**Scholars Journal of Applied Medical Sciences (SJAMS)**
***Abbreviated Key Title: Sch. J. App. Med. Sci.***
**ISSN 2320-6691 (Online)**
**ISSN 2347-954X (Print)**

A Unit of Scholars Academic and Scientific Society, India
www.saspublishers.com

Pediatrics

# Knowledge, Attitude and Practice of Parents about Childhood Immunization

**Dr. Ashok Dethe[1*], Ritu Singh[2]**
[1]Associtate Professor, Dept of Pediatrics, Andaman and Nicobar Islands medical college, Port Blair, India
[2]Assistant Professor, Dept of Pediatrics, Andaman and Nicobar Islands medical college, Port Blair, India

**Original Research Article**

***Corresponding author**
*Dr. Ashok Dethe*

**Article History**
*Received: 24.07.2017*
*Accepted: 20.01.2018*
*Published: 30.1.2018*

**DOI:**
10.36347/sjams.2018.v06i01.034

**Abstract:** It has been recently reported by WHO that a large proportion of children fail to complete their immunization schedule. Parental decisions regarding immunization are very important to improve immunization rate. The aim of this study was to evaluate the parental knowledge, attitude and practices about children's immunization completeness. A cross sectional survey of non-randomized sample of 160 mothers of the newborn children was included in the study. Mothers attending the pediatric department of the Andaman and Nicobar Institute of Medical Sciences (ANIIMS) hospital over a period of 6 months from Nov 2016 to May 2017 were included in the study and Mothers having their children of 0 to 24 months were considered for the study. All the participants were given a format of questionnaires to tick for the assessment of knowledge, attitude and practice of the parents. Statistical analysis was done by using IBM SPSS statistics version 16 with the help of chi-square test and 0.05 was used as a level of significance. A total of 160 participants were included in the study. Out of these, 131 (81.87%) completely immunized their children whereas 29 (18.12%) mothers partially immunized their children. Eighty female and eighty male children were recorded in the study i.e. a ratio of 1:1. It was found that residence affect at certain level on the status of immunization ($p<0.05$). Knowledge of prevention of disease by vaccination was present with 126 mothers out of 160. The concept of the active and passive immunization was not known to 106 and 101 mothers, respectively. Also the knowledge of health situations and schedule follow-up was lacking in some of the mothers. Many of the parents still lacked the knowledge of the immunization. Childhood immunization related messages should be more emphasized in the national vaccination programme.
**Keywords:** Immunization, Mothers, Vaccination.

## INTRODUCTION

Good parental practice regarding immunization will be able to reduce the incidence of infectious diseases. Parental practice regarding vaccination is related to appropriate sources of information, the number of sources, and the way that vaccine information is received by parents [1]. Immunization of children against serious communicable diseases is the most cost effective strategy to decrease overall morbidity and mortality among children. In order to accomplish this strategy, high coverage of vaccination is essential to be maintained [2].

Immunization which has greatly reduced the burden of infectious diseases prevents illness, disability and death from vaccine preventable diseases including, Measles, Pertussis, Diphtheria, Polio, Rubella and Tetanus [3,4]. Since factors influencing demand vary greatly by region and context, findings from one population cannot always be extrapolated to another. Thus, simple operational research into local knowledge and attitudes should become an essential part of every vaccination campaign.

The aim of this study was to evaluate the parental knowledge, attitude and practices about children's immunization completeness.

## MATERIALS AND METHODS

A cross sectional survey of non-randomized sample of 160 mothers of the newborn children was included in the study. Approval of the ethical committee before start of the study and consent of all the participants were taken.

### Inclusion criteria

- Mothers attending the pediatric department of the Mothers attending the pediatric department of the Andaman and Nicobar Institute of Medical Sciences (ANIIMS) hospital over a period of 6 months from Nov 2016 to May 2017 were included in the study.

- Mothers having their children of 0 to 24 months were considered for the study.

The data of the mothers including demographic, occupation and education were recorded and all the participants were given a format of questionnaires to tick for the assessment of knowledge, attitude and practice of the parents. A total of 9 questionnaires were formulated and given to the parents for the assessment.

## STATISTICAL ANALYSIS

Statistical analysis was done by using IBM SPSS statistics version 16 with the help of chi-square test and 0.05 was used as a level of significance.

## RESULTS

A total of 160 participants were included in the study. Out of these, 131 (81.87%) completely immunized their children whereas 29 (18.12%) mothers partially immunized their children. Eighty female and eighty male children were recorded in the study i.e. a ratio of 1:1. (Table 1) It was found that residence affect at certain level on the status of immunization ($p<0.05$) (Table 2).

Variable responses were seen regarding the knowledge, attitude and practice of the mother regarding immunization. Knowledge of prevention of disease by vaccination was present with 126 mothers out of 160. Comparatively less knowledge was present about the different types of vaccinations available and which are important for the child health. Safety of vaccination was known to almost all mothers. The concept of the active and passive immunization was not known to 106 and 101 mothers respectively. Also the knowledge of health situations and schedule follow-up was lacking in some of the mothers. Almost half of the mothers did not know that the vaccination should be started within the first week of age (Table 3).

