

Factors Influencing in-School Adolescents' Satisfaction with the Quality of Healthcare Delivery in Ghana

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Abstract

Background: Adolescents satisfaction with healthcare delivery is critical in enhancing health seeking behaviors in Ghana. Using a cross sectional design, this study sought to find out factors influencing in-school adolescents' satisfaction with quality of health service delivery in the Cape Coast Metropolis of Ghana.

Method: A sample size of 486 was obtained using multi-stage sampling. The RATER model was used for data collection and analysis of the data was done using frequencies, percentages and multiple linear regressions.

Result: The results showed that in-school adolescents had higher level of satisfaction with the highest indicators being how they were treated (81%, n = 395) and recommendation of the health facility to friends with (81%, n = 395). Findings also revealed that help from hospital staff ($\beta = .14, p = .002$), health personnel responsiveness ($\beta = .13, p = .003$), immediate response from staff ($\beta = .15, p = .002$) and prompt service delivery ($\beta = .14, p = .002$) were significant determinants of client-personnel relationship. Also, availability of enough chairs ($\beta = .18, p < .001$) and neat and open washrooms ($\beta = .25, p < .001$) were the significant determinants of satisfaction with the physical environment. Again, special attention from the hospital staff ($\beta = .19, p < .001$), competence and professionalism of staff ($\beta = .14, p = .001$) and uniformity in duty performance ($\beta = .16, p < .001$) were the significant determinants of treatment satisfaction.

Conclusion: To improve on adolescents' health seeking behaviour and utilization of health services, it is important to address the determinants of adolescent satisfaction with healthcare delivery systems in the country. It was recommended that heads of the various health facilities should inculcate the culture of delivering prompt service supported with good interpersonal relationship with the adolescents.

Keywords: Adolescents Satisfaction; Healthcare Delivery; Ghana

Abbreviations

GHS: Ghana Health Services; JHS: Junior High School; MOH: Ministry of Health; SHS: Senior High School; WHO: World Health Organization

Background

Client satisfaction remains one of the most interesting subjects for institutions as well as for researchers at the same time. Client satisfaction has emerged as an increasingly important health outcome which needs to be investigated or researched into all groups of ages.

This is to help healthcare providers and policymakers on how best to improve the satisfaction level of their clients. Adolescents have enjoyed fewer health improvements than other age groups [1] which affect their utilization and satisfaction level with healthcare delivery.

Client satisfaction is described as the level of contentment that clients experience having used a health service [2]. Client satisfaction, as one of the ultimate validities of effectiveness and quality of care as the client's opinion of the care received from health professionals working in hospitals with care services [3]. According to [4], client satisfaction is the most important indicator of high-quality healthcare and is used for the assessment and planning of healthcare. There is a positive correlation between client satisfaction and healthcare service. That is client satisfaction increases in an organization where more personalized nursing care is given [5].

The health and development of adolescents are crucial for the development of the country [6]. The health sector of Ghana has recognized adolescents' health and well-being as a necessity and the concept of making healthcare adolescent-friendly is being pursued [7]. Thus, adolescent health problems are gaining public attention in Ghana. Adolescents' healthcare quality is below expectation coupled with a poor attitude towards healthcare utilization [8]. Access to quality adolescent health information is below expectation, leading to poor health-seeking behaviours among adolescents [8]. Some of these challenges leading to poor satisfaction level and utilization of healthcare include financial barriers, long waiting time, inconvenient working hours and lack of parental support when accessing healthcare services [9-11].

The perspective of the client's view and feelings are becoming more integrated into the process of improving healthcare systems in Ghana. In Ghana, many of the studies on healthcare quality have often concentrated on the quality dimensions [12-14]. Studies conducted in public hospitals over the years provide essential evidence that the quality of health services is inadequate both by objective measures in the opinion of clients and by healthcare providers [15,16]. Moreover, research on quality healthcare has generally reported poor service delivery with respect to long waiting time, a frequent shortage of drugs and the poor attitude of health providers as factors influencing clients' satisfaction with quality healthcare in Ghana [14,17].

A number of studies have been conducted on clients' satisfaction with healthcare in Ghana [18-21] but none of these studies focused solely on adolescents. We therefore chose to assess factors influencing in-school adolescents' satisfaction with quality of healthcare delivery in the Cape Coast Metropolis of Ghana.

