The 'sleeping elephant', the role of mentorship of critical care nurses in Zambia

Abstract

Aim: To develop and evaluate a Zambian context specific mentorship model that supports registered nurses completing emergency, trauma and critical care programmes in Zambia.

Background: In Zambia, emergency and trauma and critical care nursing are relatively new specialities, with education and training programmes less than a decade old. A train the trainer mentorship programme was developed and delivered at two Colleges of Nursing. Ethics approval was gained in both Zambia and the UK.

Sources of evidence: Documentary data analysis and focus groups were used. Focus groups included stakeholders and nurses in practice who had completed the train the trainer programme and were using the mentorship model.

Discussion: The critical review of the literature revealed there was a paucity of evidence on the role of mentors in critical care. While national documentation identified that most post basic education programmes are at Diploma Level with limited content that focuses on bedside teaching, mentorship and assessment content.

Conclusion: Feedback from representatives attending the stakeholder workshops and focus groups which included participants who had completed the training programme enabled the mentorship model and workshop to be developed and evaluated.

Implications for nursing practice: Nurses are the backbone of healthcare systems in Africa and the world. Mentorship and assessment in practice enables nurses to develop the competence and skills to lead practice, support peers and junior colleagues.

Implications for nursing policy: This paper has identified the need for a context specific formalised mentorship model to support specialist practice and this project has provided the foundations for mentorship of emergency, trauma and critical care nurses in Zambia.

Key words: Assessment, Competence, Critical Care Nursing, Education & Training, Emergency & Trauma Nursing, Low-middle income country, Mentoring, Supervision

Aim:

The main aim of this experience from the field was to develop and evaluate a context specific mentorship model for qualified nurses completing specialist emergency, trauma and critical care nursing programmes in Zambia.

Background

The World Health Organization [WHO] report that the maintenance of health and society are dependent upon the expertise of its nursing and healthcare workforce (WHO, 2021a). The recent findings of the WHO, International Council of Nurses (ICN) and Nursing Now (2020) report on the state of nursing recognises the importance of mentorship as a way to develop and maintain high quality of care and patient safety. It is important to note, that mentorship needs to occur at all levels from bedside to strategic leadership (Turale et al., 2019).

Zambia is a land-locked country in central southern Africa and continues to face a high burden of disease, in many of the internationally recognised health indices, including HIV, malaria, as well as neonatal, peri-natal, infant and maternal mortality ratios (WHO, 2021c). The Ministry of Health (MOH) is committed to improving the health and economic wellbeing of communities across the country. However, the strategies for achievement of targets set by the United Nations (UN) Sustainable Development Goals (UN, 2021a) and increasing universal access to healthcare, continue to be severely impacted upon by Covid-19. This has led to the diversion of core funding to provide immediate and essential pandemic services. In consequence, the reductions in communicable and non-communicable diseases are at risk of being reversed (Ottersen & Engebresten, 2020; Nikoloski et al., 2021). In addition, the economic impact of the pandemic is also a cause for concern, as this includes rising cost of food and increased unplanned expenditure in terms of illness and loss of work (Shretta, 2020).

Prior to the Covid-19 pandemic, the MOH had recognised the importance of specialist nursing practice, with critical care nurse education and training commencing in 2012 and emergency and trauma nursing courses in 2018 (Ministry of Health, 2017). Although specialist programmes are planned, expansion of the health sector is challenging in a country where nearly 60% of the population live in rural settings (World Bank, 2021). This is not an unfamiliar scenario for low-middle income countries (LMIC) (United Nations, 2021b).

Sources of Evidence

The Consolidated Criteria for Reporting Qualitative research (COREQ) checklist was used to prepare this paper reporting experiences from the field. As no single method of data collection would support the development and evaluation of the model and training, different sources of evidence were used. This included documentary data analysis of international policy, current literature, nurse education policy documents, presentations and reports and records of decisions from national strategic meetings. Focus groups included stakeholders and participants who were nurses in practice who had completed the train the trainer programme and were using the mentorship model.

