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Strengthening the Healthcare Workforce for Universal Health Coverage in Nigeria: Lessons and Strategies

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Authors' contributions

This work was carried out in collaboration among all authors. 'All authors read and approved the final manuscript.

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ABSTRACT

Background: Achieving Universal Health Coverage (UHC) is a global imperative to ensure equitable access to quality healthcare services for all individuals. A pivotal factor in this endeavor is the strength and capacity of the healthcare workforce. This paper examines the intersection of a robust healthcare workforce and the goals of UHC, with a specific focus on the Nigerian context.

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Methods: The paper delves into the strengths and weaknesses of the Nigerian healthcare workforce, analyzing factors such as diversity, distribution, skill utilization, and the prevailing challenges. Insights from global approaches in the paper highlight innovative strategies, including workforce training, collaborative delivery models, and workforce motivation to enhance healthcare accessibility and quality.

Results: The paper addresses contextual nuances such as cultural diversity, geographic challenges, and socioeconomic disparities that shape the Nigerian healthcare landscape. The relevance of tailored solutions that accommodate these nuances is emphasized. The paper underscores the potential impact of a strengthened healthcare workforce on achieving UHC, reducing health disparities, and improving overall health outcomes.

Conclusion: The paper offers policy recommendations tailored to Nigeria's unique circumstances. The conclusion highlights the significance of continual monitoring, research, and evaluation of workforce-centric interventions for sustained progress towards UHC. The findings contribute to the broader discourse on health equity, offering insights into how a capable healthcare workforce can drive transformative change and pave the way for comprehensive healthcare coverage in Nigeria.

Keywords: Universal health coverage; healthcare workforce; Nigeria; healthcare access; interprofessional collaboration.

1. INTRODUCTION

The achievement of Universal Health Coverage (UHC) is a crucial global health goal, which aims to ensure that all individuals have equal access to essential healthcare services without facing financial hardship. A key component in this pursuit is the development of a strong and well-equipped healthcare workforce, which includes a diverse array of professionals such as doctors, nurses, pharmacists, and community health workers. These professionals play an indispensable role in providing high-quality care and realizing the goals of UHC.

In Nigeria, a country with a complex healthcare landscape characterized by diverse cultural, geographical, and socioeconomic factors, the importance of a strong healthcare workforce becomes even more pronounced. As the nation strives to provide universal access to healthcare services, it is essential to examine and optimize the capacity of the healthcare workforce to deliver effective and equitable care to all population segments.

This manuscript explores the intricate relationship between a robust healthcare workforce and the achievement of Universal Health Coverage, with a specific focus on the Nigerian context. The overarching goal of this investigation is to explore and analyze strategies that can be employed to enhance the healthcare workforce in Nigeria, aligning it with the principles and objectives of UHC.

Recognizing the multifaceted challenges and opportunities that characterize the Nigerian healthcare landscape, this manuscript sheds light on innovative approaches, policy recommendations, and tailored solutions that can address the country's unique needs. By investigating the nexus between a capable healthcare workforce and the realization of UHC, this research aims to offer insights that can guide policymakers, healthcare administrators, educators, and stakeholders in crafting effective strategies that maximize the potential of the workforce and propel Nigeria closer to achieving comprehensive and equitable healthcare coverage.

Through an exploration of global best practices, adaptation of lessons learned, and a deep understanding of Nigeria's distinct cultural, geographic, and socioeconomic dynamics, this manuscript aims to provide a comprehensive framework for strengthening the healthcare workforce.

2. ASSESSING THE NIGERIAN HEALTHCARE WORKFORCE LANDSCAPE

Nigeria has a population of over 170 million and is characterized by different climatic patterns across its regions. The country faces challenges in the distribution of its healthcare workforce, with some communities having an abundance of frontline workers while others are in dire need. There is a shortage of nurses/midwives and community health officers/extension workers,

highlighting the unequal distribution of health workers [1].