Method

Study design, setting and study population

The study employed crossed sectional design and used questionnaire, a quantitative data collection technique. The questionnaire was adapted and modeled from the RATER model, a revised version of the SERQUAL model. The data was collected from in-school adolescents in their various schools in the Cape Coast Metropolis from February to March 2019. The population for the study consisted of all in-school adolescents in the public Junior and Senior High Schools in the Cape Coast Metropolis who are 10 - 19 years. However, the total number of in-school adolescents from public JHS and SHS in the Cape Coast Metropolis is 26,488 (Cape Coast Education Unit, 2017). In the Cape Coast Metropolis, junior high schools are grouped under six circuits, Aboom, Bakaano, Pedu/Abura, Efutu, Ola and Cape Coast Circuit). Each circuit has an average of nine schools in the metropolis and three senior high schools, composing of one school each from single sex boys' school, single sex girls' school and a mixed school. Respondents to the questionnaire were adolescents (10 - 19) years who have directly or indirectly utilized the health facilities in the metropolis.

Sample size and sampling procedure

A sample size of 500 was sampled from the population of 26,488 in-school adolescents. This was made up of 250 students from JHS and 250 students from SHS. Although the actual sample size based on Ogah's table of determining sample size was 377, the sample size was increased to 500 to make room for non-responses and incompleteness of questionnaires.

Multistage random sampling technique was used to select schools and respondents in the metropolis. Multistage sampling divides large populations into stages to make the sampling process more practical [22]. A combination of cluster sampling, stratified sampling, simple random sampling and purposive sampling was used.

Data collection

We used questionnaire to collect data from in-school adolescents from the selected schools. The questionnaire was divided into 5 sections and was based on their socio-demographic characteristics, their level of satisfaction, how client-personnel relationship, the physical environment of the health facilities and the treatment received from the various health facilities influence their satisfaction. The pre-testing was done at Pedu M/A Basic School 'A'. A school was selected from the JHS because it is believed that, if adolescents at their level get the understanding of the instrument, it will be easily understood by those in the SHS. The school was selected through a simple random sampling in the absence of the selected schools with 30 students. Ten from each form, that is form 1 to form 3. The pre-testing, aside assisting in enhancing the reliability of the instrument also helped to improve the questions by making them easier for students to understand. Internal consistency method was used to enhance the reliability of the instrument. The instrument yielded Cronbach's coefficient alpha for items in Sections B, C, D and E were 0.60, 0.80, 0.74 and 0.80 respectively.

Data management and analysis

The first step of the data analysis in this study was to check for accuracy, consistency and completeness of the data. Each questionnaire completed by the respondents was checked for accuracy and consistency of the responses to the items on the instrument. After editing, a template was developed and used to create a data analysis matrix on the computer, as well as code responses to the items on the instrument. After coding, the data was then entered into the computer analysis matrix developed with the computer software, Statistical Product and Service Solutions (SPSS) Version 23. After data entry, the data was screened to check for errors and missing values after which analysis was done by research question by research question. The demographic characteristics were analyzed using percentages and frequencies.

For research question one, which was meant to find out the level of satisfaction of in-school adolescents with healthcare delivery, the data measured using dichotomous responses. The data were analyzed using frequencies and percentages. Research question two, three and four, which sought to identify client-health personnel relationship, relationship between physical environment and satisfaction and how treatment received from the health facility influence satisfaction of in-school adolescents with healthcare in the Cape Coast Metropolis, multiple linear regression was used. Multiple linear regression was used to analyze these questions because, multiple linear regression does not only predict the overall significance between the dependent and independent variables, but also indicate how each of the independent variables under each of the research questions contribute to the total significance of the various research question on satisfaction.

Results

Socio-demographic characteristics

Out of 486 in-school adolescents who took part in the study, 52.1% ($n = 253$) were males while 47.9% ($n = 233$) were females as shown in table 1. This shows a slightly higher percentage of males' respondents as compared to females. Majority of the respondents 74.9% ($n = 364$.) were between the ages of 15 - 19 years whereas 25.1% ($n = 122$) of the respondents fall in the ages 10-14. As shown in table 1, most of the respondents indicated that they often use public health facility 72.4% ($n = 352$) while 27.6% ($n = 134$) often use private health facility. Also, the number visits to the health facility ranges between 1 and 11 with majority of the respondents indicating that they visited the health facility twice (2) within the last two years as shown in table 1.

Majority of the respondents were Christians 90.4% ($n = 450$), while a few were Muslims 7.2% ($n = 36$) as shown in table 1. This is consistent with the findings of the 2010 Population and Housing Census of Ghana [23], which found that majority; 71% of Ghanaians are Christians.

