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INTERVENTIONS TO ENHANCE EFFECTIVE USE OF INNOVATIVE INSTRUCTIONAL METHODS IN PUBLIC HEALTH PROGRAMMES IMPLEMENTATION IN KENYA

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ABSTRACT: *Innovative instructional methods comprise a combination of approaches to teaching and learning that embrace modern technologies and are adaptable to different contexts. Since 1998, the College of Health Sciences of Moi University has embraced these innovative instructional methods to respond to 21st century challenges and trends in health professions' training and education. Nevertheless, to date, students and lecturers' experiences on the effectiveness of these methods have not been investigated. Therefore, the study sought the views of students and lecturers on the possible interventions in implementation of innovative instructional methods in Public Health Programme of Moi University. Mixed methods approach was used in this study involving the use of both quantitative and qualitative strategies. This was aimed at providing a comprehensive analysis of the research problem. The quantitative strategy (cross-sectional survey research) was used to gather numeric descriptions of level of knowledge of innovative instructional methods among a sample of lecturers. The qualitative strategy (phenomenological research) was used to identify students and lecturers' experiences about determinants of use of innovative instructional methods. Pre-tested structured and unstructured sets of questionnaire were administered to students and lecturers of the school of Public Health. Structured interview was conducted among a sample of members of the management team including the Dean School of Public Health and Heads of Various Departments. An observational checklist was used to assess the adequacy of infrastructure and availability of instructional materials. From the study results, all the students and lecturers believe that there are interventions that need to be put in place to improve the use of innovative instructional methods in the implementation of the Public Health Programmes. Therefore, various interventions need to be put in place as suggested by the students and lecturers. These include training workshops to enhance capacity building for the staff and students and a closer follow-up on the implementation of innovative instructional methods. The main reason as to why the interventions were necessary was to help address shortcomings faced in using innovative instructional methods. From the study, it was emphasized that the interventions should be implemented as part of university policy on teaching and learning. It was thus recommended that the government, through the Ministry of Education, should supply schools with adequate resource materials to enable teachers and learners to play their roles satisfactorily in the curriculum implementation process. The study of interventions needed to enhance implementation, specially from the perspectives of the students and lecturers, was essential to understand the true picture of what needs to be done to improve the health education programme outcomes.*

KEYWORDS: interventions, use, innovative instructional methods, public health programmes, implementation**,** Kenya

INTRODUCTION

Interventions are actions undertaken to enhance the efficiency of a given system. In the education sector, implementation of innovativeness depends on numerous motivators or related interventions

(Serdyukov, 2017). The main intervention needed to enhance the use of innovative instructional methods is injection of enough resources. These resources include human, physical infrastructure, material (teaching and learning materials), learning resources (library facilities), finances and time. This paper explores potential interventions to enhance use of innovative instructional methods by lecturers in implementation of public health programmes in Kenya. The paper is derived from a study conducted at the Moi University's school of Public Health. The paper examines such issues as effective leadership and management practices in public health training institutions, administrative support, issues to do with instructional agents (teachers' characteristics and decisions), their motivation, willingness, attitudes. It also examines how the change (in materials, teaching approaches and beliefs) management practices used to manage introduction of innovative instructional methods, along with and behaviour change, teacher training modes (staff development) and participation, skills and staffing. Further, the study examined issues related to student enrolment (class size), student focus, evaluation appropriateness, community participation, practicum sites, organizational structures, networking systems, availability of information, curriculum attributes (complexity), level of familiarity with curriculum methods and monitoring of the implementation.

Resource Support and Leadership

No meaningful teaching and learning takes place without adequate resource materials. Studies indicate that "resource outlay or initial investment can often be used to predict implementation of an instructional method" (Fullan & Pomfret, 1977). Resource availability, over both the long-term and short-term, is important to the effective implementation effort. There has to be proper resource procurement, resource organization and maximal use of resources. Human resources, including teachers, technical and administrative and support staff form another important support needed for implementation. There should be sufficient staff to deliver and support the delivery and assessment of the curriculum. According to Omariba (2016), the teaching staff should be appropriately skilled (in pedagogical and technical areas), be qualified enough and be aware not only of their own areas of the curriculum but also of the curriculum as a whole in order that they can contextualize the learners' learning experiences.

