## A SURVEY OF MISSED OPPORTUNITY FOR IMMUNIZATION IN LUCKNOW

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### **ABSTRACT**

An exit interview of the women accompanying the children of 0-2 years visiting the three large urban hospitals and three randomly selected rural primary health centres of Lucknow district was undertaken to assess the magnitude of problem of missed opportunity for immunization at health facilities. The WHO suggested protocol for the study was followed. Observations reveal that in 59.1% children, the opportunity to vaccinate was missed. Only 3% children had a true contraindication for vaccination. Also 44.6% of women accompanying the children and in the reproductive age group could have been immunized against tetanus. A high level of acceptability of immunization in those with missed opportunity was noted.

Key words: Immunization, Missed opportunity.

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Received for publication December 9, 1990; Accepted November 8, 1991 Its a common observation that a large number of children in target age group visiting a health facility are not fully immunized although they are in need of immunization, but they normally come to the OPD's for treatment. Thus a chance to immunize them is missed. This study was done to find out the extent of missed opportunity for immunization in children aged 0-2 years and accompanying women in reproductive age group in Lucknow.

### Material and Methods

There are three large urban referral hospitals in the city of Lucknow and all of them were included in the urban sample. Of the eight Primary Health Centres situated at Block level in rural Lucknow, three were randomly selected. The children attending OPDs of these six health facilities on randomly selected days were included in the study alongwith accompanying females as per the WHO protocol for missed opportunity(1). On an average, three visits per health facility were made so as to get approximately 100 eligible children per facility.

The respondents were interviewed after they had seen the doctors and/or availed the services of clinic (exit interview). The primary source of information was the women accompanying the child and immunization card if available. Data was collected on a pretested child schedule and a woman schedule. The missed opportunity was defined as "Any visit to a health facility by child or eligible women, who is partially immunized, nor up-to-date, and free of contraindication to immunization, which does not result in the child or women receiving all the vaccine doses for which he or she is eligible"(1).

Also for the purpose of this study it was

presumed that all women in reproductive age group can be offered tetanus vaccination if not already immunized.

#### Results

#### 1. Interview Census

A total of 1427 children attending Pediatrics OPDs of rural and urban health facilities were interviewed in the course of this study. Of these, 730 (51.1%) were in the age range 0-2 years (Table I). The proportion of 0-2 years old children was 66% for Primary Health Centres (PHC) while it was 48.3% for Urban hospitals. A total of 1004 women accompanied these 1427 children who were included in the present study. Of these, 910, i.e., 90.6% were in the reproductive age group and hence eligible

for being considered for immunization against tetanus.

# 2. Immunization Card Presence and Availability

Overall 493 (67.5%) children reported having an immunization card. However, only 10.5% brought the card on the days of visit at urban hospitals and 50% at rural PHCs.

# 3. Immunization Status and Missed Opportunity

Overall 38.9% children aged 0-2 years attending the OPDs were either fully immunized or their immunization status was up-to-date. Only 50% of those attending different PHCs were fully immunized as

TABLE I— Current Immunization Status, Missed Opportunity and Acceptability for Immunization in Children and Mothers

Parameters	Urban Hospital		Rural PHCs		Z	
	No	%	No	%	value	
(a) Children					•	
No. of children aged 0-2 yrs	580	100.0	150	100.0	· · · · · · · · · · · · · · · · · · ·	
Card present	387	66.7	106	70.6	0.93	
Fully immunized or up-to-date	209	36.0	75	50.0	3.08	
Contraindication present	17	2.9	5	3.3	0.25	
Missed opportunity	354	61.1	70	46.7	2.94	
Acceptability in those with missed opportunity	332	93.7	61	87.1	1.57	
(b) Women						
No. of women eligible for						
study 15-45 yrs	756	100.0	154	100.0	_	
Fully immunized or up-to-date	414	54.8	91	59.1	0.98	
Missed opportunity	342	45.2	63	40.9	0.98	
Acceptability in those with missed opportunity	295	86.3	49	77.8	1.53	

compared to 36% in Urban Hospitals (p<0.05). It is important to note that only 22 children (3%) had a true contraindication for vaccination which showed very little variation accordance to rural or urban facility. Overall in 424 children, i.e., 59.1% of the sample, the opportunity to vaccinate was missed. This figure was significantly higher for urban health facilities (61.1 vs 46.7%).

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Overall, 505 (55.4%) women accompanying the children were immunized for tetanus while in the remaining 44.6% the opportunity to immunize was missed. Nearly half (54.8%) of women in urban facilities and 59.1% in rural PHCs were fully immunized (p>0.05). A higher rate (p>0.05) of missed opportunity for tetanus immunization was observed in urban hospitals (45.2%) as compared to the rural PHCs (40.9%).

Acceptability of Immunization in Those with Missed Opportunity

A high level of acceptability of immunization in those with missed opportunity has been observed irrespective of the health facility. Overall 393 (92.6%) respondents were prepared to get the child vaccinated. The acceptance was, however, relatively low in PHCs (87%) as compared to large urban hospitals (93.7%).

The overall acceptability of tetanus vaccination was 86.3% in those attending large urban health facilities and 77.8% for the PHCs.

### Discussion

In the present study, in 58.1% of children and 44.6% of females, missed opportunity for immunization was observed. The problem of missed opportunity varied from

76% in Indonesia to almost zero in Zimbabwe in the 1987. In a survey in India in 1985, 57% of the children at a clinic were in need of immunization but did not receive it(2).

Clinics where sick children are seen, miss more opportunities to immunize than the immunization clinics. In the past there has been resistance to the idea of immunizing children who are brought to clinics with other symptoms such as diarrhea, respiratory infections and malnutrition(3). It is, however, now a matter of priority that all children are screened for immunization at every visit to a clinic because illnesses and undernutrition, unless very severe, are not valid reasons for withholding immunization(3).

It is suggested that at pediatric clinics, each sick child should be screened by a nurse for immunization and the necessary immunization be given even before the child is seen by the physician. This system has very effectively reduced the extent of missed opportunities in Zimbabwe(2). Many other actions may also be required to reduce this problem and they should all be considered because reducing missed opportunities is the cheapest way to increase the immunization coverage.

## Acknowledgement

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#### REFERENCES

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- 2. World Health Organization. Expanded

Programme on Immunization, Update of February 1989—Missed Opportunities for Immunization.

3. United Nations International Children's Emergency Fund. The State of World Children, 1990, p 28.

## NOTES AND NEWS

# SYMPOSIUM ON CURRENT PERSPECTIVES IN THE MANAGEMENT OF COMMON PEDIATRIC PROBLEMS

A symposium on "Current Perspectives in the Management of Common Pediatric Problems" is being organized under the auspices of "Dr Athavale Research Foundation" at LTMG Hospital, Sion, Bombay on 16th February, 1992.

The delegate fee is Rs. 150/- for members of the Foundation, and Rs. 200/- for others. An additional Rs. 10/- for outstation cheques. Cheques to be drawn in favour of CME Programme, Dr. Athavale Research Foundation.

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