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Dynamic Retention Strategies for Mitigating Health Workers Brain Drain

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Abstract

The departure of skilled health workers from Sub-Saharan Africa, Asia, and the Pacific poses a significant challenge for the global health workforce, exacerbating healthcare accessibility issues, labour shortages, and vulnerabilities within healthcare systems worldwide. This study aims to identify brain drain drivers and propose dynamic retention strategies tailored to the unique circumstances of each region, relying solely on secondary data. Drawing upon the Push-Pull and Social Exchange Theory frameworks, the study reviews existing literature, and it was revealed that there is an interplay of push factors, such as low pay, limited professional development opportunities, and challenging working conditions, alongside pull factors, including better income prospects and career advancement opportunities. This study advocates for dynamic retention strategies like enhancing employee engagement, implementing flexible work arrangements, promoting work-life balance, offering competitive compensation, facilitating professional development, and fostering supportive work environments tailored to each region's circumstances were imperative to mitigate the health workers brain drain syndrome. It also suggests the importance of strategic, context-specific interventions in mitigating brain drain and ensuring sustainable healthcare delivery worldwide and ongoing research and evaluation to assess their effectiveness. This can be achieved through collaborative efforts of stakeholders towards safeguarding the global health workforce and promoting equitable access to healthcare services for all.

Keywords: Employee Engagement, Flexible Work Arrangements, Health Worker Brain Drain, Retention Strategies, Work-Life Balance, Workforce Migration

1. Introduction

Global migration, fueled by factors such as limited economic opportunities, globalisation, unemployment, political unrest, social inequality, and technological disparities, has seen an unprecedented surge over recent decades (Akanji, Mordi & Ajonbadi, 2020). This phenomenon,

called brain drain, characterises the migration of highly skilled individuals from developing nations to developed ones, where their expertise is perceived to hold more excellent value (Maru, 2021). In healthcare, this migration poses a twofold risk for developing countries in Sub-Saharan Africa, Asia, and the Pacific: a disproportionately higher percentage of critically ill patients and an insufficient healthcare workforce to cater to their needs (Kavenuke & Kinyota, 2018).

This twofold risk amplifies the vulnerabilities of healthcare systems in these developing countries and their regions (Kavenuke & Kinyota, 2018). As a disproportionately higher percentage of patients struggle with critical illnesses, the first aspect of this twofold risk manifests. As a result of the health worker brain drain, there is a significant compromise in the ability to promptly and effectively deliver medical interventions for the growing number of needy individuals (Najib, Abdullah, Narresh & Juni, 2019). Concurrently, the second aspect of this twofold risk manifests itself in the extreme lack of healthcare workers (HCW) to handle the escalating health issues. Developing nations are faced with a need for more workers to meet their populace's various needs due to many health-related problems.

The implications are wide-ranging and go beyond the immediate treatment of patients, including preventative care, health education, and the management of endemic diseases (Toksöz, 2020). The departure of highly qualified healthcare workers from developing to developed nations has reached alarming levels, posing a severe threat to the healthcare systems of low-income countries struggling to provide essential services. This crisis extends beyond regional concerns, evolving into a global catastrophe demanding prompt attention and the implementation of dynamic retention strategies (Atte, 2021). Developing nations face significant hurdles in their healthcare systems, particularly in human resources, and the brain drain phenomenon exacerbates the already fragile structure of these systems (Atte, 2021).

In stark contrast, North and South America, representing only 14% of the world's population and 10% of the disease burden, account for nearly 50% of global health expenditure and employs 37% of the healthcare workforce (Masanjala, 2019). The disparities become glaringly evident in countries like Malawi, where the ratio of healthcare workers to the population is drastically imbalanced, leading to severe consequences, especially in rural communities (Kinyili, 2019). The physician-to-population ratio between Africa and the United States highlights the critical mismatch, further exacerbated by the departure of approximately 23,000 qualified healthcare workers from Africa each year (Zilla, Bolman, Boateng & Sliwa, 2020).

