Evaluation of School Health Services in Nomadic Primary Schools in Southwestern Nigeria

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Abstract

Schools health services are procedures which are established to appraise the health status of pupils and school personnel, counsel pupils, parents and others concerning appraisal findings, carry out follow-up services, provide emergency care of injuries and sudden illness, help prevent and control communicable diseases and encourage the correction of remedial defects. Previous studies have shown low levels of positive health attitude and practices, resulting in a high prevalence of malaria, tooth decay. Gastrointestinal and skin diseases. Therefore, this study evaluated school health services in nomadic primary schools in Southwestern Nigeria in order to identify areas needing improvement. The study employed descriptive survey research design. Total enumeration procedure was used to include all the 1,005 nomadic primary school teachers in Southwestern Nigeria. The instrument used for the study were observation checklist, Focus Group Discussion Guide, and questionnaire which was validated through the use of test-retest method with a reliability coefficient of 2.88. Five hypotheses were postulated and tested at 0.05 alpha level using Binomial test. Based on the result four hypotheses were accepted while one was not accepted as shown by the observed binomial proportion of respondents' responses to the statements on all the variable. The results showed that the following activities were not significantly carried out in Nomadic primary schools in Southwestern Nigeria: health appraisal (0.2895;<0.05); follow-up services (0.407; P<0.05); emergency care and first aid (0.3602; P<0.05). However, communicable diseases were significantly controlled in the school (0.6218; p<0.05). It was concluded that school health services was not given necessary attention in nomadic primary schools in Southwestern Nigeria. Hence, it was recommended that for a functional school health services, the stakeholders (Federal, State, Local Governments and the nomadic communities) should endeavour to put in place health appraisal, health guidance and counseling follow-up services and emergency care and first aid in nomadic primary schools in Southwestern Nigeria.

Keywords: *Evaluation, Nomadic, School health services, primary schools, Southwestern Nigeria.*

Introduction

School health services are those services provided in schools by health educator, nurses, physicians, dentist and other health related workers like guidance counselors and social workers to health appraise, promote and protect the health of pupils and that of the personnel.

Johnson (1991) observed that school health services are procedures established to: appraise the health status of pupils and school personnel, counsel pupils, parents and others concerning appraisal findings, carryout follow-up services, provide emergency care for injury or sudden illness, help prevent and control communicable diseases and encourage the correction of remedial defects.

School health services are designed to determine the physical and emotional status of pupils, to prevent diseases and to secure the cooperation of parents and pupils, for correcting defects and maintenance of health (Mshelia, 1999), in contributing to the concept of school health services, Akinbile (1998) stated that school health services contribute to those school activities directly concerned with the present health status of the school child. Nwana (1988) regretted that what is referred to as school health services in Nigeria may be described as a farce while Kane (1997) noted that although special clinics were established for the welfare of pre-school children, the same cannot be said of the health of school children. Negligence of the school health services can be attributed to the unfounded assumption by Nigerians that once a Nigerian child attains school age be becomes immune to diseases.

In Nigeria, Abiodum (1996) conducted a survey of 500 pupils aged between five and fifteen years in a small rural community and seventy five percent (75%) were found to suffer from mental morbidity, disturbances of emotional and conduct disorder constituted sixty seven percent (67%) of the total morbidity rate detected which made him to emphasize the need for a more functional school health services.

The most basic functional aspect of school health services is the health appraisal of pupils. According to Freeman (1999), health appraisal involves the continuous and close observation of the school child and the teacher, while Turner, Bandall and Smith (1990) viewed health appraisal of pupils' health as a means that ensures, professional advice to pupils and their families on personal health as well as advice to the school on the adaptation of the school programme to the needs of pupils. Health appraisal should include dental inspection, screening tests for vision, hearing and speech, medical examination, health history and teacher's observations.