Strategic workshops involving stakeholders with representation from policy, education and practice were deemed as essential as the heterogeneity, amongst the participants encouraged dynamic group interaction and diversity of perception. During the project period three workshops were attended by 15, 17 and 18 participants respectively. Strategic stakeholders' workshops allowed for the agreement for the proposed training the trainer programmes, the Zambian model of mentorship and definition for mentorship to be developed. Finally, the strategic stakeholders provided the overview of all activities to confirm

the mentorship model needed was based on the identified needs and requirements of Zambia, and not those of the project team.

The train the trainers programme was delivered in two Colleges of Nursing where critical care nurse education is provided. During an 8-month period (August 2018 to February 2019), 6 workshops were delivered and a total of 92 critical care nurses, educators and senior nurses participated. 20 participants who completed the workshops participated in focus groups.

In view of the mixed datasets, triangulation was used to enhance understanding of the role of the mentor. This approach increases reliability, rigour, credibility and validity of the findings, however, care had to be taken that the data extracted was not biased (Frey, 2018; Noble & Heale, 2019). Therefore, all datasets were collected and analysed by a Zambian / UK team, with each document checked for appropriateness.

Ethical approval for this project was sought and gained in both Zambia and the UK. This included consideration of all procedures for obtaining consent, data collection, analysis, usage and storage of data. This allowed the project team to identify and understand the similarities and differences between the two processes and to check all appropriate steps to ensure beneficence and non-maleficence have been taken. In addition, the Chief / Senior Medical Superintendent and Chief Nurses for each institution where workshops and focus groups were undertaken, were formally approached for approval to conduct the study in their areas of responsibility.

Discussion

Defining the role of the Mentor

Within emergency, trauma and critical care nursing, the importance of mentorship has been recognised internationally and regionally to support the application of theory to practice and to assess clinical competence (Scott & Brysiewicz, 2017; World Federation of Critical Care Nurses, 2019). In addition, the recent WHO (2020a) Nursing Now report has re-affirmed the crucial role of mentorship at all levels. A literature review of published research articles revealed that from across the African continent there was limited research, but a wealth of information from high income countries (HIC) was found. Therefore, the search strategy was revised, and from within the last 5-6 years (table 1), five studies were found from Africa, 2 were qualitative, 1 quantitative and 1 used a mixed methods approach. One study included a collaboration of countries including Ghana, Mozambique, Rwanda, Tanzania and Zambia. Other studies focused on mentoring in individual countries, including Rwanda (2), South Africa (1) and Zambia (1).

These revealed different models of mentorship, some of which combine the mentor, teacher and assessor roles; however, whether the component mentorship roles are formal or informal, tended to be implicit (Manzi et al., 2017). No specific studies relating to critical care nursing were found, however, themes did emerge that could be translated for use in critical care. A regional mentoring programme for Emergency Nurses, recognized the need for an 'Afrocentric' mentorship programme, which recognized the unique and different context in which nurses' practice in (Scott & Brysiewicz, 2017). Themes from the wider literature search included, defining and developing the role of mentors, the impact of the clinical impact on learning, the impact on both mentors and students and finally improved patient outcomes/adherence to evidence-based practice guidelines. It was also evident that the model chosen was dependent on the standards agreed by national regulators, education and clinical providers. However, the terms mentor, supervisor and assessor are often used

interchangeably, and definitions within the nursing literature vary (Manzi et al., 2017). This confusion is a cause for concern because students need to know and understand the nature of the support and clinical /professional governance they can expect as they work towards gaining clinical competence and completing their assessments. Setati et al., (2017) described this confusion as leading to a 'mentoring chameleon', who is constantly changing roles to act as leader, teacher, supervisor, role model, and/or guide. Nevertheless, regardless of the model, title or descriptors used, there is agreement that practitioners need to have initial and ongoing training and development to help them acquire the additional skills and expertise necessary to become effective and efficient mentors and assessors, leading and guiding their peers and other colleagues (Manzi et al., 2017).

