



Stakeholder Perspectives on Nursing Credential Upgrades: A Comprehensive Literature Review of Global Studies

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Abstract:

Purpose: To analyze stakeholder perspectives on nursing credential upgrades, comparing global, sub-Saharan African and Ghanaian contexts.

Method: A comprehensive literature review was conducted using systematic search strategies across multiple databases. Thematic analysis was employed to identify key themes and patterns in stakeholder perspectives.

Findings: Common themes across all levels include a push for higher qualifications, emphasis on competency-based education, and recognition of stakeholder involvement importance. Unique challenges in the Ghanaian context include resource constraints and rapid healthcare system changes.

Conclusion: Successful nursing credential upgrades require balancing global standards with local needs, addressing resource constraints, and ensuring meaningful stakeholder engagement.

Recommendations: Implement comprehensive curriculum reforms, strengthen faculty development programs, and establish formal mechanisms for stakeholder participation in policy development.

Significance: This analysis provides valuable insights for policymakers and educators involved in nursing education reforms, contributing to efforts to strengthen health systems through improved healthcare workforce education.

Keywords: Nursing education, credential upgrades, stakeholder perspectives, Ghana, global health

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1. Introduction:

The global landscape of nursing education is experiencing a significant shift towards upgrading credentials and competencies to meet evolving healthcare needs. This trend is reflected across various levels, from global initiatives to regional efforts in Sub-Saharan Africa, and specifically within the Ghanaian context. The World Health Organization's "State of the world's nursing 2020" report emphasizes the critical role of standardized, high-quality nursing education in strengthening health systems worldwide [18]. Similarly, the International Council of Nurses has developed global nursing education standards and competencies to guide curriculum development and credential upgrades internationally [19].

In Sub-Saharan Africa, nursing education faces unique challenges, including faculty shortages, inadequate resources, and weak regulatory frameworks [12]. Despite these obstacles, there is a growing recognition of the need for stakeholder involvement in nursing education reforms, as highlighted by Acheampong et al. (2021) in their study of nurses' and midwives' perspectives on policy participation in Ghana [4].

The Ghanaian perspective on nursing credential upgrades reflects a complex interplay of historical legacies, current challenges, and future aspirations. Opare and Mill (2000) provide insights into the evolution of nursing education in Ghana since independence [6], while more recent studies by Bell et al. (2013) and Donkor and Andrews (2011) highlight ongoing challenges in scaling up the nursing workforce and adapting to 21st-century healthcare needs [3, 8].

This topic is of critical importance as nursing credential upgrades directly impact the quality of healthcare delivery, patient outcomes, and the overall strength of health systems. As Laari and Duma (2023) argue, there is a strong desire among Ghanaian nurses for comprehensive reforms in nursing education and practice [2]. Understanding stakeholder perspectives on these upgrades is crucial for developing effective, context-appropriate strategies for advancing nursing education.

The purpose of this analysis is to examine stakeholder perspectives on nursing credential upgrades, comparing global, Sub-Saharan African, and Ghanaian contexts. Specific objectives include:

1. Identify common themes and unique challenges in nursing credential upgrades across global, regional, and local levels.
2. Analyze the roles and influences of various stakeholders in shaping nursing education reforms.
3. Develop recommendations for future nursing education initiatives in Ghana based on stakeholder perspectives and global best practices.



1.1 Significance of the Analysis:

This analysis holds significant implications for nursing, midwifery, and health sectors. By examining stakeholder perspectives on nursing credential upgrades, it provides valuable insights for policymakers, educators, and healthcare administrators involved in shaping the future of nursing education. The comparative approach, considering global, regional, and local contexts, allows for a comprehensive understanding of best practices and challenges in nursing education reform.

For nursing and midwifery professions, this analysis highlights the importance of continuous professional development and the need for alignment between education and practice. It underscores the critical role of nurses and midwives in policy development and educational reforms, as emphasized by Acheampong et al. (2021) [4].

In the broader health context, this analysis contributes to discussions on strengthening health systems through improved healthcare workforce education. It aligns with global efforts to achieve universal health coverage and addresses the World Health Organization's call for investment in nursing education [18].

By providing evidence-based recommendations, this analysis can inform strategic planning for nursing education upgrades in Ghana and potentially serve as a model for similar initiatives in other Sub-Saharan African countries.

1.2 Method:

This analysis employed a comprehensive literature review methodology, following a systematic approach to identify, evaluate, and synthesize relevant research on stakeholder perspectives of nursing credential upgrades. The method was chosen for its ability to provide a broad overview of the topic while allowing for in-depth analysis of specific themes and contexts.

Databases used for literature retrieval included PubMed, CINAHL, Scopus, and Google Scholar. These databases were selected for their comprehensive coverage of healthcare and nursing education literature. The search strategy utilized combinations of keywords such as “nursing education,” “credential upgrades,” “stakeholder perspectives,” “Ghana,” “Sub-Saharan Africa,” and “global health.”

Inclusion criteria for literature selection were:

1. Published in English
2. Published between 2000 and 2023 to capture both historical context and current trends



3. Focus on nursing education, credential upgrades, or stakeholder perspectives in nursing

4. Relevance to global, Sub-Saharan African and the Ghanaian contexts.

The analysis followed a thematic approach, as described by Braun and Clarke (2006), which involves identifying, analyzing, and reporting patterns within data. This method was chosen for its flexibility and ability to provide rich, detailed, and complex accounts of data.

The analysis process involved the following steps:

1. Familiarization with the data through repeated reading of selected literature
2. Generation of initial codes
3. Searching for themes
4. Reviewing and refining themes
5. Defining and naming themes
6. Producing the report

To ensure rigor and replicability, the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines were followed in reporting the literature search and selection process [Moher et al., 2009].

This methodological approach is supported by several studies in the field of nursing education research. For example, Bvumbwe and Mtshali (2018) used a similar integrative review methodology to examine nursing education challenges and solutions in Sub-Saharan Africa [12]. Similarly, Salisu et al. (2020) employed qualitative content analysis to explore nurses' and midwives' experiences of nursing education in Ghana [7].

Researchers aiming to replicate this study or conduct similar analyses elsewhere should follow the described systematic search strategy, apply the stated inclusion criteria, and employ thematic analysis techniques. Adaptation of search terms and inclusion criteria may be necessary to suit specific regional or national contexts.

2. Global Perspective on Nursing Credential Upgrades



The global landscape of nursing education and credential upgrades has been evolving rapidly in response to changing healthcare needs and technological advancements. This section examines the global perspective on nursing credential upgrades, focusing on key trends, challenges, and stakeholder views.

