Immunization Status among Government Urdu Higher Primary Schools of Azad Nagar and its Surrounding Area, Bangalore

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Abstract – Background: Children are the future of the country. In India, children under 15 years of age constitute about 40 percent of the population. School children constitute a large pool of children of this age group. Immunization forms a critical component of primary health care, and ensures nation’s health security. Although international agencies such as the World Health Organization (WHO), the United Nations Children's Fund (UNICEF) and now the Global Alliance for Vaccines and Immunization (GAVI) provide extensive support for immunization activities, the success of an immunization program in any country depends more upon local realities and national policies. Objectives: To assess the immunization status of government Urdu higher primary schools in Azad Nagar and its surrounding area, Bangalore. Methodology: The present study was one time cross sectional, conducted in the three government Urdu higher primary schools of Azad Nagar and its surrounding area. Total 500 children were included in the study. Results: In the present study, distribution of school children according to immunization status revealed that out of 500 children 386(77.20%) were completely immunized, 32(6.40%) were incompletely immunized and 82(16.40%) children had no information about the immunization. Interpretation and Conclusion: In the present study, immunization status was found highly related to socio economic status and parent’s educational status. Main emphasis may be given towards immunization education, personal hygiene education, health education apart from the regular educational activities in the community. Keywords: immunization status; school children; health education.

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I. INTRODUCTION

Disease prevention is the key to public health. It is always better to prevent a disease than to treat it. Vaccines prevent disease in the people who receive them and protect those who come into contact with unvaccinated individuals. Vaccines help prevent infectious diseases and save lives. Parents are constantly concerned about the health and safety of their children and take many steps to protect them. These steps range from child-proof door latches to child safety seats. In the same way, vaccines work to protect infants, children, and adults from illnesses and death caused by infectious diseases. Even diseases that have been eliminated in this country, such as polio, are only a plane ride away. Polio, and other infectious diseases, can be passed on to people who are not protected by vaccines. If a child is not vaccinated and is exposed to a disease germ, the child’s body may not be strong enough to fight the disease. Before vaccines, many children died from diseases that vaccines now prevent, such as whooping cough, measles, and polio (Education.com/immunization).

At national level, 61% of the children aged 12-23 months have received full immunization. The coverage of immunization was higher in urban areas (67.4%) compared to that in the rural areas (58.5%). It is a matter of concern that, nearly 8% children did not receive even a single vaccine. Nearly 62% of the male children aged 12-23 months have received full immunization, while among the females it was nearly 60%. It is shocking to note that, the birth order of the child still continues to affect the immunization coverage (Coverage Evaluation Survey 2009).

Of all the things protect children; immunization may be the most important. Explore all the wonderful reasons why choosing to immunization of children is the best choice for their health and the health of our community.

II. METHODOLOGY

One time observational cross sectional study of Urdu higher primary school children was conducted to know the immunization status in Azad Nagar govt. school children, Bangalore, India. Universal immunization policy in India includes BCG vaccination at the time of birth or in case of deliveries at home, at first contact with a health professional. Previous studies have reported moderate coverage of BCG vaccination in the Indian population (Bhatia V 2004 and Balraj V 1993). Total strength of children 500 were included for the study.

Study Period
January 2010- December 2010

a) Immunization Status

The immunization status of children was assessed by examining the immunizations cards or receipts of the vaccination done. BCG scar was specially examined. The children were instructed to
bring the immunization records before the day of examination. The children were classified into three categories based on immunization.

a. **Completely immunized children:** The children who have received BCG (1), DPT (3), OPV (3), measles (1), OPV and DPT booster vaccinations were defined as complete immunized children.

b. **Incompletely immunized children:** The children who have missed any one or more of the BCG (1), DPT (3), OPV (3), measles (1), OPV and DPT booster vaccinations were defined as incompletely immunized children.

c. **No information:** The children who failed to bring the immunization cards or receipts were included in this category.

**b) Personal hygiene status**

The hygiene status was assessed by interviewing and observing the children. The children were grouped under three categories: good, fair and poor.

c. **Literacy of the parents**

The data related to the literacy of both the parents was assessed to know the educational status and the socioeconomic status of the family.

d. **Socioeconomic status (SES)**

The SES was assessed by using the Kuppuswami’s SES Scale for Urban population, 1976. Due to changes in the economy to year, the classification or scale was modified accordingly (Kumar N et al. 2007).

e. **Data Analysis**

Data were tabulated in a systematic way for presentation and analysis on the basis of recorded parameter regarding demographic and immunization profiles. Studied children were classified into different relevant categories. Then data was entered in windows excel and analysis was done for mean and standard deviations. Statistical tests like t test and chi square test were applied.

