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Ndirangu-Mugo, Eunice; Kimani, Rachel Wangari; Onyancha, Catherine; Mutwiri, Benard Daniel; May, Beatrice; Kambo, Isabel

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LITERATURE REVIEW

Scopes of practice for advanced practice nursing and advanced practice midwifery in Kenya: A gap analysis

Eunice Ndirangu-Mugo PhD, Professor[1] | **Rachel Wangari Kimani PhD**[1] | **Catherine Onyancha MSN, Project Coordinator, Nursing Platform**[1,2] | **Benard Daniel Mutwiri BSc, Research and Advancement Specialist**[1] | **Beatrice May MSN, Program Manager, Nursing Platform**[1] | **Isabel Kambo MSN, Associate Dean**[1] | **Edna Tallam MSN, Chief Executive Officer**[2] | **Nicholas Koech BA, Project Officer, Nursing Platform**[1] | **Ann Mukuna MSN, Assistant Registrar**[2] | **Colette Henderson BSc, MSc(ANP), Lecturer**[3] | **Constance Sibongile Shumba PhD**[1]

[1]School of Nursing and Midwifery, Aga Khan University, Nairobi, Kenya

[2]Nursing Council of Kenya, Nairobi, Kenya

[3]School of Health Sciences, University of Dundee, Scotland, UK

Correspondence
Prof. Eunice Ndirangu-Mugo, School of Nursing and Midwifery, Aga Khan University-Kenya, PO Box 39340-00623, Nairobi, Kenya.
Email: eunice.ndirangu@aku.edu

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Abstract

Background: There is increasing global evidence on the impact of advanced nursing and midwifery practitioners, and Kenya's healthcare system has an excellent opportunity to develop scopes of practice and other regulatory frameworks for the integration of these roles.

Objective: The primary purpose of this gap analysis was to explore the existing evidence on opportunities and threats toward the integration of the advanced practice nursing (APN) and advanced practice midwifery (APM) roles in Kenya's healthcare system.

Methods: The study team conducted a structured electronic database search of PubMed, CINAHL, Scopus, EBSCOhost Academic Search Complete, and PsycINFO to retrieve articles and credible websites for reports highlighting the opportunities and threats toward the integration of the APN and APM roles in Kenya's healthcare systems. The retrieved articles were screened for relevance and synthesized for reporting using the traditional literature review approach.

Results: The Kenya Health Policy Framework 2014–2030, growing population needs, and implementation of universal health coverage provide an opportunity to harness and leverage advanced practice roles in nursing and midwifery. There is also momentum to develop advanced practice because of strategic alliances and global evidence showing the contributions and quality of services offered by advanced practice nurses and advanced practice midwives. However, lack of financial support, structural challenges, and lack of national policies, regulations, and legislation continue to obstruct progress.

Conclusion and implications for nursing policy: Developing scopes of practice for APN and APM in Kenya will benefit the professions, the country's healthcare delivery system, and the population. Achieving universal health coverage depends on a health workforce trained and practicing at optimal levels in tandem with education and training to deliver quality care.

KEYWORDS

Advanced practice, credentialing, nursing, nursing education, nursing legislation, nursing policy, nursing regulation, nursing roles, policy, registration

BACKGROUND

A scope of practice defines boundaries within which qualified health professional groups are permitted to offer their services and functions in tandem with their legal practicing license (ICN, 2020; Schober et al., 2020). The World Health Organization (WHO) recommended that countries develop rational scopes of practice to enable healthcare workers to operate at the full scope of their profession and avoid underutilization of skills (WHO, 2021). Emerging trends in healthcare, current evidence, and lessons learned during community and clinical practice inform nurses' and midwives' scopes of practice. To function effectively, nurses and midwives need an enabling environment with appropriate and adequate resources within legally recognized scopes of practice that are aligned with all relevant legislation (NCK, 2012). However, although global nursing bodies such as the International Council of Nurses (ICN) have defined roles and responsibilities for advanced nursing practice (ANP) (Casey et al., 2015; Fox-Young & Ashley, 2010; Sharma et al., 2013), little is known about existing gaps in integration of APN or advanced practice midwifery (APM) roles, especially in sub-Saharan Africa (SSA).

