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Implementing a competency-based midwifery programme in Lesotho: A gap analysis

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ABSTRACT

Global reforms in health professions education, including midwifery, support the transformation of education programmes to adopt competency-based models. Lesotho, a small sub-Saharan African country, with perennially high maternal and neonatal mortality, adopted a competency-based education model in the design and subsequent implementation of a one-year post-basic midwifery programme. Through a gap analysis involving administrators, educators and students in all the nursing education institutions in Lesotho, we explored their experiences related to the implementation of a competency-based midwifery programme after three years of continuous implementation. The findings revealed a vast gap between the described curriculum, and what was enacted in the nursing education institutions. The essential components of the midwifery programme had not been transformed to accommodate competency-based education. We argue that structural and operational elements of a programme should be adjusted before and during the implementation of such a curriculum innovation to enhance a positive teaching and learning experience, further sustaining the programme. Therefore, contextually relevant frameworks aimed at supporting the implementation and sustainability of the entire programme should be developed.

1. Introduction

Maternal and neonatal mortality is often significant in low and middle-income countries, where the majority of the global population lives. In these countries, competent midwives have the potential to reduce maternal and neonatal mortality (UNFPA, 2014) as they are usually the first and only skilled birth attendants that pregnant women may have access to. This picture highlights the need for high-quality pre-service midwifery education programmes in such countries as they battle the burden associated with high maternal and neonatal mortality indicators.

The World Health Organisation (WHO) and the International Confederation of Midwives (ICM) have called for reforms in the education of midwives since the late 90's and early 2000s (ICM, 2013). Central to these reforms is the adoption of competency-based models for the education of professional midwives. Competency-based education nests the design and development of educational programmes under described and desired professional competencies. A variety of competency frameworks exist in health professions education such as the CanMEDS (Frank et al., 2017). However, the ICM proposes seven professional competency domains of a midwife, which programme designers of pre-service midwifery education could adopt and adapt during programme design, development and implementation (ICM, 2013).

The adoption of competency-based education models has influenced health professions education globally. Several authors report positive outcomes related to implementing competency-based education in their education programmes. Such outcomes include improved student procedural skills (Barsuk et al., 2012), improved patient care and critical thinking (Ash et al., 2018), and even increased student confidence (Kerdijk et al., 2013). However, these positive outcomes have been reported predominantly in high-income countries and in medical education. In light of such positive outcomes, Hawkins et al. (2015) explain that competency-based education is not a panacea, but offers a plausible alternative and improvement in education when compared to behavioristic models that characterize most traditional health professions education programmes.

Implementing a competency-based education programme is an intricately complex process particularly in low- and middle-income countries (Nyoni and Botma, 2018). This intricate process often affects the ability of educational institutions to sustain the implementation of such programmes resulting in curriculum drift (Woods, 2015) or failure. Hawkins et al. (2015) summarise concerns and challenges inherent in the implementation of competency-based programmes as

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being practical, administrative and logistical.

Programme evaluators underscore the importance of unearthing implementation issues and challenges, proposing solutions and implementing such solutions for sustained change (Anakin et al., 2018). In this article, we argue that structural and operational adjustments should be made by education institutions before and during the implementation of a competency-based programme. Such programme adjustments should be monitored continuously.

2. The context of the study

The maternal and neonatal mortality in the Kingdom of Lesotho is above the regional average (UNFPA, 2017). Multiple factors have been attributed to this situation, and chief among them is the quality of education of midwives within the kingdom (Ministry of Health [Lesotho], 2012). In an attempt to improve the quality of pre-service midwifery education, the government of the Kingdom of Lesotho adopted competency-based education for all nursing and midwifery programmes through its Nursing and Midwifery strategic plan of 2010 (Ministry of Health [Lesotho], 2012). In this setting, competence was viewed as inevitably linked to a complex situation where the midwife demonstrates psychomotor skills, solves problems, makes a clinical judgement, acts professionally and interacts with other healthcare professionals and family within a context (Fernandez et al., 2013). The implication of such a policy change was the need to transform all nursing and midwifery programmes nationally to adopt competency-based education.

