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Research Article

**HEALTH STATUS OF CHILDREN STUDYING IN A LOWER
SINDH RURAL SCHOOL (DISTRICT UMERKOT)**

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Abstract:

Objective: To study the health status of a government primary school children in lower Sindh.

Material and methods: This descriptive, cross sectional study was conducted during 5 months from July to November 2015. Out of 300 children 107, school age children of 5 to 15 years of age presented with health complaints from the Government Primary school Rahmore near Nabi Sar Road were included in the study. After informed consent by the parents and teachers, a structured questionnaire was filled out for each child. The questionnaire contained child's personal data, parental profile, eating profile, delivery place, past illness in last two months and anthropometric measurements besides investigator's request and consent form. All the presenting medical issues including vaccination status, height and weight were recorded in the proforma. Data was analyzed by spss version 16.

Results: Out of 107 students 69.1% were boys and 30.84 % were girls. 11 were muslims and 96 were non-muslim, According to the age most of the students 73.83% presented with 5 to 8 years of age group. Most of the students 95.5% were underweight, 38.3% had normal body weight, and 12.1% were obese children. According to height 67.3% were under height, 38.34% children presented with normal height and only 12.1% had over height. 45.97% children were completely vaccinated, 42.05% partially vaccinated and 12.14% were without vaccination. 32 students suffered from fever, 18 from cough, 13 from cold, 7 from diarrhea, 7 from malaria, 3 from typhoid, 1 from hepatitis, 2 from minor injury and 2 from skin diseases. Almost half of the children were partially vaccinated and unvaccinated.

Conclusion: It was concluded that health status of children studying in a lower Sindh rural School was unsatisfactory. Many students presented with several health problems frequently as cough, fever and malnutrition. Many children were unvaccinated with poor oral hygiene, underweight and under height.

Key words: Children, Health status, lower Sindh.

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INTRODUCTION:

Kids are the assets of any nation. Special attention ought to be paid to fulfill the requirements of children. The children aged from 6 to 15 year spend large part of their time in schools. School is the best place for acquiring knowledge and developing for any child. [1] In underdeveloped country such as India, because of poverty and predominant socio-cultural background, a considerably high number of schoolchildren from childhood to adolescent-hood struggle with numerous diseases which can be avoided when diagnosed and managed early and preventive measures taken timely. [2] The schooling age is a developmental period, mentally as well as physically, molding a child into a capable adult. Poor nutritional status and health will badly influence cognitive functions and working capability. [1] Nutritional status is a vital element of Primary Healthcare (PHC) and is one of the Millennium Development Goals (MDGs) and an essential forecaster of the Socioeconomic class of Pakistan. [2,3] World around, majority of the 20,000,000 children are severely malnourished, residing in sub-Saharan Africa and in South Asian region, around 1,000,000 of them die each year, the greater part is never brought to healthcare services. [2] Children development, growth and body weight are of supreme importance and denotes general health status of public and a nation overall. [4,5] Body weight relies on vitality balance; intake relies not just on availability of food however also on numerous complex interrelations that comprise provocation of good food, the contribution of hunger, hypoglycemia, metabolic variations, habit and pleasure of eating. [4,6] As per the WHO's global statistics, incidence of disabling psychological illnesses among adolescence and children visiting urban healthcare centers varies from 20 to 30% and 13 to 18% in rural regions. [7,8] In Pakistan like most other developing countries, mental health of children is an ignored area with incomplete evidence concerning the burden of several disorders of mental health among adolescents and children. [7] Health has always been an abstract term to define however sensibly it is predicted as a resource that facilitates the individuals to enhance their quality of life. The oral health considered as an integral part of general health is imperative for improvement of quality of life. [9] The general health status of Pakistani children is presenting the most dismal situation in South Asia. 40% of children under 5 years of age are malnourished, 10-20% are suffering from vitamin A deficiency (child blindness is affecting 80,000 children), 600 children die of diarrhea every day, 2 million die of respiratory infections every year and 17% of all confirmed cases of tuberculosis are found

