

**A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED  
TEACHING PROGRAMME ON LEVEL OF KNOWLEDGE AND  
ATTITUDE REGARDING IMMUNIZATION AMONG THE  
MOTHERS OF UNDER FIVE CHILDREN IN SELECTED  
RURAL AREA AT DINDUGAL.**



**Reg. No. 301518201**

**A DISSERTATION SUBMITTED TO THE TAMILNADU  
DR.MGR MEDICAL UNIVERSITY, CHENNAI,  
IN PARTIAL FULFILLMENT FOR THE DEGREE OF  
MASTER OF SCIENCE IN NURSING**

**OCTOBER 2017**

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**EXTERNAL EXAMINER**

**INTERNAL EXAMINER**

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## **CERTIFICATE**

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# CHAPTER - I



## INTRODUCTION

# CHAPTER - I

## INTRODUCTION

*“What a child doesn’t receive, he can seldom later”*

**-James.**

Vaccination is probably one of the most cost effective interventions to reduce burden of childhood morbidity and mortality, provided used optimally and judiciously. Currently it is estimated that immunization saves the life of 3 million children a year but 2 million more lives could be saved by existing vaccines. Vaccination is a cornerstone of public health, believed to save an estimated 2-3 million lives annually. Therefore, provision of childhood immunization continuous to be an essential component in reducing morbidity and mortality worldwide. India is one of the few countries where universal routine childhood immunization is provided free of charge.

Immunization is defined as the process of inducing the immunity in an individual against an infectious organism or agent, through the vaccination (Satish Gupte 2002). In May 1974, the WHO officially launched a global immunization programme known as Expanded Programme of Immunization (EPI), to protect all the children of the world against six vaccine preventable diseases namely- Diphtheria, Whooping Cough, Tetanus, Polio, Tuberculosis and Measles by the year 2000. In India, the EPI was launched on January 1978. (K. Park). In 1990, by United Nations Integrated Children’s Emergency Fund (UNICEF), EPI was renamed into Universal Child Immunization and it was launched in India on November 19, 1985 and was dedicated to the memory of Smt. Indira Gandhi. (K. Park) An important contribution of microbiology to medicine has been immunization. By this, many vaccine preventable have been virtually eliminated. (C. P. Baveja, 2005).

Vaccine is an immunological substance designed to confer specific protection against a given disease. It stimulates immune system (either humoral or cell mediated) to generate specific protection against an infectious agent. Vaccine may be prepared from live modified organisms, inactivated or killed organisms, toxoids, or combination of these. Polio vaccine was invented by Jonas Edward Salk in 1952. The

immune system protects an individual against invasion by foreign bodies, specifically microbial agents and their toxic products. (Ananthanarayan, 2004).

Today vaccination is very essential part of children health .Vaccination programme is a key step for the preventive services of children. The field of paediatric vaccination is growing and changing as new vaccines are becoming available and previous diseases are being eradicated due to the complicity and evolution of vaccine preventable diseases .A review of immunology and the principles of vaccination provide background knowledge for information pertaining to disease transmission and the current recommended vaccine schedule .The goal of vaccination is to protect the population from disease and decrease the incidence of disease and disease transmission.

Immunization is vital; it protects nearly 3/4<sup>th</sup> of children against major childhood illness. There are several diseases, which can be easily prevented by timely vaccination as a part of routine immunization. Every child has the right to benefit from the appropriate traditional and new life saving vaccinations. All mothers wish good health for their children. Health workers desire all children immunized against vaccine preventable diseases. The government wants them protected from progressive diseases. But many vaccines do not reach a majority of infants and children. Decreased awareness, patient compliance and cost effectiveness play a major role in limiting the success of vaccine.

Children are innocent, trusting and full of hope. Their childhood should be joyful and loving. Their lives should mature gradually, as they gain new experiences. Each child is a unique person, a person whose future will be affected for better or worse by the influences that mould his or her life during the early years. One child will grow up to become a joy to God and parents and a blessing to others. Another will grow up and become a menace to society. Many others will live out their lives in fairly good ways. The future of any society depends on its children. Parents are laying the foundation for their child's lives. So the parents have a very key role and opportunity to help promote the health of the children. Children who receive their immunizations on time are healthier children.

At birth, infants have protection against certain diseases because antibodies have passed through the placenta from the mother to the unborn child. After birth,

breastfed babies get the continued benefits of additional antibodies in breast milk. But in both cases, the protection is temporary. Immunization (vaccination) is a way of creating immunity to certain diseases by using small amounts of a killed or weakened microorganism that causes the particular disease. Microorganisms can be viruses, such as the measles virus, or they can be bacteria, such as pneumococcus. Vaccines stimulate the immune system to react as if there were a real infection; it fends off the "infection" and remembers the organism so that it can fight it quickly should it enter the body later.

Childhood immunization require collaboration with parents, who may be anxious about immunization safety .Many parents are worried that some vaccines are not safe and may harm their baby or young child .They may ask their doctors or nurses to wait or even refuse to have the vaccines .So awareness of vaccines and its effects to all the caregivers of children or parents is an important factor to improve the health of the child. In spite of any barriers or difficulties in providing immunizations, bringing children up to date at every opportunity continuous to be essential both in preventing morbidity and mortality and in promoting worldwide eradication of vaccine preventable diseases. Protection from vaccine preventable diseases is one of the most crucial rights of children. So the parents must have the primary responsibility of getting their child fully immunized and the child must not be made to suffer if the care givers are having lack of knowledge.

## **NEED FOR THE STUDY**

*“If you have knowledge, let others light their candles at it.”(Margaret Fuller)*

The physical health of a child is important because it is associated with the mental and social development of a children. Mothers are the first care providers of their children, is needed to reduce the under five mortality rate. One of the ways to achieve reduction of under five mortality is to educate the mothers on matters pertaining to child care

Approximately 2.5 million children under five years of age die every years as a result of disease that can be prevented by vaccination using currently available or new vaccines. India houses a large chunk of these unimmunized children. According

to 2006 estimates, around 12 million children were not immunized; Uttar Pradesh with more than 3.0 million unimmunized children tops this list.

In India 22,616 cases of pertussis were reported in 2006. In developing countries pertussis is a major cause of infant mortality. The reported incidence for diphtheria has been 2472(partial) and 10,231 cases in the year 2006 and 2005 respectively. Measles is the leading cause of childhood death. Every year around 3 million cases of measles are seen and about 900,000 children die because of measles around the world .In India every 500 children die because of measles .The most worrying factor is that the vaccines coverage against measles in India is only 66% and even below 50% in many states. There are 8.8 million estimated deaths in children under 5 years of age in worldwide due to haemophilus influenza in 2008. The estimated pneumococcal deaths in Indian children aged 1-5 month per 100 000 is between 100 and <300. An estimated 527,000 children aged <5 years die from rotavirus diarrhea each year, with >85% of these death occurring in low income countries of Asia and Africa.

**Singh (2012)** conducted a study to determine the relationship between the literacy status and immunization coverage on Bihar. The analysis revealed a fairly low immunization coverage (<33%) for all vaccines and it was found that literacy status of mothers had a significant influence on the immunization level. Lack of awareness and motivation was cited as the main reason for non-immunization. Education of mothers improves their knowledge which in turn changes their attitude.

Each year since 1990, immunization with routine vaccines has reached more than 70 percent of children worldwide. At the UN General Assembly special session in 2002 the international community adopted the specific target of immunizing by 2010 at least 90 percent of children's in each country.

This area of study has been selected because even today the mortality of under five children is high and it is mainly due to diseases that can be prevented. Hence, the need was felt to identify the learning needs of mothers and educate them regarding immunization by introducing structured teaching programme and promoting health of under five children which in turn reduces mortality among under five children.



In India, **Das, N. (2013)** reported the immunization coverage has remained high since 1990, but national coverage reports of 100% coverage, suggest problems with the accuracy of those reports.<sup>4</sup> Therefore, coverage surveys are routinely used to evaluate coverage. Surveys through the 1990s have found that only about half of the birth cohorts are fully immunized, with individual year estimates ranging from a fully immunized rate of 3.5% to 68%. The Rapid Household District Surveys performed in 1998/9 and again in 2002/3 show that of the 236 districts that can be currently compared, 174 (74%) showed a decrease in infant full immunization rates.

In 2007 the UNICEF reported that Immunization coverage rates were low and complete immunization among children aged 12-23 months was dismal at 12%

- Around 42.0% of the children received BCG.

.Only a quarter of the children received measles vaccine (24.3%) and a similar percentage received DPT 3 (23.7%).

- There was a considerable drop in the percentage of children who received DPT1 (37.8%) and DPT3 (23.7%). This reflects a substantial percentage of drop-outs. Similar trend could be seen in case of children who received Polio 1 (33%) and Polio 3 (22%).

- Vaccination card was available with only 38.6% of mothers whose child received any immunization.<sup>7</sup>

Bonu, S. Rani, M. Baker, T.D. in 2003 reported multiple reasons were cited by the women for poor immunization. These included long distance to the nearest public health facility, after effects of vaccination like fever, swelling, and pain and strong belief that polio vaccine can cause sterility in their children and lack of knowledge about the vaccination and serious consequences of vaccine preventable diseases.

In 2006-2007 the UNICEF reported that measles vaccine coverage was 90.4% and tetanus immunization. So far the new vaccination for hepatitis B and encephalitis coverage was less reported. The lapse in vaccination coverage is due to lack of knowledge about the vaccine preventable diseases and its complications

The inadequately immunized children are mostly in rural areas and in urban slums and semi urban under privileged communities due to poor health delivery

facilities and non functional health care units. Failure to immunize is important not only to the individual child, but it also has societal and global implications for limiting the spread of disease. According to epidemiological data, there has been a sharp decline in disease incidence following licensure and use of each vaccines (National Associations of Paediatrics Nurse Associates and Practitioners, NAPNAP) 2000. It is critical that health care providers know and understand incidence and sequel associated with these vaccine preventable diseases and are able to discuss the benefits and risk with parents.

A study was conducted to investigate the knowledge of nursing mothers about vaccines preventable diseases, their causes and benefit of childhood vaccination among 69 nursing mother's ages 21-50 years with secondary education to a self administered questionnaire .Result showed that 78.57% of mothers had identified poliomyelitis is a disease preventable by routine childhood immunization and 85.1% knew the organism. Tetanus was identified by only 5.7% and not agreed that vaccination was the best prevention against them.<sup>9</sup>

WHO estimate that haemophilus influenza type b (Hib) caused over 8 million cases of serious disease and 376,000 deaths globally in the year 2000. Hib disease had been shown to be a significant cause of mortality and morbidity in Indian children <5 years of age. Hospital based studies showed that Hib and pneumococcus were the most common cause of childhood bacterial meningitis. Measles continued to be an important cause of childhood morbidity and mortality in many states in India and between 100,000 and 160,000 children die from measles. The extremely low rates of routine immunization in large parts of the country remain a matter of serious concern .Inadequate routine administration of polio vaccine in, UP, Bihar, West Bengal and some other parts has been chiefly responsible for the delay in polio eradication from India. Sporadic outbreaks of Diphtheria and Measles have been observed in different parts in the Northern states. The gravity of the situation calls for a more vigorous approach.

While working in the community the investigator found that there are so many children missed the opportunities of vaccination due to the inadequate knowledge of mothers and are in high risk for developing communicable diseases. So the investigator thought that if the mothers are educated well the disease can be controlled

to some extent. Therefore the investigator decided to undertake the study to assess the effectiveness of planned teaching programme for mothers in a selected community at Dindugal.

## **STATEMENT OF THE PROBLEM**

A study to assess the effectiveness of structured teaching programme on level of knowledge and attitude regarding immunization among the mothers of under five children in selected rural area at Dindugal.

## **OBJECTIVES OF THE STUDY**

- To assess the Pretest level of knowledge and attitude regarding the immunization among mothers of under five children as measured by structured knowledge questionnaire and attitude scale.
- To assess the post test level knowledge and of attitude regarding immunization among mothers of under five children as measured by structured knowledge questionnaire attitude scale.
- To evaluate the effectiveness of structured teaching program on knowledge and attitude regarding immunization among mothers of under five children in term of gain in post test knowledge and attitude score.
- To find the co relation between the knowledge and attitude regarding immunization among the mother of under five children.
- To find out the association between post test level of knowledge with their selected demographic variables.
- To find out the association between post test level of attitude with their selected demographic variables.

## **HYPOTHESES**

**H1:** The mean post test knowledge score is higher than the mean pre test knowledge score regarding immunization among the mothers of under five children.

**H2:** The mean post test attitude score is higher than the mean pre test attitude score regarding immunization among the mothers of under five children.

**H3:** There will be significant relationship between knowledge and attitude regarding immunization among the mothers of under five children.

**H4:** There will be no significant association between the post test knowledge scores of mothers regarding immunization and selected demographic variables.

**H5:** There will be no significant association between the post test attitude scores of mothers regarding immunization and selected demographic variables.

## **OPERATIONAL DEFINITION**

**1. Assess:** - In the present study it is the organized systematic and continuous process of collecting data from mothers of under five children.

**2. Effectiveness:** - In this study effectiveness means “Improving the knowledge regarding immunization for mothers of under five by structured teaching programme which may result differences between pre and post test score”.

**3. Structured teaching programme:-** In the present study it refers to systematically planned teaching programme designed to provide information regarding immunization among mothers of under five children.

**4. Knowledge:** - It refers to correct response of the mothers of under five to knowledge items on immunization as achieved by knowledge score.

**5. Immunization:** - It refers to the process of protecting under five children against disease like diphtheria, polio, tetanus, whooping cough, tuberculosis and measles by following the schedule prescribed by national immunization schedule.

**6. Attitude-** It refers to the thoughts of under five mothers regarding immunization.

**7. Under five children:** - In the present study under five is defined as one whose age is below 5 years.

## **ASSUMPTION**

- The post test score will be higher than the pre test score.
- Under five children’s mother will not have adequate knowledge and attitude regarding immunization.

- Demographic variable of the sample may have an influence over knowledge and attitude regarding immunization.

## **LIMITATION**

- Who are willing to participate in the study.
- Duration of the data collection only six weeks.
- The study will be limited to mothers of under five children those who are present at the time of data collection.
- The sample size is 30 mothers of under five children.

## **PROJECTED OUTCOMES**

- ✚ The study aims at determining the effectiveness of structured teaching programme on immunization regarding knowledge and attitude of mothers who have under five of children.
- ✚ Health teaching can help to create awareness among the people regarding the immunization and also motivates them to have vaccine.

The findings of this study will help the nursing personnel to take steps to improve the knowledge of mothers regarding the immunization.

## CONCEPTUAL FRAMEWORK

The conceptual framework is a group of related ideas, statements or concepts. The term conceptual model is often used to interchange with conceptual framework and sometimes with grand theories that articulate a broad range of the significant relationship among the concepts of a discipline Kozeir Barbara 2005.

The conceptual framework for this study was derived from general system model given by von Ludwig Bertalanffy 1968. According to this theory, a system is a set of components or units interacting with each other within a boundary that filters the type and rate of exchange with the environment. All living systems are open in that there is a continual exchange of matters, energy and information. In an open system there are varying degrees of interaction with the environment from which the system receives input and gives back output in the form of matter energy and information.

General system theory is useful in breaking the process into sequential tasks to ensure goal realization. Bertalanffy explained that the system has 4 major aspects

1. Input
2. Throughput
3. Output
4. Feedback

### INPUT

In this type of information, energy and material that enters the system from environment, through its boundaries.

Assess the level of knowledge and attitude regarding immunization among mothers of under five children is done by using structured knowledge questionnaire and attitude scale.

Here input indicates the structured teaching programme regarding immunization among mothers who have under five children.

## **THROUGH PUT**

Refers to a process that allows the input to be changed so that, it is useful to the system.

In this study, through put is a process of transformation of knowledge and attitude on immunization using flash cards among mothers who have under five children.