2.1 Overview of global nursing education standards

The World Health Organization's "State of the world's nursing 2020" report highlights the critical role of nursing education in strengthening health systems worldwide [18]. The report emphasizes the need for standardized, high-quality nursing education to ensure a competent and adaptable nursing workforce. Similarly, the International Council of Nurses has developed "Global nursing education standards and competencies" to guide the development of nursing curricula and credential upgrades internationally [19].

These global standards emphasize the importance of evidence-based practice, critical thinking, and interprofessional collaboration. They also stress the need for continuous professional development and lifelong learning among nurses. The push for higher nursing credentials is evident in the increasing emphasis on bachelor's degrees as the minimum entry-level qualification for registered nurses in many countries.

2.2 Trends in nursing education transformation

There is a growing recognition of the need for radical transformation in nursing education. Benner (2012) calls for a paradigm shift in nursing education, arguing that traditional approaches are insufficient to prepare nurses for the complexities of modern healthcare [21]. This call for transformation is echoed by Stanley and Dougherty (2010), who propose a new model of nursing education that integrates theory, practice, and research more effectively [29].

The trend towards advanced professional practice is evident in many countries. Wombeogo et al. (2015) propose a restructuring of nurses' and midwives' promotions and ranks to facilitate advanced professional practice in Ghana, reflecting a global move towards recognizing and formalizing advanced nursing roles [24].

2.3 Stakeholder views on nursing competencies

Stakeholders across the globe are increasingly focused on defining and measuring nursing competencies. This is evident in the development and validation of various nursing competence evaluation tools. Bing-Jonsson et al. (2014) developed the "Nursing older people - Competence evaluation tool" to assess competence in advanced older people nursing [32]. Similarly, Nilsson et al. (2018) created a short version of the nurse professional competence scale for measuring nurses' self-reported competence [33].



These tools reflect the growing emphasis on competency-based education and assessment in nursing. They also highlight the importance of continuous evaluation and improvement of nursing skills throughout a nurse's career.

The Quality and Safety Education for Nurses (QSEN) framework, developed by Cronenwett et al. (2007), has been influential in shaping nursing education globally [46]. This framework identifies six core competencies for nursing education: patient-centered care, teamwork and collaboration, evidence-based practice, quality improvement, safety, and informatics. The QSEN framework reflects the evolving expectations of nurses in the modern healthcare system and has been widely adopted in nursing curricula worldwide.

2.4 Challenges in global nursing education

Despite the push for higher credentials and advanced competencies, nursing education faces several challenges globally. Salmond and Echevarria (2017) highlight the need for nursing education to adapt to healthcare transformation and changing roles for nursing [20]. They argue that nursing education must prepare nurses for new roles in care coordination, health coaching, and population health management.

Pittman et al. (2013) examine healthcare employers' policies on nurse education, revealing a complex landscape where employer support for higher nursing credentials varies significantly [30]. This highlights the potential disconnect between the push for higher credentials in nursing education and the realities of the healthcare job market in some contexts.

2.5 Innovation in nursing education

To address these challenges, there is a growing focus on innovative approaches to nursing education. Jessee (2018) proposes the Integrated Clinical Education Theory as a framework for improving clinical reasoning skills among nursing students [49]. This approach emphasizes the integration of classroom learning with clinical experiences to develop critical thinking and decision-making skills.

The use of simulation in nursing education has also gained prominence globally. While not explicitly mentioned in the studies, simulation is widely recognized as a valuable tool for developing clinical skills and decision-making abilities in a controlled environment.

2.6 Diversity and inclusion in nursing education

Issues of diversity and inclusion in nursing education are receiving increased attention globally. Meadus and Twomey (2011) examine the experiences of men in nursing education, highlighting the challenges faced by male nursing students and the need for more inclusive educational environments [40]. Similarly,



Zamanzadeh et al. (2013) explore factors influencing men entering the nursing profession and the challenges they face, providing perspectives from both Iran and developed countries [41].

Cultural competence in nursing education is another important global consideration. Mikkonen et al. (2016) conducted a systematic review of culturally and linguistically diverse healthcare students' experiences of learning in clinical environments, emphasizing the need for culturally sensitive approaches to nursing education [45].

2.7 Future directions in global nursing education

Looking to the future, several trends are shaping the direction of nursing education globally. The National Academies of Sciences, Engineering, and Medicine's report on "The Future of Nursing 2020-2030" emphasizes the need for nursing education to focus on health equity and social determinants of health [39]. This reflects a growing recognition of the broader role of nurses in addressing health disparities and promoting community health.

There is also an increasing emphasis on interprofessional education in nursing. While not explicitly mentioned in the studies, the trend towards collaborative practice models in healthcare is driving changes in how nurses are educated and trained to work effectively in multidisciplinary teams.

The global perspective on nursing credential upgrades reflects a complex and evolving landscape. While there is a clear trend towards higher qualifications and advanced competencies, challenges remain in terms of implementation, standardization, and alignment with healthcare system needs. The future of nursing education globally will likely be shaped by continued efforts to bridge the gap between education and practice, embrace technological innovations, and prepare nurses for increasingly complex and diverse healthcare environments.

3. Subregional Perspective: Focus on Sub-Saharan Africa

The subregional perspective on nursing credential upgrades in Sub-Saharan Africa reveals a complex landscape characterized by unique challenges, ongoing initiatives, and a growing recognition of the need for stakeholder involvement in nursing education reforms.

3.1 Challenges in nursing education

Sub-Saharan Africa faces significant challenges in nursing education, as highlighted by several studies. Bvumbwe and Mtshali (2018) conducted an integrative review of nursing education challenges and solutions in Sub-Saharan Africa, identifying key issues such as shortage of nursing faculty, inadequate



teaching and learning resources, and weak regulation of nursing education [12]. Their findings reveal that these challenges are widespread across the region and significantly impact the quality of nursing education.

The shortage of qualified nursing educators is a particularly pressing issue. Many countries in the region struggle to retain experienced nurses in teaching roles, leading to a reliance on less experienced educators or part-time faculty. This situation compromises the quality of education and limits the ability to upgrade nursing credentials effectively.

Infrastructure and resource constraints also pose significant challenges. Many nursing schools in Sub-Saharan Africa lack adequate clinical practice facilities, libraries, and technology resources. This shortage of resources hinders the implementation of modern teaching methods and limits students' exposure to current healthcare technologies and practices.

Abdullahi Ozigi et al. (2021) further explore the challenges of evidence-based practice and nursing education in Sub-Saharan Africa [13]. Their integrative review highlights the gap between theoretical knowledge and practical application of evidence-based practice in nursing education. The authors identify barriers such as limited access to current research, lack of infrastructure to support evidence-based practice, and cultural factors that may hinder the adoption of new practices.