Resource support also involve provision of sufficient equipment. This includes information technology and audio-visual equipment, models and simulators, laboratory and clinical equipment, whiteboards and flip charts (Idris, Shamsuddin, Arome & Aminu, 2018). For the officially designed curriculum to be fully implemented as planned, schools must have adequate resource materials such as textbooks and stationery in order to enable teachers and learners to play their role satisfactorily in the curriculum implementation process. In public sector educational programme implementation, government is expected to provide physical facilities such as classrooms, laboratories, workshops, libraries and sports fields in order to create an environment in which implementation of an instructional method can take place (University of Zimbabwe, 1995). Where the availability and quality and of appropriate resource material and facilities is lacking, specified interventions are put in place to meet these gaps. These often include provision

of additional resources. In some cases, implementation may be done in piecemeal in accordance with available resources.

For proper teaching, especially in higher education, libraries must have capacity to support instructors and learners' research and teaching/learning activities fully (Virkus & Metsar, 2004). Books, journals and multimedia resources, lists of core textbooks for each part of the curriculum and other resources, including reference materials, should be availed and arranged appropriately to make them easy to identify by lecturers and students. Similarly, teaching rooms, office spaces, social and studying spaces should be adequate to accommodate learners at all stages of programme implementation. Lastly, adequate finance is another crucial resource needed to facilitate successful implementation of instructional methods.

Time

Timeliness for implementation are influenced by teachers' exposure to curriculum change. Time for implementation continues to be an issue raised by schools as impeding their progress towards fully giving effect to implementation (School Support Services [SSS], 2009). There is need for time for teachers to familiarize themselves with new materials and methods and to reflect and work on problems of implementation both individually and collectively (Fullan & Pomfret, 1977). More time is needed to plan, develop teaching materials, try out new techniques and rethink instructional practices. Teachers need enough time to develop their own understanding of the subject they are required to teach. Furthermore, time is needed to cope with all that is involved in curriculum implementation. Schools that define the activities and tasks to be undertaken designate who would be involved and specify a timeline for completion of each phase, make good progress towards implementation. Time is needed for preparing and delivering the requirements of the new curriculum. Teachers need enough time to develop their own understanding of the subject they are required to teach.

Instructional Supervision, Leadership and Administrative Support

Curriculum implementation cannot be achieved unless it has been made possible through the supervisory function of those tasked with quality assurance (Beach & Reinhatz, 1989). The school management does this through deploying staff, allocating time to subjects taught in school, providing instructional materials, creating an atmosphere conducive for effective instruction and literally inspecting the implementation process. According to the University of Zimbabwe (1995), the school administrator "monitors and guides curriculum implementation through ensuring that schemes of work, lesson plans and records of marks are prepared regularly". The school head creates and maintains a school tone and culture that create the climate of social responsibility.

Leadership relates to mission, direction and inspiration towards achieving desired goals. Studies have shown that committed professional leadership, with capacity for change management, is crucial to effective implementation of instructional methods (Sinnema, 2010). The support of top administrators is critical for change implementation process to take place successfully. Administrative support has to be strong and visible. Administrators who remain invisible, but

provide material resources to support change can positively affect implementation. Those who get actively involved in change and support the innovation in a visible and practical way make greater impact. Significant differences in degree of implementation have been found in situations where top management assistance and support is received from supervisory personnel, including consultants (Fullan & Pomfret, 1977). As such, in the education context, administrators play the role of instructional leaders in successful implementation of curriculum change.

Community Involvement and School Context

Learning institutions are meant to be an integral part of the community. As such, education contributes to social growth (Tett, 2006). In order for school effectiveness to be maximized, the general goals and visions espoused by the school should be those shared by the community. The local community also has to be involved in decision-making, especially given that it offers site for practicum. The opinion of community leaders has to be sought in order to enhance a good learning environment for the students during their attachment. The socio-economic milieu of the school also matters in instructional innovativeness. For instance, schools located in rich socio-economic environments and those that have adequate human and material resources can implement the curriculum to an extent that would be difficult or impossible for schools in poor economic environments.