## **OUT PUT**

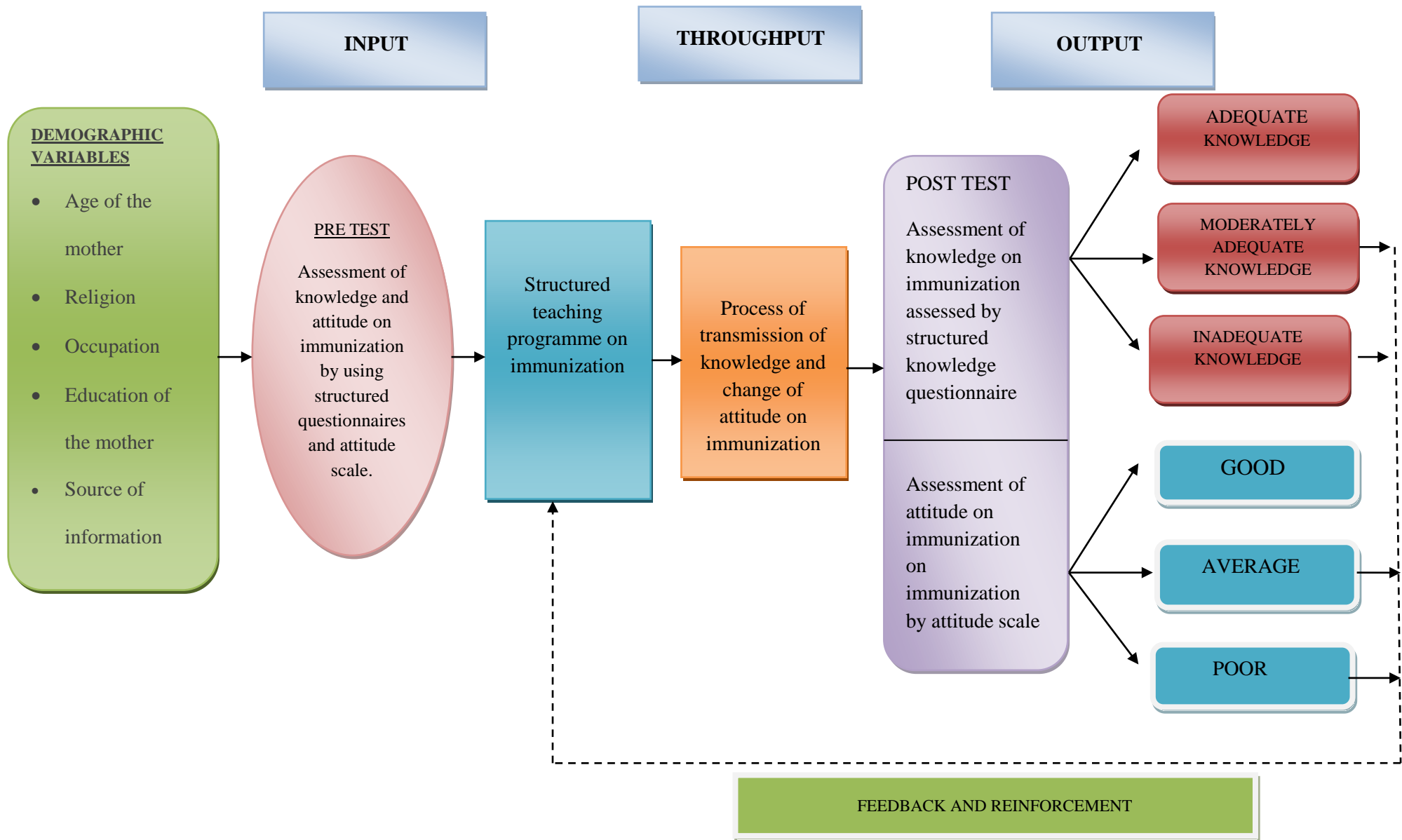
Output is any information that leaves the system and enters the environment through the system boundaries.

Output denotes the improved level of knowledge and attitude after structured teaching programme on immunization among mothers who have under five children.

In this study, output is assessed by the post test conducted among mothers regarding immunization using the same structured questionnaire.

The improved score gained by the mothers during post test indicates the effectiveness of structured teaching programme on immunization.

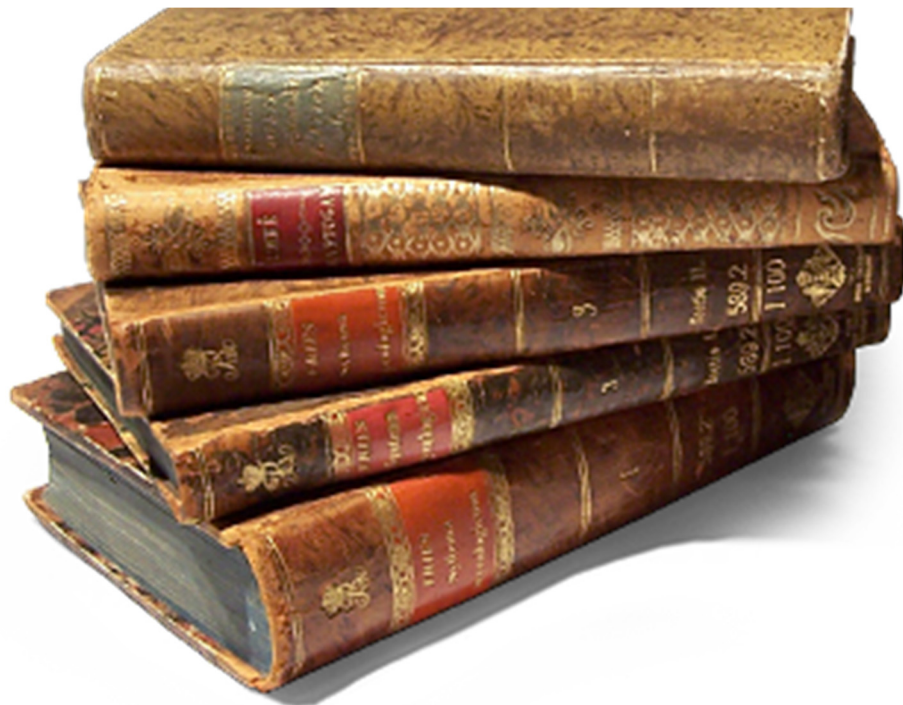
If the knowledge is inadequate, a feedback can be given by administering a structured teaching regarding various aspects to mothers who have under five children.



**FIG 1 CONCEPTUAL FRAMEWORK BASED ON GENERAL SYSTEM THEORY MODEL (KOZIER BARBARA 2005)**



## CHAPTER II



## REVIEW OF LITERATURE

## CHAPTER - II

### REVIEW OF LITERATURE

**Adeyinka (2009)** A study was done for 328 mothers of children aged 12-35 months to identify the factors even in the presence of maternal illiteracy, educating mothers about the vaccine excellent knowledge. Overall it was found that majority of the mothers were having less knowledge regarding immunization.

**Angelilio *et al.*, (1999)**, several studies on the immunization status of children have been published in various countries at different times, and comparisons with these studies are interesting but must be made cautiously. They also stated that since many factors may influence vaccination coverage, important differences should be taken into account, such as prevalence of vaccine-preventable diseases, availability of vaccination centers, level of knowledge and information about vaccination, and different methods used to measure immunization status

**Corrigan J *et al.*, (2008)**, School of Public Health, University of Cape Town, study conducted to determine the routine immunization coverage rates in children aged 12 - 23 months by cluster survey technique. A total of 3,705 caregivers of children aged 12 - 23 months who had been living in the Western Cape for at least 6 months. Vaccination status (1 = fully vaccinated; 0 = partially vaccinated) as recorded on a Road-to-Health card or by history. Reasons for not vaccinating were established from a questionnaire. The immunization coverage was 76.8% for vaccines due by 9 months and 53.2% for those due by 18 months. The reasons given for not being immunized were clinic-related factors (47%), lack of information (27%), caregiver being unable to attend the clinic (23%), and lack of motivation (14%). Of the clinic factors cited, the two commonest ones were missed opportunities (34%) and being told by clinic staff to return another time (20%). The coverage indicates that a great deal of good work is being done, the coverage is insufficient to prevent outbreaks of measles and other common childhood conditions, including polio. The coverage is too low to consider not running periodic mass campaigns for measles and polio. It will need to be sustainably improved before introducing rubella vaccine as part of the Expanded Programme on Immunizations (EPI) schedule by increasing the knowledge of care givers.

**Grais RF *et al.*, (2007)** investigate measles mortality in three recent epidemics in Niamey (Niger), N'Djamena (Chad), and Adamawa State (Nigeria). The three exhaustive household retrospective mortality surveys in one neighborhood of each of the three affected areas: Bouzouki, Niamey, Niger (April 2004, n = 26,795); Moursal, N'Djamena, Chad (June 2005, n = 21,812); and Dong District, Adamawa State, Nigeria (April 2005, n = 16,249), where n is the total surveyed population in each of the respective areas. Study populations included all persons resident for at least 2 weeks prior to the study, a duration encompassing the measles incubation period. Heads of households provided information on measles cases, clinical outcomes up to 30 days after rash onset, and health-seeking behaviour during the epidemic. The result concluded the main outcome measures were measles attack rates (ARs) and case fatality ratios (CFRs) by age group, and descriptions of measles complications and health-seeking behaviour. Measles attack rates were the highest in children under 5 year old (under 5 y): 17.1% in Bouzouki, 17.2% in Moursal, and 24.3% in Dong District. Case fatality ratios in under 5-year-olds were 4.6%, 4.0%, and 10.8% in Bouzouki, Moursal, and Dong District, respectively. Children in these countries still face unacceptably high mortality from a completely preventable disease.

**Ibrahim H *et al.*, (2005)**, conducted the study on the knowledge and practice of physicians and nurses with regard to immunization has been assessed. A self-administered questionnaire with 50 statements related to knowledge and practice of vaccination was distributed among workers in 50 MOH PHCs in Riyadh city. 506 questionnaires were returned, 479 were analyzed. A response rate of almost 70%. For most of the statements cited a correct response of knowledge & practice was obtained from more than 80% of the sample. However for few others, correct response has dropped to 40% or less. Experience in dealing with vaccination, and a formal training in vaccination were not significantly associated with the responses of both physicians and nurses. In spite of the limitations of this study it could be fairly concluded that the overall knowledge and practices of childhood immunizations among the primary care providers surveyed was good. Significant gaps still exist. This highlights the need for continuous training and supervision of health care providers dealing with children immunization.

**Kapoor (2010)** had stated that although immunization is one of the most effective, safest and efficient Public Health Interventions, and that its impact on

childhood morbidity and mortality has been great, its full potential was yet to be reached. Through proven strategies, immunization has been made accessible to even the most hard-to-reach and vulnerable populations since it involves clearly targeted groups (WHO, 2013). When immunization rates are high, it is much less likely a pathogen will be carried and transmitted from person to person. Declines in vaccination rates allow diseases to emerge in the population again. A case in point is the fact that Measles is now endemic in the United Kingdom, after vaccination rates dropped below 80% (Awosika, 2012). In Nigeria in 2001, unfounded fears of the polio vaccine led to a drop in vaccination rates and re-emergence of infection, and the spread of polio to ten other countries (Awosika, 2012).

**Kumar D et al (2008)**, Community based cross sectional study conducted in India about the knowledge of ever-married women regarding maternal and child health and to assess existing gap between awareness and practice levels of lactating mothers among 283 ever-married women in the reproductive age. Low levels of awareness and practice of TT immunization (74.2% awareness, 58.1% practice), five-cleans (31.9% awareness and 14.4% practice), trained birth attendant (69.6% awareness 39.1% practice), and post-natal care (75.4% awareness and 51.0% practice) among lactating mothers. Knowledge regarding optimal infant and young child feeding practices was very poor: initiation of breast-feeding within six hours (17.4%), colostrum feeding (34.8%), exclusive breastfeeding (5.8%) and significant gaps between knowledge and practice were observed. Highly significant difference ( $P < 0.001$ ) between proportions of women aware of ICDS (59.4%) and of beneficiaries (21.7%). High levels of awareness regarding reproductive health parameters except for contraception: desire for two children (81.6%), legal ages at marriages for girls (84.5%), desired birth interval of three or more years (71.7%). The study concluded that wide gaps exist between awareness and practices related with MCH including immunization of children due to non-adoption of knowledge into actual practice, except some selected components lacking in both knowledge as well as practice.

**Lawrence GL, Et al (2003)** from National Centre for Immunization Research and Surveillance of Vaccine Preventable Diseases, University of Sydney, New South Wales (i) Assess under-reporting of measles-mumps-rubella (MMR) vaccinations to the Australian Childhood Immunization Register (ACIR); (ii) estimate MMR

coverage among five-year-old children and the proportion immune to measles infection; (iii) identify factors related to non-uptake of MMR vaccination. We analyzed Australian Childhood Immunization Register data for a birth cohort of approximately 64,000 children aged five years. The parents of a sample of 506 children with no Australian Childhood Immunization Register record for the second MMR vaccination (MMR2), due at four years of age, were interviewed by telephone to assess under-reporting to the Australian Childhood Immunization Register and reasons for non-uptake of MMR vaccination. Results shows that parents reported that 22% (n = 111) of the surveyed 506 children had received MMR2 before their fifth birthday, and 42% (n = 214) by approximately 5.5 years of age. After correcting for this level of under-reporting to the Australian Childhood Immunization Register, MMR2 coverage for the entire cohort at five years of age was 52.9% (95% CI 52.3-53.4), and increased to 84.1% (95% CI 83.4-84.8) by approximately 5.5 years of age. This was 4.3% and 8.2%, respectively, higher than Australian Childhood Immunization Register coverage estimates at the two ages. Based on the corrected MMR coverage estimates, 93% of the cohort was immune to measles due to vaccination. The most common parent-reported reason for incomplete vaccination was lack of knowledge about the MMR vaccination schedule. Measles elimination in Australia will require continued effort in vaccination coverage and timeliness among pre-school children. School-entry requirements are important for MMR2 uptake. Strategies are needed to improve reporting to the Australian Childhood Immunization Register for more accurate measurement of coverage.

**Linkins RW *et al.*, (2006):-** Conducted study to assess the attitudes of parents of vaccinated and unvaccinated children regarding; support for immunization registries; laws authorizing registries and mandating provider reporting and financial worth and responsibility of registry development and implementation methods; A case control study of parents of 815 children exempt from school vaccination requirements and 1630 fully vaccinated children was conducted. Surveys administered to the parents, asked about views on registries and perceived utility and safety of vaccines. Results; Surveys were completed by 56.1% of respondents, fewer than 10% of parents were aware of immunization registries on their communities.

**Mark C. *et al.*, (2008).**Department of Child Health and The ICMR Centre of Advanced Research in Virology, Vellore conducted study to explore a hidden health

problem of vaccine preventable disease and the most common preventable cause of death among our under fives. These facts, plus the availability of a safe and effective vaccine make measles vaccination the highest priority in the control of communicable disease in India. The use of the pulse vaccination strategy will result in better coverage rates than the conventional strategy of immunization in fixed health centers. India's annual requirement of measles vaccine is 20 million doses. The study concluded that to prevent mortality due to measles can be prevented by economy and uninterrupted supply, measles vaccine must be manufactured in India without any further delay.

**Mathew JL, et al., (2002):-** Conducted study on 500 children under the age of 5 years belonging to a low income group. All were attending the paediatrics out patient department of a large teaching hospital in New Delhi, India. Only 25% were found to have received complete primary immunization as per the National Immunization schedule (bacilli calmette – Guerin at birth, 3 doses of diphtheria, pertussis and tetanus and oral poliovirus vaccine at 6,10 and 14 weeks and measles at 9 months). The major reasons for non-immunization of the children were migration to a native village (26.4%), domestic problems (9.6%). The immunization centre was located too far from their home (9.6%) and for child was unwell when the vaccination was due (9%). The lack of awareness and fear of side effects constituted a small minority of reasons for non-immunization.