**III. Results and Discussion**

a) **Parent’s educational status**

In the present study 73(14.60%) children had their mother education up to High School, 14(2.80%) children had up to Intermediate, 126(25.20%) had up to primary school, and 287(57.40%) had illiterate mothers. In the study 58(11.60%) children had their father education up to Intermediate or PUC or Post High School diploma, 79(15.80%) had up to High School, 95(19.00%) had up to primary school and 268(53.60%) had illiterate fathers.

The number of children who had illiterate mother was more as compared to children having illiterate fathers (57.40% Vs 53.60%). The illiteracy in the mothers was more than illiteracy in fathers. This may be due to the population in the study area showing less interest in female education in comparison to male education. As per the report of the Directorate of Economics and Statistics, Bangalore (2000-2001), the female literacy rate was less as compared to male literacy rate in Bangalore (77% Vs 88%). In present study literacy rate was lower than reported. This may be because of lower, middle socioeconomic status of the under study population area Azad Nagar. The results are summarized in Figure NO.1.

![Figure 1: School Children Parent’s Educational Status](image)
b) **Personal hygiene status**

Out of total 500 children in the study 96(19.20%) had good personal hygiene status, 235(47.00%) children had fair personal hygiene status and 169(33.80%) children had poor personal hygiene status. Maximum number, 235(47.00%) of children had fair personal hygiene status and minimum number, 96(19.20%) of children had good personal hygiene status.

A study conducted by Sundaram MV et al in Madras city reported that 28.7% school children had poor personal hygiene status (Sundaram MV et al 1978). The percentage of the children with poor personal hygiene status in the present study was more in comparison to the above study. The difference may be because the present study included only the children of Government schools whereas the above study included both Government and Corporate/Private schools children. The SES of the parents in both studies may vary widely or SES gap of the parents may be wide. SES of parents is closely related to the personal hygiene status of children, as this is more related to sensitization towards personal cleanliness. The results are summarized in Figure N0.2.

![Figure 2: Personal Hygiene Status among School Children](image)

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c) **Socioeconomic Status (SES)**

Out of total 500 children in the study 42(8.40%) children were belonging to upper middle (2) SES, 238(47.60%) children were belonging to lower middle (3) SES, and 220(44.00%) children were belonging to upper lower (4) SES. Maximum numbers, 238(47.60%) children were belonging to lower middle (3) SES. This can be attributed to lower educational and occupational status of parents, especially of fathers’ of under study children. The results are summarized in Figure N0.3.
In the present study, distribution of school children according to immunization status revealed that out of 500 children 386 (77.20%) were completely immunized, 32 (6.40%) were incompletely immunized and 82 (16.40%) children had no information about the immunization.

Chowti JV et al in their study in school children in Hubli and Dharwad cities reported that 72.24% children were completely immunized (Chowti JV et al 1995).

As per Coverage Evaluation Survey, 2009, at national level, 61% of the children aged 12-23 months have received full immunization. The coverage of immunization was higher in urban areas (67.4%) compared to that in the rural areas (58.5%). In 2009, nearly 8% children of the children aged 12-23 months did not receive even a single vaccine. Nearly 62% of the male children aged 12-23 months have received full immunization, while among the females it was nearly 60%.

The full immunization coverage of children age 12-23 months of mother’s education with 12 or more years is 76.6% whereas for mothers who had no education only 45.3% of children got full immunization. The percentage of completely immunized children in present study was more as compared to the children of the above study. This may be due to awareness about the importance of the immunization and better immunization facilities in Bangalore as compared to Hubli and Dharwad cities. The results are summarized in Figure N0.4.
IV. Conclusion

Parent’s education and socio-economic status has a significant role in ensuring full immunization coverage to their children. All children should be immunized at regular health care visits, beginning at birth immunizations are very important in keeping children healthy. The recommended childhood and adolescent schedule urges shots starting at birth and going through 24 months of age, with boosters and catch-up vaccines continuing through the teenage years. By immunizing, we safeguard our children against the potentially devastating effects of vaccine preventable diseases.

References

1. www.education.com/reference/article/importance-childhood-immunizations/access on dated 24/01/2013