

EXTENT OF HIV&AIDS CURRICULUM MAINSTREAMING IN KENYAN UNIVERSITIES IN COUNTIES BORDERING LAKE VICTORIA

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ABSTRACT

Global AIDS fight has garnered considerable gains but a lot still remains to be done to stop new HIV infections among Kenyan university undergraduates. HIV&AIDS knowledge has been associated with low risk behaviour and low HIV infection. Prevention efforts in Kenyan universities do not seem to go hand-in-hand with the students' risk behaviour. The extent, to which Kenyan universities in counties bordering Lake Victoria have mainstreamed HIV&AIDS into their curricula, remains unknown. This study sought to determine the extent of HIV&AIDS mainstreaming in the study area while it was significant for creation of new knowledge in HIV and AIDS education and for curriculum policy formulation. Four universities (Rongo, Great Lakes, Jaramogi Oginga Odinga and Maseno), were purposively selected while 384 students were selected using non-proportional quota sampling. Primary data was collected from 384 respondents using structured questionnaires and other informants by Focus Group Discussion Guides and Key Informant Interview schedules. Secondary data was sourced from government documents. Data analysis was done using Statistical Package for Social Scientists (SPSS) version 19.0 and Excel computer programmes. Results revealed that all four studied universities mainstreamed HIV&AIDS into their curricula (40%, 50%, 80% and 80% respectively). Results further indicated that content, methods and evaluation procedures were also varied. It was recommended that Kenyan Universities revamp HIV&AIDS Education mainstreaming policy and practices.

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KEYWORDS: HIV&AIDS-Curriculum-mainstreaming, Kenya, Lake-Victoria –Counties, Universities.

INTRODUCTION

Curriculum reforms and mainstreaming of HIV&AIDS into Sub Saharan university educational programmes has had special emphasis as an intervention to reduce HIV risk (Kelly 2006)^[1] World AIDS Day Report (2014)^[2], highlighted that sexual behaviour risk is increasing hence the need to intensify support to youth knowledge empowerment. UNAIDS (2012)^[3], has also cited curriculum efforts to fight HIV as having always been a tool for expanded HIV and AIDS response in universities in sub-Saharan Africa. Such a tool deserves to be evaluated constantly. The Global AIDS Response Progress Reporting(GARPR) (2015).^[4], has indicated that ending the global AIDS epidemic by 2030 will require an integrated “smart scale-up approach” which includes HIV&AIDS education; and through it, the world would avert 18 million new infections and 11.2 million AIDS-related deaths. The problem in the study was to find out the extent of HIV&AIDS curriculum mainstreaming in Kenyan universities in

counties bordering Lake Victoria with highest national figures of HIV prevalence (KAIS, 2014)^[5].To justify the study, education is said to be one of the best “social vaccines” against AIDS (Nzioka *et al*, 2007)^[6]. Kenya HIV&AIDS research agenda in the 2014/15-2018/9 HIV and AIDS Strategic Framework (KASF), (Republic of Kenya 2014)^[7]has underscored “intensifying prevention efforts to priority Geographies and populations” such as university undergraduates in this study for the achievement of Vision 2030.The objective of the study was to determine the extent of HIV and AIDS mainstreaming in the universities in the counties bordering Lake Victoria in Kenya.

METHODOLOGY

The Study Area

The study was carried out in universities in the counties bordering Lake Victoria in Kenya. These included; Maseno University and The Great Lakes University of Kisumu(GLUK) in Kisumu county,

Jaramogi Oginga Odinga University of Science and Technology (JOUST) in Siaya County and Rongo University College in Homa Bay County. The study

adopted a descriptive research design indicated in Table 1;

Table 1: Research Design for the Study on Kenyan Undergraduate Students in Counties Bordering Lake Victoria

Specific Objective	Measurable Variables (Indicators)	Research Design
Determine the extent of HIV and AIDS mainstreaming in the universities in counties bordering Lake Victoria in Kenya.	<ul style="list-style-type: none"> • Curricula Content, Methods and Resources for Implementation • HIV &AIDS Policy Documents • Co-curricular activities and facilities 	<ul style="list-style-type: none"> • Descriptive Survey

Source: Author's Research (2016)

