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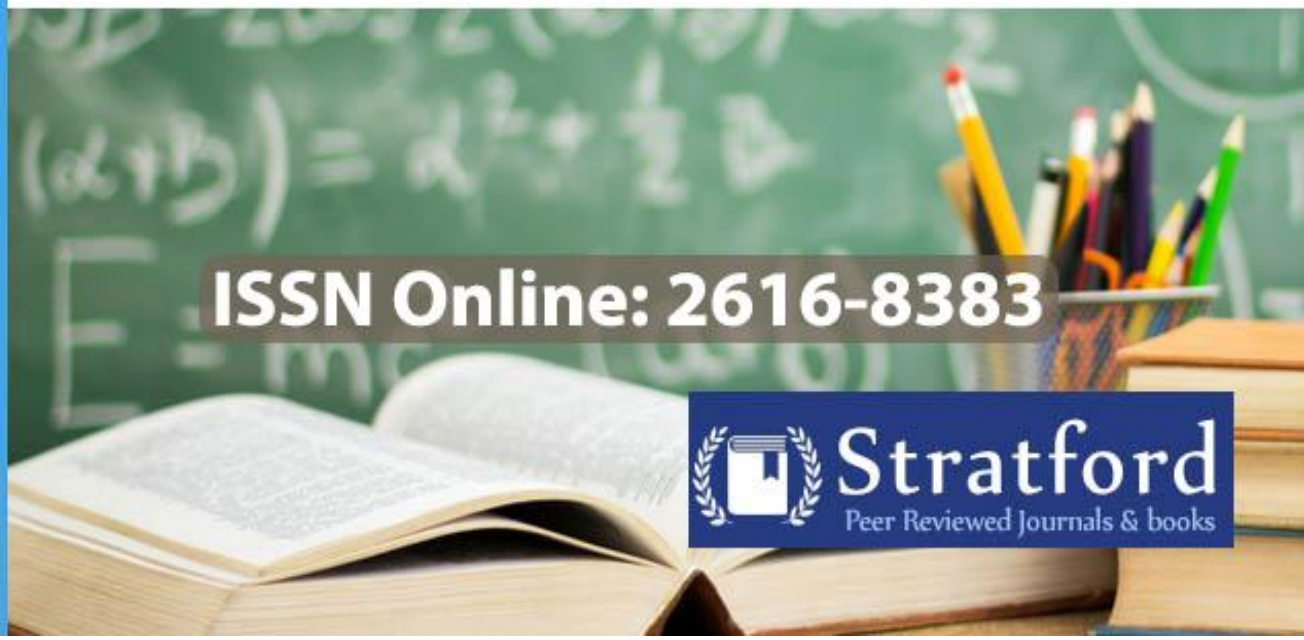

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Mbaabu Silas Muguna, Tarsila Kibaara and Paul Maku Gichohi

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Assessment of School-Based Clinic as a Health Service Provision Model in Public Secondary Schools in Meru County, Kenya

[1*]Mbaabu Silas Muguna, [2]Tarsila Kibaara & [3]Paul Maku Gichohi
[1]Meru County Government; [2,3]Kenya Methodist University
***Corresponding author email: mbaabus@yahoo.com**

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Abstract

The Government of Kenya has made an effort in facilitating access to healthcare by students through the development of a standard manual on safety and health in schools and introducing a unique NHIF program for students in public secondary schools. However, the same has been marred by the lack of sustainable mechanisms, systems and structures. This state of affairs attests to the absence of a profound model for addressing the healthcare needs of students in public secondary schools in Kenya. This study assessed the school-based clinic as a health service provision model in public secondary schools in Meru County, Kenya. The specific objective was to examine the efficacy of school-based health clinics in addressing students' healthcare needs in public secondary schools in Meru County. Andersen's model of health service utilization was significant in guiding this study. The study utilized a descriptive survey design. Schools were stratified according to categories, and then, a proportionate systematic sampling technique was used to sample 191 principals and 195 Chairpersons of the Students' Council. At the same time, the County Director of Education was purposively selected. Data was collected using a self-administered questionnaire and interview guide. The collected data were analyzed using SPSS, where factor analysis, means and standard deviations were computed. Linear regression analysis was used to test the hypothesis. Qualitative data were analyzed using the thematic technique. The majority of public secondary schools did not have a school-based health clinic. Where available, they were underutilized, poorly equipped, lacked trained health professionals, had poor infrastructures and were derailed by the lack of funding. Despite these challenges, SBHCs were statistically significant in addressing students' healthcare in public secondary schools. The study recommended that the Ministry of Education develop mechanisms and policy frameworks for establishing school-based health clinics in public secondary schools. It should also carry out capacity building programs for principals to equip them with skills for managing the SBHC facility and writing grants proposals. In addition, principals should exercise prudent management practices, ensure quality assurance of SBHCs, and pursue a concerted effort, collaborations, and partnerships of stakeholders in establishing and running school-based health clinics in public secondary schools.