The existing landscape of healthcare professionals in Nigeria is crucial for the effective implementation of Universal Health Coverage (UHC). The Strengths of the Nigerian health force can be seen in areas like:

Diversity of Medical Specializations: Nigeria has a workforce that includes a wide range of healthcare professionals' doctors, nurses, pharmacists, public health experts, and more. This diversity allows for a multi-disciplinary approach to healthcare, enabling more comprehensive patient care and encouraging task sharing and shifting between different healthcare workers, encouraging efficiency. [2].

Growing Interest in Healthcare Fields: Healthcare-related courses are increasingly popular among Nigerian students. Institutions like the University of Ibadan and Ahmadu Bello University offer robust medical programs. The growing interest ensures a constant influx of young professionals into the healthcare system, promising sustainability and innovation [3]. Some weaknesses of the healthcare force in Nigeria include:

Uneven Geographic Distribution: According to World Health Organization (WHO) statistics, rural areas, comprising nearly half of Nigeria's population, are served by 19% of doctors and 35% of nurses. It creates healthcare deserts where timely and quality medical care is virtually non-existent. [4].

Skill Mismatch and Underemployment: A substantial number of healthcare professionals in Nigeria are not effectively utilized. They may be overqualified for roles that do not fully exploit their skills or underqualified, lacking the necessary competencies for their job functions. This mismatch often leads to inefficiency and underperformance.

Some Key Performance Indicators (KPIs) to access the healthcare landscape in Nigeria are:

Doctor-to-Patient Ratio: Nigeria has a ratio of 1 doctor to 5,000 patients as of 2020, considerably below the WHO-recommended ratio of 1:1,000. Leads to a compromise in the quality of care due to the strain on healthcare providers [4].

Nurse-to-Patient Ratio: Similarly, the nurse-to-patient ratio in Nigeria stands at 1:2,000, contributing to delayed treatment and inadequate attention to patients.

Some Key Hurdles identified and analyzed include:

1. Insufficient Funding and Resources: The Nigerian healthcare sector is underfunded, with a low per cent of the budget allocated to healthcare; inadequate funding manifests as outdated equipment, insufficient medical supplies, and dilapidated healthcare facilities, putting excessive pressure on healthcare workers and compromising patient care.

2. Brain Drain: Skilled healthcare professionals are increasingly leaving Nigeria for greener pastures abroad due to inadequate remuneration and a lack of career development opportunities. This exodus exacerbates existing staff shortages and strains the remaining workforce.

3. Lack of Training and Development Programs: There is a notable lack of structured, continuous professional development programs, and it results in a workforce that is not updated on the latest medical procedures, technologies, and best practices, thus affecting the quality of healthcare [5].

Some of the Factors Contributing to Shortages, Imbalances, and Burnout that are affecting the healthcare landscape in Nigeria can be classified into several causes:

1. Economic Factors: The average salary for healthcare professionals in Nigeria is often not commensurate with the workload and the risk involved, leading to job dissatisfaction and, eventually, burnout.

2. Educational Imbalance: Despite the growing interest in healthcare professions, there are not enough educational institutions to accommodate this demand. Furthermore, the existing institutions are often not equipped with the necessary resources to provide quality training.

3. Policy Gaps: Current regulations and policies do not reflect Nigeria's healthcare provision's complexities and nuances. Policies often lack implementation strategies and do not align with ground realities.

4. Work Conditions: Many healthcare professionals face excessive workloads, long working hours, and emotionally draining conditions. Lack of support systems to manage stress contributes to burnout, affecting their well-being and patient care quality [6].

3. GLOBAL APPROACHES TO STRENGTHENING THE HEALTHCARE WORKFORCE FOR UNIVERSAL HEALTH COVERAGE

The main goal of global health policy, known as universal health coverage (UHC), is to provide basic healthcare services to all people without regard to their capacity to pay. To achieve UHC, a strong and well-equipped healthcare workforce is necessary. The healthcare workforce consists of doctors, nurses, midwives, pharmacists, and other healthcare professionals, which is essential to providing high-quality care to communities worldwide.