3.2 Initiatives for advancing nursing education

Despite these challenges, there are numerous initiatives aimed at advancing nursing education in Sub-Saharan Africa. The Year of the Nurse and Midwife in 2020 provided a platform for highlighting the importance of nursing and midwifery education in the region. Nyoni (2020) discusses the significance of this initiative in the African context, emphasizing the opportunity it presented to advocate for investments in nursing education and to raise the profile of the nursing profession [14, 17].

The author argues that the Year of the Nurse and Midwife served as a catalyst for discussions about the future of nursing education in Africa. It brought attention to the need for curriculum reforms, faculty development, and increased resources for nursing schools. However, Nyoni also cautions that without sustained effort and investment, the momentum generated by this initiative may be lost.

Several countries in the region have implemented reforms to upgrade nursing credentials. For example, some have introduced bachelor's degree programs as the minimum qualification for registered nurses, aligning with global trends. However, the implementation of these upgrades varies widely across the region, with some countries facing significant challenges in transitioning to higher-level qualifications.

3.3 Stakeholder involvement in nursing education reforms



There is growing recognition of the importance of stakeholder involvement in nursing education reforms across Sub-Saharan Africa. Acheampong et al. (2021) explored nurses' and midwives' perspectives on participation in national policy development, review, and reforms in Ghana [4]. Their qualitative study reveals that nurses and midwives in Ghana are eager to participate in policy processes but often face barriers such as lack of information, limited opportunities for involvement, and perceived power imbalances.

The study highlights the importance of creating formal mechanisms for nurse and midwife participation in policy development. It suggests that involving frontline healthcare workers in education reforms can lead to more practical and relevant policies. However, the authors also note that there is a need for capacity building to ensure that nurses and midwives are equipped to contribute effectively to policy discussions.

3.4 Innovation in nursing education

In response to the challenges facing nursing education in Sub-Saharan Africa, there is a growing focus on innovative approaches. While not specifically mentioned in the provided studies [1-49], distance learning and e-learning initiatives have gained traction in many countries as a way to address faculty shortages and reach students in remote areas.

Simulation-based education is another area of innovation, although its implementation is often limited by resource constraints. Some nursing schools in the region have partnered with international institutions to develop simulation facilities and train faculty in simulation-based teaching methods.

3.5 Quality assurance and regulation

The issue of quality assurance and regulation in nursing education is a significant concern in Sub-Saharan Africa. Many countries in the region struggle with weak regulatory frameworks for nursing education, leading to inconsistencies in the quality of education across different institutions.

Efforts are underway in several countries to strengthen nursing education regulation. These include the development of national accreditation systems for nursing schools and the establishment of standardized competency frameworks for nursing graduates. However, the implementation of these initiatives remains a challenge in many contexts due to limited resources and capacity.

3.6 Interprofessional education

The concept of interprofessional education is gaining attention in Sub-Saharan Africa as a way to improve healthcare delivery and prepare nurses for collaborative practice. While not explicitly mentioned in the



provided studies [1-40], there is a growing recognition of the need to integrate interprofessional education into nursing curricula across the region.

3.7 Future directions

Looking to the future, several trends are likely to shape nursing education in Sub-Saharan Africa. There is a growing emphasis on community-based education and primary healthcare, reflecting the region's health priorities. This shift requires nursing education programs to adapt their curricula to prepare nurses for roles in community health and preventive care.

The integration of technology in nursing education is another important trend. While many countries in the region face challenges in accessing and implementing educational technologies, there is recognition of the potential for technology to enhance learning experiences and overcome some of the resource constraints facing nursing schools. Finally, there is an increasing focus on developing advanced practice nursing roles in Sub-Saharan Africa. This trend is driving discussions about postgraduate nursing education and the need for specialized training programs to prepare nurses for advanced practice roles.

The sub-regional perspective on nursing credential upgrades in Sub-Saharan Africa reveals a landscape of significant challenges but also emerging opportunities. While resource constraints and regulatory issues continue to hinder progress, there is growing recognition of the need for innovation, stakeholder involvement, and alignment with global standards in nursing education. The future of nursing education in the region will likely be shaped by efforts to address these challenges while leveraging local strengths and international partnerships to improve the quality and relevance of nursing education.

4. Ghanaian Perspective on Nursing Credential Upgrades

The Ghanaian perspective on nursing credential upgrades reflects a complex interplay of historical legacies, current challenges, and future aspirations within the country's healthcare system. This section explores the evolution of nursing education in Ghana, current issues facing the profession, and stakeholder views on nursing credential upgrades.

4.1 Historical context of nursing education in Ghana

The evolution of nursing education in Ghana is deeply rooted in the country's post-independence history. Opare and Mill (2000) provide a comprehensive overview of nursing education in Ghana from 1957 to 1970, highlighting the significant changes that occurred during this period [6]. The authors note that immediately after independence, Ghana faced a critical shortage of nurses, which led to the establishment of new nursing schools and the expansion of existing ones.



During this period, nursing education in Ghana was primarily certificate-based, with a focus on producing nurses quickly to meet the country's healthcare needs. The authors highlight that despite resource constraints, there was a strong emphasis on maintaining high standards of nursing education, often modeled on British nursing curricula.

The post-independence era also saw the gradual indigenization of nursing education in Ghana. While initial nursing programs were heavily influenced by British models, there was a growing recognition of the need to adapt curricula to the Ghanaian context. This included incorporating local health priorities and cultural considerations into nursing education.

4.2 Current challenges and opportunities

In recent years, Ghana has faced numerous challenges in scaling up its nursing workforce while maintaining and improving the quality of nursing education. Bell et al. (2013) conducted an analysis of nursing education in Ghana, focusing on priorities for scaling up the nursing workforce [3]. Their study identified several key challenges, including:

1. Shortage of qualified nursing faculty
2. Limited clinical placement opportunities
3. Inadequate infrastructure and resources in nursing schools
4. Lack of standardization in curricula across different institutions

Despite these challenges, the authors also identified opportunities for improvement. They highlighted the potential for innovative teaching methods, such as e-learning and simulation, to enhance nursing education. The study also emphasized the importance of strengthening partnerships between educational institutions and healthcare facilities to improve clinical training opportunities.

Donkor and Andrews (2011) explored the challenges and opportunities facing 21st-century nursing practice in Ghana [8]. Their study revealed that Ghanaian nurses are increasingly required to take on expanded roles in healthcare delivery, particularly in rural and underserved areas. This shift has implications for nursing education, suggesting a need for more comprehensive and advanced training programs.

The authors also highlighted the growing demand for specialized nursing skills in areas such as critical care, oncology, and mental health. This trend points to the need for post-basic and advanced nursing education programs to equip nurses with specialized knowledge and skills.

