

Immunization Awareness in Mothers

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Immunization becomes an important cost effective weapon for combating child mortality(1,2). National Programmes like the Universal Immunization Programme lay more stress on the physical achievement of the set targets while completely ignoring the important public education aspects. In our country, parents from the educated strata have also been observed to lack knowledge regarding the protective value of immunization(3). Unless mothers are educated about the need of immunization at an appropriate time, it is highly unlikely that high coverage rates can be achieved or sustained. The obstetrician can play a major role in imparting this knowledge to the young mothers and thereby indirectly help in the successful implementation of the immunization programme. Hence, this study was aimed at evaluating the immunization knowledge of the primipara mothers in our hospital.

Material and Methods

The study was carried out by the Departments of Pediatrics and Obstetrics

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and Gynecology of the Lady Hardinge Medical College, New Delhi. Four hundred and eighty consecutive primiparous mothers during January, 1988 to June, 1988 were included in the study. Each mother was interviewed by a Pediatrician to elicit answers about the level of their knowledge regarding immunization. This information was recorded on a pre-tested proforma. Only primipara mothers were included in the study because of (a) the utmost concern of the mother about the well being of her first child, (b) multipara mothers learning from past experience and thus having a slightly better knowledge about immunization than their primi counterparts.

Results

Nearly 21% (n = 100) mothers were uneducated while 45.8% (n = 220) mothers had primary and middle school education. Only 106 mothers (22.1%) had studied till higher secondary school while 7.9 and 3.3% mothers were graduate and post-graduate, respectively.

Nearly 69% mothers were between 20-30 years of age. One hundred and twenty eight mothers (26.7%) were less than 20 years of age, while only 24 mothers (5%) were more than 30 years.

It is observed that only 312 mothers (65%) were aware of immunization while 168 mothers (35%) had no knowledge regarding immunization. On further interviewing the mothers who were aware of immunization, it was observed that majority of the mothers (38.8%) had acquired the information from their neighbors, while 22.1% had acquired it from relatives. Radio, television, hospital staff, magazines and other were responsible for imparting this knowledge in 12.8, 12.1, 5.1,

7.9 and 1.2% of the mothers, respectively. Surprisingly, only 5.1% of the mothers had been educated by the hospital medical personnel.

One hundred and fifty two mothers felt that immunization was a beneficial activity while 140 mothers (44.9%) felt it wasn't beneficial. Nearly 75% mothers were aware of the adverse reactions with the vaccine. Fever, pain and swelling, weakness and diarrhea were described as adverse reactions by 73.7, 44.9, 8.0 and 7.1% of the mothers, respectively.

Amongst the mothers who were aware of immunization a significant difference was found between the educated and uneducated mothers regarding the beneficial effects and the adverse reactions of the vaccination (*Table I*).

A comparison between the educated and the uneducated mothers regarding the names of the vaccines, number of doses and age of vaccination are given in *Table I*. A significantly larger number of educated mothers were aware of DPT and polio and tetanus vaccines. Surprisingly, no statistically significant difference was found between the two groups of mothers regarding the number of doses and age of vaccination of DPT, polio and measles (*Table I*).

Discussion

An important factor which has a direct bearing on the immunization status is health education which can break down the barriers of ignorance, prejudice, fears, phobias and misconception regarding various immunization procedures(4).

In our study 35% of the mothers were not even aware of immunization practices. Education status of mothers has a great bearing on immunization status of the child(4). Majority of the mothers in this

TABLE I—Awareness about Various Factors of Immunization

	Uneducated (n = 12)	Educated (n = 300)
A. Awareness of benefits*		
Beneficial	0	152
Not beneficial	2	138
Don't know	10	10
B. Awareness of adverse reactions*		
Yes	2	228
No	10	72
C. Awareness of name of vaccine		
BCG	1	99
DPT*	0	62
Polio*	1	132
Measles	0	10
Tetanus*	4	192
D. Awareness of number of doses		
BCG*	0	82
DPT	0	45
Polio	0	55
Measles	0	4
Tetanus*	3	179
E. Awareness of age of vaccination		
BCG*	0	80
DPT	0	6
Polio	0	6
Measles	0	4
Tetanus*	3	166

* $p < 0.05$

study had not attained high school education and the poor knowledge regarding immunization could be attributed to this.

The mothers had a poor knowledge regarding the number of doses, particularly in the case of polio, measles and DPT. Murthy *et al.* had similar observations regarding this aspect in their study(5). The mothers in our study were largely unaware of the right age of administering the vaccines. Most of the mothers were unduly worried about the adverse reactions of the vaccine. Pain, swelling and fever were commonly cited as adverse reactions. Some mothers believed that weakness and diarrhea closely followed immunization. Despite an attempt by the mass media to promote the cause of immunization, it was observed that a very small proportion of the mothers had actually gained information through this source. The mothers had never seen any films, *etc.* on the television regarding immunization, though they rarely missed their favorite programmes. Perhaps these advertisements and films are not broadcast at or around the prime viewing time. It was most distressing to note that only 5% of the mothers had been educated by the medical personnel.

Informing people of the when, why and where of immunization is a necessary and massive task(6). According to UNICEF in India, despite easy availability of vaccination, only a little over half of all families bring their infants for the first injection and only 75% of those come back for the second and third doses(7). People's participation thus is a key factor which will make the goal of universal immunization a reality(8). The mother is a key figure in the success of the programme. No amount of funds, programmes or personnel can help a child get immunization, when his mother is unaware of the need for immunization. Education of the mothers in the antenatal clinic by the obstetrician and subsequently by the pediatrician in the postnatal ward

would go a long way in the successful implementation of this programme. An active participation by the obstetrician in educating the mothers regarding the need for immunization must become the order of the day.

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