Exploring Availability, Utilization and Quality of School Health Services among Primary Schools in Jega Zonal Education Area, Kebbi State Nigeria

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ABSTRACT

School health services (SHS) is an essential component of school health programme. It is the preventive and curative services provided for the learners and staff within the school setting. School health activities support the attainment of sustainable development goals (SDG) for health, education and gender equality. The National Guideline for implementation of school health was launched in 2006 but ever since, literature about SHS is scanty nationwide. This study was carried out to explore availability, quality and utilization of SHS in Jega zonal education area, Kebbi state. A mixed method of quantitative and qualitative research design was employed using concurrent triangulation involving one hundred and fourty-nine (149) primary schools. Three validated research instruments, a questionnaire, an observation check-list and an in-depth interview guide were used to collect data using a multi-stage sampling technique. Results were presented in tables of frequencies and figures while data analysis was done utilizing descriptive and inferential statistics. Hypotheses were tested at p-value of 0.05 using chi-square regression. Distribution of participants by gender revealed 141 (94.6%) were males and 8 (5.4%) were females while educational qualification exposed 121 (81.2%) hold Nigeria Certificate in Education (NCE) and 25 (16.8%) had University degree or its equivalent. It was discovered that 117 (78.5%) schools were owned by government and 32 (21.5%) belong to private organization or individual. 103 (69.1%) schools have first-aid boxes and 37 (24.8%) did not have. Nearly half- 51 (49.5%) of the first-aid boxes available were virtually empty with no basic instruments and emergency drugs. Result showed that 5 (3.4%) of the facilities have licensed school nurses, while most of the schools- 125 (83.9%) have their health services handled by school teachers. Other- 19 (12.8%) do not have any form of school health service provider. It indicated that 30 (20.1%) always carry out pre-entry health screening and over one-third 56 (37.6%) did not. It was also discovered that 48 (32.2%) of the schools have provision for keeping health records and most schools, 101(67.8%) do not have any provision for that. Most of the schools- 120 (80.5%) have no any block of classroom that has walkway/slope that can be used for a child that is physically challenged. Results also showed that in, 129 (86.6%) schools only few of teachers were trained on first aid and emergency care. Over one-third of the schools- 56 (37.6%) have no collaboration with any health agency and few- 39 (26.2%) reported that they were visited by health personnel only for polio immunization. Findings from the study revealed that there is no statistically significant difference in availability and utilization of SHS between public and private schools (α=0.001) at 0.05 level of significance. It was concluded that SHS in the area is scanty, with poor quality and inadequate utilization. It is therefore recommended that policy framework to guide SHS provision, especially provision of well-equipped first-aid box for each primary school and periodic organization of training on basic first-aid and emergency care for all primary school teachers.

Keywords: School health services, primary schools, availability, quality, utilization, Kebbi state.

INTRODUCTION

Background to the Study

The World Health Organization (WHO) defined School Health Services (SHS) as the services provided by a health worker to students enrolled in primary or secondary education, either within school premises or in a health

service situated outside the school (WHO, 2021). Availability refers to the state or condition of something being accessible, obtainable or ready to use when needed. According to Primary Health Care Performance Initiative (PHCPI) (2019), availability is defined as the presence of a trained provider at a facility or in the community when expected and providing the services as defined by his or her job description. According to WHO, (2023) Service Availability refers to the physical presence of the delivery of services, encompassing health infrastructure, core health personnel, and service utilization (WHO, 2023). The World Health Organisation (WHO) maintained that availability and quality of health services are integral to universal health coverage (UHC) and contribute to achieving the sustainable development goals (WHO, 2022). Adam and Nwaogwugwu (2020) opined that effective delivery of healthcare services especially at the Primary Health Care level requires availability of adequate infrastructure, basic diagnostic medical equipment, drugs and well-trained medical personnel.

According to UNICEF (2019) quality of services has to comply with- i) Service provider's possession of the necessary skills and training ii) Adequate supplies (i.e., drugs that are not expired and stored properly) that meet relevant standards iii) Appropriateness of environment, being non-discriminatory, private and confidential iv) Safety of the facilities safe and sanitary and v) Provision of services at an acceptable standard of care in alignment with relevant standards as appropriate. Quality also extends to the way people are treated before, during and after accessing services. This is very relevant to the objective of current study for exploring situation of school health services in the study setting. Le, La, and Tykkyläinen (2022) asserted that effective delivery of health services requires adequate quality in healthcare facilities and easy accessibility to health services physically or virtually. The quality and accessibility of healthcare facilities play a crucial role in preventing and mitigating health problems. This is true either in the community or school settings.

According to Gulsham and Reshmi (2022) utilization of health services is governed by many factors, which were explained in several models and frameworks, such as the three delays model. To ensure effective utilization of SHS every form of delay must be essentially eliminated. Delay in decision making for seeking care which is governed by individual and household factors. Delay is to reach health facility that is affected by availability, accessibility and affordability of health facilities and services. Finally delay in getting proper care which is determined by quality of services provided in health facilities. Khan et al. (2022) opined that adequate availability of public health facilities leads to better utilization of MCH services at district level in India. They also revealed that the degree of availability of child health care services at the nearest health care facility and readiness of the nearest health care facility (where child health care services are available) to provide child health care services were found negatively associated with neonatal and infant mortality.

School Health Service is not new in Nigeria and has contributed significantly in uplifting the standard of education through ensuring sound health of pupils and the school environment. Community/public health nursing primarily aims at health prevention in all places where people live or work. Schools are places where children from different families come together to learn and stay in close contact with one another. SHS is therefore a necessary tool and vital in identifying health issues early in order to institute adequate preventive measures.

In a study by Abubakar & Raji (2021) on Status of Public Primary Schools: Safety, Health Services Provision and Environmental Health Facilities in Sokoto Metropolis, North-western Nigeria, they discovered that resources for school health program (including school health services) were grossly inadequate in most schools. They suggested more collaboration between the state and various stakeholders to ensure provision of adequate resources for school health program.

According to Bisi-Onyemaechi et al (2019) School health services are at a minimal level in Enugu East Nigeria, but are comparatively better in the private schools than public schools. The public schools were ill equipped to handle emergencies and lack awareness of school health services. They further suggested the state domestication of national school health policy and creation of school health committee in the state to aid and monitor the effective implementation of school health services. They advocated for a transferable health card designed to keep information on the child's medical history, health appraisals and other health events should be issued on admission to every child.

Oluyinka & Ayodeji (2019) reported that SHP in Nigeria has largely remained at policy level with minimal

implementation. They advocated for a need to re-establish or strengthen the program in the country. School Health Services (SHS) constitute one of the components of the School Health Programme (SHP) and deal with the maintenance of the health of school children. Effective SHS facilitate early detection and diagnosis of diseases, whereby prompt intervention ultimately reduces school-age morbidity and mortality. SHS can have significant impact on the overall health care performance as it creates a link between the maternal and child health care to the care of the school age child, more so it's usually readily acceptable.

A lot have been achieved since the launching of the National guidelines for SHS implementation in Nigeria, even though numerous challenges have been reported such as discoveries from Oluyinka & Ayodeji (2019), Bisi-Onyemaechi et al. (2019) and Abubakar & Raji (2021). They all concluded that provision of school health services in Nigeria is sub-optimal. Most of the studies conducted on SHS provision were done in the southern parts of the country (Dania & Adebayo 2019). There is dearth of literature on availability, quality and utilization of SHS in Kebbi state; this poses challenge for any remedial action. This provides the impetus for the present study to explore availability, quality and utilization of SHS among primary schools in Jega zone education area, Kebbi state. The results of the study publicised situation of the availability of SHS among the primary schools in Jega zonal education area of Kebbi State. Quality of the available SHS was also be revealed from the results of this study as well as the level of utilization of SHS. A comparison between public and private primary schools was made Findings from the study provide a useful guide for government and other stakeholders in health and education sectors that can be used in making decisions on the provision of SHS as well as institute any remedial action found to be necessary. School heads and the teachers could be reawakened by the study to uphold the SHS and give it the attention it deserves.