Keywords: *School-based health clinic, school health service provision model, school dispensary, students' healthcare*

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1.0 Introduction

The term healthcare is used to describe the provision and maintenance of preventive, curative and management of health services (Longest, 2014). In the context of a secondary school, healthcare includes the aspect of ensuring effective healthcare systems, engagement of professionals, and providing unity of purpose, well-coordinated healthcare services, effective dissemination of information, and efficient utilization of health-related resources.

The health of learners is very significant (Wasonga et al., 2014). Research shows that young people's health is significant in determining the future well-being and economic productivity of populations and has enormous implications on academic achievement (Kolbe, 2019; Kuponiyi et al., 2016; Wood Johnson Foundation, 2016). Many developed regions such as Germany, New York, Italy, Texas, and California have established systems for addressing the health of learners. One of the commonly used approaches in America for managing students' healthcare is comprehensive school-based health services which offer a wide range of health services that include physical examinations, immunizations, curative and illness; family life education, counselling for abuse of drugs, mental diseases, and referral services (Gonzales, 2018; Barnett & Allison, 2012; K-12 et al., 1997; Salazar et al., 2015).

Although learners' health is not underrated in Africa, only a few countries have evidence of well-established school-based health clinics. Examples of such countries include Ethiopia, South Africa, Nigeria, among others. However, their effectiveness is curtailed by a lack of policy, structures, and human resources and funding. The situation is not different in Kenya. Most secondary schools in Kenya rely on the National Health Insurance Fund through a special program called EDUafya (EduAfya, 2019). The funding and inadequate infrastructures are the main challenges. Notably, Meru County has very few NHIF-accredited health facilities despite having high students enrolment in secondary schools Meru County Government [MCG] (2018; NHIF, 2019).

1.1 Statement of the Problem

Healthcare is viewed as significant in contributing to broad-based social-economic performance and is a precursor to any productive and prosperous nation (Murunga et al., 2019). The national Ministry of Health (MOH) has provided a policy framework and support and technical guidance for the effective implementation of health-related national programs in the entire country. According to the Church World Service and Ministry of Education in 2008 and the Taskforce Healthcare & Kenya HealthCare Federation of 2016, the government of Kenya had earlier provided health and hygiene safety standards manual for schools which emphasized the principals' role in monitoring the health of students and establishing a healthy environment in the school.

Although there is increased expenditure to cater for students' health in public secondary schools (Deloitte Touche Tohmatsu Limited, 2019; Ministry of Health, 2017), efficient coordination of healthcare service delivery is haphazard, and has been attributed to lack of an outright service provision model. Notably, some schools have established health facilities; others have employed a school nurse; a few have Memorandum of Understanding (MOU) with neighbouring hospitals, while others have been using referral services to particular hospitals (GOK/MOH, 2016; Kiwuwa et al., 2005a; Heck & Makuc, 2000; Muli, 2018). The lack of a profound model from published literature for addressing the healthcare needs of students in public secondary schools led to the need to investigate the school-based health clinic approach to assess its effectiveness in

managing students' healthcare in public secondary schools in Meru County. The purpose of the study was to determine the efficacy of school-based health clinics in addressing students' healthcare in public secondary schools in Meru County.