		N (%)	Mean
Gender	Male	253 (52.1)	1.48
	Female	233 (47.9)	
Age	10 - 14	122 (25.1)	1.75
	15 - 19	364 (74.9)	
Health Facility	Public	352 (72.4)	1.28
	Private	134 (27.6)	
Form	JHS1	48 (9.9)	3.72
	JHS2	81 (16.7)	
	JHS3	122 (25.1)	
	SHS1	55 (11.3)	
	SHS2	70 (14.4)	
	SHS3	110 (22.6)	
Religion	Christian	450 (92.6)	1.07
	Muslim	36 (7.4)	

Table 1: Socio-demographic characteristics of respondents (N = 486).

Level of satisfaction of in-school adolescents with quality of healthcare delivery at the cape coast metropolis

From the table 2, the results showed that 54% (n = 260) of the respondents get all the prescribed drugs at the pharmacy unit at the health facility. It was also found that 66% (n = 320) of the respondents find it easy to talk to the staff at the health facility. Meanwhile, 81% (n = 395) of the respondents indicated that they like how they were treated when they visited the health facility. Also, 81% (n = 395) indicated that they will recommend the health facility to a friend. Finally, 75% (n = 364) of them indicated that they will revisit the health facility in the future.

Statements	Responses			
	Yes N (%)	No N (%)	Mean	SD
Did you get all the drugs prescribed by the doctor to you at the health facility pharmacy unit?	260 (53.5)	226 (46.5)	0.53	0.50
Did you find it easy or comfortable to approach or talk to the staff at the health facility?	320 (65.8)	166 (34.2)	0.66	0.48
Did you like how you were treated at the health facility?	395 (81.3)	91 (18.7)	0.81	0.39
Would you recommend this health facility to a friend?	395 (81.3)	91 (18.7)	0.81	0.39
Would you use this facility again in the future?	364 (74.9)	122 (25.1)	0.75	0.43

Table 2: Level of in-school adolescent satisfaction.

Client-personnel relationship influence in-school adolescents’ satisfaction with healthcare delivery in the cape coast metropolis

Table 3 shows the results on the effect of client- personnel relationship on satisfaction. The findings of the analysis showed client-personnel relationship has an influence in the satisfaction of healthcare delivery for in-school adolescents at the Cape Coast Metropolis ($F_{8,477} = 17.668, p < 0.001$). Also, 22% of the variation in the level of satisfaction of healthcare delivery can be explained by the relationship

between in-school adolescent and the health personnel at the health facility (Adjusted $R^2 = .223$). From table 3, in-school adolescents consider the help rendered to them by hospital staff at a health facility as a significant factor in influencing their satisfaction ($\beta = .14, p = .002$). Also, the health personnel responsiveness to their needs as adolescents were found to provide significant contribution to their satisfaction ($\beta = .13, p = .003$). Similarly, the staff responding immediately when called by clients was also found to be an indicator in influencing an in-school adolescents’ satisfaction ($\beta = .15, p = .002$). Also, prompt service delivery at the health facility was found to influence an in-school adolescent satisfaction ($\beta = .14, p = .002$).

Model	B	Std. Error	Beta	T	Sig.
Hospital staff were helpful to the clients.	.080	.026	.142	3.106	.002
The staff were responsive to client needs.	.053	.018	.130	2.962	.003
The staff responded immediately when called by the clients.	.068	.022	.146	3.164	.002
There was prompt service delivery without wasting time.	.054	.018	.136	3.088	.002
The hospital had skilled staff to provide healthcare delivery.	.042	.022	.084	1.942	.053
The hospital staff treated clients with dignity and respect.	.044	.023	.092	1.962	.050
The health personnel at the hospital possess a wide range of knowledge.	.029	.022	.062	1.367	.172
The staff at the hospital were courteous.	.012	.022	.025	.555	.579

Table 3: Client-personnel relationship and satisfaction.

However, presence of skilled staff at the health facility ($\beta = .08, p = .053$) and personnel possessing a wide range of knowledge at the health facility ($\beta = .06, p = .172$) did not significantly influence in-school adolescents’ level of satisfaction. Additionally, hospital staff treating clients with dignity and respect ($\beta = .09, p = .050$) and courteousness of staff ($\beta = .03, p = .579$) was not considered by in-school adolescents as a factor that can influence their satisfaction of healthcare delivery.

