

# Assessment of School Health Policy in Ghana; Perspective of Teachers in Second Cycle Institutions in the Kwadaso Municipal Area, Kumasi

**Juliana Akumiah Opoku**

<https://orcid.org/0009-0006-2036-3345>  
Kwame Nkrumah University of Science and Technology  
Julianaakumiah@gmail.com

**Joseph Kwasi Brenyah**

<https://orcid.org/0000-0001-8601-8874>  
Kwame Nkrumah University of Science and Technology-Kumasi  
bresjosaf@gmail.com

**Alyiu Mohammed**

<https://orcid.org/0000-0003-2770-8968>  
Kwame Nkrumah University of Science and Technology-Kumasi  
gentlejones22@gmail.com

**Akohene Kofi Mensah**

<https://orcid.org/0000-0001-8737-3130>  
Kwame Nkrumah University of Science and Technology-Kumasi  
akohenemensah@yahoo.com

## Abstract

**Background:** The focus on school health has moved from the classroom to a more comprehensive approach focusing on students' health behaviours and a supportive school environment in health promotion. As school health policy helps to reduce health risk behaviours, knowledge and perspectives of Teachers in school health are key.

**Method:** An institutional school-based cross-sectional study involving 220 teachers in second-cycle institutions in the Kwadaso Municipal-Ghana from June to August 2022. Data was collected using a structured questionnaire and analysed using STATA version 16, Microsoft Excel, and Jamovi 2.3.12. Descriptive statistics and Chi-square association tests were conducted between the outcome and independent variables.

**Results:** The age range was 24-56 years. Most respondents were first-degree graduates (52.5%). The study found that the school's health program covers all aspects of the health needs of the students ( $Mean=2.98$ ,  $SD= 1.34$ ). Also, the school health programs focused on preventive measures ( $Mean=2.46$ ,  $SD= 1.081$ ). Again, about 41.63% perceived that they passionately share the view that effective implementation of the health policy in their school is associated with their classroom responsibility ( $Mean=2.34$ ,  $SD=0.918$ ). Items such as 'My



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school has adequate classrooms' (110 [50.2%], Mean=2.33, SD 1.169, 'My school has friendly facilities for People Living with Disability (84[38.0%], mean=2.70 and SD of 1.315) have seen a high agreement. About 44.3% of the respondents believe that the school health program has improved their knowledge.

**Conclusion:** Most teachers had adequate perspective in the school health program due to their high knowledge of school health issues.

**Keywords:** school health policy, perspective of teachers, second cycle institutions, Ghana

## Background

School health in children seems to have been a global challenge (Bundy, 2011; Sarr et al., 2017). It is estimated that 1.2 million schoolchildren died in 2015 due to ill health (WHO, 2015). The major health conditions affecting children's education are highly prevalent among school children in poor-resourced areas such as sub-Saharan Africa. For instance, it is estimated that 169 million school-age children health in sub-Sahara Africa were affected by conditions such as malaria, worm infections, hunger, anaemia, tooth decay, diarrhoea, and respiratory disease (Bundy, 2011; Sarr et al., 2017). According to the International Commission on Financing Global Education Opportunity, these conditions translate into 200 million and 500 million school days lost to ill health in low-income countries yearly (ICFGeo, 2016). Recently, the focus on school health has moved from the classroom to a more comprehensive approach focusing on student health behaviour and a supportive school environment in health promotion (Samdal and Rowling, 2017). The Ghanaian government has created a national school health policy and an implementation strategy plan to address the mentioned issues. The strategy was supposed to improve the health status of school children if it was correctly interpreted and executed. The policy also attempted to address equity and learning environment enhancement issues for both boys and girls, including those with special needs. However, little is known about the program's implementation besides the policy's formulation. Though few studies have been done on the schools in Ghana's Eastern, Western and Central regions, they concentrated on sickbay (Mensah, 2019). There is no data on teachers' knowledge of school health programs, factors influencing teachers' perceptions towards the implementation and the influences of school infrastructure on the implementation of schools in Ghana. This paper bridges the gap by providing data on school health policy in Ghana and the perspective of teachers in second-cycle institutions in the Kwadaso Municipal Area, Kumasi. The study outcome is believed to inform policy on school health programs in Ghana and other countries.

School health programs for children of school age are usually delivered through the school system, often supported by a formal policy between multiple actors such as health, education, and environmental sectors, among others. There are safe, simple, and effective school-based options by which the education sector, typically with oversight

from the health sector, can address the most common health conditions that affect school-age children. Some of the most common interventions and the respective conditions that school health seeks to provide are deworming, mosquito, bed net usage, malaria treatment, hand washing, bacterial infections prevention and treatment, proper methods of tooth brushing, dental caries, eyeglasses prescriptions, refractive error, physical exercise and healthy dietary behaviour and weight concerns, micronutrients and micronutrient deficiency, and food security (Sarr *et al.*, 2017). In Ghana, students in secondary schools under 13 years and above constitute 48% of the total population. These age groups suffer significant health problems from poor sanitation, hygiene, water quality and other related factors such as poor housing, HIV and AIDS, parasitic infections, infectious diseases and sexually transmitted infections in their schools.

