NPRC Journal of Multidisciplinary Research
Vol. 1, No. 5, October 2024. Pages: 30-49
ISSN: 3059-9148 (Online)
DOI: https://doi.org/10.3126/nprcjmr.v1i5.71321

OPEN ACCESS

Perception of Health Professionals on Brain Drain in Nepalese Health Sector

Smriti Phuyal
BHCM
Atharva Business College, Kathmandu, Nepal
smritifuyal123@gmail.com
https://orcid.org/0009-0001-1868-9593

Received: July 06, 2024; Revised & Accepted: September 26, 2024

Abstract

Health workers are professionals who are engaged in the delivery of healthcare services to individuals. They include a wide range of roles such as doctors, nurses, midwives, paramedics, and support staff who provide clinical services to patients. They also encompass community health workers and public health professionals who work on disease prevention, health education, and improving access to healthcare. Health workers are essential for the functioning of health systems and play a critical role in ensuring the health and well-being of the population. Brain drain is increasing in Nepal day by day due to the many reasons, including the desire for better pay, work conditions, quality of life, high opportunities, more working hours, personal growth that make health workers leave. This situation is creating problem for Nepal's health services. The main purpose of this study is to explore the perceptions of health professionals regarding brain drain in Nepal's health sector. Through in-depth interviews and focused group discussions with various stakeholders, including doctors, nurses, pharmacist, health informatics, front line manager, the research aims to uncover the underlying factors contributing to emigration of skilled health workers. This study also examines the impact on Nepal's healthcare system and suggest strategies to mitigate the loss of talent. This research contributes the deeper understanding of brain drain and provides insights for policy development to strengthen Nepal's health sector.

Keywords: Brain drain, health worker, Nepal, professional

Introduction

One pressing issue faced by developing countries is the phenomenon known as "brain drain." This term refers to the migration of skilled labor from their home countries to places where their expertise is better rewarded. In the case of Nepal, brain drain significantly impacts

NPRC Journal of Multidisciplinary Research
Vol. 1, No. 5, October 2024. Pages: 30-49
ISSN: 3059-9148 (Online)
DOI: https://doi.org/10.3126/nprcjmr.v1i5.71321

critical sectors like healthcare and education. More than half of Nepalese health workers choose to live and work abroad. Countries such as Canada, Australia, the United States, and Britain, with abundant human resources, become magnets for Nepal's healthcare professionals (Ogaboh, 2020; Dangol & Mishra, 2024).

However, this migration poses a considerable challenge to healthcare delivery within Nepal. The departure of medical personnel exacerbates existing human resource crises, leading to a shortage of skilled professionals. Reports highlight the severity of this issue, emphasizing its contribution to global health disparities. Finding effective solutions to retain skilled workers while addressing their aspirations for better opportunities abroad remains a crucial task for developing nations (Wagle, Neupane, Nyaupane, & Timalsena, 2024).

The inception of medical education in Nepal dates back to 1978 when the Institute of Medicine at Maharajgunj, Kathmandu, initiated its medical program with a modest cohort of 22 students. The primary objective was twofold: to cultivate a homegrown pool of doctors and to bolster medical services in rural Nepal. Over the years, this endeavor has expanded significantly, with more than 20 institutions now dedicated to training medical professionals. Annually, approximately 2000 doctors graduate from these institutions, contributing to the nation's healthcare workforce. However, despite this commendable output, Nepal grapples with a stark disparity in doctor density. Currently, there are only 8.1 doctors per 10,000 population, highlighting the need for further efforts to bridge this gap. Factors such as emigration of trained doctors and challenges in retaining them within the country contribute to this situation. (Shakya, 2022)

Many Nepalese students who receive government scholarships for medical education eventually choose to migrate to first-world countries such as the United States, United Kingdom, Australia, and Canada. Ironically, some doctors currently serving in Nepal were either trained oversees or studied within Nepal without government support. The career trajectory has shifted, and doctors produced by state-funded medical colleges are now well-suited for health job markets in developed nations. (Shakya, 2022)

People have the right to look for better opportunities and living conditions for themselves and their families. Sometimes, skilled workers feel they have no choice but to move to other countries to achieve their goals and improve their lives. Instead of trying to completely stop this "Brain Drain," policymakers should focus on reducing its negative impact. They can do this by creating better opportunities and working conditions in their home countries, investing in education and research, and making it more attractive for skilled workers to stay. (K.C.B, 2023)

The migration of healthcare professionals from developing nations has emerged as a significant issue. This phenomenon exacerbates the existing scarcity of healthcare resources in impoverished countries and further widens global health disparities. It is imperative that international organizations work together to safeguard the value of this "intellectual capital." Even if medical professionals cannot be discouraged from relocating, their countries of origin should benefit from their expertise and training (Mlambo, 2017).

NPRC Journal of Multidisciplinary Research
Vol. 1, No. 5, October 2024. Pages: 30-49
ISSN: 3059-9148 (Online)
DOI: https://doi.org/10.3126/nprcjmr.v1i5.71321

The Birth of Medical Education in Nepal

The journey began in 1978 when Nepal's Institute of Medicine (IoM) initiated its medical program with just 22 students. The primary objective was to produce doctors within the nation and promote medical practice in rural Nepal1. However, the landscape has evolved significantly since then. (Shakya, 2022)

The Current Landscape

Today, over 20 institutes train medical doctors in Nepal, churning out approximately 2000 doctors annually11. Yet, the density of medical doctors remains at 8.1 per 10,000 population, reflecting both the exodus of trained medical professionals to other nations and the persistent need for doctors within Nepal. (Shakya, 2022)

Crisis in skilled manpower

Examining the global healthcare landscape through the discerning lens of the Worldwide Strategy 2030, which assesses the requisite number of doctors in the health sector, the ideal doctor-to-population ratio stands at 4.45 doctors per 1,000 individuals. (Jha, 2024)

In stark contrast, Nepal currently lags significantly behind, with a mere 1.094 doctors per 1,000 population, underscoring the gravity of the ongoing doctor shortage and its direct repercussions on public health. The ramifications extend to governmental hospitals, grappling with critical staff shortages where nearly 50 per cent of consultant and medical officer positions remain unfilled. (Jha, 2024)

Furthermore, over 60 per cent of general physician roles remain vacant, presenting a formidable obstacle to adequately staffing the health posts slated to be operationalized shortly. Addressing this predicament transcends the mere retention of skilled professionals; it is intrinsically linked to the well-being of the population and the overall effectiveness of the healthcare system. Urgent and comprehensive interventions are imperative to remedy this pressing issue and fortify the foundation of the nation's healthcare infrastructure. (Jha, 2024)

The purpose of this research is to investigate the root causes of brain drain in Nepal's health sector and explore effective solutions. By identifying the factors that lead professionals to leave, we can develop targeted interventions to retain talent and enhance the healthcare workforce.

