



Factors associated with School Health Program implementation in secondary schools in Cross River State: A Qualitative Study

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Abstract

Background: School health, a vital tool for the holistic well-being of the school population has dual roles of promoting health and adapting schools as settings for health-promoting activities. The dedication and awareness of school heads regarding school health policies were recognized as key drivers of successful implementation. So, this study, through the perspectives of the school heads, aimed to explore factors influencing SHP implementation in secondary schools in Cross River State based on the Socio-Ecological Model (SEM) as the thematic framework.

Methods: This qualitative study was carried out across 56 secondary schools in Cross River State in Southern Nigeria., where 6 Focus Group Discussions were conducted among head teachers of secondary schools in Cross River State. The data were analysed through a thematic framework method tailored for analyzing qualitative data

Results: Several factors were identified across SEM levels to affect the implementation of School Health Program (SHP) in the study area. These factors include individual awareness and knowledge, interpersonal collaboration, institutional resources, community involvement, and policy support.

Conclusion: This study revealed a sub-optimal school health program implementation in the state. Multi-level strategies are required at individual and structural level to strengthen SHP implementation. There should be awareness creation, capacity building of implementers, and improved stakeholders and government commitment to effective implementation of SHP in schools

Keywords: National School Health Policy, School Health Program, School Head Teachers, Qualitative, Nigeria

Background

Schools play a central role in shaping the health, well-being, and developmental trajectories of children and adolescents who spend a significant proportion of their developmental years within educational environments^{1,2} Since young people spend a significant portion of their formative years in educational

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DOI: 10.61386/imj.v19i2.1069

settings, schools provide a unique and strategic platform for delivering comprehensive health services, promoting healthy behaviours, and preventing diseases.^{3,4} Recognizing this, global frameworks emphasize schools as strategic platforms for health promotion, disease prevention, and supportive psychosocial development⁵

Evidence consistently demonstrates that healthy students are more likely to attend school regularly, engage actively in learning, and achieve better academic outcomes.⁶

In Nigeria, efforts to institutionalize school health were formalized through the National School Health Policy (NSHPo), launched in 2006 by the Federal Ministry of Education and Federal Ministry of Health. The policy provides a comprehensive framework for implementing the School Health Program (SHP) through components such as school health instruction, school health services, a healthy school environment, and school–community relationships.⁷ Effective implementation of this policy aims to enhance learners' physical, mental, and social well-being while improving overall educational outcomes. However, the extent to which a school can fulfil the requirements of the National School Health Policy is influenced by how informed, dedicated, and capable its staff and leadership are in carrying out those standards.⁸ The status of implementation of this policy in schools in different parts of Nigeria has been reported by several authors as suboptimal and also highlights the importance of knowledge of SHP among implementers of SHP such as school managers and teachers.^{9,10}

SHP provides a huge opportunity and most cost-effective investment a nation can make to improve education and health.¹¹ SHP comprises of all projects/activities in the school environment which contribute to the understanding, maintenance and improvement of the health of the school community and is geared towards protecting and improving the health status of the school community to enable them to benefit maximally from the school system.¹¹ School Health Program (SHP) is a vital and important tool for the holistic well-being of the school population. Schools have a dual role to improve not only the education of children but also their health status as they are the only institution that can nearly reach all children of school age.¹⁰ The importance of effective school health implementation is further emphasized by global commitments such as the Sustainable Development Goals (SDGs).¹² The SHP directly advances SDG 3 (Good Health and Well-being) by promoting physical and mental health, preventing communicable and non-communicable diseases,

and supporting adolescent health. It also contributes to SDG 4 (Quality Education) by improving learners' readiness to learn and reducing health-related absenteeism. Additional linkages include SDG 6 (Clean Water and Sanitation) through hygiene and sanitation promotion, SDG 2 (Zero Hunger) via school nutrition programs, and SDG 5 (Gender Equality) through menstrual hygiene management and safe learning environments for girls. Strengthening SHP implementation therefore supports Nigeria's progress toward achieving multiple interconnected SDG targets.^{1,12}