Cultural and ideological differences within a society or country can also influence curriculum implementation. Many scholars have acknowledged the importance of understanding and appreciating the cultural ideology in curriculum design and implementation (Thomas, 1999; Shkedi & Nisan, 2006; Nijhuis, 2019). Some communities may resist a domineering culture or government ideology and thus interfere with the implementation of a curriculum. Good cultural practices that promote educational ideals need to be upheld while those that do not enhance education should be excluded during implementation.

The school community and environment also includes parents, parents and teachers' associations, school development associations and schools religious organisations, local authorities, companies and private school proprietors. These groups can influence curriculum implementation since they support schools financially. Interest groups also often demand the inclusion of certain subjects in the curriculum. They may further influence learners to reject courses they consider detrimental to the interests of the group.

Instructional Agent (Teacher)

The most important person in the curriculum implementation process is the teacher. With their knowledge, experience and competencies, teachers are central to any curriculum improvement effort. Teachers are the most knowledgeable individuals about the practice of teaching and are responsible for introducing the curriculum in the classroom. Since implementation takes place through the interaction of the learner and the planned learning opportunities, the role and influence of the teacher in the process is indisputable. Change succeeds or fails depending on the innovativeness and skills of teachers (Omariba, 2016). Both characteristics of the individual teacher and collegial factors have an effect on implementation. Relationships with other teachers

is critical, given that change involves learning to do something new and interaction is at the root of this learning. The development and refinement of new knowledge, skills and beliefs depend on whether opportunities exist for interaction. The quality of relationships among teachers is strongly related to implementation.

Major educational innovations, such as implementation of curriculum, involve entail changes in materials and their usage, instructional practices and beliefs (Serdyukov, 2017). Effectiveness in curriculum implementation happens when teachers have a personal interest in promoting positive behaviour. Such teachers also believe in what they are teaching, are knowledgeable about the curriculum content, and are comfortable and skilled in implementing expected instructional strategies. They have professional knowledge and understanding regarding the new curriculum, such as different ways of teaching to foster student learning. Moreover, such innovative teachers possess the appropriate professional attitudes and interests towards the new curriculum, for example, keen interest to teach the subject. They also tend to identify and pursue opportunities to receive ongoing curriculum and professional support, professional adequacy, hone own abilities and competence to teach the curriculum. Implementers need to be personally interested and involved in accepting change in schools. As such, teachers are ideally the change agents in the educational context.

Regardless of which philosophical belief the education system is based on, there is no denying that teachers influence students' learning. Innovative teachers foster better learning (Naz & Murad, 2017). This is because such teachers are most knowledgeable about the practice of teaching and are responsible for introducing new ways to implement the curriculum in the classroom. The key to getting teachers committed to innovativeness is to enhance their knowledge of the curriculum. This means teachers need be trained and workshops have to be continuous for professional development. Unfortunately, in any curriculum implementation process not all teachers will have the benefit of such exposure. There are just too many teachers and insufficient funds to go around. The most common approach is to have periodical workshops given by experts with the lecture method being the dominant pedagogical strategy.

Teachers play dynamic roles in the education system. Some view teachers as technicians and as such do not include curriculum development in their teacher education programmes (Rozycki, 1997; Lasley, 2012). Certainly, an adequate teacher education programme should include curriculum development (both the theory and the work of curriculum development) if teaching is to be a profession and if educational opportunities for learners are really to be improved and exploited. Teachers need to be trained and workshops have to be continuously organized for them for professional development. Teachers need opportunities to become familiar with the new programme's pedagogical approach. In fact, the best way to ensure that teachers are ready to implement a new curriculum is to actively engage them during curriculum design stages and in overall education reforms (Ariza & Poole, 2018). They will be able to work faster on particular teaching skills emphasized in the new programme, such as teaching of values, or perhaps to become familiar with new tools of instruction such as the internet.