Furthermore, challenges encountered during adolescence, such as sexual harassment, drug abuse and unplanned pregnancies, contribute to poor health in second-cycle institutions (GSS GHS ICF International, 2015). A study conducted in Nigeria by Odeyemi and Chukwu (2015) reports that the overall knowledge of school health was poor in both local government areas (LGAs) of Ogun State. More than half of the respondents in Ifo (57.0%) and Ikenne (54.5%) had poor knowledge of school health programs. According to Mensah's (2019) study on school-based health service delivery in Ghana, out of 107 senior high/technical schools, 63 (59%) of teachers know school health policy, while 44 (41%) have less knowledge of school health policy. According to Adu-Mireku's (2017) study in Ghana, 40% of teachers have an appropriate understanding of school health, and 60% have less awareness of school health policy. Therefore, this paper's outcome would offer school health policymakers baseline information to shape school health policy programs in Ghana.

## Materials and Method

### Study Settings

The study was conducted in Kwadaso Municipality in Ghana between January–August 2022. The population of the Municipality was 154,526 (75,205 males and 79,321 females), as published by the Ghana Statistical Service (2021). The Municipality comprises thirty-six (36) communities with four (4) second-cycle institutions. All four schools were included in the study.

### Study Design and Approach

The study employed a descriptive cross-sectional study design. A quantitative (adapted questionnaire) method was used to assess the objectives of the study.

### Study Population

The target population for this study were teachers teaching in the four 2<sup>nd</sup> cycle institutions. These schools and their respective teacher population were Prempeh

College (130 teachers), Yaa Asantewaa Senior High School (123 teachers), Assemblies of God Senior High School (30 teachers) and Agric-Nzema Senior High School (42 teachers). In all, the teacher population of these schools altogether was 400.

### **Inclusion and Exclusion Criteria**

The study included all Teachers who are officially permanent staff of the second cycle schools in Kwadaso municipality. Again, all teachers who consented and signed informed consent statements were included in the study. Again, all teachers with more than three years of experience were included in the study. However, the excluded participants were those teachers who were not permanent, who had been in the school for less than three years and those who did not consent.

### **Sample Size Calculation**

In order to obtain the sample size for the current study, Yamane's (1967) formula for sample size calculation was used. This formula was used because the total population is known. The formula is given as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Where: n = sample size, N = number of people in the population (population size)  
e = level of precision

If N = 400 (the sum of the yearly registrants for the three hospitals), e = 0.05, then  
=  $400 / 1 + 400(0.05)^2$   
=  $400 / 1 + 400(0.0025)$   
=  $400 / 1 + 1.002$   
=  $400 / 2.002$   
= 199.80 + 10% non-response rate  
n = 220 Teachers

### **Sampling Techniques**

The respondents were stratified into strata. Simple random sampling was used to select respondents who met the inclusion criteria. The respondents were asked to pick **YES** or **NO** ballots from a box. Respondents who picked **YES** were included in this study. The interviews were conducted at the respondents' institutions.

### **Data Collection Technique and Tool**

Respondents were interviewed using a structured questionnaire in English. The questionnaire was self-administered with two trained Research Assistants for each of the four institutions. The questionnaire comprised four sections: sections A, B, C, and D. Section A included the socio-demographic characteristics of the participants, Section B the knowledge of school health programs, Section C factors influencing teachers'

perceptions towards the implementation of school health programs and Section D school infrastructure and health.

### **Pre-testing**

The instruments were pre-tested to assess their content validity and reliability to check the appropriateness of the questionnaire. The study instruments were pre-tested at Opoku Ware Senior High School in the Ashanti Region of Ghana. This institution falls under the agency of Ghana Education Services, and it offers similar characteristics to the study schools.

### **Study Variables**

The study variables were teachers' perceptions of school health policy (dependent variables), knowledge of teachers, factors influencing school health policy, and school health infrastructure (independent variables).

### **Data Processing and Analysis**

The data was first cross-checked and edited as part of the quantitative data analysis to ensure completeness. Stata Version 16 was used for the processing. Data were screened for missing values for continuous and string variables, and univariate and multivariate outliers were checked using frequency distributions and box plots. Data analysis tools comprised both descriptive and inferential statistics. Data was analysed based on the study objectives using descriptive statistics (frequencies and percentages), and logistic regression was used to determine the extent of participants' perspectives on school health policies. Results were presented in tables.

