



RESEARCH ARTICLE

Transformative Strategies to Combat Brain Drain and Retain Public Health Personnel

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Brain drain among public health personnel is one of the potent threats to healthcare systems, especially in low- and middle-income countries. This paper reviews transformative strategies designed to address and mitigate the loss of skilled health personnel and increase their chances of retention within the public sector. This paper uses a systematic literature review design to identify, analyse, and synthesise existing research on transformative strategies for mitigating brain drain among public health personnel in low- and middle-income countries. The systematic review allows for a comprehensive and unbiased assessment of the current state of knowledge, providing insights into effective retention strategies and their potential impact on healthcare systems. This paper identified several key strategies for retaining health professionals in the public sector, including forming public-private partnerships (PPPs) to leverage private sector resources and expertise, modernising health infrastructure to improve working conditions, and enhancing regulatory frameworks through greater transparency and accountability. Also, competitive remuneration and benefits packages, fostering continuous professional development, and improving employee engagement and recognition were highlighted as critical components of successful retention strategies. The results show that applying these strategies significantly improved public health workers' job satisfaction, commitment, and retention. Implications of the study suggest that addressing the brain drain requires a comprehensive, multi-faceted approach involving collaboration between government and private stakeholders. These strategies not only contribute to workforce retention but also have the potential to strengthen public healthcare systems and improve overall health outcomes. Future directions for research include exploring the long-term sustainability of these strategies and examining their applicability across different healthcare settings.

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INTRODUCTION

The public service sector is pivotal in delivering essential services and is a cornerstone for national development through government policies and programmes (Ekpe, 2021). However, globally, many public health sectors need help developing, implementing, and monitoring sustainable economic growth and development interventions. This struggle is often compounded by the sector's inability

to retain competent personnel. This problem is exacerbated by factors such as lack of motivation, inadequate salaries, insufficient incentives, and poor working conditions.

Brain drain among health workers is a critical issue that demands urgent attention from governments and stakeholders worldwide. The departure of skilled health workers leads to significant staffing deficits, overwhelming the remaining staff and compromising the quality of healthcare services. This results in extreme burnout and a harsh working environment, further exacerbated by the shortage of professionals to handle overcrowded healthcare services (Jacob & Atobauka, 2019). Consequently, patients suffer from resource depletion, prolonged waiting times, and limited access to essential treatments, eroding the overall healthcare standard.

Globally, many countries face similar challenges, with alarming statistics highlighting the depth of the brain drain in public health services. For instance, the doctor-to-population ratios in several countries are significantly below the World Health Organisation (WHO) recommendations, illustrating the dire shortage of healthcare professionals. The migration of health workers to countries with better working conditions, higher salaries, and advanced career prospects is a common trend, reflecting the global nature of this issue.

Push factors such as poor working conditions, inadequate health infrastructure, and systemic leadership failures drive health workers to seek opportunities abroad. Pull factors like better career prospects, higher salaries, and secure environments in other countries attract these professionals. Despite various efforts by governments and stakeholders to address this issue, the problem persists, indicating a need for innovative and transformative governance strategies (Abasilim & Obozekhai, 2024).

This study adopts the New Public Management (NPM) theory and the Push-Pull Theory of Migration to explore transformative strategies for combating brain drain and enhancing health worker retention. The NPM theory, emerging in the late 20th century, advocates for adopting private sector practices and market-oriented principles in the public sector to enhance efficiency, effectiveness, and accountability. It emphasises decentralisation, competition, performance measurement, and customer-oriented service delivery, providing a framework to explore and implement transformative governance strategies.

NPM suggests that involving private sector actors and adopting market-oriented practices can introduce innovation, enhance efficiency, and improve service delivery in the public sector (Christensen & Lægheid, 2022). By embracing public-private partnerships (PPPs) and leveraging private sector expertise, public health services can address challenges related to employee retention, infrastructure deficiencies, and inadequate compensation and benefits. Furthermore, NPM emphasises performance measurement, accountability, and customer-oriented service delivery, aligning with strategies to implement competitive salary structures, foster employee engagement, and strengthen regulatory oversight to enhance accountability and restore public trust in the health sector.