The study was carried out in one of the six zonal education areas of Kebbi state (Jega zone). Public and private primary schools in the state formed the target of the study. The state has been divided into six Zonal Education areas and Jega zone was selected for the study randomly. SHS availability, quality and utilization was explored in the selected zonal education area.

Objectives of the Study

The main objective of the study is to explore the availability, quality and utilization of school health services among primary schools in Jega zone education area of Kebbi state. The specific objectives are to;

1. Assess the availability of school health services among primary schools in Jega zone education area, Kebbi state,
2. Determine the qualities of school health services available among primary schools in Jega zone education area, Kebbi state.
3. Ascertain the utilization of school health services among primary schools in Jega zone education area, Kebbi state
4. Explore the factors influencing the availability of school health services among primary schools in Kebbi state
5. Determine the factors influencing the quality of school health services among primary schools in Kebbi state.

Research Hypotheses

Ho1: There is no significant difference in availability of school health services between public and private primary schools in Jega zonal education area, Kebbi state.

Ho2: There is no significant difference in quality of school health services between public and private primary schools in Jega zonal education area, Kebbi state

Ho3: There is significant difference in utilization of school health services between public and private primary

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schools in Jega zonal education area

Ho4: There is no significant relationship between availability and utilization of school health services among primary schools in Jega zonal education area.

Ho5: There is no significant relationship between quality and utilization of school health services among primary schools in Jega zonal education area, Kebbi state.

Research Design

The design for this study is a mixed method of quantitative and qualitative descriptive design involving concurrent triangulation. Quantitative descriptive research involves the process of objectively collecting and analyzing numerical data to describe, predict, or control variables of interest on the other hand, qualitative descriptive design involves collecting, analyzing, and interpreting non-numerical data. Qualitative research can be used to understand how an individual subjectively perceives and gives meaning to their social reality (Guy-Evans 2023).

Study Setting

The study setting comprises four local government areas (LGA) that include Aliero, Maiyama, Jega and Suru local governments areas in Kebbi state. These LGAs form the Jega zonal education area with the area office in Jega.

Target Population

The target population for the study were all school health nurses'/health masters in the public and private primary schools in Jega zonal education area of Kebbi state.

Sample Size and Sampling Technique

Sample size determination

One hundred and fourty nine (149) primary schools were involved in the study as the data generating sample. Sample size determination or estimation is the act of choosing the number of observations to include in statistical sample. It is the process of choosing the right number of observations or people from a larger group to be use in the sample (James et al 2001). Taro Yamane (Slovin) formula was used to determine the sample size for the study since the size of target population is not larger than four hundred. Taro Yamane (Slovin) formula given as $\mathbf{n=N/(1+Ne^2)}$ was used to determine the sample size from the target population.

Sampling techniques

Multistage sampling technique was used for the study. A multi-stage sampling method was utilized to draw the sample for the study. Sampling technique is the statistical method or process of selecting a representative sample from the target population. (Gulzar 2023).

Inclusion and Exclusion Criteria

Inclusion criteria

Every primary school that is registered with the Kebbi State Universal Basic Education Board and is six years or older in the LGAs that fall within Jega Education Area Zone was eligible and qualified to be included in the study. The school could be public or owned by private organisations/individuals as well as religious organisations.

Exclusion criteria

Primary schools within the study area that were not registered with the State Universal Basic Education Board

and were less than six years old were not eligible and qualified to be included in the study. Therefore, all primary schools that fall within this category were not included in the study.

Instrumentation

Three research instruments were used. These include a self-administered questionnaire partly adapted from SHP evaluation scale and a structured interview guide drafted by the researcher on the quality of SHS provision and an observation checklist. The questionnaire was constructed in four sections. Section A: Contained questions eliciting information about the demographic characteristics of the participants. Section B: questions revealing availability and factors that influence availability of SHS in the area will make up this section.

The second instrument was an observation checklist. It was used to assess the available as well as quality of the SHS components intended in the study. It assesses all the six major components of SHS in the national guideline for implementation of SHS in Nigeria. The third instrument was an interview guide for a structured interview of the participants on the quality of SHS in the study area. It was used to find out the quality of the available components of SHS. Components of SHS in the national guideline for SHS implementation in Nigeria were focused on.

Method of Data Collection

The data collection process began after ethics and research committee of ABUAD approved the study. An introduction letter was sought for from the University which was taken to the Chairman Kebbi State Universal Basic Education Board for approval and subsequent introduction to the Education Secretaries of the affected local governments areas.

The researcher visited all the schools that have been selected for the study. The focal person for every school visited was the school health nurse, health master or head teacher of the school. He/she was the person that attended to the questionnaire and later interviewed about the quality of health services in the school.

The researcher used the structured interview guide, field notes and digital recorder to collect data from a face-to-face interview with the focal person (SHS provider) in the selected schools. The interview lasted approximately for 30-45 minutes. The second segment of data collection was done by visiting the school health facilities and equipment mentioned by the person interviewed to ascertain the records of what exist to minimize bias in reporting. Items on the checklist were scored for each school SHS facility. No familiarization visits or notice was sent to any school visited so as to avoid hawthorn effect. Data collected was coded checked and treated for further analysis.

Method of Data Analysis

Quantitative data collected through the questionnaire was sorted out using Statistical Package for Service Solution (SPSS) version 25. Descriptive statistics was used to analyse data on socio-demographic variables, availability and utilization of SHS. Results were presented with the use of tables of frequencies, figure and percentages. The null hypotheses were tested at 0.05 level of confidence and statistical analysis was performed using inferential statistics of Chi-square computations.

Qualitative data collected was analysed according to Braun & Clarke simple steps in analysing qualitative data (Braun & Clarke, 2006). Thematic analysis was carried out and the themes were drawn from Donabedian framework for measuring quality of health services as identified earlier. The three major constructs in the framework of structure, process and outcome were the thematic areas analysed. The principles of credibility, transferability, dependability, authenticity and conformability were adhered to in order to ensure the data quality was secured.

Ethical Considerations

Letter of introduction from Faculty of Nursing Sciences and approval from Health Research Ethical Committee with protocol number ABUADHREC/15/11/2023/328 was presented to Kebbi State Universal and Basic

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Education Board Birnin-Kebbi together with an application seeking for permission to conduct the study. All above mentioned documents are attached herewith at appendix pages. The Board chairman gave a written approval and letters addressed to all the affected LGAs also attached at appendix. At the LGEA level the researcher was linked up with the Education Officers who subsequently linked him with the various schools involved in the study. Participants were offered adequate explanation to understand and consent to participate in the study. They were assured of the confidentiality of whatever information they gave. It was also explained that one is free to withdraw from the study at any time without any repercussion. No any form of inducement was made for the willing and consenting participants. A printed informed consent form was issued for signature by those who agreed to participate.

Consent

Informed consent form was issued to each participant in the study to sign indicating their consent. This was done after explanation to each intending participant the objective of the study as well as its purpose and the aim it wishes to achieve. It was also revealed to them that one can withdraw from the study at any time he/she wishes without any repercussion. There was no any form of inducement either in cash or in kinds given to the participant before, during or after the research exercise.