### **Ethical Issues**

The KNUST Committee approved the study for Human Research, Publication and Ethics (CHRPE) with approval reference number CHRPE /AP/433/22. Again, approval was sought from the Ghana Education Services (GES), Metropolitan Office, Kumasi. Participants were informed that participation in this study poses no risk to the participants. They were informed of confidentiality and the right to opt out of the study at any time without any penalty. Participants were also told they may not get any direct material benefits, but their responses would help inform policy on effective school health. Again, they were informed that completing the questionnaire would take 10–20 minutes.

## **Results**

### **Respondents Sociodemographic Attributes**

This study's response rate was 100% (220 respondents). The age range was 24–56 years, with 40 years the average age of the standard deviation (SD) of 7.56. Most respondents

were first-degree graduates (52.5%). About 63.8% were married and 24.9% were single. Our study reported that 68.8% of respondents were Christians. Regarding the duration of teaching experience, 42.5% of the respondents had worked for over eleven years, as shown in Table 1.

**Table 1:** Sociodemographic Information of the Respondents

Variable	Frequency(n=220)	Percentage (100%)
<b>Age</b>	<b>Range= 24–56</b> years	<b>Mean=40years</b> <b>SD=7.056</b>
<b>Educational Level</b>		
Post-sec. Teachers Certificate ‘A’	6	2.7
First Degree	116	52.5
Postgraduate Diploma	12	5.4
Masters	80	36.2
PhD	6	2.7
<b>Marital Status</b>		
Not married	55	24.9
Co-habitation	18	8.1
Married	141	63.8
Separated / Divorced	7	3.2
<b>Religion</b>		
Christianity	152	68.8
Islam	66	29.9
Traditional religion	3	1.4
<b>Number of Years Employed</b>		
One to five years	48	21.7
Six to ten years	78	35.3
Eleven years and above	94	42.5
<b>Do you stay on campus?</b>		
Yes	89	40.3
No	132	59.7
<b>How long have you been in this school?</b>	<b>Min</b> years = 4 <b>Max</b> years =14	Mean=6.64 SD=4.571

### The Knowledge of Teachers on School Health Program

Respondents' knowledge was measured on a Likert scale with mean scores ranging from 1–5. Higher mean scores represent more agreement and increased chances of occurrence of the corresponding item, whilst lower mean scores represent less agreement and decreased chances of occurrence of the corresponding item. As shown in Table 2, items such as ‘*The school health program in my school covers all aspects of the health needs of the students*’ (Mean=2.98, SD= 1.34) and ‘*The school health policy focuses on preventive measures*’ (Mean=2.46, SD= 1.081): Also, 33.48% of teachers agreed with the statement that ‘*The health policy in the school spells out the roles of engagement at the implementation level*’ as shown in Table 2.

**Table 2:** Teacher's Knowledge of School Health Programs

<b>Variables</b>	<b>Freq</b>	<b>Per (%)</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>My SHP covers all aspects of the health needs of the students.</b>			<b>1</b>	<b>5</b>	<b>2.98</b>	<b>1.34</b>
Strongly Agree (SA)	33	14.93	1	5		
Agreed (A)	66	29.86	1	5		
Neutral (N)	30	13.57	1	5		
Disagree (D)	57	25.79	1	5		
Disagree (SD)	35	15.84	1	5		
<b>The SHP focuses on preventive measures.</b>			<b>1</b>	<b>5</b>	<b>2.46</b>	<b>1.081</b>
Strongly Agree (SA)	43	19.46	1	5		
Agreed (A)	96	43.44	1	5		
Neutral (N)	44	19.91	1	5		
Disagree (D)	26	11.76	1	5		
Disagree (SD)	12	5.43	1	5		
<b>The SHPs my school focus on only treatment measures</b>			<b>1</b>	<b>5</b>	<b>2.4</b>	<b>1.094</b>
Strongly Agree (SA)	43	19.46	1	5		
Agreed (A)	96	44.44	1	5		
Neutral (N)	44	18.91	1	5		
Disagree (D)	26	11.76	1	5		
Disagree (SD)	12	5.43	1	5		
<b>My SHP combines preventive and treatment measures.</b>			<b>1</b>	<b>5</b>	<b>2.46</b>	<b>1.02</b>
Strongly Agree (SA)	34	15.38	1	5		
Agreed (A)	97	43.89	1	5		
Neutral (N)	53	23.98	1	5		
Disagree (D)	29	13.12	1	5		
Disagree (SD)	8	3.62	1	5		
<b>The SHP in the school spells out the roles of engagement at the implementation level.</b>			<b>1</b>	<b>5</b>	<b>2.7</b>	<b>1.045</b>
Strongly Agree (SA)	27	12.22	1	5		
Agreed (A)	74	33.48	1	5		
Neutral (N)	66	29.86	1	5		
Disagree (D)	46	20.81	1	5		
Disagree (SD)	8	3.62	1	5		



### The Perception of Teachers Regarding School Health Program

Our study found that 39.37% of teachers perceived that the school health programs (SHP) are identified more with their teaching responsibilities and the training they have influenced their responsibility to ensure effective implementation of the school health program in their schools (A=106, 39.37%; Mean=2.38, SD=1.044). Again, 41.63% shared the view that effective implementation of the health program in their school is associated with their classroom responsibility (Mean=2.34, SD=0.918, as shown in Table 3.