Global context

The ICN defined the APN as a "nurse who has acquired the expert knowledge base, complex decision-making skills and clinical competencies for expanded practice, the characteristics of which are shaped by the context and/or country in which he/she is credentialed to practice" (ICN, 2020, p. 9). A master's degree is recommended for entry into practice. Conditions necessary for APNs to practice in health services include educational preparation at an advanced level for formal recognition; a role that integrates research, education, practice, and management; a high degree of professional autonomy; advanced assessment, diagnostic, and decision-making skills; and a role that is accredited, certified, and licensed (ICN, 2020; Stewart et al., 2020). Although international consensus around a definition of APM is currently unclear, key attributes of this practice include autonomy, expertise in delivering care to women, leadership, research, and preparation at the master's level (Goemaes et al., 2016; Litchman et al., 2018; Stanley et al., 2009).

The APN and APM roles are underpinned by regulations and policies that provide authority to diagnose, prescribe medications, order diagnostic testing, and therapeutic treatments, refer clients and patients to other hospitals or healthcare service providers, and admit and discharge patients and clients (Fox-Young & Ashley, 2010; Kennedy et al., 2015; Smith et al., 2010; Wilson et al., 2018). Furthermore, the regulations and policies must confer, recognize, and protect the titles of nurses and midwives practicing at an advanced level (Fox-Young & Ashley, 2010; Heale & Rieck Buckley, 2015; Ryley & Middleton, 2016; Scanlon et al., 2012). Institutions regulating nursing and midwifery practice in different countries should provide clear regulation by defining the scopes of practice and licensing and credentialing requirements for APNs and APMs (ICN, 2020; Stewart et al., 2020; Wilson et al., 2018).

The need for specialized nursing emerged in the 19th and 20th centuries following the growth of hospitals, development of medical specialties, evolution of technology, and provision of increasingly complex healthcare services. In the United States, the first APN roles were nurse anesthetists and nurse midwives in the 1940s, followed by psychiatric nurses in the 1950s. Later, the nurse practitioner role emerged in the 1960s because of a shortage of primary care providers in rural communities (Carter, 2010; Jokiniemi et al., 2012; Maier et al., 2017). Similarly, the development of the APN role in Europe and Asia was triggered by increased demand for health services (Sheer & Wong, 2008). However, the novelty of these roles means there have been challenges in granting APNs/APMs legal and formal mandates to practice.

The APN and APM roles have evolved amid complexities, misinterpretations and challenges. A framework that identified capabilities associated with advanced clinical practice, leadership, management, education and research was developed in 2017 (Doherty et al., 2018). The consensus model developed in the United States provided a simplified and unified toolkit to advocate for the regulation of APNs. This model addressed uniformity of licensure, certification, accreditation, and educational standards (Williams, 2010) and identified four practice roles: Certified registered nurse practitioners, certified registered nurse anesthetists, certified nurse midwives, and certified nurse specialists. The ICN has provided directions and clarifications on titles and what is expected of APNs (ICN, 2020). Similarly, the International Council of Midwives has provided directions on the independence and autonomy of APMs (ICM, 2017).

Globally, the APN role is expanding as the health workforce responds to 21st-century needs (Alotaibi & Al Anizi, 2020; Bryant-Lukosius et al., 2004, 2015; Goemaes et al., 2016; ICN, 2020; Iglehart, 2013; Maier et al., 2017). A substantive body of literature has outlined increasing trends in advanced roles for nurses combined with many innovations in task-sharing with medical professionals and other health workforce cadres (Carter et al., 2010; Delamaire & Lafortune, 2010; Iglehart, 2013; Jokiniemi et al., 2012; Maier et al., 2017). APNs and APMs are educated to perform a range of roles with established competencies to diagnose, prescribe, undertake a range of procedures, and develop and lead health services (Bryant-Lukosius & DiCenso, 2004; Delamaire & Lafortune, 2010; Maier et al., 2017; Spoelstra & Robbins, 2010). As populations expand and age worldwide, governments are increasingly looking to the nursing workforce to meet health service demand and population needs; this scenario is increasingly evident in SSA.