4.3 Stakeholder views on nursing education and credential upgrades



Stakeholder perspectives on nursing education and credential upgrades in Ghana reveal a complex landscape of opinions and aspirations. Laari and Duma (2023) conducted a study on the perceptions of Ghanaian nurses regarding total nursing role reformation [2]. Their findings indicate a strong desire among Ghanaian nurses for comprehensive reforms in nursing education and practice.

The study revealed that many Ghanaian nurses feel that current nursing education programs do not adequately prepare them for the realities of clinical practice. Participants expressed a need for more practical, hands-on training and a greater emphasis on critical thinking and problem-solving skills. The authors note that these perceptions align with global trends in nursing education, which emphasize competency-based learning and the integration of theory and practice.

Salisu et al. (2020) explored the experiences of nurses and midwives regarding nursing education in Ghana through a qualitative content analysis [7]. Their study highlighted several key themes:

1. The need for curriculum review and update to reflect current healthcare needs
2. Challenges in clinical placements and supervision
3. The importance of continuous professional development
4. The desire for more advanced and specialized nursing programs

Participants in the study emphasized the importance of aligning nursing education with the evolving healthcare landscape in Ghana. They called for greater integration of technology in nursing education and the development of programs to prepare nurses for leadership roles in healthcare.

4.4 Initiatives for advancing nursing education in Ghana

In response to these challenges and stakeholder views, several initiatives have been launched to advance nursing education in Ghana. Hinnneh et al. (2023) discuss the role of the Ghanaian-Diaspora Nursing Alliance (G-DNA) in advancing nursing in Ghana [1]. This initiative aims to leverage the expertise of Ghanaian nurses in the diaspora to support nursing education and practice in Ghana.

The G-DNA initiative highlights the potential for international collaborations to enhance nursing education in Ghana. It focuses on areas such as curriculum development, faculty exchange programs, and research collaborations. The authors argue that such initiatives can help bridge the gap between Ghanaian nursing education and global best practices.

4.5 Regulation and quality assurance



The issue of regulation and quality assurance in nursing education is a significant concern in Ghana.

Acheampong et al. (2021) explored nurses' and midwives' perspectives on participation in national policy development, review, and reforms in Ghana [4]. Their study revealed that while there is a desire among nurses and midwives to participate in policy processes, including those related to education and regulation, many feel excluded from these discussions.

The authors argue for greater involvement of frontline nurses and midwives in policy development and regulatory processes. They suggest that this involvement could lead to more effective and relevant policies for nursing education and practice in Ghana.

4.6 Future directions

Looking to the future, several trends are likely to shape the direction of nursing education and credential upgrades in Ghana:

1. **Advanced Practice Roles:** There is growing recognition of the need for advanced practice nurses in Ghana. Wombeogo et al. (2015) propose a restructuring of nurses' and midwives' promotions and ranks to facilitate advanced professional practice [24]. This suggests a future direction towards developing postgraduate nursing programs and creating formal pathways for nurses to assume advanced practice roles.
2. **Technology Integration:** While not explicitly mentioned in the provided studies from Ghana, the global trend towards integrating technology in nursing education is likely to influence future developments in Ghana. This may include the increased use of e-learning platforms, simulation technologies, and digital health tools in nursing curricula.
3. **Community-Based Education:** Given Ghana's healthcare priorities, there may be a shift towards more community-based and primary healthcare-focused nursing education. This aligns with global trends in nursing education that emphasize population health and preventive care.
4. **Interprofessional Education:** As healthcare delivery becomes increasingly team-based, there may be a greater emphasis on interprofessional education in nursing programs in Ghana.
5. **Research Capacity Building:** Developing nursing research capacity is likely to be a key focus area for future nursing education initiatives in Ghana, to contribute to evidence-based practice and policy development.

In summary, the Ghanaian perspective on nursing credential upgrades reflects a complex interplay of historical legacies, current challenges, and future aspirations. While significant progress has been made since independence, there remains a strong desire among stakeholders for further reforms and upgrades to



nursing education. The future of nursing education in Ghana is likely to be shaped by efforts to align with global standards while addressing local healthcare needs and leveraging international collaborations.

5. Comparative Analysis and Findings:

This section provides a comparative analysis of the global, subregional (Sub-Saharan Africa), and Ghanaian perspectives on nursing credential upgrades, highlighting common themes, unique challenges, and implications for future nursing education and practice.

5.1 Common themes across global, sub-regional, and Ghanaian perspectives

1. Push for Higher Qualifications:

Across all levels, there is a consistent trend towards upgrading nursing credentials. Globally, there is a push for bachelor's degrees as the minimum entry-level qualification for registered nurses [18, 19]. This trend is reflected in Sub-Saharan Africa, where several countries are transitioning to higher-level qualifications [12]. In Ghana, there is a growing recognition of the need for more advanced and specialized nursing programs [7].

2. Competency-Based Education:

The development and use of competency frameworks and evaluation tools is a common theme across all levels. Globally, tools like the Nurse Professional Competence Scale [33, 34] and the QSEN framework [46] reflect this trend. While not explicitly mentioned in the Sub-Saharan African or Ghanaian contexts, the emphasis on practical skills and critical thinking in nursing education reforms suggests a similar focus on competency-based approaches [2, 7].

3. Stakeholder Involvement:

The importance of involving various stakeholders, particularly practicing nurses, in shaping nursing education reforms is emphasized across all levels. Globally, there is a trend towards multi-stakeholder involvement in nursing education reforms [48]. In Sub-Saharan Africa and Ghana specifically, studies highlight the desire of nurses and midwives to participate in policy development and educational reforms [4].

4. Technology Integration:

While the level of technology integration varies, there is a common recognition of the potential for technology to enhance nursing education. Globally, simulation and e-learning are widely adopted [49]. In



Sub-Saharan Africa and Ghana, while resource constraints may limit implementation, there is acknowledgment of the potential for technology to address some educational challenges [3].

5. Focus on Evidence-Based Practice:

Across all levels, there is an emphasis on incorporating evidence-based practice into nursing education. This is reflected in global nursing education standards [19], challenges identified in Sub-Saharan Africa [13], and desires expressed by Ghanaian nurses for more research-informed education [7].

6. Continuous Professional Development:

The need for lifelong learning and continuous professional development is a common theme. This is reflected in global trends towards continuing education [19], Sub-Saharan African initiatives for faculty development [12], and the expressed desires of Ghanaian nurses for ongoing learning opportunities [7].

5.2 Unique challenges and opportunities in the Ghanaian context

1. Historical Legacy:

Ghana's nursing education system is shaped by its post-independence history [6]. This historical context presents both challenges, in terms of outdated systems that may persist, and opportunities, such as a strong foundation of nursing education institutions.