The Push-Pull Theory of Migration, proposed by Everett Lee, explains the factors influencing individuals' decisions to migrate. Push factors, such as poor economic conditions and lack of opportunities, drive people away from their place of origin. At the same time, pull factors, such as better job prospects and higher wages, attract individuals to new destinations. This theory helps explain the brain drain of health workers by identifying the motivations behind their migration and highlighting the need for policies that address these factors.

The primary objective of this study is to propose transformative governance strategies to address the brain drain of health workers globally. This involves examining the dynamics of health worker mobility, identifying underlying factors contributing to brain drain, and drawing insights from relevant theoretical frameworks to develop actionable recommendations for policymakers and

stakeholders in the public health sector. By adopting these strategies, countries can create more supportive and attractive environments for health workers, thereby reducing brain drain and strengthening their public health systems.

LITERATURE REVIEW

The concept of brain drain

The term "brain drain" encapsulates the significant and often excessive emigration of skilled professionals from their home countries to more developed nations. This phenomenon, understood through various scholarly perspectives, highlights the adverse implications of losing highly educated and capable individuals who could otherwise contribute to their countries of origin. The term combines "brain," representing valuable human capital, and "drain," indicating an undesirable and accelerated outflow, particularly noticeable when the most skilled individuals leave at a higher-than-normal rate (Okonedo, 2023; Alabi, 2022).

Brain drain primarily refers to the globalisation of knowledge and resources concerning human capital. It involves the movement of highly qualified personnel, including those with advanced degrees, technical expertise, and specialised skills, from developing countries to developed ones. Prior studies suggest that while both the receiving nation and the migrants may gain economic benefits from brain drain, the home countries suffer significant losses. Ogbu (2019) defines brain drain as the exodus of workers seeking better living and working conditions, higher pay, access to advanced technology, and more stable political environments (Ipinnimo, Ajidahun & Adedipe, 2023).

Kadel and Bhandari (2018) further elucidate that brain drain is the departure of highly educated or competent individuals from one nation, region, organisation, or industry to another in search of better employment opportunities, improved living standards, and higher salaries. This emigration has been influenced by multiple factors at both local and international levels. For instance, brain drain in the medical field involves healthcare professionals moving globally in pursuit of better pay, improved quality of life, political stability, advanced technologies, and better working conditions (Kadel & Bhajari, 2018).

The concept also encompasses the negative impact on the countries of origin, often called "brain drain," while the receiving countries experience a "brain gain." Radonjić and Bobić (2021) discuss the net costs of a drained country versus the net benefits to the target country, highlighting the imbalance in global scientific and professional exchanges. The pejorative term "brain drain" underscores the detrimental effects of skilled emigration on the originating countries, suggesting that the loss of skilled professionals harms their development and progress (Okafor & Chimereze, 2020).

Specific causes of brain drain, particularly in the public sectors of developing countries, include poor salaries, uncondusive working environments, inadequate research opportunities, and political instability. In the context of Nigeria, for instance, poor salary is a significant push factor. NOIPolls (2018) found that 91% of Nigerian physicians cited low pay and benefits as primary reasons for leaving the country. Similarly, Nwankwo et al. (2022) reported that 91% of doctors surveyed in countries like Colombia, Nigeria, India, Pakistan, and the Philippines identified low pay as a primary motivation for relocation. Comparative studies show stark differences in earnings, with Nigerian doctors earning significantly less than their counterparts in countries like the UK and the USA (Adebayo & Akinyemi, 2022; BDI Resourcing, 2018; Owonikoko, 2021).

Uncondusive working environments also drive brain drain. Many health professionals and academics report dissatisfaction with their work conditions, which correlates strongly with their intentions to emigrate. Ogunode (2020) identifies poor working conditions, lack of motivation, insecurity, inadequate funding, and political interference as significant factors in Nigerian public universities. This dissatisfaction results in high student-teacher ratios, inadequate lecturing staff, and poor

teaching quality. Recent surveys indicate that over 60% of Nigerian university teachers intend to leave due to poor pay and working conditions, exacerbating the challenges in the Nigerian public university system (Akinwumi, Solomon, Ajayi, Ogunleye, Ilesanmi & Ajayi, 2022).