Through the Global Nurse Capacity Building Programme (GNCBP), all six Nursing Education Institutions (NEIs) in Lesotho were recipients of the Nursing Education Partnership Initiative (NEPI) grant. This grant supported the development of the first-ever competency-based curriculum (CBC) for the one year post basic Diploma in Midwifery programme in 2012 (Botma, 2014a,b) which was implemented for the first time in 2014. The CBC replaced a content-driven hospital-based curriculum that was used in all midwifery programmes in NEIs in Lesotho. In the content-driven midwifery programme, learning was teacher directed with lectures dominating approaches to teaching. Academic information was gleaned from three midwifery textbooks and teacher's notes while clinical skills were taught only in midwifery related departments of district and central hospitals with limited engagement in the community. Professional midwives in practice were naturally expected to teach and assess students in the wards (Nyoni and Barnard, 2016). Summative assessments were done primarily through 3-h written examinations and observation of only two clinical procedures at the end of the academic year. The professional regulatory body approved the content driven curriculum and set a minimum number of clinical procedures required by graduates of the programme for professional licensing.

The new CBC was underpinned by constructivism as a learning theory spliced with other educational principles namely constructive alignment (see Biggs, 1996), scaffolding (MacBlain, 2018) and learning within authentic environments. The professional competency domains as described by the ICM (ICM, 2013), where adopted and adapted based on the local context and were used to structure the CBC. National indicators, midwifery education stakeholders and international documents (ICM, 2010) guided the development of the new curriculum. Student centred approaches to learning replaced the teacher-oriented approaches and teachers were expected to support students throughout their learning. In supporting authenticity, high fidelity birthing simulators were acquired for each NEI through the NEPI grant, and students engaged with the simulators before and during clinical placement. Summative assessments were transformed to include integrated assessments (Nyoni and Botma, 2017).

A comparison between the previous curriculum and the CBC using Harden (2001) elements of a curriculum in health professions education is depicted in Table 1.

The Competency-Based Midwifery (CBM) programme was implemented after a series of faculty development and capacity building exercises. These exercises focused on curriculum development, programme design, assessment, teaching and learning and supporting students and have been reported elsewhere (see Botma and Nyoni, 2015). These authors noted during sessions on the development of teaching and learning materials, that educators found it difficult to apply new knowledge in developing teaching and learning material (Botma and Nyoni, 2015). A couple of years after the implementation of the CBC, the authors became aware of the disparities in the enactment of the CBC within the midwifery programme among NEIs in Lesotho. Evidence supporting such disparities were gleaned from meeting minutes, interaction with primary stakeholders in the implementation of the CBM programme and accreditation results from the Council on Higher Education (Lesotho).

This article reports an examination of the implementation of the CBC within midwifery programme in NEIs in Lesotho through a gap analysis.

3. Methodology

3.1. Study design

A gap analysis permits for the appraisal of actual enactment of the CBC in a midwifery programme against a gold standard. The gold standard in this case was the described CBC, including its underpinning mission, philosophy, objective, outcomes and even learning opportunities. The authors also utilized the ICM global standards for midwifery education (ICM, 2013) to guide the inquiry. Qualitative descriptive research was engaged in the appraisal of the implementation of the CBM programme in NEIs in Lesotho.

3.2. Population

All the NEIs (N = 5) that implemented the CBM programme in Lesotho since 2014 were included in this study. The first five letters of the alphabet were randomly used to identify each NEI. Primary stakeholders engaged in the implementation of the CBM programme with a minimum of one-year experience in each institution were included. These primary stakeholders were clustered into three groups namely; the administrators (A), the facilitators (F) and the students (S).

