

Considering mentorship as an opportunity for addressing nursing and midwifery faculty shortage in low-income countries: Discursive paper

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Abstract

Background: The shortage of nursing and midwifery faculty is one of the many global issues in nursing and midwifery education, particularly impacting low-income countries. This shortage challenges the effectiveness of midwifery education. To enhance human resources dedicated to educating future nurses and midwives, mentorship has been suggested as a remedy. The aim of this discussion paper is to analyze and substantiate the importance of integrating mentorship in nursing and midwifery education programs using the case of Rwanda as an example.

Methods: As a discursive paper, we draw on both the scholarly literature and our own expertise as nurse and midwife educators to explore the challenge of faculty shortages and the opportunity for mentorship.

Results: Mentorship is a pillar of the nursing and midwifery profession in that it engages junior nurses and midwives in teaching and learning processes.

Conclusion: Mentorship is proposed as a good response to the shortage of nurses and midwives, and this could positively impact the nursing and midwifery profession by bringing new nurses and midwives into education roles.

Importance du mentorat dans la formation des infirmières et des sages-femmes

Résumé

Contexte de l'étude : La pénurie de professeurs en sciences infirmières et Sage-femme est l'un des nombreux problèmes mondiaux de la formation des infirmières et des sages-femmes, qui touche particulièrement les pays à faible revenu. Cette pénurie met en péril l'efficacité de la formation des sages-femmes. Pour améliorer les ressources humaines consacrées à la formation des futurs infirmiers et sages-femmes, le mentorat a été suggéré comme solution.

Objectif de l'étude : L'objectif de ce papier de discussion est d'analyser et de justifier l'importance de l'intégration du mentorat dans les programmes de formation en soins infirmiers et obstétricaux en utilisant le cas du Rwanda comme exemple.

Méthode de l'étude : En tant qu'article discursif, nous nous appuyons à la fois sur la littérature scientifique et sur notre propre expertise en tant qu'enseignants en soins infirmiers et en sages-femmes pour explorer le défi de la pénurie de professeurs et l'opportunité de mentorat.

Résultats et conclusion : Le mentorat est un pilier de la profession d'infirmière et de sage-femme dans la mesure où il engage les infirmières et les sages-femmes juniors dans les processus d'enseignement et d'apprentissage. Le mentorat est proposé comme une bonne réponse à la pénurie d'infirmières et de sages-femmes, et cela pourrait avoir un impact positif sur la profession d'infirmière et de sage-femme en amenant de nouvelles infirmières et sages-femmes à jouer un rôle éducatif.

Mots-clés : Mentorat, mentorat, formation en soins infirmiers, formation en obstétrique

INTRODUCTION

Existing literature highlights a critical shortage of health professionals, particularly nurses and midwives (NMs), in both clinical settings and academia (1). Most of the World Health Organization (WHO) member states have less than three nurses and midwives per 1000 people, with 25% of countries having less than one nurse or midwife per 1000 people (2). According to Gitembagara and Colleagues (3), in Rwanda, the nursing and midwifery workforce at health center levels is concerningly low at 55% of the recommended level. In addition, it was predicted that the global shortage of nurses and midwives could be around 2.5 million by the year 2030 (4,5).

A key obstacle to expanding the nursing and midwifery workforce is the shortage of qualified educators to train new nurses and midwives. This shortage continues to impede progress in meeting the growing demand for healthcare professionals. The WHO reports a shortage of nursing and midwifery faculty in the majority of countries worldwide (12). At the same time as the number of NMs in the workforce continues to decrease so does the number of NMs educators required to teach new NMs and support maternal and child healthcare services (13,14,15). Similarly, the decrease of NMs in the workforce reduces the number of NMs educated to conduct research, widening gaps in research studies aimed at addressing critical maternal and child healthcare-related issues (9). Thus, the integration of mentorship in nursing and midwifery education has been suggested as one means to support more nurses and midwives into educator roles. Meier and Jacobs identified mentorship as an effective approach that could help new nurses and midwives develop essential competencies to advance nurses through the nursing profession (5, 6).

Over the past decades, Rwanda has made significant progress in improving maternal and child health, including the achievement of both Millennium Development Goals (MDGs) 4 and 5 (12). Despite the accomplishments that have been made, there remains a high shortage of nurse midwives in communities with limited access to health facilities (13,14). It is a matter of concern that midwives and nurses may miss vital opportunity to prevent maternal and neonatal morbidity and mortality. Apt interventions during the antenatal period and throughout care delivery could make a significant difference. Yet, this advancement is impeded by the inadequate educators to train the number of nurses and

midwives required to meet current population needs (1,2). That is why there is an increased demand for professional NMs, particularly in hospital settings and in academia. Besides, these inadequate educators, many experienced nurses and midwives in Rwanda move from bedside to administrative and managerial roles or higher educational programs, thus leaving gaps in the provision of direct care practice or lack of those moving into clinical education (3,7,15). Therefore, it is important to consider an approach like mentorship in nursing, and midwifery education and beyond in order to address the issue of the shortage of NM educators and the subsequent shortage of nurses and midwives.

