Extent of Integration of Content of Emerging and Re-Emerging Knowledge, Skills and Attitudes in the Various Curricula of the Academic Programmes at Kenya Medical Training Colleges

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Abstract

This study focused the Integration of Content of Emerging and Re-Emerging issues in the various Curricula of the Academic Programmes at Kenya Medical Training Colleges which is very pertinent in medical education and training. The essential package for health policy calls for strengthening of the core area of pre-service and in-service training activities as a means of its implementation. The objective of this article was; to determine the extent of integration of content of emerging and re-emerging knowledge, skills and attitudes in the various curricula of the academic programmes at Kenya Medical Training Colleges. This study adopted a cross-sectional survey method. Stratified sampling was used to select the twelve KMTC campuses and eleven academic departments. Data was collected using closed and open ended questionnaires. The questionnaires were pre-tested by being administered to 30 respondents from three campuses which were not included in the study. An interview schedule and administered questionnaires were used for data production from respondents. SPSS computer programme version 18 was used for data analysis and recording after manual cleaning and editing. Answers were thus described as to what extent, most likely, always, usually, sometimes or never as the respondent felt about the questions. The study found out that 58 percent of the lecturers (N=63) confirmed that the emerging and re-emerging knowledge, skills and attitudes were included to some extent in the curricula, 39 percent saying to a great extent. Some 3 percent said none of the emerging and re-emerging knowledge, skills and attitudes was included in their curricula. The finding portrays that some degree of integration according to lecturers. The study recommends that the academic department of KMTC to immediately take necessary imperative steps to train all lecturers in the current formulation techniques of curricula content integration
and harmonisation in line with medical and health middle level and tertiary training institutions internationally. The results of the study would help the government in formulation of policy and programmes that are akin to KMTC curricula which includes pertinent medical emerging and re-emerging issues.

**Keywords:** Kenya, Medical, Training, Emerging, Re-emerging issues, Curricula, Integration

**Introduction**

The major aim of the health strategic plan 2005-20210 is the re-establishment and improvement of the efficiency, quality, affordability and availability of health care in every household in Kenya. The plan is further designed to contribute to the accomplishment of Kenya’s Economic recovery strategy (ERS, 2003) and the rapid achievement of Millennium Development Goals (MDG 2015). Subsequently, a series of supportive measures ranging from community involvement; institutional reforms and especially human resource development need to be developed. The strategy thus implies that should there be any consideration on training needs, then it would be prudent to integrate aspects that support rapid implementation of essential packages for health.

Further, the essential package for health policy, calls for strengthening of the core areas of pre-service and in-service training activities as a means of their implementation. To accomplish the forgoing activities, it will be significant to re-look at training approaches and methods through relevant research within formal health care training institutions such as the Kenya Medical Training College. It is the apparent absence of all inclusive formalized and empirical methodologies of introduction of new clinical innovations that tend to create significant training gaps within various curricula. According to the report on primary and secondary education in Kenya, Ministry of Education, (MOE 2010), attempts to harmonise the curricula by eliminating overlaps or content among and within subjects or reducing the work load and simplifying the concept to suit the level of learners, had not succeeded. The report further pointed out that some primary and secondary subjects have difficult and broad content to harmonise. Examples given on the difficult subjects are Physics and Mathematics. The arguments put forward for the apparent difficulty are that the subjects are taught in an abstract manner-far removed from the learners daily life experiences. In addition teachers appear to be poorly oriented to those concepts and there is lack of facilities and books. The report made certain recommendations to help in the improvement of harmonisation and integration. It states that subjects should be diversified and decentralised such as fisheries, tourism and green house farming should be taught in certain regions where such activities are common. It argues that forcing a nomadic child to learn for example zero-grazing whereas that is the anti-thesis of his daily life experience is not very fair educationally. It further recommended possible incorporation of continuous assessment tests (CATS) in overall determination of learners’ overall academic abilities. The evaluation research also found out that creativity and innovation—which is stated as the aim of the curricula, has not been achieved due to the examination driven desire by schools. In conclusion, the research found the learners are taught more to memorise (i.e. rote learning) facts and to reproduce them in examinations. Thus the
finding appears to be in tandem to an attempt by this cross-sectional research that investigated extent of integration of content into the curricula of the Kenya Medical Training College (KMTC) academic programmes. The rate of development of diagnostic equipment is relatively high globally according to the reports of the Pan African Congress of Radiology and Imaging (PACORI), Nairobi 2005 and 2007). Coupled with the rapidity of establishment of information and communication technology which appear to have a direct relation to health care management, it is indeed possible that there may exist knowledge, attitude and skills (competency) gaps within various KMTC training programme curricula.