It is acknowledged that nurses in resource constrained environments need to 'do more with less' (Brysiewicz et al., 2021. pg335), with nurses providing a key role in preventing complications, disability and death (Woo et al., 2017). This challenge is evident in Zambia, where there is a lower doctor and nurse to population ratio than that set by the WHO (WHO, 2021b). At the time of writing, emergency and trauma nursing is just starting its third cohort of training nationally, while critical care nursing has been established for over a decade. In consequence, critical care nurses are providing mentorship in a range of settings, nurses are often called upon to review patients in emergency departments and to go onto the wards to support the general nursing staff, sharing their knowledge and experience with these other healthcare workers and making complex decisions regarding admission, management and ongoing care (Carter et al., 2020). Hence, the need for a Zambian specific mentorship model, with the aim of having a ripple effect, which will impact on patient care. Nurses need to have confidence to escalate concerns, make decisions and ensure timely and appropriate care for critically ill patients.

A review of Zambian nursing education policies identified that most post basic courses are at Advanced Diploma level. Also, the exception of the Clinical Instructors course, there has been limited focus on teaching, mentorship and assessment of students and peers. For nurses who complete Bachelor of Science programmes teaching methodologies are included, however, on completion of these courses, nurses tend to move into leadership and education roles. Therefore, at the bedside, most nurses hold Advanced Diplomas, and are in the position of supporting and guiding students and junior colleagues with limited recognition of their role and responsibilities when mentoring and/or supervising students. In consequence, it was recommended that mentorship and assessment should be included in all revised specialist Advanced Diploma and Bachelor of Science programmes. The results of the documentary data analysis were used to underpin and support the strategic workshops.

During strategic stakeholders groups, it was agreed the starting point was a definition which could then be applied across all critical care education and training in Zambia. It needed to make explicit the role of mentors, and recognise the skills and expertise they for this role. Issues agreed by the participants, were:

> *'the knowledge skills and expertise to be leaders both in the critical setting and in other acute environments… the ability to comprehensively assess patient and to assess and co-ordinate care… observe and assess students well as providing mentorship and supervision'*.

This fits with Brysiewicz et al's (2021) argument for mentorship of nurses in resource limited countries and across the African content. Their paper demonstrates that mentorship is in place in different countries and this needs to be expanded. In the workshops, there was acceptance that in some instances mentors had been perceived as '*policing students'*,

however, this approach needed to change to encompass a more *'supportive*' role. Participants were aware this could be a challenge for existing mentors who had developed their own idiosyncratic approaches to mentorship. It was therefore, decided that once the model was agreed, it would be used to develop a specific train the trainer programme including agreed national standards and practice assessment. This would make explicit descriptors of roles and responsibilities, delineating similarities and differences between the roles of mentor and supervisor. There was agreement that a crucial role of the critical care nurse was to provide bedside teaching, assessment and mentorship of peers and others.

The development of the Mentorship Model

With an understanding of the role of mentors in critical care, the next step was consideration of existing models. Although it is acknowledged, that a regional mentorship programme for emergency nurses is available, at the time, stakeholders decided to focus on a more generic mentorship model, that in the long term, could be applied to all nursing specialities at all levels. Stakeholders at the first workshop were presented with a series of mentorship models, including the African Federation of Emergency Medicine global mentorship programme (Scott & Brysiewicz, 2017). Stakeholders debated these models and concluded the model for midwives in Uganda, was the most appropriate, as it contained three core components, professional standards, the clinical learning environment and teaching and assessment tools (Kemp et al., 2018). However, in that model, the patient is not central, and all partners agreed that this was a prerequisite for Zambia. The concepts were therefore an important component, which contributed, but did not lead the development of the context specific model for Zambia. There was recognition that the role being developed was not just an '*add*

on', and each concepts had roles and responsibilities linked to them, which would support the development of:

> *'specialist nurses that can lead practice forward… and training the next generation of nurses is important ….if high quality care is to be sustained … mentoring can't just be "fitted round" the qualified nurses' normal workload. It needs to be a recognised part of their job…*

There was consensus that all qualified nurses should be able to supervise and assess students, and should see it as part of their role. However, it was pointed out that as to date there had been no formalised programme, nurses were being asked to act as mentors without standardised processes and protocols. The participants discussed examples from other countries, identifying those where Mentor was an agreed and accepted role. Those who had been on study exchanges to Egypt, Thailand, Japan, UK and Finland, shared examples where the role of the mentor is both recognised and supported by senior staff. With these models, the outcomes of mentorship had a key place in the overall training, and students could not qualify without passing the mentors' assessments. They went on to describe the current approach in Zambia,

