

A Study on Evaluation of Immunization Status under Five Years and Breast Feeding Practices under RHTC area Karimnagar District

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ABSTRACT

Introduction: Community based cross sectional study was conducted in the field practice area of Rural Health Training Centre (RHTC) to find out the immunization status of under five children and breast feeding practices among below poverty line and above poverty line group (A.P Classification) from 1st June 2014 to 30th September 2014.

Objectives: 1) To evaluate immunization status of under five children in rural health training centre (RHTC) practicing area. 2) To assess the breast feeding practices under RHTC - Manakondur 1st and 2nd sub centres and Annaram sub centre.

Materials & Methods: Community based cross sectional study was conducted in the field practice area of Rural Health Training Centre (RHTC), Karimnagar.

Results: Mean age of children in the study is 40.7 months with standard deviation of 22.52. Children were immunised (94.37%) up to date. At birth immunisation of children is 99.5%, whereas there is drastic fall (69.3%) in the immunisation of booster doses of DPT, OPV with comparison previous years. Only one child in the present study was not immunized for second dose because of fear of previous reactions. Up to date immunisation status is little lower in below poverty line when compared with above poverty line socio-economic group. The study findings revealed that all the children were breast fed (100%). Initiation of breast feeding within an hour was practiced by only a few mothers (10%). 95% babies were exclusively breast fed till six months. 69% of mothers have continued breast feeding when child is suffering from diarrhoea. only 40% of mothers are aware about birth spacing by contraception

Conclusion: Breast feeding was popular in rural women, though their knowledge it needs to be improved the feeding practices which directly influences the health of the child. To achieve 100 % Full Immunisation has to be improved though at birth immunisation is 99.5% but full immunisation along with booster doses has to be improved by BCC methods. The information regarding the advantages of full immunisation needs to be provided for the community as a whole. Special health education camps and community mobilisation may help in identifying and referring the children for vaccination.

Keywords: Immunization status, breast feeding practice

INTRODUCTION

Globally, each year 130 million children are born, 91 million of which are in the developing countries. However, around 10 million children under the age of five years die every year and over 27 million infants in the world do not get full routine immunization. The

estimate for global child deaths under five years was 10.8 million in 2000. About 41% of these were in Sub-Saharan Africa and 34% in South Asia.^[1] Immunization being one of the most cost effective public health interventions which is directly or indirectly responsible to prevent the bulk of mortalities in under-fives. The government of India launched its Expanded Programme of

Immunization (EPI) in 1978 aiming at optimum coverage of immunization among all children below five years, later in 1985 Universal Immunization Programme was started with aim to cover the 85% of infant with three doses of DPT and OPV and 1 dose of BCG and Measles by 1990.^[2] Despite of all efforts are being done to achieve this target but the target is still not achieved.

Vaccines remain one of the cost effective public health initiatives.^[3] yet the coverage against vaccine preventable diseases remains far from complete. Recent estimates suggest that approximately 34 million children are not completely immunized with almost 98% of them residing in developing countries.^[4]

There are many children remained unimmunized or partially immunized. Various studies quoted the factors responsible for un immunization or partial immunization. Among them the main factors were poor parental knowledge of immunization, parent's neglect, domestic problems, immunization centre was far away or not at proper time hampering their routine work etc.^[5,6] So, it is important to understand the needs/problems for un immunization or partial immunization to better manage the Universal Immunization Programme at the local level.

Health is essential to the satisfaction of human needs to an improved quality of life.^[1] The mortality and morbidity in infants and under five years are due to communicable diseases, like measles, diphtheria, whooping cough, tuberculosis etc.

Immunization is an essential component of primary health care approach in 1978 being reinforced by Declaration of Health Policy in 1983 to combat above mentioned communicable diseases.^[1] Target population of Expanded Program of Immunization (EPI) are all 0-1year children.

Vaccines remain one of the most cost effective public health initiatives yet to cover against Vaccine Preventable Diseases remains far from complete. Appropriate feeding is crucial for the healthy growth and development of the child. Breast milk is the best milk and natural first food for babies. Numerous advantages of breast feeding over artificial feeding have been documented. Promotion of breast feeding is justified on firm scientific grounds.

OBJECTIVES

1. To evaluate immunisation status of children aged 0-5yrs in our rural health training centre (RHTC) practicing area Annaram of Manakondur PHC under CAIMS.
2. To assess the breast feeding practices in RHTC area Annaram of Manakondur PHC.

MATERIALS AND METHODS

Community Based Cross sectional study was conducted in the field practice area Manakodur PHC 16 Kms to CAIMS Karimnagar covering sub centre 1 & 2 and sub centre Annaram under Rural Health Training Centre. Study period is from 1st June 2014 to 30th September 2014. A pilot study was done on 40 feeding mothers by interviewing questionnaire and deleted irrelevant questions.