In line with the foregoing, the health market require adequately trained health care technologists to safely operate the modern medical diagnostic and therapeutic equipment for improved diagnosis and management outcomes of emerging and re-emerging diseases especially in Kenya. The reality of the competency gap has precipitated the need for critical analysis of teaching and learning approaches for the health sector globally, regionally and nationally according to Kenya Bureau of Standards (Quality Management Systems, (QMS, 2007). In line of this scenario, there appears to be need therefore for the Kenya Medical Training College system to rethink and envisage development of empirical training approaches which may make it considerably easier for possible integration of necessary and relevant emerging knowledge, attitudes and skills content. Various approaches to change exist at the national and other levels that can be activated, for example millennium development goals (MDG). Some of the specific objectives of the MDG are quite relevant and need to be incorporated into training curricula content in an organised manner. According to the annual graduation report (KMTC, 2008), the KMTC has 28 satellite campuses including Nairobi campus with the latter offering close to 60 programmes divided into certificate, diploma and higher diploma cadres. However, it is significant to note that most of the programmes offered tend to be academically independent and isolated from each other. Indeed unlike the University medical schools system where students actually share a lot of units (subjects) in a more integrated design at pre-clinical (1-3 rd year), the KMTC still offer courses with much lesser commonality and much less formal integration.

**Statement of the Problem**

Despite the recommendations of World Health Organisation (WHO, 2006) that preparation of the health workforce should work towards attainment of its health objectives represents one of the most important challenges worldwide. WHO proposes that it is important to go beyond the notion of skill mix, and extend the concept of mix to include: how many people are trained (numbers); the extent to which they reflect the socio-cultural and demographic characteristics of the population (diversity); and what tasks the different levels of health workers are trained to do and are capable of performing (competencies). Maintaining a reasonable balance in terms of numbers, diversity and competencies of the health workforce requires a thorough understanding of the driving forces and challenges that shape health and education systems such as curriculum as well as labour markets. Hence the health care problems that exist cannot possibly and adequately be addressed in isolation without looking at human resource requirements. Indeed since the establishment of the KMTC system in 1927 and the main
medical school in 1967, the system of formal education and training must have changed many times over a long era (Kamunge 1988, Koech, 1996). The problem of curricula factual overload cannot be wished away in the current rapid medical scientific development and information superhighway. It is a reality that majority of medical teachers both at University and technical colleges find themselves faced with the task of how to define what core is, what content should be included and why. Most often, the initial approach is to include the so called common and important curriculum content in teaching setting. However, the problem is the determination of that content commonality and the relative importance of topics. It’s true that both teachers and students will often confess how overwhelmed they usually are by huge volumes of new information to be learned, for example on magnetic resonance imaging, rapidly changing management of malaria and HIV/AIDS including TB. In addition the problem that arises in this scenario is that huge factual knowledge, skills and attitude overload is mainly acquired in a passive manner (rote learning). The result of the passivity is probably that less time would be available for the acquisition and mastering of critical, practical/clinical skills necessary for the practice of health care. The problem of the study was therefore to determine the extent of integration of emerging and re-emerging knowledge, skills and attitudes that need to be included into various KMTC curricula.

The Concepts of Core and Options in a Curriculum

Haddad, D, et al (1997)argues that although the idea of reducing factual overload looks good, many medical teachers found themselves facing the task of how to define what a core curriculum is and what should be included and why.

Others argue that we should include common and important topics or content, but how common is common, and how does one determine the relative importance of topics or course content? It is therefore important for the determination of principles that may govern our approach and put forward some guidelines on how to do it.

