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Evaluation of the performance of primary schools in Oredo Local Government Area of Edo State in the school health programme

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Abstract

Background: With the advent of a national policy on the School Health Programme (SHP) in 2006, there is the need to evaluate the current status of the programme in primary schools to determine how well they are doing.
Objective: To evaluate some socio-economic determinants in the performances of the school health programme in primary schools in Oredo Local Government Areas of Edo State.
Method: A cross-sectional survey was carried out among primary schools. Sixty-two schools, comprising 37 public and 25 private schools were enrolled. A modified questionnaire was used as the instrument to assess performance. Aggregate scores were determined for various components of SHP and the scores compared against pre-determined acceptable limits defining presence or absence of adequate SHP.
Results: Based on the minimum acceptable aggregate score of 77, 64.8% of primary schools were adjudged to have adequate SHP. Public schools had a mean score of 57.05 ± 11.19 which was significantly lower than that of private schools of 91.04 ± 11.42 ($t = 11.64$, $p = 0.001$). There was however no significant difference in the aggregate scores between the urban and rural schools.
Conclusion: The general state of the SHP in Oredo LGA, Nigeria is poor. This state of decay is more pronounced in public schools. Hence increased emphasis should be placed on the school health programme by the state and community.

Keywords: School Health Programme, Components, National Policy, Primary Schools, Oredo LGA, Nigeria.

Introduction

The School Health Programme (SHP) entails both educational and health programmes directed to meet the health needs of pupils and staff, and laying of a good foundation for their future with the support of the home, community and the government.[1] The school age coincides with the period during which the child undergoes rapid physical and mental development. During this period, the child is particularly vulnerable to several morbidities,[2-9] including malnutrition, infectious diseases, intestinal parasites, diseases of the skin, eye, ear and dental caries. To benefit maximally from the educational system, children need to be physically, mentally and emotionally healthy.[7] School children are amendable to new ideas and the school offers a unique avenue for imparting basic knowledge on diseases and their control. The school thus guarantees one of the surest ways of ensuring adequate health education and a means of establishing a firm foundation for adopting healthy habits by the future adult population.[10]

In recognition of the needs of the school age children, SHP has evolved all over the world. The concept (of SHP) stems from the realization that without proper health, quality education is not possible.[1]The school can also play a role in identifying children with emotional, behavioural and mental health problems and ensuring they get proper assessment and appropriate intervention.[1] Healthy emotional and social development, including a sense of self-worth, are critical to the success of children within and outside the classroom.

The last two decades witnessed a marked paradigm shift in the educational development in Nigeria. Principal among these changes are the increasing role of the private sector and the concentration of schools in urban centres as against rural settings occasioned by increased rural-urban migration. How these social factors impact on the performances of the SHP remain unclear. This study seeks to evaluate the impact of such factors on the development of SHP in Nigeria as epitomised by what occur in Oredo LGA of Edo State.

Oredo LGA is located within the state capital. It is cosmopolitan, having both urban and rural representations and could be said to be a prototype LGA suitable for the study. It is envisaged that the outcome of the study, could also provide the basis for future assessments, interventions and improvements on the School Health programme.

Materials and methods

The cross-sectional study was carried out in Oredo Local Government Area (LGA) of Edo State. Oredo LGA is one of the 18 LGAs in Edo State. It is made up of both urban and rural areas. The urban areas make up 98.0% of the total land area. There were 121 registered public and 86 registered private primary schools in the LGA. Of the registered public primary schools, 10 were located in the rural area. There was no private primary school in the rural community.

Thirty percent of the schools were taken as representative of the entire population.[12,13] Sixty-two schools, comprising 37 public and 25 private schools were enrolled in the study. Nonetheless, all 10 public primary schools in the rural political ward were recruited to make for adequate representation of rural schools. A modified questionnaire[14] was used as the instrument for the study. It was made up of structured and open ended questions. The questionnaire was designed to reflect the issues inherent in the five components of the SHP. It was pre-tested in two schools (one public and one private) outside the study locale in Egor LGA also located in the State capital Benin city.