Inclusion Criteria

160 mothers having children between 0-5 years age group were included in the study, Verbal consent was obtained by visiting house to house. 40 mothers having children were interview through pre-tested questionnaire in RHTC and answers was obtained on interview sheet. After correcting brought out with appropriate questionnaire recorded the answers on the interview sheet.

Exclusion Criteria : Those not willing to participate were excluded.

The data was analysed manually and using SPSS program.

Table :1 Mother Education vs. Immunization status

Mother Education	Immunization status			Total (%)
	up to date	Partial	Not immunized	
Illiterate	15	1	0	16 (10)
Primary	42	0	0	42 (26.25)
Secondary	72	5	1	78 (48.75)
Degree	20	2	0	22 (13.75)
P.G	2	0	0	2 (1.25)
Total	151	8	1	160 (100)

The table shows majority (90%) of literate mothers immunized their children. Only one child not immunized because of fear of previous immunization complication.

Table:2 Type of family vs. Immunization status

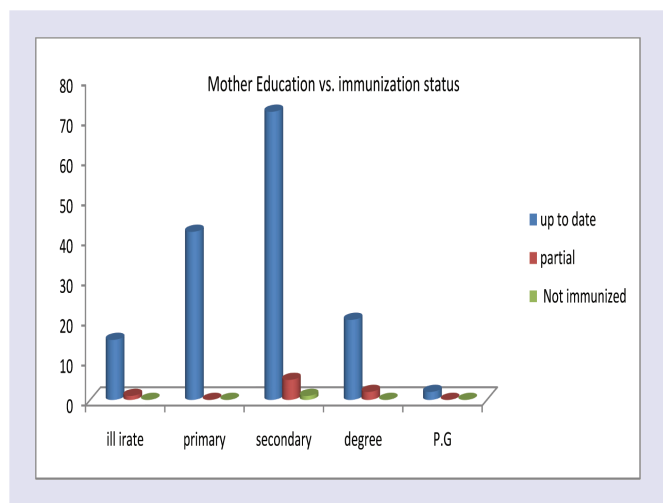
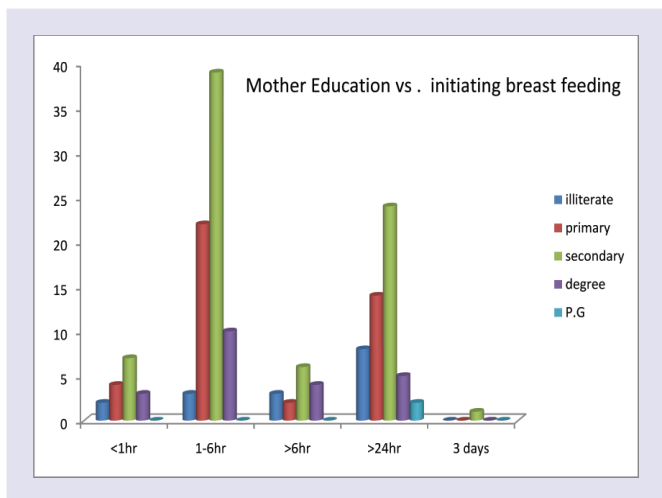
Mother Education	Immunization status			Total (%)
	up to date	Partial	Not immunized	
Joint	53	3	0	56 (35)
Nuclear	98	5	1	104(65)
Total	151	8	1	160 (100)

The table shows 65% of the family structure are belongs to nuclear type of family and majority of their children observed up to date immunization.

Table :3 Mother education vs. Initiating breast feeding

Mother Education	Time for initiating breast feeding					Total (%)
	<1hr	1-6hr	>6hr	>24hr	3 days	
Illiterate	2	3	3	8	0	16
Primary	4	22	2	14	0	42
Secondary	8	39	6	24	0	78
Degree	3	10	4	5	0	22
P.G	1	0	0	2	0	2
Total (%)	16 (10.62)	74 (46.25)	15 (9.37)	53(33.12)	0	160 (100)

The table shows majority (57%) of literate mothers initiated breast feeding of their children < 6 hrs. Remaining started after 6 hours of birth.



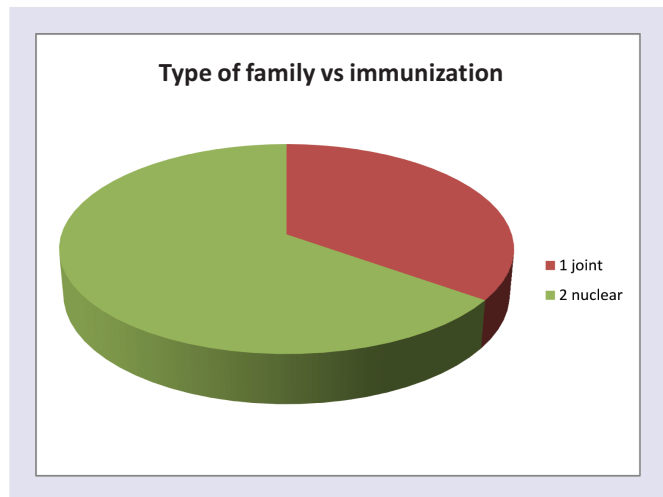
of DPT, OPV with comparison previous years . Up to date immunisation status is little lower in below poverty line when compared with above poverty line socio-economic status. Further study reveals that all the children were breastfed (100%). Initiation of breastfeeding within an hour was practiced by only a few mothers (10%). 95% babies were exclusively breastfed till six months. 69% of mothers have continued breast feeding when child is suffering from diarrhoea. Only 40% of mothers are aware about birth spacing by contraception.

