



KNOWLEDGE AND PRACTICE OF SCHOOL TEACHERS ON HEALTH CARE OF SCHOOL CHILDREN

MANGALA GOWRI¹ AND SAHBANATHUL MISSIRIYA^{2*}

¹Principal, Saveetha College of Nursing, Saveetha University, Thandalam, Chennai – 602105, Tamil Nadu, India.

^{2*}Professor, Saveetha College of Nursing, Saveetha University, Thandalam, Chennai – 602105, Tamil Nadu, India

ABSTRACT

Health services are depending on needs and preference of the community in India. Many schools in Tamilnadu do not have school health nurse in campus; teachers need to play major role in health aspect of the school children. Cross-sectional study was undertaken with the objective of assessing the knowledge and practice of school teachers towards health of school children. Cross-sectional survey conducted among school teachers in Chennai, Thiruvellore and Kancheepuram. Structured questionnaire was used and 900 teachers were randomly selected from schools and assessed on their knowledge and practice regarding health of children. Among them 346 were male and 554 were female. The SPSS package was used to analyze the data. Totally 78% of the teachers were not having adequate knowledge and 89% were not having the practice of maintaining health care of school children. The chi square test showing that there was statistically significant association between the school teacher's knowledge with the education ($P < 0.05$) and year of teaching experience ($P < 0.001$).

KEYWORDS: Knowledge, Practice, health care, school teacher



* SAHBANATHUL MISSIRIYA

Professor, Saveetha College of Nursing, Saveetha University, Thandalam,
Chennai – 602105, Tamil Nadu, India

*Corresponding author

Received on : 10-10-2016

Revised and Accepted on 21-11-2016

DOI: <http://dx.doi.org/10.22376/ijpbs.2017.8.1.b227-231>

INTRODUCTION

Health is important for everybody life. All must have a good and strong health. Eventhough the people are healthy , that is necessarily to be maintained at all time.¹ Children are the future citizen. If the child's health is protected and maintained properly, they surely become healthiest people of this country. But all children spent their maximum active time in schools rather than homes. They need their health services at their schools itself. School health is an important aspect of children's health and an integral part of school education. School health services in India showed the social and economic contexts and their health needs arise from it. It uses empirical work to look at the context and programmes that address these needs and then examines the engagement of health related issues in the schools.² School health services are services from medical, teaching and other professionals applied in or out of school to improve the health and well-being of children.³ By the way the major complications and morbidity can be prevented from their early stage. Health care services include health assessments, population based screenings, providing emergency care and managing crisis situations, and addressing the day to day health care needs of the students. There should be ongoing communication between the school health services personnel and the student's parents/guardians and health care provider so that the student is able to participate in school at the highest level.⁴ Schools bring together large populations of students and staff with needs for first aid management, detection of contagious diseases, routine medication administration, specialized health care procedures for students with special health care needs, and so forth.⁵ School Health Foundation of India set the following objectives already. They are developing health promoting schools, implementing comprehensive school health programme, promotion of research and development in the field of school health. Even though, many schools do not maintain school health services. Majority of the schools do not appoint school health nurses. In these circumstances, if any first aid emergencies arises, there nobody to handle the situation properly. This may lead into severe complicated situation or reason for mortality of children.⁶ This information will bring the change in schools to take care of the health aspect of children. School health program is an important component of the overall health care delivery system of any country. In developing countries such as India the childhood mortality is high its importance cannot be overemphasized.⁷

Need for the Study

There are 444 million children in India under the age of 18 years. This constitutes 37% of the total population in the country (Census 2011). According to UNICEF report in the year 2012, 20% of the children left inadequate care at the school period. India is among the countries where child mortality rate is alarmingly high. The problem has caught attention of policy makers and researchers for several decades.¹ Panna Choudhury, president of the Indian Academy of Pediatrics noted that there are no guidelines for schools on how to deal with children's emergency health situations in India.⁸ The Delhi government's Directorate of Health Services also