More staff development further compounds the issue. Jacob, Jegede, and Musa (2021) highlight the need for more career development opportunities for health workers in Nigerian universities. The residency training programmes in Nigeria are often not recognised by developed countries, limiting career advancement and pushing professionals to seek opportunities abroad (Akinwumi, et al., 2022).

Additionally, frequent strike actions disrupt academic and professional activities, contributing to brain drain. Ogunode (2020) points out that ongoing strikes by various union groups in Nigerian public universities impede management and create unstable academic programmes. The reasons behind these strikes include underfunding, poor infrastructure, non-implementation of agreements, and poor working conditions. These disruptions lead to poor academic outcomes, damaged institutional reputations, low international rankings, and decreased student enrollment.

THEORETICAL FOUNDATION

This paper integrates the New Public Management (NPM) theory and the Push-Pull Theory of Migration to analyse and develop strategies for addressing the brain drain of health workers and enhancing their retention in the public health sector. New Public Management Theory was an early twenty-first-century theory. This was an attempt to deal with the perception of inefficiency in the manning of the public sector, which had become increasingly vocal. It recommends implementing private sector practices and principles oriented toward market implementation in the public sector, improving efficiency, effectiveness, and accountability (Hood, 1991). NPM's major components include decentralisation, competition, performance measurement, and customer-oriented service delivery (Hood, 1995).

NPM proposes that engaging the private sector and implementing market features can bring about innovation that enhances the efficiency and service delivery of the public sector. Public health services could solve widespread issues by adopting PPPs and supporting the private sector's skills, solving problems such as employment retention, infrastructure, poor compensation, and poor monetary benefits (Gruening, 2001). In addition, NPM is committed to performance measures, accountability, and delivering service with the customer in mind, hence making the strategies of competitive salary structures, staff empowerment, and more robust regulatory oversight to enhance accountability and restore public trust in the health sector consistent with this model (Dunleavy & Hood, 1994).

The Push-Pull Theory of Migration helps to explain why a person decides to migrate. According to Everett Lee, migration is influenced by 'push' factors at the place of origin that are repellent and 'pull' factors at the place of destination that are attractive (Lee, 1966). Among the significant drivers forcing these workers to seek opportunities elsewhere, especially from developing countries, are several push factors, including poor working conditions, underequipped health infrastructure, and failed leadership in health systems (Adepoju, 2006). Other factors that pull these professionals to different destinations are better career prospects, higher salaries, and environments free from insecurity—factors known as pull factors (Castles & Miller, 2009). This theory gives insight into the brain drain of health workers by showing the 'why' behind many health worker migrations and underlining the need for donor policies and source country initiatives that effectively address these factors (Massey et al., 1993).

The integration of NPM, therefore, informs the theoretical frame used to guide the analysis of the brain drain of health workers with strategies to enhance their retention in the public health sector. For example, introducing performance-based incentives, encouraging public-private partnerships,

and increasing accountability can help deal with some push factors causing health workers to exit the public sector (Pollitt & Bouckaert, 2011). The knowledge of the push and pull factors behind health workers' migration enables policymakers to come up with specific strategies to address such factors. Improving working conditions, raising salaries, and offering more career development opportunities may reduce the push factors while creating a supportive and rewarding work environment enhances the pull factor (Kline, 2003). Integration of NPM and the Push-Pull Theory of Migration contributes to the theoretical basis of this study.

Drawing from insights from NPM and a critical analysis of the push-pull dynamics influencing health worker migration, the following study proposes transformative governance strategies in the fight against brain drain and ensuring the retention of health workers within the public sector (Connell et al., 2007). This theoretical foundation guides the analysis of still-extant challenges and the formulation of actionable recommendations for policymakers and stakeholders in the public health sector.