**Menzies R et al, (2008)** from National Centre for Immunization Research and Surveillance of Vaccine Preventable Diseases, Australia, the second report on vaccine preventable diseases and vaccination coverage in Aboriginal and Torres Strait Islander people, brings together the relevant sources of routinely collected data on vaccine preventable diseases--notifications, hospitalizations, deaths, and childhood and adult vaccination coverage. As a result of continued improvements in the collection of data on Indigenous status, this second report is considerably more comprehensive, with data available from more jurisdictions, and more detailed presentation, including time trends and vaccination coverage by jurisdiction. Vaccination coverage data provide evidence of successful program delivery and highlight some areas for improvement. For universally funded vaccines in children, coverage is similar in Indigenous and non-Indigenous children by 24 months of age. However, delayed vaccination is more common in Indigenous children, with 6%-8%

fewer children fully vaccinated at 12 months of age. More timely vaccination, particularly within the first six months of life, is particularly important in reducing the disproportionate burdens of disease due to pertussis and Haemophilus influenza type b (Hib). The substantial impact of the national meningococcal C vaccination program since 2003 is evident in this report, although the higher proportion of non-vaccine preventable serotype B disease in Aboriginal and Torres Strait Islander people underlines the need for a new vaccine to cover this serotype. Immunization programs are an example of how preventive health programs in general can be enhanced to close the gap in morbidity and mortality between Indigenous and non-Indigenous Australians.

**PARK K 2002:** stated that the health problems in a country like India are essentially linked to poverty and over population which in turn lead to less satisfactory health facilities, poor sanitary environmental conditions, and malnutrition. India is still one among the country with high infant mortality rate (60 in 2000). Infant mortality rate has declined slowly from 204/1000 live births by during 1911 by 1000 live births in the year 2000. India is a vast country with widely differing population. Kerala one has low as 16/1000 live birth during the 1998.

**Rahul Sharma, et al., (2008),** on Do caretakers of children under five years have sufficient knowledge regarding routine immunization (RI) to assess the knowledge about routine immunization among Six hundred and eighty-two caretakers of young children. caretakers accompanying children under 5 years to pulse polio booths in November 2006. with pre-tested semi-open-ended questionnaire. Statistical analysis: Proportions, Chi-square test. Results shows that the proportions of respondents who had awareness about different aspects of routine immunization, such as weekday of routine immunization (37.0%), age group for routine immunization (49.1%), number of visits required in the first year of life (27.0%), were all low. When asked to name the four diseases covered under the routine immunization program in Delhi, only 268 (39.3%) could name at least three. The education level of respondents was strongly associated with their knowledge about routine immunization. Conclusion shows that the need of the hour is to make routine immunization a 'felt need' of the community. Making caretakers more aware about routine immunization is a vital step in achieving this goal.

**Siddiqi *et al.*, (2010)** concluded that mothers' knowledge about Expanded Program on immunization (EPI) vaccination in peri-urban Karachi was quite low and not associated with their children's EPI coverage. Mothers' educational status, however, was significantly associated with child's coverage. This finding depicted a better health seeking behavior of a more educated mother.

**Singh MC, *et al.*, (1994):-** Conducted study on one hundred and thirty mothers in the age group (15-44) years and 142 children aged (12-59) months were selected in Wardha district, out of this 100 mothers and 122 children could be contacted for evaluation of immunization coverage and assessing maternal knowledge and practice regarding immunization 52.5% children were fully immunized and 45.1% were partially immunized. Vaccine coverage for B.C.G. and primary doses of DPT/OPV was 95.9% and above 85% respectively. It was 57.4% for measles and 63.04% for booster dose was 36.96% mothers had a knowledge regarding need for immunization but a poor knowledge regarding the diseases prevented and doses of the vaccines.<sup>7</sup>

**Smith P.J, *et al.*, (2005):-** Conducted study to obtain vaccination since 1994 the NIS has monitored progress toward the Healthy people 2000 and 2010 vaccination goals. A mail survey to vaccination providers to obtain vaccination histories used to estimate vaccination coverage rates. Results in 2001 among infants with completed RDD interviews, 0.3 percent were entirely unvaccinated. Together, the new non telephone adjustment and the refinement for unvaccinated infants yielded revised estimates that were within 1.5 percentage points of the original estimate obtained using the 1998-2001 methodology.

**Stokley *et al.*, (2001):-** Study was conducted to estimate the vaccination coverage level of children's living in rural and urban areas to identify statistically significant differences. Children's aged 19-35 months participating on the 1999 National Immunization Survey were included in the study. Statistically significant differences in vaccination coverage levels between the rural population and their urban counterparts were determined for individual vaccines and vaccine series. Results; overall 18% of the children included on the 1999 NIS lived in a rural area, 46% lived in a sub urban area and 36% lived an urban area.



**Topuzoglu *et al.*, (2005):-** Conducted study was conducted to determine the coverage of the expanded programme of Immunization (EPI) of the ministry of Health and the coverage of private vaccines in the umraniye Health District in order to establish approaches for improving vaccination services. Thirty streets were selected at random from each health care region, utilization of vaccination services and vaccination status of children under the age of 5 years were determined by face to face interviews Results, vaccination coverage was as follows. Hepatitis B third dose, 84.6%; BCG, 94.8%; DPT third dose, 90.1%; Oral polio virus (OPV) third dose, 90.0%; Measles, mumps, rubella (MMR), 13.3%;, The full vaccination rates for children under 5 years were 68.3%.

**Wood JG, *et al.*, (2008)** from National Centre for Immunization Research and Surveillance of Vaccine Preventable Diseases Sydney, Australia conducted study on The second dose of MMR vaccine (MMR2) is scheduled at 4 years in Australia and the USA but earlier in some European countries. We modeled the effect on measles elimination status and population susceptibility of shifting delivery of MMR2 from 4 years to 18 months using relevant Australian data. Susceptibility in young children was reduced but elimination was not sustainable past 2015 if 6% of vaccinated seroconvert became susceptible after 10 years. One-dose MMR coverage of 96% or greater maintained elimination more effectively than modeled changes in scheduling, suggesting that maximizing one-dose MMR coverage should be the highest priority.

**Zell E.R, *et al.*, (2000):-** Conducted study on National Immunization survey (NIS) was designed to measure vaccination coverage estimates for the US, the 50 states. The NIS includes a random-digit-dialed telephone survey and a provider record check study. Data are weighted to account for the sample design and to reduce non response and non coverage biases in order to improve vaccination coverage estimates. NIS estimates are highly comparable to vaccination estimates derived from the national Health Interview survey. The NIS allows comparisons between states and urban areas over time and if used to evaluate current and new vaccination strategies.

# CHAPTER III



# RESEARCH METHODOLOGY

## **CHAPTER-III**

### **RESEARCH METHODOLOGY**

The methodology of research indicates the general pattern together empirical data for the problem under investigation.

This chapter comprises methodology for this study, the research approach design for the study, setting, sample, technique of data collection, description of the tool and pilot study.

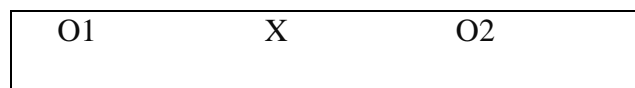
#### **RESEARCH APPROACH**

The quantitative approach was used to determine the effectiveness of structured teaching programme on knowledge and attitude regarding immunization on among mothers of under five year children.

#### **RESEARCH DESIGN**

The research design used in this study was quasi experimental one group pre test post test design is used to determine the effectiveness of structured teaching programme on knowledge and attitude regarding immunization before and after the structured teaching programme among mothers of under five children.

Diagrammatic representation of research design is as follows,



O1 - Pre-test assessment on knowledge and attitude regarding immunization.

X - Intervention

O2 - Post-test assessment on knowledge and attitude regarding immunization.

#### **SETTING OF THE STUDY**

Setting is the physical location and condition in which data collection takes place. (Polit and Hungler, 1999). The study was conducted selected community area Vakkampatti nearby Dindugal. It is situated 3 km away from Jainee College of nursing, Dindugal. There is a Sub centre available in Vakkampatti.

## **POPULATION**

A population is the entire aggregation of cases in which a researcher is interested. (Polit and Hungler, 1999). The target population of this study included the mothers of under five living in selected community area at Dindugal

## **SAMPLE SIZE**

This refers to the number of items to be selected from the universe to constitute a sample. (C.R Kothari, 2004). Sample size of this study consists of 30 mothers of underfive children living in selected community area at Dindugal.

## **SAMPLING TECHNIQUE**

Sampling is the process of selecting a portion of the population to represent the entire population (Polit and Hungler, 1999). Purposive sampling technique was used to select the sample. Sample were collected, who fulfill the sampling criteria are included in this study.

## **VARIABLES**

**INDEPENDENT VARIABLE** - Structured Teaching programme regarding immunization is the independent variable of this study

**DEPENDENT VARIABLE** – Knowledge and attitude regarding immunization were the dependent variables of this study.

## **CRITERIA FOR SAMPLE SELECTION**

### **INCLUSION CRITERIA**

- Mothers of underfive children living in Dindugal community area.
- Mothers those who are have first child in family

### **EXCLUSION CRITERIA**

- Children who are not willing to participate in the study.
- Those who don't understand Tamil and English.

## **DATA COLLECTION TOOL**

The tool was developed by the investigator to assess the knowledge and attitude of the mothers of under five children regarding immunization.

### **DESCRIPTION OF THE TOOLS**

The tool consisted of three sections.

#### **Section-A:** Demographic variables of the mother

The demographic data consisted of baseline information of mothers of under five children regarding their age, religion, education, occupation, source of information about obligatory vaccination.

**Section-B:** It consists of knowledge questionnaire on immunization; number of items was 30 questions. The total score for the entire item was 30.

**Section-C:** 3 point likert scale to assess the attitude of mother with under five children. The number of item was 15. The total score for the entire item was 40.

#### **Scoring Procedure**

##### **Knowledge**

- 10-20 - Inadequate knowledge
- 11-20 – Moderate knowledge
- 21-30 – Adequate knowledge

##### **ATTITUDE**

- Poor < 50 %
- Fair 50- 65 %
- Good > 65 %

## **TESTING OF THE TOOL**

### **CONTENT VALIDITY**

Four experts from the nursing field and one expert from the medical field evaluated the tool for content validity based on their suggestion and recommendations. Modification done and after establishing the validity of experts, the

tool was translated into Tamil and again translated into English to validate the language.

### **RELIABILITY**

The test retest was used to establish a reliability of structure questionnaire and attitude scale. Reliability value  $r = 0.7$  was satisfactory.

### **PILOT STUDY**

The pilot study was conducted in Attupatti community area. Six mothers were selected who have under five children. The knowledge of immunization was assessed by using structured knowledge questionnaire. The attitude was assessed by attitude scale. It was carried out the same way as a final study in order to test feasibility and practicability.

Six mothers who met the inclusion criteria were selected by purposive sampling method. Pre test was conducted by using structured knowledge questionnaires and attitude scale on immunization. The structured teaching programme was conducted on the study group by the same day followed by the pre test. Then after one week of pre test, the post test was conducted for the same group by using the same structured knowledge questionnaire and attitude scale.

The result was analysed based on the score obtained by the mothers, by using descriptive and inferential statistics. The tool and the structured teaching programme were found to be effective. The study conformed to be feasible.

### **DATA COLLECTION PROCEDURE**

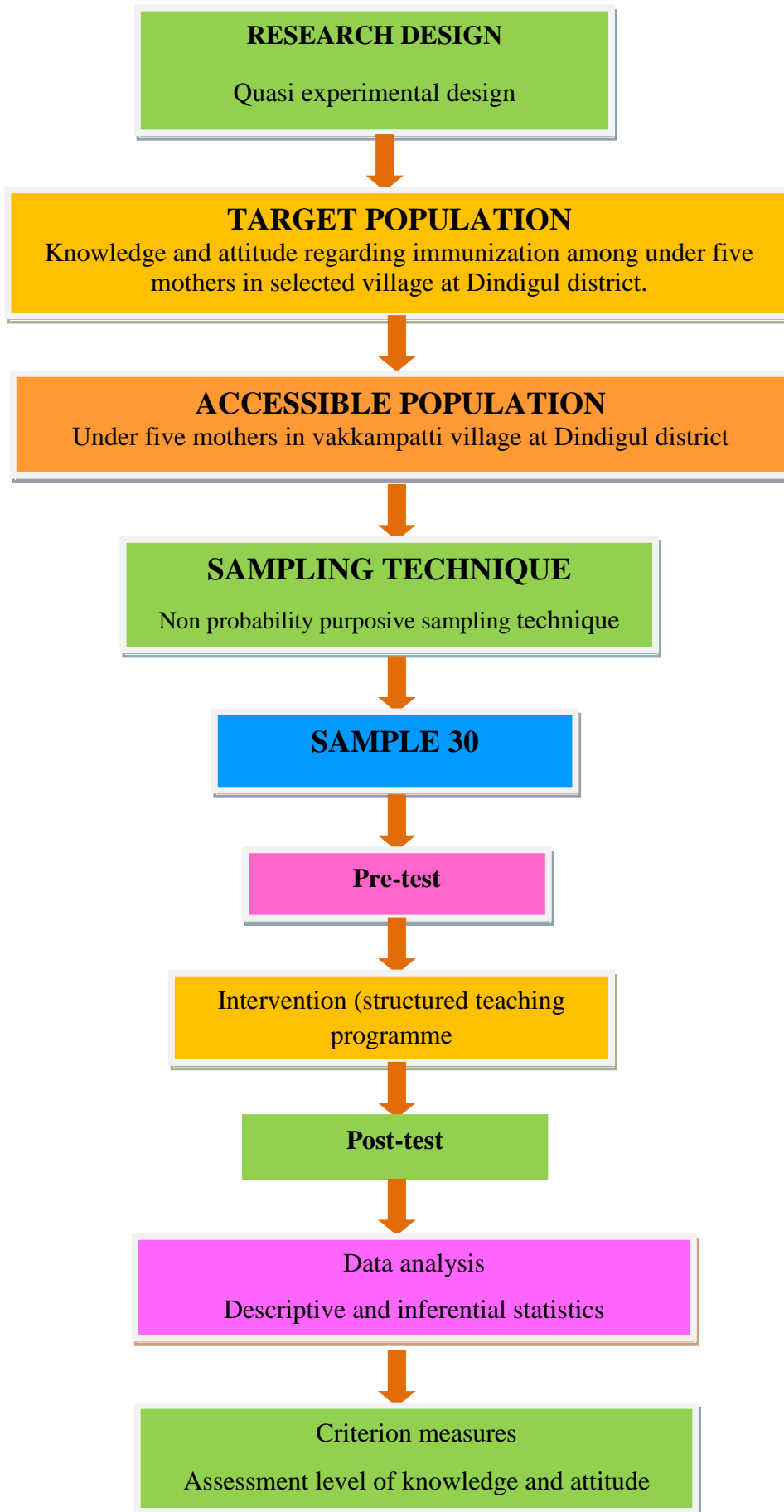
The data was collected by using Knowledge questionnaire and attitude scale in order to identify the knowledge and attitude of immunization among the mothers of under five children in selected rural area at Dindugal. First week survey was conducted to identify the under five children mothers in selected area. Each week 15 subjects was planned to conduct pre test and the structured intervention was given to the mothers. After one week post test was conducted to the mothers 15/week.

## **PLAN FOR DATA ANALYSIS**

After the data collection, it was organized tabulated, summarized and analyzed. The data analysis was planned according to objective of the study, using the descriptive and inferential statistic. The plan of data analysis was developed as frequency and percentage, mean, standard deviation, chi-square test and paired 't' test was used to evaluate the effectiveness of structured teaching programme of immunization.

## **PROTECTION OF THE HUMAN RIGHTS**

The research proposal was approved by the dissertation committee prior to pilot study. Permission was obtained from the principal of the Jainee College of nursing, head of the department of child health nursing and also oral consent was taken from each participant before starting the data collection procedure. Assurance was given to the subjects and confidence was maintained.



**Figure 2. Schematic representation of the Research methodology**



# **CHAPTER IV**

## **DATA ANALYSIS AND INTERPRETATION**

## **CHAPTER – IV**

### **ANALYSIS AND INTERPRETATION OF THE DATA**

This chapter deals with the data collection in order to determine the effectiveness of structured teaching programme regarding the knowledge and attitude on immunization among mothers of under five children.

According to the pilot statistical procedures enable researchers to Summarize, organize, evaluate, Interpret and communicate numeric information.

The data were collected, analyzed and interpreted according to the objectives of the study.