Statement of the Problem

In health training and education, the paradigm shift from traditional instructional methods to innovative instructional methods has been emphasized in order to respond to challenges and trends in health (Sadeghi & Heshmati, 2019). This need has also been spearheaded by the knowledge explosion and the rapid technological advancements that characterize the modern world. Trainers of all professionals, particularly health professionals, have felt a great need to adopt new teaching and learning methods to ensure effective learning for their trainees.

The College of Health Sciences at the Moi University strives to ensure that the students acquire practical and intellectual skills using modalities that encourage active learning in the context in which they will later function as health professionals. One such modality is the use of innovative instructional methods. Under these methods, emphasis is placed on student's acquisition of knowledge and skills through self-directed learning, problem solving and effective communication skills. This modality has been in place since the inception of the school in 1998. It is not clear what interventions have been put in place to support the adoption of innovative instructional methods.

Although there are inspiring examples of innovative teaching, research continues to show that in most places classroom practice lags behind goals (Organization for Economic Co-operation and Development [OECD], 2009). The sources of this gap between the rhetoric of change and the realities of classrooms range from lack of access to resources and training to lack of clear expectations in systems that are still organized and incentivised towards traditional measures of achievement. Most students still experience instruction that is largely lecture-based, and extensive national education investments in technology have not yet resulted in widespread transformation of learning opportunities (Kafu, 2011; Bransford, Brown & Cocking, 2000). Therefore, the study sought to identify possible interventions in implementation of innovative instructional methods in Public Health Programme.

Purpose and Justification of the Paper

The purpose of the study was to document the views of students and lecturers on the best interventions needed to enhance the adoption of innovative instructional methods in Public Health Programme implementation at the Moi University.

Innovative instructional methods are rapidly replacing traditional instructional methods because of the need to create information suitable for a creative and innovative society. The current emphasis is to place the learner at the centre of the teaching and learning process. The current knowledge revolution and rapid technological changes require innovative instructional methods in teaching and training of Health Professionals to ensure effective learning of the trainees and production of competent personnel. Around the world, there is growing consensus among education leaders, researchers and educators that teaching and learning must change to help students develop the skills they will need to succeed in the 21st century (Ananiadou & Claro, 2009). Implementation of innovative teaching method is a need of today, especially in teaching to develop the student according to nature of discipline (Kafu, 1976).

Although there has been some recent research and theory development on the barriers of implementation of innovative instructional methods, little work has been done on the necessary interventions to strengthen effective implementation of innovative instructional methods, hence the need for the study. As medical educators, it is important to ensure that the methods used improve the practice of future health professionals and, therefore, clients' outcomes. It is thus necessary to embrace new ways of delivering instruction. In order to effectively support the implementation for the Public Health programme, strategies are needed to address all shortfalls in resource allocation among other factors. Any effective strategy to support implementation should be preceded by accurate data gathering on the experiences of those involves, namely the students and lecturers.

MATERIALS AND METHODS

The most suitable research design of the study was the mixed methods approach. The study site was School of Public Health, College of Health Sciences, Moi University. The College of Health Sciences is situated in Eldoret town, Uasin Gishu County, Kenya. The study population was undergraduate Public Health students, the lecturers, Heads of Departments and the Dean, School of Public Health in Moi University. Purposive sampling was used to select the respondents where the Public Health Programme is implemented. Census method was used where the total enumeration of the study population was included. The sample size was forty-one (41) fourth-year students, thirty-nine (39) third-year students and forty (40) second-year students, thirty (30) lecturers and six (6) members of management team. The key informants were the Dean School of Public Health, heads of various departments and the administrator of the school.

The main instruments used to collect data were questionnaire, observation and interview schedule. Since the research used mixed methods, the data collected from the research was analysed using both quantitative and qualitative techniques. Data was recorded using Microsoft Excel software package. The data was then coded accordingly in order to facilitate analysis. Quantitative data was summarized using frequency counts and tables then analysed using linear regression statistical method. Qualitative data was grouped into broader categories, content coded for open-ended questions and analysed using descriptive statistics.

RESULTS AND DISCUSSION

The study sought the views of the students and lecturers on the interventions needed to support effective use of innovative instructional methods in the implementation of Public Health programmers.

Are Interventions Needed?