Motivations behind health worker migration, classified into push and pull factors, reveal the complex interplay between domestic circumstances in the country of origin and attractive elements in the destination country (Abdou, 2021). This article takes a global perspective to investigate the intricate challenges arising from the exodus of health workers, emphasising the crucial need for adaptable retention strategies. It addresses the paper's significance, highlighting the vulnerabilities healthcare systems face in developing countries and advocating for innovative, dynamic retention strategies. This study's primary objective is to assess health worker migration drivers critically, scrutinise conventional retention strategies, and underscore the immediate need for tailored and adaptable retention plans to mitigate the effects of health worker brain drain.

The subsequent sections elucidate the conceptual clarification on health workers' brain drain, review the range of dynamic retention strategies aimed at mitigating health worker brain drain, present empirical evidence from previous studies highlighting the effectiveness of various retention strategies in mitigating health worker brain drain, detail the research methodology, provides theoretical underpinnings for understanding health worker migration, examines the urgency of addressing health worker brain drain and conclude with recommendations. Through this exploration, this article aims to contribute essential knowledge to the discourse on addressing health worker brain drain and promoting the stability of global healthcare systems.

2. Understanding Health Worker Brain Drain

Scholars have comprehended brain drain in several ways, connoting different views on what brain drain is all about (Mamuli, 2020; Naumovski, 2021; Kadel & Bhandari, 2018; Wright & Constantin, 2021). When the word "brain" is used, it refers to any ability, capability, or quality that could be useful. By using the word "drain," it is implied that this pace of departure is more than "normal" or even desirable. Connecting the two means that the most skilled people leave at a noticeable rate (Biglari, Mayo, Beynaghi, Maknoon, Moztarzadeh & Mozafari, 2022). It is majorly referred to as the global transfer of knowledge and resources in the form of human capital, which is the movement of skilled personnel with advanced degrees, technical workforce, and specialists from developing to developed countries.

According to previous studies, both the receiving nation and the migrants themselves might profit economically from the brain drain (Abebayo & Akinyemi, 2022; Diah, Hasiara & Iruwan, 2020). According to Ogbu (2019), brain drain describes the exodus of workers from various parts of the world seeking better living and working conditions, higher incomes, access to cutting-edge technology, the opportunity to operate in a more favourable resource system, and stable political environments. Kadel & Bhandari (2018) also defined brain drain as the departure of highly educated or competent individuals from one nation, area, organisation, or industry to another based on greater employment possibilities, better living standards, and higher salaries. Brain loss is governed at the international level by many factors produced locally and globally.

The term "brain drain" in the healthcare industry refers to the exodus of medical professionals seeking excellent pay, a higher quality of life, access to enhanced political stability, cutting-edge technologies, and improved working conditions across the globe (Kadel & Bhadari, 2018). The rationale behind the brain drain of skilled workers has frequently been done using the "push-pull" factors approach. According to Lee's push and pull theory, a correlation exists between push variables in the country of origin and, consequently, pull elements in the country of destination, and vice versa. When these opposing factors are combined, the result is typically a net exodus of health professionals from African nations (Urbanski, 2022).

According to Urbanski (2022) there are a number of push and pull factors that affect migration. Critical analysis of global migration and brain drain has frequently been done using the "push-pull" factors approach. This approach was popularised in the 18th century by Lee (Lee, 1966) to investigate the variables influencing brain drain and migration. According to Lee's push and pull theory, a correlation exists between push variables in the country of origin and, consequently, pull elements in the country of destination, and vice versa. When these opposing reasons are combined, there is typically a net outflow of healthcare workers (HCW) from African nations (Abdou, 2021). Push factors are the domestic circumstances in the countries of origin that have compelled healthcare workers to depart. These could be societal, political, health-system, professional, work-related, or economic considerations. Pull factors show traits in beneficiary nations that could draw nurses. These elements may include social and familial dynamics, professional and career advancement, workplace culture, job stability, pay, and perks (Van Hear, Bakewell & Long, 2020).

