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Performance of school health programme in Nigeria: A situation analysis

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Abstract: *Background:* School Health Programme (SHP) if effectively implemented, will contribute to the optimal health of school-children. In this survey, the extent of the implementation of SHP in Nigeria was evaluated.
Methods: The study was cross-sectional nationwide, school-based survey, and schools were randomly selected. The school proprietors, school health personnel, teachers, students, and parents were interviewed using an interviewer-administered questionnaire on the key components of SHP.
Results: A total of 105 schools were surveyed. The proportion of students, teachers and parents who were aware of SHP were 26.3%, 11.1% and 9.10%, respectively. The proportion of the schools which conduct mental health, nutritional assessment and visual & hearing screening were 48.6%, 51.4%, and 57.1%, respectively. There were 18 (17.6%) schools that had trained person in charge of the health of students. Schools that still use pit toilet and open defecation method were 22.9% and 11.3%, respectively. The proportion of school with retainership with a health facility was 37.1%.
Conclusion: The SHP awareness is poor in Nigeria, and its implementation is sub-optimal. There is need for renewed interest in SHP in Nigeria through reform and deliberate interventions especially on establishing school-based vaccination programme and referral of sick pupils to healthcare facility.

Keywords: Child health, school health, community health, Nigeria,

Introduction

Nigeria has a teeming population of children and adolescents, an age-group that is said to constitute half of the population of Nigeria [1] Although quite a number of them are said to be out of school [2], the school-going children spend a significant proportion of their time in school with the hope of engaging in learning activities and realizing their potentials. Thus, determinants in the school environment affect their health indicators as well as their ability to grow and develop optimally. Implementation

of components of school health programme is an efficient and cost-effective intervention which will ensure that they enjoy the optimal state of health and be productive. Studies have shown that the SHP has significant impact on student's health and learning outcomes, and that SHP is necessary for achieving educational goals as well as health for all because of its potential role in improving the healthcare system of any country [3-7]. Despite the numerous observed advantages of the SHP or its components were it to be fully functional, reports from some parts of Nigeria indicates poor implementation [8-12]. It is over a decade the National School Health Policy (NSHP) which has five key components was developed to coordinate the activities of all stakeholders toward the operationalization of the SHP[13]. The key components are adequate school health service, appropriate skill-based health education, optimal healthful school environment, adequate school feeding service, and effective school, home, and community relationship [13]. Since the introduction of the SHP in Nigeria, it has largely remained at policy level with minimal implementation.[14]. This poor SHP implementation, has been attributed to lack of awareness and participation by some stakeholders, inadequate funding, inadequate school health facilities and personnel, failure of government prioritization of SHP and lack of political will, lack of intersectoral collaboration as well as lack of community involvement [5,11].However, most effort on finding solutions to the underperformance has been focused on the improvement of curriculum to educate children on health. But this is essentially just one aspect, while the greater aspects are based on practicing these health ideologies.

There is renewed interest by the Paediatric Association of Nigeria (PAN) to improve the performance of the SHP to boost her preventive, health promotion and curative services. In a concerted effort to understand the workings and current performance of SHP in Nigeria, a situation analysis was conducted to gain insight on the existing SHP policy document implementation and practices. It is hoped that the situation analysis will guide the development of an effective interventions and guidelines document. A situation analysis (SITAN) is the mapping process that allows the establishment of a clear understanding of the baseline and prevailing situation, before planning any new interventions or rather still retaining or adapting to the existing programme. The PAN SITAN in SHP focused primarily on the knowledge-base and operationalization of the key components of the SHP.

Methods

Study Area

The study was nationwide, conducted in six states: (Abia, Bauchi, Delta, Kano, Ogun, and Sokoto), one from each geopolitical zones of Nigeria.

Study design

It was across-sectional school-based survey carried out over two months period (October to November 2022).

Site selection

One state was selected randomly from each of the six geopolitical regions of the country. From this state, a local government area (LGA) with both an urban and a rural setting was randomly selected. In each LGA, 20 schools were included in the study; 12 schools in the urban, and 8 schools in the rural settings from the master list at the zonal education office by stratified random sampling. The 12 urban setting schools were subdivided into 3 each of primary/public, primary/private, secondary/public and secondary/private.
Study schools: The study schools were selected from the list of school in the LGA. In each of the selected schools, key stakeholders: proprietors, one teacher, one school health personnel where available, one parent, and one student, were interviewed using interviewer-administered questionnaire.

Quantitative data collection

A structured questionnaire was administered to selected stakeholders in the schools. Information on the staff knowledge on school health programme, the school screening programme, management of minor illnesses, implementation components of school health programme, implementation of WASH, students', and parent's knowledge on School Health Programme.

Data Analysis

The data was entered and analyzed using Statistical Package for Social Science (SPSS). The frequencies were calculated for discrete variables, and tables were developed.

Ethical Considerations

Ethical approval was obtained from the National Health Research and Ethics Committee, with the approval number of NHREC/01/01/2007-29/07/2022. Written informed consent was obtained from the participants for each school.