The administrators comprised the heads of schools, heads of the midwifery programme, institutional administrators, accountants and human resource officers. The facilitators included educators, clinical supervisors, and clinical instructors. All included students were at the exit level of the CBM programme in their respective NEIs and so could provide a ‘thick’ description of their experience in the programme.

Programme documents used to guide the implementation of the CBM programmes were also included in the study (Bowen, 2009).

3.3. Data collection

Data were collected through semi-structured interviews with administrators (n = 11), facilitators (n = 12) and through five focus groups with students (n = 48). These stakeholders were asked to describe their experiences in the implementation of the CBM programme in their institutions. Data were collected in English, and in some cases through the local language, by the researchers and a research assistant in May 2017. All available documents were accessed, de-identified, and re-identified using the respective alphabet letter and copied.

3.4. Ethics

This study was approved by the Health Science Research Ethics Committee of the University of the Free State (HSREC 22/2017) and the Institutional Research and Ethics Committee of the Ministry of Health

Table 1
Comparing the old and the new midwifery programme.

CURRICULUM ELEMENTS	PREVIOUS MIDWIFERY PROGRAMME	COMPETENCY-BASED MIDWIFERY PROGRAMME
LEARNING OUTCOMES	- No specified learning outcomes - Behaviourist approach to learning	- Competences derived from the ICM (2013), stakeholder consensus meeting - A constructivist approach to learning
EDUCATION STRATEGIES	- Teacher centred, lectured dominating mode of instruction - Teachers notes	- Student centred, active learning approaches and self-directed learning - Activities presented in workbooks - Multiple sources of information
EDUCATION ENVIRONMENT	- Classroom, midwifery departments, and community	- Classroom, simulation laboratory, midwifery departments in hospitals, primary healthcare setting, and community
ASSESSMENT	- Summative assessments through paper-based examination - Demonstration of competence in two procedures	- Integrated assessments of competence - Observation of performance in OSCE - Feedback
CONTENT	- National trends and the textbook	- Informed by the ICM standards, epidemiology, and national trends, Evidence-Based practice (EBP)
LEARNING OPPORTUNITIES	- Hospital-based learning experiences	- Experiential learning in communities, PHC, & hospitals

in Lesotho (ID 25-2017). Consent to be part of the study was sought from each individual included in this study. The framework for ethical educational research underpinned the design and implementation of this study (Burgess and Cilliers, 2017).

3.5. Data analysis

Data analysis was conducted through a stepwise approach underpinned by contemporary frameworks for qualitative data analysis (Saldana, 2009; Creswell, 2013), deductive reasoning and critical realism. The interviews were transcribed verbatim and necessary translations to English were done. The transcripts were uploaded into a password protected folder in ATLAS. Ti ™ software for qualitative data analysis. Structural coding packaged chunks of data based on the ICM global standards for midwifery education (ICM, 2013). Initial coding and SWOT analysis of the data was done to reveal the results of the study.

The framework by Bowen (2009) was used in the analysis of the captured documents. Documents were enumerated per individual institution and packaged according to the ICM global standards for midwifery education. Analysis of the documentary evidence was based on the relevance and alignment of the documentary evidence with the educational philosophy of the CBC and ICM global standards for midwifery education.

3.6. Rigor

The quality of the study was enhanced through multi-site and multi-source triangulation (Leung, 2015). Data were collected by the first author who is experienced and trained in conducting interviews. Field notes grounded the researcher's perspectives and the electronic software and use of an experienced co-coder enhanced the consistency of the data analysis process.

4. Results

The results of this study are presented as under each standard of the ICM global standard for midwifery education (ICM, 2013). Direct quotes from stakeholder interviews and documentary evidence are used as evidence per standard.