According to Tahir (1997), the population of Nomads in Nigeria is 9.3 million and that, out of the estimated population of 9.3 million nomadic people in Nigeria, 3.1 million are children of school age. In the view of Mshelia (1999), these nomadic children of school age do not enjoy good health for a long period of time because of the prevalence of numerous communicable disease, they suffer from multiple infestations and infections. Consequently, the morbidity rate is high among them and the major causes according to him are communicable diseases resulting from poor environmental conditions. Malnutrition, injuries and lack of general health supervision were also implicated in the high morbidity rate. Mshelia (1999) further stated that if school health programmes in nomadic primary schools were vigorously pursued, the incidence of high morbidity rate among school pupils would have been minimized to the barest minimum.

From the foregoing, the present study is designed to evaluate the school health programme in nomadic primary schools in Southwestern Nigeria.

Statement of the Problem

The health of primary school pupils is a matter of universal concern as children are the most precious assets any nation can have as their well-being reflects the future of the nation. The school age is a period in which the child undergoes rapid physical and mental development and this calls for a functional school health programme if the overall development of the child is to be achieved.

Experts have revealed that nomadic primary school pupils at various times have suffered from communicable diseases, infections, injuries leading to death as a result of tetanus infection, dental caries, rashes, ill equipped first aid boxes for emergency care, reported cases of epidemics resulting from poor environmental conditions. Nomadic school pupils have not shown a high level of positive healthful practices and attitudes, which school health service is aimed to achieve.

Mshelia (1999) asserted that the life expectancy of nomadic children is low due to high death rates, as they do not enjoy good health for a long period of time because of the prevalence of numerous communicable diseases. But if school health programmes in nomadic primary schools are adequately provided for and vigorously pursued, absenteeism in schools as well as high morbidity rates among pupils of nomadic primary schools would be minimized if not completely eradicated. However, from the foregoing, this study is set to evaluate the school health services in nomadic primary schools in Southwestern Nigeria.

Hypotheses

The following hypotheses were tested at 0.05 level of significance:

1. Health appraisal is not significantly available for pupils in nomadic primary schools in Southwestern Nigeria.
2. Health guidance and counseling is not significantly available for pupils in nomadic primary schools in Southwestern Nigeria.
3. Follow-up services are not significantly available for pupils in nomadic primary schools in Southwestern Nigeria.
4. Emergency care and first aid is not significantly available for pupils in nomadic primary schools in Southwestern Nigeria.
5. Control of communicable diseases is not significantly carried out in nomadic primary schools in Southwestern Nigeria.

Significance of the Study

Since the establishment of the National Commission for Nomadic Education, available records show that the school health services component of the organization programme of activities has not been evaluated. It is envisaged therefore, that the outcome of this study will bring to light areas in the school health services in nomadic primary schools in Southwestern Nigeria that need intervention from the stakeholders (Federal, State, Local Government and Nomadic Communities) to improve on areas where there are lapses for a better school health services.

The outcome of the study would also serve as a source of reference material to people who may be interested in similar areas of study in future.

Methodology

The descriptive survey research design was used for this study. The use of this method was considered appropriate because of its merits, which suits a study of this nature. This study is designed to find out the current status of school health services in nomadic primary schools in Southwestern Nigeria. The researcher is not manipulating any available but simple studying the existing occurrences and the population is also spread across many locations (states) hence, the choice of descriptive survey research design.

A total sample of 1005 representing 100% of the total population of nomadic primary school teachers in Southwestern Nigeria was used for this study. Purposive sampling technique was used to get samples of parents and pupils. Purposive sampling according to Owie (1997) is the best since the subjects have been selected by laid down rules and regulations for a particular purpose. This is the case with the subjects in the study.

The researcher adopted total enumeration procedure to include all 1005 nomadic primary school teachers.