The head teachers and other implementers at the school level play a critical role in operationalizing the SHP. The school administrators such as head teachers have been recognized as key drivers of successful implementation of school health policies, a view reinforced by multiple studies.⁹ The head teachers' awareness and perspective of NSHPo and SHP implementation in secondary schools could directly influence program effectiveness, the delivery of health instruction, early detection of health conditions, adherence to health guidelines, and the creation of a supportive school environment. However, studies on the SHP have focused on other aspects of the program and seemed to have left out the knowledge and perception of the school heads. Their roles as administrative heads of school and views as implementers of the program is important for the overall success and the realization of core objectives of SHP as outlined in the NSHPo. So, this study aimed to assess the head teachers' perspective on factors associated with SHP implementation in secondary schools in Cross River State.

It is hoped that the findings from this study will help to strengthen SHP implementation, enhance policy responsiveness, and support Cross River State progress toward an equitable, health-promoting educational system aligned with national priorities and the Sustainable Development Goals.

Materials and Methods

Study Setting

The study was conducted in Cross River State, South-South Nigeria, comprising 3 senatorial districts, 18 LGAs (7 urban, 11 rural), and 196 wards¹³. It is bordered by the Atlantic Ocean (South), Cameroon (East), Benue (North), and Abia/Akwa Ibom (West). The 2006 census recorded

a population of 2,892,988 (1,471,967 males; 1,421,021 females). However, Using the 2006 census figure and Nigeria's average growth rate (~2.1%), the estimated population of Cross River State in 2025 was about 4.2 million people.

There are 692 healthcare facilities comprising 2 tertiary, 15 secondary, 8 comprehensive healthcare centres, 95 primary health care centres, 174 health centres, 271 health posts, and 118 registered patent medicine vendors in the state.¹³ Cross River State has 252 secondary schools owned by government spread across the state with 82 schools in the northern senatorial district, 98 in central senatorial district and 72 in southern senatorial district. The state also has 350 private secondary schools registered with the government. Most of these private schools were located in the southern senatorial district.

Study Design

A descriptive cross-sectional study using qualitative methods.

Study Population and Eligibility

Participants were heads of fully registered secondary schools. Schools in conflict zones were excluded.

Sampling Technique

A multistage approach was used. In the first stage, one LGA (Local Government Area) from the six LGAs in each senatorial district was selected by simple random method of sampling using balloting technique.

In stage two - In each selected LGA, eight to ten schools were selected using simple random method of sampling by balloting. However, proportionate allocation was used to select the number of private and public schools in each LGA depending on the number of these schools in the selected local government. In each school selected, the school head or the assistant school head was purposively chosen for FGD. Purposive selection of the school head considered socio-demographic and professional diversity (age, marital status, teaching experience, headship duration, subject taught, school type, and facilities).

Data Collection

Six FGDs were conducted with 8–10 participants each, moderated and recorded, lasting 60–90 minutes. Sessions were audio-recorded with consent. Topic guides, developed from literature and expert input, were pre-tested and refined. Semi-structured guides allowed probing and alignment with study objectives. Data saturation was reached after six FGDs

Data Analysis

Audio recordings were transcribed verbatim and triangulated with field notes. Manual thematic analysis followed four steps: familiarization, coding, charting, and interpretation, combining inductive and deductive approaches. Codes were grouped into themes according to the levels of the Socio-Ecological Model.

Ethical Approval

Approval was obtained from the Cross River State Health Research Ethics Committee (CRSMOH/RP/HREC/2023/402). Written informed consent was secured; participation was voluntary, with confidentiality maintained through serial identifiers.

Authors' Reflexivity

The multidisciplinary research team (healthcare, social sciences, epidemiology, qualitative methods) remained conscious of their perspectives, ensuring balanced design, analysis, and interpretation.

Results

Two major themes – Personal and structural level factors were generated. Sub-themes for this study were generated based on the socio-ecological model of theoretical frame work

Personal level factors

Intra-personal level – At this level awareness, knowledge, experience and skills were assessed. Most of the discussants did not know what was SHP, a few of the discussants who have heard of it claimed they had no in-depth knowledge of what the program was about.