Several studies have shown that mentorship is considered a responsibility of experienced and senior professional NMs (mentors) toward new NMs and students (mentees) within the profession (10,11,16,17). However, the use of mentorship in Rwandan nursing and midwifery education and practice is limited for various reasons, including its complexity which is associated with the misunderstanding of available models. Additionally, mentorship is not emphasized in various nursing and midwifery programs nor is it integrated into nursing and midwifery curriculum as well as continuous professional development courses. Moreover, various definitions, forms, and practices of mentorship are being used in nursing (11,17). Therefore, the purpose of this discursive paper is to provide a clear definition of mentorship and to scrutinize different reasons why the use of mentorship is needed within nursing and midwifery education in general, particularly in low-income countries like Rwanda. The importance and implication of integrating mentorship to bring in more nursing and midwifery educators is explored. Finally, recommendations for the use of mentorship in nursing and midwifery education is also discussed.

MATERIALS AND METHODS

Authors searched international literature published in Scopus, ProQuest, CINAHL, and Google Scholar Databases. As a discursive paper, we draw on both the scholarly literature and our own expertise as nurse and midwife educators to explore the challenge of faculty shortages and the opportunity for mentorship.

Why Mentorship is Needed in Rwandan Nursing and Midwifery Education

Like other African countries, Rwanda has experienced a shortage of qualified NMs in clinical services as well as in nursing and midwifery teaching institutions. This issue was aggravated by the 1994 Genocide against the Tutsi where a large number of health professionals, including NMs, were killed among the other victims (18). After the Genocide of 1994 against Tutsi, Rwanda made significant progress towards the achievement of health-related MDGs (23). In response to the shortage of nursing and midwifery professionals, the Government of Rwanda planned to educate more NMs. The nursing and midwifery workforce in 2019 was targeted to be comprised of 5,095 nurses and midwives with Advanced Diplomas, 1,011 nurses with bachelor's degrees in nursing or midwifery, and 160 nurses with master's training (20). In 2015, the president of the Rwanda Association of Midwives (RAM) revealed that only 1,100 midwives were deployed in different health centers and hospitals, while the required number of registered midwives across the country was targeted at 3,600 (21). Because of the midwifery shortage in Rwanda, pregnancy surveillance and maternity care are generally provided by nurses at health centers, and most complicated cases are referred to district hospitals. This shortage of midwives highlights not only the need to increase the number of nurse-midwives, but also to expand the training of nurses as educators to be able to contribute to the reduction of maternal morbidity and mortality rate in Rwanda.

With this significant shortage, it is difficult to meet the basic needs of women and newborns. Also, some nursing and midwifery students in Rwanda start midwifery training without a good mentorship process to facilitate their understanding of the nursing and midwifery profession. This can be the leading cause of malpractice and lack of professionalism in their practice, as they did not have a complete understanding of the nursing and midwifery profession before joining the profession. Some NMs in hospitals and in teaching institutions who play the role of mentors do not have enough knowledge of mentorship, consequently, they face challenges in nursing midwifery professional development. Therefore, the critical shortage of NMs in Rwanda underscores the need for different models and strategies such as mentorship, to increase the competencies and capacity of NM educators and clinicians.

Description of Mentorship in Relation to Nursing and Midwifery Education and Practice

Mentorship has been used in nursing since the 19th-century career of Florence Nightingale, who is considered the first mentor in the nursing tradition (22,23). Other nursing pioneers, such as Annie Goodrich, Mary Adelaide Nutting, and Linda Richards, also had mentors who helped develop their capabilities and offered them opportunities to become pioneers in nursing and nurse education (6). Although the mentorship paradigm was historically used in other fields, such as education, medicine, and business (10,17), one of the main challenges experienced in different disciplines are the multiple definitions of the concept. Yoder (28), in their concept analysis, found that there was inconsistency in the definition of mentorship. In addition to the confusion due to the lack of a universal definition and inconsistency in the use of mentorship in the nursing and midwifery profession (11,25), the two terms mentorship and preceptorship are often used interchangeably. Therefore, the absence of a consistent definition of mentorship across different disciplines, including nursing, has resulted in confusion of the operational practices that are vague and consequently, has limited its integration into nursing education (26). In the next section, a clear definition of mentorship in the context of nursing and midwifery education and practice is provided.

The Oxford English Dictionary (31) defines the term mentoring as the action of advising or training less experienced persons, usually sharing the same career. In nursing and midwifery profession, mentoring requires a collaborative and dynamic relationship between an experienced nurse or midwife and their less experienced colleagues. This relationship can be formal or informal and can be established over a jointly agreed-on period, that allows the mentee and mentor to grow professionally and personally (28). According to Hodgson and Scanlan (11), mentorship is defined as a voluntary partnership in which a *mentor* acts as a role model, guide, and support, over an extended period, to facilitate a *mentee's* professional development without formal evaluation. According to Meier (5), a mentor is an experienced person who is considered both a guide or an adviser. In addition, a mentor in nursing or midwifery is a person who is experienced working in a clinical setting, academia, or educational institution who is trusted to support and guide a new employee,

student, or someone becoming an educator. At the same time, a mentee is considered as anyone who voluntarily seeks and receives assistance and guidance from the mentor (11,26).