RESULTS AND DISCUSSION

Preliminary analysis

Table 4.1 a) shows distribution of participants by gender in which greater percentage of the study participants 141 (94.6%) were found to be males while only a little percentage 8 (5.4%) were females. This displays the gender inequality distribution typical of the northern part of Nigeria as revealed by Simon-Karu (2022), who noted that youth and young women specifically in northern Nigeria are often underrepresented and excluded as collaborators in all sectors of society. Table 4.1 b) below depicts the educational qualifications of the respondents. It can be seen that highest percentage of the study participants 121 (81.2%) held Nigeria Certificate in Education (NCE), which is the minimum requirement for teaching profession in Nigeria, also 25 (16.8%) held university degree or its equivalent and 3 (2.0%) have a postgraduate qualification. Table 4.1 c) displays years of working experience of the participants. It shows that cumulatively 93.3% of the participants have put in less than 30 years in service. This is a good indicator that retirement of the most senior person is not likely to crunch the system as seen in other sectors of civil service. Table 4.1 d) shows distribution of schools' ownership in the study area. It revealed that 117 (78.5%) schools are owned by the state government while 32 (21.5%) belongs to private organisations or individuals. This finding is slightly different from the overall statistics of the federation in which Sasu (2022) reported that 56.4% (117000) primary schools in Nigeria are owned by the government and 43.6% are owned by private sector.

Table 4.1 Socio-demographic characteristics of respondents

a). Gender distribution of respondents		
Gender	Frequency	Percentage
Male	141	94.6
Female	8	5.4
Total	149	100.0
b). Educational qualifications of the respondents		
Highest educational qualification	Frequency	Percentage
NCE	121	81.2

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI | Volume XII Issue XV August 2025 | Special Issue on Public Health

B Ed/B Sc	25	16.8
M Ed/M Sc	3	2.0
Total	149	100.0
c). Years of working experience of the study participants		
Years of work experience	Frequency	Percentage
1-7	34	22.8
8-14	50	33.6
15-21	36	24.2
22-28	19	12.8
29-35	10	6.7
Total	149	100.0
d). School ownership category		
School owner	Frequency	Percentage
Government	117	78.5
Private	32	21.5
Total	149	100.0

Availability of School health services

This section of results revealed the available school health services resources in the study area. Findings on the category of health personnel, the actual school health service providers, school health service facilities and the school health services records availability in the zone were all uncovered.

Table 4.2 Designation of the respondents

Designation	**Frequency**	**Percentage**
Head teacher	65	43.6
School health nurse	5	3.4
Health master	79	53.0
Total	149	100.0

Table 4.2 reveals the designation of respondents who are the health service providers in their respective schools. The results show that only 5 (3.4%) of the schools have licensed school health nurses attending to school health services in the study area. This rhymes with findings of Dibakwane & Peu (2018), negative experiences of the service providers were articulated as hampering school health service delivery. These included the lack of transport and shortage of staff, poor infrastructure of schools and health care institutions. It also affirmed assertion of Healthy Schools Campaign (2022) that students in low-income schools are less likely to have regular access to a school nurse compared to their peers in higher-income schools.

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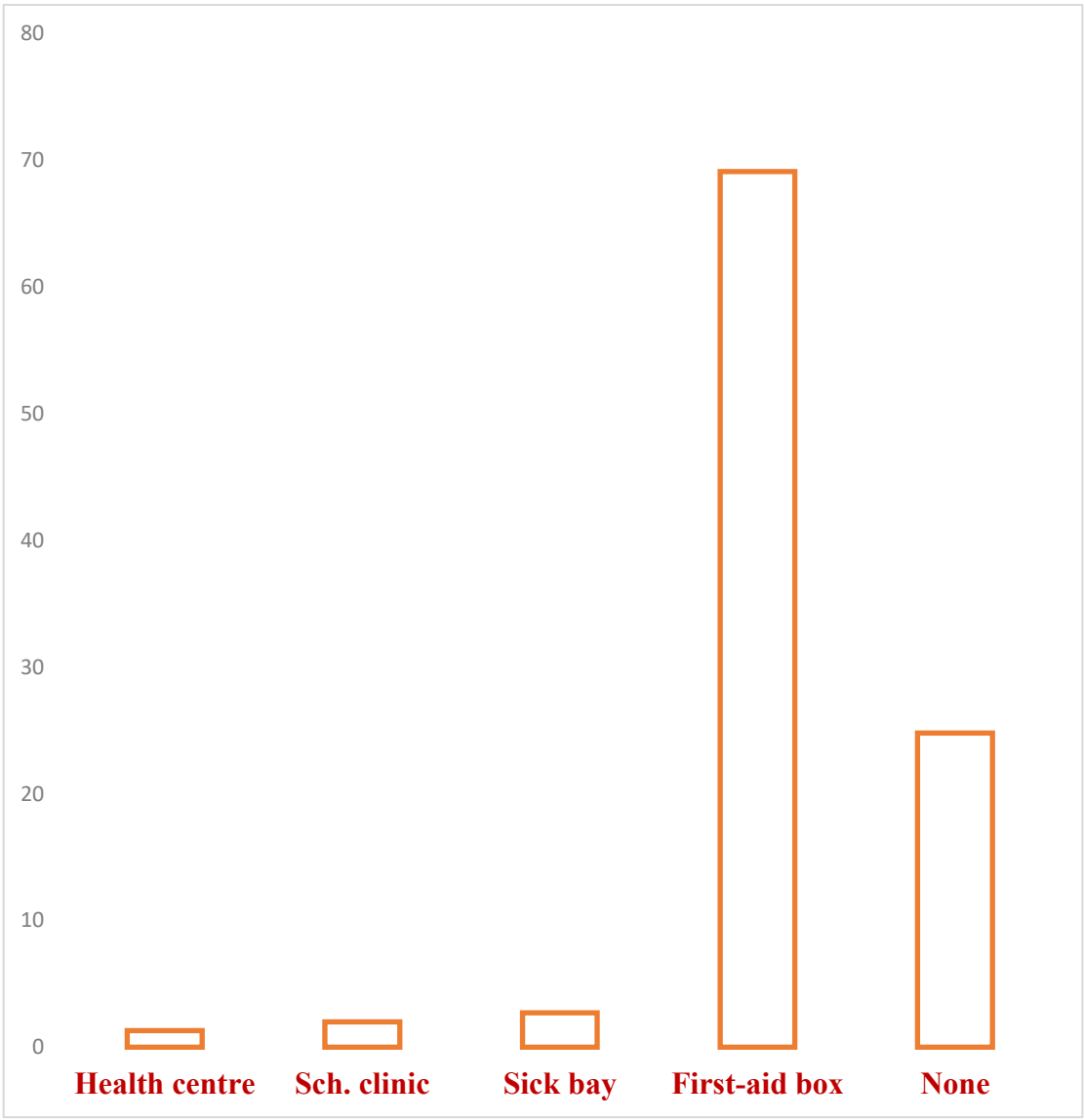

Figure 4.1 Distribution of health service facilities among primary schools in the area

From figure 4.1 it can be seen that only 2 (1.3%) and 3 (2.0%) schools had health service centres and school clinics respectively. Similarly, only 4 (2.7%) schools have a sick-bay. One hundred and three 103 (69.1%) schools have first-aid box and 37 (24.8%) do not have even the first-aid box. Nearly half 51 (49.5%) of the first-aid boxes available were virtually empty with no basic instruments and emergency drugs. Abubakar & Raji (2021) in their study discovered that resources for school health programme (including school health services) were grossly inadequate in most schools in Sokoto. Their resulted is supported by this finding. Similarly, Adebayo et al (2021) revealed that about half of the primary schools (38.5% public; 75.9% private) had first-aid boxes, but they were empty in 66.7% of public and 20.7% of private schools.

