

Utilization of Immunization Services Among Children Under Five In a Tribal Area : A Study

Kurudi P. Neeraja
M. Prakasamma

Tribal populations have unique health practices but very few studies have been done for understanding the health behaviour of these communities. The Government of India is laying a lot of emphasis on tribal populations as they are the weaker sections of the community and at high risk for various health problems. Huge amounts of money, material and manpower are provided by the Government to implement health services among tribal communities. Emphasis is laid on health care facilities for tribal populations in an attempt to bring them into the Indian mainstream.

Though the Government's effort is that the Universal Immunization Programme should reach every remote corner, one does not know whether it has actually reached the tribal areas in the interior regions of the country. Studies on utilization of immunization services especially among children of peripheral groups like tribals, need to be carried out to identify the deficiencies and administrative bottlenecks being faced in the implementation of Universal Immunization Programme (UIP) especially in far off regions. Only an honest quantitative and qualitative evaluation of the programme will enable policy makers and administrators to make the necessary changes

and modification in the programme in order to achieve the desired

The present study was undertaken in a selected tribal area of Sugali in Ananthapur district with the following objectives:

- To assess awareness of mothers of children under five about immunization and immunization services.

To assess utilization of immunization services as expressed by mothers of children under five.

- To identify reasons for non-utilization of immunization services.

As no systematic study so far has been done in this particular tribal area, it is hoped that this study will not only help in providing baseline data and but will also help in a better understanding of the existing health practices of the tribal community which can help in formulating appropriate health intervention measures.

Sampling and Data Collection

A descriptive survey was carried out in Somandepalli *Mandal* of Ananthapur district. This *Mandal* consists of twenty one villages, out of which four villages are inhabited by the Sugali tribe, these are (1) Venkatapuram Thanda (2) Velgamakulapalli Thanda (3) Naginayeni-Cherru Thanda (4) Adadhakula palli Thanda. Adadhakulapalli Thanda was selected for pilot study and actual data collection was done in the remaining three Thandas

The population of this study consisted of mothers of children under five in the three selected thandas. Initially list of all the mothers of children under five and their under-five children was made adopting a complete enumeration method. There were 255 mothers with a total of 545 under-five children available at the time of the study. The total population was surveyed.

The information collected in this study was primarily on utilization of immunization services, and secondarily, on the awareness of tribal population regarding immunization services. A third aspect consisted of assessment of the reasons for non-utilization. The technique used for collecting this information was interview of parents.

A semi-structured interview schedule consisting of four parts was used- (i) Identification data; (ii) Parents' awareness about immunization; (iii) Immunization status of each child; and (iv) Reasons for non-utilization/discontinuation of immunization services. Immunization status was computed by comparing the actual doses received by a child with what the child ought to have received by that age.

The pilot study was conducted on eleven mothers with a total of 25 under-five children in Adadhakulapalli thanda.

Sample Characteristics

Majority of parents (74.51% fathers,

Ms. K.P. Neerja is Staff Nurse, State Government Hospital, Andhra Pradesh; and Dr. M. Prakasamma is Lecturer, College of Nursing, Hyderabad

and 76.47% of mothers) belonged to the age group of 20-29 years. More males (3.04% fathers) were educated upto middle school, as compared to females (1.53% mothers). The Illiteracy was high among mothers (79.60%) than fathers (66.67%). There were more women labourers (79.22%) than men labourers (40.78%).

Discussion of Findings

Tribal mothers differed widely in their awareness of immunization. Their awareness scores ranged from zero to 29 out of a maximum of 30. The awareness of tribal women seemed to follow a normal distribution as 70.20% women scored average awareness scores.

Awareness and education were seen to be positively related as mothers with higher education scored higher on awareness.

Mothers' educational level also had a positive relationship with immunization status of children. The mothers who were educated upto primary or middle school had a higher percentage of fully immunized children, and more of the children of middle school educated mothers were unprotected. This indicated the important role played by education in building awareness and in the utilisation of preventive health services.

Dhilon and Menon (1975) and Taluja (1989) have also concluded that awareness regarding immunization and its utilization are higher among mothers with higher education, higher socio-economic status and in nuclear families.

Though better education of mothers has resulted in higher utilization of services, there were very few fully immunized children in the sample. Among the 545 under-five children only 3.67% were fully immunized, 56.88% were partially immunized and

39.46% were not at all immunized. However, other researchers who have conducted studies in tribal areas have reported comparatively higher percentages of fully immunized children. Bhandari (1989), has reported that 23% children were fully immunized, 51.1% were partially immunized and 25.9% were not at all immunized. Bharadwaj and others (1991), in their study reported that 50.6% tribal children were fully immunized.

The present study revealed that a higher percentage of female children (4.23%) were completely immunized as compared to male children (3.07%). It also showed that the percentage of children not immunized was higher in males (42.53%) than in females (26.62%). The sex ratio of the tribal population of the district showed that the percentage of females was higher than that of males.

The immunization status of under-five children for specific vaccination is revealed that utilization of D.P.T and polio vaccination was better than other vaccines. A gradual decrease or tapering down was observed for subsequent doses of immunization. While 62.69% of the children received the first dose of D.P.T and polio, only 60.00% received the second dose, and a much lower percentage (48.11%) received the third dose. As for the booster doses for D.P.T. and polio the picture was rather bleak as only 3.66% had received the D.P.T. first booster dose and only 3.23% received the second booster.