The push factors that impact migration are those that compel people to leave their homes. Economic, social, and political issues could be push factors driving migration. Lack of employment is one of the economic causes influencing migration. According to Ibrahim (2019), a lack of jobs and the overcrowding of developing nations push people to migrate to developed nations (Hatch, 2016). Migrants are often motivated by low living standards. The decision to go abroad is made by migrants who want to better their and their families' lives. Migrants can increase their salaries and participate in the market more efficiently by moving to industrialised nations (Llull, 2017).

Some common push factors in developing countries can be identified as low pay, limited growth and opportunities, instability, inadequate resources and insecurity. Inadequate compensation is a significant push factor for health workers in developing countries. The Global Health Workforce Alliance reports that 55% of health workers migrate due to low pay, with studies in Nigeria and other

nations supporting the prevalence of this issue (Nwankwo, Ugwu, Nwankwo, Akpoke, Anyigor, Obi Nwankwo and Spicer, 2022). Also, limited growth and opportunities contribute to health workers' discontent in developing nations. The Lancet Commission on Global Surgery highlights that 45% of health workers migrate due to restricted opportunities for growth, indicating that the pursuit of realising their full potential becomes a driving force behind their decision to move.

A study by Gbambuan and Agidi (2022) unveiled that insecurity has escalated the brain drain in developing countries with severe implications for quality and knowledge-driven economies. Healthcare workers may be more vulnerable to workplace violence in developing nations, which could negatively affect their general well-being and job satisfaction. In underdeveloped countries, a lack of infrastructure, technology, and medical supplies can cause frustration and burnout in the medical community. One vital motivating element is the deficiency of resources needed to carry out their responsibilities efficiently (Fletcher, Alfe & Robinson, 2018). Pull factors are used in migration studies to describe factors and conditions that attract individuals to move to a particular location or country, which are the opposite of push factors in migration.

Pull factors, like push forces, can be divided into three categories: political, social, and economic migratory pull factors. Economic determinants that attract migrants, according to Mohamed & Abdul-Talib (2020), include things like expectations for improved work, better housing, more money and food, and excellent living standards. Political pull factors that impact migration also include the freedom to vote, immunity from prosecution, enhanced legal protection, and safety (Urbanski, 2022). Some of the common pull factors derived from existing literature are enhanced education, career prospects, higher income, better standard of living and recognition in the organisation. The promise of advanced education and specialised training in developed nations lures healthcare workers.

The International Organisation for Migration (IOM) notes that over 40% of healthcare workers seek knowledge that may not be readily available in their home countries, driven by the desire to remain at the forefront of medical developments (Etzkowitz, 2019). Apart from the promise of advanced education, the attraction of diverse job options and opportunities for career advancement draws health workers to industrialised nations. The World Health Organisation (WHO) found that 60% of healthcare professionals relocate to enhance their careers and exert a global influence on healthcare policy (Urbanski, 2022). Also, economic disparities create a compelling pull, with the potential for significantly higher earnings abroad. The World Bank highlights that healthcare workers may earn up to five times more in wealthier countries, making migration an intricate decision based on financial stability and an improved lifestyle (Urbanski, 2022).

Access to better living conditions, advanced infrastructure, and social amenities in developed nations is also a strong draw. Approximately 35% of migrant health workers prioritise better living standards, emphasising the appeal of enhanced well-being for themselves and their families (Van Hear, Bakewell & Long, 2020). Developed countries might provide more professional recognition and respect. Healthcare workers frequently look for settings where they can contribute significantly to the field and where their experience is respected (Naim & Lenka, 2018).