The instruments for this study were structured questionnaire, focus group discussion guide and observation checklist. The structured questionnaire was designed according to the hypotheses that were tested in this study. The questionnaire was in two sections, section A and B. Section A was on demographic data of the respondents while section B sought information on the variables selected for the study. The questionnaire was in close-ended form in line with the modified Likert scale technique of summated ratings. The responses were on a four point rating of Strongly Agreed (SA) Agreed (A), Disagreed (D), and Strongly Disagreed (SD). The four point modified Likert scale has been shown to be reliable and valid. This is because it enables the respondents to indicate the extent of agreement and disagreement.

For the qualitative aspect of this research, focus group discussion guide and observation checklist were used. The instruments (questionnaire, focus group discussion guide and observation guide) were validated by experts in the Department of Human Kinetics and Health Education, and Institute of Education, University of Ibadan for content, construct and face validity.

The corrected version of the questionnaire was administered to twenty nomadic primary school teachers in Edo State using test-retest method. The data collected were correlated to determine the reliability of the instrument using Pearson Product Moment Correlation (PPMC) in order to bring out the degree of relationship of the scores obtained. The reliability of the instrument was found to be 0.88.

The researcher and six trained research assistants who are the state coordinators of Nomadic Education Programme in Southwestern Nigeria that is, Ekiti, Lagos, Ogun, Ondo, Osun and Oyo States administered and collected the questionnaire.

For the focus group discussion, the researcher and research assistant who is a Fulani helped to gather necessary data from the parents and pupils of the nomadic primary schools in South Western Nigeria.

The completed questionnaire were collated, coded and analyzed using both descriptive an inferential statistics. Descriptive statistics of frequency counts and percentages were used to analyze section A of the questionnaire, which deals with the demographic characteristics of the respondents. The inferential statistics of Binomial test was used to test the hypotheses at 0.05 level of significance. The data collected during the focus group discussion, and the observation made were used to corroborate the results obtained.

Data Analysis and Discussion of Findings

Hypothesis 1: Health appraisal is not significantly available for pupils in nomadic primary schools in Southwestern Nigeria.

Table 1: Binomial test table showing the proportion of respondents who agreed or disagreed with items on health appraisal.

Summary Items	Agreed	Disagreed	Test prop.	Observed prop.	2-tailed prob.	Comment
Health Appraisal Items	312 (31.0%)	693 (69.0%)	0.5000	0.3105	0.0000	Negatively Significant

Table 1 showed that 312(31.0%) of the respondents agreed that health appraisal was available for pupils in nomadic primary schools in Southwestern Nigeria, while 694(69.0%) of the respondents disagreed that health appraisal was available for pupils in nomadic primary schools in Southwestern Nigeria. Through the observation carried out in nomadic schools it was discovered that out of the 205 nomadic schools in Southwestern Nigeria, 55(26.8%) provided health appraisal for pupils while 150(73.2%) did not provide health appraisal for pupils.

Table 1 above also presented responses to health appraisal items computed with binomial test. The results show that observed proportion of 0.3105 for those who agreed with items on availability of health appraisal for nomadic primary school pupils is significantly lower than those who disagreed with the items on health appraisal availability at the 5% level (P=0.0000<0.05). Therefore, the hypothesis, which stated that health appraisal is not significantly available for pupils in nomadic primary schools in Southwestern Nigeria is accepted and the researcher concluded that health appraisal was not significantly available for pupils in nomadic primary schools in Southwestern Nigeria.

The focus group discussion revealed that pupils were not tested for vision, hearing, height and weight and no dental inspection was carried out among the pupils as well.

Also Maduagwu (1995) found out that health appraisal of students' health was not adequately carried out in secondary schools in Anambra State. It was only six percent (6%) of the respondents that indicated that health appraisal was carried out in their schools. The result of this finding is in line with the findings of Nwana (1988) who stated that health appraisal services were not provided in the majority of primary schools she investigated and where it was available, classroom teachers did it.