#### **The objectives of the study**

- ✓ To assess the pre test level of knowledge and attitude regarding immunization among the mothers of under five children as measured by structured knowledge questionnaire and attitude scale.
- ✓ To assess the post test level of knowledge and attitude regarding immunization among the mothers of under five children as measured by structured knowledge questionnaire attitude scale.
- ✓ To determine the effectiveness of structured teaching programme regarding immunization among the mothers of under five children in terms of gain in post test knowledge and attitude score.
- ✓ To find the co relation between the knowledge and attitude regarding immunization among the mothers of under five children.
- ✓ To find out the association between post test level of knowledge with their selected demographic variables.
- ✓ To find out the association between post test level of attitude with their selected demographic variables.

## SECTION – I

**Frequency and percentage distribution of samples on selected demographic variables**

**Table I**

**n = 30**

S.No	Demographic Variables	Frequency	Percentage (%)
1.	<b>Age of the Mother</b>		
	a. 18-23years	03	10
	b. 24-28 years	15	50
	c. 29-33 years	12	40
2.	<b>Religion</b>		
	a. Hindu	17	56.66
	b. Christian	08	26.66
	c. Muslim	05	16.66
	d. Others	-	-
3.	<b>Occupation</b>		
	a. Not employed	4	13.33
	b. Employed	26	86.66
4	<b>Education</b>		
	a. Illiterate	8	26.66
	b. Primary education	9	30
	c. Secondary education	5	16.66
	d. Under graduate	5	16.66
	e. Post graduate	3	10
5	<b>Source of information</b>		
	a. Television	5	16.66
	b. Radio	8	26.66
	c. Newspapers	4	13.33
	d. Neighbor	5	16.66
	e. Health center	6	20
	f. Health card	2	6.66

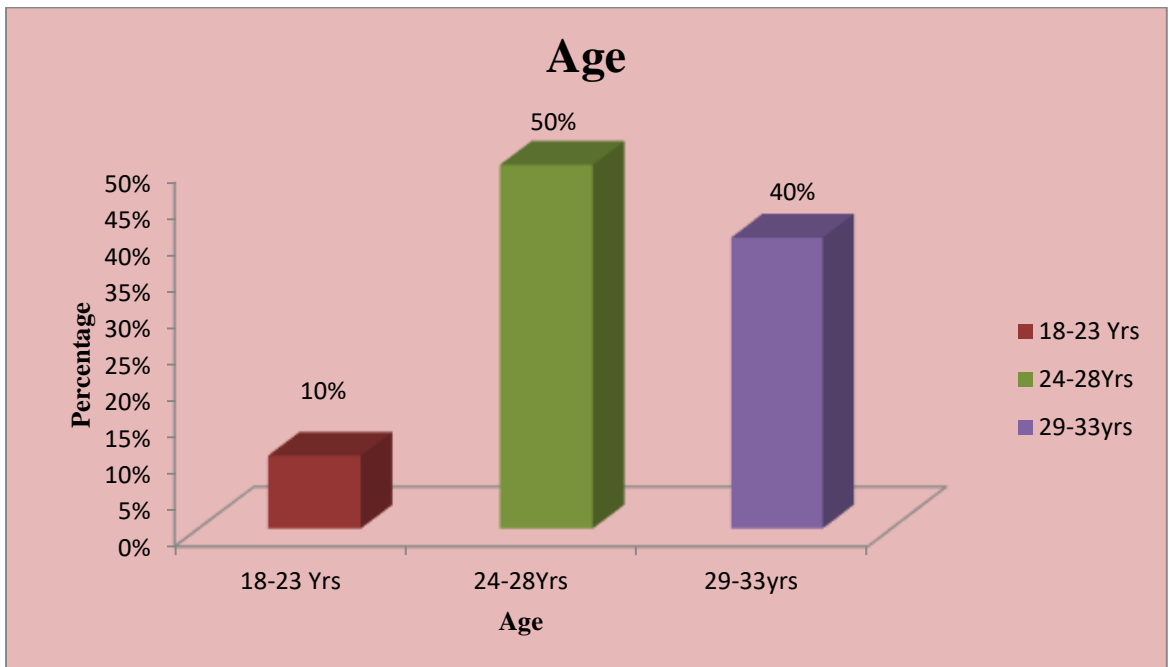
The data presented in the above table shows, the number of sample was 10 (10%) in the age group of 18-23years, 15 (50%) mothers were in the age group of 24-28 years and 12 (10%) mothers were in the age group of 29-33 years.

Regarding religion 17 (56.66%) mothers were Hindu, 8 (26.66%) mothers were Christians, and 5 (16.66%) mothers were Muslims.

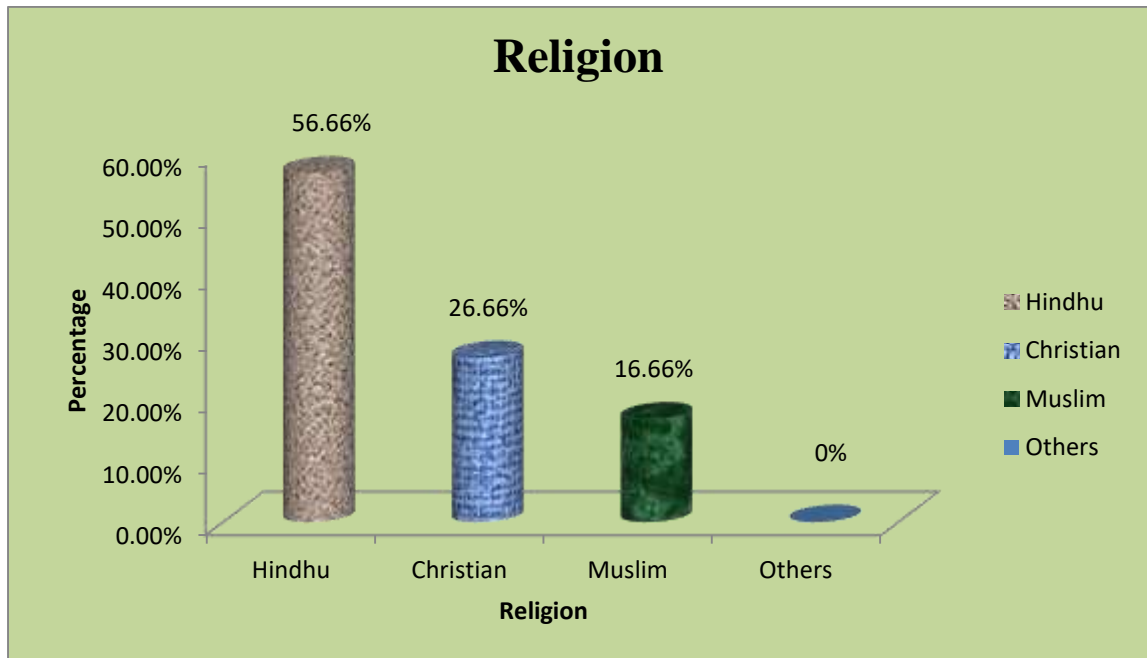
Regarding occupation, 4 (13.33%) mothers were not employed, 26 (86.66%) mothers were employed.

Regarding education 8 (26.66%) mothers were illiterate, 9(30%) mothers were completed primary education, 5(16.66%) mothers were completed secondary education, 5(16.66%) mothers were undergraduate and 3(10%) were post graduate.

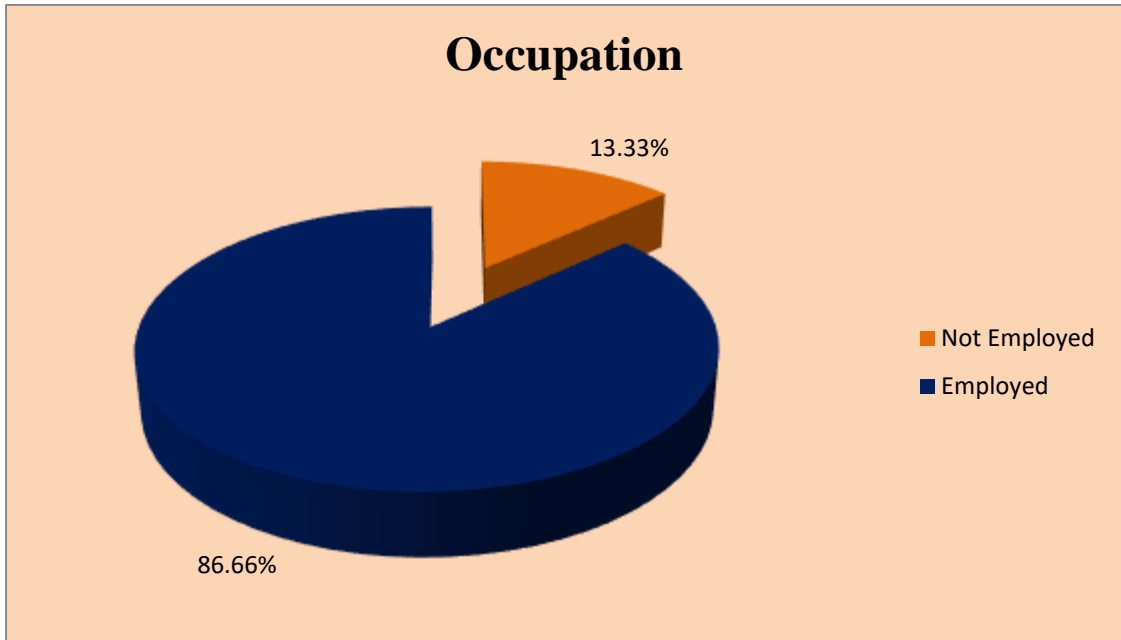
Regarding the source of information 5(16.66%) mothers got information through television, 8(26.66%) mothers got information through radio, 4 (13.33%) mothers got information through neighbor, 6 (20%) mothers got information through health cards.



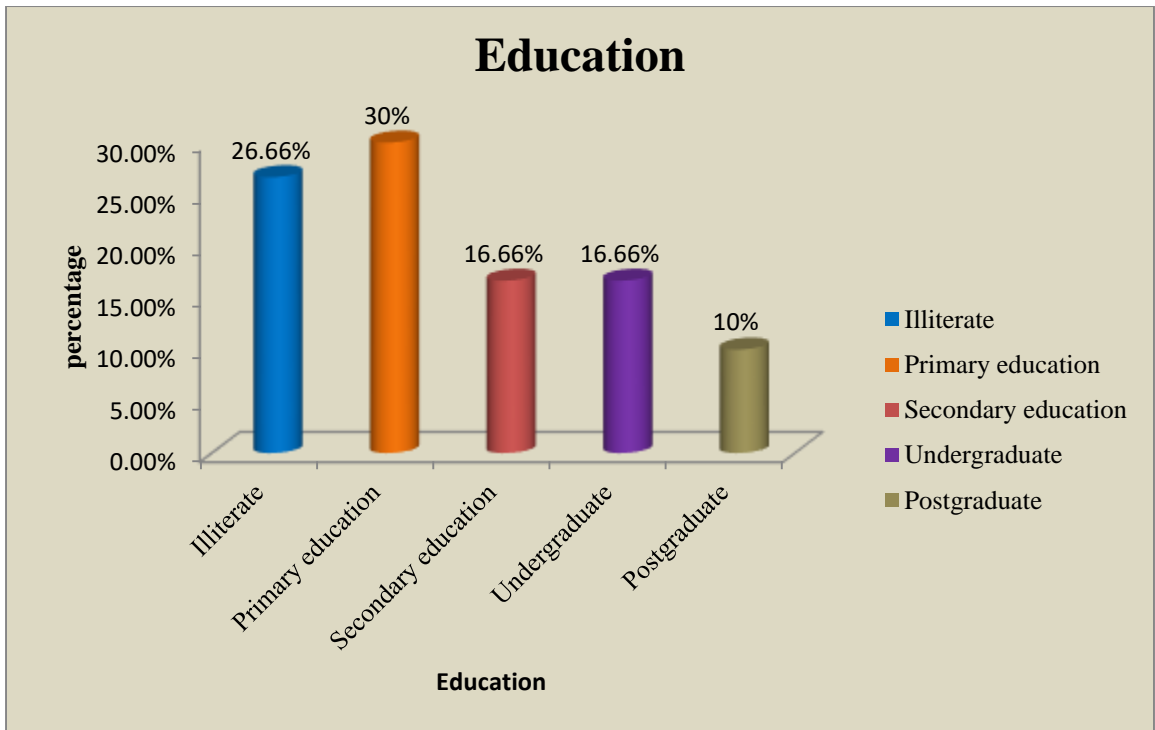
**Fig.3 Distribution of samples according to the age of the Mother**



**Fig.4 Distribution of samples according to the Religion**

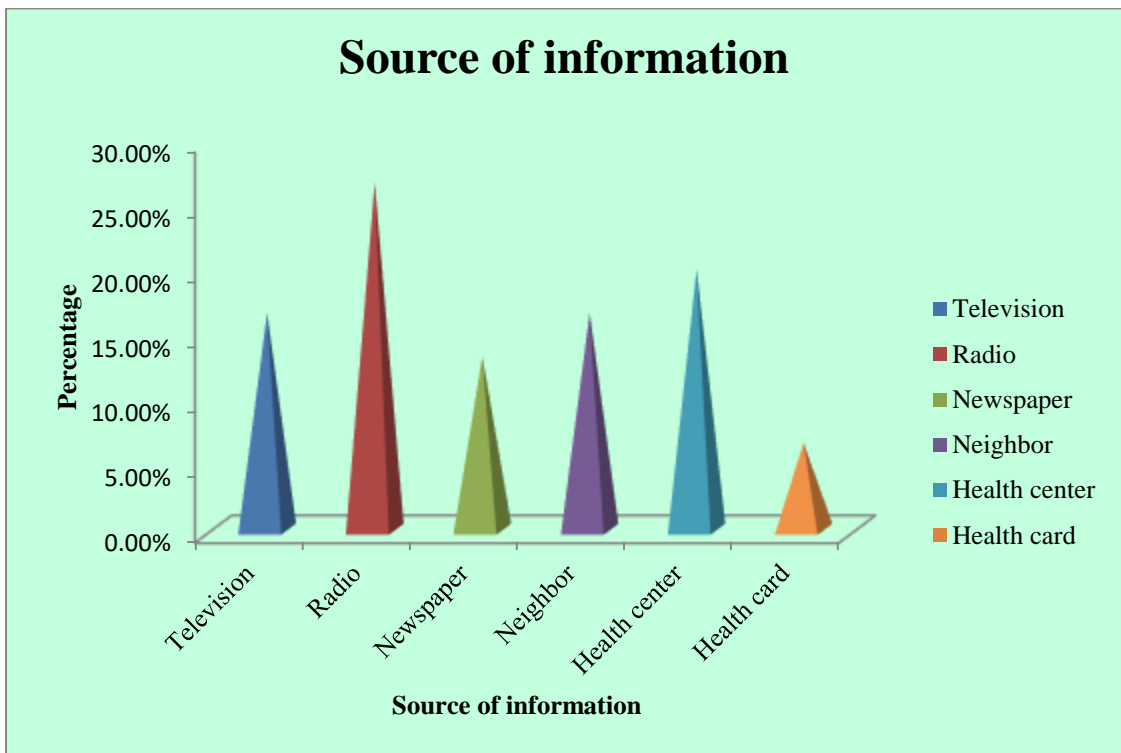


**Fig.5 Distribution of samples according to the occupation of the Mother**



**Fig.6 Distribution of samples according to the Education**





**Fig.7** Distribution of samples according to the source of Information

## SECTION-II

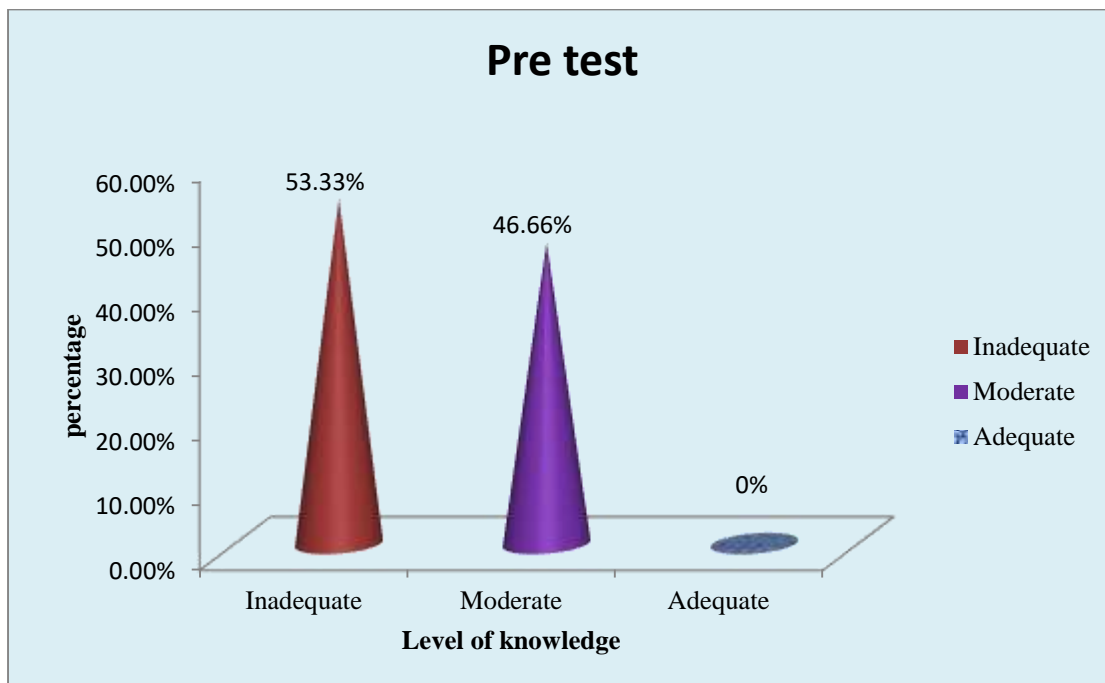
### DISTRIBUTION OF SAMPLES ACCORDING TO THE PRE TEST KNOWLEDGE SCORES OF MOTHERS REGARDING IMMUNIZATION

TABLE-II

(n=30)

Level of knowledge	Pretest	
	Frequency	Percentage (%)
Adequate Knowledge	0	0
Moderately adequate knowledge	14	46.66%
Inadequate knowledge	16	53.33%

The table-II shows that the frequency and percentage distribution of samples according to the pre test knowledge score of mothers regarding immunization. It revealed that 16(53.33%) mothers had inadequate knowledge, and 14(46.66%) mothers had moderately adequate knowledge about immunization.