Great Lakes University of Kisumu (GLUK) is a fully chartered private university in Kenya with its main campus located beyond Mamboleo on the Kisumu - Miwani Road. It has five other campuses in; Kisumu City, Kokise, Nairobi, Kisii and Garissa. The main aim of GLUK is to develop effective managers of development initiatives in the Great Lakes Region of Africa. GLUK also equips its students with additional skills aligned and designed for Kenya's vision 2030. GLUK is highly regarded in its unique methods of programme delivery and research both linked to problem solving and community service focusing on health, food and income security. The University serves both Kenyan and International students. It has a population of 2500(Commission for University Education, 2015)^[8]

Jaramogi Oginga Odinga University of Science and Technology (JOUST) is situated in Bondo Town within Siaya County on Bondo-Usenge Road, the successor of Bondo University College (BUC) which was established by the Government of Kenya as a Constituent College of Maseno University through a Legal Order No. 56 of 11th May 2009. The University College is located at the beaches of Lake Victoria and focuses on the development of Kenya's cultural heritage through the utilization of the vast natural resources for academic advancement and research purposes premised on improving the socio-economic status of communities. The location of the University College was designed to facilitate community outreach by the student and general university fraternity. (JOUST Website)<http://www.cue> .2015 .

Maseno University, enacted by an act of Parliament in 1991, is the only university on the globe that lies along the Equator (00) (Maseno University Website; <http://www.cue>).(2015). The University is located in Maseno Township along Kisumu-Busia road, 25 km from Kisumu City and approximately 400 km west of Nairobi the capital city of Kenya. The University also shares its boundaries with Vihiga County to the East but belongs to Kisumu County. The name "Maseno" was coined by Rev. J.J. Willis out of the name of a tree known in local dialects as "Omuseno" or "Oluseno" that stood next to the spot where the first missionaries in the region erected their base (<http://www.cue>).(2015). Its leaves are a local

substitute of sandpaper according to the(KII) information. Maseno University currently has three Campuses; The Main Campus in Maseno Township 25km from Kisumu City on Busia road, approximately 400km West of Nairobi, the Kenyan Capital city. The core activities and central administration of the University takes place on this Campus. The other campuses are Kisumu College in the Central Business District of Kisumu City, and Homa Bay e-campus at Sonyelo Plaza, Homa Bay Town.<http://www.cue> (2015). Maseno university undergraduate student population is approximately 15,893 (Academic Registrar 2015).

Rongo University College is a public institution which was established by President MwaiKibaki, Commander in Chief of the Kenya Defense Forces through Legal Notice NO.70, Kenya Gazette Supplement NO.51, on 17th June 2011. The University Campus is located on Kitere Hill, 8 kilometers from Rongo Town, and 2.5 kilometers off Kisii – Migori Highway. It is situated on the precincts of the former Moi Institute of Technology, (MIT), which was established in 1981 as a technical training college for Certificate, Diploma and Higher National Diploma programmes. (<http://www.cue> .2015).The total number of students in the university college was 5000 (Academic Registrar, 2015).

Sampling Techniques

Purposive sampling technique was employed to select four university cluster sites and quota sampling for the number of students studied in each university. Systematic random sampling technique (every 5th student) was used to identify the actual students to fill in the questionnaires.

The Key Informants and Focus Group Discussants were purposively selected. The Key Informants were individuals best placed in the university institutions to provide in-depth information on the variables of interest to the study. The population (N) of the undergraduate students in the four universities combined is more than 10, 000, which enabled the use of the formula proposed by Fisher, Laing and Stoeckel (1983), quoted in Mugenda and Mugenda (1999)^[9] for use in reproductive health and other social surveys. It produces a desired sample size of

384: The sample size for the study (n) was therefore calculated using;

$$n = \frac{z^2 pq}{d^2}$$

Where n is the desired sample size if the target population > 10,000

z is the standard normal deviate at the required confidence level i.e. 1.96

p is the proportion in the target population estimated to have the characteristic

(Assume 50% if unknown)

q= 1-p (i.e. 0.5) and

d is the level of statistical significance or Alpha

Data Collection Tools

Data collection tools included; 384 Individual Questionnaires, 40 Focus Group Discussion (FGD) Guides, Key Informant Interview (KII) schedules for academic registrars, Deans of Students and AIDS Control Unit (ACU) coordinators from each of the studied universities. Document Content Analysis Guides were used in the study of HIV and AIDS documents, policies and strategic plans. Observation checklists helped to record the status of the AIDS Control Units (ACUs) and AIDS messages, materials and facilities in each of the study sites.