Excerpts

No am not aware of any of their policies (FGD1, P1)

Yes, I am aware of the school health policy in a very surface manner or way because I don't actually know the in-depth of what it's entails (FGD 2, P13)

Am not aware of any such a program (FGD 1, P4)

Yes, I am aware. Not because I heard from any publication but through a casual discussion with some political debaters (FGD1, P 6)

Yes, I heard of it sometimes ago (FGD 3, P 24)

I have no idea about the program you're talking about but here in our school we have set up measures which we take care of our students if they feel sick (FGD 2, P18)

I'm not aware of any of the program you're talking about (FGD 1, P10)

However, despite the low awareness of the program, they were suggestions that increasing awareness could lead to the implementation of SHP in the area.

The parastatal that is responsible for this program or project should at first set up committee train and equip them to go out for campaigns and sensitisation of the targeted audience; which is the teachers, students and perhaps the parents which make the community perhaps this could improve SHP in the state. (FGD1, P3)

Interpersonal level – Support from other head teachers (Peer support) and from other resources in the community such as non-governmental organizations were assessed

This was generally lacking in the study population as there was no mention of head teachers having any peer group discussion on SHP. However, the involvement of non-governmental in some aspects of SHP were noticed

In many occasions Lions Club (an NGO) do comes and give the students some health talks (FGD 1, P10)

Structural level factors

Organizational level – The school environment, policies and resources that support SHP were assessed. It was noticed that some aspects of SHP were being implemented in the schools. The SHP areas covered were on school health services, School Home Community relations and safe school environment, even though these services offered were still very rudimentary and sub-optimal

Excerpts from respondents

We send them home immediately to avoid any casualty and I also announced that whosoever is sick should not come to school. That's the way we manage our situation here because there is no sickbay nor any health worker to handle such emergency. (FGD1, P12)

Yes, we have considered sanitation, healthcare of our students as a paramount task. That why you meet the school compound this serene. (FGD1, P1)

The program is as if it does not exist, it's pathetic The program itself is good program good initiative but the implementation is zero (FGD3, P23)

We have comprehensive records of all the student's status with their parents/ guardians' contacts both house addresses and phone numbers. This we have been doing by our own initiative. (FGD5, P44)

We have a borehole that supplies water to school, even though the toilet facilities are inadequate (FGD1, P10)

We allow sick students to go homes once they complain of any illness at all. (FGD3, P27)

Community level – Local resources and culture that support SHP were assessed

The culture of cleanliness in Cross River state with the mandatory monthly sanitation exercise may have been imbibed by some schools

Excerpts from respondents

Yes, we have been conducting sanitation every Wednesday and is even mandatory that all students sweep their surroundings and classrooms every working day. We only exempt students with special abilities and asthmatic patients.This does not connote that we are following any policy but we are doing this because hygiene is necessary. (FGD1, P10)

Policy level – Even though there is a national policy on School Health Program and its implementing guidelines however, the implementation of SHP in secondary schools in the state is still sub-optimal. The NSHPo and its implementing guidelines is not available in most schools in the state. The NSHPo specifies the roles of the government in SHP to include implementation, monitoring and evaluation, capacity building, partnerships and collaborations, advocacy and resource mobilization.

Excerpts from respondents

From my observation over time now, I will say that I draw an inference that they have attained Zero implementation (FGD 3, P28)

I have never heard of this policy frankly speaking. I believe 95 % of us will not know what this is all about. So, there is no implementation in fact there is zero implementation in this part of the country (FGD2, P15)

I think of are lack of awareness, poor implementation and enforcement, lack of integrity in the hands of those that handle the Project (FGD2, P13)

I'm looking at is poor implementation, lack of integrity and wrong perception towards the people at the helms of power and there is no means of enforcement. (FGD1, P7)

Since we are private school it's only our proprietor who check on the welfare of the school. If at all the ministry of health or education want to do anything they call the proprietor to dialogue. In remote private school like us we don't benefits from government policies. (FGD 1, P9)

Government should revisit the contents of this policy and create more awareness first then plan on ways to implementing them (FGD3, P 24)

