

Nursing and midwifery research priorities for Kenya: Results from a national Delphi survey

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Abstract

Background: The International Council of Nurses and the World Health Organization have prioritized evidence-based nursing and midwifery practice derived from nurse-led research. However, in a low-resource country like Kenya, there is a need to identify research priorities to optimize utilization of limited existing research infrastructure and funding. Kenya lacks a nursing and midwifery research strategy to guide research prioritization.

Introduction: The goal of this study was to identify and describe nursing and midwifery research priorities for Kenya.

Methods: A cross-sectional Delphi survey using two iterative rounds of electronic data collection was used to reach a consensus about priorities for nursing and midwifery research in Kenya. NVivo-12 was used to analyze the qualitative data to identify categories, sub-themes, and themes; descriptive statistics were used to analyze quantitative data.

Results: Participants included 159 nurse managers, administrators, and educators representing regional, county, and national referral, private, and faith-based hospitals, nurse training schools, research institutions, and nursing organizations in Kenya. Staffing challenges, motivation, remuneration, and funding for higher education were ranked as the top critically important issues using a cutoff point of $\geq 70\%$ agreement.

Conclusion: There is a need for the development of a National Framework for Nursing and Midwifery Research Priorities in Kenya to guide research that builds excellence in meeting nursing and midwifery human resource concerns and ultimately improves patient care practices and outcomes.

Implications for nursing and nursing policy: The objective of Kenya's health goals delineated within three key national health documents cannot be attained without adequate numbers of nursing and midwifery professionals and policies that address nursing and midwifery staffing challenges, remuneration for employment, and improved funding for higher education.

KEYWORDS

Delphi method, Kenya, midwifery research, midwives, nurses, nursing research, research priorities

INTRODUCTION

Nursing and midwifery research is a cornerstone for best practice. It plays a critical role in defining clinical approaches that result in cost-effective healthcare services, improved

therapeutic practice, quality, and safety (World Health Organization (WHO), 2017). The World Health Organization (WHO) emphasizes the importance of nursing and midwifery research in contributing to the delivery of quality healthcare, particularly in low-resource countries. Prioritizing research

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topics in nursing and midwifery is critical to the development of a research strategy that informs optimal resource allocation for the implementation of appropriate evidence-based practices. According to WHO (2017), limited nursing and midwifery research, especially when not informed by national policy and priorities, raises uncertainty about whether nurses and midwives have access to the most current evidence for clinical practice (Parlour & Slater, 2014). Thus, the lack of a national research strategy in nursing and midwifery negatively impacts a country's healthcare policies and strategies, ultimately resulting in poor healthcare outcomes (WHO, 2021).

BACKGROUND

Nurses' and midwives' scope of practice and proximity to individuals and communities strategically positions them to identify research priorities, undertake research, and utilize research findings in nursing education, management, and practice to improve client health outcomes (Al-Yateem, 2019; Sun & Prufeta, 2019; Sun et al., 2019). Despite the demonstrated effectiveness of nursing and midwifery research to inform quality healthcare and improved health outcomes, there is a paucity of nurses' and midwives' participation in research especially in low- and middle-income countries (LMIC), including countries in Africa such as Kenya (Nzengya et al., 2023; Sun et al., 2015). In these countries, nurses and midwives comprise over half of the healthcare workforce and meet over 90% of the population's healthcare needs; hence, their potential to significantly impact patient outcomes is great (WHO, 2021).

Since Kenya's independence in 1963, strategies to improve health care for citizens have yielded mixed results. The country has continued to experience unfavorable trends in the rise of geographic and gender disparities in health indicators, compounded by increasing communicable diseases, rapid growth in non-communicable disease, and increasing violence and injuries (CDC, 2022).

Despite the benefits associated with establishing research priorities, there has been a lack of empirical evidence of what Kenyan nurses and midwives perceive to be the most important and urgent problems requiring research attention (Al-Yateem et al., 2019; Sun et al., 2019). In response, several universities in Kenya have started postgraduate training programs in nursing. The basis of relevance and priority of research projects/theses undertaken by students in these programs is uncertain owing to the lack of established nursing and midwifery research priorities in the country.