3.1 Innovative Workforce Training and Education

One of the key strategies for enhancing the healthcare workforce is to fund programs for professional education and training in the field. Healthcare personnel must have thorough and up-to-date education to deliver high-quality care. Organizations like medical schools, nursing colleges, and allied health programs are essential to the success of this process. In sub-Saharan Africa, for instance, the Medical Education Partnership Initiative (MEPI) has greatly enhanced medical education and research capacity, addressing the region's shortage of healthcare workers [7]. Innovative methods in training and education for healthcare workers are essential to achieving the goals of UHC and preparing them to meet the changing needs of a complete and accessible healthcare system. Interprofessional Education (IPE), as defined by WHO in 2010, places a strong emphasis on collaboration and communication between healthcare professionals from different disciplines. IPE fosters a patient-centered approach and raises the standard of care delivered by facilitating interdisciplinary collaboration among students in the same training program [8]. Scalable and customized learning experiences are made possible by integrating technology-enhanced learning into healthcare education. Healthcare practitioners can access education remotely thanks to virtual simulations, telemedicine training, and online modules, which effectively bridge geographic distances and reach underprivileged areas. Healthcare personnel can better grasp socioeconomic determinants of health and cultural subtleties by being trained in community settings, according to research by Worley et al., published in 2006. This strategy improves their capacity to deliver care pertinent to the situation, particularly in underserved and distant locations. Finally, because healthcare systems worldwide are interconnected, it is critical to grasp global health challenges. Including global health concepts in healthcare education broadens professionals' perspectives and prepares them to support global health initiatives [9,10].

3.2 Navigating Workforce Distribution and Retention

Protecting the public's health and well-being depends on the healthcare sector. Appropriate and evenly distributed healthcare personnel are crucial for developing a strong and efficient healthcare system. The healthcare workforce must be strengthened to provide fair access to high-quality healthcare services. It requires navigating workforce distribution and retention. Healthcare organizations may develop a resilient workforce that addresses disparities and satisfies the changing demands of different populations by implementing techniques like telemedicine, incentive programs, continuing education, and work-life balance initiatives.

Telemedicine and telehealth technology can help close geographical gaps and efficiently reach patients in remote or underserved locations by enabling healthcare professionals to give care and consultation remotely. This strategy has become more popular, particularly during the COVID-19 pandemic [11].

Governments and healthcare organizations might create incentive programs to entice healthcare professionals to work in underserved areas, including school loan forgiveness, scholarships, and financial incentives. Countries like Brazil and India have started such programs to entice medical personnel to practice in underserved and rural areas [12]. Providing opportunities for professional development can boost job satisfaction and motivate healthcare workers to stay in their positions. Evidence demonstrates that continuing education has a favorable effect on retention. Policies that support moderate workloads, flexible scheduling, and a healthy work-life balance can improve jobs [13].

3.3 Fostering Workforce Motivation and Well-being

For the healthcare workforce to be more effective and for Universal Health Coverage (UHC) to be achieved, it is essential to promote employee motivation and wellness. Delivering high-quality care, enhancing health outcomes, and accomplishing the objectives of UHC all depend on a motivated and well-supported healthcare workforce. Providing opportunities for ongoing education, skill development, and career promotion can boost the motivation and wellness of the workforce, according to Scheffler et al. in 2016. Healthcare providers can stay current with changing medical practices and technologies by providing training programs, workshops, and mentorship [14]. Once more, increasing employee motivation and wellness involves developing welcoming and encouraging work cultures that value collaboration, communication, and work-life balance. To improve the wellness of the workforce, issues including excessive workload, burnout, and insufficient resources can be addressed [15]. In 2020, Dall'Ora et al. found that motivating healthcare professionals can be accomplished by rewarding their efforts and excellence with rewards, promotions, and public recognition. The wellness of the healthcare workforce depends on proper remuneration and benefits. Finally, encouraging autonomy and decision-making can improve job satisfaction and a sense of independence. This strategy allows healthcare workers to own their work and improve patient outcomes [16].