Ethical clearance for the study was obtained from the Research and Ethics Committee of the University of Benin Teaching Hospital. Permission to access the schools used for this study was obtained from the Oredo Local Government Education Authority and the head teachers of each school. Only registered primary schools (either public or private) whose head teachers consented to the study were recruited.

The modified and validated School Health Questionnaire[14] was completed for each school by direct interview and inspection by the investigator. The questionnaire had six sections viz: Section 'A' which assessed school administrative data such as name, date of establishment, population, age of the school and headship etc, Section 'B' assessed school health care services (SHS) in the following areas (i) personnel, (ii) health appraisals, (iii) treatment facilities in the school such as first aid boxes, sick bay etc, (iv) care of emergency illness/injury Section 'C' assessed quality of school health instruction (SHI) with emphasis on health education curriculum, teaching methods and time alloteed among others. Section 'D' assessed the degree of healthful school environment (SHE) with emphasis on water supply, refuse and sewage disposal systems, building structure etc. Section 'E' assessed the school feeding services (SFS) while section 'F' assessed the school, home and community relationship (SHCR). The head teachers of the schools assisted with the completion of the section on biodata.

SHS, SHI, SHE, SFS and SHCR were each assigned maximum scores of 25, 45, 67, 12, 10 and minimum scores of 12, 21, 33, 6 and 5 respectively. Following data translation that allowed for semi quantification of responses, gross maximum score of 159 and a gross acceptable minimum score of 77 as determined by Akani and Nkanginieme[14] for the SHP were attainable. For instance, adequate knowledge of SHP by the head teacher was assessed as good/fair definition of SHP plus ability to list three to five components of SH. This was assigned a score of one. Poor/no definition plus inability to list more than two components was considered inadequate knowledge and scored zero.

A school was considered to have an effective or adequate SHP if the aggregate scores obtained was $\geq$ 77 and or $\geq$ 50% of the aggregate scores in three of five components particularly SHS, $\geq$ 12; SHI $\geq$ 21; SHE $\geq$ 33 .Schools that failed to meet either of the criteria were considered to have ineffective or inadequate SHP.

Data analysis

Data collected were entered into Microsoft Excel spread sheet and cross checked for accuracy. The data were sorted, based on location (rural/urban), ownership (public/private) and age (<10 years or $\geq$ 10 years). The sorted data were transported unto Statistical Package for Social Sciences (SPSS) version 11 for further analysis.

The student t-test was used for comparison of means while Chi-square test or Fisher's exact test (where appropriate), were used for comparison of frequencies in contingency tables, as well as the difference between proportions. A p-value of <0.05 was interpreted as significant.

Results

Sixty-two primary schools were studied. These consisted of 25 (40.3%) private and 37 (59.7%) public schools. Ten (16.1%) of the 62 schools studied were located in the rural area. The population of private and public schools studied were comparable ($t = 1.44$, $p = 0.161$). However, there was a significant difference in school population between urban and rural schools ($t = 25.57$, $p = 0.020$).

The mean number of teachers in public schools of 15.60 ± 8.90 was also comparable with 14.60 ± 11.90 obtained in private schools ($t = 0.38$, $p = 0.706$). Nonetheless, there was a significant difference in the staff population between urban and rural schools. Whereas mean number of staff in urban schools was 17.00 ± 10.00, it was 6.20 ± 2.40 in rural schools ($t = 8.48$, $p = 0.002$). None of the 62 schools had a teacher designated specifically to head the SHP. Qualification of head teachers is as shown on Table I. Private schools had a significantly higher number of head teachers with university degrees ($X^2 = 6.27$, $p = 0.012$) when compared with public schools that had more head teachers with N.C.E. In terms of location, there was no significant difference in head teachers' qualification (Fisher's exact test = 0.472).