STUDY AIM

This cross-sectional Delphi study aimed to identify priority areas for nursing and midwifery research in Kenya to guide research prioritization and aid in effective resource allocation and utilization. Findings can contribute significantly

to improvements in the country's nurse and midwife workforce, health outcomes, nursing/midwifery education, practice, leadership, interprofessional practice, and achievement of Kenya's Agenda of Universal Health Coverage, Kenya's Health Policy, and Kenya's Vision 2030 (Kenya Ministry of Health, 2007, 2014, 2019).

METHODS

Research design

This study utilized a cross-sectional Delphi survey with two rounds of electronic data collection from expert nurses and midwives in Kenya's national and regional public, private, and faith-based hospitals as well as mid-level, baccalaureate, and postgraduate nurse training institutions across all counties. Conducting and reporting Delphi studies (CREDES) guidelines (Junger et al., 2017) were used to guide the study, and the rationale for this method is described elsewhere (Nzengya et al., 2023).

Sample and setting

As recommended for Delphi studies, a purposive sampling method was used to identify nurse and midwife experts in clinical nursing and midwifery practice, education, research, and administration (Etikan et al., 2016; Hall et al., 2018; Slade et al., 2014). In this study, experts were nurse and midwife leaders in hospitals and training schools, professional nurse/midwife organizations, nurse leaders of professional organizations, ministry and county health administrative officers, research institutions, and/or global organizations that support Kenyan healthcare services.

Information about this Delphi study was disseminated at regional meetings through the Office of the Director of Nursing Services in the Kenya Ministry of Health to build national support for the study. In addition, this approach was used to assist with the identification and purposive sampling of eligible nurse experts locally and nationally in hospitals, nurse training institutions, and established professional networks within the directory of nursing from the Nursing Council of Kenya, nurses' associations, and the nurses' union. Experts included nurses and midwives who: (1) held a bachelor's degree or higher in nursing, (2) had previous experience conducting nursing/midwifery research, (3) were Kenyan residents, (4) had valid practice license registered with the Nursing Council of Kenya, and (5) were recommended as experts in nursing/midwifery research. To ensure representation of the various settings in which nurses/midwives practice, recruitment of participants continued until the sample included nurses and midwives working in hospitals, training schools, professional nurse/midwife organizations, ministry of health and county health administration, research institutions, and global organizations that support healthcare services in Kenya.

A total of 299 nurses and midwives were nominated as experts and met the inclusion criteria. Nominated experts were invited to participate via an email that included an explanation of study participation and consent information. The first round of this Delphi study included 164 participants who completed the online questionnaire.

Data collection

An electronic link for survey participation was emailed to participants with instructions to not share the link with others. Email reminders and personal contact via telephone were done at regular intervals to facilitate higher response rates. In the first round of this Delphi study, data were collected electronically using Survey Monkey from February to April 2021. Data collected included a demographic survey to assess gender, age, education, professional experience, current place of employment and professional role, and identification of nursing/midwifery research priorities. Participants were asked via open-ended questions to identify critical research priorities in nursing and midwifery practice, education, and administration/governance. For each of the six categories (nursing practice, education, and administration/governance and midwifery practice, education, and administration/governance), participants were asked to list a maximum of five priority problems, concerns, or issues requiring further research. In the second round of this Delphi study, data collection occurred from August to November of 2021 and participants were asked to rank top priorities named for each category from round one using consensus. Consensus was defined as a percentage agreement from experts of $\geq 70\%$ on potential research topics within each of the six question categories. Rates of agreement acceptable in Delphi surveys range between 70% and 80% (Atieno et al., 2020; Hsu & Sandford, 2007).

Data analysis

In round 1, qualitative data from the open-ended questions were organized and analyzed using NVivo-12 and descriptive content analysis, respectively (Mayring, 2014). Responses from round 1 were ranked by frequency with each of the six sub-questions analyzed separately. Three members of the research team then utilized an iterative process to analyze and group participant responses while beginning the process of thematic development. Next, the remaining two members of the research team reviewed participant responses, coding separately and then collaboratively, comparing and discussing until agreement was achieved. Throughout this process, resultant codes were grouped into categories and then organized according to emerging themes and subthemes within the six questions. Codes in each category were reduced to retain only those codes reported ≥ 12 times. This cutoff point for retention was determined by using the median of the range of the total number of responses. Demographic data were analyzed

using descriptive statistics. Because participant data were not linked between Delphi rounds, participants completed the demographic survey in both rounds.