Research gaps

Despite the extensive examination of brain drain and its impact on developing countries, significant gaps still need to be made in understanding the long-term effectiveness of strategies to retain skilled professionals, especially in the health sector. Much of the existing literature has focused on identifying push and pull factors. Still, fewer studies have empirically tested the transformative strategies proposed to mitigate brain drain, particularly in the public health sectors of developing nations. Additionally, while the New Public Management (NPM) and Push-Pull Migration theories offer frameworks to explore these dynamics, there needs to be more practical application of these models to address brain drain in health systems. This gap reflects the need for studies that theorise solutions and evaluate their real-world implementation and outcomes.

Ogbu (2019) highlights the necessity for future research to explore long-term retention strategies that can counteract the exodus of health professionals. Similarly, Kadel and Bhandari (2018) stress the importance of examining how specific interventions, such as improving working conditions and salary scales, can be effectively operationalised to curb brain drain. Radonjić and Bobić (2021) also emphasise the need for more targeted research on achieving a sustainable balance between brain drain and brain gain, focusing on the transformative potential of policy reforms.

Practical significance of the study

This study holds considerable practical significance, especially for policymakers, public health administrators, and development agencies. By focusing on developing and applying transformative strategies within the public health sector, the study addresses a critical challenge faced by developing countries like Nigeria. The findings will be instrumental in guiding policy adjustments to improve health worker retention by creating more conducive work environments, enhancing professional development opportunities, and increasing compensation and benefits. Given the centrality of the health sector to national development, these interventions could lead to significant improvements in health outcomes, economic stability, and the overall capacity of the public health infrastructure.

Additionally, by applying theories like NPM and the Push-Pull Theory of Migration to practical scenarios, this research helps bridge the gap between theoretical propositions and policy implementation. Policymakers can better understand which strategies work effectively in real-world settings, thus informing the design of more robust and sustainable retention policies for skilled professionals in the public sector.

Theoretical significance of the study

The study contributes to the theoretical understanding of brain drain and human capital retention in developing nations. Integrating the NPM framework with the Push-Pull Migration theory extends the

application of these models to the specific context of health worker migration and retention. NPM, typically used to assess public sector efficiency, is applied here to identify performance-based incentives and competitive salary structures that may enhance retention rates. This integration of management theory with migration analysis represents an innovative approach to addressing brain drain, which needs to be explored in the current literature.

Furthermore, the study adds to the body of knowledge by testing the efficacy of theoretical models in addressing a real-world issue. This research challenges existing assumptions by evaluating the outcomes of retention strategies rooted in both NPM and migration theory. It provides a more nuanced understanding of the effectiveness of policy interventions. This theoretical advancement opens avenues for future studies to build upon and refine these models in other sectors beyond health, further broadening the scope of solutions to brain drain across various industries.

METHODOLOGY

This study employed a systematic literature review to explore transformative strategies for mitigating brain drain among public health personnel in low- and middle-income countries. The systematic review design was chosen to comprehensively identify, analyse, and synthesise existing research on effective retention strategies and their potential impact on healthcare systems. This approach ensures a rigorous and unbiased assessment of the current state of knowledge within the field.

The primary data sources for this review, carefully selected from peer-reviewed journal articles, conference papers, and other relevant publications, were chosen based on their direct relevance to health workforce dynamics and transformative governance retention strategies. Secondary data collection involved a critical examination of academic databases and reputable publications, ensuring a thorough understanding of the existing literature.

The electronic databases used for the search were Scopus, Web of Science, and Google Scholar. A combination of keywords pertinent to the study, such as "Transformative Strategies," "Brain Drain," and "Public Health Personnel," was applied to gather relevant literature. The search, importantly, focused on publications in English from 2018 to 2023 to ensure the incorporation of recent and up-to-date insights.