4.1. Organisation and administration

The NEIs reported that they faced challenges within their internal governance structures that made it difficult for them to implement and account for programme specific decisions. Four of the five institutions are departments of hospitals, with hospital boards having administrative and financial control of the institutions. Participants felt they were not being heard when negotiating for the various requirements associated with the programme from such boards, affecting their ability to fully adopt the CBC. An administrator stated;

> *we struggle to make independent decisions in our institutions, we have to get approval from the hospital. Those people have no idea, what we want and what this curriculum needs (BA5)*

Only one of the CBM programmes, from an NEI which was semi-autonomous, was fully accredited by the Council on Higher Education (Lesotho). The NEI with an accredited CBM programme revealed the impact of independence in decision making as influential in achieving most of the programme requirements. The head of school verbalized that;

> *We only report our activities to the board, but our institution has a dedicated management team that is responsible for running the school … it [the management team] even makes decisions regarding finances (AA1)*

All NEIs established a position of the Head of the Midwifery programme (HoP). However, the effectiveness of such a position was limited, as succession plans were not clearly detailed and the incumbents felt unprepared for such positions. Their experience in the previous curriculum was not as helpful and the fact that the term of office was only for two years complicated the situation. Their appointments were based on rotation and not competence in leadership. A HoP about to complete her term stated;

> *I was told Madam you are now the HoP [Head of Programme]. The previous one was not ready to orient me, as I think she also couldn't understand what was going on. But anyway my term is also done (CA1)*

Funding, which usually comes through from the government for student bursaries and institutional subsistence was delayed affecting the planning of most activities associated with the programme. An accountant highlighted;

> *the government subvention has never come on time … from the time I have been here. It is always late and that affects planning. We can't do what we plan for because of them (BA5)*

Academic oversight of all of the NEIs was expected to be provided by a local University with a faculty of health sciences. An affiliation document was in place, but had since expired. Such academic oversight seemed not to be useful as the University was neither implementing a similar programme nor had competence in overseeing a CBM programme. One frustrated teacher stated:

> *… I for one, I am sick of the University, it doesn't help us in any way, they are supposed to supervise their affiliates, but they just sit and wait for results (AF2)*

4.2. Midwifery faculty

The midwifery faculty in the NEIs had variations in qualification with regards to both midwifery and education. These qualifications ranged from, on one hand, a Diploma in Midwifery through to integrated degrees with midwifery components to Master degrees specializing in Midwifery, while on the other hand, from not having any qualification in education to faculty with Masters degrees in Health Professions Education. Faculty had diverse ranges of experience which was distributed between clinical practice and midwifery education. Most faculty had at least two years of midwifery experience and more than a year in education. However, their qualifications had limited impact on their new roles as facilitators in a CBM programme, as implementing the CBC required a different set of facilitation skills. No clear tailor-made faculty development approaches were in place in the NEIs and faculty were not engaged in their own learning.

we don't necessarily have a [faculty development] plan, but teachers take turns to enrol for formal academic programmes, so they have to wait for the one who is enrolled to finish and come back … then the next can go (BA1)

I was not part of the CBC training which was done through the NEPI, and I am now supposed to be implementing [the new programme] (EF1)

The limitations in the abilities of educators in implementing a CBC were experienced by students, who felt often unsupported in their own learning. Students revealed that faculty seemed to operate on a misguided understanding of self-directed learning.

The annoying part about this curriculum … when they give us work. These teachers, will give us a task as groups and then they disappear and expect us to present to each other when they are not even there, why we do this, we will argue and there is never a final answer (ES)

… it's like all these should be taken to one big workshop, where they are taught what they should do … we feel cheated by these teachers, they even confess that they have no idea about this curriculum … (DS)

Faculty appointed for clinical teaching where challenged further. Some institutions fully depended on the professional nurse-midwife in the clinical setting for clinical teaching, while one NEI had fully fledged appointed clinical instructors even running preceptorship programmes in line with the CBM programme. One of the interviewed clinical instructors who is expected to demonstrate skills for a student population of over a hundred explained;