In the second round of this Delphi study, participants were asked to rank each of the sub-themes identified during round one using a four-point Likert scale with the following response options: critically important, important, moderately important, and low priority. Descriptive statistics including frequencies, percentages, means, and standard deviations (SD) were calculated for each sub-theme using SPSS, version 26. Because consensus, as defined for this study, was met in two rounds, a third Delphi round was not indicated (Sun et al., 2019).

RESULTS

Between February and April 2021, 159 of the 299 nurse and midwife experts who were eligible and invited to participate completed the online surveys, resulting in a response rate of 52% consistent with the acceptable range of $\geq 44\%$ for online surveys (Wu et al., 2022). While most of the sample met all inclusion criteria, the final sample included some participants with diplomas who did not have a bachelor's degree ($n = 60$). All these participants had over 10 years of professional experience, held a leadership or management position in nursing or midwifery, and were involved in the coordination of research in their current position so they were considered experts. Five participants who did not meet the inclusion criteria were excluded from the final analysis. The participants' socio-demographic and professional characteristics are shown in Table 1.

Round 1

In the first round of this Delphi study, most (69%) of the participants were female and between the ages of 28 and 57 years (75%). Professionally, participants were predominantly educated at the bachelor's degree level, had more than 10 years of professional experience, were employed in government facilities, and worked in nursing management or administration (see Table 1).

Coding of participant responses resulted in four main themes: (1) resources, (2) education/training, (3) practice, and (4) governance/leadership and sub-themes for each of the six main categories of nursing and midwifery (see Table 2).

Round 2

Using a cutoff point of $\geq 70\%$ as an indicator of consensus, the following categories were ranked as the final top priorities for nursing and midwifery research: (1) staffing challenges (85.4%), (2) motivation and remuneration (75.2%), and (3) funding for higher education (70.1%) (see Table 3). Of note, staffing challenges were consistently ranked as the top priority for every category in both nursing and midwifery.



TABLE 1 Participant demographics.

Variable	Round 1, N = 159 Frequency (%)	Round 2, N = 153 Frequency (%)
Gender		
Female	110 (69.2)	109 (71.2)
Male	49 (30.8)	44 (28.8)
Age		
18–27	9 (5.7)	9 (5.88)
28–37	34 (21.4)	33 (21.57)
38–47	54 (34)	54 (35.29)
48–57	48 (20.2)	45 (29.41)
58–67	14 (8.8)	12 (7.84)
Highest educational qualification in nursing/midwifery		
Basic diploma	34 (21.4)	33 (21.57)
Post basic diploma	26 (16.4)	22 (14.38)
Bachelor's degree	49 (30.8)	49 (32.03)
Master's degree	39 (24.5)	38 (24.84)
Doctoral degree	11 (9.9)	11 (7.19)
Years of experience		
1–10	37 (23.3)	37 (24.18)
11–20	53 (33.3)	47 (30.72)
> 20	69 (43.4)	69 (45.10)
Current employer		
Government hospital/facility	50 (31.4)	42 (27.45)
County facility	46 (28.9)	32 (20.92)
Private hospital/facility	23 (14.5)	23 (15.03)
Government university or college	26 (16.3)	18 (11.76)
Private university or college	4 (2.5)	4 (2.61)
Faith-based university or college	3 (1.9)	1 (0.65)
Research institution	2 (1.3)	1 (0.65)
Development partner (e.g., USAID, DANIDA, World Bank, etc.)	2 (1.3)	2 (1.31)
State parastatal	3 (1.9)	1 (0.65)
Current professional practice		
Nurse manager/administrator	48 (30.9)	45 (29.41)
Nurse-educator	20 (5.7)	17 (11.11)
Clinical nurse practitioner	38 (23.9)	38 (24.84)
Midwifery educator/researcher	17 (16.7)	17 (11.11)
Clinical midwife practitioner	36 (22.6)	36 (23.53)