A thematic analysis approach was applied to the literature review, guided by predefined inclusion and exclusion criteria to ensure the relevance and quality of the selected data. The inclusion criteria encompassed peer-reviewed journal articles, conference proceedings, and government reports focused on transformative governance strategies, factors influencing health worker migration, and workforce dynamics in healthcare settings. Studies outside the healthcare sector, non-peer-reviewed sources, and articles published before 2018 were excluded from this review.

This structured approach enabled extracting key themes and insights from the literature, facilitating the development of actionable recommendations for policymakers and stakeholders in the public health sector. The thematic analysis also helped identify patterns and relationships within the data, contributing to the proposed strategies for enhancing health worker retention through transformative governance.

Transformative strategies to combat brain drain and retain public health personnel

According to Awuah (2019), empirical evidence links privatisation with improved employee retention, organisational performance, increased productivity and profitability, improved access, and fiscal gains. This can be a beneficial strategy that the Nigerian government may adopt to stop the

haemorrhage of health workers and improve general employee retention in public service. Implementing transformative governance strategies for employee retention in Nigeria's public service will involve actionable steps with the main stakeholders. Here are the ways the key stakeholders like the government officials, public sector unions, and policymakers can engage and how they can do so:

1. Establishing public-private partnerships (PPPs) and contracting arrangements with credible private healthcare institutions: Establishing PPPs is a transformative governance strategy that can significantly strengthen employee retention in Nigeria's public service. By leveraging the strengths and resources of the private sector through PPPs, the Nigerian government can create a more attractive and supportive environment for health workers, addressing various push factors contributing to brain drain and enhancing overall employee retention in the public service. In order for better clarifications, these are some specific points on how Public-private Partnerships (PPPs) can help strengthen health worker retention in the Nigerian public service:

- a. **Performance-based Incentives:** PPPs can help design and implement performance-based incentive schemes for public health workers, similar to those used in the private sector (Khan, Roychowdhury, Meghani, Hashmani, Borghi & Liverani, 2020). This could include bonuses, promotions, or other rewards tied to measurable performance metrics, such as patient satisfaction, quality of care, or efficiency targets. PPPs can enable the government to leverage the private sector's resources and expertise to offer more competitive compensation packages and benefits to health workers in the public sector. Private partners can bring in best practices and innovative approaches to compensation and incentive structures, making public sector employment more attractive and retaining talent (Ezeogu, 2023; Gberevbie, 2010).
- b. **Training/Professional Development and Mentorship:** Private healthcare organisations often invest heavily in training and professional development programmes for their staff. PPPs can facilitate knowledge-sharing and joint training programmes between public and private entities, providing public health workers with access to high-quality training and opportunities for skill enhancement (Beaumont, 2020). Also, Mentorship and Career Pathing is another strategy. Many private healthcare organisations have structured mentorship programmes and clear career paths for their employees. PPPs can help introduce similar initiatives in the public sector, where experienced private-sector professionals can mentor and guide public health workers, providing them with a sense of career progression and growth opportunities.
- c. **Joint Recruitment and Talent Pipelines:** PPPs can establish joint recruitment programmes and talent pipelines, where the public and private sectors collaborate to attract and retain the best healthcare professionals. This could involve joint recruitment drives, shared training programmes, or even staff exchange programmes between public and private facilities. Also, PPPs can facilitate capacity building and knowledge transfer between the private and public sectors (Settumba, 2022). Private partners can provide training and mentorship programmes, sharing their expertise and best practices in areas such as healthcare management, service delivery, and workforce retention strategies.
- d. **Improved Governance and Accountability:** Private sector partners can bring in their expertise in governance, transparency, and accountability measures (Pfisterer & Van Tulder, 2020). This can help address issues of mismanagement, corruption, and inefficiency in the public healthcare system, which can contribute to dissatisfaction among health workers.

2. Strong regulatory structures and oversight mechanisms: Strong regulatory structures and oversight mechanisms are indispensable to ensuring transparency, ethical practice, and restoring

public trust in Nigeria's health sector. The Federal Ministry of Health, the Independent Corrupt Practices and Other Related Offences Commission, and the National Assembly Committees on Health should partner in reviewing existing laws and policies to identify loopholes and areas of insufficiency (Ohunakin, Adeniji, Oludayo, Osibanjo & Oduyoye, 2019).

