# A COMPARATIVE STUDY BETWEEN THE URBAN AND RURAL SCHOOL TEACHERS KNOWLEDGE, REGARDING SELECTED PROBLEMS OF SCHOOL CHILDREN 

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#### Abstract

A comparative study to determine the knowledge, regarding selected problems of school children, between the Urban and Rural school teachers was undertaken using a descriptive cross sectional design. 100 school teachers, between the age group of (20 to 56 years) working in Middle and Higher Secondary schools were selected using Multistage with cluster random sampling technique. The tool used for data collection was a structured questionnaire. Validity was obtained from 5 experts in the field of Nursing, and Preventive Medicine. Reliability of the tool was established by using split half method, $r=0.76$.A pilot study was conducted among 10 non study subjects. Data was collected for a period of 4 weeks subsequently; visiting one school per day. The findings revealed that the level of knowledge of both urban and rural school teachers was Inadequate, but when in terms of the individual aspects of the common illnesses of school children, certain variations were observed. It can be definitely said that, the in-service education programmes for the teachers was very essential, to prevent the school children from health problems, which takes us to the saying, "Prevention is better than cure". Appointing a School Health nurse in all schools, will go a long way in keeping an expert eye on the status of health of the school children.


Key Words: Cross sectional design, School children, School Health nurse.

## INTRODUCTION

## Statement of the Problem:

A comparative study between the Urban and Rural school teachers' knowledge, regarding the selected problems of school children, in selected schools, at Choolai and Guduvanchery.

## OBJECTIVES OF THE STUDY:

1. To assess the knowledge of school teachers regarding physical and behavioural problems of school children.
2. To compare the knowledge of urban and rural school teachers regarding physical and behavioral problems of school children.
3. To determine the relationship between the knowledge score with the attributes of teachers.

## OPERATIONAL DEFINITIONS:

Knowledge: It refers to what the teachers know about the causes, signs and symptoms and management of common illness among children.

Teacher: It refers to those individuals, who teach from $1^{\text {st }}$ standard to $12^{\text {th }}$ standard, with a basic qualification of degree, along with B. Ed or Teacher training.

Selected Problems - Common Illnesses which frequently affects the children are as follows: Vitamin A deficiency, Angular Stomatitis, Dental Caries, Scabies, Anaemia, Minor Injuries, Menstrual problems.

Behavioral Problems Behavioral problems, which are usually seen in the 6-12 years age group, affecting their learning, morality and are denoted by deviated activities, are given below antisocial behaviour, Habit disorders, Personality disorders, Psychosomatic disorders, Educational disorders..

## CONCEPTUAL FRAME WORK

The health belief model which was created in 1950's, revised in 1974 by Becker et al., was used in this study.

## METHODOLOGY

## Research Design

The research design adopted for this study was descriptive cross sectional design.

## Setting of Study

The study was conducted in Urban (Choolai) and Rural (Guduvanchery). Choolai is an urban area, which belongs to the north zone, Chennai. It has got 4 wards covering the total population of 35,086 . There are a total number of 19 schools, out of which, it has 17 Primary to Middle schools and 2 Higher Secondary schools. The number of school going children in the above mentioned schools were 11,500 and these schools comprised of a total number of 52 teachers.

Nandhivaram is a Rural area, which belongs to Chengalpet District and is located near to the Primary Health Centre in Guduvanchery. It has 8 wards, covering a total population of 95,386 . There are totally 22 schools in this area, consisting of 11 Primary schools, 4 Middle schools, 3 High schools and 4 Higher Secondary schools. The number of school going children of these schools constitutes 13,869 . The total number of teachers working in these schools is 54 .

## Population

The population of this study consisted of both Male and Female school teachers, between the age group of (20 to 56 years) working in Middle and Higher Secondary schools.

## Sampling Technique

The type of sampling technique used for this study was Multistage with cluster random sampling technique.

## CRITERIA FOR SAMPLE SELECTION: Inclusive criteria:

- Teachers on duty on the day of Data Collection.
- Both male and female teachers in all the age groups.
- Teachers who know Tamil and English.