has no guidelines for schools. According to the Delhi School Education Act & Rules, there are various parameters on the basis of which a school is awarded recognition. But they do not have adequate medical facilities. Every school should have a first- aid kit, an oxygen cylinder that has been checked and certified and they have to have either nurses or experienced staff at schools stationed at all times. Mesgarzadeh, Shahamfar and Hefzollesan (2009) evaluated the knowledge and attitudes of elementary school teachers on emergency management of traumatic dental injuries in an Iranian urban area. A total of 160 teachers from 40 schools, were selected by randomization. A majority of the participants had received tertiary education. The teachers with higher educational background were significantly more knowledgeable regarding the disciplines of avulsion management. Teachers with a high level of experience were also more knowledgeable in terms of prevalence of dental trauma accidents.⁹ A study on changes in attitudes, knowledge and behavior associated with implementing a comprehensive school health program in a province of China conducted by Carmen Aldinger, et al., (2008).. Group interviews were conducted with a sample of 191 participants of school administrators, teachers, students and parents from nine schools. Participants reported a range of changes in attitudes paying more attention to health, attaining better psychological quality and confidence, increasing knowledge about various health issues, developing a broader concept of health and gaining better understanding about the physical activity, improving sanitary habits, reducing or quitting smoking, eating more nutritiously, increasing safety behavior, sustaining less injuries and improving parent-child communication.¹⁰ A study on health knowledge test for grade II teacher was conducted by Ofovwé, G. E., and Ofiji, A.N. (2007). This study focused on the development of a valid and reliable health knowledge instrument for Grade II teachers in Nigeria. It evidenced that inadequacy of the health knowledge among the teachers.¹¹ School nurses are important to take care of the physical, mental and emotional needs of school students.¹² Most of the schools do not have school nurse to take care of the student's health. In this scenario school teachers should know to care the health of school children. Hence the study is aimed to assess the knowledge and practice of school teachers on health care of school children from north Tamilnadu. The objectives of the study were to assess the knowledge and practice of school teachers on health of school children, to correlate the knowledge and practice of school teachers on health of school children and to associate selected demographic variables with the knowledge and practice of school teachers on health of school children.

MATERIALS AND METHODS

Research Design

An explorative design with descriptive approach was used. Tamilnadu has 32 districts totally. In which according to the list of developmental administrative units of Tamil nadu, north part has 7 districts namely Chennai, Kancheepuram, Thiruppur, Krishnagiri, Vellore & Thiruvellore, From them, 3 districts will be

selected randomly by using lottery method. From these 3 districts all type of schools namely Government, Private and Unaided schools were selected by cluster sampling method. School teachers working in schools from 3 districts of north Tamilnadu were the target population. Around 10,000 school teachers are working in all type of schools in each district of Tamilnadu. From each district 300 school teachers were selected. Totally 900 school teachers were selected randomly by probability sampling technique. The inclusion criteria were Teachers working at schools including Government Private and unaided as well as willing to participate in the study and teachers working experience at any schools for more than 5 years. But according to the inclusion criteria totally 900 teachers were surveyed.

Data Collection

The knowledge and practice of school teachers on health care of school children were assessed by using structured questionnaire. The tool contains Part I: Demographic data, Part- II: Knowledge Questionnaire on Health of School Children- consists of 39 questions and Part-III: Practice Questionnaire on Health of School Children. The Score Interpretation was Knowledge & Practice Questionnaire scored as 4, 3, 2 & 1 for each question. Total score ranges from 39-156. In that the score was <50% considered to be inadequate knowledge, 50-75% was moderately adequate knowledge and >75% was adequate knowledge. Similarly the score was used for practice of the teachers also. After selection of the school teachers by random sampling technique, the information sheet was provided to them about the study before obtaining informed consent. The demographic data was collected. The structured questionnaire to assess the knowledge and practice on health of school children was provided. After end of data collection self instruction module was provided.

Statistical analysis of data

The collected data were analyzed by using SPSS software (Statistical Package for Social Sciences) Version 17 Data was entered using MS excel. The

collected data was analyzed for mean, standard deviation, chi-square test and correlation test.

RESULTS

The demographic variables of the school teachers depict that, among 900 school teachers, 346(38.4%) were males and remaining 554(61.6%) were females. In that, most of them 394(43.8%) were in the age group of 31-40 years. Majority of them 356(39.6%) had the educational qualification of B.Ed. All of them were earning more than Rs.10000/- except very few 18(2%) school teachers. Considering the years of experience at the schools, 132(14.7%) teachers were having more than ten years of experience. Many 374(41.6%) teachers were handling Middle school children. Most of the teachers 487(54.1) were availing health information regarding school health services from mass media. School teachers 712(71.9%) were stated that their working schools were not getting school health services and none of the schools had appointed school health nurses at their school premises. Totally 702(78%) school teachers were not having adequate knowledge and 198(22%) were having moderately adequate knowledge and none had adequate knowledge regarding health care of school children. Among the 900 school teachers 801(89%) were having poor practice and only 99(11%) were having satisfactory level of practice of maintaining health care of school children. The correlation coefficient formula is showing that there is a positive correlation but weak linear correlation between the level of knowledge of the school teachers and their practice ($r=0.16$) regarding health care of school children at $P<0.01$ significant. There was statistically significant association between the school teacher's knowledge with the education and year of teaching experience at $P<0.05$ and $P<0.001$ respectively. There was no significant association between the school teacher's knowledge with the age, sex, monthly income, handling students, source of health information school health services conducted at schools and school health nurses availability at schools.