Research on the impacts of the APN role across different settings has demonstrated that APNs make positive contributions to patient outcomes (Coster et al., 2018). For example, APN-led primary health care (PHC) services are considered safe and effective and comparable with those offered by physicians (Woo et al., 2022). These reviews also established that APN- and nurse-led clinics in PHC settings had reduced mortality and hospital admissions, and increased patient satisfaction (McQueen, 2020). Studies conducted in acute settings also suggested that APN-led services improved clinical outcomes, shortened the length of hospital stay, improved quality of care and patient satisfaction, and reduced healthcare costs (Calero et al., 2019; Xu et al., 2022).

Currently, although up to 80 countries around the world have recognized and embraced the APN and APM roles, few countries have established regulated scopes of practice (Fong et al., 2020; Gardner et al., 2021; Giwa et al., 2020; Goemaes et al., 2016; Hudspeth & Klein, 2019; Pulcini et al., 2010; Schober, 2018; Smith et al., 2010). Despite differences in the nomenclature, role, and scope of practice of APNs within and between countries, the clinical nurse specialist and nurse practitioner roles remain the two most common advanced roles (Carney, 2016; Giwa et al., 2020; Hudspeth & Klein, 2019; Schober, 2018; Schober et al., 2020; Stewart et al., 2020). Globally, the APN role is still in the formative stage. However, countries with advanced healthcare systems are embracing APN and APM roles, which enables these healthcare professionals to take up more tasks as they work toward providing cost-effective and quality healthcare. APNs and APMs provide care in various settings, including community health, government positions, hospitals, nursing homes, and clinics (Carney, 2016).

Kenyan context

Nursing and midwifery practice in Kenya faces systemic challenges that stifle both the delivery of healthcare services to the community and the professional development of nurses and midwives (Maina et al., 2022). The overarching challenge is the absence of a comprehensive policy that governs nursing and midwifery practice (Ndirangu et al., 2021) despite the presence of public, regulatory, and professional institutions, such as the Ministry of Health, Nursing Council of Kenya, National Nurses Association of Kenya, Midwives Association of Kenya, and Kenya Progressive Nurses Association. It is important to note that the Kenya 2010 Constitution has several articles that bear implications for the health sector regarding access to quality care and the rights of clients, which requires nurses and midwives to expand their practice mandates to offer services aligned with their education and skills (Schober et al., 2020).

Currently, the majority of the nursing and midwifery workforce in Kenya perform at advanced levels despite a lack of advanced training, as more than 85% only have certificate- and diploma-level qualifications. Despite undertaking many of the activities associated with advanced roles as widely understood in the international literature, ANP is not present and streamlined in Kenya. In addition, professional regulations and regulatory systems reflecting the expanding roles of midwives and nurses in the service setting are lacking. Regulation through registration, licensure, and scopes of practice is only available for certificate-, diploma-, and bachelor's degree-trained nurses and midwives. This gap means that graduate- and PhD-qualified and trained nurses and midwives move into management and education as there is little opportunity for advancement in clinical practice (East et al., 2014).

Furthermore, although a growing number of Kenyan universities offer nursing and midwifery education at graduate and doctorate levels, the training is not standardized and the roles of these cadres are not recognized in the healthcare delivery system (Msuya et al., 2017). Therefore, Kenya continues to face challenges in improving the quality of maternal, newborn, and child health against a backdrop of a scarce skilled workforce (Gitobu et al., 2018; Kimani et al., 2020), with a maternal mortality rate of 362 deaths per 100,000 live births. Importantly, most maternal deaths can be prevented by access to improved quality of maternal and child health services (WHO, 2019).