This research addresses the following issues:

i. Why brain drain in the Nepalese Health Sectors?
ii. Does level of income influence the brain drain among health professionals?
iii. What factor influence the health workers for brain drain?
iv. Do workforce safety really matter for good future ?
v. Are people really gaining negative experiences due to the brain drain?
vi. What strategies can be implemented to retain skilled health professionals in Nepal and mitigate the impact of brain drain on the country's healthcare system?

The study on this research is important because it addresses the shortage of health workers in the country especially in rural areas. By understanding the perception of the health professionals why they are migrating from homeland to foreign land, we can find ways to keep them here, ensuring better healthcare for everyone. Additionally, retaining these

NPRC Journal of Multidisciplinary Research
Vol. 1, No. 5, October 2024. Pages: 30-49
ISSN: 3059-9148 (Online)
DOI: https://doi.org/10.3126/nprcjmr.v1i5.71321

professionals can prevent economic losses and help Nepal grow economically. The study can guide policymakers to create better working conditions and incentives, making it easier for healthcare workers to stay. This research also strengthens the healthcare system by ensuring it is staffed with skilled professionals, leading to better care and patient satisfaction. Overall, this study can help improve community health, trust in healthcare, and provide a foundation for future research on related issues. (Migration, 2004) It is significant because it:

- Explores the motivations driving healthcare workers to leave Nepal, offering insights into their professional aspirations and the systemic issues they face.
- Evaluates the impact on healthcare delivery, particularly in rural and underserved areas, where the scarcity of medical staff can be most acute.
- Encourages dialogue among stakeholders, fostering a collaborative approach to enhance working conditions and career prospects for health professionals in Nepal.
- Aims to strengthen healthcare systems, ensuring that the population has access to competent and motivated healthcare providers.

Objective of the study

Explore the causes, consequences, and potential solutions related to brain drain in Nepal's health sector.

Literature Review

Brain Drain in Nepal: The term "brain drain" describes the emigration or movement of highly educated and competent people from one nation or region to another, frequently in quest of better job opportunities, higher salaries, or better living conditions. Talented individuals, including scientists, physicians, nurses, doctors and other professionals, leave their home country to work or settle abroad. In recent times, an increasing number of individuals from Nepal have expressed their desire to migrate to countries like the USA, Canada, Australia, and others. Simultaneously, more Nepali students are being granted permission to study abroad, including in Canada (Aryal, Karki, Mahat, & Neupane, 2024). This trend prompts us to explore the reasons behind students leaving Nepal and the potential consequences faced by the young generation (Dahal, 2023).

When health professionals migrate to high-income countries the poor may be forced to seek medical treatment from traditional healers, while the wealthy may travel outside the country for their routine medical checkups; this aggravates the inequity in access to healthcare services in such countries (Serour, 2009). With continues exodus of the younger age group of medical personnel from the developing countries, the sustenance of medical education depends on the few aging generation of health care personnel (Gurung, Thapa, Khadka, Karki, & Neupane, 2020), often too weak and exhausted. At the level of research and postgraduate training, there are only a few medical journals published in Africa, some of which are published irregularly and are "probably" of low quality. Consequently, researchers do not wish to publish their papers in such journals and therefore a vicious cycle is created; the small number of submitted papers results in accepting poor quality papers or irregular publication of the journal. Irregular publication then also results in the authors not submitting

NPRC Journal of Multidisciplinary Research
Vol. 1, No. 5, October 2024. Pages: 30-49
ISSN: 3059-9148 (Online)
DOI: https://doi.org/10.3126/nprcjmr.v1i5.71321

papers as they are not sure whether and when their papers will be published, a "vicious circle of inadequacy" thus persist that explain why such journals cannot make an impact on the scientific world. However, some researchers believe brain drain could impart positively on medical education, as it will lead to beneficial international collaboration in health care research and development (Misau, 2010). The main aspects to observe in brain-drain are the situations that cause healthcare workers to migrate, their patterns of migration, and the extent to which push and pull factors influence their decisions. Push factors are generally present in donor countries, and pull factors pertain to receiving countries (Najib, 2019).

The literature is replete with discussions on push and pull factors that determine migration flows. The decision to migrate is not a random event; rather a deliberate one and the factors that affect such a decision need not change or vary greatly over time. This yields conclusions that may remain time invariant. As noted in Mejia (1978) migrant health workers constituted 6% (140000) of the world's supply of physicians in 1972. There are four major destination countries. These are the US, UK, Canada and Australia. In 2004, international medical graduates (IMGs) in the US captured 25% of the physician workforce or equivalent to 1.5 times the level of world migrant workers in 1972. In the United Kingdom (UK), 28% of its physician workforce comes from IMGs. For Canada and Australia, the proportion stood at 23.1% and 26.5%, respectively. (Dacuycuy, 2008)

Socioeconomic factors influence health outcomes and the distribution of health resources within and between countries globally. (Sunday Atobatele, 2022) There has been substantial immigration of physicians to developed countries, much of it coming from lower-income countries. Although the recipient nations and the immigrating physicians benefit from this migration, less developed countries lose important health capabilities as a result of the loss of physicians. (Fitzhugh Mullan, 2005)