A big no, they have never come for supervision nor have they given grants for school health program so that's the situation (FGD3, P21)

The subvention is too small to even buy chalk and some reagents for science laboratory not to talk about catering for health services. So, I doubt if the subvention has anything to do with school health program. (FGD1, P 7)

If the government on the other hand at least establish sick bay in every known secondary school in the States whether private or a public, this is to further enhance the program They should as well print copies of these policies and send it to all the schools. Set up a team of inspectors who will be going to the school time to time to monitor using the checklist in each of the school in order to be able to enforce the policy (FGD1, P3)

First awareness should be created; enforcement and proper implementation should be carried on without any form of fear or compromise. Another important area is that sickbay should be established in every known school in the state especially public schools because that where the poor masses attend their

studies. (FGD 1, P4)

First proper awareness should be created and seminars should be organized periodically to update teachers. Another important area is that sickbay should be established in every known school in the state especially public schools because that where the poor masses attend their studies. (FGD1, P 9)

Government should revisit the contents of that policy and prepare a checklist that will enhance the enforcement of that policy. They should create more awareness through seminars, workshops, publications. They should plant sickbay in every school if possible. (FGD 6, P5I)

They should train all the physical health Education teachers in basic health services as well as posting most of the health workers who are yet to be employed into those facilities in order to give a hand out health services by checkmating emergency and even treatment. Workshop seminars should be organized periodically in order to create more awareness and train people especially the students and the teachers on basic healthcare service and then the safety when it comes to sanitation, environmental friendliness and other aspects of the program. (FGD 2, P17)

Transparent implementation should be adopted. There should as well create a monitoring team to enforce the exercise (FGD3, 29)

Suggestions on improvement at the interpersonal level were given

I think collaboration within ministry of health, education and humanitarian service in conjunction with some NGO and other cooperation can improve implementation. (FGD 1, P3)

Discussion

This study was carried out to explore factors influencing SHP implementation in secondary schools in Cross River State using the Socio-Ecological Model. Head teachers were the respondents in this study because of their role as administrative Heads who supervise all school activities.

At the individual level, awareness and knowledge of the National School Health Policy (NSHPo) and the School Health Program (SHP) among the study population was poor. Participants' responses ranged from not being aware of the terms at all, to having

heard about them casually or a long time ago without any in-depth knowledge. Similar findings have been reported in studies conducted in several states in Nigeria among teachers, where most participants demonstrated poor knowledge of the program.^{14,15,16,17}

The deficient awareness of the concept of the school health program, which appears to be prevalent in Nigeria, may contribute significantly to the relatively poor knowledge of SHP among school teachers in this study. Teachers, being the principal actors and administrators of the School Health Program, need to be adequately enlightened on the program.

At the interpersonal level, the knowledge gap among head teachers, who primarily are teachers, and serve as key implementers of the program, constitutes a major barrier to effective implementation as there were no peer-to-peer discussion on SHP. The lack of awareness and in-depth knowledge of SHP among school leadership affects their ability to coordinate and deliver the different components of the program effectively.

At the organizational level, the implementation status of school health services in Cross River State ranged from no implementation to minimal implementation. Some schools had no sick bay, no healthcare worker, and sick students were often sent home instead of receiving care. The only relatively consistent component observed was minimal implementation of environmental sanitation. This is similar with other studies done in different locality in Nigeria.¹¹ Additionally, limited school nurse availability was a significant challenge to School Health Policy implementation.¹⁸ Even though some schools had borehole as their source of water supply but toilet facilities was still inadequate. This similar to studies done in the same study setting^{19,20} and in other settings in Nigeria.²¹

At the community level, the relatively better attention to environmental sanitation observed in some schools may be influenced by the longstanding culture of environmental cleanliness in Cross River State, which is reinforced through periodic government-mandated sanitation exercises aimed at promoting community participation in maintaining a clean environment. This may have been imbibed by some schools to improve the sanitation in the schools which is essential for

maintaining a healthy school environment and improving student wellbeing.²²

At the policy level, the government plays a central role in policy formulation, implementation, funding, regulation, and evaluation of school health program to ensure students' well-being and promote a healthy learning environment. However, findings from this study suggest that these responsibilities are not being adequately fulfilled. These findings were consistent with similar studies done in other part of Nigeria.^{11,15} It appears that the Ministry of Education, which developed the NSHP policy document and under whose authority schools operate, has not effectively communicated or sustained the dissemination of the policy's resolutions to these local implementers/schools.