**Fig.8 Distribution of samples according to the pretest knowledge scores of mothers regarding immunization.**

### SECTION-III

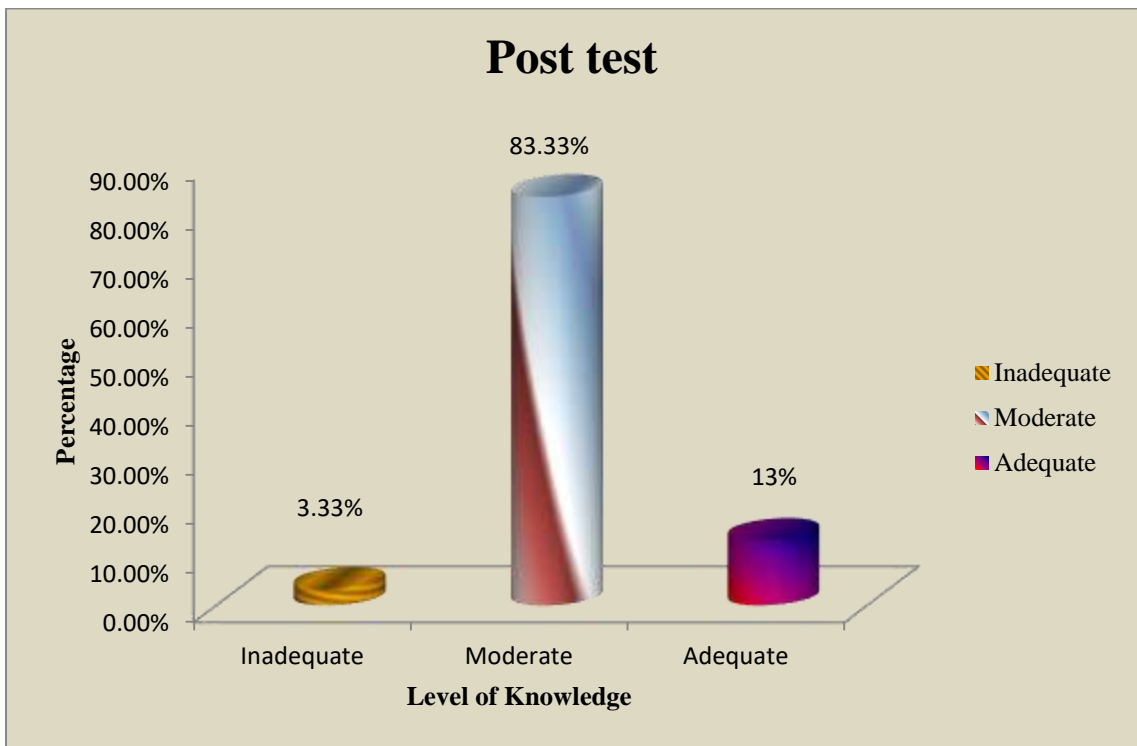
#### DISTRIBUTION OF SAMPLES ACCORDING TO THE POSTTEST KNOWLEDGE SCORES OF MOTHERS REGARDING IMMUNIZATION.

TABLE-III

(n= 30)

Level of knowledge	Post test	
	Frequency	Percentage (%)
Adequate Knowledge	4	13.33%
Moderately adequate knowledge	25	83.33%
Inadequate knowledge	1	3.33%

The table-III shows that the frequency and percentage distribution of samples according to the posttest knowledge scores of mothers regarding immunization. It revealed that 4 (13.33%) mothers had adequate knowledge, 25(83.33%) mothers had moderately adequate knowledge,1(3.33%) about immunization.



**Fig.9 Distribution of samples according to the post test knowledge scores of mothers regarding immunization.**

## SECTION-IV

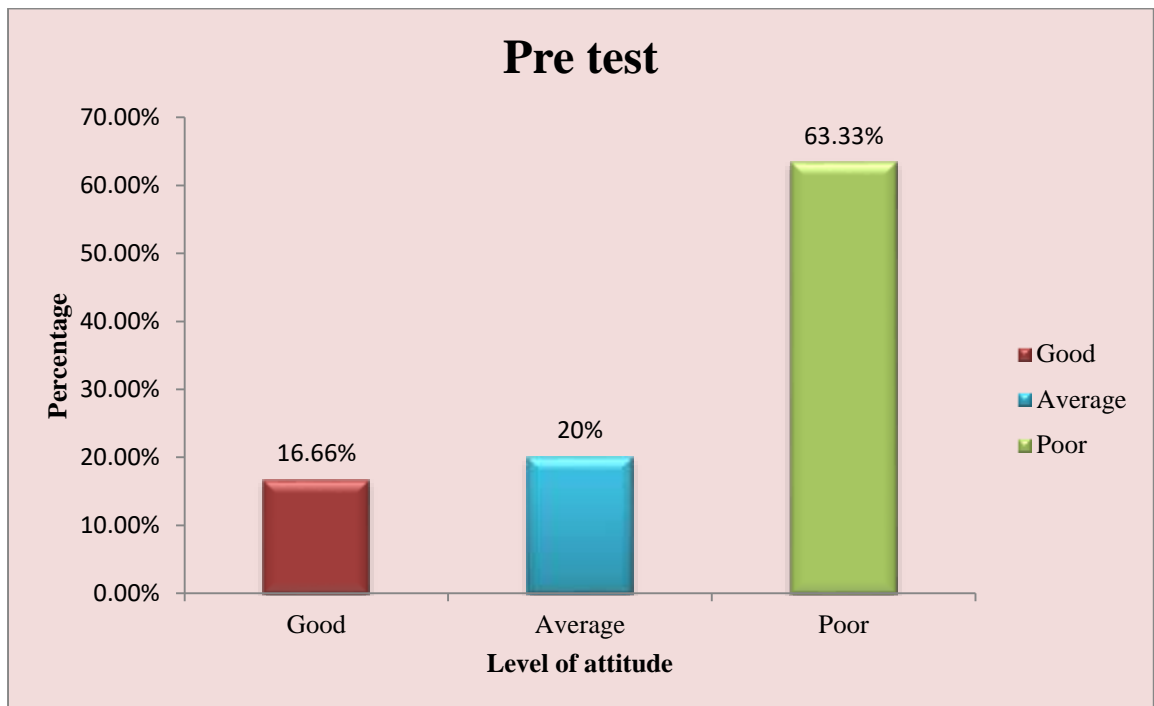
### DISTRIBUTION OF SAMPLES ACCORDING TO THE PRE TEST ATTITUDE SCORES OF MOTHERS REGARDING IMMUNIZATION

TABLE-IV

(n=30)

Level of Attitude	Pretest	
	Frequency	Percentage (%)
Good	5	16.66%
Average	6	20%
Poor	19	63.33%

The table-II shows that the frequency and percentage distribution of samples according to the pre test attitude score of mothers regarding immunization. It revealed that 5(16.66%) mothers had good attitude, and 6(20%) mothers had average level of attitude about immunization, 19(63.33%) mothers had poor attitude.



**Fig.10 Distribution of samples according to the pretest attitude scores of mothers regarding immunization.**

## SECTION-V

### DISTRIBUTION OF SAMPLES ACCORDING TO THE POST TEST ATTITUDE SCORES OF MOTHERS REGARDING IMMUNIZATION

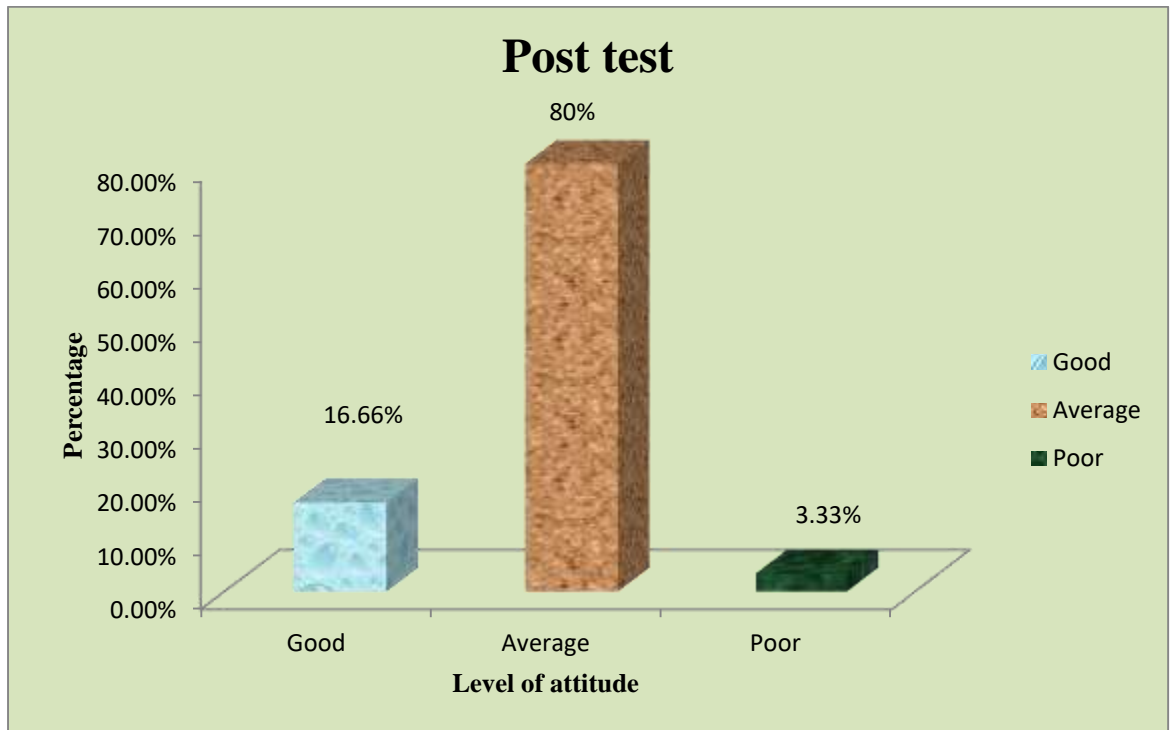
TABLE-V

(n=30)

Level of Attitude	Post test	
	Frequency	Percentage (%)
Good	5	16.66%
Average	24	80%
Poor	1	3.33%

The table-II shows that the frequency and percentage distribution of samples according to the pre test attitude score of mothers regarding immunization. It revealed that 5(16.66%) mothers had good attitude, and 24(80%) mothers had average level of attitude about immunization, 1(3.33%) mothers had poor attitude.





**Fig.11 Distribution of samples according to the post test attitude scores of mothers regarding immunization.**

## SECTION-VI

### COMPARISON OF THE PRETEST AND POSTTEST KNOWLEDGE SCORE ON MOTHERS REGARDING IMMUNIZATION.

To test the statistical significant difference between the mean pretest and posttest knowledge scores of the mothers regarding immunization, the following null hypothesis was stated.

#### HYPOTHESIS-0

The mean post test knowledge score is higher than the mean pre test knowledge score regarding immunization among the mothers of under five children.

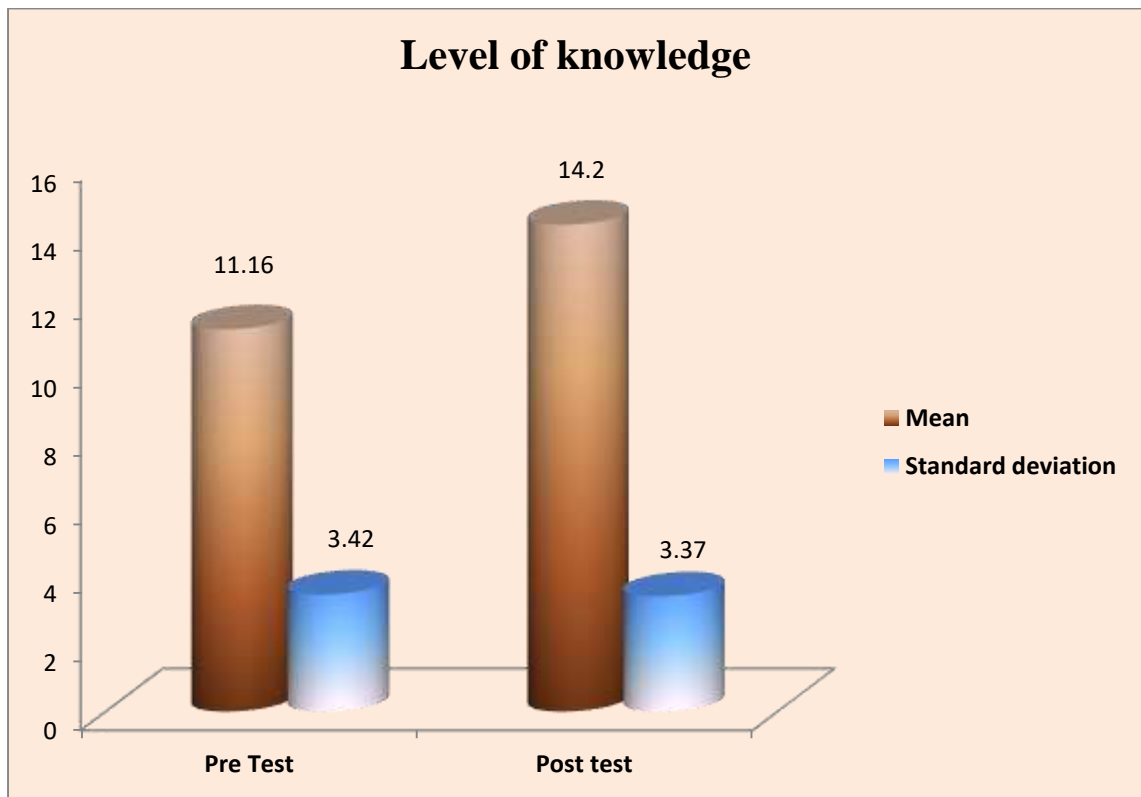
**Table-VI**

<b>Knowledge score</b>	<b>MEAN</b>	<b>SD</b>	<b>'t' TEST VALUE</b>
Pre test	11.16	3.42	7.65*
Post test	14.2	3.37	

\* Significant

The table IV shows that, mean post test knowledge score of the mothers regarding immunization are significantly higher than their mean pre test knowledge scores.