The current situation suggests that long-term solutions to shortages can only be found by addressing the problem from a global perspective; that is, to eliminate shortages through substantial investments in training and retaining health workers in developed and developing countries, and not through policies that do not work towards solving this underlying problem, such as ones that restrict migration. (Witt, 2009)

International migration of health professionals has led to staff shortages and the situation is worse in public compared to private health institutions. The quality of care given to patients has also declined. The research calls for the adoption of an integrated approach in solving the problems of the health professions. (Chikanda, 2004)The international migration of health workers has become a major feature on the health policy agenda. The main emphasis of international debate is currently on the South-North migration flows, following the urgent concerns expressed in the wake of skilled health worker emigration from developing countries in Africa and Asia to the developed world. These migration flows have been labelled a brain drain because of the damaging effect that the loss of qualified health workers has had on source countries health systems. Yet, skilled health worker migration also occurs at regional levels, drawing attention to the issue of South-South and North-North movements in times of global health workforce shortages and labor market changes. (Zurn, 2008)

NPRC Journal of Multidisciplinary Research
Vol. 1, No. 5, October 2024. Pages: 30-49
ISSN: 3059-9148 (Online)
DOI: https://doi.org/10.3126/nprcjmr.v1i5.71321

Here are some causes contributing to brain drain in Nepal:

- **Limited Opportunities:** The scarcity of job opportunities and career prospects within Nepal leads to skilled professionals being unemployed or underemployed. Factors such as limited research and development opportunities, quality education, and healthcare systems abroad, as well as the allure of higher wages and better living conditions, contribute to brain drain. Countries with stronger economies and higher living standards offer more attractive remuneration packages and career advancement opportunities. (Sourcing, 2013)
- **Economic Factors:** Nepal's sluggish economy and low wages have fueled brain drain. Skilled professionals seek better financial prospects abroad, where they can earn more competitive salaries. (Dahal, 2023)
- **Societal Factors:** Global travel, cultural pressure, lack of recognition, and inadequate social support systems discourage skilled professionals from pursuing careers in Nepal. This lack of growth opportunities and investment in critical sectors exacerbates the brain drain phenomenon. (Dahal, 2023)

In a 2019 study by Dohlman and Laudanski, the Maslow Theory of Motivation was applied to delve into the motivations behind brain drain. Low- income countries often suffer from a shortage of physicians, and the emigration of these healthcare professionals to other nations can significantly impact healthcare accessibility in the source country. Despite efforts by academic and non-governmental organizations from high-income countries to bolster healthcare capacity in low-income nations, stemming physician migration has proven challenging. The study found that one of

the major motivational factors behind physician emigration is the pursuit of financial security, aligning with Maslow's hierarchy of human needs. (Shrestha, 2017)

rom a medical perspective, it has been stated that poorly equipped and managed hospitals, inappropriate training and an excessive workload are significant contributors to the problem. This study was conducted to investigate the experiences of medical practitioners in performing their professional duties in rural district hospitals. (De Villiers, 2004)

Research Methodology

Methodology in research refers about how the researcher tackles the research problem in the future. This part not only shows which methods are used but it shows why they are used in the research. This chapter describe about the research design, population and sample size, instruments used for data collection and data analysis methods used by the researcher. We have used Quantitative descriptive research methodology for this study purpose. (Adhikari. R Dev, 2022)

Research Approach

The research approach uses both the qualitative and quantitative. Quantitative approach can be used in the research of those issues which can be measured exactly in the quantity to find out the result analyzing those facts by frequencies, correlation (Mahat, Neupane, & Shrestha, 2024). Additionally qualitative research is to get depth knowledge and explain the issues by using surveys, interviews etc.

NPRC Journal of Multidisciplinary Research
Vol. 1, No. 5, October 2024. Pages: 30-49
ISSN: 3059-9148 (Online)
DOI: https://doi.org/10.3126/nprcjmr.v1i5.71321

Research Design

Type of Study:

- The study was conducted a descriptive cross-sectional study.
- Data was collected through surveys, interviews, and questionnaires.

Data Collection Tool:

A structured questionnaire was formed by using 5-point Likert scale. The questionnaire was divided into sections. Section 1 gathered demographic information of health workers to include their age, sex, educational level, position, and department. Section 2 and 3 elucidate information to measure the relationship between working conditions and brain drain. Each item requires the respondents to respond on a Likert scale
of - Strongly agree (SA), Agree (A), Disagree (D), Strongly disagree (SD). Data generated were coded and analyzed using the Statistical Package of Social Sciences (SPSS version 27). Analysis of data was based on the research hypotheses
formulated. The statistical test employed was linear regression. (Ogaboh, 2020)

Site Selection

The study was conducted through the different hospitals in Kathmandu valley.

- Nepal medical college Teaching Hospital
- Medicare National Hospital
- Om Hospital and Research Center

Ethical Considerations:

- Informed consent and confidentiality were ensured.
- Ethical approval was obtained.
- No any modification of data as per the interest of researcher.
- Protection of participant's right

Criteria for Sample Selection

Inclusion criteria

- **Age group:** People between ages of 20 to 50 years are included as respondents.
- **Gender:** Both female and male population is included in order to balance representation and capture gender specific response.
- **Health Profession:** It includes all the health professionals like doctors, nurses, pharmacist, health informatics.

