



Original Article

A STUDY ON ATTITUDE OF MOTHERS ABOUT IMMUNIZATION PRACTICES IN GOVERNMENT DISTRICT HOSPITAL KALABURAGI

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OPEN ACCESS

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Received: 10-06-2026

Accepted: 14-07-2026

Available online: 24-07-2026

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ABSTRACT

Background: Vaccines are the most powerful, safe and cost-effective interventions to prevent major illnesses that contribute to child mortality in the country. so this study was taken up to determine the Attitude of mothers with children under five years of age, which will help the policy makers in implementing the immunization programme in a better way, to achieve >85% coverage.

Methods: A semi structured prevalidated questionnaire designed to assess the attitude of mothers regarding vaccination was administered to 360 mothers fulfilling the Inclusion criteria.

Results: In our study, Out of 360 children, 183 (50.8%) children were fully immunized, 155 (43.1%) children were partially immunized and 22 (6.1%) children were seen unimmunized. Mothers were the main decision makers regarding vaccination of their children.

Conclusion: We found significant lacunae in the attitude of mothers towards childhood vaccination. so, health education is also an essential component that can go a long way in improving the prevailing scenario of immunization in our country.

Keywords: Immunization, attitude, Mothers.

INTRODUCTION

One of the most significant contributions of the medical fraternity to mankind is the advent of vaccines. In environments where malnourished children, overcrowding, poverty and illiteracy is prevailing vaccines are the most powerful, safe and cost-effective interventions to prevent major illnesses that contribute to child mortality in the country. In a country like India, a large chunk of the population lives in rural areas, where mothers are illiterate and have numerous myths about vaccination, thus resulting in children being unimmunized and susceptible and hence causes a serious policy concern.¹

Knowledge (K), positive attitudes (A) and appropriate practices (P) about vaccination hence becomes one of the main tools to reduce the incidence of vaccine preventable diseases (VPDs) thus reducing childhood mortality and morbidity.¹

In May 1974, the WHO launched the Expanded Immunization Programme (EPI) globally, with focus on prevention of 6 vaccine-preventable diseases by the year 2000. In 1978, EPI was launched in India and it was re-designated as the Universal Immunization Programme (UIP) in 1985, with a goal to cover at least 85% of infants.²

In 2010, It was noted that 19.3 million children had been incompletely vaccinated, leaving them susceptible to vaccine preventable disease mortality and morbidity. Approximately 50% of all under vaccinated children live in three countries, India being one of them. In 2010 it was estimated that 1.7 million children died from vaccine preventable diseases (VPD).³

The present situation of under immunization is not only seen in the rural areas of the country, but also in the urban areas as the migration of workers to the urban areas are occurring at a rapid rate, and these are the areas with illiteracy, poverty, overcrowding and disease.⁴

National Family Health Survey-5, India reports that only 72.0% of children aged 12-23 months received all age appropriate vaccinations in Karnataka and only 61.6% of children aged 12-23 months received all age appropriate vaccinations in Gulbarga.⁵ Negative parental perceptions of vaccination are also an important barrier to childhood vaccination.⁶

Therefore it is important to know about the variables that influence parental decisions to vaccinate their children and plan measures to overcome these barriers. To know about the variables, beliefs and behaviour of parents it is necessary to conduct a Knowledge, Attitudes and Practices (KAP) study. So, this study was planned to assess the attitude of mothers with children under five years of age about vaccination.

METHODOLOGY

This cross sectional descriptive study was conducted over a period of 3months (from July 2023 to September 2023) on 360 mothers attending department of Paediatrics, Gulbarga institute of Medical sciences, Kalaburagi having children under five years of age. The study was conducted after obtaining the ethics committee approval from Institutional Ethics committee. Informed consent was obtained from all eligible participants after explaining the objectives and nature of this study in their own language. A semi structured prevalidated questionnaire designed to assess the Knowledge about vaccination was administered to all the mothers of children under five years of age. Mothers with neurologically abnormal child and mothers with children on chemotherapy /immunosuppressant therapy and mothers of children under five years of age who did not give consent for the study were excluded from the study. The data collected through this questionnaire includes: socio demographic details of parents and children, place of vaccination, immunization status of their child/children, reason for not taking vaccine and decision makers for taking vaccination. Attitude of mothers regarding vaccination was assessed.

Statistical data was analyzed by using statistical package for social sciences (SPSS, version 20.0). If p value is <0.05, it is considered as statistically significant.