Preceptorship is defined as an orientation technique whereby experienced or senior employees are responsible to their organization for introducing and familiarizing new students or staff into a new setting over a short period of time (29). According to the Canadian Nurses' Association (CNA) (34), nursing preceptorship involves the process of teaching and learning within the clinical environment. It is designed to help new or novice nurses and midwives adapt to a new role within organizations or institutions in a given short period. While preceptorship is provided over a short time, mentorship is often considered as a long-term relationship in which a senior or experienced nurse or midwife (mentor) supports the professional growth of a junior or less experienced nurse or midwife (mentor) with nursing or midwifery leadership support. Another significant difference is that preceptorship often involves formal assessment and evaluation in its nature, whereas assessment and evaluation within mentorship are less formal and frequently absent from the relationship (34). According to CNA (34), a preceptor is more likely to be a teacher or a professional educator from a recognized teaching and learning institution.

Importance of Mentorship Teaching in Nursing and Midwifery Programs

NMs need to broaden their connections with other professionals so that each NM is introduced to different benefits of networking. It is very advantageous for NMs to develop a passion for mentoring early in their career. The literature indicates that integration of mentorship in nursing and midwifery education (Figure 1) is very important in attracting, retaining, and educating professional members and creating high-quality nurse educators (28,31,32). Although there is a developing evidence to support the benefits and advantages of mentorship in the education of health professionals, however, the level of evidence for mentorship in nursing and midwifery professional education has been less prioritized (9).

In addition, nursing and midwifery education is the underpinning of the preparation of NMs with suitable competencies (Figure 1) to deliver high standards of safe care for mothers and newborns (33). For instance, competent NMs make a significant difference in improving maternal and children's health (33,34). It is believed that the effective use of mentorship in nursing and midwifery education should be used as a benchmark for enhancing the quality nursing and midwifery profession globally. In midwifery, as well as in the nursing profession, mentorship is

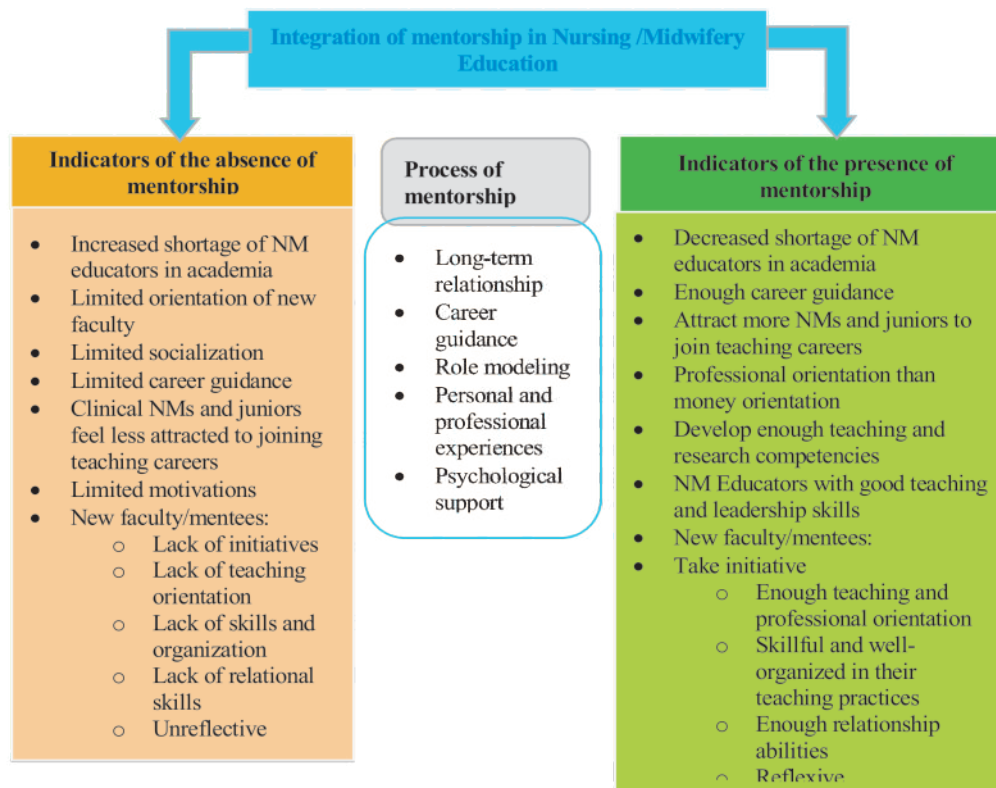


Figure 1: Indicators of Absence and Presence of Mentorship in Nursing Education

fundamental to developing nursing educator competencies (Figure. 1) that qualify one as a good educator of NMs. As a result of mentorship (Figure. 1), the mentee develops the following qualities and characteristics: interpersonal skills, communication, professional values, problem-solving and decision-making abilities, management, leadership, and teamwork (35). Furthermore, mentorship can help future educators to gain experiences through a team approach which may sometimes be used for mentoring new NM students (36,37).