## Exclusive Criteria:

- Teachers who are on leave.
- Headmasters and Headmistress who were busy with their administrative work.


## SAMPLE:

The sample selected for this study, were both Male and Female teachers from selected schools, who teach from $1^{\text {st }}$ to $12^{\text {th }}$ standard.

## Sample Size:

100 teachers ( 50 in the rural area and 50 in the urban areas) was selected for the study.

## DESCRIPTION OF THE TOOL

The tool used for data collection was a structured questionnaire to assess knowledge of teachers regarding causes, signs \& symptoms, identification and management of selected common illnesses and behavioral problems among schoolchildren.
The questionnaire consists of two sections as follows:

## SECTION - I:

The section deals with the details of attributes of teachers, presence of Health Education subject in the curriculum, the provision of in-service education programme.

## SECTION - II:

This part of the questionnaire deals with the questions of knowledge related to causes, signs/symptoms, management and prevention of selected common illnesses. (Physical and Behavioral problems). Section II consists of 44 items under 8 subdivisions:

## Scoring: Section I had no scoring

## Section II:

It has a total number of 44 Items. Each correct answer carried 4 marks, 3 marks for the partially correct answers, 2 marks for the relevant answer and 1 mark for the answer of don't know. Out of the total score, the minimum possible score was 44 and maximum was 176 marks. Based on these scores, the knowledge of teachers was classified into three categories as follows:

$$
\begin{array}{ll}
\text { Above 75\% } & \text {-- Adequate knowledge. } \\
51 \% \text { to } 75 \% & \text {-- Moderately Adequate knowledge. } \\
\text { Below } 50 \% & \text {-- In adequate Knowledge. }
\end{array}
$$

## Validity

Content validity was obtained from 5 experts from the field of Nursing, Professors and Medical officers.

## Reliability

The reliability of the tool was established by using split half method, $\mathrm{r}=0.76$ and hence the tool was considered reliable.

## Pilot Study

A pilot study was conducted at the schools for a period of 7 days among 10 non study subjects. The results revealed that the study was feasible.

## Data collection procedure

Data was collected for a period of 4 weeks subsequently; the investigator visited one school per day.

Convenient and flexible timings was ensured, before starting the data collection. The Questionnaire was then distributed to the teachers and 15 minutes was given to clarify their doubts followed by 60 minutes to fill the answers for the same. Alternate days were allotted for data collection, at urban and rural areas.

Table 1. Comparison of Urban and Rural teachers knowledge on the Physical and Behavioral problems of school children

|  |  | Group |  | Total |
| :--- | :--- | :---: | :---: | :---: |
|  |  | Rural | 82 |  |
|  | Poor | $36(72 \%)$ | $46(92 \%)$ | 18 |
|  | Average | $14(28 \%)$ | $4(8 \%)$ | 0 |
| Good | $0(0 \%)$ | $0(0 \%)$ | $\mathbf{1 0 0}$ |  |
| Total | $\mathbf{5 0}$ | $\mathbf{5 0}$ |  |  |