3.4 Synergistic Healthcare Delivery Models

The integrated and cooperative tactics used in the synergistic healthcare delivery models. They use the advantages of different healthcare organizations and systems to provide thorough and effective care. Particularly in the context of Universal Health Coverage (UHC), these strategies improve healthcare delivery and strengthen the healthcare workforce. Primary healthcare is a synergistic healthcare delivery strategy, according to WHO's 2018 report. Teams of primary healthcare providers, including physicians, nurses, nurse practitioners, pharmacists, and community health workers, collaborate to deliver comprehensive care. This strategy meets the population's various healthcare demands while improving access to care and resource usage [17]. Providing healthcare services through community-based care involves utilizing local resources and communities. This strategy strongly emphasizes preventive treatment, health promotion, and disease management at the community level, frequently incorporating volunteers and community health workers [18]. Health Information Communication (HIC) technologies enable healthcare professionals to securely communicate patient data, improving care coordination and minimizing redundant testing and procedures. This strategy promotes patient-centered treatment and decision-making that is well-informed [19].

4. TAILORING GLOBAL INSIGHTS TO THE NIGERIAN HEALTHCARE WORKFORCE CONTEXT

4.1 Unique Factors that Influence the Applicability of Global Lessons to Nigeria

To achieve Universal Health Coverage (UHC) in Nigeria, it is imperative to emphasize the contextual nuances that may impact the applicability of global healthcare lessons. While Nigeria has shown progress in aligning with the Global Strategy for Human Resources for Health: Workforce 2030, successful implementation necessitates an understanding of the country's unique cultural, geographical, and socioeconomic factors [20].

4.1.1 Cultural factors

Nigeria's diverse ethnic and cultural landscape demands that health interventions respect and incorporate various cultural norms and practices. Integrating modern healthcare with traditional healing methods requires collaboration and sensitivity. Gender roles and cultural norms influence healthcare access, often affecting those who seek care for stigmatized conditions [21].

4.1.2 Geographical factors

Urban-rural disparities in healthcare infrastructure highlight the need for strategies to address access and quality discrepancies. Overcoming challenges related to remote and underserved areas, transportation barriers, and region-specific disease patterns is crucial [22].

4.1.3 Socioeconomic factors

Addressing economic inequalities is essential, considering the wide income disparities that

affect healthcare affordability and accessibility. Strategies should target various socioeconomic groups, especially those paying out of pocket for healthcare. Additionally, bridging the gap between urban and rural healthcare professionals and tailoring communication for different education levels are vital [23].

4.2 Customization of Global Lessons

4.2.1 Innovative workforce training and education

Adapting international lessons requires aligning curriculum and training methods with local healthcare needs and challenges. Key strategies include collaborating with local experts, utilizing mobile and telemedicine technology, practical training, and involving community health workers. Sustainability hinges on local capacity building [24].

4.2.2 Workforce distribution and retention

Addressing regional disparities involves offering incentives for rural practice, engaging communities, and providing professional development opportunities. Transparent communication, mentorship programs, work-life balance support, and healthcare leadership development can enhance workforce retention [25].

4.2.3 Workforce motivation and well-being

Creating comprehensive wellness programs, promoting inclusive leadership, managing workloads, and fostering teamwork are essential. Inclusive technologies and ethical patient care can enhance healthcare environments. Open communication, community engagement, and acknowledging contributions promote motivation and well-being [26].

4.2.4 Synergistic healthcare delivery models

Collaborative partnerships between sectors, integration of telemedicine, data-driven decision-making, and patient-centered care can streamline healthcare services. Culturally competent approaches and sustainable models, including public-private partnerships, are vital [25].

4.3 Innovative Approaches for UHC

Leveraging technology and collaboration is key. Telemedicine, task-shifting, and interprofessional collaboration optimize resources and access [24]. These approaches require coordination, stakeholder commitment, and evaluation for sustainability.

As Nigeria navigates toward UHC, customizing global insights is crucial for effective healthcare workforce strengthening. Acknowledging cultural, geographical, and socioeconomic factors and adapting strategies accordingly will be pivotal for improving healthcare access, quality, and equity across the nation [20].

