

Adenike Koseganlola Risikat Kadri^{1*}, OluwatobiIoba Oluwafemi Ibikunle², Esther Ozichu Jimoh³, Ismail Adebare, Ayanleke⁴, Salihu Sule Bello⁵, Olukemi Felicia Abiodun⁶, Agnes Oluwafunke Ajayi⁷

Assessment of Socio-Demographic Indices Influencing Migration among Registered Nurses and Midwives to Developed Countries at Ring Road State Hospital, Ibadan, Oyo State

1, 2 Lead City University, Ibadan. Oyo State. Nigeria*.

3 University College Hospital, Ibadan, Nigeria

4 Nursing and Midwifery Council of Nigeria, Abuja, Nigeria

5 Kogi State College of Nursing and Midwifery Obangede

6 Ogun State Ministry of Health, Abeokuta, Nigeria

7 University College Hospital, Ibadan, Nigeria

*Correspondence

Adenike Koseganlola Risikat Kadri

Lead City University, Ibadan. Oyo State. Nigeria.

E-mail: Kadri.adenike@lcu.edu.ng

Tel: 08099573494

ABSTRACT

Background: The global health workforce crisis has been exacerbated by the migration of nurses and midwives from under-developed and developing countries to developed countries, resulting in significant shortages and disparities in healthcare delivery. The findings of this study provide valuable insights into the factors that influence the migration decisions of nurses and midwives, and highlight the need for targeted policies to address the crisis in Nigeria.

Objectives: This study aimed to assess socio-demographic indices influencing migration among Registered Nurses and Midwives to developed countries at Ring Road State hospital, Ibadan, Oyo State.

Methods: A descriptive study design was used in the conduct of the study. Using simple random techniques for selection of participants, one hundred and twelve nurses and midwives from secondary healthcare facility in Ibadan participated in the study. A self-structured questionnaire with reliability coefficient of 0.75 was used to collect data with the help of two research assistants. Ethical approval was obtained from the ethical review committee of Oyo state ministry of health and other appropriate authorities were met for the permission to conduct the study. The data was analysed using the SPSS version 26.

Result: Findings revealed that majority (73%) of the respondents expressed intention to migrate with most respondents being above 35 years (67.9%), married (90.8%), and having over 10 years of experience (64.2%). Social factors which include poor infrastructure (94.5%), personal (81%) and family (62%) as well as economic factors such as income (97.2%) and job opportunities for family members (79%); strongly influenced migration decisions. There was a significant relationship between respondent's socio-demographic characteristics and their intention to migrate.

Conclusion: Respondent's migration to developed countries is influenced by socio-demographic indices such as demographic factors, social factors, and economic factors, and the respondents are knowledgeable about the migration process. It is therefore recommended that competitive salaries, opportunity for career advancement, good working conditions should be provided for professional nurses and midwives to encourage retention and reduce the attraction of greener pastures in developed countries.

Keywords: Assessment, Migration, Registered Nurses-Midwives, Socio-demographic indices.

INTRODUCTION

The global health landscape is facing multifaceted challenges with the migration of Healthcare Workers, especially nurses and midwives from low and middle-income countries to high-income countries, driven by factors such as better job prospects, improved working conditions, and higher salaries.^{1, 2} This phenomenon has resulted in significant shortages and disparities in healthcare delivery, particularly in countries with already fragile health systems. This has been of great concern, especially to Nigeria.^{3, 4, 5,} ⁶ It was estimated that 12,579 nurses trained in Nigeria or 12% of the total number of nurses in the country, had emigrated as at the year 2000.⁷ and according to Migration policy Institute, Nigerians accounted for the largest African immigrants' population in the United States with estimated population of about 376,000 Nigerians are living and working in United States.^{8, 9}