DISCUSSION

The first research category ranked as the top priority in all six areas of nursing and midwifery practice, education, and governance/administration was “staffing challenges” (ranked “critically important” by a range of 71.3%–85.4% of participants). The second priority category mentioned in two of the six areas (nursing clinical practice and nursing man-

agement/administration) was “motivation and remuneration” (ranked “critically important” by 75.2% and 70.1%, respectively). Based on some of the three-to-five-word responses in round 1 of this Delphi study, “staffing challenges” generally focused on staffing shortages. The WHO State of the World's Nursing Report (WHO, 2020) includes data compiled from 191 countries, categorizing current nursing workforce distribution using nurse density per 10,000 population. Many countries with the lowest nurse density (including Kenya) are in Africa with an average of 8.4 nurses per 10,000 population. For comparison purposes, nurse density per 10,000 population at the highest level is 83.4 nurses per 10,000 population located within the Americas, with an average global density of 36.9 nurses per 10,000 population (WHO, 2020).

It has been clearly documented that improving nurse and midwife staffing and maintaining recommended staffing ratios directly improve patient care outcomes (WHO, 2020). Inadequate nurse staffing levels can negatively impact intra- and interprofessional teamwork function and processes, leadership development (Jepkosgei et al., 2022), and the public perception of nursing/midwifery professionals (Ndirangu et al., 2021). Shortages of nurses within Kenya and other countries can also result in an inadequate supply of competent nurses in specialized areas such as neonatal and pediatric care units (North et al., 2019; Nzinga et al., 2019).

The third highest priority mentioned by participants in this Delphi study was funding for higher education. As LMICs continue to grow their numbers of baccalaureate, master, and doctoral-level nursing and midwifery programs, country-specific research priorities are essential for guiding national research agendas, as has been shown in several other countries (Al-Yateem, 2019; Hughes et al., 2022; Sun et al., 2019).

Understanding the challenges of nursing and midwifery education, practice, and administration is critical to developing evidence-based approaches to support the nursing and midwifery workforce in Kenya. Nursing and midwifery experts consistently reported challenges across all levels of education, practice, and administration in the areas of training, staffing, resources, and working conditions. Strategies being researched and/or implemented to address staffing and workforce issues include the use of nurse-sensitive indicators contextualized to specifically address nurse/patient ratios and staffing mix by stakeholders within Kenya (Gathara et al., 2020) and a five-year program focused on the capacity building of nursing and midwifery professional associations within East Africa countries (Ruhmel et al., 2022). Approximately 32% of the respondents in the Ruhmel et al. study were from Kenya representing two of the nine nursing associations included in the study. As these associations become stronger, there is potential to impact staffing, salaries, working conditions, and public perceptions of nursing and midwifery professions.

Similar research findings related to staffing challenges have been reported. Nursing research priority studies conducted in Australian patient-specific environments such as perioperative services (Nicholson et al., 2020) and residential aged care facilities (Raynor et al., 2019) identified findings

TABLE 2 Round 1 priority topics, themes, and subthemes ($N = 159$).