5. POLICY RECOMMENDATIONS FOR STRENGTHENING UNIVERSAL HEALTH COVERAGE (UHC) IN NIGERIA

1. Education and Training: Taking cues from the European Union's approach to growth promotion, investing in education and training can foster long-term development. Educational investment leads to improved human capital, productivity, and reduced inequalities. Prioritizing education creates a skilled and adaptable workforce, essential for embracing technological advancements [27].

2. Addressing Workforce Shortages: To alleviate health worker shortages, bilateral and multilateral agreements can facilitate cross-border migration. Skill development for immigrant health workers, data collection on migration, and protective measures like pension portability should be ensured. Encouraging diaspora involvement and remittance transfers can enhance the healthcare system [28].

3. Promote Interprofessional Collaboration: Integrating interprofessional collaboration into healthcare education is crucial, incentivizing its adoption and recognizing its value. Collaborative competencies equip healthcare professionals for effective teamwork in complex settings. Including non-professional health workers, administrators, policymakers, and community leaders in interprofessional teamwork enhances the system's efficiency [29].

4. Innovation with Technology: Harnessing innovative technologies like telehealth and e-learning can significantly advance healthcare delivery. E-portfolios, ICT training, and involving patients in self-care can bolster the healthcare workforce's capabilities [30].

5. Ensuring Fair Compensation and Incentives: Enhancing universal health coverage involves prioritizing rural backgrounds in medical education. Implementing selective student intake, immersive rural learning experiences and integrated curricula can bolster recruitment and retention in underserved areas [31].

6. Community Engagement and Ownership: Incorporating Community Health Workers (CHWs) through clear policies and collaborative efforts is crucial. This integration improves healthcare effectiveness, requiring proper resource allocation, policy inclusion, and open communication [32].

7. Workforce Planning for UHC: Comprehensive health workforce planning based on holistic requirements and considering population needs, is vital. Continuous monitoring and adjustments are essential to address future healthcare needs and market dynamics [33].

8. Political Will and Leadership: Understanding the political nature of UHC and garnering domestic and international support is paramount. Governance and leadership significantly impact UHC implementation, necessitating strong political commitment [34].

6. CONCLUSION

In the pursuit of Universal Health Coverage (UHC) in Nigeria, the role of a robust healthcare workforce emerges as a cornerstone for equitable and accessible healthcare services. This manuscript has delved into the intricate dynamics of the Nigerian healthcare landscape, exploring the strengths, weaknesses, and critical challenges that shape the healthcare workforce's capacity to contribute to UHC.

Throughout the exploration, key lessons have emerged from global approaches and their adaptation to the Nigerian context. Innovative strategies in education, workforce distribution, motivation, and collaborative healthcare delivery have showcased their potential to bridge healthcare access and quality gaps. Recognizing the cultural, geographical, and socioeconomic nuances unique to Nigeria, the relevance of tailored solutions that resonate with the local context has been underscored.

The impact of a strengthened healthcare workforce on the realization of UHC cannot be understated. Effective training, interprofessional collaboration, technology integration, and community engagement can amplify the workforce's capabilities, leading to improved patient care, reduced health disparities, and improved health outcomes. The workforce can be harnessed by addressing barriers such as inadequate distribution, underutilization, and external brain drain to drive UHC forward.

As Nigeria progresses towards the UHC vision, continuous monitoring and research-driven interventions centered around the healthcare workforce remain crucial. Future research endeavors could delve deeper into the impact of innovative training methodologies, the role of community health workers in remote areas, and the sustainability of interprofessional collaboration. The evaluation of policy implementation and the measurement of outcomes tied to workforce-centric interventions are avenues ripe for exploration.

In conclusion, the path to Universal Health Coverage in Nigeria is intrinsically linked to a resilient and empowered healthcare workforce. The lessons learned from global approaches, nuanced for the Nigerian context, have the potential to reshape the healthcare landscape, making quality healthcare services accessible to all citizens. By emphasizing the significance of a strengthened workforce, this research contributes to the broader narrative of health equity, social progress, and the realization of UHC aspirations in Nigeria.

CONSENT AND ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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