2.0 Literature Review

The primary purpose of the provision of healthcare to learners in secondary schools is to promote students' holistic health to maximize the education achievement (Shaw et al., 2015; Wood Johnson Foundation, 2016). One of the model for providing health learners in schools is the School-Based Health Clinics (SBHCs). The SBHC is a health provision model is conveniently located and provides to learners and other workers in the school (Hayley et al., 2019; Olga, 2016). The SBHC are beneficial because they offer on-school healthcare services to the school community (Howe, 2019). Further, SBHC help the schools overcome healthcare-related services, such as medical health insurance covers, lack of resources for medication, and transportation facilities (Byrd, 2014; Strolin-Goltzman, 2010). They facilitate the provision of counselling services and health education to students well as preventive and services in diagnosis, assessment, treatment, and monitoring of learners' physical and behavioural health conditions. In an ideal situation, this fleet of services is delivered by an interdisciplinary group of health professionals, including mental health clinicians, medical officers, nurses, and primary care medical practitioners (Strolin-Goltzman, 2010; Barnett & Allison (2012).

Globally, SBHCs are increasingly becoming popular in most schools in developed societies such as the USA, India, New Jersey, Texas, and California. Research from these countries has underscored the significance of SBHCs in promoting health, increasing success in educational ambitions, and fostering timely preventive and clinical healthcare (Hayley et al., 2019; Niranjan & Gamboa, 2017; Olga, 2016; Salazar et al., 2015). The success of SBHCs in these countries is largely attributed to wide awareness of the health of learners and the sensitivity of the head of schools on school health, as well as the adoption of appropriate healthcare approaches by the school management (Niranjan & Gamboa, 2017). Other success factors noted are responsive policy and prudent management practices of SBHC (Keeton *et al.,* 2015). To overcome the funding constraint and implementation challenges affecting the effectiveness of SBHCs, most schools, for example, New Jersey, have collaborated with federally qualified health centres, private non-profit entities in equipping and running the SBHCs (Howe, 2019).

Some African countries, such as Ethiopia, have made an excellent attempt to adopt SBHCs in secondary schools to provide accessible and convenient healthcare services (Ministry of Education, Ethiopia, 2012). In Nigeria, school health services are not very elaborate. The main drawback has been poor organization and administration; inadequate funding by the national government; hence, many public secondary schools cannot procure requisite health infrastructures and the required personnel (Kolawole, 2015). In Kenya, the establishment of SBHCs is a far desired outcome which is also curtailed by the lack of facilities and finance. Nation Team (2018) reported the desolate state of ill-equipped school dispensaries in most secondary schools in Kenya.

Consequently, most schools are unable to establish fully functional SBHCs. This is derailed by inadequate funding, considering that the government does not charge a fee. The other deterrents are structural, while in some instances, the effectiveness is attributed to poor leadership and the inability of the school to hire qualified medical staff.

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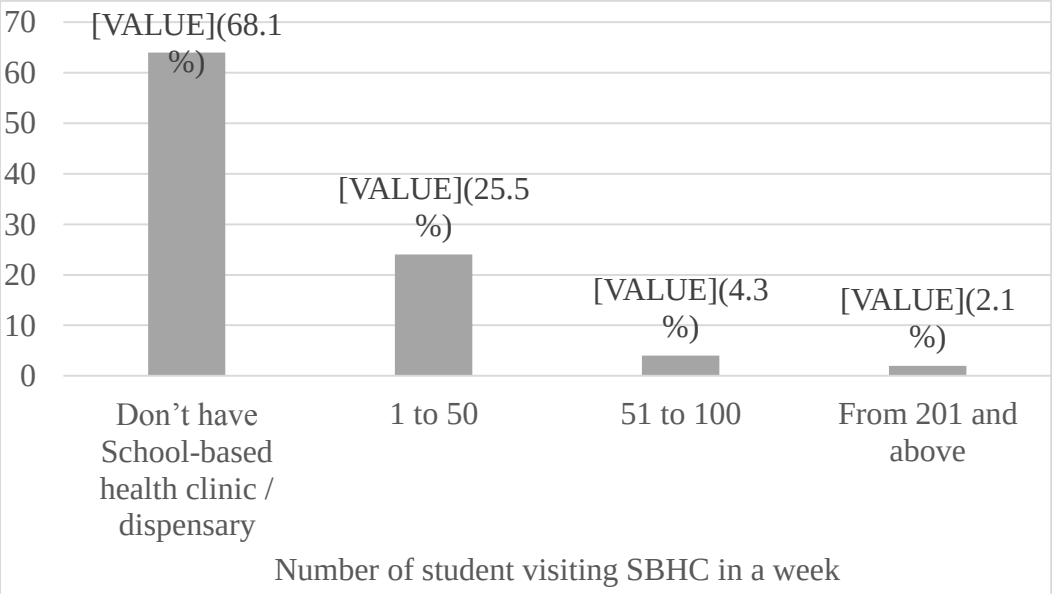
3.0 Research Methodology