Developing countries often suffer from inadequate healthcare infrastructure, insufficient resources, and limited opportunities for professional growth, leading to a loss of skilled nurses to more prosperous nations.⁵ Migration of Healthcare Professionals such as registered nurses are influenced by some socio-demographic indices such as age, marital status, remuneration, working condition, quality of life, professional development, technological advancement, infrastructure, language proficiency and presence of established communities from the same country which influences the migration of nurses to developed countries and the pattern of migration.⁶ The migration of healthcare professionals is a concern both in developing countries with its negative impact being felt in the reduced number of workers and skilled professionals in the health workforce.¹⁰ It also affects the quality of health services delivered and overall development goals in developing countries.^{6, 11} Current migration patterns as described by the Global Health Workforce Alliance, uncovers an exponentially expanding movement of nurses from low-income nations to high-income countries.¹² Nigeria is said to be among the top 13 African countries whose citizens want to emigrate to Europe and other nations on account of poverty and or hardship.¹³ Significantly, most nurses are attracted to developed countries by the prospect of better remuneration informed by their individual-related factors such as improvement in social status and lifestyle.^{14, 15, 16} Developed countries also generally offer better working conditions, including reasonable nurse-to-patient ratios, modern medical facilities, and well-equipped healthcare settings.¹⁴ Hence, this study was conducted to evaluate socio-demographic indices and their impact on the decision of Registered Nurses and Midwives to migrate to developed countries.

METHODS

A descriptive study design was adopted to determine socio-demographic indices influencing migration among Registered Nurses and Midwives to developed countries in Ring Road State hospital, Ibadan, Oyo State. One hundred and twelve registered nurses and midwives were selected using a simple random sampling technique of balloting from

Correspondence:* Adenike Koseganlola Risikat Kadri; **E-mail: Kadri.adenike@lcu.edu.ng

one of the secondary healthcare facilities in Ibadan. A self-structured questionnaire was used to evaluate respondents' socio-demographic characteristics and reason for relocation abroad. This was administered to the respondents with the help of two trained research assistants and retrieved immediately after filling. Data analysis was conducted using SPSS package version 26 and a test-retest reliability yielded Cronbach coefficient alpha 0.75. Descriptive statistics of frequency and percentages were used for analysis of collected data with the use of tables and bar charts while Chi-square was used to test for association between variables at 5% level of significance.

Ethical approval was obtained from the ethical committee of Oyo State Ministry of Health and permission for data collection was also obtained from the appropriate authority at Ring Road State Hospital. Written Informed consent was also obtained from the participants after giving information about the study and clarifying issues as well as providing answers to the questions raised by the respondents. Confidentiality was maintained as respondents were told not to write their names on the questionnaires.

RESULTS

Socio-demographic data

One hundred and twelve (112) nurses and midwives were selected for the study; however 109 questionnaires were retrieved for the data analysis. Table I shows the socio-demographic characteristics of the respondents with the mean age of the respondents being (\pm SD) of 36.8 (\pm 6.2) and age range was 25 – 60 years. The Majority 74(67.9%) of the respondents were above 35years with majority having more than 10 years of work experience. All the respondents were females, mostly 108(99.1%) Yoruba ethnic group and 99(90.8%) were married with 91.7% being from a nuclear family setting.

Table 1: Socio-demographic characteristics of the respondents (N = 109)

Socio-demographic characteristics	Options	Frequency	Percent
Age (Years)	25-35 years	35	32.1
	Above 35 years	74	67.9
Ethnicity	Yoruba	108	99.1
	Igbo	1	0.9
Marital status	Single	10	9.2
	Married	99	90.8
Religion	Christianity	81	74.3
	Islam	28	25.7
Years of experience	Less than 5years	13	11.9
	5-10years	26	23.9
	Above 10years	70	64.2
Family status	Nuclear	100	91.7
	Extended	9	8.3

Socio-demographic characteristics of the respondents

Respondents' intention to migrate

Figure 1 shows the graphical representation of respondent's intention to migrate. Majority of the respondents had the intention of migrating to developed countries while the remaining 27% had no intention of migrating.