Exclusion Criteria

- **Age group:** People of age below 20 and above 60 are not included in this research study.
- **Location:** The participants from out of valley were excluded from the study.
- **Profession:** Other Profession were not included except health professionals

Analysis and Discussions

Demographic Figure analysis of data

Frequency table

a) Gender

NPRC Journal of Multidisciplinary Research
Vol. 1, No. 5, October 2024. Pages: 30-49
ISSN: 3059-9148 (Online)
DOI: https://doi.org/10.3126/nprcjmr.v1i5.71321

Table 1 Frequency of Gender

Gender:					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	34	27.0	27.0	27.0
	Female	92	73.0	73.0	100.0
	Total	126	100.0	100.0	

The above table shows that among 126 total no of participants, 34 were male and 92 were

b) Age

Table 2 Frequency of age

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20;30	64	50.8	50.8	50.8
	31-40	47	37.3	37.3	88.1
	41-50	13	10.3	10.3	98.4
	51-60	2	1.6	1.6	100.0
	Total	126	100.0	100.0	

This table presents the age distribution of a group totaling 126 individuals, divided into four age brackets: 20-30 years, 31-40 years, 41-50 years, and 51-60 years. Here's what the data reveals:

In the 20-30 years range, there are 64 people, making up 50.8% of the total group. The 31-40 years category comprises 47 individuals, accounting for 37.3%. For those aged 41-50 years, there are 13 people, representing 10.3% of the group. Lastly, only 2 individuals, or 1.6%, are in the 51-60 years age bracket.

The table also includes cumulative percentages, illustrating the proportion of individuals as you move across the age categories. For example, combining the 20-30 years and 31-40 years groups, you find that 88.1% of the group is under 40 years old. Overall, this table provides a clear overview of the age distribution within the group, highlighting a majority of younger adults aged between 20 and 40 years.

C) Marital Status

Table 3 Frequency of Marital status

Marital status					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	57	45.2	45.2	45.2
	Married	69	54.8	54.8	100.0
	Total	126	100.0	100.0	

NPRC Journal of Multidisciplinary Research
Vol. 1, No. 5, October 2024. Pages: 30-49
ISSN: 3059-9148 (Online)
DOI: https://doi.org/10.3126/nprcjmr.v1i5.71321

The data presents information on marital status from a sample of 126 individuals. Among the respondents, 45.2% identified as single, comprising 57 individuals, while 54.8% were married, totaling 69 individuals. These figures indicate a slight majority of married individuals within the sample. The data is neatly divided between these two categories, with no other statuses reported, highlighting a clear distinction between single and married respondents. This distribution provides a snapshot of marital status within the surveyed group, reflecting the demographic Figure or preferences of the population under study.

d) Health Profession

Table 4 Frequency of health profession

Health profession					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Doctor	52	41.3	41.6	41.6
	Nurse	66	52.4	52.8	94.4
	Radiography	1	.8	.8	95.2
	Pharmacist	2	1.6	1.6	96.8
	Assistant Pharmacist	1	.8	.8	97.6
	Manager	1	.8	.8	98.4
	front line	1	.8	.8	99.2
	Procurement officer	1	.8	.8	100.0
	Lab Assistant	1	.8		
Total		126	100.0		

The table presents a comprehensive overview of the distribution of health professions among a sample of 126 individuals. Among the respondents, doctors constitute the largest group, comprising 41.3% of the sample, with a total of 52 individuals. Nurses follow closely, making up 52.4% of the sample with 66 individuals. The remainder of the sample is diversified across various roles within the healthcare sector, including radioFigurey (0.8%), pharmacists (1.6%), assistant pharmacists (0.8%), managers (0.8%), frontline staff (0.8%), and procurement officers (0.8%). Each category contributes to a cumulative total of 100%, highlighting the breadth of roles represented in the data. Overall, this distribution offers valuable insights into the occupational composition within the
healthcare workforce of the surveyed population, illustrating the roles and responsibilities that constitute the backbone of healthcare delivery.

e) Income level

Table 5 Frequency of income level

Income level per month					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	15000-20000	34	27.0	27.0	27.0

NPRC Journal of Multidisciplinary Research
Vol. 1, No. 5, October 2024. Pages: 30-49
ISSN: 3059-9148 (Online)
DOI: https://doi.org/10.3126/nprcjmr.v1i5.71321

	21000-30000	57	45.2	45.2	72.2
	31000-40000	9	7.1	7.1	79.4
	40000-50000	24	19.0	19.0	98.4
	51000-60000	2	1.6	1.6	100.0
	Total	126	100.0	100.0	

This distribution of income levels provides insights into the earnings diversity within the surveyed group. It illustrates that a significant portion of the sample earns between 21,000 to 30,000 monthly, with other brackets representing varying but distinct segments of the income spectrum. This data is crucial for understanding the economic profiles of the surveyed population, which can inform analyses related to purchasing power, socioeconomic status, and financial behaviors within the context of their respective income levels.

f) Consideration for emigrating as a health professional

Table 6 immigration of health professional

Consideration for emigrating as a health professional					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	57	45.2	45.2	45.2
	No	63	50.0	50.0	95.2
	may be	6	4.8	4.8	100.0
	Total	126	100.0	100.0	

This data offers important insights into how health professionals in the survey view the prospect of emigration. It indicates that a notable portion are considering relocating abroad, while a majority have either firmly decided against it or remain undecided. These insights are critical for shaping healthcare workforce strategies, policy development, and retention efforts, as they shed light on potential impacts on local and global healthcare systems and services. Understanding these sentiments can guide efforts to effectively support and retain healthcare professionals within their current healthcare environments.

h) Influencing factors for brain drain

Table 7 Influencing Factor for Brain drain

Factor which influenced the consideration of emigration					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	lack of job opportunity	1	.8	1.8	1.8
	Salary	4	3.2	7.1	8.9
	Job	3	2.4	5.4	14.3
	high payment	26	20.6	46.4	60.7
	Safety	1	.8	1.8	62.5
	Personal	1	.8	1.8	64.3
	quality of life	1	.8	1.8	66.1
	good opportunity	6	4.8	10.7	76.8
	financial stability	1	.8	1.8	78.6
	good future	2	1.6	3.6	82.1

NPRC Journal of Multidisciplinary Research
Vol. 1, No. 5, October 2024. Pages: 30-49
ISSN: 3059-9148 (Online)
DOI: https://doi.org/10.3126/nprcjmr.v1i5.71321

	Working environment	6	4.8	10.7	92.9
	Equipment	1	.8	1.8	94.6
	Lack of law	1	.8	1.8	96.4
	Security	2	1.6	3.6	100.0
	Total	56	44.4	100.0	
	Missing System	70	55.6		
Total		126	100.0		

The table outlines the factors influencing health professionals' decisions regarding emigration in a survey of 126 individuals. It highlights several key motivations and concerns that contribute to their considerations. The most significant factor cited by respondents, influencing 20.6% of them, is the prospect of higher payment abroad. This reflects a strong desire for better financial opportunities. Other notable factors include perceived good career opportunities (4.8%), considerations about the working environment (4.8%), and concerns about salary (3.2%). Personal safety and security also emerged as a consideration for a smaller percentage (1.6%) of respondents. These findings underscore the complex interplay of financial incentives, career prospects, and workplace conditions in influencing health professionals' decisions to potentially relocate. Addressing these factors effectively is essential for healthcare workforce planning and policy development aimed at retaining skilled professionals and ensuring sustainable healthcare delivery systems locally.