Physical environment of health facilities influence in-school adolescents’ satisfaction with healthcare delivery in the cape coast metropolis

The overall result showed that at .05 significant level, the physical environment of a healthcare facility has influence on in-school adolescents’ satisfaction with the quality healthcare delivery ($R^2 = .145, F(6,479) = 14.758, p < .001$). It was also found that 14.5% of variation in satisfaction of healthcare delivery can be explained by the physical environment of the health facility. From table 4, the availability of enough chairs at the health facility has an impact on in-school adolescent satisfaction with the physical environment at the healthcare facility ($\beta = .18, p < .001$). Lastly, in-school adolescents indicated that when washrooms are always neat and open at health facilities, that has an impact on their satisfaction of the physical environment at the healthcare facility ($\beta = .25, p < .001$). Availability of enough chairs and neat opened washrooms at the health facilities were found to be the most important indicators that significantly contribute to in-school adolescents’ satisfaction.

Model	B	Std. Error	Beta	t	Sig.
The hospital has good facilities	.022	.026	.041	.868	.386
The physical environment of the hospital is neat	.049	.032	.069	1.539	.125
The hospital has modern looking equipment	.015	.020	.034	.727	.468
There is available and enough chairs at the health facility	.075	.019	.182	4.007	.000
There are directional signs indicating the various units at the facility	.006	.022	.012	.270	.787
There were washrooms opened and neat at the health facility	.117	.022	.247	5.458	.000

Table 4: Physical environment of health facility influence on satisfaction.

In contrast, the presence of good facilities at a health facility does not contribute to the physical environment influence on in-school adolescent satisfaction to healthcare delivery ($\beta = .04, p = .386$). Also, the physical environment being neat was not a contributing factor to their satisfaction ($\beta = .06, p = .125$). Additionally, the presence of having modern looking facility was also not found to have an impact on the satisfaction of the physical environment for in-school adolescents ($\beta = .03, p = .469$). Furthermore, displaying of directional signs indicating the various units at the health facility was found not to have an influence on an in-school adolescent satisfaction with the physical environment at a health facility ($\beta = .01, p = .787$).

Relationship between treatment received at health facilities and satisfaction of healthcare delivery among in-school adolescents in the cape coast metropolis

Decisions of whether a statement contributes in explaining the relationship between treatment received at a healthcare facility and satisfaction was made at 0.05 significant level with results presented in table 5. The overall significance of the question showed that treatment received at a healthcare facility contributes to the satisfaction of healthcare services for in-school adolescents' in the Cape Coast Metropolis ($R^2 = .244, F(10,475) = 16.653, p < .001$). It was also found that 24% of variation in healthcare satisfaction can be explained by the treatment received by in-school adolescents at the healthcare facility.

From table 5, it was found that when a special attention is given to in-school adolescent by a health personnel at a health facility, it leads to their satisfaction of healthcare services ($\beta = .19, p < .001$). Also, competence and professionalism of staff working at the health facility has an impact on in-school adolescents' satisfaction ($\beta = .14, p = .001$). Lastly, the uniformity in the performance of duty by staff at the health facility was found to significantly have an impact on the satisfaction of healthcare delivery for in-school adolescents ($\beta = .16, p < .001$). Among all the statements, the provision of special attention by health personnel and the uniformity in duty performance by staff at a health facility was found to be the most significant indicators in explaining the relationship between treatment received at the health facility and satisfaction.

Model	B	Std. Error	Beta	T	Sig.
The staff has my best interests at heart.	.035	.020	.080	1.768	.078
The staff understands my specific needs at the hospital.	.027	.021	.059	1.287	.199
The health personnel gave me special attention at the hospital.	.084	.020	.188	4.226	.000
The staff at the hospital was caring to clients.	.035	.020	.077	1.733	.084
The staff provides service on scheduled time.	.018	.018	.043	1.006	.315
Doctors/staff are professional and competent	.070	.022	.136	3.196	.001
The doctor explained my medical condition to my understanding.	.032	.020	.069	1.618	.106
The pharmacist explained my drugs, how and when they should be taken.	.049	.026	.079	1.868	.062
Medical procedures were performed correctly the first time.	.007	.022	.015	.333	.740
There is uniformity in duty performance by staff at the hospital.	.073	.020	.156	3.580	.000

Table 5: Relationship between treatment received and satisfaction.

