A STUDY TO ASSESS THE PREVALENT PROBLEMS
AMONG SCHOOL GOING CHILDREN (5-15 YEARS) AND THE PREVENTIVE MEASURES
TAKEN BY HEALTH PROFESSIONALS IN SELECTED AREAS OF RATIA (FATEHABAD) HARYANA

Kulbir Kaur *| Tapti Bhattacharjee **

* Ph.D Scholar, NIMS University, Jaipur, Rajasthan, India.

** Professor, College of Nursing, NIMS University, Jaipur, Rajasthan, India.

ABSTRACT

The present study was undertaken to assess the prevalent problems among school going children (5-15years) and the preventive measures taken by health professionals in selected areas of Ratia (Fatehabad)". The descriptive exploratory study was conducted on purposively selected health professionals, who were from different health centres of Ratia Fatehabad. A structured knowledge questionnaire was prepared to assess the knowledge of health professionals regarding preventive measures of prevalent problems. Moreover common problems are assessed by the records of Civil Hospital Fatehabad. Objectives of the study are to assess the prevalent problems among school going children and preventive measures taken by health professionals to reduce these problems. Other objectives were to find out the correlation between prevalent problems and preventive measures among school going children and to determine the association between health problems and selected demographic variables. Prevalent diseases are a danger to everyone. Some have been controlled with vaccinations and modern technology, while others are emerging or are resistant to drug treatments. Disease prevention and control is a cooperative effort involving healthcare providers, local and state health department personnel and members of the community.

Key words: *exploratory, prevalent problem, preventive measures, epidemiological, demographic transition.*

ABOUT AUTHORS

Author Ms. Kulbir Kaur is Ph.D Scholar, NIMS University, Jaipur, Rajasthan, India. She has attended various National and International conferences.

Author Dr. Mrs. Tapti Bhattacharjee is Professor, College of Nursing, NIMS University, Jaipur, Rajasthan, India. She has attended various National and International conferences. She has vast research experience.

INTRODUCTION

"Health implies a sound mind, in a sound body, in a sound family, in a sound environment."

— An ancient view (J.E. Park)

The term health and wellness are used interchangeably. Health is often described as absence of illness. Whereas wellness is often given a more positive connotation, suggesting that it involves more than absence of illness. The term illness refers to deviation from normal health. A large number of life changes may cause illness. India is undergoing an epidemiological, demographic and health transition. The expectancy of life has increased, with consequent rise in degenerative diseases of aging and life-styles. Nevertheless, communicable and prevalent diseases are still dominant and constitute major public health issues. School going children, not only constitute a large group but they are also a vulnerable or high risk group. The risk is connected with growth, development and survival. First five years are full of health hazards. Since they are high risk group, under-five children are exposed to many environmental factors leading to several problems and diseases in children.

Children are wealth of tomorrow. Children are also major consumers of healthcare. In India about 35% of total population is of children below 15 years of age. Children always need special care to survive and thrive. School-age years are a time of continued maturation of a child's physical, social, psychological characteristics. The school age child values school attendance and school activities. Children spend a lot of time in recreational activities that require good vision. Good vision is a key to success. New researches estimate that a million children have undetected vision problems, while almost 70% of schools do not have any eye screening, which was described as "an absolute public health disgrace" **by Bob Hughes**.

Growing children in their tender age are at increased risk of becoming sick, especially children of under-five years. Communicable disease is a 'local and focal problem 'causing mortality and morbidity at high levels in community, especially among under-five children. In this era children are suffering and dying each year due to the prevalent communicable diseases like malaria, diarrhoea, childhood tuberculosis, pertussis and typhoid fever etc. According to world health statistics, these childhood communicable diseases account for nearly two million children losing their lives each year.