**Table 3:** Teacher's Perceptions of the School Health Program

Variables	Freq.	Per (%)	Min	Max	Mean	Std. Deviation
<b>The SHPs are identified more with my teaching responsibilities.</b>			<b>1</b>	<b>5</b>	2.78	1.099
Strongly Agree (SA)	21	9.5	1	5		
Agreed (A)	87	39.37	1	5		
Neutral (N)	44	19.91	1	5		
Disagree (D)	57	25.79	1	5		
Disagree (SD)	12	5.43	1	5		
<b>The training I have as a teacher influence me to relate to the responsibility of ensuring effective implementation of the SHP in my school.</b>			<b>1</b>	<b>5</b>	2.38	1.044
Strongly Agree (SA)	40	18.1	1	5		
Agreed (A)	106	47.96	1	5		
Neutral (N)	33	14.93	1	5		
Disagree (D)	36	16.29	1	5		
Disagree (SD)	6	2.71	1	5		
<b>My SHP needs the Headmaster and Administration's Support for its implementation.</b>			<b>1</b>	<b>5</b>	2.3	1.001
Strongly Agree (SA)	44	19.91	1	5		
Agreed (A)	103	46.61	1	5		
Neutral (N)	45	20.36	1	5		
Disagree (D)	22	9.95	1	5		
Disagree (SD)	7	3.17	1	5		
<b>I passionately believe that the effective implementation of my SHP is associated with my classroom</b>			<b>1</b>	<b>5</b>	2.34	0.923

<b>responsibility.</b>						
Strongly Agree (SA)	27	12.22	1	5		
Agreed (A)	92	41.63	1	5		
Neutral (N)	57	25.79	1	5		
Disagree (D)	31	14.03	1	5		
Disagree (SD)	14	6.33	1	5		
<b>My SHP considers contributions from all stakeholders, including teachers, in the decision-making process.</b>			<b>1</b>	<b>5</b>	2.61	1.072
Strongly Agree (SA)	27	12.22	<b>1</b>	<b>5</b>		
Agreed (A)	92	41.63	<b>1</b>	<b>5</b>		
Neutral (N)	57	25.79	<b>1</b>	<b>5</b>		
Disagree (D)	31	14.03	<b>1</b>	<b>5</b>		
Disagree (SD)	14	6.33	<b>1</b>	<b>5</b>		

### **Infrastructure and School Health Implementation Program**

Statements such as '*My school has adequate classrooms*' (110 [50.2%], Mean=2.33, SD 1.169, '*My school has friendly facilities for people living with disability*; (PLWD (84[38.0% mean=2.70 and SD of 1.315 had a high agreement by the Teachers.

Moreover, statements such as 'My school has water and sanitation facilities', The water in my school is hygienic', My school has a dedicated sickbay, and My school health program has the needed infrastructure given higher percentages of 'Agreed'. Overall assessment of the implementation of school health programs noted that 54.3% of Teachers agreed that the program is successful in their schools, as shown in Table 4.