The core of Emerging and Re-emerging Issues in the Medical Curriculum

Haddad, D, et al (1997) further places the argument for core as consistent with commonness of the content to other programmes. That is a new disease phenomenon then it has a serious impact on the health of the people and by being taught, it could be preventable by early recognition and management by healthcare graduates. Further, core is regarded as having characteristic of serving and can still serve as a study model of certain concepts. Probably looked in this light, modules or subjects like First aid, Anatomy and Physiology and HIV/AIDS/Comprehensive Care can be given as good examples of new knowledge areas, that emerges and will ever re-emerge due current research and consequent findings. Most probably the core can be regarded as having ethical or legal importance or of interest to the general student population. Common may be understood better by comparing the event in question with some other phenomenon, WHO (2004). Moreover, an example of the incidence of HIV/AIDS infection and the re-emergence of TB affect all communities alike. Its prevention and control need to be taught in all health related courses. In other words, early recognition
has the potential to save lives hence the need for such modules to be included in all training programmes become almost irresistible.

Research done by General Medical Council of Britain, (GMC, 1993) puts forward the idea that it is not acceptable to be ignorant about a topic that is in the public domain even if it is an uncommon or a non-life threatening condition. In fact there may be an advantage in trying to include informally a ‘measured’ amount of the topics that are at the heart of what is happening locally and in the individual department.

According to studies done by Harden, et al (1997) in the University of Dundee Medical School curriculum review shows that in the training of effective medical practitioners there is need for systematic design of the curriculum to avoid information overload that is expected in the study of medicine. The Dundee University spiral curriculum has three systematic interlocking phases. Each phase recognizes the competencies required of the young doctor to allow him/her to function as a junior house officer on completion of the 5 year programme. Within the course there are core-curricula with special study modules or options. However, in Kenyan health training colleges, options or Special Study Modules (SSM) are called electives or Independent Study Projects (ISP) depending on the institution or programme. In a traditional curriculum students study a range of subjects or courses and there are examinations at the end of each term/year to assess the students’ competence. Little emphasis is placed on how the knowledge or skill will be used in later parts of the course. It appears there is little constructive connectivity between one area of the course and the next as the student attempt to master a subject or course with the aim of passing the examination and moving on to the next course of study (KMTC curriculum documents). It calls on the question of how to intertwine parts of course content or modules from different programmes for better development of students’ bonding.

Hirsch (1993) portends that learning is an organized process: new knowledge builds on core prior knowledge. This idea is supported by Yambo (2012) when he pointed out that teaching at any level, should be from known to unknown and within the students experience and range of mental conceptualization. There appears to be need therefore for an approach to teaching and learning that encourage new information introduced to link directly back to the information from the previous sessions or semesters according to Dowling, (1993). Consequently, there is a need to integrate both emerging and regularly re-emerging issues in the Medical Training College curriculum.

Shumak (1992) suggested that the factual overload faced by medical students under the traditional curriculum was becoming absurd. The information explosions have led to increasing and potentially intolerable burden for the student. Curriculum committees and medical educators are expected to pay attention to new topics or topics of particular current concern such as: HIV/AIDS/TB, cancer, counseling and health service management.

How can training institutions cope with continuing and significant expansion of medical knowledge? Is increasing the length of time allocated an option? The problem of information overload demands a fundamental reorientation of curricula, and new strategies such as a core
and options could be effective. GMC (1993) proposed the development of core curriculum which defines the requirements that must be satisfied (competencies required) before a newly qualified doctor can assume the responsibility of a pre-registration house officer. This appears to draw fundamental parallel to the requirements for KMTC graduates as the research projects needs to determine. Kirk (1986) proposes that the core curriculum will constitute all Knowledge, Skills and Attitudes (KSA) thought to be essential for medical practice. It is further pointed out that options let student spend some time studying related subjects of interest to them in more depth for example HIV/AIDS/TB modules in other words options are expected to compliment the core that is taught to the class. It appears that most medical training institutions are still employing the approach of the 1970’s and 1980’s. Then, the challenge was that there should be a uniform curriculum, with all students undertaking identical programmes of study, Yambo (2012). It was the period of “electives” where each student was given the opportunity to select their own area of study for part of the time at the college. The time of elective was however limited (GMC, 1980). The question being investigated is how do teachers introduce the options into the curriculum