Results

Awareness on School Health Programme: A total of 105 schools were surveyed. The proportion of students, teachers and parents who were aware of School Health Programme were 26.3%, 11.1% and 9.10% respectively. Table 1.

Table 1			
Regions		Description	
School surveyed	Regions	n	%
	Urban	60	57.14
	Rural	45	42.86
Responses to aware of School health Programme?			
Students			
	Yes	28	26.67
	No	77	73.33
Teachers			
	Yes	12	11.43
	No	93	88.57
Parents			
	Yes	10	9.52
	No	95	90.48

School Health Assessments

The proportion of the surveyed schools that conduct mental health assessment was 48.6%. The schools that did nutritional assessment were 54 (51.4%). Schools that request for immunization certificate were 69 (65.7%). The schools that did auditory and visual screening were 60 (57.1%). Table 2.

Table 2: School Assessments

	Yes		No	
School Assessments	n	%	n	%
Mental Health Assessment	51	48.60	54	51.40
Control measure for Violence/ Gender based	84	80	21	20
Menstrual Hygiene measures	72	68.70	33	31.30
Nutritional assessment	54	51.40	50	48.60
Implementation of Water access, Sanitation and Hygiene (WASH)	80	76.50	20	23.50
Implementation of immunization uptake	69	65.70	36	34.30
Reason for poor performance (Vision & Hearing)	60	57.10	45	42.90

Health Support Services

The proportion of school that request for pre-admission medical assessment form was 38.2%, out of which the schools that make use of the filled form was 33 (84.6%). The schools that kept register for illnesses attended to in the school were 35 (33.3%), The schools that had trained person in charge of the health of students were 18 (17.6%). Table 3.

Table 3: Health support services

	Yes		No	
Health support interventions	n	%	n	%
Schools that request for pre-admission medical assessment form	40	38.20	65	61.80
Among the schools that request for pre-admission medical assessment, those that make use of the filled forms (n = 39)	33	84.60	6	15.40
Functional sick bay (n = 105)	49	47.10	56	52.40
Availability of register for illness attended to in the school	35	33.30	70	66.70
Trained staff on health	42	40	63	60
Refer out sick children	54	51.70	51	48.30
Retainership	28	26.90	77	73.10
Pupils' request for immunization record	40	37.50	65	62.50
Trained person in charge of health of the students	18	17.60	87	82.40

Availability of Water, Sanitation and Hygiene facilities

Out of the schools surveyed, 63 (69%) had borehole, 89 (84.4%) had facility for hand washing, and 70 (65.8%) had standard water cistern. The schools that still use pit toilet and open defecation method were 24 (22.9%) and 12 (11.3%) respectively. Table 4.

Table 4: Availability of WASH facilities

	n	%
Borehole	63	60
Fetch water from outside	30	28.60
Well	6	5.70
none	6	5.70
Facility for hand washing		
Yes	89	84.40
No	16	15.60
Toilet facilities		
Water cistern	70	65.80
Pit	24	22.90
Open/Bush	12	11.30

School Health Seeking behaviour

The number of school pupils that once took ill while in school was 96 (91.4%). The major (45 (42.9%) action taken by the school was to call their parents 45 (46.88%) instances. Those taken to the hospital was 39 (40.63%).

Table 5: Actions taken when a child was ill in school

Pupil ever ill in school	n	%
Yes	96	91.40
No	9	8.60
Actions taken when student is ill		
Call Parent/Taken Home	53	50
Received First Aid	49	46.30
Taken to Hospital	8	7.70
Pupils' preferred treatment		
Given treatment in school	45	42.90
Taken to the hospital	39	37.10
Taken home	27	25.70
Satisfied with treatment received		
Yes	92	87.50
No	13	12.50

Healthful School Environment

The number of schools with satisfactory school environment was 81 (76.9%). The schools with satisfactory toilet facility were 59 (56.5%). The number of schools with satisfactory source of water was 89 (85.2%). Table 6

Table 6: Assessment of the school health support

Support service	n	%
Satisfied with school environment		
Yes	81	76.90
No	24	32.10
Satisfied with toilet facility in school		
Yes	59	56.50
No	46	43.50
Satisfied with water source		
Yes	89	85.20
No	16	14.80

Discussion

School health program though a vital aspect of child health care is still basically unknown, underdeveloped, and under implemented in Nigeria. From our study, only 11.1% of teachers, 9.1% of parents and 26.3% of students were aware of School Health Programme. This was similar, to finding from other studies[15,17] except study by Obembe *et al* 2016,[18] which reported more than 55.9% knowledge of SHP among teachers. The lack of knowledge on SHP among the stakeholders may have contributed to the low implementation of the components of SHP. There is need to create awareness on SHP through introduction of interventions.