In this respect, the lecturers were first asked to give their views on whether or not there were some interventions required to improve the use of innovative instructional methods in teaching of Public health programmes. From their responses, all the 26(100.0%) lecturers said that there were interventions that could be put in place to improve the use of innovative instructional methods in the implementation of the Public Health Programmes. From this response, it was clear that all lecturers were convinced that some interventions were needed to improve the use of innovative instructional in teaching.

Suggested Interventions

The lecturers were further asked to state some of those interventions they are aware. Their responses are presented in Table 1.

Table 1: Possible Interventions needed to support Innovative Instructional Methods in teaching Public Health Programme

Response	F	%
Budgeting for resources to all departments	11	42.3
Proper planning and prioritization	13	50.0
Control student admission	11	42.3
Curriculum review	11	42.3
Introduce management course	11	42.3
Timely disbursement of funds	11	42.3
Harmonizing college activities	11	42.3
Recruitment of more staff	11	42.3
Increasing transparency	12	46.2
Timely payment of fees by students	11	42.3
Reinforce policy	12	46.2
Conduct training workshops to enhance capacity building	22	84.6
Improving and maintenance of facilities	12	46.2
Employment of technocrats to use the methods	11	42.3
Review meetings on implementation	11	42.3
Use Open and Distance Education Learning (ODEL)	11	42.3
Get feedback from students on preferred practical innovative methods	11	42.3
Provide tutorial rooms	11	42.3
Allocate more funds to purchase facilities	11	42.3
Involve heads of department in school resource allocation	11	42.3
Remunerate tutors according to their input	13	50.0
Clear and regular assessment	11	42.3
Purchase modern ICT equipment	11	42.3

As shown in the Table 1, a majority, 22(84.6%), of the lecturers suggested the need to conduct training workshops to enhance capacity building in instructional technology as an intervention to improve the use of innovative instructional methods. These findings are in line with the work of Kafu (1976) and Fullan (1991) who demonstrated that sustained interaction and staff development are crucial in implementation of a programme. Ongoing professional development and training is crucial for helping teachers implement strategies that need new skills in teaching or assessment.

Two interventions were each identified by half, 13(50%) of the lecturers, namely proper planning and prioritization and remuneration of tutors according to their input, were each identified by half, 13(50.0%), of the lecturers. Twelve 46.2%) of the lecturers, in each case, suggested the following interventions: increasing transparency; improving and maintenance of facilities, and follow-up on policy implementation/reinforce policy implementation. The rest of the suggested interventions, each of which was mentioned by 11(42.3%), were: budgeting for resources in all departments; control of student admissions; curriculum review; introduction of management course; timely disbursement of funds; harmonization of the college activities; recruitment of more staff; timely payment of fees by students; reinforce policy; employment of technocrats to use the methods; review meetings on implementation; use ODEL; get feedback from students on preferred practical innovative methods; provide tutorial rooms; allocate more funds to purchase facilities; involve heads of department in school resource allocation; proper resource allocation; clear and regular assessment and purchase modern ICT equipment. Some scholars indicate that "resource outlay or initial investment can often be used to predict implementation of an instructional method" (Kafu, 2011; Fullan & Pomfret, 1977). Other studies have also underscored the importance of adequate resource availability over both the long-term and short-term to support effective implementation of an instructional method (Omariba, 2016; Idris *et al.*, 2018; Virkus & Metsar, 2004).

The student were also asked to indicate whether there were interventions that needed to be put in place to enhance use of innovative instructional methods.Of the 103 students, 77(75%) indicated there were interventions that needed to be put in place to improve implementation of innovative instructional methods while 25% of them indicated there were no interventions. Therefore, it was deduced that there were interventions that needed to be put in place to improve implementation of innovative instructional methods in the School of Public Health. The students were further asked to suggest possible interventions that could be put in place to improve implementation of innovative instructional methods. Their responses were as listed in Table 2.