The concept of Option or Special Study Modules

Once the score has been identified and developed, the question to be addressed will lay largely on what to do with re-emerging Knowledge, Skills and Attitudes in the medical field. The concept of option and special study modules underlines the fact that students are responsible for their own learning. For example the students may spend time reading about the thyroid gland and the functions of the thyroid hormone. They may for example, see or dissect the organ in the histology laboratory under the microscope. So when a patient comes for a thyroid ultrasound scan, the student’s ideas about the thyroid are transformed, thus deep learning occurs. This teaching approach tends to reduce the need for the latter to simple memorization of information about the thyroid

Approaches to Curriculum Integration for Emerging and Re-emerging issues

Studies done by Wallace, J, et al (1995) postulated that the broad features of integration practice and provided some examples of different forms. Wallace, et al also found that most schools in Australia selected the type of curriculum integration depending on three factors. These factors are the needs of the individual involved, the purpose of the curriculum and the nature of the institutional setting. Each of these factors contributed to decision on what forms of curriculum integration to be applicable in each programme or cadre. These forms or approaches to curriculum integration were identified as; synchronized, cross-curriculum, thematic, project-based, specialization and community-focused approaches to teaching and learning within the curriculum. Within these approaches, decisions had to be made by either individuals or the institutions on the extent of ‘separateness or “togetherness” of subjects or modules. The authors also found out that certain conditions enable and/or inhibited integration practices in schools.
Examples of enabling conditions for curriculum integration

- Committed teachers/Tutors/Lecturers
- Team approach
- Flexible time table
- Planning time
- Administrative support
- Small size school

Examples of inhibiting conditions for curriculum integration

- Staff resignations (turnover)
- Teacher workload
- Teaching materials
- Finding committed teachers
- Time table restrictions

According to Haddad, et al (1997) pure integration is taken to mean that the special module or units like emerging and re-emerging knowledge, skills and attitudes are related to the core subjects. The students take a core subject and also a range of options or electives which they could sign up for within the time frame allocated for the core subject (traditional way). The students could chose to attend specific lectures in, for example in HIV and Aids to have additional experience in one module of the ten 12 HIV and AIDS modules

Concurrent integration is key in this aspect of teaching. In the concurrent model, electives or option run alongside the basic core subject taught but do not cover the same content area or topic. Time slots may be allocated for the elective, which is then scheduled in the time table. Student can be left to find the time, for example Independent study time or other time available, to work on the special study module or elective in greater depth. Time can be spread over a longer period than would be possible in consecutively, WHO (2004). Intermittent integration cannot equally be ignored. In intermittent integration blocks of time is allocated for the elective or special study module. These topics are not related to the ongoing core lectures. However, time allocated to electives are set aside and protected. A group of the students can be doing electives while the rest of the class attends core courses.

Sequentially, harmonization should be sought in curriculum designing. In sequential integration model, core and electives are planned together. This means that the students first master the core (assessment to standard to Pass, e.g. St John Ambulance First Aid course or skills lab KMTC/Belgium VVOB models) before proceeding to electives or special study modules or practical area. Both the core subjects or modules and electives are allocated specific time frame in the curriculum depending on the nature of the academic programme. It allows for remedial action for weak students and skilled staff to be assigned special counselling duties in those blocks of time. General Medical Council, (GMC) 1993.
Inter-professional Education

WHO (1988) encouraged health training institutions to adopt the concept of students sharing some knowledge and common skills in a shared session. Regmi, KR, et al (March 2010) in their research, found that a majority of the medical and nursing students were aware about the concept and importance of inter-professional education (IPE). The learning reflected two issues they argued: students viewed communication skills with both patients and colleagues as very important. In that study, it was, in addition found that development of increased awareness of each other’s professional roles would support integration among them in future work places. Students reported that they should be provided with adequate knowledge to ensure that they are appropriately equipped to work with or learn from one another. According to Yambo (2012), IPE is significant in that it can call for team teaching such that a Lecturer/Tutor can have a bias or on interest in a topic or an area of study and can be brought on board to give his/her input hence a variety in knowledge. Similarly, when allocating subjects or lessons to be taught, expertise, experience and interest on the part of the teacher should be considered.