Furthermore, other factors identified in this study included poor policy implementation and enforcement, lack of political will, and insufficient funding for the School Health Program. These findings are comparable to those reported in a study conducted in South-West Nigeria.²³

Conclusion

The findings of this study reveal that structural issues affect all the SEM level and thus implementation of the School Health Program in the study population.

Using the Social Ecological Model framework, the challenges identified span multiple levels of influence. At the individual level, teachers and school administrators demonstrated poor awareness and limited understanding of the School Health Program. At the interpersonal level, this knowledge gap among key implementers further limits effective coordination and delivery of the school health program.

At the organizational level, many schools lacked essential components required for the implementation of the program, including sick bays, health personnel, and structured health services for students. Consequently, sick students were often sent home rather than managed within the school setting. At the policy level, inadequate dissemination of the National School Health Policy, weak enforcement mechanisms, limited political will, and insufficient funding by the government were major barriers to effective implementation.

Overall, these findings highlight the need for

strengthened structural issues such as policy communication, increased funding, capacity building for teachers, and improved institutional support to enhance the implementation of the School Health Program. Addressing these challenges across the different levels of influence will be essential to ensure the successful implementation of school health policies and the promotion of a healthier learning environment for students.

Recommendations

Based on the findings of this study, the following recommendations are proposed to improve the awareness and implementation of the National School Health Policy and the School Health Program. These recommendations are structured in line with the overall theme of individual and structural level factors affecting the implementation of SHP

A. At the Individual Level – Government, school owners and other stakeholders in health need to improve the awareness and knowledge of the School Health Program among school administrators such as head teachers.

Regular training, seminars, and continuing professional development programs should be organized to educate teachers about the components, objectives, and benefits of the School Health Program. This will equip them with the necessary knowledge and skills required for effective implementation and also cascade this knowledge to peers

Capacity building for head teachers - Integrate School Health Program (SHP) into teacher training curricula, in service training, and seminars.

School leadership, particularly head teachers, should play a more active role in promoting and coordinating school health activities. Teachers should also be encouraged to collaborate with parents and community members to support school health initiatives. Strengthening communication and cooperation among teachers, parents, and other stakeholders will help create a supportive environment for effective implementation of school health program.

B. At the structural level – To the policy makers and stakeholders in health and education:

Inter- ministerial collaboration should be encouraged - Enhance cooperation between the ministries of health, education, and environment for effective SHP implementation.

Establish school health teams - Teams should include the head teacher, health educator/counsellor, nurse, health officer, student health prefect, parent representative, community representative, and nutritionist

Organizational / Institutional Level - Schools should be supported to establish and maintain basic school health facilities such as sick bays and first aid services. Where possible, trained health personnel such as school nurses should be made available to manage students' health needs within the school. School authorities should also ensure regular environmental sanitation and proper monitoring of school health activities.

Policy / Government Level - The Ministry of Education and other relevant government agencies should ensure effective dissemination and enforcement of the National School Health Policy across all schools. Government commitment should also include adequate funding, provision of essential resources, and regular monitoring and evaluation of school health program. In addition, collaboration between the Ministries of Education and Health should be strengthened to ensure proper implementation and sustainability of school health services.

Availability of guidelines - Ensure every school has a copy of the National School Health Policy (NSHPo) and its implementation guide.

Strengthen stakeholder and government commitment - Improve monitoring, supervisory visits, and resource allocation (manpower, funding, materials).

C. Future Research - Further studies should be conducted among key stakeholders – ministry of education, school owners, teachers and students to assess the level of awareness and implementation of the School Health Program in order to provide broader evidence that can guide policy improvements and program strengthening across the country.