**Table 4:** School Infrastructure on the Implementation of School Health Program

<b>Variables</b>	<b>Freq.</b>	<b>Per (%)</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>My school has adequate classrooms.</b>			<b>1</b>	<b>5</b>	<b>2.33</b>	<b>1.169</b>
Strongly Agree (SA)	49	22.2	1	5		
Agreed (A)	110	50.2	1	5		
Neutral (N)	18	8.1	1	5		
Disagree (D)	26	11.8	1	5		
Disagree (SD)	17	7.7	1	5		
<b>My school has friendly facilities for PLWD.</b>			<b>1</b>	<b>5</b>	<b>2.70</b>	<b>1.315</b>
Strongly Agree (SA)	40	18.1	1	5		
Agreed (A)	84	38.0	1	5		
Neutral (N)	30	13.6	1	5		
Disagree (D)	37	16.7	1	5		
Disagree (SD)	29	13.6	1	5		
<b>My school has water and sanitation facilities.</b>			<b>1</b>	<b>5</b>	<b>2.08</b>	<b>0.976</b>
Strongly Agree (SA)	57	25.8	1	5		
Agreed (A)	120	54.4	1	5		
Neutral (N)	21	9.5	1	5		
Disagree (D)	13	5.9	1	5		
Disagree (SD)	9	4.1	1	5		
<b>The water in my school is hygienic.</b>			<b>1</b>	<b>5</b>	<b>2.10</b>	<b>0.844</b>
Strongly Agree (SA)	44	19.9	1	5		
Agreed (A)	130	59.3	1	5		
Neutral (N)	28	12.7	1	5		
Disagree (D)	15	6.8	1	5		
Disagree (SD)	3	1.4	1	5		
<b>My school has a dedicated sick bay.</b>			<b>1</b>	<b>5</b>	<b>2.30</b>	<b>1.028</b>
Strongly Agree (SA)	40	18.1	1	5		
Agreed (A)	117	53.1	1	5		
Neutral (N)	30	13.6	1	5		
Disagree (D)	23	10.4	1	5		
Disagree (SD)	10	4.5	1	5		
<b>My SHP needs infrastructure to support its successful and effective implementation.</b>			<b>1</b>	<b>5</b>	<b>2.44</b>	<b>0.996</b>

Strongly Agree (SA)	26	11.8	1	5		
Agreed (A)	120	54.8	1	5		
Neutral (N)	32	14.5	1	5		
Disagree (D)	35	15.8	1	5		
Disagree (SD)	7	3.2	1	5		
<b>Given the overall assessment, I think implementing the SHP is successful and effective in my school.</b>			1	5	2.23	0.422
Strongly Agree (SA)	39	17.7	1	5		
Agreed (A)	118	53.4	1	5		
Neutral (N)	30	13.6	1	5		
Disagree (D)	23	10.4	1	5		
Disagree (SD)	10	4.5	1	5		

### Assessment of the Benefit of the School Health Program in Second-Cycle Schools

We found that 44.3% of respondents mentioned that they think the SHP has improved teachers' knowledge. Also, 52.49% of respondents mentioned that they have received training in first aid, and the training has been helpful to them, as mentioned by 46.15% of the Teachers. The Teachers further made known that the skills acquired were applied in the school (48%) at home (31%), and served as trainer skills of trainees to other teachers (21%). The general assessment of the SHP showed that about 50.23% of the respondents said training on the subject was insufficient. Two-thirds of the respondents agreed that (82.35%) the school health program prevents risk-associated conditions among the students.

### Factors Influencing School Health Program

Factors such as trained nurses (71.82%), inadequate supply of drugs (47.27%) and support from the Central Government (52.94%) were seen as factors influencing the SHP. The trained state registered Nurses (SRN) overseeing the sickbay and school clinic greatly impact achieving the program objectives. Our study found that 47.27%, 32.72% and 20.0% mentioned inadequate supply of drugs staffing (32.72%) and inadequate supply of basic consumables as the major challenges facing the implementation of school health programs. We also found that the central government's contribution to the school health programs accounted for 52.94%, while the efforts of school administrators accounted for 38.46%. Despite these itemised challenges, 60.18% of Teachers mentioned they were satisfied with the school health programs in Ghana, as shown in Table 5.

**Table 5:** Factors Influencing School Health Program

Question items	Freq.(n=20)	Percent age (%)
<b>Who is in charge of the school health in your school clinic?</b>		
Trained State Registered Nurse	158	71.82
On the Job Nurse	41	18.64
A Staff Teacher	21	9.55
<b>What challenges is the school health program in your school facing?</b>		
Staffing	72	32.73
Inadequate supply of basic drugs	104	47.27
Inadequate supply of basic instruments	44	20.00
<b>Who gives resources to the school health program?</b>		
Central Government	117	52.94
Efforts of the School Administration	85	38.46
Non-governmental organizations	17	8.14
Community members	1	0.45
<b>Generally, are you happy about the school health system in your schools?</b>		
Yes	133	60.18
No	87	39.82

### **The Association Between Respondents' Sociodemographic Characteristics and the Impact of the School Health Program**

The association between respondent demography and the SHP showed no statistical association regarding their level of education;  $\chi^2$  test=20.74, p=008. This is shown in their marital status ( $\chi^2$  test=7.28, p=0.29, religion ( $\chi^2$  test = 17.96, P=0.773) and age ( $\chi^2$  test=81.26, P=0.229) of the respondents. However, their number of years working is associated with the SHP ( $\chi^2$  test=23.78, P=<001, as seen in Table 6.