Table 2: Possible Interventions to Improve Implementation of Innovative Instructional Methods

Possible intervention	2nd Yr	3rd Yr	4th Yr
Establish more learning rooms	**15**	**16**	**16**
Training of lecturers, human resource persons and lab assistants on the use of innovative methods	**17**	**19**	**18**
Improving the learning conditions	**16**	**18**	**17**
Review implementation of instructional methods used	**17**	**21**	**19**
Revision of the public health course	**16**	**18**	**21**
Proper time management	**19**	**19**	**20**
Introduce more electives in learning	**15**	**16**	**19**
Proper induction of first-year students	**21**	**17**	**18**
Emphasize policy implementation on the methods	**16**	**18**	**19**
Motivate students to embrace innovative methods	**16**	**17**	**16**
Enough resource allocation to support effective implementation of innovative methods	**17**	**17**	**17**
Engage students in discussion rather than overly using lectures	**17**	**18**	**16**
Exchange programmes (bench-marking)	**15**	**17**	**17**
Set up programmes to reinforce application of the innovative methods	**16**	**16**	**18**
Provide enough books for every course	**15**	**20**	**16**
Provide full-time access to the internet and Wi-Fi	**20**	**19**	**21**
Provide more human personnel (facilitators) for common courses		**17**	
The university should set aside specific teaching rooms for students of different years	**13**	**16**	**15**
Increase practical sessions	**15**	**18**	**17**
Introduce e-learning	**17**	**18**	**21**

The students suggested several interventions that could be put in place to improve innovative instructional methods. Notable among the interventions was review of implementation structure of innovative instructional methods, revision of the public health course, proper induction of first year students on use of innovative instructional methods and provision of full time access to the internet and Wi-Fi. This could go a long way in improving the implementation of innovative instructional methods.

The students also mentioned the need to be motivated to embrace innovative instructional methods. From the findings of the factors that influence use of innovative instructional methods, students' attitude and preference were among them. The need for motivation points to the lack of free will among students to embrace innovative instructional methods.

Statistical Analysis for Suggested Interventions

A statistical analysis was undertaken for the various categories of possible interventions needed to facilitate implementation of innovative instructional methods. Therefore, multivariate linear regression analysis was done to predict the relationship between interventions faced in the use of innovative instructional methods and the various departments. The results were as shown in Table 3.

Table 3: Statistical Analysis for Possible Interventions

Model	Coefficients				
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.111	.731		2.890	.009
Financial Intervention	.778	1.060	.343	.734	.472
Personnel Interventions	1.000	1.422	.450	.703	.490
Infrastructural Intervention	-015	1.232	.000	.000	1.000
Knowledge Intervention	-1.667	.768	-.769	-2.170	.042
Policy Based Intervention	-015	1.422	.000	.000	1.000

Table 3 shows that there was a statistical significance on knowledge intervention at p value = 0.042, hence $p \leq 0.05$ and the dependent variable. The other variables were not statistically significant. However, looking at the beta coefficients, results show personnel interventions as the strongest independent variable with 0.450 followed by financial interventions at 0.343.

From the students' responses, multivariate linear regression analysis was done to predict the relationship between interventions proposed in the use of innovative instructional methods and the students' year of study. The results were as depicted in Table 4.

Table 4: Statistical Analysis for Interventions Proposed and Year of Study of Students

Model	Coefficients				
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.078	.258		11.918	.000
Personnel Based	.139	.691	.087	.201	.841
Infrastructure	.611	1.020	.385	.599	.551
Knowledge	-1.028	.814	-.647	-1.263	.210
Financial	.583	.628	.367	.928	.356
Policy	-.355	.480	-.222	-.739	.461

There was no statistical significance between the dependent and the independent variables, however looking at the beta coefficients shows infrastructure interventions as the strongest independent variable with 0.385 followed by financial interventions at 0.367.

Reasons for Suggesting those Interventions

The lecturers were further asked to explain why the specific interventions they suggested were the most appropriate. Their responses were as summarized in Table 5.