I am appointed to work in this simulation lab, to demonstrated procedures to students … I expect the clinical personnel to be the ones supervise the students in the wards (BF1)

4.3. Student body

Legislative requirements in Lesotho, expect that all nursing professional are expected to have a midwifery qualification before practice. This requirement demotivated some students while studying midwifery, with some of them claiming that they had different career trajectories in nursing. Students expressed that;

For me, it's not about the CBC, I am not motivated to study this thing. I perceive it as compulsory, us being used by the government for its own mission … Even if it was well presented, I don't like midwifery (AS)

NEIs inherited students from their general nursing programmes into the CBM programme which are usually in large numbers making constructivist approaches to teaching, such a group work and discussions very difficult. The three-year Diploma in General Nursing was still using the traditional content driven curriculum.

We have a really large number of students, we cannot do much of this individual teaching and even follow each student … I mean I can't even be sure if they all learn, their number (BF1)

Students in the CBM programme were expected to direct their own learning in a supported environment. Students were not oriented to self-directed learning approaches and claimed to be unsupported by their NEI's. Some students verbalized;

Yes, we never had an orientation to this, we were just told this is it … we had to do this and start learning (DS)

We have serious internet issues here … these teachers switch off the internet on their way home and we get stuck [in finding information]. We spend the whole day in class and hope to do assignments in the evening (CS)

4.4. Curriculum

All institution had approved copies of the CBC document. Only one institution had managed to develop, print and continuously update their workbooks for their students throughout the entire time of implementation as stipulated in the curriculum document. In other cases, educators referred to materials used in the previous curriculum while others resorted to teaching via power point.

I dust my old notes, … the one from the previous programme and read for the students … (BF2)

I am pressed of time, most of the time, so I simply prepare a power point and teach from the power point (EF1)

Teaching in the clinical setting was monitored through logbooks and registers. These were inherited from the previous programme and updated to meet the CBM programme requirements. However, examination of clinical placement plans, revealed that students were placed in environments not aligned with their clinical objectives, for example, a student studying ante-natal care would be attached to post-natal wards for their work integrated learning.

4.5. Resources, facilities, and services

All institutions had adequate infrastructure for the implementation of the CBM programme. To enhance authenticity in learning midwifery, the NEPI grant acquired simulation laboratories for all the NEIs equipped with state-of-the art birthing simulators. The faculty were trained in the utilization of such simulators. This study, however, revealed limited utilization of such simulation facilities. Programme timetables did not reflect simulation time, and in cases, were it did, it was used in low fidelity, and excluded the birthing simulators.

Training facilities for students, namely the clinics and hospitals did not have adequate resources to support learning while other resources still needed to be aligned to the CBM programme. The professional nurse-midwives working in such units had limited engagement with best practices in midwifery affecting the transfer of knowledge and learning complex for students.

These clinics and hospitals are a mess, there is nothing there for the students. I tell you, we have to make packs for these procedures at school and the students have to travel with them. At hospital Y, there did not have episiotomy scissors. We as the school has to donate to the entire hospital (AF1)

Those nurses are not engaged with latest information when we arrive there, their information is outdated and they are not receptive of us making suggestions, we end up following their old ways because we want their signatures (AS)

4.6. Assessment

All institutions had transformed summative assessment practices to integrate long cases and Objective Structured Clinical Examinations (OSCEs). However, documentation influencing assessment practices and procedures including policies were not adjusted to align with competency-based education. Rules and regulations of the four institutions had been developed but after three years of implementation, where not approved. One teacher expressed that;

> *I am getting this frustration about documentation and rules and regulations. The CHE when it was here, we were embarrassed to present rules and regulations of 2009, this is almost ten years later. We developed some, submitted for approval and no one cares (AF1)*

5. Discussion

Academic programmes are massively complex systems reflecting an interrelation of elements, that synergistically influence and are influenced by each other to inform the pattern and detail of the description of their outcomes. When one element of this complex system changes, for example the curriculum, the entire system is affected and is expected to adjust and accommodate the changes (Lotz-Sisitka et al., 2015). The entire academic programme risks failure if such elements making up its complex system are not adjusted. This failure has direct implications for the intended and desired outputs and outcomes of the academic programme.