## Major findings of the study

> Regarding individual illness teachers had good knowledge on menstrual problem, whereas, they had poor knowledge on scabies, minor injuries, and vitamin A deficiency with the mean score of $7.40,7.56$ and 7.54 respectively.
> Similarly the rural schoolteachers had good knowledge on menstrual problems, whereas, they had poor knowledge on minor injuries and anemia. To elicit the reasons, most of the teachers were females both in urban and rural schools.
> The level of knowledge of both urban and rural schoolteachers was Inadequate, but when in terms of the individual aspects of the common illnesses of schoolchildren, certain variations were observed. In the Vitamin A deficiency, the urban schoolteachers have more knowledge about the signs and symptoms. In the rural schools, teachers had more knowledge about management. > Urban schoolteachers had more knowledge in managing Angular stomatitis and possessed less knowledge in causes.
$>$ As far as scabies is concerned, the urban teachers had adequate knowledge on causes and the rural teachers had adequate knowledge on the management of this problem.
$>$ With regard to anemia, the urban teachers had good knowledge on managing this problem, whereas, the rural teachers had good knowledge on signs and symptoms. Regarding the causes of this problem, both urban and rural teachers had poor knowledge. The popular belief among both the teachers was that, this is caused due to eating of ash and chalk piece powder, rather than, due to the lack of nutrition and presence of worms, especially Hookworms. $>$ As for the minor injuries caused to schoolchildren, the level of knowledge between urban and rural with
regard to signs and symptoms was good but the level of knowledge about the causes was poor.
$>$ In terms of the Behavioral problems, urban teachers had adequate knowledge on the management but had inadequate knowledge regarding the causes of these problems.
$>$ When the age of the teachers was compared with their level of knowledge, the teachers falling in the age group of 41-50 years had moderately adequate knowledge. This was statistically significant between urban and rural areas.
$>$ The teachers having a basic degree coupled with a teacher-training course possessed an adequate knowledge of $52.6 \%$ and the teachers having only a teacher-training course possessed a inadequate knowledge at $95.6 \%$. The reason for this difference is due to higher qualifications possessed by some teachers. Therefore, it can be said that the level of knowledge increases with their qualification also.
$>$ When the experience of teachers was compared with their level of knowledge, the teachers who had an experience between 6-10 years possessed a moderately adequate knowledge, both in urban and rural schools.
$>$ Another feature of the study was that, teachers who were close to retirement age had inadequate knowledge. The possible reasons for such an occurrence may be due to their own lack of interest in the subject due to their fast approaching super-annuation age.
$>$ The urban and rural schoolteachers with more than 20 years of experience had more knowledge on the menstrual problems. Schoolteachers with Masters Degree (M.Ed./B.Ed) had more knowledge on behavioral problems, when compared with others.

## CONCLUSION

> Majority of rural teachers $46(92 \%)$, showed a remarkably inadequate knowledge than the urban schoolteachers, whose score stood at 36 (72\%), which narrowed the difference between the two.
> Surprisingly, no teacher had adequate knowledge in both areas. This study reveals that the teachers overall knowledge, on physical and behavioral problems, were below average.
> Looking at the age, experience of the teachers and their participation in the in-service education programmes on Physical and Behavioral problems, it could be surmised that, the programmes had definite influence on the knowledge of the teachers on the problems of schoolchildren.
> It can be definitely said that, the in-service education programmes for the teachers is very essential, to prevent and protect the schoolchildren health problems, which takes us to the saying, "Prevention is better than cure".

## Implications

## Health Services

This study also implies the need for the integrated services and the collaborative approach of both teachers and community health workers.

This study stress the importance of Health services, which include initial health screening and referral activities, record keeping with regard to the compliances of the statutory laws of the state like immunization and special needs, provision of emergency care for acute and chronic illnesses, Health counseling and education for the students and the teachers.

## Education Measures

The curriculum of the teachers should emphasize health promotion and disease prevention and should address the topics of stress, diet, exercise, sexuality, human relationships, family health, non-violent conflicts, resolution safety

An effective coordination between the Departments of Nutrition, Health and Education, can be implemented through Intersectoral approach.

## Environmental Health

School environment has to be considered with Physical and Psychological aspects. Physical concerns include sanitation, lighting, safety issues and roofing (asbestos) in the school building.

A traffic police constable should compulsorily be posted, in the morning and evening time, to avoid accidents.

## Funding

Government should initiate to pump in enough funds in the budget to take care of the health of the school children.

Insurance schemes and periodical medical aid will also help a lot in improving the health of the children.

## Recommendations <br> Administrative measures:

Appointing a School Health nurse in all schools, will go a long way in keeping an expert eye on the status of health of the school children.

Accommodating adequate number of hours in the school syllabus, with regard to the Health related subjects.

Incorporating a school health team, consisting of a nurse, teacher, principal of school, consultants, technicians, volunteers and psychologists.

## SUGGESTIONS FOR FUTURE STUDIES

An experimental study can be designed for the teachers, in relation to the knowledge and practice of common illnesses among schoolchildren.

A study can be done to assess the children and parents participation in their physical and behavioral development, after a planned teaching programme by the teachers.

An exploratory study may be conducted among school teachers, on the behavioral problems, in the area of depression and drug abuse among the school children.

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