Figure 1 indicates that mentorship has many advantages for the mentor, mentee, organization, and profession. Mentorship has a positive impact on mentors since it is linking those who are more novice to the right people for career attainment (38). Additional benefit for mentors is that through mentorship, they cultivate increased trustworthiness in the working team and working institution (28). Grossman (32) stated that mentoring others through partnering initiatives will certainly help NMs to be more effective professional leaders and gain higher level of job satisfaction with their lives. Therefore, the integration of mentorship into

nursing and midwifery education can contribute to the development of new nurses' self-esteem and attract or motivate new nurses and midwives to pursue faculty positions in the future.

Implications of Integrating Mentorship in Nursing and Midwifery Education

The integration of mentorship in nursing and midwifery education (Figure. 2), particularly in low-income countries can attract more junior NMs, including those working in clinical settings and are involved in teaching on part-time or temporary basis to transitioning into a full-time and long-term teaching position (39,40). In addition, effective integration of mentorship principles in academia (Figure. 2) could impact significantly on NM educators' abilities to develop teaching and research competencies (16,39,41). As results of effective mentorship program within academia, experienced NM educators act as role model to the novice and junior, which could motivate junior faculty members to learn, develop, shape, and implement their own teaching philosophy. In addition, when applying mentorship principles like nurturing, caring, and sharing, experienced NM educators



Figure 2: The Implication of Using Mentorship Model in Nursing Education.

pass on teaching methodologies and approaches that help the junior NMs educators to promote effective and conducive teaching and learning environment (39,40). This will ensure that nursing and midwifery professional's needs are met within a learning environment that also supports teaching competencies development (42). Different authors highlighted that the effective use of mentorship enhances international collaboration in nursing and midwifery teaching and research (28,43,44). Integrating mentorship into nursing and midwifery teaching programs, particularly in low-income countries like Rwanda has many positive implications (Figure. 2), including improving the quality of nursing and midwifery education, reducing the shortage of nursing and midwifery professionals, attracting more prospective students motivated to become future faculty members, increasing professionalism, maintaining international standards, capacity building and stress management among NM educators, and improving job satisfaction in academia (20,46-48)

Mentorship Can Reduce the Shortage of Nurses by Increasing the Population of Nurse and Midwives Educators

Globally, the shortage of NMs, high rate of turnover, and poor retention are considered increasing issues for healthcare institutions in different countries on all continents (47-49). According to Bloct et al (51), the shortage of NMs was projected to be 29% or around one million nurses by 2020. This significant shortage of NMs is thought to be related to the inadequacies of the nursing and midwifery training programs in many countries, which is the leading cause of a low number of educated NMs. The shortage of NMs may also be associated with issues of NMs leaving the profession for various reasons, such as lack of peer and administrative support, frustration, and burnout (50). This NMs shortage challenge demonstrates why there is an increased demand for professional NMs, particularly in clinical environments. As indicated in Figure. 2, to respond to this global shortage of NMs, mentorship can play an important role in bringing new NMs into education roles (49). Therefore, mentorship programs could be considered as a useful approach to respond to the nursing and midwifery global shortage but also to provide support for the nursing and midwifery education, improving professionalism and development as well as maintaining nursing and midwifery educational standards.

Increase of Professionalism and Maintenance of Nursing and Midwifery Educational Standards

Integrating mentorship program in academia may help junior NM educators in advancing their professionalism and meeting international educational standards (28,31,35). Together with public protection, another fundamental role of mentorship is to increase and sustain nursing and midwifery professional standards (Figure. 2). This is related to how mentorship helps ensure that junior NMs educators meet essential required standards. Through the robust incorporation of nursing and midwifery professional standards in their teaching and research activities, mentorship can help keep the profession updated and fresh (51), at the same time raising the profile of faculty (mentors) within teaching and healthcare organizations (9). Several mentors saw mentorship approaches as the best way of improving quality assurance, ensuring more valid, rigorous, reliable, and objective theoretical and practical assessment. Mentorship may not only be linked with improved performance of high-achieving students, but also to improved nursing and midwifery educational standards (47).