Our study found that the most implemented aspects in the schools surveyed were control measures for violence, implementation of WASH, and menstrual hygiene with 80%, 76.5% and 68.7% respectively. The proportion of schools that conduct health assessment range from 48.60% to 80%. The least implemented aspects were nutritional assessment and mental health assessment with 51.4% and 48.6% respectively. This contrast to the findings in the systematic review by Oluyinka et al[14] which reported periodic medical examination assessed by schools which a range from 0% to 26.8%. However, every institution needs to conduct mental health screening to evaluate the emotional wellbeing of the students and identify several mental disorders in young individual. Most schools and students shy away from that due to stigmatization, and social influences. There is enough evidence that proves that a greater proportion of students in schools have some level of mental illnesses, with anxiety and depression being the commonest.[19,20] The omission of performing the mental health screening and the students enrolled will eventually ruin their academic careers. Majority of students not performing well in school may even have undetected mental health challenges undetected.[21]Early screening offers answers to these questions, as well aspointing to characteristics that might identify risk for underlying mental disorders. Universal screening involves collecting performance data on all students in a given setting (e.g., a classroom) to determine if learning is on track in particular areas. Once screening takes place, a plan can be implemented to ensure that the needs of children found to be at risk of mental health can be addressed.
Another important component is nutrition, which plays an important role in preventing chronic diseases and supporting good health. Beyond teaching nutritional education in schools, schools should ideally provide nutritional assessment programmes and nutritional activities. However, because schools face many demands, school staff can consider ways to add nutrition assessment into the existing schedule. A proper nutrition screening given at the right time has the potential to be lifesaving.[22] Nutrition screening can help to identify students who are malnourished, or at risk of being so, and who would benefit from sufficient nutritional support and guidance as soon as possible. Identifying malnutrition early is important, because it negatively influences students' quality of life, body functions, and academic outcomes.

There was an overall poor disposition of the schools towards adequate health promotion and intervention. The proportion of schools that utilized the pre-admission health assessment was low at 32.3%. The schools that request for immunization history was low at 37.50%. The schools that have register for illnesses report were low at 33.30%. The schools that have trained personnel on health was 17.6%. The school with retainership was 26.90%. Kuponiyi et al[23] in their study reported that there were no health personnel or a trained first aider in 47.8% public and 61.1% private schools but a nurse/ midwife was present in 31.7% and 15.0% public and private schools. Children and adolescents spend most of their productive time in schools. By instituting appropriate health interventions in the school setting, it would benefit the overall wellbeing of the children. Health Promoting Schools approach is comprehensive, considers health of teachers, school staff and partnership with parents and community. Schools are strategic platforms for delivering preventive health care services especially vaccines.[24] Schools provide an efficient and effective way to promote health and to reach large numbers of the population. With the increase in the number of new vaccines and booster doses of children vaccines targeting school-age children, implementation of school-based vaccination and checking of student vaccination records at school will improve vaccination coverage. Every school can promote health and contribute to a strong and sustainable future for its community.

This survey showed a fairly good availability of WASH interventions across board. Up to 60% of these schools had borehole as source of water and 28.6% having to fetch water outside with 5.7% having no source of water in the schools. The schools that still use either pit toilet or open defaecation were 22.9% and 11.3% respectively. Supporting the Water, Sanitation and Hygiene (WASH)

sector is considered a fundamental right of all children. In September 2013, the ONE WASH National Program (OWNP) was launched in Nigeria, in a bid to modernize the way water and sanitation services are delivered, and to increase the number of people in rural and small/ medium towns using improved sources of water and sanitation facilities. However, access to water and sanitation is still suboptimal. Increasing access to WASH can improving health outcomes, reducing the burden of disease and malnutrition, and relieve pressure on the healthcare system. Disease related to inadequate water, sanitation, and hygiene such as diarrhoea, are predominant in Nigeria.

Furthermore, without adequate sanitation facilities, girlsare unable to manage their menstruation safely, hygienically, and with dignity within school premises. In this survey, school with toilet facility was 56.5%. This can adversely affect ability of many females to manage their menstruation adequately as a challenge as access to adequate facilities. Many menstruating girls are unable to adequately manage their monthly menses with safety, dignity, and privacy. In recognition of the positive impact on girls' education, and the need to address adolescent girls' menstrual hygiene, calls for coordinated efforts to improve water, sanitation, and hygiene (WASH) facilities in schools.

There was very poor referral practice by the schools with 7.7% of the schools referring ill children to a hospital. Effective referral systems from the school to the health care facility are essential to save lives and ensure quality and a continuum of care. [25] The study has some limitations, among which is the lack of exploratory component to understand the reasons behind some deficits observed in the schools. However, this can be explored in future studies.

Conclusion

The extent of implementation components of school health programme in Nigeria schools is still extremely sub-optimal. There is need for renewed interest in SHP in Nigeria through reform and deliberate interventions to strengthen key school health program components especially on establishing school-based vaccination programme and referral of sick pupils to healthcare facility. It is also important to re-establish stakeholders' roles especially paediatricians and nurses for effective coordination.

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Authors' contributions
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