3. Multifaceted Dimensions of Employee Retention Strategies

Employee retention strategies can be seen as policies developed and supported by organisations' actions to prevent key personnel from leaving the company (Ramos, 2019). Similarly, Leign (2012) extends this definition, framing retention as the effort to retain employees critical to the organisation's sustenance. In the contemporary employment landscape, characterised by a power shift from employers to employees, organisations are compelled to employ various activities, often in the form of policies, to ensure the sustained presence of their workforce throughout their careers (Gberevbie, 2010). According to Singh (2019), the effective implementation of employee retention strategies fosters commitment and loyalty among staff while simultaneously mitigating the costs associated with employee turnover.

Understanding the reasons behind employee departures is pivotal in deploying successful

retention strategies. As outlined by Kurdi & Alshurideh (2020), various retention strategies encompass training and development, employee rewards, career advancement opportunities, job rotation, work environment enhancement, goal setting, job enlargement, job enrichment, and job security. In response to the evolving dynamics of the workforce, organisations are recognising the need for a one-size-fits-all approach. They are now navigating the intricate terrain of employee retention, with remuneration emerging as a cornerstone strategy. While traditional approaches focus on pay standardisation, Singh (2019) advocates flexible compensation packages tailored to individual preferences.

Hong et al. (2012) underscore the significance of strategic compensation planning, incorporating wages, salaries, incentive schemes, employee benefit plans, and additional perks to create a positive workplace and reduce employee turnover. According to Savery et al. (2019), wage and benefits policies should strategically enhance employee morale, reduce attrition, and align with organisational goals. The second dimension centres on training and development, recognising that job-related training enhances employees' skills, confidence, and dedication (Hong et al., 2012). Cloutier et al. (2015) emphasise the critical role of development in promoting organisational career advancement. Staff development, closely tied to performance and organisational support, influences satisfaction and retention, as Grossman (2002) and Fletcher, Alfes, & Robinson (2018) highlighted.

The third dimension underscores the pivotal role of responsible leadership in employee retention, encompassing equitable HR practices, managerial support for staff development, and fostering a positive workplace culture (Doh, Stumpf, & Tymon, 2011; Cloutier et al., 2015; Naim & Lenka, 2018; Abasilim, Gberevbie & Osibanjo, 2019; Osibanjo, Adeniji, Salau, Atolagbe, Osoko, Edewor & Julia Olowu (2020). According to Naim & Lenka (2018), a positive workplace culture reduces employee turnover and promotes career advancement. In the ever-evolving healthcare landscape, there has been a shift from traditional retention strategies to dynamic approaches such as work-life balance, employee engagement, and work flexibility to retain health workers and address brain drain (Dago & Barussaud, 2021; Clausen, Demircioglu & Alsos, 2020; Bhende, Mekoth, Ingalhalli & Reddy, 2020).

One innovative strategy is workforce engagement, emphasising techniques like meritocracy, business branding, and succession planning to lower turnover and boost productivity (Ashraf and Siddiqui, 2020; Arubayi, 2022; Kreiss & McGregor, 2018). A friendly workplace fostered by engaged employees increases productivity and organisational loyalty. The significance of flexibility in work arrangements and work-life balance is emphasised as crucial by Clausen, Demircioglu & Alsos (2020). Work-life balance, defined by Brough et al. (2020), focuses on positive effects on employee satisfaction and well-being. Flexible work schedules, including job-sharing, telecommuting, and part-time employment, have become influential in keeping healthcare professionals satisfied and engaged (Nnko, 2022; Mercer, Russel & Arnold, 2014; Idris, 2014; Gberevbie, 2010).

4. Empirical Evidence of Dynamic Retention Strategies

While the extensive literature review offers a solid theoretical framework for dynamic retention strategies, it is crucial to examine real-world empirical evidence to validate their effectiveness in mitigating health worker brain drain. Several studies have demonstrated the positive impact of these strategies on employee retention and job satisfaction within the healthcare sector (De Vries., Boone., Godderis., Bouman., Szemik., Matranga & De Winter, 2023; De Vries., Lavreysen., Boone., Bouman., Szemik., Baranski., Godderis & De Winter, 2023). The Mayo Clinic implemented a work-life balance programme in the United States that included flexible scheduling, on-site childcare facilities, and mental health support services. Mayo Clinic incorporated a "joy in the workplace" structure to support health workers' well-being and create space for healthcare workers to be energised to put the patient's needs first and deliver excellent care.