In order to find out the significant difference between the mean score of pre and post test knowledge score of the mothers regarding immunization paired 't' test was computed. The calculated value is higher than the table value, the null hypothesis was rejected and the research hypothesis was accepted. Hence the researcher concluded that gain in knowledge is not by chance but by STP on immunization.



**Fig.12 Comparison of the pre test and post test knowledge scores of mothers regarding immunization**

## SECTION-VII

### COMPARISON OF THE PRETEST AND POSTTEST ATTITUDE SCORE ON MOTHERS REGARDING IMMUNIZATION

To test the statistical significant difference between the mean pretest and post test attitude scores of the mothers regarding immunization, the following null hypothesis was stated.

#### HYPOTHESIS-0

The mean post test attitude score is higher than the mean pre test attitude score regarding immunization among the mothers of under five children.

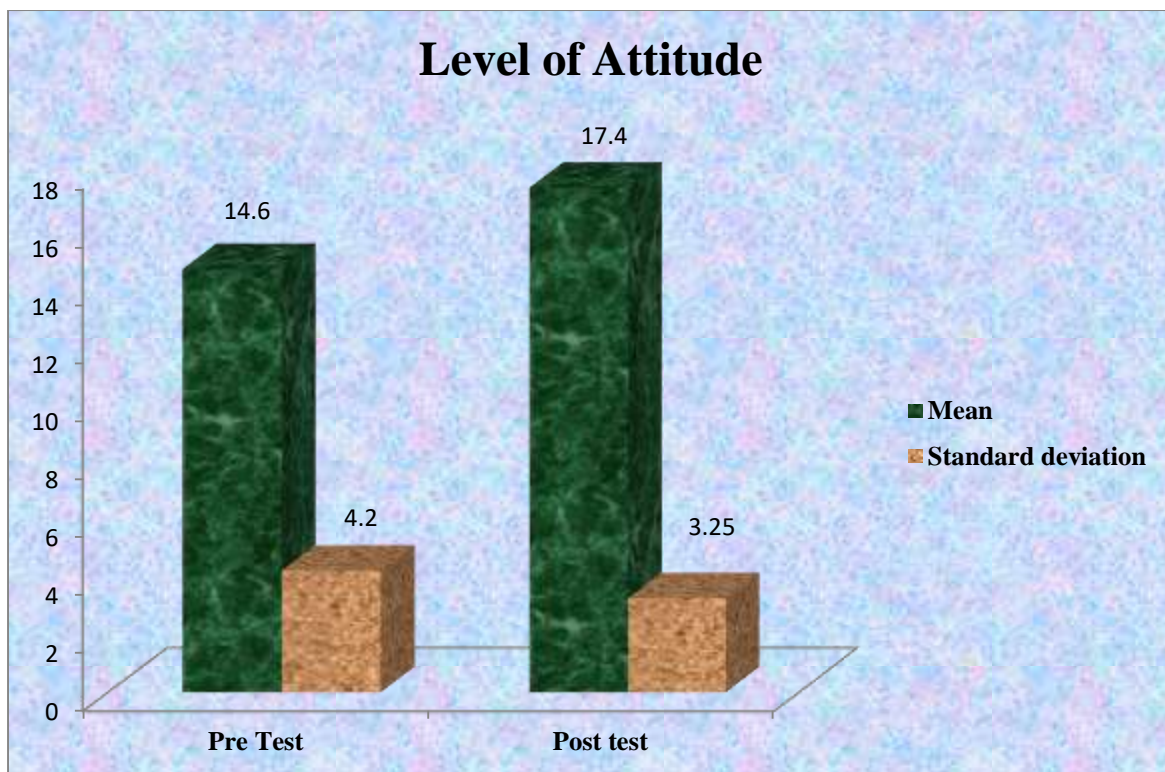
**Table-VII**

<b>Knowledge score</b>	<b>MEAN</b>	<b>SD</b>	<b>'t' TEST VALUE</b>
Pre test	14.6	4.2	6.46*
Post test	17.4	3.25	

\* Significant

The table IV shows that, mean post test attitude score of the mothers regarding immunization are significantly higher than their mean pre test attitude scores.

In order to find out the significant difference between the mean score of pre and post test attitude score of the mothers regarding immunization paired 't' test was computed. The calculated value is higher than the table value, the null hypothesis was rejected and the research hypothesis was accepted. Hence the researcher concluded that change of attitude e is not by chance but by STP on immunization.



**Fig.13 Comparison of the pre test and post test attitude scores of mothers regarding immunization**

**Table : VIII**

**Relationship between post test level of knowledge and attitude among under five mothers.**

<b>S. No</b>	<b>Calculated 'r' value</b>	<b>Table "r" value</b>
1.	-0.22 <sup>NS</sup>	0.381

**NS- Not significant**

The 'r' value of post test level of knowledge and attitude was -0.22, there was a negative correlation between knowledge and attitude which was not significant.

## SECTION VIII

**TABLE. 9 ASSOCIATION BETWEEN THE POST TEST KNOWLEDGE SCORES ON MOTHERS REGARDING IMMUNIZATION AND DEMOGRAPHIC VARIABLES**

To identify the association between the post test knowledge scores on immunization of mothers and the selected demographic variables. The following null hypothesis was stated

### HYPOTHESIS I

There will be no significant association between the post test knowledge scores of mothers regarding immunization and selected demographic variables.

Demographic Variable	Frequency Numbers	Knowledge level			Chi-Square $\chi^2$
		In adequate	Moderately Adequate	Adequate	
<b>Age of the mother</b>					
18-23 years	30	1	2	0	11.50*
24-28 years		-	14	1	
29-33 Years		-	9	3	
<b>Occupation</b>					
Not Employed	30	1	2	1	7.58*
Employed		-	23	3	
<b>Education</b>					
Illiterate	30	-	8	0	8.70#
Primary education		1	5	3	
Secondary education		-	5	-	
Under graduate		-	4	1	
Post graduate		-	3	-	

<b>Religion</b>					
Hindu	30	1	14	2	0.99#
Muslim		-	7	1	
Christian		-	4	1	
Others					
<b>Source of information</b>					
<b>Television</b>	30	-	4	1	10.07#
Radio		-	8	-	
News paper		-	3	1	
Neighbor		-	3	2	
Health center		1	5	-	
Health card		-	2	-	

**\* Significant at 0.05 level**

**# Non significant at 0.05 level**

The table shown above chi-square is carried to find out the association between the knowledge on immunization of the mothers who have under five year children and demographic variables

The result shows there is a significance association between age of the mother, and occupation. But there was no association between religions, education, and source of information.



## SECTION IX

**TABLE. 10 ASSOCIATION BETWEEN THE POST TEST ATTITUDE SCORES ON MOTHERS REGARDING IMMUNIZATION AND DEMOGRAPHIC VARIABLES**

To identify the association between the post test attitude scores on immunization of mothers and the selected demographic variables. The following null hypothesis was stated

### HYPOTHESIS I

There will be no significant association between the post test attitude scores of mothers regarding immunization and selected demographic variables

Demographic Variable	Frequency Numbers	Attitude level			Chi-Square $\chi^2$
		In adequate	Moderately Adequate	Adequate	
<b>Age of the mother</b>					
18-23 years	30	1	1	1	11.9*
24-28 years		-	14	1	
29-33 Years		-	11	1	
<b>Occupation</b>					
Not Employed	30	1	2	2	13.03*
Employed		-	23	3	
<b>Education</b>					
Illiterate	30	1	6	1	7.98#
Primary education		-	9	-	
Secondary education		-	4	1	
Under graduate		-	3	2	
Post graduate		-	3	-	
<b>Religion</b>					
Hindu	30	1	13	3	0.99#
Muslim		-	7	1	
Christian		-	4	1	
Others		-	-	-	

<b>Source of information</b>					
<b>Television</b>	30	-	4	1	5.85#
Radio		-	6	2	
News paper		-	4	0	
Neighbor		-	4	1	
Health center		1	4	1	
Health card		-	2	-	

**\* Significant at 0.05 level**

**# Non significant at 0.05 level**

The table shown above chi-square is carried to find out the association between the attitude on immunization of the mothers who have under five year children and demographic variables

The result shows there is a significance association between age of the mother, and occupation. But there was no association between religions, education, and source of information.

# CHAPTER V



# DISCUSSION

## CHAPTER-V

### DISCUSSION

The aim of the study is to assess the effectiveness of structured teaching programme on level of knowledge attitude regarding Immunization among Mothers of under five children in selected area at Dindugal. This chapter discusses the major findings of the study and reviews that in relation to the findings from the result of previous history.

The subjects were assessed by the demographic data and knowledge questionnaire and attitude scale. The investigator has to identify the effectiveness of immunization among mothers who have below 5 years children has taken effort to improve the knowledge and attitude of the mothers. Immunization teaching was given by means of flash cards on immunization. After post test was conducted to find the effectiveness of teaching.

#### **Objectives of the study**

- To assess the Pretest level of knowledge and attitude regarding the immunization among mothers of under five children as measured by structured knowledge questionnaire and attitude scale.
- To assess the post test level knowledge and of attitude regarding immunization among mothers of under five children as measured by structured knowledge questionnaire attitude scale.
- To evaluate the effectiveness of structured teaching program on knowledge and attitude regarding immunization among mothers of under five children in term of gain in post test knowledge and attitude score.
- To find the co relation between the knowledge and attitude regarding immunization among the mother of under five children.
- To find out the association between post test level of knowledge with their selected demographic variables.
- To find out the association between post test level of attitude with their selected demographic variables.

**The first objective was to assess the pretest score on knowledge and attitude regarding the immunization among mothers of under five children.**

The analysis (Table II) shows that 14 (46.66%) mothers had moderate knowledge, 16 (53.33%) mothers had inadequate knowledge and no mothers had adequate knowledge about immunization. In attitude 5(16.66%) mothers had good attitude, and 6(20%) mothers had average level of attitude about immunization, 19(63.33%) mothers had poor attitude.

This can be explained by due to the lack of awareness about the immunization the mothers were having inadequate knowledge and attitude.

Zagminas K, et al., (2007). also said that, the lack of provider recommendation and lack of parental awareness of immunization were the two most significant factors associated with failure to receive vaccine.

➤ **The second objective was to assess the post test level knowledge and of attitude regarding immunization among mothers of under five children as measured by structured knowledge questionnaire attitude scale.**

The data (Table III) shows 4(13.33%) mothers had adequate knowledge, 25(83.33%) mothers had moderate knowledge and one 1(3.33%) mother had inadequate knowledge about immunization. Regarding attitude 5(16.66%) mothers had good attitude, and 24(80%) mothers had average level of attitude about immunization, 1(3.33%) mothers had poor attitude.

Allred NJ, et al., (2011) conducted a study to find the parents vaccine safety concerns results from the national immunization survey. The parental structural teaching module was administered. The mothers were given questions regarding knowledge and attitudes toward vaccine safety and side effects, simultaneous vaccine administration, and acceptance of new vaccines. Multivariate logistic regression analyses examined associations between attitudes and up-to-date vaccination coverage. The study results showed that after giving teaching module 93% of parents rated vaccines as safe, 6% as neither safe nor unsafe, and 1% as unsafe.

➤ **The third objective was to evaluate the effectiveness of structured teaching program on knowledge and attitude regarding immunization among mothers of under five children in term of gain in post test knowledge and attitude score.**

The analysis (Table IV) shows that the pretest knowledge mean score regarding immunization was 11.1 and standard deviation was 3.56. In the post test knowledge mean score was 21.5 and standard deviation was 3.18. Regarding pretest attitude mean score regarding immunization was 14.6 and standard deviation was 4.2. In the post test attitude mean score was 17.4 and standard deviation was 3.25.

**H1** The mean post test knowledge score is higher than the mean pre test knowledge score regarding immunization among the mothers of under five children.

In order to find out the significant difference between the means of pretest and post test knowledge scores of the samples paired 'T' test was computed. Paired t test value is 7.65. The calculated value is higher than the table value, hence the null hypothesis was rejected and the research hypothesis was accepted. Hence the researcher concluded that gain in knowledge is not by chance but by the structured teaching programme on immunization.

In order to find out the significant difference between the mean score of pre and post test attitude score of the mothers regarding immunization paired 't' test was computed. . Paired t test value is 6.46. The calculated value is higher than the table value, the null hypothesis was rejected and the research hypothesis was accepted. Hence the researcher concluded that change of attitude e is not by chance but by STP on immunization.

This may be due to before giving structured teaching programme they have very little knowledge and poor attitude about immunization and they gained more knowledge and change of attitude after given the structured teaching programme regarding immunization.

**Vila –corcoles et al (2012)** conducted a quasi experimental study regarding immunization, there are 60 samples were selected. The study setting was Bouzouki, Niamey, Niger and surrounding areas. The findings revealed that 45(75%) mothers

had adequate knowledge and change of attitude after the structured teaching programme, the study was effective in terms to improve the knowledge of mothers.

**The fourth objective was to find the co relation between the knowledge and attitude regarding immunization among the mothers of under five children.**

The 'r' value of post test level of knowledge and attitude was -0.22, there was a negative correlation between knowledge and attitude which was not significant.

**The fifth objective was to find out the association between post test level of knowledge with their selected demographic variables.**

Regarding knowledge the result shows there is a significance association between age of the mother, and occupation. But there was no association between religions, education, and source of information.

According to the researcher point of view, the age of mother increases the mother's knowledge regarding immunization. This may be one of the factors to have association between ages of the mother with the knowledge of immunization.

According to the researcher point of view, occupation of the mother increases the mother's knowledge regarding immunization. This may be one of the factors to have association between occupations of the mother with the knowledge of immunization.

The further analysis shows that there was no significant association between the level of post test knowledge score on mothers regarding immunization and demographic variables such as religions, education, and source of information.

**The fifth objective was to find out the association between post test level of attitude with their selected demographic variables**

Regarding attitude the result shows there is a significance association between age of the mother, and occupation. But there was no association between religions, education, and source of information.

According to the researcher point of view, the age of mother increases the mother's attitude regarding immunization. This may be one of the factors to have association between ages of the mother with the attitude of immunization.

According to the researcher point of view, occupation of the mother increases the mother's attitude regarding immunization. This may be one of the factors to have association between occupations of the mother with the attitude of immunization.

The further analysis shows that there was no significant association between the level of post test attitude score on mothers regarding immunization and demographic variables such as religions, education, and source of information.



# CHAPTER 6



## **SUMMARY, CONCLUSION, IMPLICATIONS, RECOMMENDATIONS AND LIMITATIONS**

## **CHAPTER VI**

### **SUMMARY, IMPLICATIONS, RECOMMENDATIONS, AND CONCLUSION**

This chapter deals with the summary of the study and conclusions. It clarifies the implications for nursing practice and recommendations for further research in the field.

#### **SUMMARY**

A study was conducted to assess the effectiveness of structured teaching programme on immunization among mothers of children in selected area of Dindugal. The research design of the study is quasi experimental research design with one group pretest and posttest. Total 30 mothers were taken who have under 5 children, purposive sampling technique was used to select the mothers. The conceptual model of the study was general system model.

A structured knowledge questionnaire was prepared by the investigator, consisting two sections.

#### **SECTION 1: Demographic data**

**SECTION2:** Structured Knowledge questionnaires and attitude scale regarding immunization.

The gathered data was tabulated, grouped and analyzed. Descriptive and inferential statistics i.e., frequency, percentage, paired' test, chi-square test were used for analysis.

#### **MAJOR FINDINGS OF THE STUDY**

- ❖ Regarding Age of the mother, maximum 15 (50%) mothers were between the ages of 24-28.
- ❖ Regarding Religion, maximum 17 (56.66%) mothers were Hindu.
- ❖ Regarding education of the mother, maximum 9(30%) mothers were completed primary education, 8(26.66%) mothers had no formal education.