> *'the best way to describe it [mentorship] is as "a sleeping elephant" ….everyone knows it's there, but we all "tip toe round it" sliding over the issues and concerns ... we don't talk about it and we don't try to find solutions… it's just a problem that is always there…*

There was recognition that rather than seeking for solutions to this perennial training problem, they all just hoped '*it would just go away*'. In some ways mentorships can be seen as comparable to the hidden curriculum (Raso et al., 2019), there are key concepts that all

acknowledge are important, but nobody openly speaks of. Until what is implicit becomes explicit, it will be difficult to develop national standards of assessment, and through that, national standards of practice. Participants wanted this to change, and they argued that the needed to be able to see where they fitted in the clinical setting, as a student, and when they qualified.

> *"it starts with us… whatever good thing we should say… but again somehow it also comes with how we treat each other how we say things"*

Both stakeholders and participants argued there was a need for transparency with students, to able to discuss freely what they saw, mentors needed to know how to guide a student and critique appropriately. The participants recognised that students learn at different rates, and a student who doesn't pass a procedure first time, can still become a *'good'* nurse. The challenge was that these students needed much more time and support. Currently, nurses in practice were allocated no additional time for this vulnerable groups, and therefore there was concern that the current system did not adequately support such students.

> "*We have enough nurses to be mentors but not enough time to support the students properly… we have to fit it in our day job… that is fine for students who are good but it doesn't help the others"*

The tutors in the workshops were supportive of this perspective, but pointed out that they too had insufficient time and there were too few clinical instructors to arrange for students to have remedial training. There was also agreement that it is not only pre-registration students who need mentorship, but also that newly qualified emergency, trauma and critical care nurses need guidance to gain the confidence for critical decision making. These nurses are the '*leaders of the future*' and it is important that they are supported through transition

to autonomous practice. Without this they may well choose to leave the clinical setting returning to an area which as one said is "*within their comfort zone"*.

For some participants who had previously acted as mentors for several years, the real challenge was supporting the "*failing student*". They argued this group, who had failed an assessment more than once, needed time away from patients to enable them to gain the skills they needed. They were adamant that patient safety meant that students struggling to understand new protocols and procedures should be able to carry out the nursing tasks in a safe environment such as a skills laboratory. For them the difficulty was that the current skills laboratories tended to be fully booked. They wanted access to a skills facility within the hospital where "*they could take the student and show them*", arguing, that waiting until there was time in the skills laboratory meant that the student had "*probably forgotten what the problem was*". In addition, the limited numbers of clinical instructors and mentors made it hard to assess whether students had "*finally*" achieved the competencies needed. They wanted:

> "*Time protected for mentoring… we need time each week in which we could book the space [clinical] to show the student what we wanted the student to do… managers need to recognise that this is an official part of the job and not something… we just fit in"*

There were too many students for mentors to work with them all.

> *"students* [are] *sent to clinical areas… the numbers are unmanageable*".

Where the nursing workforce is already at full stretch, trying to find time to guide and support several students adversely impacts not only on the student but also on the nursing care given

to patient and through that patient safety. The focus groups participants were well aware of their role as *"gatekeepers*" for the profession. They were concerned that without recognition of their mentorship duties and the time that this takes, they were compromising their professional responsibilities, and increasing the risk to patents. They wanted their model to identify and delineate the position and roles of the mentor, tutor and clinical instructor.

The starting point for the model was the patient and the role of the student (diagram 1). As the model is primarily for nurses undertaking specialist education they pointed out:

> *… they need to recognise* [that] *as critical nurses…. they decide care… not just follow orders [tasks given by doctors] … they need to look at all …. the* [patient] *needs….so patient centred care ….the competencies* [state] *… comprehensive…..full…nursing diagnosis…*

They saw nurses as the ones '*who are always there'* who complete observations, give all aspects of care, they were keen to move away from '*task centre care...to holistic care*'. They saw this model as a way to formally '*state'* the change, pointing out that once agreed, the change in terminology and approach would be become accepted. Support and assessment of performance based on this training pack would therefore be based on more than just performance of tasks, highlighting the higher knowledge and expertise found in these specialist nurses (Akresh-Gonzales, 2018).