Descriptive Analysis Data

a) Remuneration and brain drain of health Practitioner

Table 8 Remuneration and Brain drain

		Count	Layer N %
1.Unsatisfactory pay package is responsible for brain drain among health practitioners	strongly disagree	4	3.2%
	Disagree	2	1.6%
	Neutral	8	6.3%
	Agree	34	27.0%
	strongly agree	78	61.9%
	Total	126	100.0%
2.Inadequate remuneration provokes migration among medical practitioners	strongly disagree	5	4.0%
	Disagree	3	2.4%
	Neutral	11	8.7%
	agree	43	34.1%
	strongly agree	64	50.8%
	Total	126	100.0%
3.Medical practitioners in developed nations earn better remuneration compared to their colleagues in home country (Nepal)	strongly disagree	1	0.8%
	disagree	4	3.2%
	neutral	8	6.3%
	agree	35	27.8%
	strongly agree	78	61.9%
	Total	126	100.0%
enhanced 2 package"	strongly disagree	3	2.4%
	disagree	0	0.0%
	neutral	9	7.2%

NPRC Journal of Multidisciplinary Research
Vol. 1, No. 5, October 2024. Pages: 30-49
ISSN: 3059-9148 (Online)
DOI: https://doi.org/10.3126/nprcjmr.v1i5.71321

	agree	51	40.8%
	strongly agree	62	49.6%
	Total	125	100.0%
5.Brain drain among health practitioners is nott associated to poor remuneration	strongly disagree	16	12.7%
	disagree	47	37.3%
	neutral	25	19.8%
	agree	18	14.3%
	strongly agree	20	15.9%
	Total	126	100.0%

The table looks at how salaries affect health workers' decisions to move to other countries, based on responses from 126 people. It shows that most respondents believe low pay makes health workers leave for better jobs abroad (89.9% agree or strongly agree). About 85% agree that low pay is a big reason why health workers move. Almost 90% think doctors earn more in developed countries than at home, which makes them leave. Views vary on whether bad pay directly causes health workers to leave: 52% think it does, while 32% disagree or aren't sure. Overall, the data shows that pay is a major factor in health workers leaving, which affects healthcare systems globally. Policymakers need to consider this when making plans to keep skilled workers and make healthcare better.

b) Workers Safety and brain drain of health professionals

Table 9 Safety and Brain drain

		Count	Layer N %
1.Migration of health professionals is prevalent where workers feel threatened in their work place	strongly disagree	5	4.0%
	disagree	11	8.7%
	neutral	20	15.9%
	agree	51	40.5%
	strongly agree	39	31.0%
	Total	126	100.0%
2.High-quality care of health professionals in receiving countries is responsible for continuous brain drain among 1s and 2	strongly disagree	2	1.6%
	disagree	10	7.9%
	neutral	33	26.2%
	agree	48	38.1%
	strongly agree	33	26.2%
	Total	126	100.0%
3.Health professionals migrate because they are dissatisfied with the 5 precautions in their hospital	strongly disagree	3	2.4%
	disagree	14	11.2%
	neutral	18	14.4%
	agree	48	38.4%
	strongly agree	42	33.6%
	Total	125	100.0%
4. Worker 5 does 2t stimulate migration among health practitioners	strongly disagree	19	15.1%
	disagree	50	39.7%
	neutral	15	11.9%
	agree	34	27.0%

NPRC Journal of Multidisciplinary Research
Vol. 1, No. 5, October 2024. Pages: 30-49
ISSN: 3059-9148 (Online)
DOI: https://doi.org/10.3126/nprcjmr.v1i5.71321

	strongly agree	8	6.3%
	Total	126	100.0%

The table examines how workplace safety influences the migration of health professionals based on responses from 126 individuals. It indicates that a majority (71.5%) believe health professionals are more likely to migrate when they perceive their safety is compromised at work, underscoring safety's pivotal role in migration decisions. There's a split view (64.3% agree) on whether high-quality healthcare abroad draws professionals away, suggesting varied perceptions on the pull factors of better working conditions elsewhere. Dissatisfaction with local safety precautions strongly motivates migration according to 72% of respondents, highlighting the critical need for robust safety measures to retain skilled healthcare workers domestically. Views differ on whether poor worker safety directly stimulates migration, with 33.1% agreeing and 50.8% either disagreeing or neutral. Overall, the data stresses the importance of enhancing safety measures in healthcare settings to retain professionals and mitigate the negative impacts of brain drain on healthcare services and workforce stability locally.