Williams and Jellife (1982) opposed the idea of modeling school services in poor countries after European and North American practices with prime emphasis on routine medical examinations, which with limited staff and inadequate facilities at referral centers, usually degenerate into an endless and almost pointless routine of inspection with no possibility of correcting the large number of abnormalities discovered.

Hypothesis 2: Health guidance and counselling is not significantly available for pupils in nomadic primary schools in Southwestern Nigeria.

Table 2: Binomial test table showing the proportion of respondents who agreed or disagreed with items on health guidance and counseling.

Summary Items	Agreed	Disagreed	Test prop.	Observed prop.	2-tailed prob.	Comment
Health Guidance and Counseling items	291 (29.0%)	714 (71.0%)	0.5000	0.2895	0.0000	Negatively S ignificant

Table 2 showed that 291(29.0%) of the respondents agreed that health guidance and counseling were available for pupils in nomadic primary schools in Southwestern Nigeria, while 714(71.0%) of the respondents disagreed that health guidance and counseling were available for pupils in nomadic primary schools in Southwestern Nigeria. Through the observation carried out in nomadic schools, it was discovered that out of the 205 nomadic schools in Southwestern Nigeria. 47(22.9%)

provided health guidance and counseling for pupils while 158(77.1%) did not provide health guidance and counseling for pupils.

Table 2 above also presented responses to health guidance and counseling items computed with binomial test. The result show that observed binomial proportion of 0.2895 for those who agreed with the items on availability of health guidance and counseling is significantly lower than those who disagreed with the items on health guidance and counseling availability at the 5% level (P=0.0000<0.05). Therefore, the hypothesis which stated that health guidance and counseling is not significantly available for pupils in nomadic primary schools in Southwestern Nigeria is accepted and the researcher concluded that health guidance and counseling is not significantly available for pupils in Nomadic primary schools in Southwestern in Nigeria.

The above findings are in line with the findings of Wilson (1993) who stated that in many Nigerian primary schools health guidance and counseling is absent. Speaking further, he stated that guidance and counseling is the procedure by which nurses, teachers, physicians and guidance counselor interpret to pupils and parents, the nature and significance of a health problem and aid them in formulating a plan of action which will lead to the solution of the problem.

The above findings are in contrast with the findings of Maduagwu (1995) who found out that guidance and counseling services were adequately carried out among pupils in the schools he investigated in Anambra State.

Through the focus group discussion it was revealed by the pupils that, they were not being counseled concerning their health.

Hypothesis 3: Follow-up services are not significantly available for pupils in nomadic primary schools in Southwestern Nigeria.

Table 3: Binomial test table showing the proportion of respondents who agreed or disagreed with items on follow-up services.

Summary Items	Agreed	Disagreed	Test prop.	Observed prop.	2-tailed prob.	Comment
Follow-up Services items	409 (40.7%)	596 (59.3%)	0.5000	0.407	.0000	Negatively significant

Table 3 revealed that 409(40.7%) of the respondents agreed that follow-up services were available for pupils in nomadic primary schools in Southwestern Nigeria, while 596(59.3%) of the respondents disagreed that follow-up services were available for pupils in nomadic schools in Southwestern Nigeria. Through the observation carried out in nomadic schools, it was discovered that out of the 205 nomadic schools in Southwestern Nigeria, 92(44.9%) provided follow-up services for pupils while 113(55.1%) did not provide follow-up services for pupils.

Table 3 above also presents responses to follow-up services items computed with binomial test. The result showed that an observed proportion of 0.407 for those who agreed with items on availability of follow-up services in significantly lower than those who disagreed with the items on follow-up services availability at the 5% level (P=0.000<0.05). Therefore, the hypothesis which stated that, follow-up services are not significantly available for pupils in nomadic primary schools in Southwestern Nigeria is accepted and the researcher concluded that follow-up services were unavailable in nomadic primary schools in Southwestern Nigeria.

The result is in contract with the findings of Maduagwu (1995) in a research he conducted in Anambra State Secondary Schools, which revealed that follow-up services were adequately carried out among the pupils.