The integration of mentorship in nursing and midwifery education has been shown to increase newly hired faculty's expectation and awareness of their new academic role at the university (20). In mentorship relationships, the mentor's characteristics play an important role in the mentoring process (22,43). That is why mentorship programs consider the characteristics and attitudes of a mentor as essential prerequisites to be considered when hiring mentors. According to Andrews and Wallis (26), the prerequisite characteristics of a good mentor include interprofessional development ability, adopting a positive teaching role, interpersonal skills, approachability, paying appropriate attention to learning and teaching, providing supervisory support, and interprofessional development ability. Those characteristics reinforce the teaching and learning process in both nursing and midwifery education. Furthermore, mentoring involves informal and formal relationships between experienced NMs (mentors) and less experienced NMs (mentees) of a teaching institution directed toward the improvement and support of the junior NMs (52). According to Gibson and Heartfield (46), mentorship can be a useful teaching approach for new NM educators as it provides them with

successful and systematic encouragement in the nursing and midwifery educational and teaching practice, enables their professional development, and boosts the coordination of teaching activities within the unique context of the academic environment. To increase nursing and midwifery professionalism and to reduce the shortage of human resources in nursing and midwifery education, mentorship plays an important role in the attraction of prospective faculty members.

The Attraction of Prospective Nursing and Midwifery Educators

As in other professions, clinical nurses and newly hired educators need to be oriented before they join the nursing and midwifery education career. According to Bulut et al (20), professional mentorship relationships are mainly aimed at two important things: assistance with interpersonal challenges and career guidance. The Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) reports that insufficient orientation and training of NMs educators is a factor in 58% of serious errors that are commonly made by many higher teaching and learning institutions (50). In mentorship, the relationship is developed almost entirely on potential and hope, rather than performance. According to Greene and Puetzer (49), to build that relationship it is necessary to sit down with the mentee and plan the objectives and expectations. In addition, the NMs educator can assist prospective nursing and midwifery educators in ensuring an understanding of the teaching and learning process and how to deal with some challenges that may arise while playing their new teaching role. This relationship can attract prospective faculty members (Figure. 2) as they start to better understand the new concepts of mentorship in the nursing and midwifery profession and how that could increase their self-confidence and self-esteem while developing positive teaching experiences (35,43,49).

Although the mentor plays a big role in the mentorship process, as highlighted by Eller et al. (44), the successful requirements of mentorship include mutual respect, and the investment of time and energy required for both mentors and mentees. In the nursing and midwifery profession, establishing a good mentorship relationship requires a mentor to be able to inspire and support mentees during teaching practice as well as in education programs (43). In addition, mentorship programs in nursing and midwifery education increase

junior faculty's confidence and help support them through the difficulties associated with a new teaching and learning environment (31). Furthermore, mentoring newly hired and junior educators in their teaching roles and responsibilities develop self-esteem and become more socialized in the nursing and midwifery faculty team and are better able to achieve their career goals (31). Mentorship can enhance the professional socialization of new NM educators, smooth their transition into the academic social culture of the profession and teaching institutions, and make them feel welcomed within the academic environment with other faculty members and co-workers (46). Moreover, the mentoring process helps mentors determine if mentees are a good fit for teaching practice by preparing their mentees' psychologically and mentally. This also protects junior educators' safety and enhance their confidence as well as competencies. Rooke (47) states that educators who integrate mentoring into their clinical teaching believe that students benefit from the mentorship relationship because it gives them enough time to discuss and reflect during practice. The attraction of prospective NM educators as a result of mentorship (Figure. 2) also enhances capacity building in the theoretical knowledge related to nursing and midwifery educations, as well as stress management for mentored faculty and new NM educators.

Capacity Building and Stress Management for Novice Nurse and Midwife Educators

Novice nursing and midwifery educators develop capacity building in theory and practices where professional experience plays an essential part in developing their learning (Figure 2). According to Weng et al. (48), through mentorship relationships, mentors can provide opportunities for professional development advice, support, psychological and emotional support, and role modeling and social guidance to mentees. Psychological and emotional support functions as results of mentorship include counseling, acceptance, and friendship (46). According to Grossman (32), mentoring is positively correlated with career progression, satisfaction, increased self-esteem, and decreased turnover for mentored professionals. Therefore, these outcomes have a significant positive influence on the profession by improving the image of a nursing and midwifery educator career (28). Teaching experience can be acquired throughout the interaction with other senior NMs, and students during teaching

assignments (53). Therefore, this experience helps nursing and midwifery educators to develop communication, professional, psychomotor, and interpersonal skills (54,55).

The integration of mentorship in nursing and midwifery can help in stress management for educators through their early teaching experiences (Figure 2). According to Letvak (56), 50% of NMs who intend to change the profession mention reasons for stress such as heavy workload, frustration, burnout, and lack of respect or motivation, and support. It has also been established that mentorship opportunity decreases the anxiety experienced by novice NM educators and their self-confidence as a result of the mentorship program is enhanced (31). In addition, mentorship offers educators with opportunities to apply the theory they have gained related to teaching and learning and assists them in developing a teaching philosophy (54). To increase the teaching experience, it is vital to provide novice educators with appropriate supervision, guidance, and support in the academic setting (43). A successful mentor can help mentees to clarify any raised questions and misconceptions as well as help them establish a safe working environment that can promote such facilitation. Evidence indicates that several factors, such as the mentor's competencies, communication skills, and the mentor-student relationship play a key role in mentees' learning (28,38). The literature supports that mentorship programs can help to improve the achievement of organizational goals (31,54,57).

