

Teachers' Knowledge and Perception of Practice of School Health Services in Demsa Local Government Area, Adamawa State, Nigeria

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Abstract

This study was conducted to assess teachers' knowledge and practice of school health services (SHS) in government secondary schools in Demsa local government area of Adamawa state. A descriptive survey design was used and a multistage sampling technique was employed to select 100 participants for the study, although 94 participants returned the questionnaire. A self-developed validated questionnaire was the instrument for data collection. Data was analyzed using frequency counts, percentages and mean; Chi-square and Pearson Correlation (at 0.05 and 0.01 significant level respectively) were used to analyze the two hypotheses and one research question in the study. Major findings: Teachers had adequate knowledge of SHS ($p = 0.000 < 0.05$); the practice of SHS was not good enough (average practice mean was 2.70): sanitary sites in the schools were not adequate, the lighting and safety within the school environment was inadequate and the teachers appear not to practice adequate general hygiene inspection of the students. Also, the two wards used had positive moderate correlation of SHS ($r = 0.248$; $p .000 < 0.01$). It was concluded that SHS are unsatisfactory in Demsa Local Government area of Adamawa State. Therefore, there is need for all stakeholders involved in implementing SHS in Adamawa state in general and Demsa LGA in particular (Teachers, health workers, parents, government) to collaborate in providing the materials and manpower needed to achieve effective SHS in the area.

Keywords: School health services, Teachers Knowledge of SHS, Practice of SHS, Demsa LGA

Introduction

School health services refer to the health-care delivery system that is operational within a school or college. The services aim at promoting and maintaining the health of school children so as to give them good start in life. In addition, the services seek to enable children benefit optimal health from their school learning experiences (Ezedum, 2013; Okafor, 2014; Okafor, 2015). According to the declaration of the World Health Organisation (WHO) in 1948 which has been reinstated in other publications of WHO, health is not simply the absence of disease but “*a state of complete physical, mental, and social well-being*” (WHO, 2018). Major components of Health services available in schools (School Health Services, SHS) include Health appraisal, prevention, early detection and intervention in the area of school children's physical, social and mental health among others. Health appraisal has been pointed out as a major component of health services (Oyinlade, Ogunkunle and Olanrewaju, 2014). Health appraisal according to Oyinlade, Ogunkunle and Olanrewaju(2014), is that aspect of health services which concerns itself with evaluating the health of an individual objectively. School Health Services (SHS) constitute one of the components of the School Health Programme (SHP) and deal with the maintenance of the health of school children. Effective SHS facilitate early detection and diagnosis of diseases, whereby prompt intervention ultimately reduces school-age morbidity and mortality.

It is the concession of health professionals, educators and social workers that the provision of school health services is a cost-effective way of meeting the health needs of children (Nakajima, 2012). Therefore, it is a welcome development for the Nigeria government to have made specific provisions for the rendering of health services in all schools in the federation, as enunciated in the policy document of the Federal Republic of Nigeria (Ademuwagun & Oduntan, 2010). Ensuring that children are healthy and able to learn is an indispensable component of an effective education system. Achieving good school health services status for school children is particularly most relevant to efforts targeted to achieving education for all in most deprived areas. Children, who are least healthy and malnourished, often gain most from improved school health services. This implies the

cogent need for enacting and implementing health related school policies that, when effectively endorsed can lead to better educational outcomes. School health services (SHS) promotes good health in children. Good health increases enrolment, reduces absenteeism and brings more of the poorest and most disadvantaged children to school, and more girls than boys tend to come to school (Grant, 2017). It is for this reason that Health policies in schools, including skilled based health education and the provision of some health services can help promote the overall health, hygiene and nutrition of children are necessary to be implemented to help promote the health of these children (WHO, 2003). The School Health Programme (SHEP) activities are supportive of the Millennium Development Goals, (MDGs), especially those covering universal primary education (MDG 2), promoting gender equality (MDG 3), reducing child mortality rate and combating HIV/AIDS, malaria and other infectious diseases (WHO, 2003). The Coordinated School Health Programme (CSHP) is an "organized set of policies, procedures, and activities designed to protect and promote the health and well-being of students and staff" (McKenzie, Pinger & Kotecki, 2012, p. 565).

The School Health Programme (SHP) traditionally includes three components: health education, a healthful school environment, and the provision of health services. It was expanded in 2008 to include physical education, nutrition services, counselling services, community and family involvement, and health promotion for faculty (Achal, 2013). Since students spend a major part of their lives in schools, schools are good places to influence healthful living before harmful habits are established (Achal, 2013). The CSHP encourages all schools to address their students' health on various levels/classes. The programme's mission (CSHP) is to promote wellness, motivate health improvement, and offer educational opportunities for students, families, and community members. By implementing the planned, ongoing services of the CSHP, schools have the ability to improve both education and the health of students and school personnel (Achal, 2013).