Data Analysis

Data analysis procedures were as shown on table 2:

Table 2: Summary of Data Analysis of Undergraduate Students in Kenya

Specific Objective	Indicators	Method of Analysis
Determine the extent of HIV and AIDS mainstreaming in the universities around Lake Victoria in Kenya.	<ul style="list-style-type: none"> • Curricula Content, Methods and Resources • HIV and AIDS Policy Document • Co-curricular activities. 	<ul style="list-style-type: none"> • Descriptive Narratives • Content Analysis

Source: Author's Research (2016)

RESULTS AND DISCUSSIONS

The extent of HIV and AIDS mainstreaming into the universities' curricula found in the counties bordering Lake Victoria ranged from **fair** to **reasonably high**. It was judged by the university adherence, through document analysis, to the ten HIV and AIDS curriculum Mainstreaming criteria (a 10-point scale) that yielded; Rongo University College score of, **40%**, Great Lakes University of Kisumu, **50%**, Jaramogi Oginga Odinga University of Science and Technology, **80%** and Maseno University, **80%** respectively for the four studied universities. This is as indicated on table 3. Students' quantitative data indicated the mainstreamed content, methods used, learning resources and the evaluation they experienced. The data was confirmed qualitatively by FGD and KII information.

Document Content Analysis such as the University Strategic Plans in all four universities studied revealed that, the Five or Ten Year Strategic Plans contained HIV and AIDS on the agenda. This was as required by the Kenya National AIDS Control Council (NACC) Strategic Plan (2005/6-2009/10), Republic of Kenya (2005) ^[10] for HIV Education and the Association of African Universities (AAU) Toolkit (2004) ^[11]. This document was rated as the blue print of clear commitment by all universities' management of their academic concern in this important matter of HIV&AIDS education for their undergraduates. It also indicated commitment that financial resources for the programmes would be forthcoming to a reasonable and sustainable extent. All the four universities in the research confirmed

this commitment as analyzed in the document and scored 2 points each as shown on table 3.

Three out of the four universities studied had a **well-established ACU** with a score of 2 points each. The universities with well-established ACUs were directly associated with well-established HIV and AIDS curriculum mainstreaming and vice versa based on the percentages. Two of the four studied universities (Maseno and JOOUST) had a total adherence score of 18 out of 20 due to this success. The third university (GLUK) studied had just established the ACU with the net result of a much lower adherence score of ten (10 out of 20). The last University College, Rongo had not yet established an ACU with a net adherence score of eight (8 out of 20) as indicated on table 3. JOOUST stood out alone to have published the **HIV and AIDS work place policy**. The study found out from the KII (Academic registrars) that this document was also a blue print of institutional commitment to the AIDS curriculum mainstreaming in greater detail than the University Strategic plan since it was developed by the (ACUs).

Content analysis also, showed that none of the four studied universities studied had an **ACU strategic plan** in place as shown on table 3. It would have given clearer policy targets of HIV and AIDS Education in their finer detail for CUE audit (KII from the academic registrars). Regarding the **HIV&AIDS Common Courses' Content analysis** from Student Data, the questionnaire data results indicated that 66% of the students were taught HIV and AIDS courses upon joining the university

Table 3: HIV&AIDS Curriculum Mainstreaming Elements' Adherence by University

s/n	HIV Mainstreaming items	university	Score type (Y=2 /N=0)	Adherence Score per university
1	University Strategic Plan (with HIV&AIDS education agenda)	1.Maseno 2.JOUST 3.GLUK 4.RONGO	2 2 2 2	{1} MASENO: 16/20=80%
2	AIDS Control Unit (ACU) has been established	1.Maseno 2.JOUST 3.GLUK 4.RONGO	2 2 2 0	
3	ACU Strategic Plan (Targeting HIV&AIDS Curriculum mainstreaming)	1.Maseno 2.JOUST 3.GLUK 4.RONGO	0 0 0 0	{2} JOUST:16/20=80%
4	Existence of HIV and AIDS Work- Place policy	1.Maseno 2.JOUST 3.GLUK 4.RONGO	0 2 0 0	
5	HIV&AIDS Common Course Content analysis score (Structure and Scope)	1.Maseno 2.JOUST 3.GLUK 4.RONGO	2 2 0 2	{3} GLUK: 10/20=50%
6	HIV Course methods and resources	1.Maseno 2.JOUST 3.GLUK 4.RONGO	2 2 0 0	
7	Evidence of university AIDS Peer Educators' activities	1.Maseno 2.JOUST 3.GLUK 4.RONGO	2 2 2 2	{4} RONGO: 8/20=40%
8	Reference to global, national and local HIV reports	1.Maseno 2.JOUST 3.GLUK 4.RONGO	2 2 2 0	
9	Evidence of Exam transcripts	1.Maseno 2.JOUST 3.GLUK 4.RONGO	2 2 2 2	
10	Evidence of curriculum review and AIDS Control Unit (ACU) coordinator's training	1.Maseno 2.JOUST 3.GLUK 4.RONGO	2 0 0 0	