Methodology

The design of the study was cross-sectional survey. Nkpa (1997) and Best and Kahn (2006), suggest that: The purpose of the cross-sectional survey research was to strive to focus on accurate description of situations. This was mainly because it was a descriptive survey study design in nature and not the experimental causative connotation. Kothari (2004) argues that research design is an attempt to make decision on what, where, how much and by what means concerning an inquiry on identified problem. Further, research consists mainly of the arrangement of conditions for production and analysis of data in a manner that aims to combine relevance to the research purpose with cost benefit in procedure. It actually constitutes the blue print for the production, measurement and analysis of data. The survey research involved actual scrutiny of real curricula and implementation situations with regard to integration of modules, content or topics as the cases may be found in selected sample colleges. Stratified Random sampling technique was applied in selecting respondents. According Nkpa (1997) and Best & Kahn (2006), they support this technique because the study involves subjects from departments or faculties that appear to be individually homogeneous than the total population. In this scenario the academic departments and classes/year of study were classified as strata for the purpose of this research. Then a third (1/3) of either second or third year students was selected as strata. Only in exceptional cases where the researcher found on arrival in the campus, only first year students would later be given questionnaires. The researcher was thus able to get more precise estimates for each stratum to get a better representative estimate of the whole. A formula adopted in this case is explained herein below. However detailed statistical calculations were beyond the scope of this survey research. The method of proportional allocation under which the sizes of the samples from the different strata are kept proportional to the sizes of the strata was used. In addition, Kothari, (2004) and Fisher, (1958, 1960) supports this fact and they give the following procedure:
P1 represents the proportion of population included in stratum i and n represents the total sample size, the number of students selected from stratum 1 is \( n \cdot P_i \)

If a sample size of 30 is needed then

\[ n = 30 \] from a population of \( N = 8000 \) divided into 3 strata:

- \( N_1 = 4000 \)
- \( N_2 = 2400 \)
- \( N_3 = 1600 \)

(a) For strata \( N_1 = 4000 \), we have \( P_1 = \frac{4000}{8000} \)

\[ n_1 = n \cdot P_1 = 30 \left( \frac{4000}{8000} \right) = 15 \]

(b) \( n_2 = n \cdot P_2 = 30 \left( \frac{2400}{8000} \right) = 9 \)

(c) \( n_3 = n \cdot P_3 = 30 \left( \frac{1600}{8000} \right) = 6 \)

Thus the sample sizes for different strata are 15, 9 and 6 respectively.

So, using the same argument, for an average class of 50, 100 up to 150, we selected 10 to 30 students for the same class-year and course (about 1/3 of each class population). Eleven programmes which were viewed to have existed for more than five years were selected for the survey. That gave a sample population of 660 (11 X 30 X2) average students per class/year 1 and 2). However, 501 responses were received from the student population of 501 out of possible 660. The response rate was quite significant at 75 percent. The instruments for data collection were face to face interview of the lecturers and students concerning the emerging and re-emerging concerns in the curriculum and general administration of college programs. Both structured and unstructured questionnaires were administered to solicit various view and ideas. The unstructured interview was preferred because it is flexible hence according to Nkpa (1997), Orodho (2004) and Kothari (2004). Both inferential and descriptive statistics were used interchangeably. Descriptive statistics such as frequency counts using tally sheets were used and percentages calculated, this is recommended by Frankael and Wallen (1993) because they portray the findings easily and at a glance. The information gathered through interview schedule was arranged thematically and transcribed into written texts.

Results and Discussion

From the study, the respondents clearly indicated their reactions as shown below, which further gave more insight to the research.
1. To what EXTENT are emerging and re-emerging knowledge, skills and attitudes/special study modules (SSM) included in your programmes as part of the curriculum subject/module?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
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<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Great Extent</td>
<td>24</td>
<td>38.1</td>
<td>38.7</td>
<td>38.7</td>
</tr>
<tr>
<td>Some Extent</td>
<td>36</td>
<td>57.1</td>
<td>58.1</td>
<td>96.8</td>
</tr>
<tr>
<td>Not at all</td>
<td>2</td>
<td>3.2</td>
<td>3.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>62</td>
<td>98.4</td>
<td>100.0</td>
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<td>Missing</td>
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<tr>
<td>Missing System</td>
<td>1</td>
<td>1.6</td>
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<tr>
<td>Total</td>
<td>63</td>
<td>100.0</td>
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The study revealed that 58 percent of the lecturers (N=63) confirmed that the emerging and re-emerging knowledge, skills and attitudes were included to some extent in the curricula, 39 percent saying to a great extent. 3 percent said none of the emerging and re-emerging knowledge, skills and attitudes was included in their curricula.