According to WHO's World Malaria Report (2014): In 2014, 97 countries and territories had ongoing malaria transmission. An estimated 3.3 billion people are at risk of malaria, of which 1.2 billion are at high risk. In high-risk areas, more than one malaria case occurs per 1000 population. There are 2 million deaths per year from gastroenteritis in children. Infants and those with immunological compromise are more likely to have more severe disease requiring admission to hospital for rehydration. Childhood Tuberculosis is an important indication of public health success in interrupting and preventing Tuberculosis transmission. Infection can be reduced with improvement of environmental hygiene, medicine, high nutritious diet and health education. Fever remains endemic in many developing countries. Population based studies from South Asia indicate that the age specific incidence of typhoid may be highest in children. *F*ood and water borne diseases are one of the major causes of childhood mortality and

morbidity in developing countries. Dental caries and scabies are the most prevalent and chronic oral diseases particularly in childhood age.

OBJECTIVE OF THE STUDY

1. To assess the prevalent problems among school going children.

2. To find out the correlation between problems and preventive measures among school going children.

3. To associate the knowledge score with selected demographic variables.

MATERIALS AND METHODS

A quantitative research approach with non-experimental one group exploratory research design was used. Dependent variable was knowledge and demographic variables are age, academic qualification, experience and previous sources of information. Study was conducted in CHC's, PHC's and sub centres in Ratia, Fatehabad (Haryana). Target population was health professionals working in health centres. Non-probability purposive sampling technique was chosen for the study. Hypothesis for the study showed significant relationship between problems of school going children and preventive measures. There is significant association between knowledge and selected demographic variables. Reliability is degree of consistency or accuracy with which an instrument measures the attribute which it is designed to measure. The "r" value is calculated using Split-half Formula. Thus the tool was considered reliable for the study. Knowledge questionnaire was distributed to health professionals. Tool validity was obtained from ten experts and their suggestions were considered too in constructions. Data collection took around one hour. The data collected was grouped and analysed. It provided the evidence that the tool was feasible, reliable and practicable.

Description of tools: Tool was prepared under two sections: —

Section A:

This section had information regarding demographic data of health professionals, such as age, educational status, experience and previous sources of information.

Section B:

This section consists of structured knowledge questionnaire on thirty items. Each item had multiple choices in nature with four responses to each question. There was one correct response carrying one mark and the wrong response carried zero mark. The score was 30 for 30.

Demographic data of health professionals:

Table – 1: Description of socio-demographic variables

n=100

Variables	Opts	Frequency	Percentage
Age	21-30 Years	40	40
	31-40 Years	40	40
	41-55 Years	20	20
	Above 56 Years	00	00
Professional Qualification	Nursing	60	60
	Para-medical	20	20
	Medical	20	20
Gender	Male	30	30
	Female	70	70
Source of information	Family members	10	10
	Mass Media	20	20
	Health team	60	60
	Any other	10	10
Experience	0-10 years	30	30
	11-20 years	40	40
	21-30 years	30	30
	30 years or above	00	00
Area of residence	Urban	80	80
	Rural	20	20
Economic status	5000-10000 Rs	00	00
	10001-30000	40	40
	30001-50000	30	30
	Above 50000Rs	30	30

Table – 2: Assessment of the prevalent problems among school going children (5-15years)*

(n = 1000)

Morbidity	Number	Percentage
Anaemia	170	17
Worm infestation	126	12.6
Under nutrition*	105	10.5
Nutritional skin disorders	66	6.6
Skin infections	117	11.7
Respiratory infections	151	15.1
Eye infections	36	3.6
Ear infections	42	4.2
Tuberculosis**	30	3
Leprosy**	7	0.5
Dental caries	106	10.6
Deafness	6	0.6
Congenital malformations	3	0.3
Lameness	8	0.6
Rheumatic heart disease	1	0.1
Seizure disorder	5	0.5
Injuries	20	2
Speech disorder	1	0.1

* This was calculated only in children between 5-12 years of age (n=1000)