However, the statement on staff having in-school adolescents' best interest at heart was not found to have a relationship with their satisfaction of healthcare delivery ($\beta = .08, p = .078$). They also indicated that, staff being able to understand their specific needs when they visit the health facility does not significantly has an impact on their satisfaction ($\beta = .06, p = .199$). Additionally, the in-school adolescents indicated that, how caring a staff is at a health facility does not significantly have a relationship on their satisfaction ($\beta = .08, p = .084$). Furthermore, the statement on the provision of services on scheduled time was not found to significantly have an impact on the satisfaction of an in-school adolescent ($\beta = .04, p = .315$). Additionally, statements on explanations on how and when to take prescribed drugs ($\beta = .07,$

$p = .062$) and medical procedures being performed correctly ($\beta = .02, p = .740$) were not indicated by the in-school adolescents as one of the factors that has an impact on their satisfaction with regards to treatment received at the health facility.

Discussion

The findings indicate that, majority of in-school adolescents were very satisfied with the quality of healthcare delivery provided in the Cape Coast Metropolis. This is in line with a study done in Muhimbili National Hospital in Dares Salaam, whereby a high proportion of patients were satisfied with quality of care delivered to them [24]. This finding is also in agreement with a study done at Dejen District, Ethiopia on health service utilization and reported satisfaction among adolescents [25]. However, this is contrary to findings of patients' satisfaction studies elsewhere where it was found that the overall level of satisfaction was low [26]. It has been noted that satisfied patients often utilize more healthcare services and followed the treatment regime properly [27].

The highest dissatisfaction was in getting all the prescribed drugs at the hospital pharmacy. This implies that many of the in-school adolescents find it difficult to get drugs that are prescribed by medical doctors at the pharmacy unit of the health facility. This finding is in line with other findings conducted on patient satisfaction on healthcare services where respondents indicated that the availability of essential drugs is an important factor in influencing their level of satisfaction [28]. The possible reason for this finding could be that, most Ghanaians see the hospital pharmacy as a one stop shop for all prescription, therefore, in-school adolescents' inability to get all the prescribed drugs at the hospital pharmacy could lead to low satisfaction. This finding could also imply on the speculations that, some pharmacists at the various healthcare facilities own their private pharmacy shops where patients are sometimes, redirected to purchase prescribed drugs from those shops even if the drug is available at the hospital pharmacy.

In relation to the satisfaction with client-personnel relationship, the finding implies that client personal relationship has an influence in on the satisfaction of in-school adolescents. This finding confirms to a similar study conducted by [29] where they found that, improving the physician interpersonal skills can increase patient satisfaction which is likely to have a positive effect on treatment adherence and health outcomes. In-school adolescents' indication that, client-personnel relationship influences their satisfaction with the quality of healthcare delivery is very important because it helps them to freely interact and share their health concerns with the healthcare providers. Also, the adolescent stage is a curious stage where adolescents would like to know almost everything about themselves and therefore, good client-personnel relationship will have a positive effect on their treatment outcome.

In-school adolescents' indication that prompt service delivery contributes to their satisfaction could be because they are students and they do not want to spend much time at a health facility since that could have a negative impact on their academic work. Other studies also identified delay in service delivery as a crucial factor in dissatisfaction of customers [30,31]. This is agreeing with the findings by [32] which identified staff communication with patients, competence of staff and their demeanor as most critical factors associated with client's satisfaction in service delivery.

Even though hospital staff treating clients with dignity and respect was found to be barely insignificant, it was close to contributing to in-school adolescent client-personnel satisfaction of healthcare delivery. This implies that a little improvement on this indicator will help in making in-school adolescents satisfied with healthcare delivery. This finding relates to a study conducted by [33] and [34]. In their study, respondents indicated that they were least satisfied with staff respect towards patients. This can attest to the notion that, some healthcare providers in Ghana are disrespectful. It is also documented that patient's perception of healthcare provider's behaviour, such as respect, influence their views towards quality of care [34,35] also the feeling of been treated with care and respect as a key predictor of satisfaction. The aforementioned findings show that, respect and dignity are very important to clients at all level irrespective of age and gender.

Also, in the context of how the physical environment influence in-school adolescents' satisfaction with the quality of healthcare, the finding showed that the overall model was significant when the physical environmental variables were put together. The overall signifi-

cance of the model implies that the physical environment of the healthcare facilities has influence on the satisfaction of in school adolescents on the quality of healthcare delivery in the Cape Coast Metropolis. Some studies in other contexts have also shown that a suitable and comfortable healthcare facility environment leads to better patients' satisfaction [32,36,37]. Though, good physical environment influence patients' satisfaction, healthcare providers' even stand at risk of contracting infectious diseases from patients when the physical environment is not conducive [38,39].