Awareness and Knowledge of SHP

The number of head teachers who had heard of SHP in private schools 17/25 (68.0%) was again comparable with 28/37 (78.7%) observed in public schools (X^2 = 0.38, p = 0.535). In the rural area, eight (80.0%) of the 10 head teachers had heard of SHP while 38 (73.1%) of the 52 head teachers in urban area had heard of it. There was also no significant difference in the level of awareness of head teachers in rural and urban schools (Fisher's exact test = 1.000). However, five (13.5%) head teachers from public and four (16.0%) from private schools were able to list one or two components each. There was no significant difference between the knowledge of SHP among head teachers in public and private schools (Fisher exact test = 1.000). There were however significantly more head teachers from urban than rural schools who had knowledge of SHP (Fisher's exact test = 0.001).

Table I: Qualification of head teachers in rural and urban schools

Qualification	Schools		
	Public n (%)	**Private n (%)**	**Total n (%)**
University degree	2 (20.0)	20 (38.5)	22 (35.5)
Others (N.C.E.)	8 (80.0)	32 (61.5)	40 (64.5)
Total	**10 (100.0)**	**52 (100.0)**	**62(100.0)**

Fisher's exact test = 0.472

Table II: Proportions of schools with health personnel

Personnel	Schools		
	Public (n=37) N (%)	**Private (n=25) N (%)**	**Total (N=62) N (%)**
Yes	3(8.1)	12(48.0)	15(24.2)
No	34(91.9)	13(52.0)	47(75.8)
Total	**37(100.0)**	**25(100.0)**	**52(100.0)**

X^2 = 10.86, p = < 0.001

Table III: Summary score of sub-components of health care services provided by public and private schools

Service	Schools				t	p value
	Public (n = 37)		**Private (n = 25)**			
	Mean	**± SD**	**Mean**	**± SD**		
Personnel*	0.19	0.70	1.20	1.38	3.80	<0.001
Health appraisal	1.16	0.55	1.80	1.16	2.91	0.005
Treatment facilities	1.46	0.96	3.24	1.27	6.28	<0.001
Care of emergencies	2.76	1.21	3.72	1.24	3.03	0.004

*The presence of health personnel in few schools resulted in outliers.

Table IV: Summary score of sub-components of health care services provided by rural and urban schools.

Service	Schools				t	p value
	Rural (n = 10)		Urban (n = 52)			
	Mean	± SD	Mean	± SD		
Personnel*	0.00	0.00	0.71	1.21	-	-
Health appraisal	1.70	0.68	1.37	0.93	1.07	0.291
Treatment facilities	1.30	1.06	2.35	1.40	2.25	0.029
Care of emergencies	3.20	1.23	3.14	1.33	0.13	0.895

*There were no personnel in the rural schools.

Table V: Source of water supply in public versus private schools

Source of Water Supply	Schools		Total n (%)	Fisher's	P-Value
	Public n (%)	Private n (%)			
Potable	22 (84.6)	23 (92.0)	45 (88.2)	0.668	NS
Non-potable	4 (15.4)	2 (8.0)	6 (11.8)		
Sewage Disposal				χ^2	
WC	4 (10.8)	23 (92.0)	27 (43.5)	40.00	0.001
None	16 (61.5)	1 (4.0)	17 (27.4)		

NS = Not Significant.

Table VI: Summary scores of the components of shp: public versus private schools

Component (acceptable range)	Schools				t	p value
	Public Schools n = 37		Private Schools n = 25			
	Mean	±SD	Mean	±SD		
SHS (12 – 25)	5.54	2.26	9.96	3.80	5.74	<0.001
SHI (21 – 45)	23.51	4.03	27.52	3.61	4.01	<0.001
SHE (33 – 67)	21.76	7.55	45.29	6.91	12.45	<0.001
SFS (6 – 12)	1.97	1.42	2.29	1.42	0.87	0.388
SHCR (5 – 10)	4.16	1.72	5.50	1.19	3.38	0.001
AS (77 – 159)	57.05	11.19	91.04	11.42	11.64	<0.001

SHS = School Health Services
SHI = School Health Instruction
SHE = School Health Environment
SHCR = School, Home, Community Relationship
AS = Aggregate Score
n = Number of Schools