The study employed a descriptive survey research design. It targeted a population of 375 principals, 375 students' council chairpersons, and one County Education Officer (CEO). Data was collected through a questionnaire and an interview from a sample size of 195 principles, 195 students' council chairpersons and one Director of Education. First, public secondary schools were stratified into four categories: girls' boarding schools, boys' boarding schools, mixed boarding schools and mixed day secondary schools. Then, a proportionate systematic sampling technique was applied to sample 196 principals and the Students' Council's Chairpersons, while the County Director of Education was sampled purposively. A total of 392 questionnaires were distributed to both principals and the students' leaders chairpersons, where 138 (70.4%) and 142 (72.4%) were returned, respectively. An interview session with the CEO was conducted. Content, face and construct validity were ensured while Cronbach's Coefficient Alpha was computed to determine the reliability of research instruments (Kumar, 2014). Quantitative data were analyzed using SPSS version 24, where descriptive statistics such as factor loading, mean and standard deviations were computed, while regression analysis was used to test the hypothesis. Data from the interviews were analyzed using thematic analysis. Finally, the findings were presented using tables, figures and narratives.

4.0 Results and Discussion

The principals were asked to indicate the average number of students who visited school-based health clinics/dispensaries per week in their schools. The response choices to the question had been designed to enable the study also to ascertain the existence of school-based health clinic/dispensary in public secondary schools. Results were summarized and presented in Figure 1.

Figure 1: Number of Students visiting school-based clinics



Out of 138 public secondary schools that took part in the study, 94 (68.1%) did not have a school-based health clinic/dispensary. The public secondary schools that had SBHC were

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approximately one third (1/3). Information gathered from the County Director of Education confirmed the findings on a few SBHCs. This was attributed to the lack of vote heads for school-based clinics. According to the County Director of Education, the government, through the Ministry of Education, had no provision for funding SBHCs. Despite SBHCs suffering from the budget, the Director described them as vital in providing immediate medical attention to learners. The Director, however, said that "large boarding schools are encouraged to establish school-based health clinics. This is meant to take care of serious emergencies especially at night". The Director further reiterated that principals were expected to make referral arrangements to accredited health facilities in case of severe cases.

Information gathered from students indicated that SBHC are visited between 1 and 50 times per week were 24 (25.5%), while those visiting between 50 and 100 times per week were 4 (4.3%). The findings suggest that SBHC as an approach for addressing students' healthcare in public secondary schools is less famous in Meru County. The results indicated that the few SBHCs that existed were underutilized. The study, therefore, sought to understand from principals the available school-based health facilities at their schools. Results were summarized as shown in Table 1.