DISCUSSION

97% respondents were lower class (BPL), among the 100% of immunised children, 65% belongs to nuclear family and 35% were joint family. Among the study group mothers 90% literate and 10% illiterates.

BCG coverage was 100% among them 53% of study group had female child. Among them 76.25% were immunized in private hospitals and 23.75% were in Govt. Hospitals. 1st and 3rd dose of DPT and OPV completed before 1st year. Majority (69.3%) of children had their first contact of immunization at the age of 6 weeks.

The study tried to bring out the specific factors responsible for un-immunized and partial immunization. Similar findings were noted by Yadhav et al^[12] and Prabhakaran Nair et al.^[13] found that 77.5% children were fully immunized. While, Manjunath et al^[10] and Nirupam et al^[15], noted very low percentage of fully immunized children respectively, So that it will helpful to strengthen the Universal immunization programme(UIP) in India. Lack of mother's knowledge about immunization, ignorance, fear of losing daily wages due to inconvenient time schedule of the immunization camp and cultural and social restrictions were few important factors responsible in divulging the under-five children from his/her right of immunization.



RESULTS

Mean age of children in the study is 40.7 months with standard deviation of 22.52. The study findings revealed that 94.37% of children were immunised up to date. At birth immunisation of children is 99.5%, whereas there is drastic fall (69.3%) in the immunisation of booster doses

In the present study 53.1% female children were fully immunized as compared to male children i.e. 46.99%. Even though the percentage of fully immunized children was more in female under-fives as compared to male but the relation was not statistically significant ($P>0.05$). Similar findings were also noted by Kumaret al.^[8]

Having a significant association between immunization status and mother's education, fully immunized children in educated mothers signifies importance of female education. Present study reveals that socio-economic group of 97% children belonging to Below Poverty Line(BPL) and 100% immunized with BCG. The percentage in fully immunized was 69.3 respectively ($P<0.004$). Statistically significant relation was also noted by Tiwari et al^[9], Bhandari et al^[14], but Malini Kar et al^[11], states that there is no significant relation between socio-economic group and immunization status of children where, 73.5% children of lower socioeconomic group were fully immunized as compared to middle socio economic group (59.2%).

Thus, even after 25 years of UIP implementation, bulk of children were missed for their basic right of immunization. This underlines the intensive need to create awareness about immunization among the parents. Fear of losing daily wages due to inconvenient time schedule of the immunization camp was also one of the important factors found in 10.67% children. Mathew et al^[7] found 4% of the children are not brought for immunization due to inconvenient time schedule of immunization camp. 3.33% children in the present study were not immunized because immunization centre was far away. Similar reason was also noted by Mathew et al^[7].

Only one child in the present study was not immunized for second dose because of fear of previous reactions but this was the reason mentioned by many like , Kumar et al^[8], In the present study, children among the unimmunized were due to cultural and social restrictions. Similarly, cultural and social restriction or lack of faith was also mentioned by Bhola Nath et al^[5], and Bhandari et al.^[14] This was the unfavourable observation that even in the era of science and technology the community is not in position to accept the basic health facilities challenging to the health system to work efficiently up to the root level.

CONCLUSION

Mother's education and socioeconomic status of the family significantly influences the immunization coverage among the under-fives. Lack of mother's knowledge about immunization, ignorance, fear of losing daily wages due to inconvenient time schedule of the immunization camp and cultural and social restrictions were few important

factors responsible in divulging the under-five children from his/her right of immunization. Breast feeding was popular in rural women, though their knowledge the same needs to be improved regarding the feeding practices. To achieve 100 % Full Immunisation has to be improved though at birth immunisation (99.5%) but full immunisation with booster doses has to be improved by BCC methods. The information regarding the advantage of full immunisation needs to be provided for the community as a whole. Special health education camps and community mobilisation may help in identifying and referring the children for vaccination

RECOMMENDATIONS

1. Intensive Information, education and communication (IEC) activity about immunization i.e. its importance and need, should be conducted focusing on individual level, family level and community level.
2. Immunization camps should be arranged by considering the work schedule of the community and the distance from the houses of beneficiaries.
3. It is advisable to include topics on child health and immunization in school syllabus for improving the knowledge of future parents.

CONFLICT OF INTEREST

The authors declared no conflict of interest.

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