2. To what EXTENT your students required to study emerging and re-emerging KSA/SSM in order to complete the course? the student are

<table>
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<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
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<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always Required</td>
<td>44</td>
<td>69.8</td>
<td>71.0</td>
<td>71.0</td>
</tr>
<tr>
<td>Usually Required</td>
<td>18</td>
<td>28.6</td>
<td>29.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>62</td>
<td>98.4</td>
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<td>Total</td>
<td>63</td>
<td>100.0</td>
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The research finding was that 71 percent of lecturers said that the students were always required to study the emerging and re-emerging knowledge, skills and attitudes in order to be allowed to complete the basic course he/she is studying. Only 29 percent of lecturers agreed that it was just a usual requirement to complete a course.

3. The academic performance in emerging and re-emerging KSA/SSM can count for A DECISION on a student PASSING or FAILING a subject/course/module?

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<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
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<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always</td>
<td>12</td>
<td>19.0</td>
<td>19.4</td>
<td>19.4</td>
</tr>
<tr>
<td>Usually</td>
<td>46</td>
<td>73.0</td>
<td>74.2</td>
<td>93.5</td>
</tr>
<tr>
<td>Rarely</td>
<td>4</td>
<td>6.3</td>
<td>6.5</td>
<td>100.0</td>
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<tr>
<td>Total</td>
<td>62</td>
<td>98.4</td>
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<tr>
<td>Total</td>
<td>63</td>
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The study pointed out that 74 percent said it usually counts, 19 percent said it always counts 7 percent said it rarely counts. Performance in emerging and re-emerging knowledge, skills and attitudes is therefore viewed as very important.

With regard to the perception of lecturers of emerging and re-emerging knowledge, skills and attitudes as away of introduction of harmonisation to academic modules in KMTC 60 percent always viewed this as a good opportunity for teaching and learning medical innovative concepts and practices while only 10 percent usually perceived it as so. Then 30 percent rarely saw emerging and re-emerging knowledge, skills and attitudes as innovative.

To master the emerging and re-emerging KSA, 60 percent prefer the *sequential* method of integration to a *great extent*, 32 percent to *some extent* and 8 percent not all.

The four methods of curricula delivery known as pure integration concurrent integration, intermittent (sand-witch or “staccato” as the author would call them), and the sequential approach appear to augur well among KMTC students. However, the majority of students (78 percent) seem to call for inter-departmental harmonisation and pure integration within a given time-frame, of certain subjects/modules or units even though it would only usually help them master the latter

Lecturers agreed that the major barriers to greater curricula integration are lack finance and training on the methodology or models of curriculum integration. Students see inclusion into final academic transcript of academic performance grades in emerging and re-emerging knowledge, skills and attitude content as extremely important. As such, it is prudent that content need to be included into all academic programmes of KMTC. The student and lecturers ultimately suggested that the emerging and re-emerging knowledge, skills and attitude content be covered as supervised elective. This gives the impression that students need to be given early opportunity to make a choice or option on which modules to study more deeply as part of a build up to academic and professional excellent before final qualification from the Kenya Medical Training College

**Conclusion**

This study made the following conclusion based on the findings: The results of the study indicated that the emerging and re-emerging knowledge, skills and attitudes were included to some extent in the curricula With regard to the perception of lecturers of emerging and re-emerging knowledge, skills and attitudes as a way of introduction of harmonization to academic modules in KMTC 60 percent always viewed this as a good opportunity for teaching and learning medical innovative concepts Lecturers agreed that the major barriers to greater curricula integration are lack finance and training on the methodology or models of curriculum integration.
Recommendation

Due to the fact that the academic department of KMTC to immediately take necessary imperative steps to train all lecturers in the current formulation techniques of curricula content integration and harmonization in line with medical and health middle level and tertiary training institutions internationally The government should be encouraged to fund more training programmes of KMTC so as to include more emerging and re-emerging knowledge, skills and attitudes.

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