Table 4.3: Category of health personnel available in schools

Health personnel	**Frequency**	**Percentage**
School Nurse	5	3.4
School teachers with Skills in Health Care	125	83.9
None	19	12.8
Total	149	100.0

Table 4.3 displays distribution of categories of health personnel available in the schools within the research

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI | Volume XII Issue XV August 2025 | Special Issue on Public Health

setting. It indicated that only 5 (3.4%) of the facilities have licensed school nurses while the greater portion of the studied schools- 125 (83.9%) had their health services handled by school teachers who were not trained and licensed for that job also- 19 (12.8%) of the facilities do not have any form of school health service provider. These results are similar to position of WHO when it stated that most countries have some form of SHS, but many such programme currently are not evidence-based, are not implemented well, are underfunded and/or are delivered with limited reach and scope (WHO, 2021). Adam and Nwaogwugwu (2020) opined that effective delivery of healthcare services especially at the Primary Health Care level requires availability of adequate infrastructure, basic diagnostic medical equipment, drugs and well-trained medical personnel.

Table 4.4: Availability of Health records in schools

Nature	Frequency	Percent
Yes	48	32.2
No	101	67.8
Total	149	100.0

Table 4.4 conveys result on availability of health records in the schools under investigation. It reveals that only 48 (32.2%) of the schools have provision for keeping health records of the SHS in the school. A greater percentage- 101 (67.8%) do not have any provision for keeping health records in the school. It has been recorded also even where the health records are kept, in all the schools it is done purely at the discretion of the service provider and there is neither provision for transfer of such records nor any hope for securing them for future reference. Despite the fact that Shizume et al. (2021) proposed five key factors as essential for successful provision of school health services in developing countries: (i) formulation of national school health policies and guidelines with clear definitions of essential health services and stakeholders' responsibilities, (ii) strengthening partnerships within and between health and education sectors at all administrative levels, (iii) building cooperation between school and health professionals and at the community and school levels, (iv) establishing sustainable development of personnel for school health in the education sector, and (v) developing systems for collecting children's health data, assessing their health issues, and monitoring and evaluating the implementation.

Utilization of School Health Services

This section of the results revealed the extent of practice /utilization of school health services in the study area. It identified the level of utilization of SHS that included pre-entry screening of school children, periodic inspection of pupils by the school teachers, care of first-aid and emergency situations, treatment of minor illnesses, control of communicable diseases and screening of teachers and other staff in the schools.

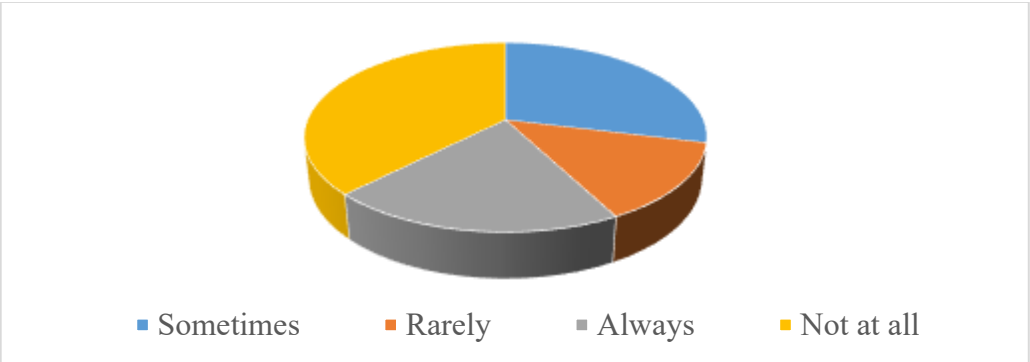

Figure 4.2 Frequency of performing pre-entry screening of children admission into primary schools

Figure 4.2, mode of utilization/practice of SHS among the studied schools in the research area. It indicated that only 30 (20.1%) of the schools always carry out pre-entry health screening of the children brought to them for admission. While 43 (28.9%) of the schools sometimes do and sometimes do not, over one-third 56 (37.6%) of

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the schools studied do not screen children brought for admission at all while 30 (20.1%) rarely do the pre-entry screening. This is a very good opportunity for early detection of health conditions, physical challenges and learning difficulties of the child for proper placement, but it is being lost due to poor utilization of SHS despite the fact that pre-entry medical and dental health screening is one of the major components of SHS in Nigeria. The finding above is a direct opposite of what was discovered by Poi et al. (2020). They revealed that, in many European countries direct medical care was found to be a part of SHS, including tasks like pre-entry health screening, management of chronically ill children and emergency care. In almost all countries, SHS comprised screenings, with a focus on height and weight, as well as vision, hearing and dental tests. Another focus in most countries was mental health promotion. According to them, nurses were the most widely reported professionals working in this field, followed by doctors and psychologists.

Quality of School Health Services

Results indicating quality of school health services in the area is reported in this section. The number of SHS providers trained on first-aid and emergency care, collaboration between the schools and health sector/personnel, number of walkways/slopes in the classroom blocks and availability of adequate equipment/instruments as well as potent drugs and consumables was revealed.

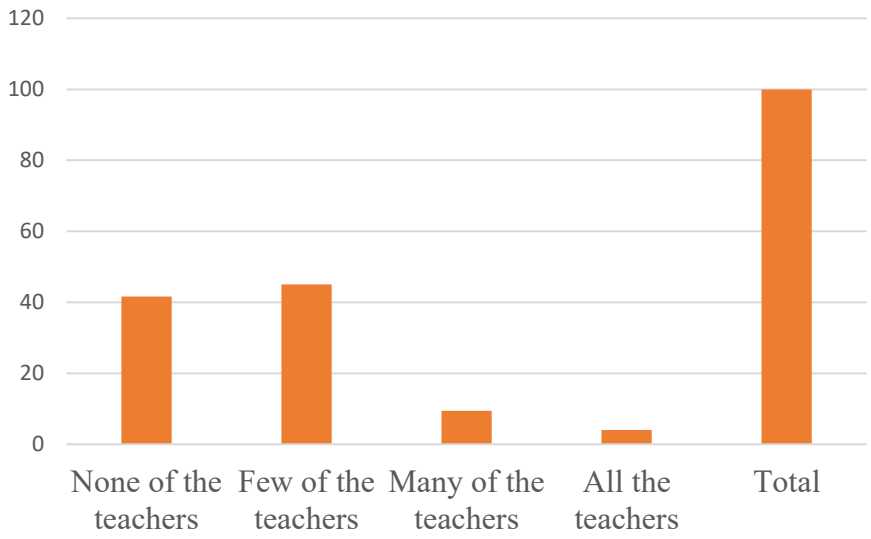

Figure 4.7 Teachers trained on first-aid and emergency care

Figure 4.7, number of teachers trained on first aid and emergency care in the primary schools. From the statistics, it shows that in 62 (41.6%) schools none of the school teachers had any training on first-aid and emergency care and in 67 (45.0%) only few of the teachers were ever trained on first-aid and emergency care. cumulatively in 129 (86.6%) schools only few of teachers were trained on first aid and emergency care. It also shows that only in 20 (13.4%) schools many teachers received training of first aid and emergency care of children. This result calls for effective collaboration between stakeholders so that training and retraining of school teachers can be organised to ensure effective attention to SHS in the area. Rasesemola et al (2019) identified insufficient stakeholder integration/collaboration in the provision of school health services and concluded that lack of collaboration with relevant stakeholders in school health service delivery will lead to a fragmented, uncoordinated and unsustainable approach to the execution of SHP programme.