CONCLUSION

As in many other professions, mentorship is a pillar of the nursing and midwifery profession as it engages potential nurse educators in a constructive, and collaborative process. This can help to achieve the standard of international educational standards and reinforce the nursing and midwifery profession standards through the development of strong employees within education. Mentorship is proposed as a good response to the global shortage of NM educators. This will positively impact nursing and midwifery generally, and particularly in Rwanda, by bringing new NMs into the education system, retaining and supporting them in the delivery of high-quality teaching environments. A mentorship program in nursing and midwifery provides opportunities to generate sustainable benefits for mentors, mentees, professions, and teaching institutions. The mentoring process in

nursing and midwifery encourages NM educators to develop leadership skills, advancing the mentees' vision for individual success and the future of nursing and midwifery as a profession. Mentorship is needed in Rwanda to increase knowledge and skills for all professionals including NM educators, to improve teaching and learning outcomes through effective teaching and skills, and to offer better professionalism in education. In nursing and midwifery, mentorship programs should be promoted and supported as an effective approach to nursing and midwifery education.

Conflict of Interest: All authors declare that there was no conflict of interest associated with this work.

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REFERENCES

1. Boniol M, Kunjumen T, Nair TS, Siyam A, Campbell J, Diallo K. The global health workforce stock and distribution in 2020 and 2030: A threat to equity and "universal" health coverage? *BMJ Glob Heal.* 2022;7(6):1–8.
2. WHO. Fact sheet: The state of the world's midwifery 2014. 2014.
3. Gitembagara A, Relf M V, Pyburn R. Optimizing nursing and midwifery practice in Rwanda. *Rwanda J Ser F Med Heal Sci [Internet].* 2015;2(2):26–30. Available from: <https://www.ajol.info/index.php/rj/article/viewFile/125400/114935>
4. Scheffler RM, Arnold DR. Projecting shortages and surpluses of doctors and nurses in the OECD: What looms ahead. *Heal Econ Policy Law.* 2019;14(2):274–90.
5. McGill University. Global shortage of nurses. *Ingram Sch Nurs [Internet].* 2019;(November):1–24. Available from: https://www.mcgill.ca/nursing/files/nursing/nurse_shortages.pdf
6. World Health Organization. Working together for health [Internet]. Vol. 19, World Health Organization. Geneva; 2006. Available from: http://www.who.int/whr/2006/whr06_en.pdf?ua=1
7. Ndayisenga JP, Evans MK, Babenko-Mould Y, Mukeshimana M. Nurse and midwife educators' experiences of translating teaching methodology knowledge into practice in Rwanda. *Int J Nurs*