In the initial stakeholders workshop there was a debate as to where the three components from the Uganda model should sit. For mentorship the starting point was teaching and assessment tools, and this should be linked to the tutor and clinical assessor as these key workers prepared the student for practice. To keep the model true to their ideas, they were adamant that '*professional standards and clinical environment must rise up'* from academic

teaching and assessment. Professional standards needed to come first as theory, standards and clinical competence are all inextricably linked. However, clinical competence cannot be developed without practice, and the environment has to be conducive for study (Kemp et al., 2018). Thus, the clinical environment as the third component has to be linked to the other two. Also these three have to be '*joined together to wrap around the student'* as they have to meet to encompass the patient student and teaching. Having seen a triangle as the best way to join the concept, seeing the shape as a clear and '*aspirational'* as it reminded them of the hierarchy of needs, *with the 'tip to be aimed for showing higher skills'.* The final step was to identify the place of the mentor in the model and participants decided that it sat at the:

> *'top of the triangle as they* [mentors] *are guarding the point between professional standards and … clinical…. '*

In both workshops, participants were adamant that developing '*good'* mentors was essential for the future of critical care nursing. They also wished to emphasise the importance of the interconnectedness of the differing elements of the model, using colour to delineate this (diagram 2).This final model was then presented to a strategic stakeholder meeting for review. They considered the model for its appropriateness, accessibility (ease of use) and acceptability, with it being approved for practice.

Embedding into the curriculum and practice

Following completion of the mentorship model a train the trainer programme was structured around the components of the model. Three experienced senior Zambian nurse educators who undertook a study tour to the UK, worked with mentors and facilitators to develop training materials for inclusion in the train the trainers' mentorship programme. The new Bachelor of Science in Critical Care Nursing programme, which is due to start in July 2021,

recognises that due to the complex nature of the programme, students and newly qualified critical care nurses need a period of mentorship to enable them to consolidate their training and reach their full potential. However, it is accepted this is an area that will need to be further developed and formalised as this is the first specialist graduate nursing programme. In addition, a Bachelor of Science in Emergency and Trauma nursing is currently being developed and includes a mentorship component.

Conclusion

This mentorship model for emergency, trauma and critical care nursing was specifically designed by key stakeholders to fit within the Zambian healthcare context and MoH agenda for specialist nursing practice. The model provides a potential framework to formalise the role of mentors in this new area of nursing practice. It has facilitated discussions with strategic stakeholders and educators regarding ways to support students and newly qualified staff while maintaining quality standards. There is also a need for further development and evaluation of this model for use nationally. It has provided a mechanism for nurses to be guided through the application of theory into practice and the acquisition of competencies necessary for specialist practice.

Implications for Nursing Practice

Nurses are the backbone of healthcare systems and the largest group of healthcare workers in Africa and the world (WHO 2020a. Cunningham et al., 2017; Crisp et al., 2016). This project has embedded mentorship and assessment in practice within education programmes and in the Colleges where emergency, trauma and critical care nurse education is delivered.

However, with increasing numbers of education providers and numbers of specialist nurses, there is a need to further develop and formally accept the model for national cascade training. It has to be noted that new initiatives can potentially overwhelm limited human resources in practice and education. Therefore, it is important to have support from the strategic stakeholders, with any changes that affects practice, so that it fits within national policy and direction.

Implications for Nursing Policy

It is crucial that nursing practice adapts and evolves to the changing burden of disease and specialist nurse education programmes are one way to meet the rapidly changing patient needs. In many low resource countries, emergency, trauma and critical care service provision is limited (Schell et al., 2018; Scott & Brysiewicz, 2017), and the challenge is to develop specialist practice within a limited workforce and with few role models. In consequence, it is important that while each country may use international evidence and guidance, it essential to develop individualised policies for practice, which fit within the unique healthcare system of the country.

This collaborative approach used by the Zambian- UK partnership facilitated knowledge exchange and transfer, with all partners gaining increased awareness and understanding of the differing health systems in which they work. This experience from the field contributes to the international debate on mentorship and support for specialist nurses. The focus on fitting within the Zambian healthcare system has led to the development of a low cost, high sustainable model for nurse education.

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