Category	Number of codes identified	Top-ranked codes ($N = 12$ mentions)	Themes and sub-themes
Clinical nursing practice	63	<ul style="list-style-type: none"> • Shortage of staff ($n = 72$) • Lack of supplies ($n = 34$) • Lack of equipment ($n = 31$) • Lack of motivation and poor working conditions ($n = 28$) • Lack of scheme of service ($n = 18$) • Lack of practice knowledge ($n = 17$) • Workplace safety ($n = 15$) • Inadequate knowledge/skills for nursing process ($n = 14$) • Long working hours ($n = 13$) • Shortage of resources ($n = 13$) • Work overload ($n = 12$) 	Resources <ul style="list-style-type: none"> • Staffing challenges • Lack of supplies/equipment • Inadequate infrastructure/space Education/Training <ul style="list-style-type: none"> • Crowded student placement sites • Inadequate knowledge/skills • Lack of continuing educational opportunities Practice <ul style="list-style-type: none"> • Theory–practice mismatch • Lack of evidence-based practice and data-driven decision-making • Documentation of care • Lack of multidisciplinary approach/teamwork • Emerging health challenges • Poor working conditions • Safety and security in the workplace Governance/Leadership <ul style="list-style-type: none"> • Lack of Ministry of Health guidelines • Scope of practice limitations • Lack of involvement of nurses in decision-making/governance issues • Political interference/corruption • Lack of technology • Motivation and remuneration
Nursing administration	55	<ul style="list-style-type: none"> • Inadequate staffing ($n = 47$) • Inadequate resources ($n = 31$) • Motivation issues ($n = 29$) • Inadequate supplies, pharmaceuticals ($n = 19$) • Lack of clear policies ($n = 17$) • Lack of involvement of nursing management in policy making ($n = 17$) • Political interference ($n = 16$) • Lack of support ($n = 16$) • Lack of leadership/management skills ($n = 16$) • Practices and quality of care ($n = 15$) 	Resources <ul style="list-style-type: none"> • Staffing challenges • Supplies and equipment • Inadequate infrastructure Education/Training <ul style="list-style-type: none"> • Lack of nursing knowledge • Lack of continued professional education and growth • Lack of training opportunities Practice <ul style="list-style-type: none"> • Ethical challenges • Inadequate knowledge base • Lack of quality improvement systems/quality of care • Safety and security in the workplace • Poor working conditions Governance/Leadership <ul style="list-style-type: none"> • Lack of leadership/management skills • Political interference/power struggles • Lack of multidisciplinary teamwork • Lack of support for nursing/midwifery • Unclear policies, guidelines, role definitions • Lack of involvement in decision-making • Motivation/remuneration • Poor nursing image • Discrimination toward nursing/midwifery
Nursing education	44	<ul style="list-style-type: none"> • Scope of curriculum/nursing practice ($n = 29$) • Lack of funding for higher education ($n = 27$) • Shortage of lecturers ($n = 22$) • Lack of mentorship ($n = 21$) • Lack of passion for nursing ($n = 18$) • Student overcrowding in clinical areas ($n = 15$) • Lack of clinical instructors ($n = 15$) • Lack of updates ($n = 15$) • Inadequate resources ($n = 14$) • Lack of updated teaching materials/technology in training institutions ($n = 14$) • No study leaves ($n = 12$) 	Resources <ul style="list-style-type: none"> • Lack of/outdated teaching materials • Lack of training facilities • Staffing challenges • Lack of funding for higher education • Lack of/limited technology in nursing education Education/Training <ul style="list-style-type: none"> • Curriculum discrepancies • Gap between theory and practice • Lack of inter-professional education • Lack of training opportunities • Inadequacy of nursing skills

(Continues)



TABLE 2 (Continued)

Category	Number of codes identified	Top-ranked codes (<i>N</i> = 12 mentions)	Themes and sub-themes
			Practice <ul style="list-style-type: none"> • Gap between theory and practice • Lack of updates • Challenges maintaining ethics and professionalism • Lack of passion for nursing • Discrimination against students in clinical settings Governance/Leadership <ul style="list-style-type: none"> • Inadequate innovations and technology • Poor perceptions of nursing career • Challenges in nursing education • Lack of recognition of higher education in nursing
Midwifery clinical practice	51	<ul style="list-style-type: none"> • Quality of care (<i>n</i> = 42) • Staff shortages (<i>n</i> = 38) • Inadequate supplies (<i>n</i> = 36) • Inadequate equipment (<i>n</i> = 22) • Inadequate training (<i>n</i> = 20) • Lack of professional development/updates (<i>n</i> = 17) • Heavy workload (<i>n</i> = 16) • Inadequate resources (<i>n</i> = 15) • Poor/inadequate infrastructure (<i>n</i> = 14) 	Resources <ul style="list-style-type: none"> • Poor/inadequate infrastructure • Inadequate equipment/supplies • Staffing challenges Education/Training <ul style="list-style-type: none"> • Lack of training opportunities • Inadequate training • Gap between theory and practice • Lack of mentorship • Lack of advancement opportunities • Lack of professional education/updates Practice <ul style="list-style-type: none"> • Quality of care challenges • Poor working conditions • Lack of evidence-based practice and data-driven decision-making • Emerging conditions/new practices • Cultural beliefs and practices of patients • Lack of motivation Governance/Leadership <ul style="list-style-type: none"> • Inappropriate staff deployment • Scope of practice limitations • Poor referral system
Midwifery administration	44	<ul style="list-style-type: none"> • Staff shortages (<i>n</i> = 55) • Inadequate resources (<i>n</i> = 25) • Inadequate supplies (<i>n</i> = 19) • Standardization/quality issues (<i>n</i> = 17) • Infrastructure (<i>n</i> = 16) • Lack of updates or timely updates (<i>n</i> = 15) • Inadequate training (<i>n</i> = 14) • Leadership (<i>n</i> = 14) • Discrimination/lack of recognition (<i>n</i> = 12) 	Resources <ul style="list-style-type: none"> • Inadequate supplies and equipment • Inadequate infrastructure • Staffing challenges Education/Training <ul style="list-style-type: none"> • Lack of advanced training opportunities • Lack of continuing professional education/updates • Lack of midwifery administrative knowledge Practice <ul style="list-style-type: none"> • Poor working conditions • Lack of multidisciplinary teamwork • Lack of quality improvement systems • Lack of evidence-based practice • Emerging conditions/new practices • Poor referral system • Gap between administration and practice Governance/Leadership <ul style="list-style-type: none"> • Inappropriate resource management • Lack of/limited technology in midwifery administration • Lack of skills in leadership and management • Lack of involvement in decision-making • Unclear policies/guidelines/role definitions • Motivation/remuneration
Midwifery education	46	<ul style="list-style-type: none"> • Need for regular CMEs and updates (<i>n</i> = 22) • Less training opportunities/advancement opportunities (<i>n</i> = 18) 	Resources <ul style="list-style-type: none"> • Lack of/outdated teaching materials • Lack of training facilities/infrastructure