**Table-1: Distribution of children immunization status according to their gender**

| Sex | Immunization status | | | | Total | $x^2$ | p |
|---|---|---|---|---|---|---|---|
| | Complete | | Partial | | | | |
| | Number | % | Number | % | | | |
| Male | 67 | 83.75 | 13 | 16.25 | 80 | 45.54 | <0.001 |
| Female | 64 | 80.00 | 16 | 20.00 | 80 | | |
| Total | 131 | 81.87 | 29 | 18.12 | 160 | | |

**Table-2: Immunization status according to urban or rural area**

| Place | Immunization status | | | | Tot0al | $x^2$ | p |
|---|---|---|---|---|---|---|---|
| | Complete | | Partial | | | | |
| | Number | % | Number | % | | | |
| Urban | 88 | 88.88 | 11 | 11.12 | 99 | 9.24 | <0.05 |
| Rural | 43 | 70.49 | 18 | 29.51 | 61 | | |
| Total | 131 | 81.87 | 29 | 18.12 | 160 | | |

**Table-3: Responses of the participants for the immunization knowledge, attitude and practice**

| Sr. no. | Statements | Don't know | Uncertain | Know |
|---|---|---|---|---|
| 1. | Vaccination prevents disease. | 8 | 26 | 126 |
| 2. | There are different types of vaccines. | 21 | 38 | 101 |
| 3. | Vaccination is safe? | 5 | 34 | 121 |
| 4. | Vaccination must be given according to schedule. | 31 | 32 | 97 |
| 5. | Active immunization is a killed or weakened form of a disease causing agent. | 106 | 09 | 45 |
| 6. | Passive immunization is an antibody from someone who was infected with the disease. | 101 | 11 | 48 |
| 7. | In some health situations vaccines should not be given. | 25 | 48 | 87 |
| 8. | Will u recommend vaccination to others? | 2 | 15 | 143 |
| 9. | Vaccination should be initiated within first week of age. | 72 | 12 | 76 |

## DISCUSSION

Childhood immunization almost guarantees protection from many major diseases.4 Childhood immunizations are the most cost-effective medical intervention to prevent death and disease[5] Not solely a good in itself, childhood immunization represents the gateway provisioning of comprehensive health care to all children[6].

The most important factor affecting parental practice is communication between parents and the sources of information or immunization providers. Improving communication will improve parents' perceptions of the benefits and risks of vaccines [1].

Cultural receptivity to perceived modernity and education, as well as trust in health workers, was considered to be the most important factors influencing attitudes. In short, knowing little about vaccination does not necessarily translate into negative attitudes towards it; factors such as trust (e.g. in health-care providers) and culture may be more influential. The impact of high levels of knowledge on subsequent attitudes towards vaccination is unknown [7].

There are many barriers against immunization, including misinformation about vaccines, adverse effects of vaccines, vaccine-preventable diseases, low socioeconomic status, and low education level and disease development after the administration of vaccines. Deficiencies in parents' knowledge about the adverse effects and contraindications of vaccines often lead to many immunization errors. These factors can play a role in delay or finishing full set of vaccination [1,2].

In the present study 18.12% of the parents partially immunized their children, which was in accordance to the study by Joseph J *et al*.[8], where they found 14.0% of parents immunized partially to their children.

Health workers are the main source for immunization in urban areas so, communication and education training to them need to be considered to improve their working with different strata of the population. A comprehensive communication strategy should be designed, regularly reviewed and updated. The strategic communication programme for different literacy level and ethnic group is must to reach the particular deprived group. As the radio jingles and TV spots were found as the most effective and understandable, this could help spread knowledge through broadcasts with regular intervals.

## CONCLUSION

It can be concluded that the knowledge of parents about immunization is not completely adequate and this is replicated on the state of immunization. Child gender and residence of mothers do not significantly affect the pattern of immunization. This refers to incomplete knowledge and inappropriate practice of the people. This would require appropriate information dissemination, aggressive campaigning and family involvement as crucial to the success of the programme.

## REFERENCES

1. Al-Lela OQ, Bahari MB, Al-Qazaz HK, Salih MR, Jamshed SQ, Elkalmi RM. Are parents' knowledge and practice regarding immunization related to pediatrics' immunization compliance? a mixed method study. BMC pediatrics. 2014 Jan 25;14(1):20.
2. Al-Zahrani J. Knowledge, attitude and practice of parents towards childhood vaccination. Majmaah J Health Sciences 2013;1(1):29-38.
3. Ramadan HA, Soliman SM, El-kader RG. Knowledge, Attitude and Practice of Mothers toward Children's Obligatory Vaccination. IOSR Journal of Nursing and Health Science 2016;5(4):22-8.
4. Caingles SE, Lobo JJ. Survey on the knowledge, attitudes and practices of parents in barangay 8a, district 1, Davao city regarding their children's immunization. PIDSP Journal 2011;12(1):46-52.
5. Libwea JN, Kobela M, Ollgren J, Emah I, Tchio R, Nohynek H. Predictors to parental knowledge about childhood immunisation/EPI vaccines in two health districts in Cameroon prior to the introduction of 13-valent Pneumococcal Conjugate Vaccines (PCV-13). Pan African Medical Journal 2014;17(187):1-13.
6. Devkota S, Simkhada P, Teijlingen EV, Rai LD. Parents' Knowledge and Practices to Childhood Immunisation in Nepal: Implications for Health Policy. Health Science Journal 2013;7(4):370-83.
7. Bofarraj M. Knowledge, attitude and practices of mothers regarding immunization of infants and preschool children at Al-Beida City, Libya 2008. Egypt J Pediatr Allergy Immunol 2011;9(1):29-34.
8. Joseph J, Devarashetty V, Reddy SN, Sushma M. Parents' knowledge, attitude and practice on childhood immunization. Int J Basic Clin Pharmacol 2015;4:1201-7.