- ❖ Regarding source of information, maximum 8(26.66%) mothers were got the information through the radio.
- ❖ In pre test, the majority of the mothers 16(53.33%) had inadequate knowledge regarding immunization.
- ❖ In post test, the majority mothers 25(83.33%) had moderate knowledge regarding immunization.
- ❖ In pre test, the majority of the mothers 19(63.33%) had poor attitude regarding immunization.
- ❖ In post test, the majority mothers 24(80%) had average attitude regarding immunization
- ❖ While comparing the pre test (mean score 11.16) knowledge score regarding immunization most of the mothers were scored more in the post test (mean score 14.2).
- ❖ While comparing the pre test (mean score 14.6) attitude score regarding immunization most of the mothers were scored more in the post test (mean score 17.4).
- ❖ There is significant association between knowledge and age of the mother and occupation of the mother. But there was no association between religion, education and source of information with the post test knowledge score.
- ❖ There is significant association between attitude and age of the mother and occupation of the mother. But there was no association between religion, education and source of information with the post test attitude score.

## **IMPLICATIONS**

Nursing is a dynamic process, which involves quality-based practice, scientific knowledge and dissemination of research knowledge in to practice. Nursing professional find that the health promotion is very relevant useful in a variety of settings. So the present study adds major implications in to various areas of nursing to help mothers who have below 5 yrs children about immunization.

## **NURSING PRACTICE**

WHO says nursing has wide scope in primary health area. Health care can not provided by one agency. It is up to the individual to take care. A timely enlighten bring numerical changes in health behavior

- ❖ Nurse can use the planned health education program to teach the mothers who have under 5 children to provide adequate knowledge on immunization.
- ❖ Nurse can educate the mothers who have under 5 children about importance of immunization.
- ❖ Nurse can use the charts to provide further reference for mothers on immunization.
- ❖ Measures can be taken to prevent disease through mass media.

### **NURSING EDUCATION**

- ❖ Nurse educators should encourage the nursing students to conduct immunization awareness programme in the community/ as well as in the hospital.
- ❖ Nurse educator should motivate the learners to identify the problems and reason for non acceptance of vaccine and find out the solution for the problem.
- ❖ The importance of immunization should be included in the nursing curriculum which is considered as the optional vaccine.

### **NURSING ADMINISTRATION**

- ❖ Nurse administrator can disseminate the research knowledge into practice, so that the under five children can be benefited.
- ❖ Nurse administrator can conduct seminar / workshop on pneumococcal vaccination for the nurses to improve the knowledge regarding pneumococcal vaccination among mothers of under five children.
- ❖ Nursing administrator motivate the community health nurse to prepare pamphlets / other A.V aids to impart knowledge regarding pneumococcal vaccination in rural area.

### **NURSING RESEARCH**

- ❖ The study can be a baseline for future studies to build upon.
- ❖ Future researcher study could be done to identify the factors influencing adherence / non adherence of immunization.
- ❖ Extensive research can be conducted regarding immunization by using self instructional module.

## **RECOMMENDATIONS**

- ❖ A comparative study can be done between urban mothers and rural mothers who have under 5 children.
- ❖ A similar study can be conducted with large samples.
- ❖ Study can be done using different methods of teaching.
- ❖ Future studies can be conducted on knowledge and factors influence non-compliance of optional vaccine among mothers.

## **CONCLUSION**

The structured teaching programme through flash cards found to be very effective in improving the knowledge and attitude among mothers who have below 5 yrs children on immunization. The knowledge and attitude regarding immunization was improved by health teaching through flash cards. Being as a nurses, our main responsibility is try to make our India, free from communicable disease by providing immunization for all under five children.



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## **APPENDIX**

**APPENDIX-I**  
**LETTER SEEKING EXPERT OPINION AND CONTENT**  
**VALIDITY**

**FROM**

Mr.AJEESH.R  
MSC (N) II YEAR  
Jainee College of nursing  
Dindugal district

**TO**

Respected Madam\ sir

Sub: Requisition for expert opinion and content validity

I am Msc nursing II year. Student of Jainee College of Nursing, Dindugal, under Dr.MGR Medical University, as a partial fulfillment of my MSC NURSING degree program, I have chosen research problem on “ A study to assess the effectiveness of structural teaching programme on level of knowledge and attitude regarding immunization among the mothers of under five children in selected area at Dindugal”. I am sending the tool for content validity and for your valuable expert opinion. Here with I have enclosed the necessary documents.

Enclosure.

- Statement of problem,
- Objectives &Hypothesis of study
- Tools for data collection
- Brief note on the research methodology
- Certificate of content validity

Yours faithfully

Ajeesh.R

## APPENDIX-II

### CERTIFICATE OF CONTENT VALIDITY

This is certify that the tool prepared by Mr.Ajeesh for the conduction of the research study On **“A Study to assess the effectiveness of structural teaching programme on level of knowledge and attitude regarding immunization among the mothers of underfive children in selected area at Dindugal”** is valid. He can proceed for data collection.

Signature of Validator

Name of the Validator

Designation

Date

## **CERTIFICATE OF CONTENT VALIDITY**

This is certify that the tool prepared by Mr.Ajeesh for the conduction of the research study On **“A Study to assess the effectiveness of structural teaching programme on level of knowledge and attitude regarding immunization among the mothers of underfive children in selected area at Dindugal”** is valid. He can proceed for data collection.

Signature of Validator

Name of the Validator

Designation

Date

## **APPENDIX-III**

### **CERTIFICATE OF TAMIL EDITING**

**To whom so ever at may concern**

This is certify that the dissertation “As study to assess the effectiveness of structural teaching programme on level of knowledge and attitude regarding immunization among the mothers of underfive children in selected rural area at Dindigul” by Mr.Ajeesh M.Sc., (N) II Year Student of jainee College of Nursing was edited for Tamil Language appropriateness by Miss.Kaniammal M.A., B.Ed.,

Signature

## **APPENDIX-IV**

### **CERTIFICATE OF ENGLISH EDITING**

#### **To Whom so Ever at may Concern**

This is to Certify that the dissertation “As study to assess the effectiveness of structural teaching programme on level of knowledge and attitude regarding immunization among the mothers of underfive children in selected rural area at Dindigul” by Mr.Ajeesh M.Sc., (N) II Year Student of Jainee College of Nursing was edited for English Language appropriateness by Mr.Sebastin M.A., M.Ed., Teacher English working in Samanatham high School Madurai.

Signature



## **APPENDIX-V**

### **LIST OF EXPERTS OPINION FOR CONTENT VALIDITY**

**1. Dr.Navamani Prabhakaran, M.D. DCH**

Consultant Paediatrician,  
Navamani Nursing Home,  
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**2. Prof.Mrs.Malarvizhi M.Sc. (N),**

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**3. Mr.Abdus Sukkoor M.Sc. (N),(Ph.D)**

Assistant Professor,  
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Sivagangai.

**4. Mr.Mani Msc.,M. Phil**

**Statistician**

**5. Prof.Mrs.Jeyasundari M.Sc. (N), Ph.D.,**

Department of Child Health Nursing,  
Jainee College of Nursing,  
Dindugal.

## **APPENDIX-VI**

### **PART –A**

#### **DEMOGRAPHIC VARIABLES**

##### **1. AGE**

- a) 18-23 years
- b) 24-28 years
- c) 29-33 years

##### **2. Religion of the mother**

- a) Hindu
- b) Christian
- c) Muslim
- d) Others

##### **3. Occupation of the mother**

- a) Not employed
- b) Employed

##### **4. Education of the mother**

- a) Illiterate
- b) Primary education
- c) Secondary education
- d) Under Graduate
- e) Post graduate

##### **5. Source of information about obligatory vaccination**

- a) Television
- b) Radio
- c) Newspapers
- d) Neighbors
- e) Health center
- f) Health card.

## **PART - B**

### **1. Immunization is**

- a) Introducing immunity to our body to produce specific protection against some of the dangerous disease.
- b) It stimulates the production of protective antibody
- c) Any other
- d) Do not know

### **2. Which of the following are effective preventive interventions in children under five?**

- a) antibiotics of pneumonia
- b) Immunization
- c) promote treatment of malaria
- d) exclusive breast feeding

### **3. Why is it important to take Immunization during childhood period?**

- a) For the protection of the child from tetanus
- b) For the protection of the child from diphtheria
- c) For the protection of the child from tuberculosis
- d) For the protection of some communicable and non communicable diseases.

### **4. BCG vaccine should be given**

- a) At birth
- b) 1-3 days
- c) 3-28 days
- d) After 23 days

### **5. What disease can be prevented by BCG?**

- a) Tuberculosis
- b) Polio
- c) Tetanus
- d) Any other

**6. Do you know the reaction which develops after BCG vaccination?**

- a) Fever
- b) Scar formation
- c) Abscess
- d) Swelling

**7. What will you do where there is reaction after BCG reaction?**

- a) Consult the doctor
- b) Self medicines
- c) Take the prescribed tablets
- d) Others

**8. Oral polio vaccine is given towards**

- a) Measles
- b) Polio myelitis
- c) Tuberculosis
- d) Any other

**9. How many doses of DPT should be given a one year child?**

- a) Less than 3 doses
- b) 3 doses
- c) More than 3 doses
- d) Do not know

**10. Interval between first three dose of DPT vaccination**

- a) 15 days
- b) 30 days
- c) 70 days
- d) Any other

**11. Do you know the reaction the child develops after DPT vaccination?**

- a) Fever
- b) Allergic reaction
- c) Paralysis
- d) None

**12. What will you do when there is a reaction after DPT reaction?**

- a) Consult the doctor/ Nurse/ health worker
- b) Take the prescribed tablets
- c) Self medicines
- d) Native medicines

**13. Diphtheria is caused by**

- a) Micro organism
- b) Hereditary
- c) Sin
- d) Any other

**14. Diphtheria can occur at the age of**

- a) 1-5 years
- b) 5-10 years
- c) 5 months
- d) None

**15. Why should you give measles vaccination only at the age of 9 months**

- a) Child cannot tolerate the measles vaccine
- b) Child has natural antibodies acquired through the mother till 8<sup>th</sup> month of period
- c) Any other
- d) Do not know

**16. Why it is important to take tetanus toxoid injection during pregnancy**

- a) For the protection of the mother from tetanus
- b) For the protection of the baby from tetanus
- c) To prevent communicable diseases
- d) Don't know

**17. How often should you take tetanus toxoid injection during pregnancy?**

- a) Only once
- b) Twice
- c) Three times
- d) Any other

**18. Cause of neonatal tetanus is?**

- a) Umbilical cord is cut down with unclean instruments
- b) Umbilical stump is decessed with soil /cow dung
- c) Any other
- d) Less blood supply to the umbilical vessels

**19.. Tetanus organism is spread through**

- a) Puncture wound
- b) Surgery
- c) Injection
- d) Any other

**20. Measles is caused by**

- a) Virus
- b) God's play
- c) Heat
- d) Any other

**21. Zero dose of polio vaccine is given?**

- a) At birth
- b) 3 days after birth
- c) Up to 28 days after birth
- d) 3 months

**22.How many doses of OPV should be given up to one year child?**

- a) 3 doses
- b) 4 doses
- c) 5doses
- d) Above 5doses

**23. Which month OPV should be given?**

- a) At birth –zero dose OPV
- b) 2 month-1<sup>st</sup> dose
- c) 3 month-2<sup>nd</sup> dose
- d) 4month-3<sup>rd</sup> dose

**24.. Pulse polio vaccine is given towards?**

- a) Polio myelitis
- b) Tuberculosis
- c) Tetanus
- d) Measles

**25. The infant can be immunized simultaneously against disease like**

- a) Diphtheria
- b) Pertusis
- c) Tetanus
- d) Tuberculosis

**26. Diphtheria affects the**

- a) Throat
- b) Face
- c) Conjunctiva
- d) Skin

**27. Whooping cough is a**

- a) Infections disease
- b) Congenital disease
- c) Hereditary disease
- d) Do not know

**28. Whooping cough affects the children**

- a) Below 5years
- b) Above 5years
- c) 7 years
- d) Any other

**29. Whooping cough is spread mainly by**

- a) Cough
- b) Sneezes and talks
- c) Direct contact
- d) None

**30. Tetanus organisms found in the intestine of the;**

- a) Cattle
- b) Horses
- c) Goat
- d) All the above



## PART- C

### ATTITUDE SCALE REGARDING IMMUNIZATION

S.NO	QUESTIONS	DISAGREE	UNCERTAIN	AGREE
1.	Vaccination is important			
2.	Vaccines have severe side effects			
3.	Vaccination is safe			
4.	Infants infected with the disease which immunized against			
5.	Vaccination maintain child health			
6.	Vaccination side effects cause death			
7.	Vaccination is best for each infant			
8.	Vaccination is important for boys than girls			
9.	Recommended others to vaccine their children			
10.	Vaccination is harmful			
11.	Vaccination must give according to schedule			
12.	Vaccination save the community			
13.	Effective in prevention of infectious disease			
14.	Vaccines prevent mortality rate			
15.	Tetanus vaccine is important for infant and mothers health			

## **PART- D**

### **ANSWER KEYS**

1. A
2. B
3. D
4. A
5. A
6. B
7. A
8. B
9. B
10. B
11. A
12. A
13. A
14. A
15. B
16. B
17. B
18. A
19. A
20. A
21. A
22. B
23. A
24. A
25. C
26. A
27. A
28. A
29. B
30. D

## APPENDIX-VII

### நோய் தடுப்பு முறை

#### நோய்தடுப்பு முறை:

நோய் தடுப்பு முறை என்பது ஒரு குழந்தையின் நோய் எதிர்ப்பு சக்தியை தூண்டுவதற்கும், தொற்று நோய் மற்றும் பிற நோய்கள் வராமல் தடுப்பதற்குரியது முறையே நோய் தடுப்புமுறை எனப்படும்.

#### நோய்தடுப்பு முறையின் நோக்கம்:

- தவறாமல் நோய்தடுப்புமுறை மருந்து கொடுப்பதன் மூலம் குழந்தைகளுக்கு மூலம் குழந்தைகளுக்கு ஏற்படும் தொற்கு நோயிலிருந்து பாதுகாக்கிறது.
- நோய் தடுப்புமுறை ஒரு மிக சிறந்த உடல் ஆரோக்கியத்திற்கான கொடுக்கப்படும் முறை.
- நோய்தடுப்பு முறையை பின்பற்றுவதன் மூலம் பிறப்பில் இருந்து ஏற்படக்கூடிய நோய்கள் மற்றும் உடல் ஊனம் வராமல் தடுக்க உதவுகிறது.
- தொற்று நோய் வராமல் தடுக்கிறது
- நோய்களிலிருந்து பாதுகாக்க
- நோய் வராமல் தடுக்க
- குழந்தை பருவம் முதல் எந்தவித நோய் வராமல் தடுக்கிறது

#### நேரடி தடுப்பாற்றல்:

நேரடி தடுப்பாற்றல் என்பது நம் உடம்பினுள் உள்ள நோய் தடுப்பாற்றல் சக்தியைத் தூண்டி நோய் தொற்றில் இருந்து பாதுகாக்கப்படுகிறது.

#### இயல்பான தடுப்பாற்றல்:

இவை மனிதன், நோய் தொற்றுக்கு உள்ளாகும்போது மனித உடலிலிருந்து தற்காலிகமாக உற்பத்தியாகக் கூடிய உடல்நோய் எதிர்ப்பு ஆகும். இது தயார் நிலையில் உள்ள உடல்நோய் எதிர்ப்பு ஆற்றல் முகவர் ஆகும்.

**பிசிஜி வாசினேன்:** பேசில்லஸ் கால்மெட்டி குயிரின்

பிசிஜி வாக்கின் என்பது வாழக்கூடிய தடுப்பூசி. இந்த வகையான தடுப்பூசி

காசநோய் பாக்கிரியாவில் இருந்து உருவாக்கப்படுகிறது.

இந்த வகையான வாக்கின் :.தடுப்பூசியை குழந்தை பிறந்தவுடன் தோல்ஊசியாக போடவேண்டும்.

இவ்வகையான தடுப்பூசியை கூடுதல் கடுப்பூசி ஊட்டம் போடவேண்டிய அவசியம் இல்லை.

மேலும் இவ்வகையான தடுப்பூசியானது இரத்தப் புற்றுநோய் மற்றும் தொழுநோய் வராமல் தடுக்கப்படுகிறது.

இந்த வகையான தடுப்பாற்றல் உயிரணு நோய்எதிர்ப்பு ஆற்றலை உற்பத்தி செய்கிறது.