- a. **Accountability and Performance Management:** Robust regulatory frameworks and oversight mechanisms can establish clear performance standards, metrics, and accountability measures for health workers (Vian, 2020). This can include regular performance evaluations, feedback mechanisms, and consequences for underperformance or misconduct. When health workers feel their efforts are recognised and rewarded, and poor performance is addressed, it can increase job satisfaction and motivation to excel (Mukinda, Van Belle, George & Schneider, 2020).
- b. **Ethical Practice and Professional Standards:** Strong regulations and oversight can promote ethical practices and uphold professional standards in the healthcare sector. This can include codes of conduct, guidelines for patient care, and mechanisms for reporting and addressing unethical behaviour or malpractice. When health workers operate in an environment that prioritises ethics and professionalism, it can enhance their sense of pride and commitment to their roles (Saks, 2021).
- c. **Transparent and Fair Processes:** Effective regulatory structures can ensure transparent and fair processes for recruitment, promotion, disciplinary actions, and grievance redressal. This can help build trust among health workers and create a sense of fairness and equal opportunity, reducing perceptions of favouritism or unfair treatment, which can contribute to job dissatisfaction and high turnover (Ogbu, 2019).
- d. **Public Trust and Reputation:** Strong regulatory structures and oversight mechanisms can help restore public trust in the healthcare system by ensuring transparency, accountability, and adherence to ethical standards. When the public perceives the healthcare system as trustworthy and reputable, it can boost the morale and pride of health workers, contributing to improved retention.
- e. **Grievance Redressal and Whistle-blower Protection:** Effective regulatory frameworks can establish clear processes for grievance redressal and provide whistle-blower protection mechanisms. This can encourage health workers to report issues or concerns without fear of retaliation, fostering an environment of transparency and accountability, which can positively impact job satisfaction and retention (Saloranta, 2021).

3. Improved infrastructure and working conditions: Infrastructure and working conditions are at the core of creating a conducive environment to enhance job satisfaction, productivity, and, eventually, the retention of health workers within the public healthcare system of Nigeria (Okoroafor, Ongom, Mohammed, Salihu, Ahmat, Osubor & Alemu, 2021). There should be better access to modern infrastructure and technology in these hospitals. The government should invest more time and resources in upgrading and modernising healthcare infrastructure and technology in public facilities. This can create a more conducive working environment for health workers, with access to state-of-the-art equipment and resources, improving job satisfaction and retention. With the prioritised needs based on criticality and potential impact, the investment funding is secured from the federal and state budget, international donors, and private sector investment through NSIA. The approach to executing these projects must be adopted to see that the most critical areas are covered first, and the management of such infrastructure must be effectively and transparently done with regular monitoring and reporting (Okunade, Adediran, Balogun, Maduka & Adegoke, 2023). At the same time, complete maintenance plans must be drawn up and enforced to ensure that upgraded facilities and equipment last long and function without complications to provide an enabling and sustained working environment for health workers.

4. Increment in remuneration and benefits packages: A competitive compensation and benefits package should be implemented to make the Nigerian public service attractive to health professionals and encourage employees to be retained (Salau, Worlu, Osibanjo, Adeniji, Falola, Olokundun & Ogueyungbo, 2020). Federal Ministry of Health, Ministry of Labour and Employment, and National Salaries, Incomes, and Wages Commission must, therefore, take urgent collective action to revisit and benchmark current compensation structures for public health workers against standards prevalent in the private sector and international best practices to formulate policies for the revision and improvement of salary structures, allowances, and benefits accorded to public health workers, all in a way that is sustainable and sensitive to long-term financial implications (Abasilim & Obozekhai, 2024; Salau, Worlu, Osibanjo, Adeniji, Atolagbe & Salau, 2020). Broad stakeholder engagement by health worker unions and associations is critical for gaining support, addressing concerns, and ensuring transparency. The revised compensation package should be rolled out in phases, starting with critical areas while closely monitoring the impact on recruitment, retention, and general job satisfaction among health workers (Nwankwo & Kifordu, 2019). An employee engagement and recognition culture are pivotal to boosting morale and commitment among health workers in the public sector. Federal Ministry of Health, State Ministries of Health, and the Public Service Institute of Nigeria should, therefore, work together to create platforms where employees can voice their concerns and provide feedback, accompanied by recognition initiatives such as Employee of the Month awards. Continuous professional development should be nurtured through workshops, seminars, online courses, and mentorship programmes. Implementing physical and mental health-focused wellness programmes, including fitness activities, stress management, and counselling services, will go a long way in fostering a supportive work environment. Critically, open and regular communication between management and employees must be maintained to nurture a sense of inclusivity, transparency, and shared commitment to public service (Ibeneme, Ukor, Ongom, Dasa, Muneene & Okeibunor, 2020).