RESULTS

Table 1: Socio Demographic profile wise distribution of study participants

Variables	Categories	No. of mothers	Percentage
Age of children	≤ 2 years	162	45.0
	2—4 years	158	43.9
	4—5 years	40	11.1
	Mean ± SD	2.12 ± 1.63	----
Gender of children	Male	191	53.1
	Female	169	46.9
Area residence	Urban area	266	73.9
	Rural area	94	26.1
Socio-economic status (B G Prasad classification) ⁷	Upper Class	0	0.0
	Upper Middle Class	12	3.4
	Middle Class	165	45.8
	Lower Middle Class	124	34.4
	Lower Class	59	16.4
Age of mother	≤ 25	133	36.9
	26—30	198	55.0
	> 30	29	8.1
	Mean ± SD	26.81 ± 6.78	----
Mother education	Illiterate	162	45.0
	Primary	110	30.6
	Secondary and degree	88	24.4
Mother occupation	House wife	225	62.5
	Labour	54	15.0
	Employee	81	22.5

In the study, the mean age of children was 2.12 years, the mean age of mothers (participants) was 26.81 years. Out of 360 children in the study, males were 191 (53.1%) and females were 169 (46.9%). Table 1 shows demographical profiles wise distribution of mothers. Majority of mother's 266 (73.9%) residential area was rural and 94 (26.1%) mother's residential area was urban. Majority of the study participants 165 (45.8%) were belonging to middle class. Out of 360 participants, 162 (45.0%) of participants (mothers) were illiterate, Majority of mother's occupation 225 (62.5%) was found to be house wife.

In the Study, it was observed that, out of 360 children, 183 (50.8%) children were fully immunized, 155 (43.1%) children were partially immunized and 22 (6.1%) children were seen unimmunized.

Table No.2: Immunization status wise distribution of children

Immunization status	No. of children	Percentage
Fully Immunized	183	50.8
Partially immunized	155	43.1
Unimmunized	22	6.1
Total	360	100.0

Out of 177 (49.2%) partially and unimmunized children's mothers, 53 (29.9%) had given the reason for not taking vaccination as lack of awareness regarding vaccination schedule, followed by 37 (20.9%) said unawareness regarding Place/time of immunization and 30 (17.0%) said Child was ill so not brought for immunization.

In the study, for majority 248 (68.9%) children, mothers were the decision makers for vaccination, for 62 (17.2%) children both mother and father were the decision makers for vaccination, and for 50(13.9%) children fathers were the decision makers. All 360 mothers said the place of vaccination preferred by them was government institute

Out of 360 mothers, Majority 212 (58.9%) of mothers had got the source of information regarding vaccination from Health care workers (ANM/AWW) and 98 (27.2%) participants got the source of information regarding vaccination from doctors and 29(8.1%) participants got information from family/neighbours/relatives.

Table No.3: Attitude of mothers regarding vaccination

Sl. No.	Questions	No. of mothers		
		Yes No. (%)	No/don't k No. (%)	Total
1	Do u think vaccination is important	212 (58.9%)	148 (41.1%)	360
2	Is it important to follow vaccination schedule	205 (56.9%)	155 (43.1%)	360
3	Where do you prefer to receive vaccination	360 (100.0%)	0 (0.0%)	360
4	Are u satisfied with the way in which the vaccination is provided	356 (98.9%)	4 (1.1%)	360

Study revealed that; all the mothers 360 (100.0%) had the attitude of to receive vaccines at government hospitals, 356 (98.9%) of mothers were satisfied with the way in which the vaccination is provided, 205 (56.9%) mothers said that it is important to follow vaccination schedule, and 212 (58.9%) mothers thought that vaccination is important.

Table 4: Comparison of attitude of mothers with immunization status of children

	Questions	Fully immunized (N=183)		Partially immunized/ unimmunized (N=177)		Fisher exact test P-value
		Yes	No/don't know	Yes	No/don't know	
Attitude	Do u think vaccination is important?	172 (94.0%)	11 (6.0%)	36 (20.3%)	141 (79.7%)	P = 0.000 HS
	Is it important to follow vaccination schedule?	179 (97.8%)	4 (2.2%)	28 (15.8%)	149 (84.2%)	P = 0.000 HS
	Do you prefer to receive vaccination in a government institute?	183 (100.0%)	0 (0.0%)	177 (100.0%)	0 (0.0%)	
	Are u satisfied with the way in which the vaccination is provided?	183 (100.0%)	0 (0.0%)	173 (97.7%)	4 (2.3%)	P = 0.989 NS

NS= not significant, S=significant, HS=highly significant

On analysing the attitude of the mothers towards vaccination, 94% mothers of fully immunized children and 20.3% mothers of partially immunized/unimmunized children thought that vaccination is important. 97.8% mothers of fully immunized children and 15.8% mothers of partially immunized/unimmunized children opined that it is important to follow vaccination schedule. This also showed a high statistical significance and further highlights the cause of under immunization and poor vaccination coverage in our country.