Table VII: Summary scores of the components of SHP: rural versus urban schools

Component (acceptable range)	Schools				t	p value
	Rural n = 10		Urban n = 52			
	Mean	±SD	Mean	±SD		
SHS (12 – 25)	6.20	2.35	7.54	3.85	1.06	0.294
SHI (21 – 45)	27.0	3.30	24.77	4.42	1.51	0.136
SHE (33 – 67)	25.2	7.8	32.06	14.00	1.50	0.139
SFS (6 – 12)	2.0	0.01	2.76	0.90	2.51	0.015
SHCR (5 – 10)	6.0	1.73	4.50	1.45	2.75	0.008
AS (77 – 159)	64.0	10.2	71.5	20.91	1.10	0.274

SHS = School Health Services
SHI = School Health Instruction
SHE = School Health Environment
SHCR = School, Home, Community Relationship
AS = Aggregate Score

Table XIII: Relationship between age of schools and the status of some components of SHP

SHP Components	Ages of Schools (Years)				X^2	p
	0 – 10 n (%)	11 - 20 n (%)	21 – 30 n (%)	>30 n (%)		
SHS	6(60.0)	1(10.0)	2(20.0)	1(10.0)	8.61	0.035
SHI	16(30.8)	8(15.3)	8(15.3)	20(38.5)	7.71	0.040
SHE	14(53.8)	5(19.2)	6(23.1)	1(3.8)	36.10	<0.001
SHCR	11(37.9)	4(13.8)	4(13.8)	10(34.5)	4.00	0.659
AS	12(50.0)	6(25.0)	5(20.8)	1(4.1)	28.83	<0.001

SHS = School Health Services
SHI = School Health Instruction
SHE = School Health Environment
SHCR = School, Home, Community Relationship
AS = Aggregate Score
n = Number of Schools that attained the minimum acceptable score

Practice of the components of SHP
School Health Service

Table II shows that fifteen (24.2%) of the 62 schools studied, had one form of health personnel or the other. Significantly more public schools {34 (91.9%)}than private ones {13 (52.0%)}had no health personnel on their staff list ($X^2 = 10.86$; $p = < 0.001$). Fifty-one (82.3%) of the 62 schools studied had First Aid boxes. These comprised 28/37 (75.7%) public and 23/25 (92.0%) private schools. There was no difference in the number of schools with First Aid boxes between the urban and rural areas. Possession of First Aid box was not influenced by school ownership and geographical location i.e. whether urban or rural. In terms of contents

of first aid boxes, there was no significant difference between urban and rural as well as between public and private schools. A sick bay was present in only 9/25 (36.0%) private schools, and none in public schools. No rural school had a sick bay. Only six (24.0%) private schools had school buses. No public or rural school had a school bus. Forty-seven (75.8%; 10 rural 37 urban) of the 62 schools use outside health facilities for care of emergencies. The mean score for private schools of 9.96 $\pm$ 3.30 was significantly higher than scores from public schools of 5.54 $\pm$ 2.26 ($t = 5.74$, $p < 0.001$). However, the mean $\pm$ SD score for rural schools of 6.20 $\pm$ 2.35, was comparable with that for urban schools of 7.54 $\pm$ 3.85 ($t = 1.06$, $p = 0.294$). One (2.7%) of the 37 public schools and $^{9}/_{25}$ (36.0%) private schools had the minimum acceptable score of 12 for a functional SHS. There was a significant difference in such scores between public and private schools (Fisher exact test = < 0.001), suggesting that public schools were less likely to have adequate SHS. In the rural area, no school attained the minimum acceptable score.