The need for APNs and APMs in Kenya is fundamental to achieving universal healthcare coverage and improving the delivery of cost-effective healthcare (Crisp et al., 2018; Shaibu et al., 2020). For example, the WHO Strategic Directions for Nursing 2021–2025 report indicated that universal coverage of midwife-delivered services could avert 67% of maternal deaths, 64% of neonatal deaths, and 65% of stillbirths. In addition, studies have shown that APNs provide quality care and demonstrate higher-level thinking and clinical judgment in diagnosis, prescription, and delivery of care (Organization, 2017; WHO, 2021).

Objective

The overall objective of this study was to identify opportunities and threats toward the integration of the APN and APM roles in Kenya's healthcare system.

METHODS

This article presents findings from one component of a large multimethod study, which was conducted to inform the development of the APN and APM scope of practice in Kenya. Specifically, the gap analysis sought to synthesize both scientific and technical document reports from the Nursing Council of Kenya and MOH to provide insights into the existing opportunities and imminent threats. The findings from the gap analysis were linked with a scoping review of evidence on regulations and the roles of APNs and APMs in SSA to inform the qualitative and quantitative phases of the study. The researchers mimicked a study conducted in Australia to inform the development of the inaugural Australian registered nurse standards for practice (Cashin et al., 2017).

A gap analysis consists of a detailed procedure of identifying, exploring, understanding, and addressing or bridging gaps in service delivery and nursing practice (Davis-Ajami et al., 2014). The purpose of conducting a gap analysis is to identify areas where there are incongruities, threats, or opportunities for improvement with an intent to enhance decisions and develop strategies for addressing the underlying gaps toward the realization of the study goals. Owing to the dearth of evidence on the underlying needs and opportunities for APN and APM integration in healthcare delivery in Kenya, the research team conducted a preliminary search of available literature to grasp the scope of existing research on APN and APM scopes of practice in both SSA and high-income countries. This informed an exhaustive search of the PubMed, CINAHL, Scopus, EBSCOhost Academic Search Complete, and PsycInfo databases, as well as credible websites to retrieve relevant articles and reports for synthesis. The key search strings were based on the objectives of the gap analysis, which involved the generation of informative knowledge pertaining to the definition of APN/APM, global and regional evolution of the APN/APM roles, impact of APN/APM roles on healthcare, prevalence of APN/APM practice in Kenya, and current opportunities and threats for the integration of APN/APM roles in Kenya. The retrieved articles were exported to Endnote for title and abstract screening. Data extraction specifics from the eligible studies and reports focused on opportunities and barriers toward the integration of APN/M in Kenya. The extracted data were subjected to an objective secondary synthesis using the traditional literature review approach.

RESULTS

Opportunities: Facilitators of APN role implementation

Kenya health policy framework

The Kenya Health Policy Framework 2014–2030 seeks to provide equitable and quality health and health-related services at the highest attainable standard to all Kenyans, especially those in rural and remote areas. The policy supports multiskilling, multitasking, professional accountability, and cultural sensitivity among Kenyan healthcare workers (MOH, 2015; Nzioka et al., 2016). The Kenyan Constitution of 2010 (through the Health Act of 2017) provides for the protection, respect, promotion, and fulfillment of the health rights of all persons in Kenya to realize their rights to the highest attainable standard of health, including the right to reproductive healthcare and emergency medical treatment. The Act specifies the right of every person to access reproductive healthcare that will enable safety and health through pregnancy, childbirth, postpartum, and infancy. For these rights to be realized, there must be investment in highly skilled healthcare professionals, including APNs and APMs.