Table 1: School-based health facilities available in public secondary schools

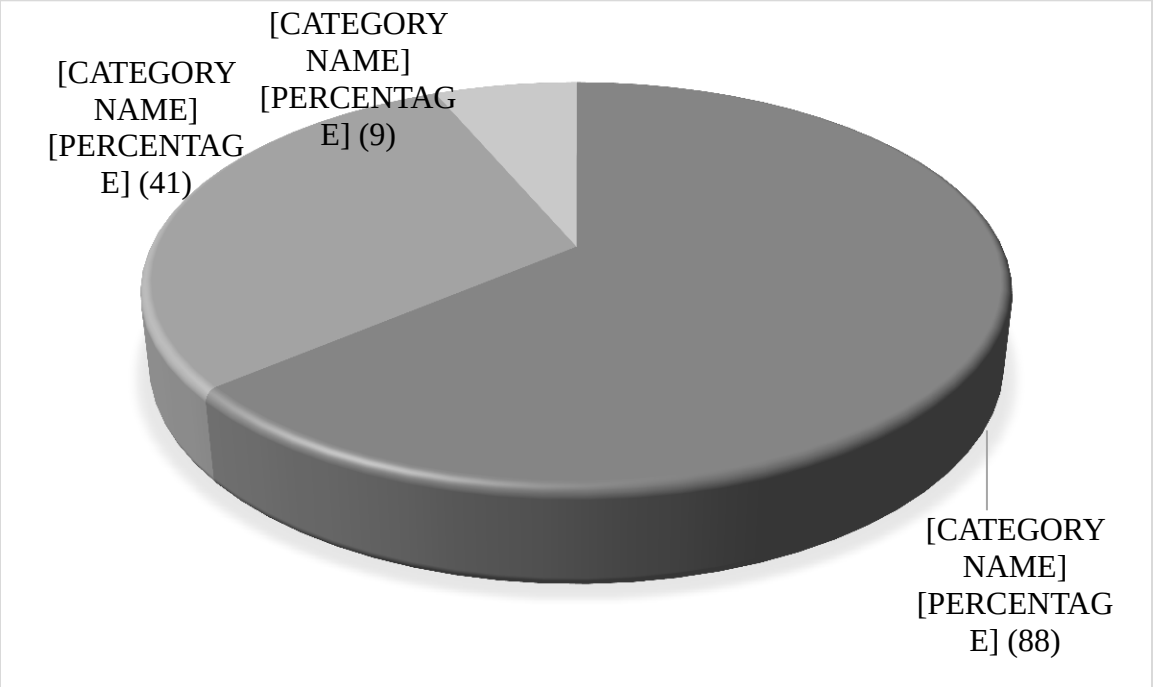
School-based health facilities available in the school (N=138)	Factor loading	Mode	Mean	Std. Deviation
A designated waiting area for sick students	.713	1	2.09	1.373
Room for a school nurse	.736	1	1.87	1.475
A purpose-build school-based health clinic/dispensary	.771	1	1.79	1.327
Consultation room	.783	1	1.68	1.263
A reception at the school health clinic/dispensary	.793	1	1.49	1.055
Pharmacy services	.853	1	1.45	1.033
Toilet facilities for students within the health clinic/ dispensary	.799	1	1.40	.943
Computers - for health clinic staff	.942	1	1.30	.902
Rooms for other health professional, e.g. social worker	.938	1	1.28	.822
Laboratory services	.676	1	1.17	.598
Kaiser-Meyer-Olkin Measure of Sampling Adequacy				.709
Bartlett's Test of Sphericity				.000

The responses presented in Table 1 were reliable. All the health facilities loaded well and exhibited a strong KMO (.709) with a significant Bartlett's Test of Sphericity of .000. However, some schools said they had a designated waiting area for sick students 57 (41.8%) with a mean value of 2.09 and a standard deviation of 1.373. It is one thing to have a designated waiting area for sick students, but, is a different thing to have them treated in an SBHC. The findings in Table

1 support the observation in the preceding discussion on the absence of SBHC in most public secondary schools in Meru County. The existing SBHC facilities appear to be in deplorable status. These results concur with the findings reported by the Nation Team (2018) about the desolate state of health facilities and infrastructural in secondary schools.

Apart from the availability of SBHC facilities, the study further sought to understand the number of trained medical personnel hired in a public secondary school. The findings (See Figure 2) show that 88 (64%) public secondary schools had no qualified medical personnel.

Figure 2: Number of trained medical personnel hired in a public secondary school



The finding further confirms the results appearing in Figure 2. This implies that the engagement of trained medical personnel is not a common practice in most public secondary schools in Meru County.

4.1 Healthcare programmes and services offered in a school-based health facility

Although few schools had SBHC, the study sought to find out the nature of healthcare programmes and services offered in school-based health facilities by asking students to indicate the extent to which such programmes and services were utilized. Results were summarized as shown in Table 2.