DISCUSSION

The immunization coverage status of the study was far lower than the target which had to be achieved (85% coverage).

The immunization coverage found by this study was 50.8%. Our study revealed that Anganwadi workers (AWW) and Auxiliary Nurse Midwives (ANM) were the main source of information regarding vaccination and it is this population that needs to be adequately trained so that they can spread the awareness to the doorstep of the population. This was in concordance with the study by Bholanath et al.⁴

In our study, all mothers preferred vaccination services in government health facilities. Hamid et al, in their study have reported that rural mothers preferred and trusted Government health facilities.⁸ Majority of the mothers of partially immunized and unimmunized children had given the reason for not taking vaccination as lack of awareness regarding vaccination schedule, which is consistent with the findings of the study done by Angadi et al.⁹

Our study revealed that Anganwadi workers (AWW) and Auxiliary Nurse Midwives (ANM) were the main source of information regarding vaccination and it is this population that needs to be adequately trained so that they can spread the awareness to the doorstep of the population. This was in concordance with the study by Bholanath et al.⁴

Our study has found a significant difference in mothers of fully immunized children and mothers of partially immunized/unimmunized children in terms of their attitude towards vaccination. The mothers of fully immunized children were more aware and showed favourable attitude and practices regarding vaccination than mothers of partially immunized/unimmunized children. It must also be kept in mind that since the majority of the mothers are the main caregivers, decision makers and informants regarding immunization, so ensuring good education to the girl child and knowledge about vaccination integrated into the antenatal care of mothers, the immunization coverage can be improved and the goals of eradication of vaccine preventable diseases may be accomplished.

CONCLUSION

We found significant lacunae in the attitude of mothers towards childhood vaccination especially among mothers of partially immunized and unimmunized children. So, health education is also an essential component that can go a long way in improving the prevailing scenario of immunization in our country.

ACKNOWLEDGEMENT

Authors acknowledge the help received from scholars whose articles have been cited and included in references of this manuscript.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee.

REFERENCES

1. Pandey RP and Yazbeck AS. What's in a country average? Wealth, gender and regional inequalities in immunization in India. *Soc Sci Med* 2003; 57(11):2075-2088.
2. Park K. Park's textbook of Preventive and Social Medicine. 22nd Edition. Jabalpur (India):Banarsidas Bhanot Publishers;2009.
3. Mahalingam S, Soori A, Ram P, Achappa B, Chowta M, Madi D. Knowledge, attitude and perceptions of mothers with children under five years of age about vaccination in Mangalore, India. *Asian Journal of Medical Sciences* 2014; 5(4):52-57.
4. Nath B, Singh JV, Awasthi S, Bhushan V, Kumar V, Singh SK. KAP Study on Immunization of Children in a City of North India – A 30 Cluster Survey. *Online J Health Allied Scs* 2008;7(1):2.
5. http://rchiips.org/nfhs/NFHS-5Report_KA.shtml. [cited 2023 Jul 5].
6. Heininger U. An internet based survey on parental attitudes towards immunization. *Vaccine* 2006; 24(37-39):6351-6355.
7. Mangal A, Kumar V, Panesar S, Talwar R, Raut D, Singh S. Updated BG Prasad socioeconomic classification, 2014: A commentary. *Indian J Public Health* 2015;59:42-4.
8. Hamid S, Andrabi SAH, Fazli A and Jabeen R. Immunization of children in a rural area of North Kashmir India: a KAP study. *Online J Health Allied Scs*.2012; 11(1):10.
9. Angadi MM, Jose AP, Udgiri R, Masali KA, Sorganvi V. A study of knowledge, attitude and practices on immunization of children in urban slums of bijapur city, karnataka, India. *J Clin Diagn Res*. 2013 Dec; 7(12):2803-6.