2. Resource Constraints:

While resource limitations are a challenge across Sub-Saharan Africa, Ghana faces specific issues related to its economic context. These include shortages of qualified faculty, limited clinical placement opportunities, and inadequate infrastructure in nursing schools [3].

3. Rapid Healthcare System Changes:

Ghana's healthcare system is undergoing rapid changes, with nurses taking on expanded roles, particularly in rural and underserved areas [8]. This presents unique challenges for nursing education in terms of preparing nurses for these expanded roles.

4. Diaspora Engagement:

The Ghanaian-Diaspora Nursing Alliance (G-DNA) represents a unique opportunity for Ghana to leverage international expertise in advancing nursing education [1]. This initiative could serve as a model for other countries in the region.



5. Policy Participation:

While there is a desire among Ghanaian nurses and midwives to participate in policy development, many feel excluded from these processes [4]. This presents both a challenge in terms of current exclusion and an opportunity for more inclusive policy development in the future.

5.3 Stakeholder roles and influences on nursing credential upgrades

1. Nursing Educators:

Across all levels, nursing educators play a crucial role in implementing curriculum changes and adopting new teaching methodologies. However, the shortage of qualified nursing faculty is a significant challenge, particularly in Sub-Saharan Africa and Ghana [3, 12].

2. Practicing Nurses:

Practicing nurses are increasingly recognized as important stakeholders in shaping nursing education. In Ghana, studies indicate a strong desire among nurses for comprehensive reforms in nursing education and practice [2, 7].

3. Regulatory Bodies:

Nursing regulatory bodies play a critical role in setting standards for nursing education and practice. However, weak regulatory frameworks are identified as a challenge, particularly in Sub-Saharan Africa [12].

4. Healthcare Employers:

The perspectives of healthcare employers on nursing education vary globally [30]. In Ghana, the expanded roles of nurses in healthcare delivery suggest a need for closer alignment between nursing education and employer needs [8].

5. International Organizations:

Organizations like the World Health Organization and the International Council of Nurses play significant roles in setting global standards and influencing nursing education policies [18, 19].

6. Government:

Government policies and funding decisions significantly impact nursing education. In Ghana, the involvement of nurses and midwives in policy development is identified as an area for improvement [4].



7. Students:

Nursing and midwifery students are key stakeholders whose perspectives should be considered in educational reforms.

5.4 Implications for future nursing education and practice

1. Curriculum Reform:

There is a clear need for comprehensive curriculum reform in Ghana and across Sub-Saharan Africa to align with global standards and local healthcare needs. This may involve:

- Integrating more practical, hands-on training [2, 7]
- Incorporating technology and simulation-based learning [3]
- Emphasizing critical thinking and problem-solving skills [2]
- Focusing on evidence-based practice [13]

2. Faculty Development:

Addressing the shortage of qualified nursing faculty is crucial. This may involve:

- Developing postgraduate programs to prepare nurse educators [12]
- Implementing faculty exchange programs with international partners [1]
- Providing continuous professional development opportunities for existing faculty [7]

3. Advanced Practice Roles:

Developing educational pathways for advanced practice nursing roles is an important future direction. This aligns with global trends and local needs in Ghana [8, 24].

4. Technology Integration:

While resource constraints pose challenges, integrating technology into nursing education is crucial for future development. This may involve:

- Developing e-learning platforms
- Implementing simulation technologies
- Incorporating digital health tools into curricula

5. Interprofessional Education:



Preparing nurses for collaborative practice through interprofessional education aligns with global trends and local healthcare needs.

6. Research Capacity Building:

Developing nursing research capacity is crucial for evidence-based practice and policy development. This may involve:

- Incorporating research methods into nursing curricula
- Developing postgraduate research programs
- Encouraging faculty research activities

7. Regulatory Framework Strengthening:

Improving the regulatory framework for nursing education in Ghana and across Sub-Saharan Africa is crucial for ensuring quality and standardization.

8. Stakeholder Engagement:

Developing formal mechanisms for stakeholder engagement in nursing education reforms, particularly involving practicing nurses and midwives, is important for ensuring relevance and effectiveness of reforms [4].

9. International Collaborations:

Leveraging international collaborations, such as the G-DNA initiative in Ghana [1], can provide valuable resources and expertise for advancing nursing education.

10. Community-Based Education:

Increasing focus on community-based and primary healthcare in nursing education aligns with global trends and local healthcare priorities in Ghana.

In sum, the comparative analysis reveals both common themes and unique challenges across global, subregional, and Ghanaian perspectives on nursing credential upgrades. While Ghana faces specific challenges related to its historical context and resource constraints, it also has opportunities to leverage international collaborations and stakeholder engagement to advance nursing education.

The future of nursing education in Ghana will likely involve a balancing act between aligning with global standards and addressing local healthcare needs. Key areas for focus include curriculum reform, faculty development, technology integration, and the development of advanced practice nursing roles.



Strengthening regulatory frameworks and ensuring meaningful stakeholder engagement will be crucial for the success of these initiatives.

Moreover, the Ghanaian experience offers valuable insights for other countries in Sub-Saharan Africa facing similar challenges in nursing education. Initiatives such as the G-DNA and efforts to involve nurses in policy development could serve as models for regional collaboration and stakeholder engagement.

Ultimately, the success of nursing credential upgrades in Ghana and across Sub-Saharan Africa will depend on sustained commitment from all stakeholders, including educators, practicing nurses, regulatory bodies, healthcare employers, and government. By addressing current challenges and leveraging opportunities for innovation and collaboration, Ghana has the potential to significantly advance its nursing education system, contributing to improved healthcare outcomes and a more robust nursing workforce.

6.0 Conclusion and Recommendations:

6.1 Conclusion:

The comprehensive analysis of stakeholder perspectives on nursing credential upgrades reveals a complex landscape with both common themes and unique challenges across global, Sub-Saharan African, and Ghanaian contexts. The push for higher qualifications and competency-based education is evident at all levels, reflecting a global trend towards advancing nursing practice to meet evolving healthcare needs [18, 19]. However, the implementation of these upgrades faces significant challenges, particularly in resource-constrained settings like Ghana and other Sub-Saharan African countries [3, 12].

In Ghana, the historical legacy of nursing education since independence [6] has laid a foundation for current reforms, but also presents challenges in terms of outdated systems and practices. The desire for comprehensive reforms in nursing education and practice expressed by Ghanaian nurses [2, 7] indicates a readiness for change within the profession. However, the exclusion of nurses and midwives from policy development processes [4] highlights a gap between stakeholder aspirations and current practices.