Source: Author's Research (2016)

For 51% it was the first time to be taught about HIV and AIDS, and 73% of the students had learned new information (Figure 2). Adequate content coverage about HIV transmission was observed by 82% while 88% of the respondents said HIV prevention was well covered. These positive responses indicated that most of the fresh university students learn about HIV and AIDS right at the point of entry for impact to reduce their HIV risky behaviour during the rest of the four years of stay as undergraduates hence to stem new infections. However, about a third of them would not enjoy this benefit as indicated by the data, Figure 1:

From evidence in the students' FGDs, one discussant (from Rongo University College- RUC) said,

"I could only take the HIV and AIDS common course in third year because, before that it was not established in this university".

Another discussant from Maseno University had this to say to this delay;

"We are allowed to take it any time even in Fourth Year since the PHT 112 (the Maseno

HIV&AIDS Common Course) is an on-line course."

Student Was Taught about AIDS Upon Joining

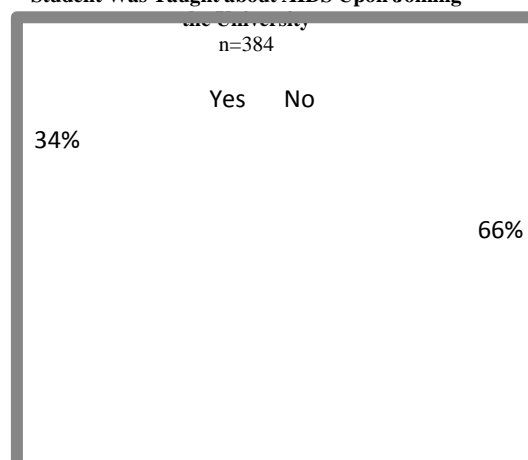


Figure 1: Kenyan University Undergraduate Students in counties Bordering Lake Victoria were taught about HIV and AIDS upon Joining University
 Source: Author's Researcher, (2016)

Almost three quarters of all respondents admitted they learned some new HIV and AIDS information when they took the HIV and AIDS course. This is as indicated by figure 2:

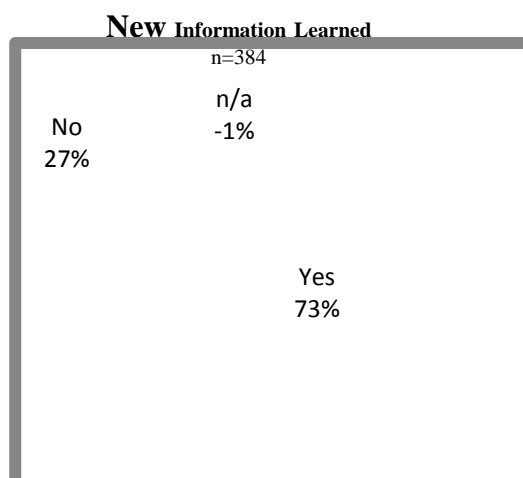


Figure 2: Undergraduate Student in Kenyan Universities in Counties Bordering Lake Victoria Learned New Information
 Source: Author's Research, (2016)

On **Content coverage adequacy**, 82% of the students agreed that they had covered content on global spread, 88% on biological background, and 89% on prevention methods. On the issue of learning methods, 69.5% of the respondents reported lecturing as the main method used while 78.2% agreed to an interactive approach where they were actively involved. Internet and other E-learning resources had been used according to 92% of the respondents, (positive compatibility to the 21st century education). KII and FGD informers outlined the type of mainstreamed courses showing a close fit with what the Association of African Universities (AAU) Toolkit (2004) had prescribed. An On-line HIV and AIDS common course was established in 2012 in Maseno University due to double intake of 1500 students but should clearly be linked to AIDS Days and Cultural week; through media awareness; through video clips and other methods employed for the common course. Methods that KII informants (The Maseno ACU coordinator) listed included;