The findings showed that, when washrooms at health facilities are opened and always neat, it influences in-school adolescents' satisfaction with the quality of healthcare delivery in the Cape Coast Metropolis. This indicator implies that, been unwell could cause some laboratory test to be done. This sometimes require the presentation of urine and stool samples, therefore having a neat and open washroom will make submission of these sample faster if not the client has to possibly go home and return same day or the following day which will prolong the treatment of the illness. This finding also coincides with a research done in Nagpur by [40] where they found out that there was a better patient feedback in terms of the cleanliness of washrooms. This is contrary to a research done by [41] where they found that respondents indicated availability of toilets facilities but unclean. Making chairs available at the health facilities was also found to significantly contribute in explaining how the physical environment influences in-school adolescents' satisfaction on healthcare delivery. This is no surprising as available chairs for awaiting clients helps to reduce anxiety and frustration in waiting to be attended to. The findings can be related to a study in India on client satisfaction by [42] about healthcare services which stated that the overall satisfaction level of clients for availability of services was 97% for seating arrangements, 95% about cleanliness, in the Out-Patient Department. The overall significance of this model implies that the treatment received at the healthcare facilities have influence on the satisfaction of in-school adolescents with the quality of healthcare delivery in the Cape Coast Metropolis.

The health personnel giving special attention to client at the hospital, doctors/staff been professional and competent, and uniformity in duty performance by staff at the hospital were reported by the in-school adolescents to influence their satisfaction with the treatment received at the healthcare facilities. This finding is in line with a study done by [43] in India, where they found out that treatment as one of the highest satisfaction indicators for patients. This finding also confirms to studies conducted by [44] and [45] where patient satisfaction and treatment outcomes were significantly related. This therefore implies that, when clients get satisfied with the treatment received at the healthcare facilities, it will have a positive effect on their health outcome and as well increase their satisfaction with the quality of healthcare delivered to them.

The health personnel giving special attention to their clients at the hospital imply that when adolescents are giving special care, it makes them feel more appreciated and more comfortable. This is in line with a study by [46], where they found that, adolescents with positive relationships with healthcare providers increased their desire to attend clinic appointments. Doctors/staff been professional and competent was reported by the in-school adolescents to influence their satisfaction with the treatments received at the healthcare facilities. This finding agrees to studies on patient satisfaction and medical interaction [47-50]. When healthcare providers prove their competency and professionalism to clients, it boosts clients confident in the medication given. This is in line with findings by [51] and [52] where they found that, the positive the patient experiences about technical expertise of doctors, the higher the level of satisfaction with medical interaction

Limitation

Some respondents were not willing to give information pertaining to the study. Also, not all questionnaires given out were retrieved. To account for this shortfall, more questionnaires were administered than the stated sample size. Caution was taken at all levels to make the questionnaire clear and unambiguous. Again, the participants voluntarily participated in this study. It was believed that the questionnaires were answered with utmost honesty so that the findings reflect their true opinions on experience gotten since their confidentiality was assured.

Conclusion

In-school adolescents are generally satisfied with the quality of healthcare delivery in the Metropolis. This implies that, management of the various healthcare facilities should improve on the quality of health delivered to clients. Based on the findings, it can also be concluded that, in-service training and refresher workshops can be done for healthcare providers to help in their delivery of services in the metropolis. Also, if hospitals have enough chairs and washrooms neat and opened will increase in-adolescents satisfaction thereby increasing the utilization of the healthcare services and keep their appointment with doctors. Also, a satisfied in-school adolescent with the quality of healthcare delivery in the Cape Coast Metropolis is more likely to have his/her health seeking behaviour improved and also, more reproductive health services will be patronaged. This will therefore help solve self-medication and drug abuse as well as sexual and reproductive health issues.

Authors' Contributions

The research was initiated by CSA supported by TH. CSA and TH contributed to the literature review. CSA led the data collection and funded the research. ET run the analysis and interpreted the result. The manuscript was drafted by CSA, TH and ET. All authors have read and approved the final manuscript.

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Availability of Data and Materials

The dataset used to support the findings of the current study is available from the corresponding author on reasonable request.

Ethics Approval and Consent to Participate

Approval to conduct this study was obtained from University of Cape Coast Institutional Review Board, Cape Coast. Ethical clearance was also obtained from the Cape Coast Educational Unit. Permission and consent were obtained from the various heads of selected schools. The study details were explained to the individual participants; participation in this study was voluntary and all respondents signed a written informed consent form.

Conflict of Interest

Authors have declared that no competing interests exist.

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