among children aged below 5 years. [9] In contrast, it is projected that around 750,000,000 children are influenced by IDA. [10,11] Anemia may occur due to several causes, however the common factors are the essential nutritional deficiencies such as Iron, Folic acid and Vitamin B12. In Pakistan, anemic children from both genders (aged 05 to 12 years) were 34.0% in district Karak and the percentage of anemia in this age was high, as the children need diet rich in nutrients for fast growth. [10] Unluckily, children in our poor areas are facing many diseases and not under proper treatment; no adequate studies has been found on health status of children studying in poor areas of our country, therefore this study has been planned to determine the health Status of Children Studying In a Lower Sindh Rural School (District Umerkot).

MATERIAL AND METHODS:

A descriptive, cross sectional study was conducted during 1st week of July to the end of November. A total of 107, school age children of 5 to 15 years of age from the Government Primary school Rahmore near Nabi Sar Road were included in the study. After informed consent by the parents and teachers, a structured questionnaire was filled out for each child. Anthropometric measurements were performed by the investigators. All enrolled primary school children of age 4–15 years were randomly chosen. Children or their parents who were not willing to participate in the study were excluded. A semi-structured Performa/questionnaire was filled out for each child. The Performa contained child's personal data, parental profile, eating profile, delivery place, past illness in last two months and anthropometric measurements besides investigator's request and consent form. Indices calculated were Weight for Age (W/A), and Height for Age (H/A). All instruments/ equipment were calibrated to the set standards on daily basis and the same instruments were used for all data collection. Data collection tools included Questionnaire Form, Electronic Weighing Scale, and Standard Height Scale. Data were analysed using SPSS-v20. For categorical variables, frequencies and percentages were calculated. Continuous variables were described in terms of Mean \pm SD. Correlation of age of the child with height, and weight was calculated.

RESULTS:

Many children were interviewed and clinically assessed, out of them 107 students of age between 4 to 15 years were found with different health issues. Out of these 69.1% were boys and 30.84 % were girls. 11 were muslims and 96 were non-muslim, this shows non-Muslims were more interested to send

their children towards school, while data shows that education in Muslim is not on priority. **Table No.1.**

According to the age there were different groups of age, i.e. most of the students 73.83% presented with 5 to 8 years of age group, followed by 24.29% had age group of 9 to 12 years and only two students 1.87% were with age group of 13 to 15 years. 58.87% children were 1st class students, 14.95% from 2nd class, 10.28% from 3rd class, 9.34% from 4th class and 6.54% were fifth class students. **Table No.1.**

Most of the students 95.5% were underweight, 38.3% had normal body weight, and 12.1% were obese children. According to height 67.3% were under

height, 28.0% children presented with normal height and only 4.7% had over height. 45.97% children were completely vaccinated, 42.05% partially vaccinated and 12.14% were without vaccination. **Table No.2.**

Table 3 shows illness of students there were 83 students who were ill in last two months and 24 were not ill in last two months.

Table 4 shows type of illness 32 students suffered from fever, 18 from cough, 13 from malnutrition, 7 from iron deficiency anemia, 5 from malaria, 3 from typhoid, 1 from diarrhea, 2 from injury and 2 from skin diseases.