8. Ndayisenga JP, Evans, Marilyn.K, Babenko-Mould Y, Mukeshimana M. Nurse and midwife educators' experiences of translating teaching methodology knowledge into practice in Rwanda [Internet]. Electronic Thesis and Dissertation Repository. 6296; 2019. Available from: <https://ir.lib.uwo.ca/etd/6296>
9. Nowell L, White DE, Mrklas K, Norris JM. Mentorship in nursing academia: a systematic review protocol. *Syst Rev* [Internet]. 2015; 4(1):16. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4342164/>
10. Meier SR. Concept analysis of mentoring. *Adv Neonatal Care* [Internet]. 2013;13(5):341–5. Available from: <http://content.wkhealth.com/linkback/openurl?sid=WKPTLP:landingpage&an=00149525-201310000-00010>
11. Jacobs S. An analysis of the evolution of mentorship in nursing. *Int J Mentor Coach Educ*. 2018;7(2):155–76.
12. Abbott P, Sapsford R, Binagwaho A. Learning from success: How Rwanda achieved the Millennium Development Goals for health. *World Dev* [Internet]. 2017;92:103–16. Available from: <http://dx.doi.org/10.1016/j.worlddev.2016.11.013>
13. Ngabonzima A, Kenyon C, Kpienbaareh D, Luginaah I, Mukunde G, Hategeka C, et al. Developing and implementing a model of equitable distribution of mentorship in districts with spatial inequities and maldistribution of human resources for maternal and newborn care in Rwanda. *BMC Health Serv Res*. 2021;21(1):1–12.
14. Yamuragiye A, Ndayisenga JP, Nkurunziza A, Bazirete O. Benefits of a Mentorship Program on Interprofessional Collaboration in Obstetric and Neonatal Care in Rwanda : A Qualitative Descriptive Case Study. *Rwanda J Med Heal Sci*. 2023;6(1):71–83.
15. Mukamana D, Uwiyeze G, Sliney A. Nursing and midwifery education in Rwanda: Telling our story. *Rwanda J* [Internet]. 2015;2(2):9. Available from: <http://www.ajol.info/index.php/rj/article/view/125396>
16. Cross M, Lee S, Bridgman H, Thapa DK, Cleary M, Kornhaber R. Benefits, barriers and enablers of mentoring female health academics: An integrative review. *PLoS One*. 2019;14(4):1–21.
17. Hodgson AK, Scanlan JM. A concept analysis of mentoring in nursing leadership. *Open J Nurs*. 2013;2013(September):389–94.
18. Drobac P, Naughton B. Health equity in Rwanda: The new Rwanda, twenty years later. *Harvard International Review* [Internet]. 2014;57–61. Available from: <http://hir.harvard.edu/article/?a=5732>
19. Ndenga E, Uwizeye G, Thomson DR, Uwitonze E, Mubiligi J, Hedt-Gauthier BL, et al. Assessing the twinning model in the Rwandan Human Resources for Health Program: goal setting, satisfaction and perceived skill transfer. *Global Health* [Internet]. 2016;12(1):4. Available from: <http://www.globalizationandhealth.com/content/12/1/4>
20. Binagwaho A, Kyamanywa P, Farmer PE, Nuthulaganti T, Umubyeyi B, Nyemazi JP, et al. The human resources for health program in Rwanda — A new partnership. *N Engl J Med* [Internet]. 2013;369(21):2054–9. Available from: <http://www.nejm.org/doi/pdf/10.1056/nejmsr1302176>
21. One UN Rwanda. Health workers call for increases number of midwives. 2015 May 7;1–5. Available from: <http://www.rw.one.un.org/press-center/news/health-workers-call-increased-number-midwives>
22. Andrews M, Wallis M. Mentorship in nursing: A literature review. *J Adv Nurs*. 1999;29(1):201–7.
23. Pellatt GC. The role of mentors in supporting pre-registration nursing students. *British journal of nursing* (Mark Allen Publishing). 2006.
24. Yoder L. Mentoring: A concept analysis. *Nurs Adm Q*. 1990;
25. McIntyre A, Lykes MB. Who's the Boss? Confronting Whiteness and Power Differences within a Feminist Mentoring Relationship in Participatory Action Research. Vol. 8, *Feminism and Psychology*. 1998. p. 427–44.
26. Crisp G, Cruz I. Mentoring college students: A critical review of the literature between 1990 and 2007. *Res High Educ*. 2009;
27. Oxford English Dictionary O. Oxford Dictionary Mentoring. In: *Oxford Dictionary Mentoring*. 3rd Editio. 2001.
28. Grossman SC. Mentoring in nursing: A dynamic and collaboration process [Internet]. 1st ed. Sally JF, editor. New York: Springer Publishing Company; 2007. 1–158 p. Available from: <http://digitalcommons.fairfield.edu/nursing-books/6/1/2>
29. Stewart BM, Krueger LE. An evolutionary concept analysis of mentoring in nursing. *J Prof Nurs*. 1996;
30. CNA. Achieving Excellence in Professional Practice - A guide to preceptorship and mentoring [Internet]. Vol. 1, *Statewide Agricultural Land Use Baseline 2015*. 2004. 78 p. Available from: www.cna-aiic.ca
31. Bulut H, Hisar F, Demir SG. Evaluation of mentorship programme in nursing education: A pilot study in Turkey. *Nurse Educ Today* [Internet]. 2010;30(8):756–62. Available from: <http://dx.doi.org/10.1016/j.nedt.2010.01.019>
32. Warne T, Johansson UB, Papastavrou E, Tichelaar E, Tomietto M, den Bossche K Van, et al. An exploration of the clinical learning experience of nursing students in nine European