It was concluded from the records of civil hospital at Fatehabad that the most prevalent problem is anaemia, followed by worm infestations, respiratory problems, skin diseases, dental issues besides under-nutrition and ear infections which are also very common health issues.
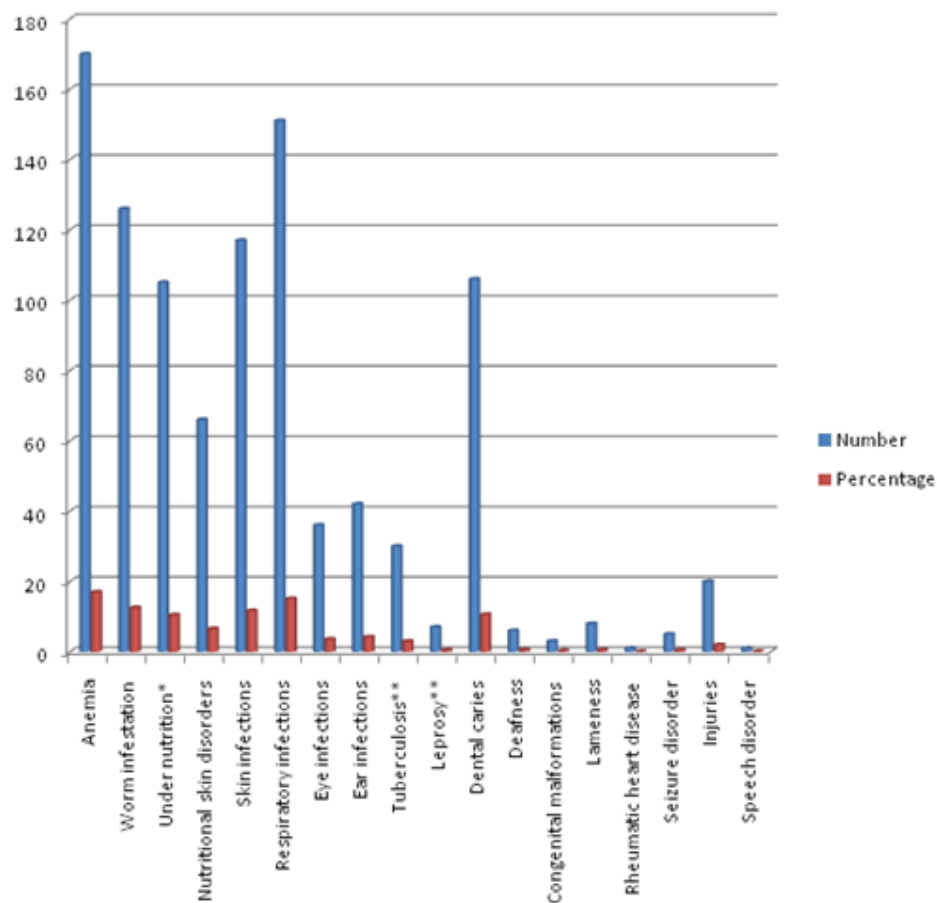
Table – 3: Overall Knowledge questionnaire to assess prevalent problems and preventive measures among school going children

Sample no.	Percentage of Correct answer	Mean	Median	SD
1	66.66			
2	77.3			
3	70.00			
4	86.60			
5	90.00			
6	60.00	78.06	77.66	10.12
7	73.33			
8	80.00			
9	83.33			
10	93.33			
N = 10	**780.64**			

Table – 3 shows the overall Knowledge questionnaire to assess prevalent problems and preventive measures among school-going children, where mean=78.06, median=77.66 and SD=10.12 .

Table – 4: Analysis of knowledge, to assess the prevalent problems among school going children (5-15years) and the preventive measures taken by health professionals in selected areas of Ratia (Fatehabad)

CRITERIA MEASURE OF KNOWLEDDGE SCORE	
Score Level (N = 100)	PRE-TEST (F %)
Low (0-15)	0 (0%)
Average (16-25)	70 (70%)
High (26-30)	30 (30%)
Maximum Score = 30, Minimum Score = 0	

Table – 4 shows that 30% of the samples had high level of knowledge, 70% of the samples had average level of knowledge and 0% sample had poor knowledge regarding prevalent problems among school-going children (5-15 years) and the preventive measures taken by health professionals respectively.

