

Health Education in School Children

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Health Education is a vital component of the Health Care System. Health Care can no longer be looked upon as a passive process but requires the active participation of the community at large. Awareness and knowledge about common health problems result in people's involvement in health. Children too can play a key role in health education(1). There are few studies that have assessed the health knowledge of school children. This study seeks to assess the health knowledge of various groups of school children, and also to find out the impact of health education on school children using simple information inputs.

Material and Methods

This study was carried out on 304 school children studying in Standards VII and VIII in three different schools. School

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A, a Bombay Municipal School, in which education is given free, provided 100 children—46 boys and 54 girls. School B, a semi-aided school in Bombay, in which fees are charged, provided 98 children—56 boys and 42 girls. One hundred and four school children—56 boys and 48 girls were from School C, a semi-aided school in the rural area of Kazli—160 km from Bombay where no fees are charged as the school is subsidized by a charitable institution. Schools A and C had majority of children from the poor socio-economic group while School B had the majority of children from the middle socio-economic group. Ages of the children ranged from 12 to 16 years. The medium of Instruction was English in School B and Marathi in Schools A and C.

Existing health knowledge was assessed by using a pretested questionnaire, in the medium of Instruction, consisting of 20 objective types of questions on general nutrition, infant feeding, immunization and hygiene each carrying one mark. The specific questions asked were-related to balanced diet, diet in the first year of life, type and doses of vaccines in the first year of life, and causes of common medical problems and prevention by good habits. The questionnaire was explained well to the children before administration. Health education was then imparted, in the language of instruction to the children by means of health talks with the help of posters and simple demonstrations.

Health knowledge was again assessed within a week of imparting of health education by using the same questionnaire. Scoring was divided into four groups. Those attaining less than 25% of the marks were

graded as poor, between 25-50% as average, between 51-75% as good, and above 75% as very good. The overall comprehension of simple health messages was assessed, and not retention of knowledge as this would require re-enforcement of health education. Teachers too attended the health education, so that they could provide re-enforcement of health education later on.

Results

It is seen from *Table I*, that 52% children from School A had poor knowledge of health components at the onset of the study; while 46% had an average knowledge. On the other hand, 76 and 81% children from Schools B and C had average knowledge, respectively. It is further observed that there was improvement in the knowledge after health education in all the school groups.

After health education, in School A 52% of the children had good knowledge while in 37% the knowledge was very good. Similarly, in Schools B and C, 67 and 23% had good knowledge and in 23 and 76% the knowledge was assessed to be very good.

As regards to nutrition it can be seen from *Table I* that in Schools A, B and C knowledge prior to health education was average in 43, 64 and 65% of the children, respectively. After health education most of the children had good or very good knowledge of nutrition. Regarding immunization, before health education children had poor knowledge in 66, 90 and 74%. However, after health education children had good and very good knowledge in 60, 76 and 97% in Schools A, B and C, respectively. In hygiene 82, 66 and 6% had poor knowledge prior to health education, while

after health education only 15, 3 and 2% had poor knowledge in Schools A, B and C, respectively.

There were also misconceptions regarding health. Almost 30-40% of school children in all schools thought worms were caused by eating sweets. Similarly, the cause of tetanus was said to be due to rusty nails (35-40%). Beetroots were considered good for improving the quality of blood, and milk was considered a sufficient food in the first year of life. These misconceptions were corrected after health education and 60-80% of the children knew the cause of worms and tetanus and had the knowledge about foods rich in iron and about infant's diet.

Discussion

Overall health knowledge was deficient in all three groups of school children from urban and rural areas of both poor and middle socio-economic groups. Health education improved the knowledge in all the three groups of children. Before health education, most of the children had average and poor knowledge. After health education, the majority of children had good and very good knowledge. Misconceptions were present regarding causes of worms and tetanus and about infant feeding and nutrition. These were reduced in all three groups after health education. Nutritional knowledge was comparatively better than other subjects in all three groups before health education. This has been seen in another study too(2). Knowledge of immunization was considerably inadequate in all three groups before health education and improved markedly after health education. Simple inputs by way of health education can improve health knowledge of school children considerably.

TABLE I—Health Knowledge Score

School	Score	Before health education %				After Health education			
		Nutrition	Immunization	Hygiene	Total	Nutrition	Immunization	Hygiene	Total
A (n = 100)	Poor	50	66	82	52	1	25	15	1
	Average	43	34	18	46	14	15	73	10
	Good	7	—	—	2	44	17	11	52
	Very Good	—	—	—	—	11	43	1	37
	Total	100	100	100	100	100	100	100	100
B (n = 96)	Poor	30	90	66	33	2	7	3	—
	Average	64	7	33	67	24	17	94	10
	Good	6	2	1	—	54	26	3	67
	Very Good	—	1	—	—	20	50	—	23
	Total	100	100	100	100	100	100	100	100
C (n = 104)	Poor	35	74	6	19	—	1	2	—
	Average	65	23	89	81	5	2	63	1
	Good	—	2	4	—	31	8	12	23
	Very Good	—	1	1	—	64	89	23	76
	Total	100	100	100	100	100	100	100	100

Health information is crucial to health behavior and resulting change in attitudes leading to a healthy lifestyle(3). The success of the Health Care System depends on community participation which requires appropriate health education. Health education and health delivery systems should run parallel and not in isolation of each other. Health education imparted to school children has a three-fold impact; on the child, on the family and community at large and on the next generation too. It is worth investing in a sound school health education programme, and making children partners in community health programmes.

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Jejunal Diaphragm

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Atresias in the jejunoileal area are an important cause of intestinal obstruction during infancy. Stenosis, a partial intraluminal occlusion, resulting, in incomplete intestinal obstruction accounts for about 5% of cases of jejunoileal obstruction(1).

Out of these, the incidence of stenosis is 75% in the duodenum, 20% in the ileum and only 5% occur in the jejunum(2). Diaphragm (web) in the jejunum leading to obstruction is still rare. We report a 2½-year-old male child who presented with features of intestinal obstruction and at laparotomy a thin diaphragm (web) was detected in the mid-jejunum. Excision of the web was curative. The late presentation of membranous obstruction or web in the jejunum prompted us to document this case.

Case Report

A 2½-year-old male child was admitted with history of intermittent episodes of bilious vomiting, episodic abdominal pain and distention for the last 2 weeks. Past history was noncontributory and examination revealed a child who weighed 9 kg (normal 13 kg) and had a height of 85 cm (normal for age).

Abdominal examination revealed a distended abdomen with visible peristalsis above the umbilicus. No definite abdominal lump could be palpated. There was no organomegaly. There was no evidence of dehydration. General physical and rest of the systemic examination was unremarkable.

Investigations revealed a normal hemogram and serum electrolytes. Upright abdominal X-ray revealed dilated small bowel loops. A barium meal follow

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