

Morbidity Pattern and Health Education for School age Children in Karachi

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ABSTRACT

Objective: To screen morbidities among school age children, to assess health education need to prevent these diseases and to compare morbidities with national and international patterns

Study Design: Cross Sectional Epidemiological Study

Place and Duration of Study: This study was conducted at DIMC, DUHS, Karachi during February and March 2012.

Materials and Methods: This study was conducted of school children of Karachi. Sample size; 125 children from 6 primary, kg and nursery classes data was collected on pre -designed and pre- tested proforma

Results: Total 22 morbidities were identified on clinical examination and anthropometry methods common morbidities were max in ear, scabies, lice infestation, alopecia, anemia, and underweight, DNS, Rhinorrhea, 21.5 % children had no morbidity while 28.8 % needed primary health care/ first aid or simple treatment or referral while 71% needed health education, hygiene or nutrition supplements. Morbidities are same as reported from Pakistan and Indian studies published Journals and books and all morbidities were preventable

Conclusion: School age children are suffering from common preventable diseases they need primary health care education hygiene and nutrition supplement to improve their health Medical Universities NGOs and Education and Health Department can manage by health camps or by formal school health services programme.

Key Words: School Health, Morbidities, Wax, Karachi, Scabies, KG class.

INTRODUCTION

School health is branch of community Medicine dealing with providing, preventive. Curative, rehabilitative and health education and promotion services to the students and teachers in school environment as regards health education it informs, motivates and helps people to adopt practices and lifestyles conducive to the health of individuals and communities as well as advocates environmental changes and conducts research and training. School age children suffer from various health problems but common morbidities are malnutrition, dental problems, vision problems, sore throat, communicable diseases. Parasitic infections, skin disorders and lice infestation ⁽¹⁾ When a boy or girls leave home for school their small world starts to change. Compared to last century mortality in children has ten fold reduced in current century due to control on communicable disease from 4 per 1000 to 0.5 per 1000 ⁽²⁾ the function of school health services are early detection of defects of school children important health education for healthful living ⁽³⁾ health education in Pakistan is of recent origin and still in process of development. UNICEF is supporting school health clinic in all provinces one medical officer is made in-charge of 3000 to 5000 school children to provide medical care ⁽⁴⁾ in subcontinent school health service was started in Baroda city in joint India in 1909 ^(5 6) In Haryana state during 1999 and 2000 cross sectional study was conducted during in eight

government primary schools on 736 children in rural Haryana, India, the result showed that 59.4% of the children belonged to the age group 9-11 years and 51.6% of the children were males. most commonly found morbidity was pallor (23.8%), followed by signs of xerophthalmia (21.6%), dental caries (16.8%), worm infestation (8.3%), respiratory infections (7.3%), refractive error (16.3%), skin infections (8%) and ear infections (3.7%). Moderate to sever malnutrition was recorded⁷ Reduced illness, low level of morbidity, and less burden of disease contribute positively to human resource development and economic growth in a country⁸ In Kerala state studies indicate that morbidity in young children in Kerala state, India, remains at high levels despite the low mortality had been attained⁹

In one of big school health services scheme in Tamil Nadu in India in 2012-2013 where 49,40,470 are covered for school health camps programme out of these students 22,22,850 are treated for one or other health problems and 27,082 students were referred to higher medical institutions for further treatment. this scheme aims to provide comprehensive health care services to all students studying in Government and Government aided schools in first to twelfth standards. One Medical Officers of Primary Health Centres and the paramedical staff constitute school medical teams and visit the schools allotted to them on every Thursdays on a predetermined definite programme under advance intimation to the school authorities. This programme is continuing in August 2012 report they

diagnosed 13 morbidities which include Dental Carries 8.09%, Worm Infestation 11.72 %, Acute Respiratory Infections 10.39%, Anaemia 2.01%, Vitamin-A Deficiency 1.16 %, Scabies 0.47%, Defective Vision 0.31%, Otitis Media 0.00 %, Leprosy 0.00%, Defective Hearing 0.00%, Rheumatic Heart Disease 0.02%, T.B 0.16 % and Goiter 0.01%¹⁰.

MATERIALS AND METHODS

It was a cross sectional study conducted on sample of school age children of Karachi located in Rana Liaquat Craftsman Colony (RLCC) school in Shah Faisal Colony Karachi during February and March 2012.

Sample size: 120 school age children from KG, Nursery, Class I to IV, consent of school administration was sought for conduction medical examination.

Data Collection instrument: A proforma comprising basic information like name ,age, class ,medical section comprising general appearance, eye, ear, skin, height weight ,symptoms and sign with physical check up and last part with medical treatment, health education and referral advise was designed and filled and signed by teacher and doctor.

Data Analysis: SPSS version 16 was used to analyze the data.

Inclusion: All children who were present and registered for check up were included

Exclusion: Those who were absent or unwilling were excluded.

RESULTS

1) In this study there were 62(49.6%) boys and 63(50.4%) girls total were 125 (See Table 1).

Table No.1: Sex of Children RLCC School Karachi

Sex	NO	%
Boys	62	49.6
Girls	63	50.4
Total	125	100

Table No.2: Class wise distribution of Children of RLCC School Karachi

Class	NO	%
Kinder Gorton	19	15.2
Nursery	24	19.2
Class-I	20	16.0
Class-II	25	20.0
Class-III	20	16.0
Class -IV	17	13.6
Total	125	100

2) There were 19(15.2%) children in Kinder Gorton (KG) Class, 24(19.2%) in Nursery class, 20(16.0%) were in class –I ,25(20.0%) in class II, 20(16.0%) in class III while 17(13.6%) were in class IV (See table 2)

3) The age distribution of school children who participated in study showed that 10(8.0%)were in age

of 4 years,37(29.6%) in age of 5 years,19 (15.2%) in age of 6 years,16(12.8%) in age of 7 years, 19(15.2%) in age of 8 years,8(6.4%) in age of 9years,10(8.0%) in age of 10years, 4(3.2%)in age of 11 years 1(o,8%) in age of 12 years and 1(o.8%)in age of 13 years.