Overall, addressing these recommendations will help strengthen the implementation of the School Health Program and promote the health and well-being of school children.

Conflicts of interests

The authors declared they have no conflicts of interest.

Authors' contributions

All conceived, designed, and implemented the study. NOE and AI guided and supervised design and implementation. NOE, AI, BJA carried out the qualitative interviews, tape recorded and transcribed. BJA and MEO wrote the first draft of the manuscript under the guidance of NOE, and AI. All authors reviewed and edited the manuscript and approved the final version of the manuscript.

Funding

The authors received no funding for the research, authorship, and/or publication of this article.

References

- Rahmania T. Exploring school environmental psychology in children and adolescents: The influence of environmental and psychosocial factors on sustainable behavior in Indonesia. *Heliyon*. 2024 Sep 12;10(18):e37881. doi:10.1016/j.heliyon.2024.e37881 PubMed PMID: 39315168; PubMed Central PMCID: PMC11417535.
- Nagy-Pénzes G, Vincze F, Bíró É. A School Intervention's Impact on Adolescents' Health-Related Knowledge and Behavior. *Front Public Health*. 2022; 10: 822155. doi:10.3389/fpubh.2022.822155 PubMed PMID: 35359760; PubMed Central PMCID: PMC8963932.
- Pulimeno M, Piscitelli P, Colazzo S, Colao A, Miani A. School as ideal setting to promote health and wellbeing among young people. *Health Promotion Perspectives*. 2020 Nov 7;10(4):316. doi:10.34172/hpp.2020.50 PubMed PMID: 33312927.
- Dodd S, Widnall E, Russell AE, Curtin EL, Simmonds R, Limmer M, et al. School-based peer education interventions to improve health: a global systematic review of effectiveness. *BMC Public Health*. 2022 Dec 2;22(1):2247. doi:10.1186/s12889-022-14688-3
- Abdelaziz B, Makino Y, Baltag V, Guthold R, Ameyam W. Global Standards for Health Promoting Schools. WHO; UNESCO.
- UNESCO, Global Partnership for Education, Research Consortium on School Health and Nutrition. Integrating health and well-being into education policy and planning: a handbook | Health and Education Resource Centre [Internet]. UNESCO; 2025 [cited 2026 Jan 15]. 107 p. Available from: <https://healtheducationresources.unesco.org/index.php/library/documents/integrating-health-and-well-being-education-policy-and-planning-handbook>
- Ogbe J. Appraisal of the Implementation of the National School Health Policy in Secondary Schools in Nigeria. *Academic Journal of Interdisciplinary Studies*. 2020 Mar 10;9:149. doi:10.36941/ajis-2020-0032
- Obembe TA, Osungbade KO, Ademokun OM. Awareness and knowledge of National School Health Policy and School Health Programme among public secondary school teachers in Ibadan metropolis. *Nigerian Medical Journal : Journal of the Nigeria Medical Association*. 2016 Aug;57(4):217. doi:10.4103/0300-1652.188341 PubMed PMID: 27630385.
- Ademokun OM, Osungbade KO, Obembe TA. A Qualitative Study on Status of Implementation of School Health Programme in South Western Nigeria: Implications for Healthy Living of School Age Children in Developing Countries. *American Journal of Educational Research*. 2014 Jan 23; 2(11): 1076–87. doi:10.12691/education-2-11-12
- Bisi-Onyemaechi AI, Akanni A, Ikefuna A, Tagbo B, Chinawa J, Chikani. School health services in Enugu East, Nigeria: perspectives from a resourcepoor setting Authors Adaobi I. Bisi-Onyemaechi. *Healthcare in Low-resource Settings*. 2017 Aug 29; 13(2). doi:10.4081/hls.2025.12999
- Dania O, Adebayo AM. School Health Program in Nigeria: A Review of Its Implementation for Policy Improvement. *American Journal of Educational Research*. 2019 Jul 17;7(7):499–508. doi:10.12691/education-7-7-10
- Strickland B. School health activities support the achievement of 5 SDGs | Blog | Global Partnership for Education [Internet]. [cited 2025 Nov 3]. Available from:

- <https://www.globalpartnership.org/blog/school-health-activities-support-achievement-5-sdgs>
13. Isika AI, Ekpenyong NO, Undelikwo . A, Izuchukwo FO, Oku A O, Oyo-ita AE. Clients and healthcare providers' perspectives on Quality of maternal health services in primary healthcare facilities in Cross River State, Nigeria. *Ibom Medical Journal*. 2026 Jan 1;19(1):158–67. doi:10.61386/imj.v19i1.927
 14. Bosede AO, Obembe TA, Adebayo AM. Knowledge of school teachers and the associating factors in the effective delivery of the school health programme in Nigeria. *Pan Afr Med J*. 2022 Sep 2; 43:4. doi:10.11604/pamj.2022.43.4.30838 PubMed PMID: 36284886; PubMed Central PMCID: PMC9557807.
 15. Adebayo A, Bella-Awusah T, Adediran K, Omigbodun O. School health and well-being in Nigeria: gaps in policy and design. *J Public Health (Berl)*. 2024 Dec 1;32(12):2271–7. doi:10.1007/s10389-023-01984-4
 16. Ezeonu CT, Asiegbu UV, Arua CE, Edafioghor LO, Una AF, Anyansi MN, et al. National School Health Policy in Nigeria; Survey of teachers' perception and implementation in public schools in Ebonyi State. *Nigerian Journal of Paediatrics*. 2022 May 3;49(1):83–9. doi:10.4314/njp.v49i1.14
 17. Abubakar AU, Oche OM, Awosan KJ, Raji IA, Abdullahi AM, Kaoje AU. Knowledge of School Health Programme among Public Primary School Teachers in Sokoto Metropolis, Northwestern Nigeria. *Journal of Community Medicine and Primary Health Care*. 2021 Mar 22;33(1):128–39. doi:10.4314/jcmphec.v33i1.11
 18. Cygan H, Tribbia C, Tully J. School Health Policy Implementation: Facilitators and Challenges [Internet]. Vol. 36. 2019 [cited 2026 Jan 15]; 36(5). Available from: <https://journals.sagepub.com/doi/abs/10.1177/1059840519846089>
 19. Ekpenyong NO, Isika AI, Enagu MA, Umoh A U, Urom DS, Freedman AB, et al. Factors associated with diarrhea prevention among mothers of under-five children in Calabar Municipality, Cross River State, Nigeria. *Ibom Medical Journal*. 2025 Oct 1;18(4):592–8. doi:10.61386/imj.v18i4.797
 20. Offiong AE, Nwagu EK, Ojong AA, Osang GO. (PDF) Evaluation of the Water, Sanitation and Hygiene (Wash) Programme Implementation (Availability/Accessibility of Safe Drinking Water) in Secondary Schools in Cross River State, Nigeria [Internet]. [cited 2026 Mar 6]. Available from: https://www.researchgate.net/publication/379310978_Evaluation_of_the_Water_Sanitation_and_Hygiene_Wash_Programme_Implementation_on_AvailabilityAccessibility_of_Safe_Drinking_Water_in_Secondary_Schools_in_Cross_River_State_Nigeria?utm_source=chatgpt.com
 21. Nnaji CC. An Exploratory investigation into the status of Water, Sanitation And Hygiene (Wash) of Schools in Enugu State, NIGERIA. *Nigerian Journal of Technology*. 2023 Nov 2;42(3):414–22. doi:10.4314/njt.v42i3.15
 22. Ilekendi H, Alabi AD, Daniel OJ. Comparative Study on the Implementation of Water, Sanitation and Hygiene Programme in Public and Private Secondary Schools in Remo Division, Ogun State. *Direct Research Journal of Public Health and Environmental Technology*. 2025 Feb 20;10(1):75–84.
 23. Adeyemi EO, Olatunya OS, Fayemi O, Anidobe C, Adeyemi FM, Adebami OJ. An assessment of school-based health instruction among primary schools in Ido/Osi local government area Southwest, Nigeria. *Nigerian Journal of Clinical Practice*. 2022 Nov;25(11):1838. doi:10.4103/njcp.njcp_272_22