School Health Instructions

All 62 schools gave health instructions to pupils, and also had plans for improving on health instructions. There was no significant difference in the periods per week allotted to health instructions between private and public schools. Similarly, the allotted period(s) per week devoted to health instructions was uninfluenced by rural/urban location of the schools. With regards to health-related visitations, eight (12.9%) schools had visitations from medical specialists/voluntary groups. There was no difference between public and private schools in this regard (Fisher's exact test = 0.451). In the urban area, only seven (13.5%) schools had been visited as against one (10.0%) rural school. There was however no statistically significant difference between urban and rural settings in terms of health visitation (Fisher's exact test = 1.000). Only two (5.4%) public schools had ever gone on a health trip outside the school, as against 16/25 (64.0%) private schools. Private schools had organised significantly more health trips than their public counterparts (Fisher's exact test = <0.001). No rural school had ever gone on health-related and safety trips. Seven (13.5%; 3 private and 4 public) urban schools had sent teachers on health related in-service training. Again no rural school had ever sent teachers on such in-service training.

Summary of Scores for School Health Instructions.

With the minimum acceptable score of 21, public schools had a mean $\pm$ SD score of 23.50 $\pm$ 4.03, (range 16-31), while private schools had a significantly higher score of 27.52 $\pm$ 3.61; range 20 -34 ($t = 5.74$, $p < 0.001$). Urban schools had a mean SHI score of 24.77 $\pm$ 4.42, (range 6-34), while the corresponding mean score was 27.00 $\pm$ 3.30 (range 22-31) for the rural located schools. There was no significant difference in health instruction-related score between rural and urban schools ($t = 1.51$, $p = 0.136$). Fifty-two (83.9%) schools had the minimum acceptable score of 21 and were thus considered to have adequate SHI. Significantly more private schools (96%) rather than public schools (76.0%) met the minimum score (Fisher's exact test = 0.040). In this regard, all 10 rural schools had an adequate SHI while 42 (90.8%) urban schools did. There was however no significant association between the location (rural versus urban) of schools and the adequacy of SHI.

School Health Environment

Water Supply

Portable water supply was available in 51 (85.5%) schools. Eleven (14.5%) schools had no form of water supply. Access to potable water supply was comparable in public and private schools (Fisher's exact test = 0.668). The location of the source of water supply was within the school in 21 (41.2%) of the 51 schools with a viable water supply.

Fifty-two (83.9%) of the 62 schools, disposed refuse by uncontrolled open dumping/burning, {37 (100.0%) public and 15 (60.0%) private schools}. All schools in the rural area practiced this method, while 42 (80.8%) in the urban area did same. Nine (36.0%) private schools practiced controlled tipping while one (4.0%) had an incinerator.

Sewage Disposal System

Twenty-three (92.0%) of the 25 private schools had water closet (WC) type of sewage disposal, compared to 4 of 37 (10.8%) public schools. Seventeen (27.4%) schools (16, public and one private) did not have any form of sewage disposal. In such schools, the disposal of sewage was anywhere around the classroom and nearby bushes. Public schools were less likely to have toilet facilities ($X^2 = 40.00$, $p = 0.001$). No school in the rural area had pit-latrine.

Toilet: Pupil Ratio. Five (20.0%) of the private schools had acceptable toilet: pupil ratio of 1:30. Nine (36.0%) of the private schools had ratio of 1:60, while all four (10.8%) public schools with WC had ratio of 1:≥90.

Building Structure

Buildings were satisfactory in 36/62 (58.1%; 16 public and 20 private schools. Seven of the 10 (70.0%) with satisfactory structure were in rural areas as against 29/36 (55.8%) in urban setting. A school in the rural area had no building whatsoever. Significantly more satisfactory structures were found in private schools (Fisher's exact test = 0.005). There was however no significant difference between urban and rural schools in terms of structure of buildings (Fisher's exact test = 0.680).

Ventilation

Fifty-five (88.7%) schools (all private compared to 30/37 public and 46 urban compared to 9/10 rural) had adequate cross ventilation. Public schools were significantly less likely to have adequate ventilation. There was no significant difference in the adequacy of ventilation between urban and rural schools (Fisher's exact test = 1.000).