NEIs housing midwifery programmes that are undergoing transformation to competency-based models need to re-negotiate with their internal and external partners or stakeholders for the development and implementation of policies and laws that support the transformation of their overall administrative structures and approaches. The fact that the majority of the NEIs in this setting had limited autonomy regarding academic, administrative and financial decision-making hamstrings their ability for planning and accountability related to the implementation of the CBM programme (Botma, 2014a,b). Taber et al. (2010) relate the need for drastic institution-wide policy changes which would enhance accountability and shared decision making for better and sustained outcomes.

In as much as the leadership structures established in these NEIs for the CBM programme were filled with qualifying and experienced individuals, their experience in the content-driven approach was not useful in supporting their positions in the new programme. The incumbents felt ill-prepared for the role and often unsure of what was expected of them. At the same time, their short-lived terms made the commitment to developing the programme and their leadership repertoire trivial. Transformational leadership is defined as a style of leadership where a leader works with subordinates to identify needed change, creating a vision to guide the change through inspiration, and executing the change in tandem with committed members of a group (Schmitt et al., 2016). This form of leadership style is essential to change environments, such as the CBM programme in Lesotho, to ensure bottom-up approaches to change and meeting of the expected programme vision. In achieving transformational leadership in this setting, the leadership position needs to be redefined through structured succession plans, leadership policies and training in the execution of both managerial and leadership responsibilities. The leaders in the programme must operate within and create an environment amenable to accountability and excellence.

Transforming an academic programme, in this case through the introduction of a CBC to a system predominately content driven, is fraught with myriads of reactions from all stakeholders, especially from teachers expected to enact the curriculum. Such curricular changes require a new set of facilitation skills which may or may not be reachable within their realm. Keesing-Styles et al. (2014) describe the 'ontological uncertainty' among educators in Australia, who had to facilitate a new programme after a curricular reform. The ingrained methods of facilitating learning, arise among the teachers from the deep-seated worldviews of what reality, education, and knowledge are. Transforming curricula will involve an overhaul of the ontological and epistemological perspectives of the teachers who are expected to implement the curriculum. Steinert et al. (2006) reveals that faculty development is the foundation of transforming the minds of the faculty, but should also be nested within constructivist approaches, that are able to link the previous experience, culture, and values of the faculty with the new ways or approaches to education. The fact that their implementation process was not being monitored and appraised compounded the situation, and promoted wrong and incorrect practices. Rogers (1962) classic theory on the diffusion of innovations, may be applied in such cases. Teachers need guidance and role-modelling of ideal curricular enactment within their reach. The modelling of ideal practice may influence their own understanding of the curricular enactment thereby supporting their own professional growth.

Students are often the centre of curricular innovations. Thomas et al. (2015) defines the curriculum as the total lived experience of students within an academic programme. The NEIs in this study did not meet the majority of the learning needs and curricular expectations of their students. Students were further demotivated by the compulsory programme. Such demotivation influenced their perception and experiences of the overall programme. Everaert et al. (2017) reported that demotivated students apply minimal effort in their training and are usually associated with low scores and they typically fail the programme.

In some instances, however, the motivation of the students to study and be engaged into a particular programme may be influenced by the enactment of the curriculum and amount of support such students receive during training (Schiefele and Schaffner, 2015). The findings of this study, reveal poor enactment of the curriculum and limited support. This situation could have contributed, to the demotivation among students to study and pursue midwifery. The Ministry of Health, which promulgates laws and policies associated with education models, compulsory midwifery and own clinical practice environments, is challenged to support the implementation of the CBM programme for its overall intended impact on patient populations which may include allowing students a choice to be enrolled in a midwifery programme.