c) Health equipment and brain drain

Table 10 Health equipment and brain drain

		Count	Layer N %
1.non-availability or near absence of health facilities leads to brain drain among health practitioner	strongly disagree	4	3.2%
	disagree	15	11.9%
	neutral	23	18.3%
	agree	62	49.2%
	strongly agree	22	17.5%
	Total	126	100.0%
2.Inadequate infrastructural facilities is responsible for migration of 1s and 2s	strongly disagree	2	1.6%
	disagree	13	10.3%
	neutral	16	12.7%
	agree	64	50.8%
	strongly agree	31	24.6%
	Total	126	100.0%
3.Failure of hospital management to provide essential working tools results to brain drain among health professionals	strongly disagree	1	0.8%
	disagree	11	8.7%
	neutral	12	9.5%
	agree	69	54.8%
	strongly agree	33	26.2%
	Total	126	100.0%
4.Inability of management to maintain as well as replace damaged equipment leads to brain drain among health practitioners	strongly disagree	0	0.0%
	disagree	13	10.3%
	neutral	25	19.8%
	agree	61	48.4%
	strongly agree	27	21.4%
	Total	126	100.0%
5. health practitioners are likely to migrate to countries that offers better medical equipment	strongly disagree	1	0.8%
	disagree	13	10.3%
	neutral	12	9.5%

NPRC Journal of Multidisciplinary Research
Vol. 1, No. 5, October 2024. Pages: 30-49
ISSN: 3059-9148 (Online)
DOI: https://doi.org/10.3126/nprcjmr.v1i5.71321

	agree	61	48.4%
	strongly agree	39	31.0%
	Total	126	100.0%

The table examines how the availability and quality of health equipment influence the migration of health professionals, based on responses from 126 individuals. It reveals several significant insights into the factors driving professionals to seek opportunities abroad:

Firstly, a majority (66.7%) agree or strongly agree that brain drain among health practitioners is exacerbated when health facilities are inadequate or unavailable. This highlights the pivotal role of accessible healthcare infrastructure in professionals' decisions to migrate.

Secondly, a substantial proportion (75.4%) acknowledge that inadequate infrastructural facilities contribute to health professionals leaving their home countries. This suggests that deficiencies in infrastructure serve as significant push factors driving migration.

Furthermore, a large majority (81.0%) agree or strongly agree that brain drain occurs when hospitals fail to provide essential tools and equipment. This underscores critical need for healthcare institutions to adequately equip their staff to retain them locally.

Views on the impact of equipment maintenance vary, but a notable 69.8% agree that poor maintenance and replacement of damaged equipment contribute to brain drain. This indicates concerns among respondents regarding the upkeep of medical resources influencing migration decisions.

Lastly, about 79.4% agree or strongly agree that health professionals are likely to migrate to countries offering superior medical equipment. This reflects the attractiveness of advanced healthcare settings abroad as a pull factor for migration.

Overall, the data underscores the significant influence of health equipment availability, infrastructure quality, and management practices on migration patterns among health professionals. It emphasizes the importance of investing in healthcare infrastructure, ensuring proper equipment maintenance, and improving management strategies to retain skilled professionals and mitigate brain drain. Addressing these challenges effectively can bolster local healthcare delivery capabilities and reduce reliance on foreign recruitment to fill gaps in healthcare services.

d) Why Brain Drain exist among health practitioner?

e) Table 11 Why is Brain drain existing

		Count	Layer N %
1. Brain drain is not a common practice among health professionals	strongly disagree	33	26.2%
	Disagree	42	33.3%
	Neutral	16	12.7%
	Agree	20	15.9%
	strongly agree	15	11.9%
	Total	126	100.0%
2. Brain drain of health professionals is a serious challenge facing the country's health sectors	strongly disagree	4	3.2%
	Disagree	2	1.6%
	Neutral	13	10.3%
	Agree	43	34.1%

NPRC Journal of Multidisciplinary Research
Vol. 1, No. 5, October 2024. Pages: 30-49
ISSN: 3059-9148 (Online)
DOI: https://doi.org/10.3126/nprcjmr.v1i5.71321

	strongly agree	64	50.8%
	Total	126	100.0%
3.1s and 2s who desire better working conditions migrate to countries where they are available	strongly disagree	1	0.8%
	Disagree	4	3.2%
	Neutral	6	4.8%
	Agree	66	52.4%
	strongly agree	49	38.9%
	Total	126	100.0%
4. Enhanced condition of service in receiving countries encourages migration among health practitioners	strongly disagree	1	0.8%
	Disagree	7	5.6%
	Neutral	11	8.7%
	Agree	72	57.1%
	strongly agree	35	27.8%
	Total	126	100.0%
5.Health professionals who migrate are regarded as the most talented and are said to seek greener pastures in developed countries where they perceive eco2mic opportunities and working conditions to be better and enhanced.	strongly disagree	7	5.6%
	Disagree	21	16.7%
	Neutral	21	16.7%
	Agree	57	45.2%
	strongly agree	20	15.9%
	Total	126	100.0%

The table provides insights into the factors contributing to brain drain among health practitioners, based on responses from 126 individuals. It reveals several key findings:

Firstly, a majority (59.5%) of respondents agree or strongly agree that brain drain is common among health professionals, indicating widespread recognition of this issue within the healthcare sector.

Secondly, a significant majority (85.0%) agree or strongly agree that brain drain poses a serious challenge to the country's health sectors. This underscores concerns about the impact of professionals leaving on healthcare delivery and workforce stability.

Thirdly, the vast majority (91.3%) agree or strongly agree that health professionals migrate to countries offering better working conditions. This suggests that the pursuit of improved work environments is a major driver behind migration decisions.

Similarly, 84.9% agree or strongly agree that enhanced conditions of service in receiving countries encourage migration, highlighting the allure of better employment terms abroad.

Lastly, views on health professionals migrating for perceived better economic opportunities and working conditions are divided, with 61.1% agreeing or strongly agreeing with this statement. This indicates varying perspectives on the primary motivations behind migration.

Overall, the data underscores that brain drain among health practitioners is perceived as a significant issue driven by desires for better working conditions and enhanced opportunities abroad. It highlights the challenges this poses to local healthcare systems and emphasizes the need for strategies to improve working conditions, retain talent, and sustain effective healthcare services locally. Addressing these concerns effectively could help mitigate brain drain and strengthen healthcare systems globally.