An internal evaluation reported a 22% decrease in voluntary resignations among doctors and a 16% reduction in nursing staff turnover within two years of implementing the program (Mayo Clinic,

2020; Kelsey, 2023). Similarly, the National Health Service (NHS) in the United Kingdom introduced a range of flexible working arrangements, including part-time options and job-sharing, to address staff retention challenges (NHS, 2022). A recent NHS report found that trusts (organisations) with higher uptake of flexible working policies experienced lower turnover rates among nurses and midwives, with some trusts reporting up to a 25% reduction in voluntary resignations.

Another study in Kenya public hospitals showed that work-life balance practices increased health workers' retention and productivity. The study concludes that work-life balance strategies, including flexible working options, health worker welfare programs, leave programmes and talent development, significantly enhance health workers' productivity and contribute to hospitals' overall performance. These strategies were present but must be fully implemented (Ibrahim, 2019). A longitudinal study conducted by the World Health Organization (WHO) in Ghana, Uganda, and Zambia evaluated the impact of work-life balance initiatives on healthcare worker retention. The study found that organisations implementing flexible work arrangements, such as job-sharing and telecommuting options, experienced a 27% reduction in voluntary turnover among nurses and midwives over three years (WHO, 2021).

These empirical examples highlight the concrete benefits of adopting dynamic retention strategies in diverse healthcare settings across the globe. By prioritising work-life balance, employee engagement, and job flexibility, organisations can effectively address the push factors driving health worker migration while enhancing job satisfaction and commitment among their workforce. However, it is essential to note that various contextual factors, such as organisational culture, leadership support, and resource availability, may influence the effectiveness of these strategies. Therefore, further research is recommended to evaluate the impact of dynamic retention strategies across different healthcare settings, particularly in low- and middle-income countries facing severe health worker shortages.

5. Research Methods

This article employs a secondary research method involving a review of existing literature about the article's subject. The study adopts a descriptive and explanatory research design to propose on the dynamic retention strategies for mitigating health worker brain drain. This design enables an exploration of the multifaceted aspects of the subject matter. The primary data source is from peer-reviewed journals, conference papers, and national policy documents. The study leveraged on secondary data to gain insights into the evolving landscape of health workforce dynamics and effective retention strategies. The primary data collection method involves meticulously examining scholarly articles, academic databases, and reputable publications that explore various aspects of health workers dynamics, retention strategies, and factors influencing health worker migration. This method ensures a thorough understanding of the existing knowledge base and informs the identification of dynamic retention strategies for mitigating health workers brain drain.

The literature review was conducted using multiple electronic databases, including Scopus, Web of Science and Google Scholar. The search strategy involved a combination of relevant keywords such as "health worker brain drain", "retention strategies", "work-life balance", "workforce migration" "employee engagement", and their variations. The search was limited to articles published in English between 2018 and 2023 to ensure the inclusion of recent and relevant literature. The study employed predefined inclusion and exclusion criteria for literature selection. The inclusion criteria were:
    a.   Peer-reviewed journal articles, conference papers, or government reports.
    b.   Studies focusing on employee retention strategies in the healthcare sector.
    c.   Studies examining factors influencing health worker migration.
    d.   Studies analysing workforce dynamics in healthcare settings.
    Exclusion criteria were:
    a.   Non-peer-reviewed sources,
    b.   Studies not directly related to the healthcare sector, and

c. Studies published before 2018.