**முத்தடுப்பு ஊசி : டிபிடி**

தொண்டை அடைப்பான், கக்குவான், டெட்டனஸ் இந்த வகையான நோய்தொற்று குழந்தைகளை மட்டுமே அதிகம் பாதிக்கக்கூடிய நோய் ஆகும்.

இவை பெரும்பாலும் தும்மல் மற்றும் இருமல் மூலமாக மற்றவர்களுக்கு பரவுகிறது.

முதல் முத்தடுப்பு ஊசி குழந்தைப் பிறந்த 6வது வாரம் கொடுக்கப்படவேண்டும்.

டேட்டனஸ் தடுப்பூசியை பள்ளிக்கால பருவத்தில் கொடுக்கப்பட வேண்டும்.

இந்த வகையான தடுப்பூசி தசை ஊசியாக கொடுக்க :.போடப்படுகிறது.

**வாய்வழி போலியோ தடுப்பூசி (பிவி) :**

இந்த வகையான தடுப்பூசி இளம்பிள்ளைவாதம் வராமல் தடுப்பதற்காக கொடுக்கப்படுகிறது.

இவ்வகையான தடுப்பூசியை முத்தடுப்பூசி உடன் கொடுக்கப்பட வேண்டும்.

### **தட்டம்மை தடுப்பூசி:**

தட்டம்மை தடுப்பூசி தட்டம்மை வராமல் தடுப்பதற்காக  
கொடுக்கப்படுகிறது.

இந்த தடுப்பூசி குழந்தை பிறந்த 9வது மாதத்தில்கொடுக்கப்படுகிறது.  
கூடுதல் தடுப்பூசி ஊட்டம்: துணைஊசி செலுத்த அவசியம் இல்லை.

### **குடற்காய்ச்சல் தடுப்பூசி (டைபாய்டு வேக்சின்)**

குடற்காய்ச்சல் தடுப்பூசி பொதுவாக குழந்தை பிறந்த  
ஒருவருடத்திற்குப் பிறகு கொடுக்கப்படுகிறது.

அ) மோனா வாலன்ட் எதிர் குடற்காய்ச்சல் தடுப்பூசி

ஆ) பிவேலன்ட் எதிர் குடற்காய்ச்சல் தடுப்பூசி

இ) டேப் வாசின் (தடுப்பூசி) (டைப்பி அண்டு பாரா டைப்பி அண்டு  
பாராடைப்பி 'பி')

நோய்தடுப்பூசி கொடுக்கப்பட்ட பின்பு நோய்தடுப்பாற்றல் அபிவிருத்தி  
பொதுவாக பத்து நாட்கள் முதல் 21 நாட்கள் வரை செயல்புரிகிறது.

மற்றும் மூன்று வருட காலத்திற்கு இந்த நோய் தாக்காமல்  
பாதுகாக்கப்படுகிறது. அதன்பின்பு ஒவ்வொரு மூன்று வருட இடைவெளியில்  
இவ்வகையான தடுப்பூசியை போடவேண்டும்.

இந்த வகை தடுப்பூசியை 2-10டிகிரி வெப்பநிலையில் பதபடுத்த  
வேண்டும்.

**1) நோய் தடுப்பு என்பது:**

- (அ) ஆபத்தான நோய்க்கு எதிராக குறிப்பிட்ட நோய் எதிர் பொருளை உருவாக்க தேவையானவற்றை நம் உடலினுள் செலுத்துவது  
(ஆ) நோய் தடுப்பு பொருளை உருவாக்க தூண்டுவது.  
(இ) மற்ற காரணங்களுக்கு – (காய்ச்சல் ஜலதோம் வயிற்றுப்போக்கு)

**2) கீழ்காண்பவற்றுள் 5 வயதிற்கு உட்பட்ட குழந்தைகளுக்கு எந்தெந்த தடுப்புமுறை மற்றும் செயல்திட்டங்கள் வழங்கப்படும்**

- (அ) சளிக்காய்ச்சலின் நோய் கிருமி தடுப்பான்  
(ஆ) தடுப்பூசி முறை.  
(இ) பொதுவான மலேரியா சிகிச்சை முறை  
(ஈ) முழுமையான தாய்ப்பால்.

**3) குழந்தை பருவத்தில் நோய்த்தடுப்பு ஏன் கொடுக்க வேண்டும்**

- (அ) ரணஜன்னியில் இருந்து குழந்தை பாதுகாக்க  
(ஆ) தொண்டை அடைப்பானில் இருந்து குழந்தையை பாதுகாக்க  
(இ) காசநோயில் இருந்து  
(ஈ) இளம்பிள்ளை வாதம் நோயில் இருந்து குழந்தையை பாதுகாக்க  
(உ)வேறு ரகம் (தட்டம்மை, வயிற்றுப்போக்கு, காய்ச்சல்)

**4) பி.சி.ஐ நோய் தடுப்பு கொடுக்க வேண்டிய பாவம்**

- (அ) பிறந்த உடல் (ஆ) 1-லிருந்து 3 நாட்களுக்குள்  
(இ) 3-லிருந்து 28 நாட்களுக்குள் (ஈ) 28 நாட்களுக்கு பிறகு  
(உ) தெரியாது

**5) பி.சி.ஐ வாக்கினால் எந்த நோயை தடுக்க முடியும்**

- (அ) காசநோய் (ஆ) இளம்பிள்ளை வாதம்  
(இ) ரணஜன்னி (ஈ) மற்ற நோய் (உ) தெரியாது

**6) பி.சி.ஐ நோய் தடுப்புக்குப் பின் குழந்தைகளுக்கு ஒவ்வாமை ஏற்படுவது தெரியுமா?**

- (அ) காய்ச்சல் (ஆ) ஊசி செலுத்திய இடத்தில் வீக்கம்  
(இ) சீழ் கட்டி (ஈ) மற்றவை

7) பி.சி.ஜி நோய் தடுப்புக்குப் பின் ஒவ்வாமை ஏற்பட்டால் என்ன செய்வீர்கள்

- (அ) மருத்துவரை ஆலோசிப்பேன் (ஆ) சொந்த சிகிச்சை அளிப்பேன்  
(இ) பரிந்துரைக்கப்பட்ட மாத்திரை கொடுப்பேன் (ஈ) மற்றவை

8) போலியோ சொட்டு மருந்து எதற்காக கொடுக்கப்படுகிறது?

- (அ) தட்டமை (ஆ) இளம்பிள்ளை வாதம் (இ) காசநோய்  
(ஈ) வேறு காரணங்களுக்கு (உ) தெரியாது

9) குழந்தைப்பருவத்தில் ஒரு வயதுக்குள்ளாக எத்தனை டோஸ் முத்தடுப்பு ஊசி போட வேண்டும்?

- (அ) 3 டோஸ்க்கு கீழ் (ஆ) 3 டோஸ்  
(இ) 3 டோஸ்க்கு மேல் (ஈ) தெரியாது

10) முத்தடுப்பு ஊசி முதல் மூன்று டோஸ்களுக்கு இடையிலான காலம்

- (அ) 15 நாட்கள் (ஆ) 30 நாட்கள்  
(இ) 70 நாட்கள் (ஈ) பேறுகால இடைவெளி

11) முத்தடுப்பு ஊக்குவிப்பான் குழந்தைக்கு ஏற்படும் எதிர்வினை தெரியுமா?

- (அ) காய்ச்சல் (ஆ) ஒவ்வாமை எதிர்வின்  
(இ) மற்றவை (ஈ) தெரியாது

12) முத்தடுப்பு ஊக்குவிப்பான் எதிர்வினை ஏற்பட்டால் நீங்கள் என்ன செய்வீர்கள்

- (அ) மருத்துவர், செவிலியர், நலப்பணியாளர் இவர்களை ஆலோசிப்பேன்  
(ஆ) பரிந்துரைக்கப்பட்ட மாத்திரைகளை கொடுப்பேன்  
(இ) கைப்பக்குவம் செய்வேன் (ஈ) நாட்டு மருந்து கொடுப்பேன்

13) தொண்டை அடைப்பான் ஏற்படக்காரணம்?

- (அ) நுண்ணுயிர் தொற்று (ஆ) பாரம்பரிய நோய்  
(இ) மற்ற காரணம்

14)தொண்டை அடைப்பான் குழந்தைகளை பாதிக்கும் பருவம்

- (அ) 1லிருந்து 5வயது (ஆ) 5லிருந்து 10 வயது வரை  
(இ) 5 மாதம் (ஈ) தெரியாது

15)தட்டம்மை தடுப்பூசி ஏன் 9 மாதம் களிந்த பிறகு

கொடுக்கப்படுகின்றன?

- (அ) ஒன்பது மாதத்திற்குள் உட்பட்ட பருவத்தில் குழந்தையால் தட்டம்மை நோய் தடுப்பை தாங்க முடியாது.  
(ஆ) 8 மாத காலம் வரை தாய்ப்பால் மூலம் இயற்கையான நோய் எதிர் பொருள் குழந்தைக்கு கிடைக்கிறது.

16)தாய்மை அடைந்தவர்கள் ரன ஜன்னி தடுப்பூசி போட்டுக் கொள்வது ஏன்?

- (அ) தாய்க்கு ரனஜன்னி வராமல் தடுக்க  
(ஆ) பிறக்கும் குழந்தைக்கு ரன ஜன்னி வராமல் பாதுகாக்க  
(இ) மற்ற தொற்று நோயிலிருந்து பாதுகாக்க  
(ஈ) தெரியாது

17)தாய்மை அடைந்தவர்கள் காலத்தில் எத்தனை முறை ரனஜன்னி தடுப்பூசி போட்டுக் கொள்ள வேண்டும்

- (அ) ஒரு முறை (ஆ) இரண்டு முறை  
(இ) மூன்று முறை (ஈ) பலமுறை

18)சிகவுக்கு ரனஜன்னி ஏற்படக் காரணம்

- (அ) சுத்தமில்லாத கருவிகளால் தொப்புள் கொடி வெட்டப்படுவதால்  
(ஆ) வெட்டப்பட்ட தொப்புள் கொடி சாணம் மற்றும் மண்ணால் கட்டப்படுவால் (இ) வேறுகாரணங்களால் (ஈ) தெரியாது

19)ரனஜன்னி பரவும் விதம்

- (அ) துளைக்கப்பட்ட காயம் (ஆ) அறுசுவை சிகிச்சை  
(இ) ஊசி போட்டு கொள்வது (ஈ) மற்றக் காரணங்கள்  
(உ) தெரியாது



20) தட்டம்மை ஏற்படக் காரணம்

- (அ) வைரஸ் கிருமிகள் (ஆ) கடவுளின் விளையாட்டு  
(இ) சூட்டினால் (ஈ) மற்றக்காரணங்கள் (உ) தெரியாது

21) 0 டோஸ் போலியோ வாக்கின் கொடுக்கப்படும் பருவம்

- (அ) பிறந்தவுடன் (ஆ) பிறந்த 3 நாட்கள் (இ) பிறந்த 28 நாட்கள் பின்  
(உ) தெரியாது

22) குழந்தையின் ஒரு வயதுக்குள் எத்தனை முறை ஒபிவி சொட்டு  
மருந்து கொடுக்க வேண்டும்?

- (அ) மூன்று முறை (ஆ) நான்கு முறை  
(இ) ஐந்து முறை (ஈ) ஐந்து முறைக்கு மேற்பட்ட

23) கோலியோ வாக்கின் எந்த மாதம் கொடுக்கப்படுகிறது?

- (அ) பிறந்தவுடன் 0 டோஸ் போலியோ வாக்கின்  
(ஆ) 2வது மாதம் ஸ்ரீ முதல் டோஸ்  
(இ) 3வது மாதம் ஸ்ரீ இரண்டாவது டோஸ்  
(ஈ) 4வது மாதம் ஸ்ரீ 3வது டோஸ்  
(உ) மற்ற விடைகள்

24) பல்ஸ் போலியோ கொடுப்பதன் நோக்கம்

- (அ) இளம்பிள்ளை வாதம் நோய் தடுக்க  
(ஆ) காசநோய் தடுக்க  
(இ) ரனஜன்னி நோய் தடுக்க  
(ஈ) தட்டம்மை நோய் தடுக்க  
(உ) தெரியாது

25) ஒரே நேரத்தில் குழந்தைக்கு எந்த நோய்க்கெல்லாம் நோய் தடுப்பு  
செய்யலாம்?

- (அ) தொண்டை அடைப்பான் (ஆ) கக்குவான் (இ) ரனஜன்னி  
(ஈ) காசநோய் (உ) இளம்பிள்ளை வாதம் (ஊ) தெரியாது

26) தொண்டை அடைப்பான் தாக்கும் பகுதி

- (அ) தொண்டை (ஆ) முகம்  
(இ) வெண்விழி படலம் (ஈ) காசநோய்

27) கக்குவான் இருமல் என்பது

- (அ) ஒரு தொற்று நோய் (ஆ) பிறவி நோய்  
(இ) பரம்பரை நோய் (ஈ) தெரியாது

28) கக்குவான் இருமல் எந்த வயது குழந்தையை பாதிக்கிறது?

- (அ) ஐந்து வயதுக்கு குறைவான (ஆ) ஐந்து வயதுக்கு மேற்பட்ட  
(இ) ஏழு வயது (ஈ) வேறு ஏதாவது

29) முக்கியமாக கக்குவான் நோய் பரவும் விதம்

- (அ) இருமல் (ஆ) தும்மல் மற்றும் பேசுதல்  
(இ) நேரடித் தொடர்பு (ஈ) மற்றவை

30) ரனஜன்னியைதோற்றுவிக்கும் கிருமி எந்த விலங்கின் குடலில்  
காணப்படுகிறது?

- (அ) கால்நடை (ஆ) குதிரை  
(இ) ஆடு (ஈ) மேல் காண்பவை அனைத்தும்

## ATTITUDE SCALE REGARDING IMMUNIZATION

S.NO	QUESTIONS	DISAGREE	UNCERTAIN	AGREE
1.	Vaccination is important			
2.	Vaccines have severe side effects			
3.	Vaccination is safe			
4.	Infants infected with the disease which immunized against			
5.	Vaccination maintain child health			
6.	Vaccination side effects cause death			
7.	Vaccination is best for each infant			
8.	Vaccination is important for boys than girls			
9.	Recommended others to vaccinate their children			
10.	Vaccination is harmful			
11.	Vaccination must give according to schedule			
12.	Vaccination save the community			
13.	Effective in prevention of infectious disease			
14.	Vaccines prevent mortality rate			
15.	Tetanus vaccine is important for infant and mothers health			

ATTITUDE மனப்பான்மை		ஏற்கிறேன்	ஏற்க மறுக்கிறேன்	நிச்சயமற்ற
1	தடுப்பூசி மிக முக்கியமானது			
2	தடுப்பூசி பக்கவிளைவுகளை கொண்டது			
3	தடுப்பூசி பாதுகாப்பானது			
4	தடுப்பூசி போட்டபின்பு குழந்தைகள் நோயால் பாதிக்கப்படுகின்றனர்			
5	தடுப்பூசி குழந்தைகளின் உடல்நலத்தை பராமரிக்கிறது			
6	தடுப்பூசியின் பக்கவிளைவுகள் இறப்பிற்கு காரணமாகும்			
7	தடுப்பூசி ஒவ்வொரு பச்சிளம் குழந்தைகளுக்கும் உகந்தது			
8	தடுப்பூசி போடுவதை அடுத்தவர் (மற்றவர்) குழந்தைகளுக்கு பரிந்துரை செய்தல்			
9	தடுப்பூசி பெண்குழந்தைகளைவிட ஆண்குழந்தைகளுக்கு மிகவும் முக்கியமானது			
10	தடுப்பூசி ஆபத்தானது			
11	தடுப்பூசியை அட்டவணை முறைப்படி வழங்க வேண்டும்			
12	தடுப்பூசி போடுவது சமூகத்தை பாதுகாக்கிறது			
13	பரவும் நோய்களை தடுக்கும் வலிமை தடுப்பூசிக்கு இருக்கிறது			
14	இறப்பு விகிதத்தைத் தடுப்பூசி தடுக்கிறது			
15	குழந்தை மற்றும் தாய்மார்களின் உடல்நலத்திற்கு கக்குவான் இருமல் தடுப்பூசி மிகவும் முக்கியமானது			

## PHOTOGRAPHY