DISCUSSION OF FINDINGS

Availability of school health services

Adam and Nwaogwugwu (2020) opined that effective delivery of healthcare services especially at the Primary Health Care level requires availability of adequate infrastructure, basic diagnostic medical equipment, drugs and well-trained medical personnel. As a major construct of Andersen and Newman framework for health care

utilization, enabling factor which include availability of resources for school health services are paramount in effective delivery of health at all levels.

Findings in the study shows that only 5 (3.4%) of the schools have licensed school health nurses attending to school health services in the study area. Greater portion of the studied schools- 125 (83.9%) have their health services handled by school teachers who do not possess the pre-requisite knowledge and skills for the job., 19 (12.8%) of the facilities do not have any form of school health service provider. This rhymes with findings of Dibakwane and Peu (2018) who discovered that negative experiences of the service providers were articulated as hampering school health service delivery. These included the lack of transport and shortage of staff, poor infrastructure of schools and health care institutions. It also affirmed assertion of Healthy Schools Campaign (2022) that students in low-income schools are less likely to have regular access to a school nurse compared to their peers in higher-income schools.

Discussing about availability of SHS provision facilities, it can be seen that only 2 (1.3%) and 3 (2.0%) school health service centres and school clinics respectively were available in the study area. Similarly, only 4 (2.7%) schools have a sick-bay. One hundred and three 103 (69.1%) schools have first-aid boxes and 37 (24.8%) do not have even the first-aid box. Nearly half 51 (49.5%) of the first-aid boxes available were virtually empty with no basic instruments and emergency drugs. Anti-malarial drugs, cotton wool and bandages are the only drug and consumables that are averagely available in the studied facilities. These are provided at 78 (52.3%), 79 (53.0%) and 87 (58.3%) schools respectively. Scabicides. Antihelminthics, Anti-fungals, Haematinics and ORS sachets were not available in all the schools visited despite their reported importance and inclusion in the essential drugs. Analgesic and disinfectants were seen in 66 (44.2%) and 68 (45.6%) schools, while only 23 (15.4%) had vitamins as at the time of the study The situation is not different from findings of Abubakar and Raji (2021) on Status of Public Primary Schools. The author stated that Safety, Health Services Provision and Environmental Health Facilities for school health programme (including school health services) were grossly inadequate in most schools. The result of the present study is Similar to that work of Adebayo et al (2021) who revealed that about half of the primary schools (38.5% public; 75.9% private) had first-aid boxes, but they were empty in 66.7% of public and 20.7% of private schools.

A greater percentage of the schools studied -101(67.8%) did not have any form of health records keeping system, only 48 (32.2%) of the schools have provision for keeping the records. It has been recorded also even where the health records were kept, in all the schools it has been done purely at the discretion of the service provider and there was neither provision for transfer of such records nor any hope for securing them for future reference. Efficient and effective health records system is enshrined in the national guideline for implementation of SHS. This is the only accepted means of proper communication between SHS and the mainstream health care system. Shizume et al., (2021) also proposed five key factors as essential for successful provision of school health services in developing countries.

Utilization of school health services

Present study uncovered that only 30 (20.1%) of the schools always carry out health screening for children on regular basis- 43 (28.9%) of the schools sometimes do and sometimes do not, over one-third 56 (37.6%) of the schools studied do not screen children brought for admission at all and- 30 (20.1%) rarely do the pre-entry screening. This is a very good opportunity for early detection of health conditions, physical challenges and learning difficulties of the child for proper placement, but it is being lost due to poor utilization of SHS despite the fact that pre-entry medical and dental health screening is one of the major components of SHS in Nigeria. The finding above is a direct opposite of what was discovered by Poi et al. (2020). They revealed that, in many European countries direct medical care was found to be a part of SHS, including tasks like the management of chronically ill children and emergency care. In almost all countries, SHS comprised screenings, with a focus on height and weight, as well as vision, hearing and dental tests. Another focus in most countries was mental health promotion. According to them, nurses were the most widely reported professionals working in this field, followed by doctors and psychologists.

Health screening of teachers and other supporting staff such as cleaners, labourers, security and food vendors in the schools is a health preventive measure for the spread of infections in the school community. It was found in

this study that only 18 (12.1%) of the schools always perform this all-important activity. It was also discovered that 44 (29.5%) and 11 (7.4%) utilise this service sometimes and rarely respectively. Surprisingly, more than half 76 (51%) of the schools do not undertake this activity at all. This finding is at variance with what Michaud et al. (2021) discovered. The authors stated that all countries in the European Union (EU) (except Spain and the Czech Republic, which do not have formal SHS) provided school-based individual screening and health-enhancing measures. The majority performed height, weight, vision and hearing checks; some integrated other assessments of limited evidence-based effectiveness. Most countries also delivered health education and promotion activities in areas, such as sexual health, substance use and healthy nutrition.

Routine inspection of the school children should ideally be carried out daily by the school teachers. This helps to identify a child with any illness early so as to prevent an unexpected spread of diseases. This study exposed that few schools 22 (14.8%) undertake daily inspection of school children while weekly inspection is conducted by many (81 (54.4%)) of the schools. Ominously 22 (14.8%) carry out termly inspection and 24 (16.1%) do not even conduct inspection of children at all. This negates the wishes of CB (2023) who asserted that, effective school health service helps to reduce ill health, increase school attendance, academic performance, decrease school dropout rates, and additionally plays a role in identifying children with emotional, behavioural, and mental health problems for proper assessment and appropriate interventions. In the treatment of minor illnesses and emergencies as they occur. It was found that in 81 (54%) of schools studied it was reported that the SHS provider treat cases and send the child back home. This indicates how neglected is the health of our school-age children. The teachers who did not have any formal training and lacking the necessary tools and equipment were those treating children with illnesses in the school and sent them back home. Only 18 (12.1%) did refer cases to hospital, though 39 (26.2%) send back the sick child home immediately another small proportion of 11(7.4%) treat and refer to the hospital as reported.

Control of communicable diseases among the study participants shows that only 33 (22.1%) referred children with suspected communicable diseases to hospital and 84 (56.4%) of the studied school environments all send back home a child noticed to have a communicable disease. While 26 (17.4%) attempt to treat and send the child back home, 6 (4.0%) refer the child to hospital after attempting to offer treatment. According to UNICEF (2019), quality of health services is only guaranteed when service providers possess the necessary skills and training, have adequate supplies (i.e., drugs that are not expired and stored properly) that meet relevant standards and work in an environment appropriate, non-discriminatory, private and confidential as needed. It also emphasized that the facilities be safe and sanitary and services provided at an acceptable standard of care in alignment with relevant standards as appropriate. Quality also extends to the way people are treated before, during and after accessing services.

Quality of school health services

For quality of service to be assured, training and retraining of service provider is key. Therefore, number of teachers in the schools trained on first aid and emergency care was investigated. From the results, it shows that cumulatively in 129 (86.6%) schools only few of teachers were trained on first aid and emergency care. It also shows that only in 20 (13.4%) schools had many teachers trained on first aid and emergency care of children. This finding calls for effective collaboration between stakeholders so that training and retraining of school teachers can be organised to ensure effective attention to SHS in the area. Because Rasesemola et al (2019) identified insufficient stakeholder integration/collaboration in the provision of school health services at schools in the City of Tshwane and concluded that lack of collaboration with relevant stakeholders in school health service delivery will lead to a fragmented, uncoordinated and unsustainable approach to the execution of ISHP programme. This might result in delayed or no detection and intervention in cases of, among others, mental, psychosocial and health challenges to learning, as well as development of nutrition-related conditions.