Table – 5: Association of knowledge scores of sample with selected socio-demographic variables

Association of Knowledge scores with selected socio-demographic variables									
Variables	Opts	High	Average	Poor	Chi Test	P Value	Df	Table Value	Result
Age	21-30 years	15	25		3.644	0.934	3	9.84	Not Significant
	31-40 Years	20	20						
	40-55 Years	5	15						
	Above 55 Year	00	0						
Professional Qualification	Nursing	15	45		0.242	0.980	2	7.82	Not Significant
	Para-medical	4	16						
	Medical	5	15						
Source of information	Family members	2	8		10.970	0.934	3	9.84	Significant
	Mass Media	10	10						
	Health team	10	50						
	Any other	0	10						
Experience	0-10 years	15	15		1.908	0.934	3	9.84	Not Significant
	11-20 years	15	25						
	21-30 years	10	20						
	30 years or above	00	0						
Economic status	Rs. 5000-10000	00	0		1.418	0.934	3	9.84	Not Significant
	10001-30000	16	24						
	30001-50000	10	20						
	Above Rs. 50000	8	22						
Area of residence	Urban	25	55		0.295	0.999	1	5.41	Not Significant
	Rural	5	15						
Gender	Male	12	18		1.260	0.999	1	5.41	Not Significant
	Female	20	50						

Table - 5 Reveals the results of statistical analysis to check the association of knowledge scores with selected demographic variables. The calculated chi- square values were 3.644, 0.242, 10.97, 1.908, 1.418, 0.295, and 1.26 for age, professional qualification, source of information, experience, economic status, area of residence, gender,

respectively, showing that the association of knowledge scores with age, professional qualification, experience, economic status, area of residence and gender is not significant at 5%. The calculated chi- square value of source of information is higher than 9.84, showing that the association of knowledge scores is significant at 5%.

Table - 6: Co-relation between prevalent problems and preventive measures taken by health professionals among school going children

Morbidity	Number	Preventive measures
Anemia	170	120
Worm infestation	126	90
Under nutrition*	105	85
Nutritional skin disorders	66	45
Skin infections	117	90
Respiratory infections	151	110
Eye infections	36	20
Ear infections	42	4
Tuberculosis**	30	30
Leprosy**	7	7
Dental caries	106	100
Deafness	6	0
Congenital malformations	3	0
Lameness	8	0
Rheumatic heart disease	1	0
Seizure disorder	5	0
Injuries	20	0
Speech disorder	1	0

$$r = \frac{1390.56}{\sqrt{1933673}} = \frac{1390.56}{1390.56} = 1$$

Table - 6: Correlation determines the relationship between two variables. It is computed by using Karl Pearsons correlation coefficient (r) formula that there is perfect positive correlation (r=+1). Here x is directly proportional to y. Both variables rise and fall in the same proportion, e.g., prevalent problems and preventive measures, meaning there was decrease in health problems with more adoption of preventive measures by health professional.

RESULTS

Demographic data of health professionals

40% of samples were from age group of 21-30 years, 40% were in the age group of 31-40 years, 20% were in the age group of 40-50 years and 0% was in the age group of above 55 years. As for professional qualification, 60% samples belong to nursing field, 20% of samples from paramedical field, 20% samples were from medical field. As for the source of information, majority of samples 60% were health team, 20% were from mass media, 10% were from family members and only 10% were others. According to experience, 40% were having experience of 11-20 years,

30% samples were having experience between 0-10, 30% were having experience between 21-30 and 0% had experience 30 or above. It was found that 40% of the samples were having income 10001-30000, 30% of the sample having income 30001-50000, 30% having income above 50000 and 0% of the sample had income 5000-10000. According to gender, 70% of samples were females and 30% males. Area wise 80% samples were from urban area and 20% were from rural areas.

