection period was limited to the duration of the study.

Hypothesis:

- There was no significant difference in the level of knowledge regarding immunization between first-time mothers and experienced mothers attending selected Community Health Centres, Coimbatore.
- There was a significant difference in the level of knowledge

regarding immunization between first-time mothers and experienced mothers attending selected Community Health Centres, Coimbatore.

METHODOLOGY:

- **Research Design:** A comparative descriptive research design was adopted for the study.
- **Research Setting:** The study was conducted at Thudiyalur and Idikarai Primary Health Centre, Coimbatore.
- **Population:** The population of the study comprised first-time mothers and experienced mothers attending the selected Community Health Centres, Coimbatore.

Sample Size -The sample size consisted of 100 mothers, including:

- 50 first-time mothers
- 50 experienced mothers

Sampling Technique - Non-probability purposive sampling technique was used to select the participants.

Variables

- Independent Variable-Maternal status (First-time mothers and experienced mothers).
- Dependent Variable-Level of knowledge regarding immunization.
- Attribute (Demographic) Variables
 - Age
 - Educational status
 - Occupation
 - Religion
 - Type of family
 - Monthly family income
 - Number of children
 - Age of the child
 - Source of information regarding immunization

Data Collection Tool

The tool consisted of two sections:

- Section A: Demographic variables of the mothers.
- Section B: Structured knowledge questionnaire to assess the level of knowledge regarding immunization.

Data Analysis

The collected data were analyzed using descriptive and inferential statistics.

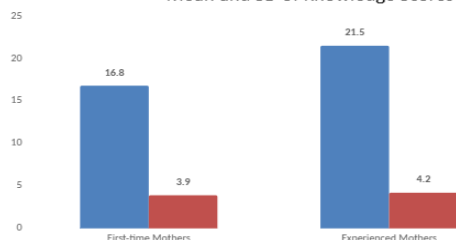
Descriptive Statistics

- Frequency and percentage were used to describe the demographic variables.
- Mean and standard deviation were used to assess the level of knowledge regarding immunization.
- Inferential Statistics
- Independent 't' test was used to compare the level of knowledge regarding immunization between first-time mothers and experienced mothers.
- Chi-square (χ^2) test was used to determine the association between the level of knowledge regarding immunization and selected demographic variables.
- The level of significance was set at $p < 0.05$.

RESULTS:

Group	Mean	SD	Mean %	t-value	Significance
First-time Mothers	16.8	3.9	56.0	3.42	$p < 0.001$ (Significant)
Experienced Mothers	21.5	4.2	71.7		

Mean and SD of Knowledge Scores



Association with Demographic variables:

The association between the level of knowledge regarding immunization and selected demographic variables among first-time

mothers and experienced mothers was determined using the Chi-square (χ^2) test. The findings revealed that there was a statistically significant association between the level of knowledge and educational status, monthly family income, number of children, and source of information regarding immunization ($p < 0.05$). However, no statistically significant association was found between the level of knowledge and age, occupation, religion, type of family, and age of the youngest child ($p > 0.05$). This indicated that educational level and access to immunization-related information had a significant influence on the mothers' knowledge regarding immunization.

DISCUSSION :

The present study was expected to compare the level of knowledge regarding immunization among first-time mothers and experienced mothers attending selected Community Health Centres, Coimbatore. It was anticipated that experienced mothers would have a higher level of knowledge than first-time mothers because of their previous childcare experience and repeated exposure to immunization services.

The study was also expected to identify significant associations between the level of knowledge and selected demographic variables such as educational status, monthly family income, and source of information regarding immunization. The findings were expected to emphasize the importance of health education and counselling provided by healthcare professionals to improve mothers' knowledge and promote timely childhood immunization.

Overall, the study was expected to provide useful evidence for planning educational interventions aimed at improving maternal knowledge regarding immunization and strengthening immunization practices in the community.

Recommendations:

- Similar studies can be conducted on a larger sample to improve the generalizability of the findings.
- A comparative study can be carried out in different rural and urban settings.
- Educational programmes can be organized to improve mothers' knowledge regarding immunization.
- An interventional study can be conducted to evaluate the effectiveness of a structured teaching programme on immunization among mothers.
- Similar studies can be conducted among fathers, caregivers, or pregnant women to assess their knowledge regarding immunization.
- Longitudinal studies can be undertaken to assess changes in mothers' knowledge and immunization practices over time.

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