Table 5: Reasons for Proposing Interventions

Response	F	%
To address shortcomings faced in using innovative methods	13	50.0
To improve innovative instructional methods	18	69.2
For modernization purpose	11	42.3
ODL can cater for large numbers of students	11	42.3
To improve skills of learners or graduates	11	42.3
To expose tutors on the methods	11	42.3
To improve implementation of Public Health Programme	13	50.0

The general explanation given by the majority, 18(69.2%), of the lecturers for the need of the suggested interventions was to promote quality and use of innovative instructional methods in public health programmes. Half, 13(50.0%), of the lecturers, in each case, said the interventions they suggested would help address shortcomings faced in using innovative methods and improve implementation of Public Health Programme. The rest of the lecturers, 11(42.3%) in each case, gave the following explanations for the interventions they had proposed. For modernization of the Public Health Programme; in the case of ODL to manage large numbers of students; to promote the competence of learners or graduates and to expose tutors to the new innovative instructional methods. These interventions if put in place probably could help address challenges facing the implementation of innovative instructional methods and promote the use of these methods in instruction of Public Health Programme.

Further to this, the students were asked to give reasons for the suggested interventions. The reasons given were as summarized in Table 6.

Table 6: Reasons for Putting Interventions in Place

Reasons for the suggested interventions	2nd Yr	3rd Yr	4th Yr
To ensure the achievement of the desired goals and objectives of the public health programme	**17**	**18**	**21**
To improve delivery of content using innovative methods	**16**	**17**	**16**
To correct or address challenges in implementation	**19**	**18**	**21**
To improve the use of innovative methods	**16**	**18**	**16**
To suggest steps to make corrections	**16**	**17**	**19**
To help improve the effectiveness of innovative instructional methods in teaching and learning of public health programmes	**15**	**16**	**16**
Exchange programmes will help acquaint students with innovations in other institutions to enable them to emulate	**16**	**17**	**19**
Improve internet connection to ease research and access to useful information	**15**	**18**	**19**
To ensure there is safety in application of innovative methods	**16**	**16**	**17**
To reduce the time wasted by class representatives looking for unoccupied rooms to conduct classes	**21**	**19**	**18**
To make the learning process easy	**14**	**19**	**17**
To improve students' efficiency in their careers afterwards	**13**	**16**	**19**
To promote easy understanding of subject content	**18**	**16**	**17**
To promote hands on mastery of skills	**17**	**16**	**18**

Students gave several reasons for suggesting interventions needed to enhance teaching of Public Health Programme. Some of the reasons were geared towards correcting existing inefficiencies. Others focused on improving facilities and still others were geared towards ensuring safety in application of the methods. All the reasons given pointed at improving the adoption of innovative instructional methods and enhancing the overall implementation of the Public Health Programme.

How Interventions should be Implemented

The student respondents were also asked to suggest how the interventions were to be adopted. This was aimed at informing the research how the interventions were to be realized in order to contribute towards improving Innovative Instructional Methods. They gave responses as shown in Table 7.

Table 7: Adoption of Interventions: Students' Views

	2nd Yr	3rd Yr	4th Yr
Through e-learning	**16**	**17**	**19**
Implementation of benchmarking reports	**15**	**18**	**16**
Abiding by the set regulations and standards	**16**	**17**	**19**
Step-by-step across every academic year	**21**	**17**	**19**
Regular review of the public health course	**19**	**18**	**21**
Collaborative stakeholder (lecturers and students) involvement	**15**	**16**	**19**
Train the lecturers to use the new methods before training students	**15**	**16**	**17**
The head of the Faculty of Public Health and other schools should hold regular meetings to discuss the issues affecting the implementation of innovative methods	**17**	**21**	**18**

From Table 7, notable among the intervention strategies was regular review of the public health course to address upcoming issues. The second one was systematic adoption across all the academic years. The third was that the head of faculty of Public Health and other schools to hold regular meetings to discuss issues affecting the of innovative methods. Most respondents were of the opinion that regular review meetings can actually identify the challenges faced by all stakeholders in the programme. Through regular review meetings, simple challenges identified would be addressed before developing into complex issues to be handled.

E-Learning being one of the strategies has less respondents compared to other strategies. This strategy requires the use of support educational technologies like the laptops, which in turn need accessibility to the internet and power source. Accessibility could be limited to some few rooms where the students take the lessons. Limited access to e-learning may only allow use among a few facilitators and students. Therefore, adopting this kind of strategy will not improve much the use of innovative instructional methods. There is need for capacity building in development of human resource and other relevant facilities.