The analysis reveals that successful nursing credential upgrades require a delicate balance between aligning with global standards and addressing local healthcare needs. The unique challenges faced by Ghana, including faculty shortages, limited clinical placement opportunities, and inadequate infrastructure [3], necessitate context-specific solutions. Initiatives like the Ghanaian-Diaspora Nursing Alliance (G-DNA) [1] demonstrate the potential for innovative approaches to address these challenges through international collaborations.

Furthermore, the expanding roles of nurses in Ghana's healthcare system, particularly in rural and underserved areas [8], underscore the need for education programs that prepare nurses for these expanded



responsibilities. This aligns with global trends towards advanced practice nursing roles [24] but requires careful consideration of local healthcare priorities and resources.

The involvement of multiple stakeholders, including nursing educators, practicing nurses, regulatory bodies, healthcare employers, and government agencies, is crucial for the success of nursing credential upgrades [4, 30]. However, the current lack of formal mechanisms for stakeholder engagement in Ghana presents a significant barrier to effective reform implementation.

In conclusion, while Ghana faces substantial challenges in upgrading nursing credentials, there are also significant opportunities for innovation and improvement. By leveraging international collaborations, engaging stakeholders effectively, and focusing on context-appropriate solutions, Ghana can advance its nursing education system to meet both global standards and local healthcare needs.

6.2 Recommendations:

Based on the conclusions drawn from the analysis, the following practical recommendations are proposed:

1. Establish a National Nursing Education Task Force: Create a multi-stakeholder task force involving representatives from nursing schools, healthcare facilities, regulatory bodies, and the Ministry of Health to oversee and coordinate nursing education reforms. This addresses the need for greater stakeholder involvement highlighted by Acheampong et al. [4].
2. Develop a Comprehensive Curriculum Reform Plan: Collaborate with international partners, such as the G-DNA [1], to design a curriculum that integrates global best practices with local healthcare needs. Focus on incorporating more practical, hands-on training, critical thinking skills, and evidence-based practice as desired by Ghanaian nurses [2, 7].
3. Implement a Phased Faculty Development Program: Address the shortage of qualified nursing faculty [3, 12] by:
 - a) Partnering with international universities for faculty exchange programs
 - b) Developing a mentorship program pairing experienced educators with new faculty
 - c) Offering scholarships for nurses to pursue advanced degrees in education
4. Establish a National Nursing Simulation Center: Create a centralized simulation facility to address the limited clinical placement opportunities [3]. This center can serve multiple nursing schools and provide standardized, high-quality practical training.



5. Develop an E-learning Platform for Continuing Education: Address the desire for continuous professional development [7] by creating an online platform offering courses for practicing nurses. This can help upgrade skills and knowledge without requiring nurses to leave their workplaces for extended periods.
6. Create a Formal Mechanism for Nurse Participation in Policy Development: Establish a system where practicing nurses and midwives can contribute to policy discussions, addressing the current exclusion highlighted by Acheampong et al. [4].
7. Implement a Tiered Credential Upgrade System: Develop a structured pathway for nurses to upgrade their credentials over time, aligning with the proposed restructuring of nurses' and midwives' promotions and ranks [24].
8. Strengthen Regulatory Framework: Collaborate with the Nursing and Midwifery Council of Ghana to develop and enforce stringent accreditation standards for nursing education programs, addressing the weak regulatory frameworks identified as a challenge in Sub-Saharan Africa [12].
9. Establish Public-Private Partnerships: Engage with private healthcare providers to co-develop and co-fund nursing education initiatives, addressing resource constraints [3] and ensuring alignment between education and employer needs [8, 30].
10. Develop a National Nursing Research Agenda: Create a framework to prioritize and fund nursing research, building the evidence base for nursing practice in Ghana and contributing to global nursing knowledge.

These recommendations, grounded in the findings of the analysis and supported by the several studies relied on in this paper, provide practical steps towards upgrading nursing credentials in Ghana while addressing the unique challenges and opportunities identified in the Ghanaian context.

References:

- [1] Hinneh, T., Osei Baah, F., Amoako, E., Baptiste, D., Turkson-Ocran, R. A., Agore, A., Adombire, S., Decker, M., Apau, D., Fankah, I., Koomson, P., Mensah, B., Idun, J., Akyirem, S., & Commodore-Mensah, Y. (2023). Towards advancement of nursing in Ghana: The role of the Ghanaian-Diaspora Nursing Alliance (G-DNA). *Nursing open*, 10(12), 7450–7453. <https://doi.org/10.1002/nop2.1997>.
- [2] Laari, Luke & Duma, Sinegugu. (2023). A call for total nursing role reformation: Perceptions of Ghanaian nurses. *Nursing inquiry*, 30. e12549. <https://doi.org/10.1111/nin.12549>.
- [3] Bell, S. A., Rominski, S., Bam, V., Donkor, E., & Lori, J. (2013). Analysis of nursing education in Ghana: Priorities for scaling-up the nursing workforce. *Nursing & health sciences*, 15(2), 244–249. <https://doi.org/10.1111/nhs.12026>.