Infrastructural support and its alignment with the curriculum requirements are critical in sustaining the CBM programme. This study revealed that one of the NEI had successfully integrated simulation-based education within its entire CBM programme and such integration was reflected in the students' study guides and their schedules in the simulation laboratories. Cant and Cooper (2017) state that simulation-based education improves students' confidence and competence when and if applied appropriately. The promise of simulation-based education was not being realized in the other NEIs and this is attributed to multiple factors including, faculty competence and motivation, human resource numbers and planning. Such investments may soon become obsolete and are at risk of dilapidation. A clinical teaching strategy that includes the development of a vision for clinical teaching, faculty development, simulation-based education and the involvement of clinical preceptors is vital in informing and influencing the trajectory of clinical teaching in the kingdom.

Determining competence in a competency-based education model is a result of constant intimate direct observation of performance enclosed by immediate feedback on the students (Hawkins et al., 2015). Assessment of students within the CBC should embody the criteria for good assessment (Norcini et al., 2011) and programmatic assessment approaches (Schuwirth and van der Vleuten, 2018). In as much as policy transformation on the assessments seemed to be apparent in some of the NEIs, the assessment practices seemed to be poor. The impact of poor assessment practices threatens the credibility of the graduates of these programmes, and their ability to meet the overall midwifery competencies as described by the curriculum.

Transformative education involves the breaking of current systems of education and replacing them with new ones that are hopefully better. The literature on transformative education highlights that key tenets of a programme need to be in place before a successful transformation can occur, otherwise the education system can take a different trajectory than intended. One would argue about the ethics surrounding the implementation of botched transformative education programmes on students, especially when such programmes are not tried and tested or piloted elsewhere. On the other hand, Rowe and Oltmann (2016) argues that education programmes should be perceived from a constructivist lens, which supports that such programmes are entirely experiments in their own nature. These experiments are context dependent and their intended outcomes cannot be guaranteed. It is evident from this data that the implementation of the CBM programme was not as expected. Challenges that arise from unsatisfactory implementation may influence the overall ability of graduates to influence their practice and impact on the national maternal and neonatal mortality indicators.

6. Conclusions

The purpose of this article was to describe a gap analysis done on stakeholders engaged in the implementation of a CBM programme in Lesotho, three years after its nationwide implementation. The findings of this study reflect a business as usual approach in CBM programmes, with minimal adaptation of the systems that supported the previous content-driven programme to meet the requirements of the new programme. The legacies of the previous programme infiltrated into the CBM programme negatively and were influenced by various contextually defined factors. The teachers, supervisors, and students experienced poor support and monitoring during the implementation process. This poorly managed curricular change process may have dire consequences on the students, institutions and the patient populations.

Advocates for curricular change in low and middle-income countries should be aware of essential structural and operational requirements needed for a nationwide curriculum change processes. Such structural and operational adjustments may include;

- Re-negotiation with internal and external partners regarding the requirements and expectation of the new programme;
- Development of new policies and laws that support the transformation of administrative structures to include accountability and shared decision making;
- Integration of transformational leadership that is driven by excellence;
- Faculty development which is nested in constructivism, allowing for faculty to link previous experience, culture, and value with expectations of the new programme;
- Role modelling ideal curricular enactment;
- Engaging multiple stakeholders to motivate students; and
- The development of a clinical teaching strategy that is aligned with the requirements of the new programme.

Further research in this setting should investigate contextually relevant strategies and frameworks that can be developed and used to support the implementation of such nation-wide curricular innovations.

The CBM programme is in place in Lesotho, and NEIs need to reflect on their implementation and engage in structural and operational transformations, before superficial evaluations may dismiss it as a failure. The words of Kelly A. Morgan (2009) come to mind:

> “Changes are inevitable and not always controllable. What can be controlled is how you manage, react to and work through the change process.”

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Conflict of interest

None.

Ethical approval

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