1. Seminar papers
2. Visits to Voluntary Counseling and Testing(VCT)centers to learn about HIV&AIDS)- and nearly always, one is likely to take an HIV test
3. Orientation week activities
4. Door-to-door campaigns by youth groups and peer educators
5. PHT 112, workshop at the ACU
6. Resource persons facilitation (e.g. People Living with HIV and AIDS (PLWHAs)
7. Internet virtual learning

8. Team teaching;done by various lecturers from different departments...these do not fear to teach the “forthright” facts of HIV and AIDS as they are more confident.”

Almost all students (91.7%) had learned HIV and AIDS through internet and other E-channels in this particular university. According to most FGD informants in the four universities studied, E-library and internet resources were well exploited since “very few textbooks on HIV and AIDS could be found”(Discussant). On this issue, questionnaire responses on the pie chart in figure 3, shows that internet and other E-learning resources were largely used.

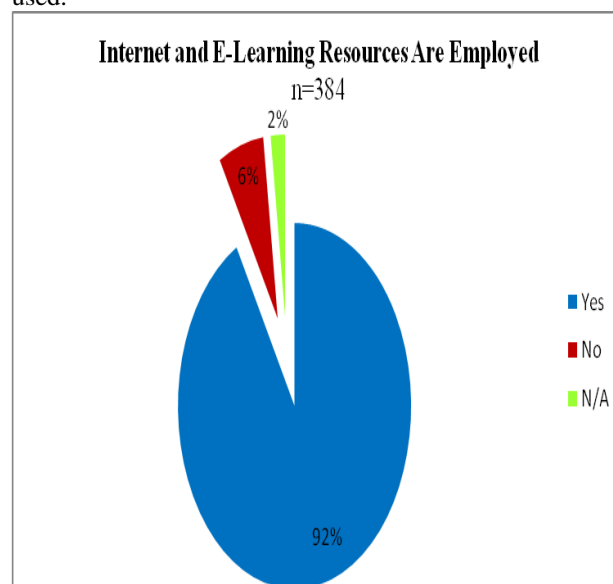


Figure 3: Students in Kenyan Universities in Counties Bordering Lake Victoria confirmed Internet and other E-learning resources were used
 Source: Researcher, 2015

The finding that about 89% of the respondents had agreed that the HIV course had covered prevention methods is very good (It is a key area on HIV prevention) which addressed HIV

Risk perception and behaviour, the key variables in the broader study.

Regarding the **HIV and AIDS Mainstreamed Common Courses' Structure and Scope**, it was revealed in the study that out of the four universities studied, discussants in the FGDs clearly indicated that three of the universities had a common stand-alone HIV and AIDS Course except GLUK . In summary, discussants in FGDs revealed three main types of HIV and AIDS mainstreaming structures namely; a specific common course whose nature was (i) stand -alone, **multidisciplinary** and **formal**; (ii) an **interdisciplinary formal** HIV and AIDS Curriculum content within carrier subjects and (iii) a co-curricular or **non-formal activities** for the

HIV&AIDS curriculum mainstreaming in the study. All these three types could be used concurrently in any one university with well-established practice. As seen above however, that 3 out of 4 universities studied had adapted (i), (ii) and (iii), 1 out of 4 had (ii) and (iii) which was well expressed in their varying adherence score to the 10 elements of HIV and AIDS curriculum mainstreaming. This is consistent with the UNESCO (2006)^[12] on “new and innovative approaches to suit each university setting”.

The study revealed the following **peer educator activities**; orientation week where the Fresh students got new HIV&AIDS information, Cultural week/*Tamasha* events, weekly counseling seminars (*coffee houses*) and collaborating youth organizations particularly, *I Choose Life* (ICL-Africa). One university (JOUST), reported use of video-shows such as the “*SHUGA*” movies in which young people like Lupita Nyong (the famous Kenyan born 2015 Oscar laureate) have acted in Season I-III entitled “*Behaviour Risk in the University*.” Fliers, ribbons and wrist bands bearing HIV and AIDS educational messages like “*jijue*”, “*kuwatru*”, and “*Chill*”, were rewarded as incentives and learning motivation. Other movies that were yet to be used at that particular university were; Raphael Tuju’s movie, “*The Silent Epidemic*” shot at Ugunja, Siaya County depicting the plight of AIDS Orphans.