(Continues)

TABLE 2 (Continued)

Category	Number of codes identified	Top-ranked codes (<i>N</i> = 12 mentions)	Themes and sub-themes
		<ul style="list-style-type: none"> • Shortages of trainers (<i>n</i> = 18) • Lack of research/evidence-based care (<i>n</i> = 16) • Lack of mentorship (<i>n</i> = 16) • Quality practice and training for use of modern equipment/resources/improvising (<i>n</i> = 15) • Inadequate training resources (<i>N</i> = 14) 	<ul style="list-style-type: none"> • Staffing challenges • Lack of/limited technology • Lack of funding for higher education <p>Education/Training</p> <ul style="list-style-type: none"> • Lack of professional education/updates • Lack of advanced training opportunities • Challenges in midwifery education • Inadequate training <p>Practice</p> <ul style="list-style-type: none"> • Lack of research/evidence-based practice • Lack of quality improvement systems • Lack of passion/attitude toward midwifery <p>Governance/Leadership</p> <ul style="list-style-type: none"> • Unclear scope of practice • Unclear policies, guidelines, role definitions • Lack of recognition/perceptions of midwifery • Lack of midwifery autonomy

TABLE 3 Final priority research topics ($\geq 70\%$ consensus) (*N* = 153).

Category	Final priority topics ($\geq 70\%$, <i>n</i>)
Nursing clinical practice	<ul style="list-style-type: none"> • Staffing challenges (85.4%, 123) • Motivation and remuneration (75.2%, 119)
Nursing education	<ul style="list-style-type: none"> • Staffing challenges (72.6%, 111) • Lack of funding for higher education (70.1%, 107)
Nursing management/administration	<ul style="list-style-type: none"> • Staffing challenges (79.6%, 122) • Motivation and remuneration (70.1%, 107)
Midwifery clinical practice	<ul style="list-style-type: none"> • Staffing challenges (80.9%, 123)
Midwifery education	<ul style="list-style-type: none"> • Staffing challenges (71.3%, 109)
Midwifery management/administration	<ul style="list-style-type: none"> • Staffing challenges (82.8%, 127)

of workforce issues (staffing ratios, access to educational research resources, necessary equipment) and negative culture settings, including bullying, which impacted staff and patient safety. Sun et al. (2019) in their Eastern Mediterranean study found participants across all groups frequently discussed nursing workforce issues, including staffing shortages, shifts, and burnout and these were also reported in this study. Additionally, limited technology, lack of preceptors, and overcrowding of clinical placements for students impaired student learning opportunities were identified. At the governance/leadership level, challenges included a lack of clear guidelines to direct nursing and midwifery practice. Limited involvement of nurses and midwives in decision-making and political interference were additional challenges. However, across all categories, staffing challenges, motivation and remuneration, and lack of opportunity for higher education were of the highest priority. Staffing issues were rated as important by 91.5% of the participants. Staffing ratios directly impact patient

safety and quality of care (Al-Yateem et al., 2019). Other issues identified include low salaries, lack of recognition, stress, and burnout impact the quality of nursing care (Sun et al., 2019).