The Health of school students is a matter of universal concern as children are the most precious assets any nation can have as their wellbeing affects the future of the nation. The school age is a period in which the child undergoes rapid physical and mental development and his calls for functional school health programme as the overall development of the child is to be achieved (Shala, 2013). Mshella (2003) asserted that the life expectancy of children is low due to high death as they do not enjoy good health for a long period of time because of the presence of numerous communicable diseases. Auta, *et al.* (2012) also reported that findings have revealed that students at various times have suffered from communicable diseases, infections, injuries, leading to death as a result of tetanus infections, dental caries, rashes, unequipped first aid for emergency care, reported cases of epidemic resulting from poor environmental conditions. Health problems interfere with students' ability to come to school, stay in health, or make the most of their opportunity to learn. Even schools with limited resources, can do a great deal to improve students' health and thus educational outcomes (United Nations International Children's Emergency Fund- UNICEF, 2012).

However, in Nigeria, School health programme seems not to receive the needed attention from policy makers and the implementers, hence a seemingly weak implementation and compromise on the comprehensive practice of the programme. There seem to be lack of collaboration between health ministries and education ministries. The programme itself is apparently not fully practiced in most schools. There also seem to be a major systemic problem due to the fact that there is no budget line for School Health activities, resulting in a seemingly poor monitoring and evaluation procedures to help ensure the sustainability of the programme. There is also a global shortage of health workers and it is not certain if the schools have health workers to support the teachers is carrying out the necessary SHS in schools (WHO, 2007). Recently, the Federal Ministry of Health (FMoH) implemented National oral health policy which the school has to ensure its implementation (FMoH, 2018).

This study, therefore, sought to bring to light how the School Health Services is known and practiced in government schools of Demsa Local Government Area, Adamawa State from teachers' perception.

Method

This study adopted descriptive research design, carried out to ascertain teachers' knowledge and practice of school health services in Demsa Local Government Area, Adamawa State. The population of this research was teachers of four government secondary schools in Demsa Local

Government Area (LGA).

A multistage sampling technique was used for this study. There are ten wards in Demsa local government. Using stratifying sampling technique, the local government was divided into north and south; five wards were in the north as well as five wards in the south. Then using simple random sampling technique, one ward was selected from the north and one ward was selected from the south (Kpasham ward from the South and Mbula from the North of the LGA). Then, the two available government secondary schools in Mbula were selected and random sampling was used to select two out of the five government secondary schools in Kpasham. The selected four secondary schools were: Government Senior Secondary School Kpasham, Government Senior School Bali (Mbula) Government Junior Secondary School Tagombali (Mbula) and Government Junior Secondary School Kpasham (Dutse). To get the required number for the target population of teachers needed for study, 30% of the available teachers in each school were used in order to get enough sample size. Then, simple random sampling technique was used to select the number of the teachers in each school that made up 30%.

The sample size for the study consists of one hundred (100) teachers from four schools of the two selected wards in Demsa Local Government. However, only 94 teachers returned analyzable questionnaire. Self-developed reliable validated questionnaire using Cronbach Alpha ($r = 0.88$) was the instrument used for data collection. Two hypotheses were formulated and one research question answered. Data analysis was carried out using percentages, frequency counts, mean, standard deviation, chi-square for hypotheses 1, and acceptance at 0.05 alpha level. Pearson Correlation for hypothesis 2 and acceptance was at 0.01 alpha level. Research question was answered using mean and percentages.

Table 1:
Demographic data of the participants

Variables	Frequency	Percentages (%)
Age of participants		
20-30years	16	17
31-40years	43	46
41-50	27	27
51 and Above	8	10
Total	94	100
Gender		
Male	31	33
Female	63	67
Total	94	100
Religion		
Christianity	60	64
Islam	34	36
Total	94	100
Years of experience		
1-5	20	21
5-10	21	22
11-15	23	24
16-20	20	21
20 and Above	10	12
Total	94	100
Level of Education		
Masters	18	19
PGD	10	11
Bachelors	41	44
NCE	25	26
Total	94	100

Source: Field survey 2018

Results

Table 1 above shows that the number of the participants between the age group of 20-30 years was 16 (17%), 31-40 years was 43 (46%), 41-50 years was 27 (27%) and above 50 years was 8 (10%). Also, gender shows that 63 (67%) participants were females while 31 (33%) participants were males. Religion of the participants shows that 64% were practicing Christianity while 36% were Muslim. The working experience of the participants shows that 21% had 1-5 years working experience, 22% had 5-10 years working experience, 24% had 11-15 years working experience, 21% had 16-20 years working experience and 12% had 20 years and above working experience. The level of education of the participants shows that majority of them were graduates with first degree, PGD and masters totaling 76%.