The analysis in this study predominantly adopts a qualitative and interpretive nature. Extracted information from the literature is systematically organised to identify recurring themes, best practices, and gaps in the current understanding of health worker retention. For example, specific retention strategies mentioned in the literature reviewed, such as flexible work arrangements, employee engagement and work-life balance, were coded and grouped under the broader theme of "dynamic strategies for retention." Similarly, factors contributing to health worker migration, such as better career prospects, higher salaries, and improved quality of life, were coded and categorised under the theme "drivers of brain drain."

6. Theoretical Framework

The theoretical framework for addressing health worker brain drain through dynamic retention strategies can be comprehensively constructed by integrating two prominent theories: the Push-Pull Theory of Migration (Lee, 1966) and the Social Exchange Theory (Blau, 1964). This synthesis provides a robust analytical lens to understand the dynamics of health worker migration and retention strategies within the context of global healthcare systems. Push-Pull Theory of Migration (Lee, 1966): The Push-Pull Theory posits that migration is driven by a combination of push factors that compel individuals to leave their home country and pull factors that attract them to the destination country. Push factors represent adverse conditions in the home country that incentivise migration, while pull factors denote favorable conditions in the destination country that attract migrants.

In the context of health worker brain drain, push factors may include low pay, limited career growth opportunities, political instability, inadequate resources, and insecure working environments in the home country (Lee, 1966). These factors create dissatisfaction and prompt health workers to seek opportunities elsewhere. Pull factors, on the other hand, may include better remuneration, enhanced professional development prospects, political stability, access to advanced technology, and improved working conditions in destination countries. These factors entice health workers to migrate to countries where they perceive greater opportunities for personal and professional growth.

Social Exchange Theory (Blau, 1964): The Social Exchange Theory posits that individuals engage in relationships and make decisions based on a rational assessment of costs and benefits. According to this theory, individuals weigh the rewards and costs associated with their actions and make choices that maximise their perceived benefits. Applied to the context of health worker retention, the Social Exchange Theory suggests that employees decide to remain with an organisation when they perceive the benefits of staying outweigh the costs of leaving (Blau, 1964). Benefits may include intrinsic rewards such as job satisfaction, professional development opportunities, supportive work environment, and extrinsic rewards such as competitive salary, benefits package, and recognition. Costs, on the other hand, may include dissatisfaction with work conditions, limited career advancement opportunities, inadequate compensation, and lack of support from organisational leadership.

The integration of the Push-Pull Theory of Migration and the Social Exchange Theory provides a comprehensive understanding of the factors influencing health worker migration and retention. Push factors identified through the Push-Pull Theory elucidate why health workers may choose to leave their home countries, while pull factors explain what attracts them to migrate to other countries. Concurrently, the Social Exchange Theory helps to elucidate why health workers may choose to remain with an organization or migrate elsewhere based on their perceived benefits and costs. By triangulating both theories, this framework enables a nuanced analysis of the complex interplay between migration motivations and retention strategies in the global healthcare workforce.

7. Discussion

7.1 Addressing the Urgency: Mitigating Health Worker Brain Drain

In the face of the escalating challenge posed by health worker brain drain, it is imperative to advocate for dynamic retention strategies as a principal solution. The urgency of this matter is underscored by the increasing migration of healthcare workers from low- and middle-income countries to resource-rich nations, aggravating the shortage of skilled healthcare workers in critical regions, particularly Sub-Saharan Africa, Asia, and the Pacific (Serour, 2019). The primary reasons behind the migration of healthcare workers are manifold. A health worker's decision to migrate will depend on a complex interplay of push and pull factors and many individualistic considerations (Snyder, 2016; Odunayo, Worlu, Osibanjo, Adeniji, Atolagbe, and Salau. 2020).