Universal health coverage highlights the need for health workforce development to enable health services to meet the demands of populations that are increasingly burdened with both communicable and noncommunicable diseases, especially in rural, remote, and marginalized areas. Emerging diseases such as coronavirus (COVID-19) further compound the healthcare burden in Kenya (Stewart et al., 2020).

Strategic partnerships and alliances

There has been a steady growth of APN programs in SSA. These programs have existed in developed Western countries for decades and have demonstrated the effectiveness of APNs/APMs in bridging healthcare gaps. Development partners and institutions in Western countries supported the APN role by providing funds and offering technical support for its integration (Christmals & Armstrong, 2020). Kenya has an opportunity to be part of this movement as it aims to generate an optimal nursing and midwifery workforce.

Contribution to the Sustainable Development Goals (SDGs)

The APN and APM roles will contribute to attaining the various SDGs. By improving access to healthcare for vulnerable and hard-to-reach populations through health promotion, preventive, and curative services, these healthcare professionals can respond to SDGs 1 and 3 concerning eliminating poverty and ensuring access to good health and well-being at all ages. The roles also respond to SDGs 4, 5, 6, and 10 by helping to ensure quality education, gender equality, decent work and economic growth, and reduced inequalities, especially for women in nursing and the populations they serve (ICN, 2020; Schober et al., 2020; Stewart et al., 2020).

Leadership

Although women comprise 89% of the nursing and midwifery workforce, only 25% hold senior leadership positions in healthcare organizations (Hewitt et al., 2021). This has been attributed to a lack of leadership roles in education curricula. The APN and APM curricula educate midwives and nurses to understand the importance of and have the necessary capabilities to build strategic partnerships and alliances within and outside the health sector to improve the health of communities and populations. They are educated to appraise and apply evidence in local contexts and enable others to develop these capacities. Their orientation to quality improvement, intersectoral collaboration, and community involvement creates synergies that promote healthcare innovation and allow otherwise impossible outcomes to be achieved. APNs/APMs are, therefore, well placed to assume formal leadership roles within healthcare organizations and governments (Hassmiller & Pulcini, 2020; WHO, 2021).

Early steps toward institutionalization

Progress toward the integration of the APN and APM roles in Kenya is on track. A curriculum for APNs in Kenya has already been developed with two universities offering graduate APN and APM training (Shaibu et al., 2020). Master of Science in Advanced Practice Nursing and Master of Science in Advanced Practice Midwifery programs are now available in two Kenyan universities, with the clinical hours of study and program outcomes consistent with international examples.

Population needs

Like many African countries, more than one-third of Kenya's population live below the poverty line (less than 1 USD per day), making access to self-paid healthcare unaffordable given other basic needs such as shelter, clothing, and education. Universal health coverage and PHC models of healthcare delivery underpinned by the availability and fair distribution of highly qualified healthcare workers coupled with evidence of their effectiveness mean the APN and APM roles are suitable for bridging this gap (Woo et al., 2017).

The Kenyan population is projected to increase from 47.5 million to 59 million by 2030 and double by 2050. Most of this population will be distributed in rural and marginalized areas where there is limited access to healthcare services. APNs/APMs offer a solution to the healthcare discrepancies attributable to these population dynamics. Access to advanced care that APNs/APMs can provide remains scarce in PHC settings where these roles have been reported to work effectively. Most doctors in Kenya work in Nairobi (Kenya's capital city) and other urban areas, whereas most Kenyans live in rural areas where the need for healthcare is greatest. This is reflected in the distribution of all healthcare professionals. For example, Homabay County has the highest prevalence of HIV in the adult population but has one of the lowest numbers of health professionals in Kenya (Jokiniemi et al., 2012).

Nurses and midwives constitute the largest healthcare workforce in Kenya at a ratio of one doctor to eight nurses; therefore, these cadres form the foundation of the healthcare system and by extension, the foundation for provision of advanced healthcare. To achieve universal health coverage, it is necessary to invest in capacity building for this cadre to optimize skills and competencies through the development of appropriate training programs, regularization, provision of scopes of practice for high cadre nurses, and recognition of these roles through licensing (Jokiniemi et al., 2012).