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Table 2: Healthcare programmes and services offered in a school-based health facility

Healthcare programmes and services offered in school-based health facility (N=142)	Factor loading	Mode	Mean	Std. Deviation
Counselling services	.757	1	3.06	1.560
Health promotion and education programs	.838	1	2.43	1.450
Hospital referral system	.533	1	2.40	1.566
Nutrition and food services	.627	1	2.34	1.513
Access to substance and drugs abuse services	.634	1	2.24	1.526
Psychological and social support services	.715	1	2.18	1.392
Prevention programming activities	.783	1	2.11	1.391
Reproductive/sexual health services	.673	1	2.07	1.293
Management of chronic diseases	.793	1	2.04	1.436
Vaccination services	.801	1	1.71	1.181
Mental health services	.632	1	1.62	1.075
Screening services (early detection and intervention)	.600	1	1.25	.693
Summation			2.12	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy				.796
Bartlett's Test of Sphericity				.000

The findings on the absence of elaborate SBHC services and programmes, as presented in Table 3, are consistent with the initial results on SBHC facilities where most health services were poorly rated by students (mode was 1 in each case) an aggregate means 2.12. Undoubtedly, establishing and running a full-fledged school-based health clinic, where all services such as the ones listed in Table 3, requires prudent management and leadership practices. Therefore, this study sought to understand the role principals play in ensuring SBHCs are operating effectively. Results of rating on suggested roles were summarized and arranged in descending order, as shown in Table 3.

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Table 3: Responsibility of Principals of Secondary Schools in Managing SBHCs

Responsibility of Principals of Secondary Schools in Managing SBHCs (N=138)	Factor loading	Mode	Mean	Std. Deviation
Ensure proper control of expenditures to minimize mismanagement of funds	.874	5	4.28	1.186
Planning	.759	5	4.17	1.123
Chief accounting officer	.821	5	4.17	1.267
Ensure quality assurance in SBHC	.865	5	4.17	1.179
Networking and collaborations	.820	5	4.09	1.241
Policy formulation	.680	4	4.06	1.162
Coordination	.851	4	4.06	1.105
Allocation of resources	.797	5	4.06	1.162
Continuous evaluation to ensure healthcare services of learners are sustainable	.735	5	4.04	1.209
Staff management and supervision	.743	5	4.00	1.295
Administration	.770	4	3.96	1.226
Billing management	.673	5	3.77	1.440
Write winning funding proposals	.537	5	3.72	1.387
Summation			4.04	1.229
Kaiser-Meyer-Olkin Measure of Sampling Adequacy				.907
Bartlett's Test of Sphericity				.000

A factor analysis indicated that all the responsibilities of the principals of secondary schools regarding managing SBHCs listed in Table 3 loaded very well, where each role had a factor Eigenvalue above 0.45; with an overall KMO value of .907, and a significant Bartlett's test of sphericity (P= .000). Furthermore, all the stated roles showed a summated mean value of 4.04 and a standard deviation of 1.229. This meant that an overwhelming majority, 111 (81%), agreed that principals are expected to play a critical role in managing school-based health clinics/dispensaries. Top on the list of the functions includes: ensuring proper control of expenditures to minimize mismanagement of funds, planning, chief accounting officer, and quality assurance of SBHCs. The roles that had the lowest rating were: billing management and writing winning funding proposals.

One of the roles listed in Table 3 requires principals to source external funding through writing funding proposals. This has implications on skills for writing grants and funding proposals. The sourced funds will go a long way in overcoming fiscal, human resources, infrastructure, and health facilities challenges which are severe drawbacks to the effectiveness of SBHCs in public secondary schools.

The study acknowledged that the issue of funding featured prominently in the results as a critical drawback. Therefore, the study further sought to establish how school-based health clinics/dispensaries were being funded. Results were summarized as shown in Table 4.