Only 39.08% had a BCG scar and only 4.23% children were protected against measles.

Bhandari (1989), in his survey covering tribal blocks of Rajasthan, found that only 23% children were fully immunized and a very high drop out rate of 51.1% was found for D.P.T. and O.P.V.

Reasons for Non-utilization of Immunization services

As far non-utilization and discontinuation of immunization services the reasons most frequently stated were those associated with health services like non-availability of facilities at centre (36.19%) and immunization team not visiting the thanda (12.19%). The time of immunization was not convenient for 4.76% of the people. Rajguru (1987); Joshi (1987); Sahu and others (1989); Mathur and others (1990); and Gandhigram Researchers (1991) in their studies have supported the above reasons and have stated that the non-availability of vaccines at the centres was expressed by parents as the first cause for non-utilization; the time of the clinic not being suitable was another reason.

In the present study lack of knowledge regarding immunization and its utilization was mentioned as another reason for poor immunization of their children by 28.76% mothers. This was mentioned as the second common reason for non-utilization of immunization services, according to Dhilon and Menon (1971); Maya Chansuria and others (1975); Bandhyopadhyay (1978); Rajguru (1987); Joshi (1987); Mahajan (1989) and Balakrishna and others (1989).

A small percentage (1.14%) of female children were unprotected due to sex discrimination.

Conclusions

In conclusion, the following observation can be made. Immunization coverage is very low in the selected tribal areas of the Ananthapur district. Poor facilities and lack of awareness are the main hurdles in the utilization of these services by the tribals. Increased knowledge and awareness of immunization services, higher literacy of

women and strengthening of health facilities can improve the immunization status of under-five children.

To achieve the goal of Health For All by the year 2000 A.D., it is essential to involve primary health centres more actively in providing health care services on a regular basis to remote areas and communities. It is necessary to have intersectoral coordination with other developmental areas like education in order to increase people's awareness of health care facilities and thereby facilitate better utilization of health services. Planned health educational programmes should be conducted in thandas to increase people's awareness about health care facilities.

Health workers need to be clear about the goals and ought to work according to people's needs. The programmes should be people oriented. The time of providing immunization should be adjusted to enable mothers to utilize the services. Health workers should work closely with the local leaders and involve the tribal community in planning and implementing health services.

The knowledge of health workers should be updated by conducting workshops, orientation, reorientation and inservice education programmes. A

stricter supervision should be exercised over health personnel. Supervisors should be advised to stay in their respective areas and supervise health workers' implementation of health care programmes. Unprotected children should be identified and immunized in order to ensure full coverage. Adequate quantity of vaccines should be supplied.

References

1. Balakrishna, et al 1989. Comprehensive study of immunization coverage of infants, mothers in twin cities of Hyderabad and Secunderabad, Andhra Pradesh. (Research paper presented at XVIIIth National Conference of I.A.P.S.M. Guwahati, October, 1988).
2. Bhandari, B. et al 1981. Nutritional immunization status of children in an ICDS block. *Indian Paediatrics*. 18, 187-191.
3. Bharadwaj, A.K. et al 1991. Immunization coverage in Urban, rural and tribal populations—a comparative assessment. *Indian Journal of Community Medicine*. 55:4. 173-175.
4. Dhilon, H. and P.S. Menon. 1975. Active immunization of women in pregnancy with two injections of adsorbed tetanus toxoid for prevention of tetanus Neonatorum in the Punjab in India. *Indian Journal of Medical Association*. 64, 583-589.
5. Gandhigram. 1990 Evaluation of Universal Immunization Programme in three

districts of Tamilnadu. (Unpublished study, affiliated to Rural University, Tamil Nadu.)

6. Gandhigram. 1991. An evaluation of immunization children between 12 to 24 months and expectant mothers in a rural area of Tamilnadu. (Unpublished study, affiliated to Rural University, Tamil Nadu).

7. Joshi, P.K. 1989. Implementation of U.I.P by Medical College, Allahabad. *Indian Journal of Community Health*. 2:3. 24-28.

8. Mahajan, P.C. 1989. Constraints and bottlenecks of implementation of maternal child health care in Madhya Pradesh. (Research paper presented at XIXth National Conference of I.A.P.S.M. Guwahati October, 1989).

9. Mathur, S. 1989. Universal Immunization Programme in Lower Parel, Bombay: Achievement, obstacles and failure. *Indian Journal of Community Medicine*. 41:2. 99-102.

10. Chansuria, M. et al 1975. Study of immunization status of children in a defined urban population. *Indian Journal of Paediatrics*. 12. 888.

11. Rajguru, K.K. 1981. Study of knowledge and practice of immunization in sample of 1000 families in urban and rural areas of Ahmedabad city and district during 1980-81. (Unpublished M.D. thesis. Gujarat University).

12. Sahu, et. al 1989. Immunization of children below five years in defined rural population. *Indian Journal of Paediatrics*. 41:2. 421 - 426.

Revised Rates of Journal Effective from June 1, 1993

Annual Subscription (Single Copy)

Inland:	Rs. 200	Foreign:	US \$ 40 including air mail postage US \$ 20 including surface mail postage
---------	---------	----------	--

Cost of Single Copy

Inland:	Rs. 20 including postage
Foreign:	US \$ 4 including air mail postage

Claims

Missing numbers will not be supplied if claims are received more than 180 days after the date of issue or if loss is due to failure to notify change of address.

Back issues

Back issues, if available, will be supplied at Rs. 20 plus postage.