In many cases, the decision to migrate abroad is influenced by the knowledge of an opportunity to migrate; in other cases, national health systems or private employers will actively recruit these workers through job fairs, advertisements, or the use of head-hunting firms. Some of the push factors in the origin countries include the meagre pay offered to domestic health care workers, unfavourable work environment, lack of opportunity for growth and development, appalling socioeconomic conditions, harsh government policies and religious and ethnic movements such as those in Ethiopia, Sudan, Angola, Zaire, and Iraq (Serour, 2019; Yuksekdag, 2018; Najib, Abdullah, Narresh & Juni, 2019; Gelencsér, Szabó-Szentgróti, Kőmüves & Hollósy-Vadász. 2023).

By 2030, the World Health Organisation anticipates a global deficit of 10 million health and care workers, predominantly in low-income nations, driven by an increasing migration of skilled professionals seeking better opportunities abroad. The "red list," initiated in 2020 and updated triennially, now includes 34 additional African nations, alongside Nigeria, Ghana, and Zimbabwe. Notably, the UK saw an influx of over 7,000 Nigerian nurses in 2021–2022, while Ghana and Zimbabwe experienced departures of approximately 4,000 nurses each in 2022 (Olufemi, 2023, p.1). The Economic Commission for Africa (ECA) underscores the severity of the brain drain in Africa, surpassing other developing regions, and emphasises the urgent need to close the labour force gap with developed nations (Dago & Barussaud, 2021).

The latest ECA report reveals a substantial loss of Africa's skilled workforce to developed countries, highlighting the imperative to enhance qualified individuals across all fields. With around 70% of Ghanaian doctors trained in the 1990s believed to have emigrated and a significant African presence in the USA, addressing health worker brain drain is critical to prevent compromising patient care quality, worsening labour shortages, and straining healthcare infrastructure on a global scale (Maru, 2021; Bhende, 2020). While it is noteworthy that some resource-rich nations such as Australia, Canada, the UK and the USA are experiencing an influx of healthcare workers and low- and middle-income countries like Sub-Saharan Africa, Asia, and Pacific countries are experiencing a loss of skilled workers, the overall trend indicates a critical need for targeted intervention.

To effectively address the health worker brain drain, this article strongly recommends implementing dynamic retention strategies tailored to meet the unique needs of healthcare professionals. These strategies should prioritise work-life balance, employee engagement, and job flexibility as essential components. (Clausen, Demircioglu & Alsos, 2020; Johnson & Johnson, 2019; Li, Gillies, He, Wu, Liu, Gong & Sun, 2021). Drawing on studies like Arubayi (2022) and Nnko (2022), which emphasise the impact of meritocracy and other employee engagement on employee retention, it is evident that these strategies yield positive results. By aligning company branding, succession planning, and meritocracy, organisations can create an environment where healthcare professionals feel valued, ultimately influencing their decision to stay (Chandra, 2019; Ashraf & Siddiqui, 2020; Theuri, 2017).

Financial incentives should not stand alone but be complemented by initiatives that promote positive company culture. Employee engagement programs, such as mentorship, professional development, and frequent feedback mechanisms, strengthen a healthcare worker's sense of purpose

and belonging (Iloh, Ikwudinma, Obi & Akodu, 2022). Focused professional development and training investments enhance skills and job satisfaction, contributing to workforce stability (WEF, 2021). Work-life balance programs, encompassing fair working hours, adequate vacation time, and mental health support, are pivotal in fostering a contented and motivated workforce (Johnson & Johnson, 2019).

Embracing flexible work arrangements, including job-sharing, telecommuting, and part-time options, is crucial to accommodate healthcare professionals' diverse demands and preferences (Clausen, Demircioglu & Alsos, 2020). As defined by Bhende, Mekoth, Ingalhalli & Reddy (2020), work-life balance goes beyond equal time distribution and encompasses a healthy work-life ratio, fostering employee happiness and well-being. The positive impact on effective hiring, employee retention, and reduced absenteeism underscores the long-lasting benefits of prioritising work-life balance (Kreiss & McGregor, 2020). Flexible work scheduling, job allocation, and work continuity, as highlighted by Nnko (2022), contribute positively to the retention and performance of healthcare workers.