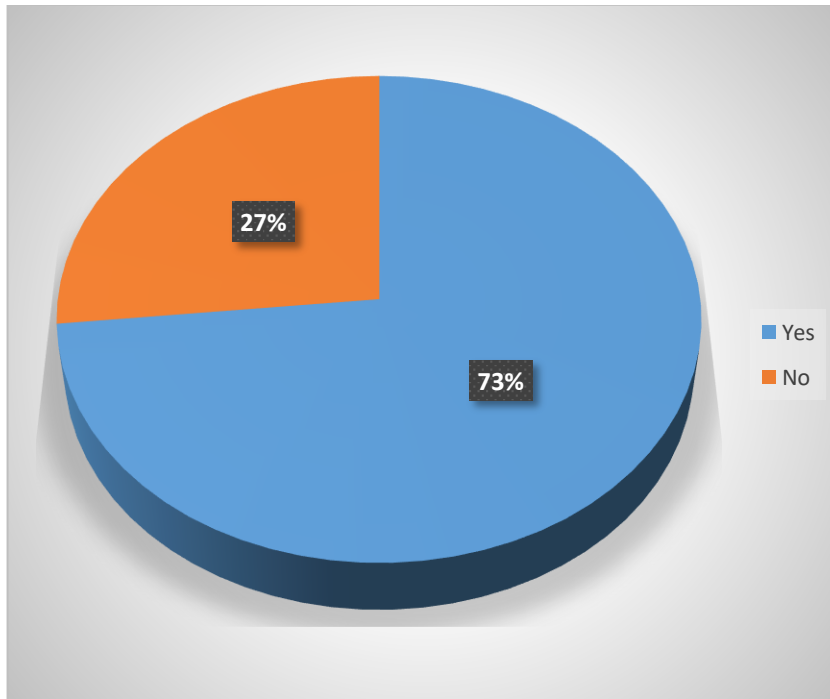


Figure 1: Respondents' intention to migrate

Respondents' choice of migratory country

Figure 2 shows a bar chart of the respondent's choice of migratory country. While a total of 28 respondents were not interested migrating to any of the developed countries, 32 respondents made Canada their choice closely followed by 21 respondents choosing United State of America (USA) with Ireland having only 2 intending immigrants.

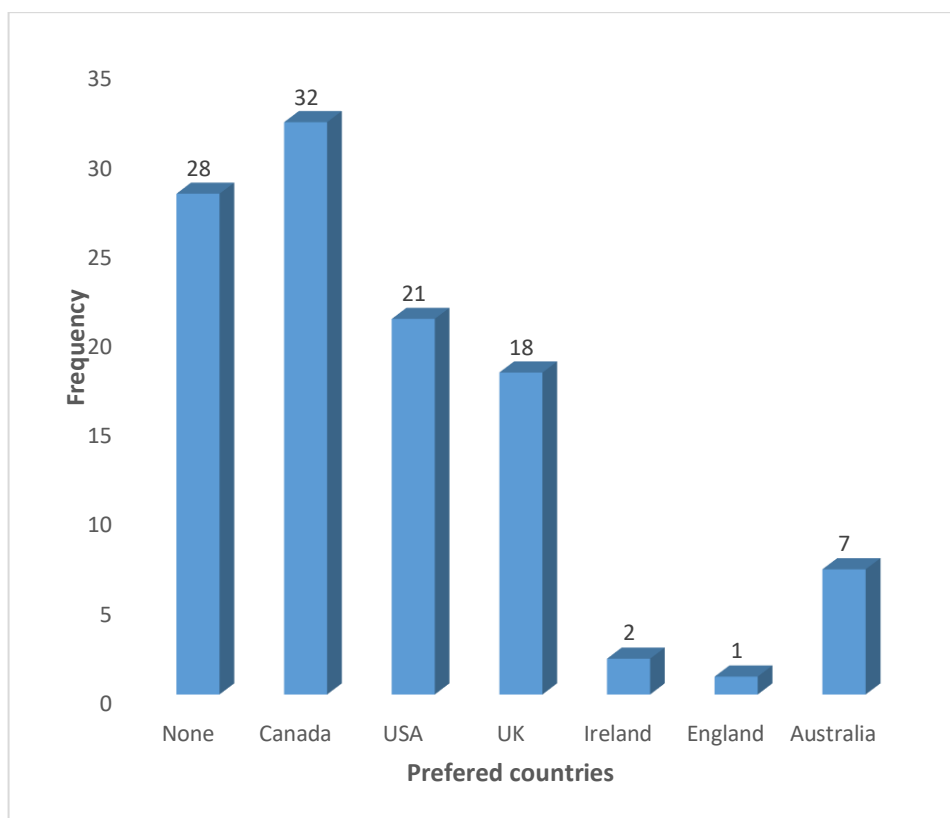


Figure 2: Respondents' choice of migratory country

Social factors influencing migration of Registered Nurses and Midwives to developed countries

Table 2 shows the social factors influencing the migration of registered nurses and midwives to developed countries. The majority 103(94.5%) of the respondents stated poor infrastructure closely followed by 88 (80.7%) of the respondents who stated political stability in developed country while 16.5% of the respondents stated desire to join family members abroad.