Table No.3: Showing Age distribution of Children of RLCC School Karachi

Age	Boys	Girls	Total	%
4 Year	4	6	10	8.0
5 Year	24	13	37	29.6
6 Year	5	14	19	15.2
7 Year	11	5	16	12.8
8 Year	10	9	19	15.2
9 Year	5	3	8	6.4
10 Year	6	4	10	8.0
11 year	1	3	4	3.2
12 Year	1	0	1	0.8
13 Year	1	0	1	0.8
Total	63	62	125	100

Table No. 4: Showing morbidities pattern among RLCC school children Karachi N=125

Morbidity	NO	%
Vision Disorder	2	1.6
Anaemia	3	2.4
Injuries	2	1.6
Itching/Scabies	7	5.6
Wax in Ear	35	28.0
Gingivitis	10	8.0
Jaundice	1	0.8
Fever	1	0.8
Under weight	6	4.8
Ear block	2	1.6
Sun Allergy	1	0.8
Cavity in teeth	6	4.8
Teeth Mal occlusion	1	0.8
Rhinorhea	10	8.0
Pus in Ear	2	1.6
Obesity	1	0.8
DNS	7	5.7
Chewing pain	1	0.8
Lice Infestation	14	11.2
Alopecia	5	4.0
Squint	1	0.8
Dental Bleeding	2	1.6
Dirty Face	1	0.8
Vitamin A Deficiency	1	0.8
Dental Hygiene	1	0.8
Pimple	2	1.6
Acid Injury	1	0.8

4) The morbidity pattern among children showed that 28 morbidities, symptoms found in them common of them were wax in ear in 35(28.0%) , lice infestation 14 (11.2%),Rhinothoea in 10(8.0%),cavity in teeth/care in 6(4.8%) DNS in 7(5.7%), Itching/Scabies in 7(5.7%)

Alopecia in 5(4.0%), Gingivitis in 10(8.0%), under weight/malnutrition 6(4.8%), pus in ear 2(1.6%), fever 1(0.8%) Jaundice 1(0.8%), Anemia /Malnutrition in 3(2.4%). vision disorder 2(1.6%) squint 1(0.8%), pimple 2(1.6%) acid injury 1(0.8%), other injuries/ wound 2(1.6%)(see table 4).

Table 5: Showing Health education, Treatment and Nutritional advices interventions for RLCC school children of Karachi.

Table No. 5: Children needed simple treatment of health education /simple treatment intervention

Interventions	No	%
Health Education/Hygiene	38	30.4
Treatment	36	28.8
Nutrition Supplements	45	36.0
No intervention	6	12.5
Total	125	100

5)Health Interventions showed that 38(30.4%) children needed health education and hygiene education, 36(28.8%) needed primary health care/or simple treatment 45(36.0%) needed nutrition supplement while 6(12.5%) needed no intervention in all 66.4% needed health education ,hygiene and nutrition supplement only 12.5 % were symptom free while 81.5%.

DISCUSSION

Majority of the students were in the age group of 14/15 which was around 79%. In this study most common current morbidity was found respiratory infection (61.5%), others included fever (25.2%), pain abdomen (16.5%), conjunctivitis (14.2%) and toothache (7%). Refractive error was seen among 20% of students. In hemoglobin estimation 14.5% girls were severe anemic. Current morbidity was significantly associated with age, gender, religion and type of family^{11,13,14,15}

Reduced illness, low level of morbidity, and less burden of disease contribute positively to human resource development and economic growth in a country. Most common illnesses reported among children are fever, intestinal infections including diarrhea, and viral diseases, which are preventable.¹⁶

In Nepal in a similar study found in primary school children, the pattern of diseases as skin diseases, dental caries and lymphadenopathy as the common diseases and scabies was very common in school boys.^{17,18}

In an Indian study of Kolkota and Hoogly area, ear infection was found in 20% children.¹⁹

In a cross-sectional study was carried out from March 2007 to October 2007 in urban area of Meerut.-prevalence-of-morbidity--pattern-in-school-children-5-11-yr-in-urban-area-of-meerut.

Children are not only divine gifts but also the mirror of a nation and hope of the world. They are the countries biggest human investment for development. It is rather

unfortunate that even after 60 years of Independence; our country had made little progress in improving the health condition of our school children when compared to the developed countries. Quality of life of school children, by all standards continues to be poor more so in rural areas and urban slums.

The World Health Organization's Expert Committee on School Health Services noted as long as 1950 that "to learn effectively, children need good health".¹ Research indicates that nutritional deficiencies and poor health in primary school age children are among the causes of low school enrolment, high absenteeism, early dropout and poor classroom performance^{20,21}

In our study 70% morbidities are same as reported in above studies how ever wax in ear, lice infestation, alopecia, scabies and dental and chewing difficulties injuries were more common health problems. Which are preventable by health education, first aid ,nutrition supplements all are manageable and are low cost health care services.

CONCLUSION

School health camps with strong health education component and first aid and primary Health care and nutrition supplements can solve 98% school age health problem which are preventable and simple to treat with low cost by school health camps or clinic. Karachi schools almost lack in school health services and health education and hygiene services particularly in schools in poor areas of Karachi.

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