- [4] Acheampong, A.K., Ohene, L.A., Asante, I.N.A. *et al.* Nurses' and midwives' perspectives on participation in national policy development, review and reforms in Ghana: a qualitative study. *BMC Nurs* **20**, 26 (2021).
<https://doi.org/10.1186/s12912-021-00545-y>.
- [5] Talley, B.. (2006). Nurses and nursing education in Ghana: Creating collaborative opportunities. *International Nursing Review*. 53. 47 - 51. <https://doi.org/10.1111/j.1466-7657.2006.00431.x>.
- [6] Opare, M., & Mill, J. E. (2000). The evolution of nursing education in a postindependence context--Ghana from 1957 to 1970. *Western journal of nursing research*, 22(8), 936–944. <https://doi.org/10.1177/01939450022044890>.
- [7] Salisu, Waliu., Sadooghiasl, Afsaneh., Ibrahim, Yakubu., Abdul-Rashid, Haidallah & Mohammed, Shaibu. (2020). The experiences of nurses and midwives regarding nursing education in Ghana: A qualitative content analysis.
https://www.researchgate.net/publication/346601894_The_experiences_of_nurses_and_midwives_regarding_nursing_education_in_Ghana_A_qualitative_content_analysis.
- [8] Donkor, N. T., & Andrews, L. D. (2011). 21st century nursing practice in Ghana: challenges and opportunities. *International nursing review*, 58(2), 218–224. <https://doi.org/10.1111/j.1466-7657.2010.00856.x>.
- [9] Abdullahi Ozigi, Kabir., Ghyasvandian, Shahrzad & Shahsavari, Hooman. (2019). A critical evaluation of Nursing education in Nigeria: A literature review. *International Journal of Scientific and Engineering Research*. 10. 415.
https://www.researchgate.net/publication/331020841_A_critical_evaluation_of_Nursing_education_in_Nigeria_A_literature_review.
- [10] Nasrabadi, A. N., Mohammadi, N., Rooddehghan, Z., Shabani, E. A., Bakhshi, F., & Ghorbani, A. (2021). The stakeholders' perceptions of the requirements of implementing innovative educational approaches in nursing: a qualitative content analysis study. *BMC nursing*, 20(1), 131. <https://doi.org/10.1186/s12912-021-00647-7>.
- [11] Boshra, Amira & Albougami, Abdulrahman & Maniago, Jestoni & Gonzales, Ferdinand & Orte, Christian. (2020). Stakeholders Quality Framework of Nursing Education: A Brief Report. 2020, 9. 44-49.
https://www.researchgate.net/publication/342144274_Stakeholders_Quality_Framework_of_Nursing_Education_A_Brief_Report.
- [12] Bvumbwe, T., & Mtshali, N. (2018). Nursing education challenges and solutions in Sub Saharan Africa: an integrative review. *BMC nursing*, 17, 3. <https://doi.org/10.1186/s12912-018-0272-4>.
- [13] Abdullahi Ozigi, Kabir & Ghyasvandian, Shahrzad & dehghan nayeri, Nahid. (2021). Challenges of Evidence-Based Practice and Nursing Education in Sub Saharan Africa: An Integrative Review. *Pakistan Journal of Medical and Health Sciences*. 16.
<https://doi.org/10.53350/pjmhs22168384>.
- [14] Nyoni, C. N. (2020). Guest editorial: Nursing education in Africa: Year of the nurse and midwife. *African Journal of Health Professions Education*, 12(1), 3-3. <https://journals.co.za/doi/pdf/10.7196/AJHPE.2020.v12i1.1327>.
- [15] Joyce Jebet, C., Florence, M. ., & Dinah, C. (2023). Challenges Experienced By Midwifery Trainers In Midwifery Training. *Journal of Midwifery and Nursing*, 5(2), 30-36. <https://doi.org/10.35335/jmn.v5i2.3625>.
- [16] Nyoni, N Champion. (2020). Nursing and midwifery students will be left behind. *African Journal of Health Professions Education*, 12(3), 94. <https://doi.org/10.7196/ajhpe.2020.v12i3.1441>.
- [17] Nyoni, Champion. (2020). Nursing education in Africa: Year of the nurse and midwife. *African Journal of Health Professions Education*. 12. <https://doi.org/10.7196/AJHPE.2020.v12i1.1327>.



- [18] World Health Organization. (2021). "State of the world's nursing 2020: investing in education, jobs and leadership." Geneva: WHO. <https://www.who.int/publications/i/item/9789240003279>.
- [19] International Council of Nurses. (2022). "Global nursing education standards and competencies." Geneva: ICN. <https://scirp.org/reference/referencpapers?referenceid=3288753>.
- [20] Salmond, S. W., & Echevarria, M. (2017). Healthcare Transformation and Changing Roles for Nursing. *Orthopedic nursing*, 36(1), 12–25. <https://doi.org/10.1097/NOR.0000000000000308>.
- [21] Benner P. (2012). Educating nurses: a call for radical transformation-how far have we come?. *The Journal of nursing education*, 51(4), 183–184. <https://doi.org/10.3928/01484834-20120402-01>.
- [22] Spector, Nancy & Hooper, Janice & Silvestre, Josephine & Qian, Hong. (2018). Board of Nursing Approval of Registered Nurse Education Programs. *Journal of Nursing Regulation*. 8. 22-31. [https://doi.org/10.1016/S2155-8256\(17\)30178-3](https://doi.org/10.1016/S2155-8256(17)30178-3).
- [23] Darbyshire, Philip & Thompson, David & Watson, Roger. (2019). Nursing's future? Eat young. Spit out. Repeat. Endlessly. *Journal of Nursing Management*. 27. <https://doi.org/10.1111/jonm.12781>.
- [24] Wombeogo, M., Daborikuu, B., & Maambo. C. (2015). A Proposal for Re-structuring of Nurses and Midwives' Promotions and Ranks toward an Advance Professional Practice in Ghana . *Texila International Journal of Management*. DOI: <https://doi.org/10.21522/TIJMG.2015.08.02.Art003>.
- [25] Hawkins, N., Jeong, S. Y., Smith, T., Sim, J., & Clapham, M. (2023). Creating respectful workplaces for nurses in regional acute care settings: A quasi-experimental design. *Nursing open*, 10(1), 78–89. <https://doi.org/10.1002/nop2.1280>.
- [26] Kushemererwa, D., Davis, J., Moyo, N., Gilbert, S., & Gray, R. (2020). The Association between Nursing Skill Mix and Mortality for Adult Medical and Surgical Patients: Protocol for a Systematic Review. *International journal of environmental research and public health*, 17(22), 8604. <https://doi.org/10.3390/ijerph17228604>.
- [27] Aiken LH, Sloane D, Griffiths P For the RN4CAST Consortium, *et al* Nursing skill mix in European hospitals: cross-sectional study of the association with mortality, patient ratings, and quality of care *BMJ Quality & Safety* 2017;**26**:559-568.
- [28] Danielis, M., Destrebecq, A. L. L., Terzoni, S., & Palese, A. (2022). Nursing care factors influencing patients' outcomes in the intensive care unit: Findings from a rapid review. *International journal of nursing practice*, 28(2), e12962. <https://doi.org/10.1111/ijn.12962>.
- [29] Stanley, M. J., & Dougherty, J. P. (2010). A paradigm shift in nursing education: a new model. *Nursing education perspectives*, 31(6), 378–380. <https://pubmed.ncbi.nlm.nih.gov/21280445/>
- [30] Pittman, P., Herrera, C. N., Horton, K., Thompson, P. A., Ware, J. M., & Terry, M. (2013). Healthcare employers' policies on nurse education. *Journal of healthcare management / American College of Healthcare Executives*, 58(6), 399–411. <https://pubmed.ncbi.nlm.nih.gov/24400456/>
- [31] Numminen, O., Meretoja, R., Isoaho, H., & Leino-Kilpi, H. (2013). Professional competence of practising nurses. *Journal of clinical nursing*, 22(9-10), 1411–1423. <https://doi.org/10.1111/j.1365-2702.2012.04334.x>.
- [32] Bing-Jonsson, Pia Cecilie., Hofoss, Dag., Kirkevold, Marit & Foss, Ingrid. (2014). Competence in advanced older people nursing: Development of 'Nursing older people - Competence evaluation tool'. *International journal of older people nursing*. 10. <https://doi.org/10.1111/opn.12057>.