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Table 4: Sources of funding for school-based health clinic/dispensary

Sources of funding for school-based health clinic/dispensary (N=138)	Factor loading	Mode	Mean	Std. Deviation
Revenue from students-patients	0.861	1	2.57	1.656
Partnerships and collaborations with other sponsoring agencies	0.774	1	2.11	1.513
Reimbursement from public and private health insurers	0.733	1	1.62	1.165
Non-governmental organizations	0.838	1	1.3	0.619
Funding from school county offices	0.84	1	1.26	0.527
Sponsored by the national government	0.683	1	1.17	0.561
Kaiser-Meyer-Olkin Measure of Sampling Adequacy				0.603
Bartlett's Test of Sphericity				0.000

Most principals chose the option 'to a minimal extent' against all sources (mode = 1). A few schools, 70 (51.4%) with a mean of 2.57 and a standard deviation of 1.626, reported having been relying on funding from student patients. This means that funding of SBHCs is a severe detriment to their effectiveness in public secondary schools. Similar results had been reported by Mutia (2015), arguing that there was no budgetary allocation to the school health strategic plan, and the few services that were rendered to the sick students were out of their own cost. According to the County Director of Education, principals of public secondary schools were expected to champion income-generating activities whose proceeds can be used to cater for other expenses such as establishing school-based clinics. The study was also interested in ascertaining the challenges.

4.2 Challenges facing school-based clinics/dispensaries

A synopsis of challenges affecting the effectiveness of SBHCs was sought from principals whose responses were analyzed and presented in descending order of the mean values, as shown in Table 5.

Table 5: Challenges facing school-based clinics/dispensaries

Challenges facing school-based clinics/dispensaries (N=138)	Factor loading	Mode	Mean	Std. Deviation
Lack of funds to establish a school clinic/dispensary	.806	5	4.15	1.375
Insufficient funding to maintain the school clinic/dispensary	.860	5	4.06	1.443
Lack of requisite health infrastructures	.857	5	3.85	1.421
Poorly-equipped school clinic/dispensary	.856	5	3.74	1.599
Financial inability to hire medical staff due to poor pay	.762	5	3.57	1.669
Inability to afford health technology	.714	5	3.43	1.630
The inadequate medical fee paid by parents	.623	5	3.40	1.718
Lack of transport for referral cases	.683	1	3.09	1.644
Complexity in managing the transition of the patient to the required facility	.864	1	3.02	1.531
Limited or lack of well-structured monitoring and evaluation systems	.884	1	2.81	1.547
Delay in diagnosis and treatment of diseases	.806	1	2.68	1.553
Unnecessary delays where sick students are held on sickbay for too long before they are attended	.701	1	2.53	1.644
Poor communication and coordination of services often lead to duplication of work or confusion	.836	1	2.53	1.550
Poor organization and administration of the school clinic/dispensary	.510	1	2.40	1.461
Delay in diagnosis and treatment of diseases	.772	1	2.40	1.505
Poor leadership of school clinic/dispensary	.818	1	2.28	1.432
Negligence by management	.806	1	2.28	1.491
Leaking of students' confidential information	.720	1	2.11	1.395
Kaiser-Meyer-Olkin Measure of Sampling Adequacy				.815
Bartlett's Test of Sphericity				.000

The results indicate seven challenges that had a mean value above 3.4, which were all narrowing down to find. These were: lack of funds to establish a school clinic / dispensary (mean = 4.15; standard deviation = 1.375), insufficient funding to maintain the school clinic / dispensary (mean = 4.06; standard deviation = 1.443), lack of requisite health infrastructures (mean = 3.85; standard deviation = 1.421), poorly-equipped school clinic / dispensary (mean = 3.74; standard deviation = 1.599), financial inability to hire medical staff due to poor pay (mean = 3.57; standard deviation = 1.669), inability to afford health technology (mean = 3.43; standard deviation = 1.630), and inadequate medical fee paid by parents (mean = 3.40; standard deviation = 1.718). This result complements the findings presented in Table 5, where scanty sources for funds were noted. Without sufficient funding, it would be challenging for a public secondary school to establish and run an effective SBHC.

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The capitation from the government to public secondary schools is usually inadequate and is meant to be spent in identified expenditure vote hence challenging to divert. The Ministry of Education has sensitized parents not to pay additional money except what is stipulated; therefore, financing and operating a school-based health clinic/dispensary is an uphill task in public secondary schools. Both Wamunyu (2012) and Mutia (2015) studies complement these findings arguing that principals mainly face financial challenges in undertaking school health projects considering lack of allocation for this essential need. However, the study by Denny et al. (2014) disagreed, noting how secondary schools in New Zealand Secondary Schools were equipped with professional nurses and equipment. This difference, however, could be due to the economic gap between the developed and developing country such as Kenya.