Table 2:
Knowledge of Teachers on School Health Services

S/No	Statement	Responses		Mean (X)	Decision
		Yes	No		
1	Do you know what school health services entail?	73	21	3.55	Agreed
2	Do you have a school clinic?	92	2	3.00	Agreed
3	Do you have Health Personnel in your school clinic?	94	0	3.00	Agreed
4	Do you have a separate place for midday meal of your students?	0	94	3.00	Disagreed
5	Do you have screening programme for staff and students in your school?	63	31	2.50	Agreed
6	Do you have the necessary logistics to embark on screening programmes?	72	22	2.70	Agreed
7	Is there any flow of funds for the School Health Programme?	60	34	3.05	Agreed
Overall Mean				3.50	Accepted

Table 2 shows that the teachers responded positively to almost all the questions asked. Question 4 was markedly negatively answered by all the teachers. However, it is noteworthy that questions 5, 6 & 7 show that despite the apparent knowledge exhibited by teachers, a lot of attention for improvement is necessary in the points raised in these questions (5, 6 & 7).

Table 3:
Knowledge of school health services by teachers of Demsa LGA, Adamawa State.

	Value	df	Asymp. Sig. (2-tailed)
Pearson Chi-Square	294.24 ^a	6	.000
Likelihood Ratio	12.59	6	.000
Linear-by-Linear Association	6.74	1	.000
N of Valid cases	94		

a. 6cells (25.0%) have expected less than 5

From table 3 above, calculated chi-square value (X_{cal}) is 296.24 and table value (X_{tab}) is 12.59 at 0.05 level of significance with 6 degree of freedom (Pearson Chi-square = 294.24; df = 6; $p = 0.000 < 0.05$). Since $X_{cal} > X_{tab}$ at 0.05 level of significance, the null hypothesis which stated that there is no significant knowledge of school health services by teachers of Demsa LGA, Adamawa State is rejected and alternate hypothesis is accepted. This implies that there is significant knowledge of teachers on school health services.

Question: What are the practices of school health services by teachers in Kpasham and Mbula?

Table 4:

Practice of the School Health Services by Teachers in Kpasham and Mbula

S/N	Statement	SA	A	D	SD	Mean (X)	Decision
1.	My school provides items for maintenance of sanitary sites	30	21	23	20	3.00	Disagreed
2	My school ensures provision and maintenance of waste disposal sites	43	18	23	10	3.05	Agreed
3	My school ensures that safety and health promotion specification (lighting, ventilation, recreational grounds)	24	30	19	21	3.00	Disagreed
4	My school organizes environmental inspection and certification	22	22	30	20	2.75	Agreed
5	My school ensures the provision of portable water	41	32	10	11	3.75	Agreed
6	My school inspects school sports field and physical exercise equipment	35	14	21	24	3.00	Agreed
7.	My school organizes general hygiene inspection e.g. hair, nails, clothing, check skin for rashes, sores or dryness, and teeth hygiene	58	31	2	3	3.00	Disagreed
Overall Mean						2.70	Accepted

Table 4 shows that there was agreement of opinion among the participants in respect to items 1, 2, 3,4,5,6 and 7 in table 3 which sought the opinion of participants on the statements provided in the table. From the result, there are very cogent areas to pay attention to as reflected in numbers 1, 3 and 7; the responses indicate the need to improve the practice of school health services in the area.

Hypothesis 2 (H₀₂): There will be no significant difference in the practice of school health services in Kpasham and Mbula

Table 5:

Practice of school health services among teachers in Kpasham and Mbula schools

Wards	N	\bar{X}	SD	r-value	Sig. (2-tailed)
Kpasham	49	36.67	11.81	0.248	.000*
Mbula	45	41.63	8.35		

Correlation is sig. at 0.01 level (2-tailed)

In table 5 above, the Pearson's correlation "r" is found to be 0.248 ($p=.000 < 0.01$) which shows positive but low or moderate correlation exist between teachers in Kpasham and Mbula wards as regards school health services, hence the null hypothesis is rejected. Therefore, the alternate hypothesis that there is significant relationship between secondary school teachers in Kpasham and Mbula wards of Demsa Local Government Area as regards school health services existed. Mbula contributed a higher mean to the difference, indicating a better practice of school health services.