Integration of children with disability in the school enrolment reduces the menace of out of school children and enhances the overall quality of educational system. In the research, it was found that in 120 (80.5%) schools, no single block of classroom has a walkway/slope that can be used for a child that is physically challenged to climb the normal steps and enter the classroom. It is only in 9 (6.0%) that most of the classroom blocks have the walkways. This is a serious hinderance for child with physical challenge to feel belonged in the school system and is a booster for the menage of Out of School Children. Inyango (2021) opined that if Nigeria is to implement

effective programme for inclusive education and to achieve Education for All (EFA) it has to continue bringing forward the concerns of marginalized and currently excluded groups.

CONCLUSION AND RECOMMENDATION

Summary

This study explored availability, utilization and quality of school health services among primary schools in Jega zonal education area of Kebbi state, Nigeria. Literature review indicates consistently wide gap of variation in availability, quality and utilization of SHS between high income and low-income economies of the world. Literature also further reveals even more variation across low-income economies with poorer indices across sub-Sahara Africa especially in Nigeria. A mixed method of descriptive design with concurrent triangulation was used in the study. The study setting was one randomly selected zone from the six zonal education areas of Kebbi state Nigeria. Target population was formed by all the primary schools in the zone out of which 160 were selected using a multi-stage cluster sampling technique. Three research tools were used to gather data which included a self-administered questionnaire, an interview guide and an evaluation scale. Results from 149 respondents was found suitable for analysis and it was treated using SPSS version 25. Results of findings from the study revealed that:

1. All major determinants of availability of SHS in an area such as trained service providers, SHS facility/tools, health records and transport/logistics are grossly inadequate and unavailable.
2. The little available SHS in the area is of poor quality due to lack of adequate training, poor source of funding and little or no collaboration with the health sector for SHS provision.
3. Need is not created by the SHS providers for the consumers; therefore, utilization is very low by the intended consumer of services.
4. There is a lack of legal framework upon which SHS can be placed in the area so as to enforce its provision and sanction the erring providers in the area.
5. It was also found that there is no statistically significant difference in the availability of SHS between public and private primary schools in the area under investigation.
6. Results also show that there is no statistically significant difference in the quality of SHS between public and private primary schools in the study setting.
7. It was also discovered that there was no statistically significant difference in utilization of SHS between public and private primary schools in Jega zonal education area.

CONCLUSION

Considering reports of the findings in this study, it can be concluded that;

1. The availability, utilization and quality of school health services in Jega zonal education area is very meagre, poor and inadequate.
2. There is no statistically significant difference in the availability, utilization and quality of SHS between public and private primary schools in Jega zonal education area.
3. A legal framework to guide and regulate SHS provision among primary schools in the study setting is required.

RECOMMENDATIONS

In view of the findings reported above and considering strategic importance of SHS in the attainment of SDGs 3,4,5 and several others as well as its key role in linking Maternal, New-born and Child health with the care of the school-aged children; the following recommendations are made.

1. It is necessary to develop a state policy and implementation guideline for school health service provision in the state and same be enforced upon all schools in the state through the zonal education areas.
2. There is need for provision of at least a well-equipped first-aid box in all primary schools in the area.

3. Basic first aid and emergency care training need to be periodically organized for all primary school teachers in the area.
4. Enhance multi-sectoral collaboration between health and education and all stakeholders in health to establish a sound SHS

REFERENCES

1. Abubakar, A. U., & Raji, I. A., (2021). Status of Public Primary Schools: Safety, Health ServiceProvision and Environmental Health Facilities in Sokoto Metropolis, Northwestern Nigeria. Asian Journal of Medicine and Health, 22–31.https://doi.org/10.9734/ajmah/2021/v19i1130395
2. Abodunrin, O., Adeoye, O., Adeomi, A., Osundina, F., & Ilori, O. (2014). Practices, Scope and Determinants of School Health Services in Osun State, Nigeria. British Journal of Medicine and Medical Research, 4(35), 5548–5557. https://doi.org/10.9734/bjmmr/2014/11931
3. Adam, V. Y., & Nwaogwugwu, J. C., (2020). Availability of personnel, facilities and servicesin Primary Health Care Centres in a Local Government Area in Benin City, Nigeria. Annals of Clinical and Biomedical Research, 1(1).https://doi.org/10.4081/acbr.2020.111
4. Adebayo, A. M., Sekoni, O. O., Uchendu, O., C., Ojifinni, O. O., Akindele, A., O., & Adediran, O. S.,(2019). Quality of implementation of the school health programme in a rural district of Oyo State, Nigeria: a public-private comparison. Journal of Public Health (Germany), 27(2), 163–169. https://doi.org/10.1007/s10389-018-0941-5
5. Adebayo, A. M., Dania, O., Akindele, A., & Fawole, T., (2021). Public–private comparative study of the quality of implementation of the school health programme in a metropolitan city in Nigeria. Journal of Public Health (Germany), 29(4), 829–837.https://doi.org/10.1007/s10389-019-01178-x
6. Ade, A. D., Vallepalli, C., Nagaraj, K., & Rao, G. V. (2020). A comparative study of school health services in South India. International Journal of Advanced Community Medicine, 3(1), 218–222.https://doi.org/10.33545/comed.2020.v3.i1d.137
7. Adebayo, A. M., & Owoaje, E. T., (2016); Quality of Implementation of the School Health Programme in Oyo State, South-West Nigeria: A Rural-Urban Comparative Survey. American Journal of Educational Research, 4(4),307-313. http://pubs.sciepub.com/education/4/4/3
8. Agu, C. I., Ossai, E. N., Ndu, A. C., Eze, I. I., Agu, I. C., Ugwunweze, I. J., & Ugwu, G. O. (2021). Exploring the views of Heads of Schools on School Health Services in Public Primary Schools in Enugu Metropolis, Nigeria: A Qualitative Study. Journal of Community Medicine and Primary HealthCare, 33(2),19–34. https://doi.org/10.4314/jcmphc.v33i2.2
9. Ahumaraeze, C. B., (2023). Comparative Analysis of the Status of Implementation of School Health Services in Public and Primary Schools in Owerri Municipal, Imo State, Nigeria. IDOSR JOURNAL OF BIOLOGY, CHEMISTRY AND PHARMACY, 8(2), 92–101.https://doi.org/10.59298/idosr/jbcp/23/10.127
10. Alafin, B., Adesegun, O. A., Izang, J. A., & Alausa, K., O., (2019). An appraisal of the School Health Programme in primary schools in a rural community in Nigeria. Ethiopian JournalofHealth development, 33(3), 153–159.
11. Amoran, O., (2017). Healthful School Environment: A Comparative Study of Public and Private Primary Schools in Ogun State, Nigeria. Archives of Community Medicine and PublicHealth,062–070. https://doi.org/10.17352/2455-5479.000027
12. Atakpo, T. E., (2020). Restructuring primary school health services in Nigeria for a sustainable solution to global pandemics. Journal of Educational and Social Research, 10(4), 134–145. https://doi.org/10.36941/JESR-2020- 0073
13. Bello J. F., Muhammed J. N., Kehinde I. P., Umar, O. A., Baba, J., & Isezuo, K., (2020).School Health Services in Sokoto Town, Nigeria. IOSR Journal of Dental and Medical Sciences (IOSR-JDMS) e-ISSN, 19, 44–50. Retrieved from www.iosrjournals.org
14. Binder, C., Torres, R. E., & Elwell, D., (2021). Use of the Donabedian Model as a Framework for COVID-19 Response at a Hospital in Suburban Westchester County, New York: A Facility-Level Case Report. J Emerg Nurs. 47(2), 239-255.doi: 10.1016/j.jen.2020.10.008.Epub 2020 Dec 11.