Sitting Comfort

The sitting comfort was adjudged adequate in all private and 22 (59.5%), public schools. In the urban area, 38/52 (73.1%) schools had comfortable sitting arrangements, while nine (90.0%) rural schools did. Fourteen (37.8%) of the schools, all public, had inadequate sitting comfort with some pupils sitting on the floor, or sharing chairs and having to write on top of their thighs. Significantly more private schools had adequate sitting comfort (Fisher exact test = 0.001). There was however no significant difference in the sitting comfort between urban and rural schools (Fisher's exact test = 0.427). All private schools, and 28/37 (75.7%) public schools had adequate sitting arrangements for teachers.

Safety Measures

Compared to 16 (43.2%) public schools with a fence, all private schools were securely fenced (Fisher's exact test = <0.001). Only one (10.0%) rural school had a fence, as against 40 (76.9%) urban schools that had fences (Fisher's exact test = < 0.001). There were no nuisance/health hazards in 18 (29.0%) schools; all of which were private schools. Public schools had significantly higher number of hazards, compared with private schools (Fisher's exact test = <0.001). Rural schools had comparable sets of hazards with urban schools (Fisher's exact test = 0.027).

Scores for School Health Environment (SHE)

Score range for SHE was 33-67. The mean score for private schools of 45.29 ± 6.91 (range 27-56) was significantly higher than that obtained for public schools of (21.76 ± 7.55 (range 6-40) ($t = 12.45$, $p < 0.001$). Mean score for urban schools of 32.06 ± 14.01, (range 10-56), was comparable to that for rural schools of 25.20 ± 7.80 (range 6-33). Twenty-four (96.0%) private and two (5.4%) public had the minimum acceptable score of 33. There was a significant difference in the mean SHE score between public and private schools ($t = 12.45$, $p < 0.001$). Only two rural (20.0%) schools had the minimum score in comparison with 24 (46.2%) schools in the urban area with minimum score.

Provision of one balanced meal a day and food handling practices

None of the 62 schools studied had provisions for at least a balanced diet/day for the pupils. This was seen in 18 (72.0%) private and 32 (86.5%) public schools. Only one (1.6%) public school screened her food vendor regularly.

Scores for School Feeding Services (SFS)

Attainable score range for SFS was 6-12. The mean score for public 1.97 ± 1.42, (range 0-

4), and private schools 2.24 ± 1.42, (range 0-4) as well as between urban (2.76 ± 0.90, range 0-4) and rural schools (2.00 ± 0.01, range 0-2) were comparable.

School, Home and Community Relationship (SHCR)

Home Visits by Teachers

Practice of home visit between private 43.6% and public schools (56.4%) were comparable. Similarly no difference was observed between rural (90.0%) and urban (88.5%) schools.

Presence of a Functional Parent Teachers Association (PTA)

Twenty-one (84.0%) of the 25 private schools, as against 24/37 (64.9%) public schools had functional PTA. Seven (70.0%) rural schools had functional PTA compared to 45(86.5%) urban schools that had similar association.

Scores for School, Home and Community Relationship (SHCR)

Score range for SHCR was 5-10. Private schools had a mean score of 5.50 ± 1.19 (range 0-8) while public schools had 4.16 ± 1.72 (range 0-8). There were significant differences in the mean score for SHCR between public and private schools ($p = 0.001$, $t = 3.38$) as well as between urban (4.58 ± 1.45; range 2-6) and rural schools (6.00 ± 1.66; range 0-8) ($t = 2.75$, $p = 0.008$). Ten (49.0%) of 25 private and $^{19}/_{37}$ (51.4%) public schools obtained the minimum acceptable score of five. Corresponding figures for rural and urban schools were six (66.0%) and 23(44.2%) respectively.

Summary of Aggregate Scores for SHP

Twenty two (88.0%) of the 25 private and $^{2}/_{37}$ (5.4%) public schools had adequate SHP. Public schools had a mean score of 57.05 ± 11.19, which was significantly lower than the corresponding score of 91.04 ± 11.42 for private schools ($t = 11.64$, $p = < 0.001$). Summary of scores for the various components of the SHP in all the categories of schools studied is as shown in Tables VI. In each of the SHP components assessed private schools performed better, as is the case with the aggregate scores. On the other hand, rural schools performed just as well as urban schools in all components except for the SFS and SHCR components, in which urban schools performed significantly better.