Evidence of effectiveness of APNs/APMs

Globally, the track record for APNs and APMs shows that the quality of services offered by these cadres is equal to or higher than that of services offered by general practitioners. Nursing leaders in SSA countries, including Kenya, need to capitalize on this to lobby for these programs and develop the necessary guidelines, policies, and tools to actualize these roles (Christmals & Armstrong, 2020).

Challenges: Barriers to APN/APM implementation

Financial support in education and training

Countries that have introduced advanced practice roles have experienced myriad challenges and threats. In the United States, the roles have not received the same robust financial support for education and training as equivalent physician roles. There are also faculty shortages and a limited supply of potential preceptors and clinical sites because the preparation of medical residents dominates the use of available clinical sites in hospitals (Fitzgerald et al., 2012; Ladd et al., 2020). Thailand and India have also regulated advanced practice roles (Pulcini et al., 2010). However, APNs and APMs in these countries are still assigned to work that is not reflective of their practice. There is also a lack of support for optimum clinical responsibilities, a lack of jobs, and resistance from physicians.

Lack of regulation for advanced practice

A lack of national policies, regulations, and legislation relevant to advanced roles is experienced in most countries, which contributes to role confusion, informal practice, and limited evidence to support these roles (Ladd et al., 2020). In Kenya, regulations through registration, licensure, and scope of practice only exist for certificate-, diploma-, and bachelor's degree-trained nurses and midwives. This gap has seen graduate- and PhD-qualified and trained nurses and midwives move into management and education positions because there is little opportunity for advancement while remaining in clinical practice (East et al., 2014).

Opposition from the medical profession

Opposition from the medical profession has been reported because the roles carried out by APNs/APMs are traditionally considered to be for doctors, which has been documented as a challenge to adopting APN/APM training and practice. Furthermore, medical associations have argued that the evidence for these advanced roles is flawed and inaccurate. In some places, medical associations have also sought to impose regulatory standards that hinder APNs from practicing to the full extent of their training and skills by insisting they are supervised by a medical officer (Stewart et al., 2020). Consequently, there are different specialist (higher diploma) training programs for nurses and a physician substitute "clinical

officer" cadre in Kenya, which may be assumed to fill gaps in clinical autonomy, expertise, and leadership (East et al., 2014).

Structural challenges

Identified structural challenges include minimal context-specific APN benchmark programs, a lack of sufficient locally trained and practicing APNs and APMs, use of faculty who may be foreign-trained or new to APN/APM roles, and limited tailored succession plans to produce local capacity for sustenance of the specialist training. These challenges may create a window for adopting practices that are not context-specific and produce practitioners that do not meet the country's healthcare demands, which further makes ownership and sustainability a challenge (Christmals & Armstrong, 2020).

DISCUSSION

APNs and APMs are fundamental for attaining universal health coverage in Kenya. Their role in PHC and other settings has been demonstrated to increase accessibility to high-quality healthcare, improve patient outcomes, improve cost-effectiveness, and increase patient satisfaction. However, as understood in the global context, these advanced nursing and midwifery roles are neither streamlined nor regulated in Kenya. Nurses and midwives informally perform advanced roles despite a lack of guidance and recognition from regulators, employers, and the government. This has impacted these professions as highly educated and skilled nurses and midwives opt out of clinical practice, which leaves the lower cadres to offer direct patient care (Swan et al., 2015; Tilley, 2010). Without appropriate national policies and regulations, role confusion, informal practice, and limited data on the roles of APNs and APMs are emergent threats. National and international policies and frameworks provide for the right to the attainment of the highest standard of health for every person, which includes access to promotive, preventive, curative, palliative, and rehabilitative services. This right can only be realized when governments invest in highly skilled human resources and other health infrastructure. Training, regulating, deploying, and providing favorable remuneration for APNs and APMs in Kenya will put the country on the global road map toward providing quality and cost-effective healthcare to all citizens.