Embracing flexibility in work arrangements accommodates varied requirements and results in less absenteeism and increased employee satisfaction (Sasso et al., 2019; Brough, Timms, Chan, Hawkes & Rasmussen, 2020). According to Mercer, Russel & Arnold (2014), one of the leading causes of healthcare professionals' discontent is restrictive and inflexible work arrangements. Health professionals' varied requirements and interests can be accommodated by offering flexible schedule choices like job-sharing, telecommuting, or part-time work. This flexibility helps healthcare workers manage their personal and professional obligations more effectively, leading to more extended career longevity and increased job satisfaction (Jacob & Atobauka, 2019; Abimbola, Olanipekun, Igbokwe & Negin, 2020).

These dynamic strategies, employee engagement, work-life balance, and work flexibility support the well-being and retention of healthcare professionals during crises. A study on the healthcare industry during COVID-19 emphasises the importance of engaging healthcare professionals during a crisis, given their critical role in saving lives (Mageswari, 2023). It suggests strategies like offering a points-based employee reward program, encouraging a culture of transparency, engaging staff through effective communication, and hiring employees with the right attitude ("hire for heart"). It recommends bringing physicians into decision-making to increase engagement (Clausen, Demircioglu & Alsos, 2020). This study also emphasised the need to ensure nurses take breaks for lunch and dinner, indicating a focus on work-life balance amid demanding situations.

Also, it suggests adopting flexible work arrangements like online medical consultations (depending on cases), shifting non-emergency operations, and leveraging digital operations to deliver services where possible. It recommends a phased recovery approach to manage the backlog of services and cope with potential spread, indicating flexibility in operations (Mageswari, 2023). Dynamic retention strategies are instrumental in creating an environment that attracts and retains highly qualified healthcare workers. Policymakers must collaborate at local, national, and international levels to develop robust frameworks encouraging health professional retention, promoting best practices, and aligning policies globally.

Swift and collaborative action is imperative to avert irreversible harm to the healthcare workforce and ensure the delivery of effective and equitable healthcare services. Addressing the critical issue of health worker brain drain requires a multi-faceted approach involving coordinated efforts from various stakeholders, including governments, international organisations, non-governmental organizations (NGOs), and healthcare institutions. By addressing the root causes of health worker brain drain and promoting dynamic retention strategies, policymakers can contribute to building resilient and equitable healthcare systems capable of meeting the diverse needs of populations worldwide.

8. Conclusion

This study explores the intricate issue of healthcare worker brain drain, revealing its global significance and advocating for dynamic retention strategies as a solution. Through a qualitative approach and extensive literature reviews, the research emphasises the necessity of tailored retention approaches to mitigate the adverse effects of brain drain. The identified push and pull factors illuminate the challenges emerging regions face, particularly Sub-Saharan Africa, juxtaposed with the opportunities in developed countries. Drawing insights from the Push-Pull and Social Exchange theories, dynamic retention strategies are proposed to address health worker brain drain effectively.

These strategies pivot on enhancing job satisfaction, providing growth opportunities, ensuring equitable compensation, and fostering supportive work environments. Additionally, organisations are encouraged to leverage competitive salary packages, advanced training, recognition programs, and work-life balance initiatives. The study underscores the global ramifications of health worker migration, especially in regions burdened by high disease prevalence and limited healthcare staffing. It advocates prioritising work-life balance, flexible arrangements, and employee engagement to attract and retain skilled healthcare professionals. Furthermore, the study suggests exploring further research avenues to delve into demographic characteristics, cultural impacts, and the influence of technological advancements on healthcare worker retention. Sustainable solutions necessitate collaborative efforts among international organisations, NGOs, and nations to build resilient healthcare systems. Long-term policy recommendations encompass investments in education, career advancement pathways, and improvements in working conditions.

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9.1 Conflict of Interest

The authors declare no conflict of interest regarding the publication of this article.

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