Research in Kenya should address the critical issues of staffing, remuneration, and funding for advanced education for nurses and midwives. Established recommendations by the International Council of Nurses and the WHO should be used to guide nursing and midwifery staffing in Kenya. Understanding the unique experiences of nurses and midwives is necessary to inform strategies for improving staffing in Kenya. In addition, it is imperative that an infrastructure for rigorous national data collection be established to enable linking nursing/midwifery practice (including staffing) and patient outcomes. Research-based practice has been shown to help in developing a profession's theoretical base and in generating evidence necessary to inform practice. In some countries, the identification of research priorities has led to exponential growth in research (Al-Yateem et al., 2019).

Limitations

Despite its strengths, this study has several limitations. A participation rate of 52% of the experts invited to participate in this study may have resulted in a nonresponse bias. The use of a web-based survey may have impacted the response rate as they are typically associated with lower participation rates. However, the survey was administered during the COVID-19 pandemic and other methods of data collection were not accessible. The pandemic may have also limited participation as nurses were experiencing increased professional demands, stress, and potentially personal illness. Nonetheless, the response rate was still above 44%, considered the acceptable range for online surveys (Wu et al., 2022). Although purposeful sampling of nursing and midwifery experts throughout the country of Kenya was employed, the



final sample was not equally distributed by geographic or employment location and may have contributed to response bias. Data for this study were gathered specifically for Kenya, limiting generalizability to other countries or regions. However, findings may trigger interest in similar research in other settings.

Another limitation is the lack of definition for the participant response. Most participant responses were limited to 3–5 words and further reduced during the coding process. Participants were not asked to explain their responses, so the research team could not ensure an accurate interpretation of their meaning. While our sampling methodology intended to recruit experts in the fields of nursing and midwifery, we are unable to verify years of experience at a granular level due to the broad years of experience categories used. Therefore, our sample may have included participants with limited experience (e.g., 1–2 years). However, we relied on established nursing/midwifery networks to identify and invite colleagues perceived as experts in the field.

CONCLUSION

For recipients of nursing and midwifery care, to receive quality care based on evidence, there is a need for a paradigm shift in nursing and midwifery research. In this study, priority research needs within the disciplines of nursing and midwifery were identified in the areas of staffing challenges, motivation and remuneration, and lack of opportunity for higher education. These priorities should guide future research agendas to improve nursing and midwifery clinical practice, education, and administration in Kenya and beyond as some of the issues raised are similar across other parts of the world (Wong et al., 2015). Strategic plans should be adopted to build nursing and midwifery research capacity that addresses identified research priorities. Access to online resources, including research journals, in-country research findings and data should be essential components to any capacity-building plan (Ruhmel et al., 2022). Such an evidence-based approach will lead to effective contributions in nursing and midwifery practice, education, and leadership and the development of a body of nursing and midwifery research in support of informed policy. These study findings lay the groundwork for the development of a National Framework for Nursing and Midwifery Research Priorities in Kenya to guide research that builds excellence in practice along with the provision of a foundation for the nursing and midwifery professions.

IMPLICATIONS FOR NURSING AND HEALTH POLICY

As with any health professional desiring to advance leadership, education, practice, and health care outcomes, it is imperative to begin with a clear understanding of existing national programs, policies, and goals related to health and health care. Major national documents currently guiding health care and health goals in Kenya include the Agenda

of Universal Health Coverage, Health Policy 2014–2030, and Vision 2030 (Kenya Ministry of Health, 2007, 2014, 2019). The objective of Kenyan health goals delineated within these documents cannot be attained without adequate numbers of nursing and midwifery professionals and policies that address nursing and midwifery staffing challenges, remuneration for employment, and higher-education funding.

AUTHOR CONTRIBUTIONS

Study design: AM, MW, DN, JE, MS; data collection: AM, MW, DN; data analysis: AM, DN, MS; study supervision: AM, MW, DN, JE, MS; manuscript writing: AM, MW, DN, JE, MS; critical revisions for important intellectual content: AM, MW, DN, JE, MS.

CONFLICT OF INTEREST STATEMENT


No conflict of interest has been declared by the authors.

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