Although evidence shows that the level of primary care services provided by APNs and APMs is higher than that offered by generalists and is equated to that provided by physicians (Attard et al., 2014; Casey et al., 2011; Duma et al., 2012; Perry et al., 2017), challenges remain to embracing these roles. In some countries, medical practitioners have traditionally considered diagnosis, prescription, and treatment as tasks that are solely reserved for their profession, which leads to resistance when these tasks are assumed by APNs and APMs. In Kenya, the clinical officer role has been argued to be a substitute for medical officers and physicians, which may threaten the integration of APNs and APMs (East et al., 2014). Although not trained at an advanced level, clinical officers take up consultancy roles in PHC settings.

Training and regulating APNs and APMs in Kenya requires the government and stakeholder institutions to commit to investment in financial and human resources. Countries that train and employ APNs and APMs have grappled with limited funding, faculty shortages, and a limited supply of potential preceptors and clinical sites. Furthermore, advanced nursing and midwifery practitioners are still assigned work that does not reflect their skills and training, a lack of support for optimum clinical responsibilities, and a shortage of job opportunities.

To realize the integration of APNs and APMs in Kenya, it is necessary to consider policies safeguarding their practice, legislation for prescription and investigations, and building consensus among healthcare stakeholders to create conditions for a healthcare organization and system transformational change supportive of these roles. This includes negotiating for these roles in the country's healthcare delivery system and ensuring rational remuneration as defined in human resources for health service schemes. Furthermore, establishing a national knowledge translation plan to promote an understanding and awareness of APN/APM roles as well as educating stakeholders and healthcare decision-makers about the benefits of these roles could counter-resistance and build critical support.

Although this gap analysis presents novel findings regarding the underlying opportunities and challenges for APN and APM integration in Kenya's healthcare system, there are various methodological limitations. First, the study employed a traditional literature review approach which is not considered rigorous compared with systematic and scoping review methods. Additionally, while constraining the search to specific databases might have limited the scope of studies identified and included in the synthesis, it is our belief that these gap analysis findings present a footing for further research targeting a broader scope for future studies.

Conclusion and implications for nursing policy

Developing scopes of practice for APN and APM roles in Kenya will benefit the professions, the country's healthcare delivery system, and the population. Achieving universal health coverage depends on a workforce that is trained and practicing at their optimal level in tandem with education and training to deliver care to rural and marginalized populations. Evidence of the effectiveness and efficiency of these advanced roles has been documented widely despite the challenges and threats to their integration. Furthermore, regulatory mechanisms and policies that enable APNs and APMs to practice at their optimum level must be put in place for these cadres to work to the extent of their training. Authority to diagnose, prescribe medications, order diagnostic testing and therapeutic interventions, and admit, discharge, and refer patients and clients must be legally recognized. Moreover, the titles for

these cadres must be conferred, recognized, and protected alongside regulating their practice.

AUTHORS CONTRIBUTION

Study design: EN, CO, BDM, CS; data collection: BDM, CO, NK; data analysis: EN, IK, BM, NK, BDM; study supervision: BM, CO; manuscript writing: EN, CO, BDM, RWK, CS, ET, IK; critical revisions for important intellectual content: CS, RWK, AM, CH.

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ETHICAL STATEMENT

For this type of study, formal consent is not required.

ORCID

Eunice Ndirangu-Mugo PhD https://orcid.org/0000-0001-8594-0808
Rachel Wangari Kimani PhD https://orcid.org/0000-0002-7735-7302
Benard Daniel Mutwiri BSc https://orcid.org/0000-0003-4896-3394
Colette Henderson BSc, MSc(ANP) https://orcid.org/0000-0003-2364-192X
Constance Sibongile Shumba PhD https://orcid.org/0000-0001-7787-9998

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