4.3 Testing of the null hypothesis; School-based health clinic approach is not statistically significant in managing students' healthcare in public secondary schools in Meru County

The preceding descriptive results have indicated that although school-based health clinics are not very common in most public secondary schools, their establishment is incredible and worthwhile. In that connection, it was critical to check whether this approach of providing health services was statistically significant in managing students' healthcare in public secondary schools in Meru County. The results on tests of this hypothesis were summarized and presented in Table 6.

Table 6: Linear regression results regarding the efficacy of school-based clinic in managing students' healthcare in public secondary schools

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.435[a]	.189	.180	.50230	1.378

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5.417	1	5.417	21.471	.000[b]
	Residual	23.212	137	.252		
	Total	28.630	138			

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.079	.150		13.853	.000		
	X1	.293	.063	.435	4.634	.000	1.000	1.000

a. Dependent Variable: Y
b. Predictors: (Constant), X1

From the results in Table 6, the study variables in this context did show autocorrelation as shown by the Durbin-Watson value, which is more than 1; hence, the model was regarded as reliable in the analysis. The ANOVA results show the significance of the school-based health clinic approach in predicting variations in students' healthcare management in public secondary schools in Meru County. Results show that the school-based health clinic approach (X_1) is statistically

significant F (1, 137) = 21.471; p= .000) in predicting the variations in the dependent variable (Y, management of students' healthcare in public secondary schools in Meru County). VIF value of 1 ruled out multicollinearity among the study variables; hence the model was fit for data analysis and interpretations. The results also show the coefficient values (regression weight) of the predictor variable and the corresponding significance level.

Considering that the ANOVA result shows *P*=.000, which is less than the alpha value/significance level of 0.05, the study rejected the null hypothesis. It concluded that there were positive and statistically significant impacts of the school-based health clinic approach on the management of students' healthcare in public secondary schools in Meru County. The results show a prediction value where R^2=.189. This implies that the school-based health clinic approach accounts for 18.9 percent of the impact on students' healthcare management in public secondary schools when other factors are held constant. The regression weights further confirm this finding. It shows that the effects of the school-based health clinic approach on managing students' healthcare in public secondary schools will always exist at a significant minimum (β_1= .293, *P* = .000).

The findings show the indispensable need for a school-based health clinic approach in addressing students' healthcare in public secondary schools. Results have implications on establishment and funding policy for school-based health clinics in public secondary schools. The findings further call for prudence in running and managing such an establishment. A study by Guo *et al.* (2008) compliments the results that rejected the null hypothesis on the school-based health clinic approach.

5.0 Conclusion

The study noted a positive and statistically significant impact of the school-based health clinic approach on managing students' healthcare in public secondary schools in Meru County. However, the SBHCs were not available in most public secondary schools. Where available, the facilities were underutilized, lacked sufficient equipment and trained health professionals, and were facing severe funding constraints. The crucial roles of principals for the effective running of school-based clinics were noted to include ensuring proper control of expenditures to minimize mismanagement of funds, planning, chief accounting officer, and quality assurance of SBHCs. They were also expected to source external funding through writing funding proposals.

6.0 Recommendations

The study recommended that the Ministry of Education develop a guided mechanism for establishing school-based health clinics in public secondary schools. Specific measures should include infrastructural development, buying requisite equipment and facilities and other supplies, and employing qualified health professionals. The Ministry of Education should also establish a policy framework to allow schools to collaborate with health facilities in the absence of SBHCs in the schools. The principals of schools should be mandated to source for alternative funding to support the establishment of SBHCs. Hitherto, the study recommended the capacity building program by the Ministry of Education for all principals to equip them with skills for managing a health facility and writing funding and grants proposals. The findings have severe implications on budgetary allocations and capacity building programs for principals by the Ministry of Education. The results present a new approach to the management of the health of learners in the public secondary.

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