Also Arunsi (1997) in a study conducted in Lagos Primary Schools found out that nurses and teachers held meetings to discuss the health of pupils and that meetings sometimes included the parents of pupils. The schools health nurses visited very sick pupils at home and the teachers were informed when the pupils had recovered enough to resume school. A good flow of information existed between the school, the clinic and the pupil's home. The nurses and teachers met with parents on the health of their children.

The focus group discussion carried out in nomadic communities revealed that there were no follow-up services in nomadic schools. Majority of the parents also revealed that there were no follow-up services in nomadic primary schools.

Brooks and Brooks (1999) identified follow-up services as one of the activities carried out in the interest of those children for whom the school has a record of physical abnormalities, according to them, follow-up services are not being given the necessary attention in schools.

Hypothesis 4: Emergency care and first aid is not significantly available for pupils in nomadic primary schools in Southwestern Nigeria.

Table 4: Binomial test table showing the proportion of respondent who agreed or disagreed with items on emergency care and first aid.

	Summary Items	Agreed	Disagreed	Test prop.	Observed prop.	2-tailed prob.	Comment
	Emergency care and First Aid items	362 (36.0%)	643 (64.0%)	0.5000	0.3602	0.0000	Negatively Significant

Table 4 above showed that 362(36.0%) of the respondents agreed that emergency care and first aid were available for pupils in nomadic primary schools in Southwestern Nigeria, while 643(64.0%) of the respondents disagreed that emergency care and first aid were available for pupils in nomadic primary schools in Southwestern Nigeria. Through the observation carried out in nomadic schools it was discovered that out of the 205 nomadic schools in Southwestern Nigeria, 77(37.6%) provided emergency care and first aid for pupils while 128(62.4%) did not provide emergency care and first aid for pupils.

Table 4 above also presented responses to emergency care and first aid items computed with the binomial test. The results showed that an observed proportion of 0.3602 for those who agreed with items on availability of emergency care and first aid is significantly lower that those who disagreed with the items on emergency care and first aid availability at the 5% level ($P=0.0000<0.05$). Therefore, the hypothesis, which stated that emergency care and first aid is not significantly available for pupils in nomadic schools in Southwestern, is accepted and the researcher concluded that emergency care and first aid was not significantly available for pupils in nomadic primary schools in Southwestern Nigeria.

The above findings are in contrast with the findings of Maduagwu (1995) who found out that emergency services were adequately provided in the school he investigated. Falawiyo (1988) and Nwana (1988) stated that first aid is the commonest emergency care provided in the schools.

However, in nomadic schools this is not the situation, first aid and emergency services were not available because of the fact that, there were no well equipped first aid boxes and persons trained in the use of first aid were not available in the schools. Cases of serious injuries were immediately referred to the hospital for treatment.

The result of these findings is in contrast with the findings of Arunsi (1997) in a research she conducted in Lagos State primary schools. She said that pupils affirmed that emergency care and first aid services were provided for pupils while the parents indicated that the health personnel gave prompt treatment in emergency situations.

The findings are in line with the observation carried out in the nomadic schools, which revealed that although first aid boxes were available in some of the schools, these boxes were not well stocked and besides, person(s) trained to carry out first aid in case of injuries was (were) not available in the schools.

Hypothesis 5: Control of communicable diseases is not significantly carried out in nomadic primary schools in Southwestern Nigeria.

Table 5: Binomial test table showing the proportion of respondents who agreed or disagreed with communicable diseases control items.

Summary Items	Agreed	Disagreed	Test prop.	Observed prop.	2-tailed prob.	Comment
Communicable diseases control items	625 (62.0%)	380 (38.0%)	0.5000	0.6218	0.0000	Positively Significant

Table 5 showed that 625(62.0%) of the respondents agreed that communicable diseases were controlled in nomadic primary schools in Southwestern Nigeria, while 380(38.0%) of the respondents disagreed that communicable diseases were controlled in nomadic primary schools in Southwestern Nigeria.

