Indian J. Pediat. 37 : 612, 1970

SOME EXPERIENCES DURING SCHOOL HEALTH SURVEY*

P. C. KHANDUJA, K. N. AGARWAL, K. CHAND AND D. K. AGARWAL

New Delhi

There has been a tremendous reduction in the incidence of different diseases specially those of an infectious nature in the developed countries. This is because of the advent of different immunization agents plus an improvement in the socioeconomic status of these countries. To plan any programme for the improvement of health of a particular community or country, it is essential to know the pattern of morbidity and mortality in that community. This in turn would help us to know the economic loss to the country due to sickness and also the need for medical and paramedical staff to provide nationwide health care of a better quality. With this in view a study was planned to find out the incidence of different infectious diseases and the immunization status of school children. About 3,000 school children were surveyed. As reliable information for immunizations could only be collected in 783 subjects, they are analyzed below for the incidence of infectious diseases and immunization status. The detailed clinical and stool and urine examinations were also done to find out the incidence of various diseases and evidence of worm infestation and/or urinary tract infections.

*From the Pediatric Hematology Unit, Department of Pediatrics, Maulana Azad Medical College, New Delhi-1.

Received on August 1, 1970.

Observations

The incidence of various infectious diseases in these children was : measles 56.8%, chicken pox 20.7%, etc. (See Table 1).

On inquiry about the status of immunization in the 783 children,

Table 1. *Incidence of different diseases in school children.*

Disease	Number suffered	Percentage
Measles	415	56.8
Chicken pox	162	23.7
Mumps	114	14.8
Whooping cough	130	16.7
Typhoid	134	17.6
Infective hepatitis	50	6.4
Dysentery	50	6.4
Smallpox	42	5.3
Diphtheria	15	1.9
Polio	7	0.9
Tuberculosis	3	0.4
Cholera	4	0.5

9.7% had been given B.C.G. vaccine. Table 2 gives this data in detail.

On physical examination, the common ailments present in the 3000 children surveyed were caries of the teeth, tartar deposit on the teeth, trachoma and mild pallor. Congenital heart disease was detected in 3 patients ; the parents of 2 of these were not aware of the condition. Gynecomastia and undescended testes were found in 3 each, and xerosis and/or night blindness in 5 subjects.

The examination of the stools in 756 children revealed giardiasis in 5%, ascariasis in 0.45% and amoebiasis in only one child. Urine examination did not reveal any significant abnormality.

Discussion

For any information regarding the health status of school children, one has to depend on the health cards maintained at home or in the school. The data of this study were obtained on the basis of a questionnaire put to the parents and therefore, the reliability of the results would depend upon the records kept by them, their memory and their capacity to understand the problem. Most of the children in this study belonged to the higher middle class educated community. The incidence of any infectious disease in a particular community would depend upon the immunization status, socioeconomic status, housing conditions and health education. The high incidence of measles may therefore be due to the non-availability of measles vaccine in this country. Only 4.3% of these children had been immunized against measles. Smallpox vaccination is the only one which has been given national importance and is administered by law, and this in turn has achieved some success in reducing this disease. B.C.G. vaccination on a mass scale is another immediate need for this country, though only 9.7% children in this study had received this. B.C.G. is supplied only to a limited number of hospitals and it is not yet available to the practitioners. The low incidence of manifest tuberculosis in our sample is not a true figure for the country because the material selected is from a better socioeconomic group. The immunization against typhoid and cholera is not easy as it needs repetition every six months or a year. Moreover, it is only partially protective and hence the only way to reduce the incidence of such enteric infections is to improve the sanitary conditions of the community. Only 11.3% of the children had received triple antigen inspite of the fact that the children belonged to a better

Table 2. *Immunization status of school children.*

Immunization	Percentage
B.C.G.	9.7
Triple antigen	11.3
Booster of triple antigen	0.3
Poliovaccine	4.6
Measles vaccine	4.3
T.A.B. vaccine	3.3
Cholera vaccine	10.9
Smallpox vaccine	81.1
Smallpox revaccination	23.5

socioeconomic group. This stresses the need to popularise this vaccine on a mass scale.

The high incidence of caries teeth and tartar deposit in school children underlines the need for a regular dental check up. In fact in one of the recently surveyed schools, it was observed that over 80% of the children had very bad dental hygiene and on enquiry it was found that usually the cleaning of the teeth was done with fingers using salt or coal powder as the cleaning agent. It was surprising to know that most of the Government aided schools had a provision for a school doctor but none could be appointed to it because of the inadequately sanctioned salary.