Table No.1
Frequency and Percentage distribution of demographic variables of school teachers
(n=900)

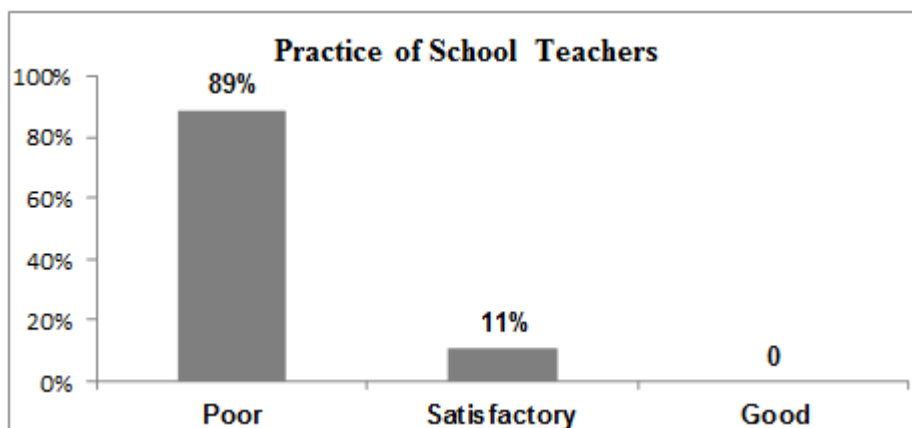
S. No.	Demographic Variables	No.	Frequency (%)
1.	Age	19-25 years	12 1.3
		26-30 years	198 22
		31-40 years	394 43.8
		41-58 years	296 32.9
2.	Sex	Male	346 38.4
		Female	554 61.6
3.	Educational Qualification	Diploma in Teacher Training	223 24.8
		B.Ed	356 39.6
		M.Ed	243 27
		M.Phil/PhD	78 8.7
4.	Monthly Income in Rupees	<10,000	18 2
		10,000 – 20,000	110 12.2
		20,001 – 30,000	366 40.7
		>30,000	406 45.1
5.	Years of Teaching Experience	< 3years	145 16.1
		3-5 years	356 39.6
		6-10 years	267 29.7
		>10 years	132 14.7
6.	Handling students	Primary level	141 15.7
		Middle School	374 41.6
		High School	296 32.9

		Higher Secondary	89	9.9
7.	Source of Health Information	Mass media	487	54.1
		Friends	197	21.9
		Family Members	14	1.6
		Health Personnel	99	11
		Others	103	11.4
8.	School health service conducted by	None	712	79.1
		Government Organization	105	11.7
		Private Organization	31	3.4
		NGO	52	5.8
9.	School health nurse availability at your school	Yes	0	0
		No	900	100

Table No.2
Frequency and Percentage distribution of level of knowledge of school teachers regarding health care of school children (n=900)

Level of Knowledge	Frequency	Percentage
Inadequate	702	78
Moderately adequate	198	22
Adequate	0	0

Graph 1
Frequency and Percentage distribution of level of practice of school teachers regarding health care of school children (n=900)



DISCUSSION

The current study is showing that most of the school teachers 702(78%) were not having adequate knowledge and 198(22%) were having moderately adequate knowledge and none had adequate knowledge regarding health care of school children. A study conducted by Sekar V et al., (2014) on knowledge, attitude and practice of school teachers towards oral health in Pondicherry. The study concluded that the knowledge regarding oral health among school teachers was fair. It also emphasized that oral health education must be imparted to preschool and primary school teachers as a part of National oral health care program on a regular basis.¹³ The present study is proving that the school teachers 801(89%) were having poor practice and only 99(11%) were having satisfactory level of practice of maintaining health care of school children. This was supported by Ofovwe G E and Ofiji A N on knowledge, attitude and practice of school health programme among head teachers of primary schools in Egor Local Government Area of Edo State, Nigeria.¹¹ The study resulted that none of the head teachers had adequate knowledge of SHP. 93.1% from private compared to 48.3% from public schools had poor knowledge of SHP (chi2 = 56.86, p < 0.05). Regarding