PMID: 33317860; PMCID: PMC7831996.
15. Bisi-Onyemaechi, A. I., Akani, A. N., Ikefuna, A. N., Tagbo, B., N., Chinawa, J., M., & Chikani, U., N., (2017). School health services in Enugu East, Nigeria: perspectives from a resource poor setting. Healthcare in Low-Resource Settings, 5(1).https://doi.org/10.4081/hls.2017.6357
16. BO, T. O., GIO, T., & E, A., (2014). School Health Services in primary schools in Jos. OpenScience Journal of Clinical Medicine, 2(3), 83–88.
17. Blessing, A. C., Nwadiuto, A., A., & Francis, U., I., (2023). Qualifications of Head Teachers and the numbers of Healthcare Personnel available in Public and Private Schools in Owerri Municipal, Imo State, Nigeria. IDOSR JOURNAL OF APPLIED SCIENCES, 114–130.https://doi.org/10.59298/idosr/2023/12.1.7901
18. Chen, C., & Gu, D., (2021). Andersen Model. In: Gu, D., Dupre, M.E. (eds) Encyclopedia of Gerontology and Population Aging. Springer, Cham. https://doi.org/10.1007/978-3-319-69892-2_876-1
19. Chidiebere, O. D., Thomas, U. O., Joy, E., Stanley, O. K., Ikenna, N. K., Uchenna, E., & Isaac, A. N. (2016). The Status of School Health Services: A Comparative Study of Primary Schools in a Developing Country. American Journal of Public Health Research, Vol. 4, 2016, Pages 42-46, 4(2), 42–46. https://doi.org/10.12691/AJPHR-4-2-1
20. Choi, Y., Kang, S., Kim, J. S., Kwon, I., & Lee, M. (2020). School Health Needs Assessment inChanchamayo, Peru: A Health Promoting School Project. FrontiersinPublicHealth, 8.https://doi.org/10.3389/fpubh.2020.00333
21. Dania, O., & Adebayo, A. M., (2019). School Health Programme in Nigeria: A Review of Its Implementation for Policy Improvement. American Journal of Educational Research, 7(7),499–508.http://pubs.sciepub.com/education/7/7/10
22. Dibakwane, S. T., & Peu, M. D., (2018). Experiences of school health nurses regarding the provision of the school health service delivery in the Tshwane district. African Journal of Primary Health Care and Family Medicine, 10(1), 2071–2928.https://doi.org/10.4102/phcfm.v10i1.1807
23. Eduweb (2023). JEGALGA wards new and existing polling unit. The eduweb blog.https://www.eduweb.com.ng/jegalga-wards-new-and-existing- polling-unit/
24. Eduweb (2023); ALIEROLGA wards new and existing polling unit. The eduweb blog.https://www.eduweb.com.ng/jegalga-wards-new-and- existing-polling-unit/
25. Eduweb (2023); MAIYAMALGA wards new and existing polling unit. The eduweb blog.https://www.eduweb.com.ng/jegalga-wards-new-and- existing-polling-unit/
26. Eduweb (2023); SURULGA wards new and existing polling unit. The eduweb blog. https://www.eduweb.com.ng/jegalga-wards-new-and-existing-polling-unit/
27. Endeshaw, B., (2021). Healthcare service quality-measurement models: a review, Journal of Health Research,35(2),106-117. https://doi.org/10.1108/JHR-07-2019-0152
28. Ezeonu, C. T., Asiegbu, U. V., Arua, C. E., Edafioghor, L. O., Una, A. F., Anyansi, M. N., & Onwe, O. E. (2022). National School Health Policy in Nigeria; Survey of teachers' perception and implementation in public schools in Ebonyi State. Nigerian Journal of Paediatrics, 49(1). https://doi.org/10.4314/njp.v49i1.14
29. Fox, K., Burgess, A., Williamson, M. E., Massey, J., Shaler, G., Pearson, K., & Ward, M. (2022). Implementation of Telehealth Services in Rural Schools: A Qualitative Assessment. Journal of School Health, 92(1), 71– 78. https://doi.org/10.1111/josh.13104
30. Guest, G., Namey, E., & Chen, M. (2020); A simple method to assess and report thematic saturation in qualitative research. PloS one,15(15), e0232076.
31. Gulshan, K., & Reshmi, R. S., (2022). Availability of public health facilities and utilization of maternal and child health services in districts of India, Clinical Epidemiology and Global Health, 15(5)
32. Guta, N. M., (2022). Application of Donabedian quality-of-care framework to assess quality of neonatal resuscitation, its outcome, and associated factors among resuscitated newborns at public hospitals of East Wollega zone, Oromia, Western Ethiopia, 2021. BMC Pediatr 22(605). https://doi.org/10.1186/s12887-022-03638-y
33. Guy-Evans, O., (2023); Qualitative vs Quantitative Research Methods & Data Analysis. Simply Psychologyhttps://www.simplypsychology.org/qualitative-quantitative.html
34. Inyango M., (2021). Integration of Children with Special Educational Needs in School System