**Table 6:** The Association Between Respondents' Sociodemographic Characteristics and the Impact of the School Health Program

Variables	School Health Program			Total (%)	$\chi^2$ test	p-value
	Improved (%)	Not Improved (%)	Not Sure (%)			
<b>Educational Level</b>	98	46	76	220	20.74	0.008
Post-secondary Teachers Cert. 'A'	3.1	1.5	2.4	7.0		
First Degree	51.4	24.1	40.4	115.9		
Postgraduate Diploma	5.3	2.5	3.2	11.0		
Masters	35.5	16.7	27.9	80.1		
PhD	2.7	1.2	2.1	6.0		
<b>Marital Status</b>	97	46	77	220	7.2855	0.295
Not married	21.0	14.0	20.0	55.0		
Co-habitation	10.0	6.0	2.0	18.0		
Married	63.0	25.0	53.0	141.0		
Separated / Divorced	4.0	1.0	2.0	7.0		
<b>Number of working</b>	98	46	76	220	23.788	<0.001
1–5 years	21.4	10	16.6	48		
6–10 years	34.7	16.3	26.9	77.9		
11 years and above	41.9	19.7	32.5	94.1		
<b>Religion</b>	97	46	77	220	1.7968	0.773
Christianity	67.4	31.6	53	152		
Islam	29.3	13.7	23	66		
Traditional religion	1.3	0.6	1	2.9		
<b>Age</b>					8.1263	0.229
Below 24 years	0.4	0.2	0.3	0.9		
25–30 years	6.2	2.9	4.9	14.0		
31–34 years	20.4	9.6	16.0	46.0		
35 and above years	71.0	33.3	55.7	89.0		

### **Measures of Association Between the Outcome of the School's First AIDs Training and Respondents' Perspective of the School Health Program**

The outcome of the school health program is statistically associated with the respondent's perception. The variables, such as the school health policy/programs, are identified more with my teaching responsibilities ( $\chi^2$  test=29.22,  $p<0.001$ ). This association is very strong, as seen in their training ( $\chi^2$  test =**30.1444**,  $p<0.001$ ) and stakeholders' support 9( $\chi^2$  test=46.1535,  $p<0.00$ ). See Table 7 below.

**Table 7:** Measures of Association Between the Outcome of School First AIDs Training and Respondents' Perspective of the School Health Program

	<b>The outcome of the school's first AIDs training</b>				$\chi^2$ test	p-value
	<b>Very helpful (%)</b>	<b>Not Helpful (%)</b>	<b>Neutral (%)</b>	<b>Total (%)</b>		
<b><i>The SHP are identified more with my teaching responsibilities.</i></b>	102	36	82	220	<b>29.2265</b>	<b>&lt;0.001</b>
Strongly Agree (SA)	9.7	3.3	8	21		
Agreed (A)	40.2	13.8	31.1	85.1		
Neutral (N)	20.3	7	16.7	44		
Disagree (D)	26.3	9	21.7	57		
Disagree (SD)	5.5	1.9	4.6	12		
<b><i>The training I have as a teacher influence me to relate to the responsibility of ensuring effective implementation of the SHP in my school.</i></b>	102	35	83	220	<b>30.1444</b>	<b>&lt;0.001</b>
Strongly Agree (SA)	18.5	6.3	15.2	40		
Agreed (A)	48.9	16.8	40.3	106		
Neutral (N)	15.2	5.2	12.5	32.9		
Disagree (D)	16.6	5.7	13.7	36		
Disagree (SD)	2.8	1	2.3	6.1		
<b><i>My SHP needs the Headmaster and Administration's Support for its implementation.</i></b>	100	35	84	219	<b>15.7249</b>	<b>0.046</b>
Strongly Agree (SA)	19.3	7	16.7	43		
Agreed (A)	47.5	16.3	39.1	102.9		
Neutral (N)	20.8	7.1	17.1	45		
Disagree (D)	10.2	3.5	8.4	22.1		
Disagree (SD)	3.2	1.1	2.7	7		
<b><i>I passionately believe that the effective implementation of my SHP is associated with my classroom responsibility.</i></b>	102	34	84	220	<b>16.3323</b>	<b>0.038</b>
Strongly Agree (SA)	12.5	4.3	10.3	27.1		
Agreed (A)	59.1	20.3	48.7	128.1		
Neutral (N)	16.6	5.7	13.7	36		



Disagree (D)	11.1	3.8	9.1	24		
Disagree (SD)	2.8	1	2.3	6.1		
<b><i>My SHP considers contributions from all stakeholders, including Teachers, in the decision-making process.</i></b>	102	34	84	220	<b>46.1535</b>	<b>&lt;0.001</b>
Strongly Agree (SA)	12.5	4.3	10.3	27.1		
Agreed (A)	42.5	14.6	35	92.1		
Neutral (N)	26.3	8	21.7	56		
Disagree (D)	14.3	4.9	11.8	31		
Disagree (SD)	6.5	2.2	5.3	14		