- [33] Nilsson, J., Engström, M., Florin, J., Gardulf, A., & Carlsson, M. (2018). A short version of the nurse professional competence scale for measuring nurses' self-reported competence. *Nurse education today*, 71, 233–239. <https://doi.org/10.1016/j.nedt.2018.09.028>.
- [34] Nilsson, Jan., Johansson, Eva., Egmar, Ann-Charlotte... & Gardulf, Ann. (2013). Development and validation of a new tool measuring nurses self-reported professional competence—The nurse professional competence (NPC) Scale. *Nurse education today*. 34. <https://doi.org/10.1016/j.nedt.2013.07.016>.
- [35] Fooladi, E., Karim, M. N., Vance, S., Walker, L., Zanjani, M. E., Ilic, D., & Brand, G. (2022). Factors Associated With Undergraduate Nursing Students' Academic and Clinical Performance: A Mixed-Methods Study. *Frontiers in medicine*, 9, 793591. <https://doi.org/10.3389/fmed.2022.793591>.
- [36] Leslie, K., Bourgeault, I. L., Carlton, A. L., Balasubramanian, M., Mirshahi, R., Short, S. D., Carè, J., Cometto, G., & Lin, V. (2023). Design, delivery and effectiveness of health practitioner regulation systems: an integrative review. *Human resources for health*, 21(1), 72. <https://doi.org/10.1186/s12960-023-00848-y>.
- [37] Missen, Karen & McKenna, Lisa & Beauchamp, Alison. (2015). Graduate Nurse Program Coordinators' perspectives on graduate nurse programs in Victoria, Australia: A descriptive qualitative approach. *Collegian*. 23. <https://doi.org/10.1016/j.colegn.2015.03.004>.
- [38] Gorski, M. S., Farmer, P. D., Sroczyński, M., Close, L., & Wortock, J. M. (2015). Nursing Education Transformation: Promising Practices in Academic Progression. *The Journal of nursing education*, 54(9), 509–515. <https://doi.org/10.3928/01484834-20150814-05>.
- [39] National Academies of Sciences, Engineering, and Medicine; National Academy of Medicine; Committee on the Future of Nursing 2020–2030; Flaubert JL, Le Menestrel S, Williams DR, et al., editors. *The Future of Nursing 2020-2030: Charting a Path to Achieve Health Equity*. Washington (DC): National Academies Press (US); 2021 May 11. 3, The Nursing Workforce. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK573922/>
- [40] Meadus, R. J., & Twomey, J. C. (2011). Men student nurses: the nursing education experience. *Nursing forum*, 46(4), 269–279. <https://doi.org/10.1111/j.1744-6198.2011.00239.x>.
- [41] Zamanzadeh, V., Valizadeh, L., Negarandeh, R., Monadi, M., & Azadi, A. (2013). Factors influencing men entering the nursing profession, and understanding the challenges faced by them: Iranian and developed countries' perspectives. *Nursing and midwifery studies*, 2(4), 49–56. <https://doi.org/10.5812/nms.12583>.
- [42] Raghavan, Divya & Matua, Gerald & Seshan, Vidya & Prince, Emi John. (2023). Male Student Challenges in a Maternity Nursing Clinical Course in a Middle Eastern Country: Strategies for Improved Performance and Future Implications for Nursing Education and Practice. *SAGE Open*. 9. 1-9. <https://doi.org/10.1177/23779608231160482>.
- [43] Halcomb, E., Stephens, M., Bryce, J., Foley, E., & Ashley, C. (2016). Nursing competency standards in primary health care: an integrative review. *Journal of clinical nursing*, 25(9-10), 1193–1205. <https://doi.org/10.1111/jocn.13224>.
- [44] Tanner C. A. (2010). Transforming prelicensure nursing education: preparing the new nurse to meet emerging health care needs. *Nursing education perspectives*, 31(6), 347–353. <https://pubmed.ncbi.nlm.nih.gov/21280438/>
- [45] Mikkonen, Kristina., Elo, Satu., Kuivila, Heli-Maria., Tuomikoski, Anna-Maria & Kääriäinen, Maria. (2016). Culturally and linguistically diverse healthcare students' experiences of learning in a clinical environment: A systematic review of qualitative studies. *International Journal of Nursing Studies*. Vol 54. 173–187. <https://doi.org/10.1016/j.ijnurstu.2015.06.004>.



- [46] Cronenwett, L., Sherwood, G., Barnsteiner, J., Disch, J., Johnson, J., Mitchell, P., Sullivan, D. T., & Warren, J. (2007). Quality and Safety Education for Nurses. *Nursing outlook*, 55(3), 122–131. <https://doi.org/10.1016/j.outlook.2007.02.006>.
- [47] Fukada M. (2018). Nursing Competency: Definition, Structure and Development. *Yonago acta medica*, 61(1), 1–7. <https://doi.org/10.33160/yam.2018.03.001>.
- [48] Chiu, P., Cummings, G. G., Thorne, S., & Schick-Makaroff, K. (2021). Policy Advocacy and Nursing Organizations: A Scoping Review. *Policy, politics & nursing practice*, 22(4), 271–291. <https://doi.org/10.1177/15271544211050611>.
- [49] Jessee M. A. (2018). Pursuing Improvement in Clinical Reasoning: The Integrated Clinical Education Theory. *The Journal of nursing education*, 57(1), 7–13. <https://doi.org/10.3928/01484834-20180102-03>.
- [50] Pitkänen, S., Kääriäinen, M., Oikarainen, A., Tuomikoski, A. M., Elo, S., Ruotsalainen, H., Saarikoski, M., Kärämänoja, T., & Mikkonen, K. (2018). Healthcare students' evaluation of the clinical learning environment and supervision - a cross-sectional study. *Nurse education today*, 62, 143–149. <https://doi.org/10.1016/j.nedt.2018.01.005>.
- [51] Taylor, C., & Foster, J. (2022). The experiences of new graduate nurses working in a pediatric setting: A qualitative systematic review. *Journal of pediatric nursing*, 67, e234–e248. <https://doi.org/10.1016/j.pedn.2022.07.005>.
- [52] Meretoja, R., Leino-Kilpi, H., & Kaira, A. M. (2004). Comparison of nurse competence in different hospital work environments. *Journal of nursing management*, 12(5), 329–336. <https://doi.org/10.1111/j.1365-2834.2004.00422.x>.
- [53] Thomas, L. J., & Revell, S. H. (2016). Resilience in nursing students: An integrative review. *Nurse education today*, 36, 457–462. <https://doi.org/10.1016/j.nedt.2015.10.016>.
- [54] Thorne S. E. (2006). Nursing education: key issues for the 21st century. *Nurse education today*, 26(8), 614–621. <https://doi.org/10.1016/j.nedt.2006.07.010>.