(Nomadic, Fishermen and Albinism) in Cross River State. SSRN:https://dx.doi.org/10.2139/ssrn.3852603
35. Jansen, D., Vervoort, J.P.M., Visser, A., Reijneveld, S.A., Kocken, P., de Lijster,G. & Michaud, P., A. (2019), "School Health Services", Blair, M., Rigby, M. and Alexander, D. (Ed.) Issues and Opportunities in Primary Health Care for Children in Europe, Emerald Publishing Limited, Bingley, pp. 219 236. https://doi.org/10.1108/978-1-78973-351-82019101
36. Jessie M., (2023); Healthy Schools Campaign Blog. https://healthyschoolscampaign.orgKabir, D., (2003 October 16). Nigeria: Jega, Where oil "Sheikhs" lead the way, Daily Trust Newspaper https://allafrica.com/stories/200310160361.html
37. Kelley, C. (2018); Coordinated school health. WARREN COUNTY SCHOOLS TN departments and services/coordinated-school-health/eight-components-of-coordinated-school-health https://www.warrenschools.com/district-
38. Khan, N., Trisha, N. I., & Rashid, M., (2022). Availability and readiness of healthcare facilities and their effects on under-five mortality in Bangladesh: Analysis of linked data. J Glob Health. (12) 04081
39. Kuponiyi, O.T., Amoran, O. E., & Kuponiyi, O.T., (2016). School health services and its practice among public and private primary schools in Western Nigeria. BMC Res Notes 9,203 https://doi.org/10.1186/s13104-016-2006-6
40. Le, K. H., La, T. X. P., & Tykkyläinen, M. (2022); Service quality and accessibility of healthcare facilities: digital healthcare potential in Ho Chi Minh City. BMC Health Serve Res 22(1374) https://doi.org/10.1186/s12913-022-08758-w
41. Lordson O. D., & Margaret, O. (2014). Availability and Application of School Health Services in Selected Primary and Secondary Schools in Ovia Local Government Area of Edo State-Nigeria. International J. Soc. Sci. & Education, 4, 2223–4934.
42. Plummer, M. L., Chan, A., Kohl, K., Taylor, A. B., Baltag, V., Saewyc, E., & Ross, D. A., (2021). Results of a Global Survey of Experts to Categorize the Suitability of Interventions for Inclusion in School Health Services, Journal of Adolescent Health, 69, Healthy Schools Campaign 2022 https://healthyschoolscampaign.org/issues/health-services/#current- environment
43. Mays, A., (2020). Advancing Student Health and Achievement Through Medicaid: Lessons Learned from State Efforts to Expand Medicaid- Funded School Health Services. Journal of School Health, 90(12), 918–922. https://doi.org/10.1111/josh.12969
44. Medeiros, E. R. de, Holanda, L. M. da S. L. de, Pinto, E. S. G., Paiva, A. C. de S.,Medeiros, H. I. B de, & Silva, S. Y. B. E. (2020). Structure of services and material health resources associated with the School Health Programme. Revista Brasileira de Enfermagem, 73(6), e20190073.https://doi.org/10.1590/0034-7167-2019-0073
45. Michaud, P. A., Vervoort, J. P. M., Visser, A., Baltag, V., Reijneveld, S. A., Kocken, P. L., &Jansen,D. (2021). Organization and activities of school health services among EU countries. European Journal of Public Health, 31(3), 502– 508 .https://doi.org/10.1093/eurpub/ckaa200
46. Michelle E. Kiger & Lara Varpio (2020): Thematic analysis of qualitative data: AMEE Guide No.131,Medical Teacher, DOI: 10.1080/0142159X.2020.1755030 https://doi.org/10.1080/0142159X.2020.1755030
47. Mohanraj, R., Kumar, S., Agarwal, M., Dhingra, B., & Suresh, S., (2022). Conceptual Framework-Andersen and Newman framework for health service utilization, PLOS Global Public Health. Figure.https://doi.org/10.1371/journal.pgph.0000632.g001
48. Olatunya O, Oseni S, Olaleye A, & Akani N, O. O. (2015). School Health Services in Nigeria: Asleeping giant? African Journal of Health Sciences, 28(1), 127–141.
49. Okoloagu, N. N., Okoye, O., Onwubiko, S., Eze, C., Eze, B., & Chuka-Okosa, C., (2019). A Survey of Teachers' Knowledge, Attitudes, and Practices Related to Pupils' Eye Health and School-Based Eye-Health Services. DOI:10.410/njo.njo_10_18 nigerian journal of ophthalmology,27(2)68-75
50. Omotayo, G. O., & Aliyu I. N., (2020). Implementation of School Health Policy: Echoing Its Prospects in Combating Emerging Health Challenges in Nigeria. World Journal of innovative Research (WJIR);8 (4) 125-130

51. Oyinlade, O. A., Ogunkunle, O. O., & Olanrewaju, D. M. (2014). An evaluation of school health services in Sagamu, Nigeria. Nigerian Journal of Clinical Practice, 17(3), 336–342. https://doi.org/10.4103/1119-3077.130236
52. Page, M. J., McKenzie, J. E., & Bossuyt, P. M. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. Syst Rev 10(89).https://doi.org/10.1186/s13643-021-01626-4
53. Poudel, A. P., (2018). Teachers' Perception on School Health Services. Journal of Health Promotion, 6, 5–10. https://doi.org/10.3126/jhp.v6i0.21779
54. PHCPI (2019): Availability of Effective PHC Services: Provider Availability Improvement Strategies. Primary Health Care Performance Initiative, 2018, https://improvingphc.org/provideravailability.
55. Rasesemola, R. M., Matshoge, G. P., & Ramukumba, T. S. (2019). Compliance to the Integrated School Health Policy: Inter-sectoral and multi-sectoral collaborate on. Curationis, 42(1) https://doi.org/10.4102/curationis.v42i1.1912
56. Rockville, M. D., (2015). Types of Health Care Quality Measures: Agency for Healthcare Research and Quality, https://www.ahrq.gov/talkingquality/measures/types.html
57. Ross, D. A., Plummer, M. L., Montgomery, P., Kohl, K., Siegfried, N., Saewyc, E., & Baltag, V. (2021): World Health Organization Recommends Comprehensive School Health Services and Provides a Menu of Interventions. Journal of Adolescent Health, 69(2), 195–196 https://doi.org/10.1016/j.jadohealth.2021.04.036
58. Sanford, C., Saurman, E., Dennis, S., & Lyle, D. (2021). "We're definitely that link": The role of school-based primary health care registered nurses in a rural community. Australian Journal of Primary Health, 27(2), 76–82. https://doi.org/10.1071/PY20149
59. Sanni, U. A., Airede, K. I., Anigilaje, E. A., & Offiong, U. M. (2022); Assessment of school health services in primary schools in Gwagwalada area council, federal capital territory, Nigeria. Pan African Medical Journal, 41. https://doi.org/10.11604/pamj.2022.41.251.27372
60. Seidu A-A (2020); Using Anderson's Model of Health Service Utilization to Assess the Use of HIV Testing Services by Sexually Active Men in Ghana. Front Public Health 8(512).
61. Shao, S., & Wang, M., (2018). Analysis of health service utilization of migrants in Beijing using Anderson health service utilization model. BMC Health Serv Res 18(462).https://doi.org/10.1186/s12913-018-3271-y
62. Shizume, E., Tomokawa, S., Miyake, K., & Asakura, T., (2021). Factors enabling systematized national school health services in Japan. Pediatrics International, 63(10),1151–1161.https://doi.org/10.1111/ped.14864
63. Soultatou, P., Vardaros, S., & Bagos, P. G., (2023). School Health Services and Health Education Curricula in Greece: Scoping Review and Policy Plan. Healthcare, 11(12),1678.https://doi.org/10.3390/healthcare11121678
64. Sulaiman, K., (2008). JEGA A Social, Economic and Political History ed. Kraft Books Limited.
65. Suzie, C., (2023 December 5). Avedis Donabedian: The creator of Donabedian Model of care. Life QI blog. https://blog.lifeqisystem.com/avedis-donabedian
66. Bradford, S., (2018). Global Partnership for Education: School health activities support the achievement of 5 SDGs support-achievement-5-sdgs https://www.globalpartnership.org/blog/school-health-activities-
67. Tawfik, G.M., Dila, K.A.S., & Mohamed, M.Y.F. (2019); A step by step guide for conducting a systematic review and meta-analysis with simulation data. Trop Med Health 47(46). https://doi.org/10.1186/s41182- 019- 0165-6
68. Unicef (2019). Availability, Accessibility, Acceptability, and Quality framework: A tool to identify potential barriers to accessing services in humanitarian settings,https://gbvguidelines.org/wp/wp-content/uploads/2019/11/AAAQ-framework-Nov-2019-WEB.pdf
69. Van der Pol, S., Postma, M. J., & Jansen, D., (2020). School health in Europe: a review of workforce expenditure across five countries. BMC health services research, 20(1), 206. https://doi.org/10.1186/s12913-020-05077- w
70. World Health Organization, (2022). Quality of Care. https://www.who.int/health-topics/quality-of-care#tab=tab_1
71. World Health Organization, (2021). WHO guideline on school health

serviceshttps://www.who.int/publications/i/item/9789240029392
72. World Health Organization, (2022). Health Service Data; https://www.who.int/data/data-collection-tools/health-service-data
73. World Health Organization, (2023). Service availability and readiness assessment (SARA), https://www.who.int/data/data-collection-tools/service-availability-and-readiness-assessment-(sara)
74. World Health Organization, (2021). WHO guideline on school health services https://www.who.int/publications/i/item/9789240029392
75. World Health Organization, (2021). Guideline on school health services. https://www.who.int/publications/i/item/9789240029392