## Discussion

Teachers' knowledge, involvement and perspectives on all educational policies and programs are key for successful implementation. School health programs are fundamental to academic achievement. In our study, Teachers' knowledge of school health policy was assessed using a five-level criterion Likert scale (1–5 items). Most of the indicators were above average (M&SD=2.98±1.34, M&SD=2.46±1.081 M&SD=2.40±1.094, M&SD=2.46±1.02, M&SD=2.7±1.0450). This high average score indicates that most teachers knew about the school's health policy. Our study results on this are contrary to Anjum's (2018) study, where it was found that most school teachers had insufficient knowledge regarding school health services. Again, over half of the respondents had average knowledge regarding school health services. This is consistent with a study conducted in Ghana by Adu-Mireku (2017), which found that 78% of teachers have some understanding of school health. Also, a study conducted by Mensah (2019) deepened this assertion by mentioning that 59% of his study respondents have good knowledge about school health programs. Equally, a study in Ibadan acknowledged that most teachers who participated in cross-sectional studies have a high knowledge of school health programs. On the contrary, the study outcome of Adebayo and Onadeko (2018) reported that the majority (84.6%) of the teachers had inadequate knowledge of SHP with similar proportions in the rural (84.2%) and urban (84.9%) schools in Nigeria.

We found that about one-third of respondents agreed that the school health program covers all aspects of the health needs of the students. This is consistent with the review of the American School Health Association (1994), which reported that the comprehensive school health approach includes a broad spectrum of activities and services which take place in schools and their surrounding communities that enable children and youth to enhance their health, develop to their fullest potential and establish productive and satisfying relationships in their present and future lives (American School Health Association, 1994). Again, Miller and Bice (2014) corroborated that a comprehensive school health program includes courses of study (curricula) for students

that address a variety of topics such as alcohol, drug use and abuse, healthy eating/nutrition, mental and emotional health, personal health, wellness and physical activity. Also, half of the respondents in our study agreed that the school health program focuses on preventive measures. This is consistent with the report of the US Department of Health and Human Services (2021), which mentioned that school health programs could provide opportunities for school staff members and students to improve their health status through activities such as health assessments, health education, and health-related fitness activities.

Moreover, close to half of the respondent mentioned that the SHPs in their schools focus only on treatment measures. This finding is only a microscopic function of the SHP. Therefore, this is not consistent with other studies, such as the report of the Division of Population Health (2019), where comprehensive school health program includes curricula and instructions that address a variety of topics such as alcohol, drug use and abuse, healthy eating/nutrition, mental and emotional health, personal health, wellness, physical activity, safety and injury prevention, sexual health, and violence prevention. However, this report by the Division of Population Health is similar to a section of a finding in our study where close to half of the respondents mentioned that the SHP in their schools combines preventive and treatment measures. Lastly, 33.48% of the respondents mentioned that their SHPs spell out engagement roles at the implementation level. This is consistent with the Kenya National School Health Program, where the rules of engagement are spelt out in the policy handbook for schools to adopt (Kenya National School Health Policy, 2014-2030).

On the perception of teachers towards the SHP, a little over a third of the teachers perceived that the school health policy/programs are identified more with their teaching responsibilities, and the training they have as a teacher influences their ability to ensure effective implementation of the school health policy/program in their schools. This is consistent with the study results of (Cholevas and Loucaides, 2012), who reported that the knowledge and skills of Health Education Officers and Teachers are based on scientific knowledge, organisational skills, initiatives and communication skills. As they further put forth, the Teachers' autonomy to select appropriate health teaching methods and health educational materials has implications for implementing school health programs (Cholevas and Loucaides, 2012). Again, 46.61% of respondents mentioned that the support of school management is key in implementing school health programs. This is consistent with the study outcomes, which report that everyone in the school district: teaching staff, non-teaching staff, students and families look to administrators for leadership regarding the values and culture of the district school health programs (Chemers, 1987). Singer (2005) and Sahin (2011) also publicised that the SHP cannot be fully or successfully implemented without administrators' authentic support. Moreover, efforts by administrators should be positive and made to encourage teachers to take ownership of any new initiative in a school. Again, our study found that little under half of the respondents mentioned that SHP receives contributions from all

stakeholders, including teachers, in Ghana's decision-making process, which is consistent with the earlier submission by Chemers (1987).