- countries. *Nurse Educ Today* [Internet]. 2010;30(8):809–15. Available from: <http://dx.doi.org/10.1016/j.nedt.2010.03.003>
33. Luyben A, Barger M, Avery M, Bharj KK, O'Connell R, Fleming V, et al. Exploring global recognition of quality midwifery education: Vision or fiction? *Women and Birth* [Internet]. 2017;30(3):184–92. Available from: <http://dx.doi.org/10.1016/j.wombi.2017.03.001>
 34. Fullerton JT, Thompson JB, Johnson P. Competency-based education: The essential basis of pre-service education for the professional midwifery workforce. *Midwifery* [Internet]. 2013;29(10):1129–36. Available from: <http://dx.doi.org/10.1016/j.midw.2013.07.006>
 35. Royal College of Nursing R. Guidance for mentors of nursing students and midwives [Internet]. 2007. Available from: https://my.rcn.org.uk/_data/assets/pdf_file/0008/78677/002797.pdf
 36. Montgomery BL. Mapping a Mentoring Roadmap and Developing a Supportive Network for Strategic Career Advancement. *SAGE Open*. 2017;7(2).
 37. Lawson SA. Mentoring in specialist workforce development: a realist evaluation. 2017;(April). Available from: <http://etheses.whiterose.ac.uk/18498/>
 38. Jokelainen M, Jamookeeah D, Tossavainen K, Turunen H. Finnish and British mentors' conceptions of facilitating nursing students' placement learning and professional development. *Nurse Educ Pract* [Internet]. 2013;13(1):61–7. Available from: <http://dx.doi.org/10.1016/j.nepr.2012.07.008>
 39. Summers JA. Developing Competencies in the Novice Nurse Educator: An Integrative Review. *Teach Learn Nurs* [Internet]. 2017;12(4):263–76. Available from: <http://dx.doi.org/10.1016/j.teln.2017.05.001>
 40. Ephraim N. Mentoring in nursing education: An essential element in the retention of new nurse faculty. *J Prof Nurs* [Internet]. 2021;37(2):306–19. Available from: <https://doi.org/10.1016/j.profnurs.2020.12.001>
 41. Ekong EN. Impact of mentoring on nursing and midwifery educators and students: An integrative. *Texila Int J Nurs*. 2017;3(2):73–86.
 42. Aston E, Hallam P. Successful mentoring in nursing [Internet]. 2nd Revise. Exeter, United Kingdom: Sage Publications Ltd; 2014. 1–52 p. Available from: <https://www.bookdepository.com/Successful-Mentoring-Nursing-Elizabeth-Aston/9781446275016> ×
 43. Eller L., Lev E., Feurer A. Key components of effective mentoring relationship. *Nurse Educ Today* [Internet]. 2015;27(3):320–31. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3925207/pdf/nihms-516498.pdf>
 44. Riley M, D FA. Mentoring as a teaching-learning strategy in nursing. *Medsurg Nurs* [Internet]. 2009;18(4):228–33. Available from: https://www.amsn.org/sites/default/files/documents/practice-resources/healthy-work-environment/resources/MSN_Riley_18_04.pdf
 45. Gibson T, Heartfield M. Mentoring for nurses in general practice: An Australian study. *J Interprof Care*. 2005;19(1):50–62.
 46. Weng R-H, Huang C-Y, Tsai W-C, Chang L-Y, Lin S-E, Lee M-Y. Exploring the impact of mentoring functions on job satisfaction and organizational commitment of new staff nurses. *BMC Health Serv Res* [Internet]. 2010 Jan;10:240. Available from: <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=2929231&tool=pmcentrez&rendertype=abstract>
 47. Ramoo V, Abdullah KL, Piaw CY. The relationship between job satisfaction and intention to leave current employment among registered nurses in a teaching hospital. *J Clin Nurs*. 2013;22(21–22):3141–52.
 48. Maternity R, Campaign C. Respectful maternity care campaign update. 2015;(April):1–3.
 49. Greene MT, Puetzer M. The value of mentoring: A strategic approach to retention and recruitment. *J Nurs Care Qual* [Internet]. 2002 Oct;17(1):63–70. Available from: <http://content.wkhealth.com/linkback/openurl?sid=WKPTLP:landingpage&an=00001786-200210000-00008>
 50. Block LM, Claffey C, Korow MK, McCaffrey R, Services H. The value of mentorship within nursing organisation. *Nurs Forum* [Internet]. 2005;40(4):134–40. Available from: <http://onlinelibrary.wiley.com/doi/10.1111/j.1744-6198.2005.00026.x/epdf>
 51. Rooke N. An evaluation of nursing and midwifery sign off mentors, new mentors and nurse lecturers' understanding of the sign off mentor role. *Nurse Educ Pract* [Internet]. 2014;14(1):43–8. Available from: <http://dx.doi.org/10.1016/j.nepr.2013.04.015>
 52. Halfer D, Graf E, Sullivan C. The organizational impact of a new graduate pediatric nurse mentoring program. Vol. 26, *Nurs Econ*. 2008. p. 243–9.
 53. Ndayisenga JP. Learning from senior nurse educators : Reflections on values of classroom teaching session observation in nursing education. *Res J Heal Sci* [Internet]. 2024;2(June):163–9. Available from: <http://dx.doi.org/10.4314/rejhs.v12i2.9>
 54. Ali P, Panther W. Professional development and the role of mentorship. *Nurs Stand* [Internet]. 2008;22(42):35–9. Available from: <https://www.uwplatt.edu/files/tlc/Mentoring/RoleofMentoring.pdf>
 55. Benner P, Sutphen M, Leonard V, Day L. Educating nurses: A call for radical transformation-How far have we come? *J Nurs*

- Educ. 20012;51(4):183–4.
56. Letvak S. Retaining the older nurse. *J Nurs Adm* [Internet]. 2002;32(7):387–92. Available from: [http://vr2pk9sx9w.search.serialssolutions.com/?sid=Elsevier:Scopus&genre=article&issn=00020443&volume=32&issue=7-8&spage=387&epage=392&pages=387-392&artnum=&date=2002&title=Journal+of+N](http://vr2pk9sx9w.search.serialssolutions.com/?sid=Elsevier:Scopus&genre=article&issn=00020443&volume=32&issue=7-8&spage=387&epage=392&pages=387-392&artnum=&date=2002&title=Journal+of+Nursing+Administration&atitle=Retaining+the+Older+Nurse&aufirst=S.&au)
57. Fox KC. Mentor program boosts new nurses' satisfaction and lowers turnover rate. *J Contin Educ Nurs* [Internet]. 2010;41(7):311–6. Available from: <http://www.slackinc.com/doi/resolver.asp?doi=10.3928/00220124-20100401-04>