Discussion

Effective school health services help the health of school children by ensuring optimum health at all times so that they can attain their physical and intellectual potentials, as well as receive maximal moral and emotional benefits from health providers, teachers, and the school environment. Therefore, this study, examined the knowledge and practice of school health services among teachers in Demsa Local Government area of Adamawa state in Nigeria. The age of participants was selected from 20 years and above out of which the age groups of 31-40 had the highest percentage of participants. This age group being high shows that the teachers are matured people that their perception can be relied on.

Female participants were the highest participants in gender category. In religion, Christianity had the highest percentage of participants. This is so because Demsa LGA is in the southern part of Adamawa state which is dominated by Christians (Michael, 2018). The level of education shows that most of the participants had tertiary education (Bachelor's degree) and quite a good number had master's degree. This qualification status of the participants implies that they had a good education which should enhance their knowledge to be able to appreciate and report promptly the school health services practice in their various schools.

The first hypothesis which tested the knowledge of teachers on school health services shows that the teachers had significant knowledge on school health services ($p = 0.00 < 0.05$). This is an expected and reassuring discovery because with the high level of education of the teachers, it was expected that they should have knowledge of school health services, it is thus assumed that their educational level gave the positive knowledge observed in this study. It is reassuring because, teachers play a strategic role in the successful implementation of school health services. They are expected to be able to continue to demand for the ideals of school health services for their schools and practice effectively school health services. This study confirms the report in a similar study on school health programme carried out in Lagos State; there was a high level of awareness about School Health Programme among the respondents in the study (Adeniran and Ezeiru, 2016). It is noteworthy that all the teachers pointed out that there were no separate places for midday meals of their students. This is not good enough. Providing separate eating places for school children provides them with the opportunity to socialize with friends and to build relationships across the school community and teaches them to value and enjoy their lunchtime experience. Spaces created for children at midday meal time should be safe, welcoming and nurturing environment which is conducive to dining and learning. In short, the eating etiquette and experience should support a positive attitude towards food and education and demonstrate a whole school, whole child approach (Cohen et. al., 2016).

A research question was answered on the perception of the teachers on school health practice in their schools. From the finding in this study, the practice of school health services was not good enough, although some of the issues that bother on school health services appear well provided. This supports the finding of Chidiebere et al (2016) where they also reported the unsatisfactory school health services situation in Nnewi in Nigeria. In this particular study, there are very cogent areas to pay attention to as reflected in numbers 1, 3 and 7 (table 4). The responses indicate the need for urgent action to improve the school health services in the area. In a situation where wastes are not taken care of adequately, there is no sanitary site or maintenance of the available ones, the school environment will be unhygienic and predispose students and staff to infection. Diseases like diarrhoea, cholera and other infectious diseases will abound in such schools. The government as a matter of urgency must see to the provision of adequate sanitary facilities for all schools in general and in particular for that locality. This is of utmost importance for the students to learn properly in school, prevent increase morbidity and mortality among students. Studies in the past have reported that there is a positive association between a healthy school environment and academic performance of students; this has also been confirmed globally (Adedokun, Osungbade and Obembe 2014; Kolawole, 2015; Adeniran and Ezeiru, 2016).

The second hypothesis (H_{02}) stated that there will be no significant difference in the practice of school health services in Kpasham and Mbula. The analysis using Pearson correlation showed that there was a significant difference in the practice of school health services between the two wards. From the mean Mbula contributed a higher score 41.63, while Kpasham contributed a mean of 36.67. With the higher mean, it was showed that Mbula practiced school health services better than Kpasham. The Pearson's coefficient of correlation "r" is found to be 0.248 ($p=.000 < 0.01$) which shows that a positive but moderate correlation exist between the practice of school health services by teachers in Kpasham and Mbula wards. This finding suggest that the two wards may need to come together to collaborate on how to move their schools forward on the issues of school health services.

Conclusion

School Health Services (SHS) are unsatisfactory in Demsa Local Government area of Adamawa State. Teachers appear to have adequate knowledge of SHS but practice is compromised due to inadequate provision of amenities and funding. It is therefore necessary for all stakeholders of schools in Adamawa state in general and Demsa LGA in particular (Teachers, health workers, parents, government) to collaborate and provide the materials and manpower needed to achieve effective SHS in the area. Also, there is a need to motivate and strengthen teachers' involvement in SHS in order to optimize the health of school children in the locality. Better remuneration and training may be employed to get teachers to be more involved in the effective implementation of SHS.

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