Relationship Between School Administrative Data and Status of SHP

There was a significant association between the age of the school and the status of SHP. Significantly more of the newer schools (0-10 years) had adequate SHP, compared to the older ones.

Discussion

In the present study, only 38.7% schools attained the minimum acceptable aggregate score. These consisted of two (5.4%) public and 22 (88.0%) private schools, and were thus considered to have adequate SHP. Only nine (36.0%) schools, all private, attained the minimum acceptable scores of 12 for SHS, 21 for SHI, and 33 for SHE. None of the schools with adequate SHP was located in the rural area. Only 2.7% of public, as against 36.0% of private schools attained the minimum acceptable score for School health services. As is the case for many of the components of SHP, the performance of private schools was significantly higher than that of public schools. The poor state of public schools has been a consistent finding from earlier studies.[15-22] The fact that most public schools were relatively old, coupled with the poor maintenance culture known to be associated with public institutions in Nigeria, could account for the observation. Besides, they also have more head teachers with sub-university certification and poor financial commitment from the government. In this regard, the fact that there was no difference between the rural and urban public schools underscores the common denomination of government's poor commitment to education. Considering that these children are the survivors of a very high under-five mortality rate[23], and are still predisposed to several health problems,[2-9,24,25] the poor state of the school health programme is least desirable. Urgent steps therefore need to be taken by all stakeholders to address the situation.

Health and safety trips were employed more commonly by private schools, as public

schools do not have school buses or the funds for transportation to sites of interest which would have otherwise been of educational benefit to the pupils. Poor funding from the state and the different socio-economic backgrounds of the children in the two settings may also be responsible for this observed difference.

The age of schools was found to have significantly influenced the performances of schools in the aspects of SHE, SHS and SHI. Schools that had been in existence for less than 10 years performed better than older schools. Most of these relatively new schools were privately owned. A school in the rural area was found to have completely dilapidated infrastructure, leaving the teachers without a building and the few remaining students under very harsh and unfriendly learning conditions. Poor environmental conditions have a wide range of health implications including the spread of communicable diseases, and suboptimal cognitive achievements. Only 5.4% of public schools had adequate SHE, using the attainment of the minimum acceptable score of 33 as the yardstick. This contrasted with the corresponding figure of 96.0% in private schools. This observation reflects deterioration when compared with Toma's finding of 15.0% of public schools that attained the minimum acceptable score.[21] The school health environment has been described by several authors[15-22] as being in a poor state, a situation that is confirmed by this report.

In this study, 88.7% of schools practiced home visits by teachers while 67.7% of schools had parents visiting schools for one reason or the other. This was equally practiced in public and private schools, as well as in both urban and rural schools. Parents/Teachers' Association (PTA) was functional in 72.6% of schools in this study, a finding that is lower than that contained in Ogaji's[22] study in Calabar LGA of Cross River State in 2006 where 83.3% of schools had functional PTA.

In the present study, the SHCR as a component of SHP was found to be comparable between private and public schools. Minimum acceptable score of five was attained by 46.8% of schools. This is an additional component to SHP with the enunciation of the national policy only in 2006. This could explain the paucity of earlier data on this aspect of SHP from previous studies. Of note was the fact that there was no significant difference between the state of the SHP in the urban and rural areas. This may be as a result of gradual merging of urban with rural areas, as a result of increasing urbanization. It may also be ascribed to the fact that the same government is predominantly responsible for executing the UBE programme in schools located in the two areas.

In conclusion, this decay in SHP is more pronounced in public schools while participation of parents and community in SHP is currently minimal. It is recommended that a robust framework including implementation of the policy and intersectoral collaboration be fostered to enhance the performance of SHP. Closer collaboration between the school, community and parents is advocated.

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