Table No.1. Demographic characteristics of children n=107

Characteristics	Frequency	Percentage
Gender		
Male	74	69.15%
Female	33	30.84%
Total	107	100.0%
Age groups		
5 to 8	79	73.83%
9 to 12	26	24.29%
13 to 15 years	2	1.87%
Total	107	100.0%
Religion		
Muslims	11	10.28%
Non-Muslims	96	89.71%
Total	107	100.0%
Class of students		
1 st	63	58.87%
2 nd	16	14.95%
3 rd	11	10.28%
4 th	10	9.34%
5 th	7	6.54%
Total	107	100.0%

Table. No.2. Children according to weight and height n=107

Variables	Frequency	Percentage
Weight		
Under weight	53	95.5%
Normal weight	41	38.3%
Over weight	13	12.1%
Total	107	100.0%
Height		
Under height	72	67.3%
Normal height	30	28.0%
Over height	5	4.7%
Total	107	100.0%
Vaccination status		
Full	49	45.97%
Partial	45	42.05%
Nil	13	12.14%
Total	107	100.0%

Table. No.3. Children according to weight and height n=107

Past illness	In numbers	Percentage
Yes	83	77.57%
no	24	22.42%
Total	107	100.0%

Table. No.4. Children according to weight and height n=107

Type of illness	In numbers	Percentage
Fever	32	38.55%
Cough	18	21.6%
Malnutrition	13	15.66%
Iron deficiency anemia	7	8.43%
Malaria	5	6.02%
Typhoid	3	3.61%
Diarrhea	1	1.2%
Injury	2	2.4%
Skin diseases	2	2.4%
Total	107	100.0%

DISCUSSION:

Hematological delinquencies are the hallmark of malaria, especially pronounced in *P. falciparum*, due to high parasite index [11]. Hematological delinquencies are the hallmark of malaria, especially pronounced in *P. falciparum*, due to high parasite index [11]. The hematological changes previously reported in the literature. In this study many children were interviewed and clinically assessed, out of them 107 students of age between 4 to 15 years were collected with different health issues. Out of these; 69.1% were boys and 30.84 % were girls. 11 Muslims and 96 were non-Muslim, this shows that non-Muslims were more interested to send their children towards school, while data shows that education in Muslim is not on priority. Similar finding were noted in other studies. [12,13]

In this study according to the age there were different groups of age, i.e. most of the students 73.83% presented with 5 to 8 years of age group, followed by 24.29% had age group of 9 to 12 years and only two students 1.87% were with age group of 13 to 15 years. 58.87% children were 1st class students, 14.95% from 2nd class, 10.28% from 3rd class, 9.34% from 4th class and 6.54% were fifth class students. In some other sties also found comparable findings. [14,15]

In this study most of the students 95.5% were underweight, 38.3% had normal body weight, and 12.1% were obsess children. According to height 67.3% were under height, 28.0% children presented with normal height and only 4.7% had over height. 45.97% children were completely vaccinated, 42.05% partially vaccinated and 12.14% were without vaccination. Some other also found comparable findings.^{16,17} In this study 83 students were ill in last two months and 24 were not ill in last two months.

In this study according to type of illness 32 students, suffered from fever, 18 from cough, 13 from malnutrition, 7 from iron deficiency anemia, 5 from malaria, 3 from typhoid, 1 from diarrhea, 2 from injury and 2 from skin diseases. Other studies reported that the prevalence of anemia in children in Africa was 60%, Latin America (46%), Eastern Mediterranean (63%), Southeast Asia I (49%), southeast Asia II (66%) and north America 7%. [18] In Pakistan the survey conducted by National Health survey for Pakistan (NHSP) in 1990-1994 shows that the nutritional anemia in children under age of 05 years was 62.9%. The prevalence of anemia among urban school children of Panjab was 51.5%. [19] Syed SS et al [20] reported that the history of whooping cough, mumps, chicken pox and measles was present in 25 (11.36 %) cases in the last three months before the commencement of the disease.

History of close contact with TB patient was present in 84 (38.1%) cases and in 76 (34.5%) cases third degree malnutrition was found.

CONCLUSION:

It was concluded that health status of children studying in lower Sindh rural Schools was unsatisfactory. Many students presented with many health problems frequently as cough, fever and malnutrition. Many children were unvaccinated, poor oral hygiene, underweight and under height. Health strategies should be developed regarding complete and daily routine survey of medical teams in govt. schools in poor areas of our population to improve the health status of children.

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