5. Collaboration among key stakeholders and capacity-building investment: This is required for transformative governance strategies to strengthen employee retention. For this to occur, the Federal Ministry of Health, State Ministries of Health, the Nigerian Medical Association, and development partners, such as WHO and UNICEF, should hold regular forums and workshops to facilitate collaboration and the development of joint task forces to tackle specific challenges. Other critical capacity-building measures would include spending on training programmes to boost the skill level of healthcare workers and managers, partnering with international organisations and universities to get better at advanced training and making knowledge-sharing mechanisms functional. Collaborative research and pilot projects could test and fine-tune innovative approaches. Crucially, long-term plans and resource allocation must be in place to ensure that these capacity-building initiatives' sustainability is followed continuously through monitoring and evaluating their impacts on employee retention and overall performance in healthcare.

Comparative analysis of transformative strategies to combat brain drain and retain public health personnel

Transformative strategies aimed at mitigating brain drain and enhancing the retention of public health personnel have been widely studied across various contexts. This comparative analysis assesses these strategies by reviewing global evidence on their effectiveness and potential for broader adoption.

Public-private partnerships (PPPs): The utility of public-private partnerships (PPPs) in boosting employee retention and organisational performance is well-established. Awuah (2019) highlights that PPPs can significantly enhance productivity, access, and financial outcomes by harnessing the

strengths of the private sector. This is echoed by Khan et al. (2020), who find that performance-based incentives facilitated through PPPs can substantially improve employee motivation and retention. Ezeogu (2023) and Gberevbie (2010) support this view, noting that private sector expertise in compensation and incentives can make public sector roles more appealing. Further evidence from Settumba (2022) suggests that PPPs can also aid in establishing joint recruitment and talent pipelines, which are critical for attracting and retaining skilled healthcare professionals. This global perspective reinforces the value of PPPs in addressing brain drain by offering competitive compensation and fostering professional development opportunities across diverse settings.

Strong regulatory structures and oversight mechanisms: Robust regulatory frameworks are crucial for enhancing healthcare worker retention. Ohunakin et al. (2019) emphasise that effective oversight can combat mismanagement and corruption, improving job satisfaction. Vian (2020) argues that well-defined performance standards and accountability measures can significantly boost employee motivation. Mukinda et al. (2020) further argue that performance management systems and ethical practices promote professional pride and commitment. The importance of transparent and fair processes, as noted by Ogbu (2019), and the role of grievance redressal and whistle-blower protection, highlighted by Saloranta (2021), is vital for building trust and ensuring a supportive work environment. These findings underscore the global necessity of strong regulatory structures to maintain high standards and improve retention.

Improved infrastructure and working conditions: The impact of infrastructure and working conditions on health worker retention is widely recognised. Okoroafor et al. (2021) argue that modernising healthcare facilities and investing in advanced equipment enhance job satisfaction and retention. This is supported by Okunade et al. (2023), who advocate for targeted investments in critical infrastructure and ongoing maintenance to create a conducive working environment. The consensus across the literature suggests that upgrading facilities and investing in technology are fundamental strategies for addressing the brain drain globally. Improved infrastructure supports operational efficiency and contributes to job satisfaction and retention.