Assessment of problems and knowledge among health professionals
It was concluded from the records of civil hospital, Fatehabad that the most prevalent problem was anaemia followed by worm infestations; respiratory, skin and dental issues; under nutrition and ear infections were also quite common. This study also revealed that 30% of the samples were having high knowledge, 70% of them were having average knowledge and 0% of sample had poor knowledge regarding prevalent problems among school going children (5-15 years) and the preventive measures taken by professionals, respectively.

Correlation between prevalent problems and preventive measures
Correlation determines the relationship between two variables. It can be computed by using Karl Pearsons correlation coefficient (r) formula that there is perfect positive correlation (r=+1) between prevalent problems and preventive measures. Here x is directly proportional to y. Both variables rise and fall in the same proportion. Means there was increase in health problems with more adoption of preventive measures by health professional.

Association of knowledge score with selected demographic variables
Results of statistical analysis to check the association of knowledge scores with selected demographic variable show the calculated chi- square values were 3.644, 0.242, 10.97, 1.908, 1.418, 0.295, and 1.26 for age, professional qualification, source of information, experience, economic status, area of residence, gender, respectively and that the association knowledge scores with age, professional qualification, experience, economic status, area of residence and gender are not significant at 5%. The calculated chi- square value of source of information, are higher than 9.84, showing the association of knowledge scores are significant at 5%.

DISCUSSIONS
It was concluded from the records of civil hospital at Fatehabad that the most prevalent problem is anaemia followed by worm infestations, respiratory problems, skin diseases, dental issues besides under-nutrition and ear infections which are also very common health issues. This study also revealed that 30% of the samples were having high knowledge, 70% of the samples having average knowledge and 0% sample had poor knowledge regarding prevalent problems facing school going children (5-15years) and the preventive measures taken by professionals, respectively.

CONCLUSION
Prevalent problem are widespread around the globe. School children are more vulnerable to these problems. Health professional are taking effective measures. India is rapidly stepping towards industrialisation, urbanisation along with change in lifestyle factors. These factors possibly contributed to a rapid increase in incidence of prevalent problems in the country. It is difficult to provide all the preventive measures to the children due to less manpower. Study concluded that there is need to provide more detailed information to health professionals regarding prevalent problems.

RECOMMENDATIONS
On the basis of the study, it is recommended that the study can be replicated with large sample. Comparative studies may be conducted on common problems of urban and rural groups. Effective information, education and communication packages can be prepared to improve the knowledge and practice of health professionals.

ETHICAL CONSIDERATION
Formal permission will be obtained from ethical committee through Principal, NIMS College of nursing. Formal permission will be obtained from health centres. Informed consent will be obtained from all study subjects. Study subjects will be assured that information collected from them shall be kept confidential.

LIST OF REFERENCES

1. Park , Preventive and social medicine.19th edition, 2007, Jabalpur, page No: 182 –186

2. Whaley and Wongs, Essentials of Paediatric Medicine, –1st edition, Harcourt private Ltd., Publishers 2001, Page No: 806 - 808

3. Basanthappa B.T., Community health nursing, 2003, New Delhi, Page No: 194 to 196.

4. Suraj Gupte, the short text book of paediatrics, 9th edition, Jaypee brothers, medical publishers, New Delhi, 2001, Page No: 325 to 328.

5. Paruldatta, Paedeatric Nursing, 1st edition, New Delhi, Page No: 286 to 288.

6. Donna .L. Wong Marilyl Hocken Berry Eaton, the text book of Paediatric Nursing, 6th edition, Harcourt Private Limited publishers, 2001, page No: 288 to 300.

7. Brunner and Suddarth's, 'Text Book of Medical Surgical Nursing', 10th edition. Lippincott Williams & Wilkins, Page no. 6

8. Gulani K.K., Principles and Practice Community Health Nursing. 1st edition. Delhi: Kumar Publishing House; 2007; 244-245.