health services, 51.0% of private schools compared to 27.6% of public schools perform medical inspection of the pupils. Similarly 39.4% private compared to 3.4% public schools have sick bay (chi2 = 11.11; p < 0.05). A total of 16.5% of the schools undertake medical screening of food handlers/vendors, while 20.2% private compared to 3.4% public schools screen food handlers/vendors (chi2 = 4.47; p < 0.05). Shobha Masih, Rajesh Kumar Sharma¹ and Atul Kumar (2014) conducted a study on knowledge and practice of primary school teachers about first aid management of selected minor injuries among children.¹⁴ This study concluded that the training program was effective and there is significant improvement of knowledge and practice regarding first aid management of selected minor injuries among study participants. There was a significant positive correlation between knowledge score and practice score of participants (r = 0.9; P < 0.001). The current study is also proved that there is a positive correlation and weak linear correlation between the level of knowledge of the school teachers and their practice (r=0.16) regarding health care of school children at P<0.01 significant. The positive correlation between the knowledge and practice ensure that there is significant relationship between the school health care knowledge and skills. It is evidenced that if the school teachers have adequate knowledge can have good practice too.

There was no statistically significant association between the mother's practices with the any of the demographic variables in the current study.

CONCLUSION

The study concluded that the school teachers should have adequate knowledge and skill regarding health care school children. All the school teachers must be

REFERENCES

1. UNICEF. The state of the World's children. Retrieved from www.unicef.org/sowc/files/SOWC_2012-Main_Report_EN_21Dec2011.
2. Baru RV, editor. School Health Services in India: The Social and Economic Contexts. SAGE Publications India; 2008 Dec 8; 128-32.
3. Keeton V, Soleimanpour S, Brindis CD. School-Based Health Centers in an Era of Health Care Reform: Building on History, Current Problems of Pediatric Adolescent Health Care. 2012 Jul; 42(6):132-58.
4. School Health Services, Virginia Department of Education. Retrieved from www.doe.virginia.gov/support/health_medical/virginia_school_health/overview.pdf.
5. Allensworth D, Lawson E, Nicholson L. Schools & Health: Our Nation's Investment. Institute of Medicine Committee on Comprehensive School Health Programs in Grades. Washington: National Academies Press (US); 1997.
6. Lee A, Tsang C, Lee SH, To CY. A comprehensive healthy schools programme to promote school health: the Hong Kong experience in joining the efforts of health and education sectors, Journal of Epidemiology Community Health. 2003; 57: 174-7.
7. Jamison DT, Breman JG, Measham AR, Alleyne G, Claeson M, Evans DB, Jha P, Mills A, Musgrove P, editors. Disease control priorities in developing countries. World Bank Publications; 2006 Apr 2.
8. Dalwai S, Choudhury P, Bavdekar SB, Dalal R, Kapil U, Dubey AP, Ugra D, Agnani M, Sachdev HP. Consensus Statement of the Indian Academy of Pediatrics on integrated management of severe acute malnutrition. Indian pediatrics. 2013 Apr 1;50(4):399-404.
9. Mesgarzadeh AH, Shahamfar M, Hefzollasan A. Evaluating knowledge and attitudes of elementary school teachers on emergency management of traumatic dental injuries: a study in an Iranian urban area. Oral Health Preventive Dentistry.2009; 7(3):297-308.
10. Aldinger C, Zhang XW, Liu LQ, Pan XD, Yu SH, Jones J, Kass J. Changes in attitudes, knowledge and behavior associated with implementing a comprehensive school health program in a province of China. Health Education Research. 2008 Dec 1; 23(6):1049-67.
11. Ofofwe GE, Ofiji AN. Knowledge, attitude and practice of school health programme among head teachers of primary schools in Egor Local Government Area of Edo State, Nigeria. Annals of African Medicine. 2007;6:(3)99-103.
12. www.cdc.gov/healthyyouth/cshp/pdf/nasbe_howschoolswork.pdf
13. Sekar V, Sivsankar P, Easwaran MA, Subitha L, Bharath N, Rajeswary K, et al. Knowledge, attitude and practice of school teachers towards oral health in Pondicherry. Journal of Clinical Diagnosis Research. 2014; 8(8):ZC12-5.
14. Masih S, Sharma RK, Kumar A. Knowledge and practice of primary school teachers about first aid management of selected minor injuries among children. International Journal of Medicine & Public Health. 2014 Oct 1; 4(4):458.

adequately trained to take care the school children related to their health aspect. Otherwise the policy of Tamilnadu government has to be modified for insisting compulsory school health services to all schools as well as recruitment of school health nurse to each school.

CONFLICT OF INTEREST

Conflict of interest declared none.