Increment in remuneration and benefits packages: The link between competitive compensation and employee retention is well-documented. Salau et al. (2020) argue that aligning salary structures with private sector standards and international best practices is crucial for attracting and retaining health professionals. This view is reinforced by Abasilim and Obozekhai (2024), who advocate for comprehensive reforms in salary and benefits structures. The importance of employee engagement and recognition, as highlighted by Nwankwo and Kifordu (2019), and the promotion of continuous professional development, as discussed by Ibeneme et al. (2020), further supports the argument that competitive remuneration is vital for enhancing job satisfaction and retention. These strategies are essential for creating an environment where health professionals feel valued and motivated.

Collaboration among key stakeholders and capacity-building investment: Collaboration and capacity-building are critical for strengthening employee retention. The need for coordinated efforts among various stakeholders, including government bodies, professional associations, and international organisations, is emphasised in the literature. WHO and UNICEF, for example, highlight the importance of joint initiatives in developing effective retention strategies. Collaborative research and pilot projects are also noted as means to test and refine innovative approaches, leading to improved performance in healthcare settings.

In summary, this comparative analysis highlights the effectiveness of PPPs, strong regulatory frameworks, improved infrastructure, competitive remuneration, and stakeholder collaboration in addressing brain drain and enhancing public health worker retention. The global evidence supports

a multifaceted approach, combining these strategies to achieve meaningful improvements in healthcare systems worldwide.

CONCLUSION

The brain drain of health workers poses a significant challenge to the global healthcare system, undermining its effectiveness and sustainability. This study highlights the imperative for transformative strategies to address this issue and enhance health worker retention. Leveraging the principles of New Public Management (NPM) theory and the Push-Pull Theory of Migration, the analysis presents actionable recommendations to improve working conditions, compensation, and professional development opportunities for health workers on a global scale.

The study asserts that a multifaceted approach is essential for reversing brain drain and improving retention rates. Public-Private Partnerships (PPPs) can introduce performance-based incentives, structured mentorship, and joint recruitment programs, significantly enhancing job satisfaction and career development opportunities. Strengthening regulatory frameworks and oversight mechanisms is crucial for ensuring transparency, ethical practices, and fair processes, which build trust and improve job satisfaction. Upgrading infrastructure and working conditions will create a more conducive environment for health workers, while increasing remuneration and benefits packages will align public-sector compensation with private-sector standards, further motivating staff. Finally, fostering collaboration and capacity-building initiatives will enhance the effectiveness and sustainability of these strategies.

IMPLICATIONS

These recommendations imply a transformative shift in how public health sectors globally approach employee retention. Integrating PPPs, reinforcing regulatory frameworks, improving infrastructure, revising compensation structures, and promoting collaborative efforts can address both push and pull factors contributing to brain drain. This comprehensive approach promises to strengthen healthcare systems, enhance service delivery, and contribute to achieving broader health and development goals.

LIMITATIONS

Several limitations are acknowledged in this study. The generalisability of the findings may be limited by regional and context-specific factors that influence the implementation and effectiveness of the proposed strategies. The reliance on secondary data may only partially capture on-ground realities and diverse experiences. Additionally, the dynamic nature of healthcare systems means that strategies effective today may require adaptation in the future.

RECOMMENDATIONS FOR FUTURE RESEARCH

- a. Conduct longitudinal studies to assess the long-term impacts of PPPs, regulatory reforms, and infrastructure improvements on health worker retention and system performance.
- b. Explore the implementation and effectiveness of these strategies across various regional and cultural contexts to tailor solutions to local needs.
- c. Gather primary data through surveys and interviews with health workers and stakeholders to comprehensively understand their experiences and the effectiveness of retention strategies.
- d. Perform comparative case studies of countries that have successfully implemented similar strategies to identify best practices and lessons learned.

Addressing these research areas will provide deeper insights and more refined recommendations, supporting the development of effective strategies to combat brain drain and enhance health worker retention globally.

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