Through the observation carried out in nomadic schools, it was discovered that out of the 205 nomadic schools in Southwestern Nigeria, 132(64.4%) had experienced control of communicable diseases while 73(35.6%) had not experienced control of communicable diseases.

Table 5 above also presents responses to communicable disease control items computed with binomial test. The results showed that an observed proportion of 0.6218 for those who agreed with items on communicable diseases control in nomadic primary schools in Southwestern Nigeria is significantly higher than those who disagreed with the items on communicable disease control at the 5% level ($P=0.0000<0.05$). Therefore, the hypothesis which stated that, control of communicable disease is not significantly carried out in nomadic primary schools in Southwestern Nigeria is not accepted and the researcher concluded that communicable diseases were significantly controlled in nomadic primary schools in Southwestern Nigeria. Crosson (1995) in a study he conducted in some selected public schools found out that communicable diseases outbreak in the schools investigated were controlled by the Local Health Department. The application of appropriate hygiene, sanitation and environmental control procedure are essential for controlling the spread of communicable diseases.

Foutes (1996) also stated that a high incidence of scabies infection among school children in a research he conducted was adequately controlled. While Arunsi (1997) in a research she conducted

in Lagos primary schools found out that nurses took measures to prevent the spread of communicable diseases among pupils and their parents in the school clinics. The nurses also co-operated with teachers on immunization programmes for the pupils in times of outbreak of diseases. Infected pupils and staff were isolated, and the school environment was fumigated when an epidemic had been brought under control. The efforts to control communicable diseases in nomadic schools are predicated on the recognition of the fact that the school environment was very conducive to the transfer of disease among the children and staff.

Also school age children possessed low levels of immunity therefore, conscious efforts were made to protect them from communicable diseases. In contrast are the findings of Maduagwu (1995) in a research conducted in Anambra State secondary schools were communicable diseases where not adequately controlled. Focus group discussion with the parents revealed that, in the community, outbreak of communicable diseases were usually reported to the local health centres and most times such cases were taken care of.

Recommendations

Based on the findings of this research work, there is the need for urgent attention to be given to school health services in nomadic primary schools in Southwestern Nigeria. These recommendations will have little effect without the strong support of planners, policy makers, administrators at the national, state, local government and community levels.

1. The Government should ensure that before a child is enrolled in a school, medical examination of such a child is carried out and even while in school, periodic and routine medical examination should be done on the pupils. Such examinations should include visual screening, hearing and auditory acuity screening and dental inspection. Through this, early detection of medical problems could be achieved which will lead to early correction or treatment of such defect.
2. Health guidance and counseling should be given priority in nomadic schools by the government. To this end, the government should employ qualified health teachers, nurses and guidance counselors who will be able to interpret to pupils and parents the nature of a health problem, and also aid them in finding solutions to such problems.
3. The Federal, State, Local Government and the community should collaborate among themselves and provide well stocked first aid boxes for nomadic schools to enhance emergency care of injuries before taking the victim to the hospital if need be.
4. The issue of communicable disease control in nomadic schools and the communities should not be taken with levity by the government, the communities and the schools considering the kind of environment in which the nomads live, cases of outbreak of diseases should be promptly reported to the appropriate quarters for immediate action. Parents and teachers should make sure that pupils suspected of having communicable diseases are isolated from the class or taken to the hospital for treatment. The teacher should make sure that until the child is declared fit medically; he or she should not be allowed to return to the class. This is to prevent possible infection of others.

Conclusion

Based on the research findings, it was concluded that nomadic primary schools in Southwestern Nigeria have no functional school health services. This is so because out of the five variables tested

only control of communicable diseases was significantly indicated. Health appraisal, health guidance and counseling, follow-up services, emergency care and first aid were significantly unavailable in the schools.

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