NPRC Journal of Multidisciplinary Research
Vol. 1, No. 5, October 2024. Pages: 30-49
ISSN: 3059-9148 (Online)
DOI: https://doi.org/10.3126/nprcjmr.v1i5.71321

Conclusion and Recommendation

The migration of Nepali health professionals to countries like the United States, Australia and the United Kingdom, is driven by a complex interplay of factors. Push factors compel professionals to leave Nepal, including limited job opportunities, dissatisfaction with salaries that do not commensurate with their qualifications and experience, and personal ambitions for professional growth and development. These factors create a sense of stagnation and unfulfilled potential, prompting doctors to seek better prospects abroad where they perceive greater opportunities for career advancement and financial reward. Conversely, pull factors in destination countries such as the US and UK include superior job opportunities, better career advancements, access to advanced technologies and resources, and often more supportive working environments. These factors act as magnets, drawing Nepali health workers seeking to enhance their professional skills and quality of life.

The consequences of this brain drain are multifaceted. On one hand, it contributes positively to Nepal's economy through remittance income and knowledge transfer when professionals return with new skills and experiences. On the other hand, the loss of skilled workers exacerbates the shortage of qualified healthcare professionals within Nepal, which in turn hampers the country's ability to develop and sustain its healthcare infrastructure and services. Based on the data from multiple research tables on factors influencing brain drain among healthcare professionals, several key insights emerge:

- Firstly, the disparity in salaries between home countries and developed nations stands out as a primary driver for migration, with a significant majority (89.9%) indicating that inadequate pay pushes professionals to seek better opportunities abroad. This underscores the critical need for competitive compensation strategies to retain skilled healthcare workers locally.
- Secondly, workplace safety perceptions play a crucial role in migration decisions, as noted by 71.5% of respondents who believe that concerns about safety contribute to professionals leaving their home countries. Addressing these safety concerns is essential to improve retention rates and ensure a stable healthcare workforce.
- Furthermore, access to quality healthcare facilities and equipment significantly influences migration choices, with a majority expressing concerns over inadequate infrastructure (66.7%) and equipment availability (81.0%). Enhancing healthcare infrastructure and ensuring proper equipment maintenance are essential steps to retain professionals domestically.
- The research also highlights the widespread recognition (85.0%) of brain drain as a serious challenge to healthcare sectors in countries like Nepal. This recognition underscores the urgency for policy interventions aimed at mitigating its impact through strategic measures.
- Moreover, professionals are primarily motivated to migrate by better working conditions (91.3%) and improved service opportunities abroad (84.9%). These pull factors illustrate the attractiveness of enhanced career prospects and environments in destination countries.
- Lastly, while there is agreement (61.1%) that economic opportunities and working conditions

NPRC Journal of Multidisciplinary Research
Vol. 1, No. 5, October 2024. Pages: 30-49
ISSN: 3059-9148 (Online)
DOI: https://doi.org/10.3126/nprcjmr.v1i5.71321

drive migration, there are diverse perspectives on the exact motivations behind healthcare professionals' decisions to migrate.

Recommendation

- **Competitive Compensation:** Increasing salaries to match international standards is crucial, as 89.9% of respondents identify low pay as a significant reason for professionals leaving. This includes implementing government scales for fair remuneration.
- **Safety and Security:** Ensuring a safe working environment is essential, as 71.5% believe that safety concerns contribute to migration. This involves implementing strict laws and regulations to protect healthcare workers from physical assaults and providing security measures in healthcare institutions.
- **Improving Working Conditions:** Enhancing the overall working environment, including reducing work overload, managing duty hours effectively, and providing adequate resources and infrastructure, is critical to retaining professionals locally.
- **Career Development Opportunities:** Offering opportunities for career advancement and professional growth, including continuing medical education (CME) programs and skill enhancement initiatives, can incentivize professionals to stay.
- **Government Support:** Governments should play a proactive role by ensuring political stability, implementing supportive health policies, and investing in healthcare infrastructure and research. This includes maintaining and expanding the National Health Insurance Program.
- **Respect and Recognition:** Fostering a respectful environment where healthcare professionals feel valued for their contributions is essential. This includes acknowledging their work through public recognition and ensuring equal respect across all healthcare professions.
- **Social and Economic Stability:** Addressing socio-economic factors such as corruption, economic instability, and improving the overall quality of life can create a conducive environment for professionals to stay and contribute to the local healthcare system.
- **Investment in Healthcare Infrastructure:** Governments should prioritize investing in modern healthcare infrastructure, including upgrading medical facilities, ensuring availability of state-of-the-art equipment, and improving the overall quality of healthcare delivery.
- **Supportive Policies for Healthcare Professionals:** Implementing supportive policies such as loan forgiveness programs for healthcare education, housing assistance, and tax incentives can alleviate financial burdens and attract professionals to stay.
- **Work-Life Balance:** Promoting work-life balance through regulated working hours, adequate rest periods, and family-friendly policies can improve job satisfaction and retention among healthcare professionals.
- **Professional Autonomy and Decision-making:** Empowering healthcare professionals with autonomy in clinical decision-making and involving them in policy formulation can enhance job satisfaction and retention.
- **Collaborative and Team-based Care:** Encouraging collaborative and team-based care

NPRC Journal of Multidisciplinary Research
Vol. 1, No. 5, October 2024. Pages: 30-49
ISSN: 3059-9148 (Online)
DOI: https://doi.org/10.3126/nprcjmr.v1i5.71321

models where healthcare professionals work together in interdisciplinary teams fosters a supportive work environment and improves patient outcomes, which can enhance job satisfaction and retention.

- **Continual Feedback Mechanisms:** Establishing regular feedback mechanisms where healthcare professionals can provide input on improving healthcare delivery, patient care processes, and workplace conditions can enhance job satisfaction and retention.
- **Mentorship and Leadership Development:** Providing mentorship opportunities and leadership development programs for early-career healthcare professionals can nurture talent, enhance skills, and encourage professionals to stay and grow within the healthcare system.
- **Public Awareness and Advocacy:** Increasing public awareness about the importance of healthcare professionals and advocating for their rights and contributions can create a supportive societal environment that values and respects healthcare workers.
- **International Collaboration:** Engaging in international collaboration and partnerships to exchange knowledge, skills, and best practices can create opportunities for professional development and reduce the need for professionals to migrate for career advancement.
- **Ethical Recruitment Practices:** Adopting ethical recruitment practices that prioritize local hiring and minimize the exploitation of healthcare professionals from developing countries can help retain skilled workers and contribute to global health equity.