Evidence of HIV and AIDS Course Examination and Transcripts was depicted by students’ questionnaire data results. (81.8%) affirmed that the HIV and AIDS common (stand-alone) and the interdisciplinary courses containing HIV and AIDS content were examined just like other Kenyan Commission of University Education (CUE)-approved courses. 66.7% of the respondents had had continuous Assessment tests, research and term papers just like other university courses. Over 50% of them as has been indicated had sat a common course exam at the end of the semester. It can therefore be inferred that about 20% of these respondents had been taught and examined through other carrier subjects. The stand-alone common course examination had affected only one half of the respondents in the entire study. In this regard, the AAU Toolkit’s recommendation on the HIV and AIDS common course is yet to be fully implemented. 74.5% of all respondents indicated that the evaluation carried equal weight as other subjects on the students’ transcripts but it didn’t for 17.17 %. This was in agreement with the AAU toolkit (2004), and KII (Academic Registrars’ CUE guidelines (2013).

The statistical inference is that all the universities examined either the common HIV and AIDS course or one or more carrier subjects. In this connection UNESCO (2006)^[12] and the AAU Toolkit (2004)

recommended that HIV and AIDS mainstreaming would be most fruitful if it targeted First years before they got used to the rampant HIV risk behavior.

In all the four universities studied, according to the key informants, students had made **reference to Global, Regional and Local AIDS reports, and Research** in their term papers and dissertations in the library. Such necessary references were prescribed by the AAU toolkit (2004). In this study, the respondents from universities who had a stand-alone HIV and AIDS common course admitted to having referred to the global, regional and national HIV and AIDS reports and documents. Such reference resources reflected the right quality and scope of the course content. Key informants in three out of the four universities studied admitted that the HIV and AIDS common course referred to world AIDS reports on the internet and in the university library. They had also referred to the Kenya HIV and AIDS Strategic Framework 2014/15-2018/19 (KARF) and other NACC documents, Kenya AIDS Indicator Survey (KAIS) reports and Kenya Demographic Health Survey reports.

Regarding evidence of curriculum review and ACU Coordinators’ training, KII informants revealed that in Maseno University, the ACU coordinator had been trained at Naivasha together with other University ACU coordinators in 2012. Since then, the common course in that university had been reviewed and changed from class-taught to the online E-platform. This had come about also due to the sudden influx of new students of the 2012 double intake (office of the Academic Registrar, KII informant). No evidence of the training was observed in the other three universities. This type of training is a panacea for effective HIV&AIDS Curriculum Mainstreaming in all Kenyan universities.

CONCLUSION

The study established that each of the universities studied indicated adherence to some of the elements of HIV and AIDS curriculum mainstreaming, judged by the ten-point scale and what was qualitatively captured through students’ questionnaires, FGD-discussions and KII-information from the offices of the Academic registrars and the ACU coordinators or Deans of students. This ten-point scale was the tool used to show the extent to which each of the four universities had mainstreamed HIV and AIDS into their curricula as presented in this study based on what was prescribed by the AAU Toolkit (2004) given in the literature review. The University medium-term or long-term strategic plans analyzed showed that top level commitment and leadership for the mainstreaming efforts were in place in all the four universities. The KII information received from the registrars and ACU coordinators indicated that establishment of an AIDS Control Unit in all

universities was necessary for the focused development and review of the HIV and AIDS mainstreamed curriculum.

RECOMMENDATIONS

It was recommended that:

1. the Commission for University Education(CUE) revamp policy on HIV and AIDS mainstreaming practices in Kenyan universities in line with what was prescribed by AAU toolkit, (2004), to help stem students' risky behaviour and to reduce HIV infection.
2. The mainstreaming should target first years so that the information guides their HIV Risk Perception and Behaviour for the remainder of their years in the university and for longer retention of the HIV and AIDS knowledge.
3. The human element in the teaching of the on-line HIV&AIDS course should be enhanced to make it more "provocative".
4. All ACU coordinators should be trained and retrained often for effective review of the HIV&AIDS common courses in their universities especially targeting effective use of the E-platform and on-line AIDS education.
5. Finally that further research needs to be carried out in all universities to bench mark the extent of HIV&AIDS curriculum mainstreaming to enhance necessary policies and practices in view of stopping risky behaviour and new HIV infections.

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