Our study found that half of the respondents mentioned that their school has adequate classrooms, while about a third mentioned that it has friendly facilities for people with disabilities (PLWDs). These are basic facilities that have to be present to ensure efficient SHP. Our result is consistent with the report of studies that found infrastructural availability crucial for SHP development (Allensworth et al., 1997). In assessing the school health program, the general assessment of the School Health Program (SHP) showed that half of the respondents said the training on the subject was insufficient. This is an important revelation which needs to be worked on. This is because the program's application is on students who are vulnerable and susceptible to all manner of health conditions. Therefore, dealing with them needs the expert skills of the program implementers. Again, our study found that actors such as trained nurses (71.82%), inadequate supply of drugs (47.27%) and support from the Central Government (52.94%) were some of the factors mentioned as influencing the implementation of the SHP. All the schools had school Nurses who attended to students at the sick bay. Our study did not establish the effectiveness of the school nurses in the SHP. However, other studies that did that assessment reported that school nurses could not do proper follow-up and home visits for students with problems (Mohlabi, Van Aswegen and Mokoena, 2010).

Again, our study found that inadequate supply of drugs (47.27%), staffing (32.72%) and inadequate supply of basic commodities such as gauze, cotton wool, digital BP apparatus and others were among the items that were setting back the efficiency of the school health programs. The shortage of staffing was consistent with the study outcome of Mohlabi, Van Aswegen and Mokoena (2010), which found that whenever there is a shortage of personnel in primary healthcare facilities, managers withdrew school health nurses to replace the missing staff members and this crippled continuity and the quality of services available to the school children.

Regarding resources supply, our study found that over half of the respondents mentioned that the government gives resources to the school. This is consistent with the study outcome of Miller and Bice (2014), who mentioned that the government provides grants and resources to enable schools and community agencies to focus on programs and services to enhance the SHPs.

Our study found a statistically significant association between the number of years working and the implementation of SHP in the relation ( $\chi^2$  test=23.78,  $P<.001$ ). The implication is that the longer a teacher has served in the school, the greater the capacity of the teacher to contribute to the implementation of the SHP. This means that the status of the teachers is key in the implementation of the SHP. This is consistent with the study outcome of Adebayo, Makinde and Omode (2018), who reported that, in Nigeria, lack

of training/orientation of teachers in the program, higher attrition rates, and transfer, among others, may have contributed to ineffective implementation of SHPs.

Our study found a statistically significant association between school health programs and teaching responsibilities, training and stakeholders' support in the relation ( $\chi^2$  test=29.22,  $p<0.001$ ), ( $\chi^2$  test =30.1444,  $p<0.001$ ) and 9( $\chi^2$  test=46.1535,  $p<0.001$ ) respectively. These are all consistent with the study outcomes of Mohlabi, Van Aswegen, and Mokoena (2010), who found that SHPs are effective when teachers are committed, have adequate knowledge and with the support of other stakeholders such as the government, the school administrator (state actors), the community, NGO's, faith-based organisation, and civil society organisation (non-state actors).

## Conclusion

Our study concludes that Teachers in second-cycle institutions have adequate knowledge of the school health programs policy and can evaluate the status of the policy implemented in their schools. The teachers' perspectives revealed that the program would have been very effective if the inter-sectoral collaborations in implementing the policy were effective.

## Recommendation

It recommended that the role of stakeholders in the implementation of school health programs should be reviewed as the findings of our study suggest that the inter-sectoral networks among the stakeholders are not strong. It is also recommended that implementation targets be set for all the school health implementation partners by the Ministry of Education and Ministry of Health through the Ghana Education Service and Ghana Health Service, respectively.

## Limitations of the study

A major limitation was the limited published literature on the topic locally (Ghana) and regionally (Africa). This situation made it difficult for the researchers to compare the best school health practices. Time and funds were major constraints because of the wide scope of the research. Again, availability and time for the teachers to participate were also key. Most of them were in the classrooms teaching, and others whose periods (teaching schedules) were not ready were not present and had to be replaced. Despite these limitations, the quality of the study was not compromised as the research team placed measures to bring the effects of these limitations to the barest minimum.

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## Availability of Data and Materials

The data supporting this study's findings are available from the corresponding author upon request.

## Authors' Contributions

Author A led the background development, fieldwork and analysis of the paper. Author B developed the methodology and was involved in the paper's analysis and proofreading. Author C was involved in Data Analysis. Author D was involved in conceptualising and grounding the paper's theoretical framework, structuring, assessing the analysis and proofreading the paper. All authors were involved in discussions, conclusions and recommendations put forward by the paper. All authors, therefore, read and approved the final manuscript.

## Ethics Approval and Consent to Participate

The study was approved by the Committee of Human Research Publication and Ethics (CHRPE), Kwame Nkrumah University of Science and Technology, Kumasi-Ghana, with reference number CHRPE/AP/433/22. All participants were provided with written informed consent to participate. The study followed all the ethical considerations in relation to respondents' selection, interview process, confidentiality and data analysis protocols.

## Consent for Publication

All Authors' have fully consented for this paper to be published.

## Competing Interests / Declaration

The authors declare that they have no conflict of interest. All authors declare their approval for the manuscript to be published.

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