By implementing these recommendations comprehensively and collaboratively, countries can effectively mitigate brain drain, strengthen their healthcare workforce, and ensure sustainable healthcare delivery systems that meet the needs of their populations. These efforts are essential for achieving equitable health outcomes and promoting global health security. Additionally, the government should explore various appealing methods to encourage emigrated doctors to return, whether on a temporary or permanent basis. Even if the government cannot offer comparable compensation, it could recognize the overseas training of emigrants by creating opportunities such as visiting scholar positions or appointing them as honorary trainers within medical schools.

References

Adhikari. R Dev, P. (2022). *Business Research Methods.* kathmandu: Asmita books publishers and distributors.

Aryal, P., Karki, T. B., Mahat, D., & Neupane, D. (2024). Unravelling the Motivations behind Students' Academic Migrations in Nepal: A Mixed-methods Approach. *NPRC Journal of Multidisciplinary Research, 1*(1), 1-18.

Chikanda, A. (2004). Skilled Health Professionals, Migration and Its Impact on Health Delivery in Zimbabwe. *Journal of Ethnic and Migration Studies*.

Dacuycuy, L. B. (2008). *The Migration of Health Professionals* . Bangkok: International Labour Organization .

Dahal, A. (2023). Brain Drain in Nepal: Causes, Consequences, and Solutions.

NPRC Journal of Multidisciplinary Research
Vol. 1, No. 5, October 2024. Pages: 30-49
ISSN: 3059-9148 (Online)
DOI: https://doi.org/10.3126/nprcjmr.v1i5.71321

Dangol, S., & Mishra, R. (2024). Patient Characteristics on Satisfaction with Healthcare Quality in a Teaching Hospital in Nepal. *Baneshwor Campus Journal of Academia*, 121-132. doi:https://doi.org/10.3126/bcja.v3i1.65632

De Villiers, M. R. (2004). Doctors' views of working conditions in rural hospitals in the Western Cape. *South African Family Practice*.

Fitzhugh Mullan, M. (2005). The Metrics of the Physician Brain Drain. *The New England Journal of Medicine*.

Gurung, M., Thapa, N., Khadka, M., Karki, T. B., & Neupane, D. (2020). Access the Quality Service of Ganeshman Singh Memorial Hospital and Research Center. *Nepal Journal of Multidisciplinary Research, 3*(3), 51-63. doi:https://doi.org/10.3126/njmr.v3i3.34884

Jha, M. K. (2024, july 27). *Brain drain phenomena in medical professionals*. Retrieved from Online Khabar: https://english.onlinekhabar.com/brain-drain-phenomena.html#:~:text=in%20medical%20professionals-,Brain%20drain%20phenomena%20in%20medical%20professionals,-Manoj%20Kumar%20Jha

K.C.B. (2023, april 25). *BRAIN DRAIN: A CHANGING PHENOMENON OF THIS CENTURY*. Retrieved from Ratopati: htt ps:/ /englis h.ratopati .com/ story/27516

Mahat, D., Neupane, D., & Shrestha, S. (2024). Quantitative Research Design and Sample Trends: A Systematic Examination of Emerging Paradigms and Best Practices. *Cognizance Journal of Multidisciplinary Studie, 4*(2), 20-27.

Migration, I. I. (2004). The Migration of Health Care Workers:. *Seminar on Health and Migration*.

Misau, Y.-S. G. (2010). Brain Drain and healthcare delivery in developing countries. *Journal of public health in Africa*.

Mlambo, V. H. (2017). Effects of Brain Drain on the South African Health Sector; Analysis of the Dynamics of its Push Factors. *Journal of Economics and Behavioral Studies*.

Najib, M. H. (2019). Brain-Drain Phenomenon Under healthcare workers. *International journal of Public Hea;th and Clinical Sciences*.

Ogaboh, A. A. (2020). why brain drain in nigerian health sector? *Asian J Appl Sci 8*.

Serour, G. I. (2009). ISSUES IN WOMEN'S HEALTH CARE. *International Journal of Gynecology and Obstetrics*.

Shakya, s. (2022). Brain drain in Nepal and the plight of young health professionals. *Journal of kathmandu medical college*, 11(1),1-3.

Shrestha, M. (2017, 02 08). *Push and pull : a study of international migration from Nepal (English).* Retrieved from World Bank group:

NPRC Journal of Multidisciplinary Research
Vol. 1, No. 5, October 2024. Pages: 30-49
ISSN: 3059-9148 (Online)
DOI: https://doi.org/10.3126/nprcjmr.v1i5.71321

https://documents.worldbank.org/en/publication/documents-reports/documentdetail/318581486560991532/push-and-pull-a-study-of-international-migration-from-nepal#:~:text=http%3A//documents.worldbank.org/curated/en/318581486560991532

Sourcing, J. &. (2013). The impact of the brain drain on the quality of health care in Africa. *African Health Sciences*.

Sunday Atobatele, O. O. (2022). Situational Analysis of Access to Essential Healthcare Services in Nigeria: Implication for Trans-Sectorial Policy Considerations in Addressing Health Inequities. *Scientific research an academic publisher*.

Wagle, N., Neupane, D., Nyaupane, N. P., & Timalsena, C. (2024). Compassionate Care: Exploration of the Nurse-Patient Relationship and Behavioral Dynamics in Healthcare Settings. *International Journal of Atharva, 2*(1), 65-77. doi:https://doi.org/10.3126/ija.v2i1.63476

Witt, J. (2009). Addressing the migration of health professionals: the role of working conditions and educational placements. *BMC Public Health* .

Zurn, P. &. (2008). Health workforce and migration: Insights from the European Union. . *International Journal of Health Services*.