

permanently correct the retraction due to two actions: (i) Suction by the syringe, followed by (ii) Sucking by the baby.

We have used this procedure in 35 cases of inverted nipples and in 34 we have been successful in establishing breastfeeding. *Table* shows that all except one mother were able to get the baby to latch on the breast by 1 to 4 days. The time interval between use of syringe and establishment of full breastfeeding varied from 3 to 7 days in all except one case. Failure in one case was due to severe inversion due to tethering of nipples. On follow up, all the babies were continuing to breastfeed and nipples had permanently everted.

TABLE—*Showing Time Needed for Initiating and Achieving Full Breastfeeding.*

No. of days	Time to successfully latch on breast	Time to full breastfeeding
0-1	00	00
1-2	07	01
2-3	17	06
3-4	10	18
4-5	00	07
5-6	00	02
6-7	00	00
7-8	01	01
Total	35	35

With this method, the struggle of putting the baby to the breast experienced by the team of doctors, nurses and mothers came to an end so quickly, that we did not resort to any other method. Hence, there were no mothers belonging to control group in this study.

Breast pumps are expensive and they can't provide steady pressure. Hoffman's procedure is not very effective. Nipple

shields give nipple confusion and also carry risk of infection. Sucking at breast by older children is not feasible as older children often refuse to suck on the breast. The device we have described has been successfully used in the last two years. It is effective in corrective the inverted nipples.

I have received personal communications from Pediatric and Obstetric colleagues who were encouraged to use this method. They have successfully initiated breastfeeding by using this method in patients with inverted nipples. This simple method, can be used at home and can also be taught to peripheral workers.

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Polioparalysis in Immunized and Unimmunized Children

Despite aggressive vaccination programmes in India, like the expanded programme of immunization and universal immunization programme, physical disability due to poliomyelitis continues to be a significant problem in India. It is estimated that in India about 2.4 million children have been handicapped by poliomyelitis and 70,000 newborn children develop the disease every year(1). Recently, there have been diverging views on effects of partial immunization on the severity of muscle paralysis in poliomyelitis(2-5). To clarify this situation in our setting this study was undertaken.

This was a retrospective study of 40 cases of poliomyelitis diagnosed clinically admitted to the Pediatric Department in

1 year from 1st January to 31st December, 1991. All cases were analysed for age, seasonal variation, number of doses of polio vaccination (by history) and the severity of muscle paralysis. The correlation between the immunization status and the number of limbs paralysed and deaths were analysed. The age ranged between 3 months and 4 years (mean age 2 years). The peak number of cases were recorded during the months of March, July and August.

Most of the children presented with symptoms less than 1 week (26 cases; 65%). Twenty of the 40 cases (50%) had a provocative factor in the form of an intra muscular injection. There were 3 deaths (2 out of 26; 7.7%) in non-immunized group and 1 out of 14 (7.1%) in immunized group. Limb paralysis with or without respiratory and bulbar involvement is shown in the Table.

In our study most of the findings like

in partially immunized group. As also note that similar number of cases were seen in the fully immunized group. This could best be explained by the virulence of the polio virus and has nothing to do with the immunization status of the host. We would like to endorse the views expressed by Sen *et al.* (2) who have documented type 1 virus affecting non-immunized children, this virulence could cause a more severe form of the disease. Also quoted in the study are a high incidence (17.8%) of non-polio virus infection in immunized group, which could be a possible explanation for seeing bulbar paralysis in the immunized group.

We have found no significance in the degree of paralysis between the non-immunized and the partially immunized group. This is in contrast to the findings seen by Sen *et al.* (3).

In conclusion, one definitely needs to concentrate more on quality of vaccine de-

TABLE I—Severity of Paralysis in Immunized and Unimmunized Cases

Status	n=40	(%)	Single limb	Both limbs	All 4 limbs	Resp. bulbar
Immunization	26	(57.5)	6 (12.5)	11 (22.5)	7 (17.5)	2 (7.7)
1 dose	3	(7.5)	1 (33.3)	2 (66.7)	-	-
2 doses	1	(2.5)	-	1 (100)	-	-
3 doses	10	(2.5)	1 (10)	5 (50)	3 (30)	2 (20)

Figures in parentheses are percentages.

age incidence, provocative factors and immunization status correspond to similar studies done by other authors reported in literature (6-8).

In contrast to the findings by Mathur *et al.* in 1991 (4) there is no significant increase in the incidence of bulbar paralysis

livered to the patient and to make sure the cold chain does not break. If we are to ensure that polio is eradicated, we would have to concentrate on improving vaccine coverage. Give atleast one dose of potent vaccine, make sure that cold chain does not break and avoid unnecessary IM injections

in partially or non-immunized children. For this one needs to educate the public and the practitioners of Medicine.

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NOTES AND NEWS

SEX AND HEALTH EDUCATION FOR SCHOOL CHILDREN

It is proposed to introduce a nationwide programme to impart health education to school children in the fields of sex education and HIV, mother craft, nutrition, physical fitness and promotion of cardiovascular health, personal hygiene, vaccines and prevention of diseases and substance abuse, *etc.* The Academy would like to establish a Task Force and organize a workshop to develop appropriate tools and teaching material to meet this objective. Those members of the Academy who have special interest and expertise in this field and can spare their time are requested to send their names along with brief synopsis of their contribution already made in this area to the undersigned within the next two weeks.

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