The lecturers were also asked to explain how the proposed interventions should be implemented. Their responses were as indicated in Table 8.

Table 8: Adoption of Proposed Interventions: Lecturers' Views

Response	Frequency	Percentage
Through university policy	15	57.7
Consultative meetings	11	42.3
At the start of every semester/new academic year	12	46.2
Reinforce implementation	11	42.3
Avail experts	11	42.3
Involve all stake holders	11	42.3
In phases across the academic levels	11	42.3
During recruitment of lecturers/induction of new lecturers	13	50.0
During intake stage of students	11	42.3

Table 8 shows that most, 15(57.7%), of the lecturers said that the interventions should be made a part of the university policy for easy implementation. Half, 13(50.0%), of the lecturers said the interventions should be implemented during recruitment of lecturers or through induction programmes for new lecturers. Twelve (46.2%) of them said the interventions should be implemented at the start of every semester or new academic year. The rest of the lecturers, 11(42.3%) in each case, suggested the following strategies for implementation of the proposed interventions: use of consultative meetings; reinforcement of the implementation of innovative instructional methods; availing experts; involving all stake holders that is, facilitators, learners and administrators involved in use of Public Health Programme; implement the interventions gradually across the academic levels and during intake stage of students.

Contribution to Research, Policy and Practice in Public Health Education

Establishing teachers and students' perspectives on interventions for effective adoption of innovative instructional methods was a critical step in offering a comprehensive health training programme. High quality evidence is necessary to establish policy and practice of highest standard. Therefore, policy makers should find this paper helpful in planning, supervising and evaluation of comprehensive the quality of instruction that informs the Public Health Programme under implementation. As such, the paper has provided insight into the challenges experienced by students and lecturers while using innovative instructional methods and identified ways through which those challenges may be addressed. Consequently, teachers and students' perspectives on possible interventions help in the improvement of delivery of innovative instructional methods.

The findings facilitate identification of effective practices to be adopted by Health Professional Educators. It is hoped that this study assists Health educators in providing support for successful implementation of the programme. Existing research supports the case for assessing implementation process challenges when evaluating programmes and interventions. This paper contributes to such knowledge by defining interventions to enhance the adoption of innovative instructional methods. Future researchers will use this paper to underline the specific aspects of capacity building needed to support the introduction of new methods of instruction and learning in public health training institutions. Therefore, the study provides a reasonable foundation from which to embark on further work that can assist the staff, educational developers, administrators

and even students in their approaches to new ways of teaching and learning. Innovative instructional methods are necessary because they foster development of the students and lecturers' talents.

CONCLUSION AND RECOMMENDATIONS

From the findings of the study, all the students and lecturers believe that there are interventions that need to be put in place to improve the use of innovative instructional methods in the implementation of the Public Health Programmes. Therefore, various interventions need to be put in place as suggested by the students and lecturers. These include training workshops to enhance capacity building for the staff and students and a closer follow-up on the implementation innovative methods. There is also need for timely disbursement of funds to support the use of these instructional methods. Meanwhile, there is need to recruit more staff. The College should also seek students' feedback on preferred and practical innovative methods. Additionally, the College should provide tutorial rooms, allocate more funds to purchase facilities and purchase modern ICT equipment. The main reason as to why the interventions were necessary was to help address shortcomings faced in using innovative instructional methods. From the study, it was emphasized that the interventions should be implemented as part of university policy on teaching and learning.

It is recommended that the government, through the Ministry of Education, should supply schools with adequate resource materials to enable teachers and learners to play their roles satisfactorily in the curriculum implementation process. The appropriate authority must also provide physical facilities such as classrooms, laboratories, workshops, libraries and sports fields in order to create a conducive environment in which implementation can take place. The availability and quality of source material and the availability of appropriate facilities have a great influence on curriculum implementation. Meanwhile, the School of Public Health should adopt appropriate interventions to address the main factors that hinder use of innovative instructional methods in implementation of public health programme. It should also review the implementation of innovative instructional methods in Public Health Programme in the University regularly.

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