Table 2: Social factors influencing migration of Registered Nurses and Midwives to developed countries

Social Factors	Yes (%)	No (%)
Inadequate mentorship	6 (5.5)	103 (94.5)
Pressure from family members	6 (5.5)	103 (94.5)
Poor infrastructures	103 (94.5)	6 (5.5)
Personal desire to live in another country	81 (74.3)	28 (25.7)
Family desire to live in another country	62 (56.9)	47 (43.1)
Desire to join family members already abroad	18 (16.5)	91 (83.5)

Political stability in developed country	88 (80.7)	21 (19.3)
Challenges of travelling to other destinations for vacation	53 (48.6)	56 (51.4)
Concerned about being away from your support network	38 (34.9)	71 (65.1)

Economic factors influencing migration of Registered Nurses and Midwives to developed countries

Table 3 shows the economic factors influencing migration of registered nurses and midwives to developed countries among the respondents. Majority 106(97.2%) of the respondents stated income and working condition which was closing followed by 104(95.4%) of the respondents living condition, while 25(22.9%) of the respondents stated lack of opportunity for career advancement.

Table 3: Economic factors influencing migration of Registered Nurses and Midwives to developed countries

Variables	Yes (%)	No (%)
Income	106 (97.2)	3 (2.8)
Working conditions	106 (97.2)	3 (2.8)
Living conditions	104 (95.4)	5 (4.6)
Unavailability of research opportunities	29 (26.6)	80 (73.4)
Lack of opportunity for career advancement	25 (22.9)	84 (77.1)
Job opportunities for family members	79 (72.5)	30 (27.5)
Potential for professional growth	85 (78.0)	24 (22.0)
Poor healthcare system	101 (92.7)	8 (7.3)

Respondents' knowledge of the Migration Process for Registered Nurses and Midwives to developed countries.

Table 4 shows the respondent's knowledge of migration process for registered nurses and midwives to developed countries. Majority 96(88.1) of the respondents were aware of immigration pathways for nurses in developed countries, 85(78.0%) of the respondents knew about the nursing licensing process in your desired country while 81(74.3%) of the respondents believed migrating to a developed country will enhance your nursing career prospects.

Table 4: Knowledge of the Migration Process for Registered Nurses and Midwives to developed countries (n = 109).

Variables	Yes (%)	No (%)
Aware of immigration pathways for Nurses in developed countries	96 (88.1)	13 (11.9)
Know about the nursing licensing process in your desired country	85 (78.0)	24 (22.0)
Attended nursing migration related events	41 (37.6)	68 (62.4)
Researched cultural and social aspects of living abroad	80 (73.4)	29 (26.6)
Familiar with healthcare systems in your desired country	78 (71.6)	31 (28.4)
Considered cost of living and financial implication	80 (73.4)	29 (26.6)
Discussed your migration plans with family or friends	79 (72.5)	30 (27.5)
Researched housing options	65 (59.6)	44 (40.4)
Aware of challenges that may arise during migration process	76 (69.7)	33 (30.3)
Believe migrating to a developed country will enhance your nursing career prospects	81 (74.3)	28 (25.7)

DISCUSSION

The migration of nurses and midwives from low- and middle-income countries to high-income countries has become a pressing concern in the global health landscape.^{1, 4} This phenomenon has significant implications for the health systems of both sending and receiving countries. On one hand, the migration of health professionals can lead to a brain drain in the sending countries, exacerbating existing health workforce shortages.^{2, 17} On the other hand, receiving countries benefit from the influx of skilled health professionals, which can help address their own health workforce shortages.^{3, 18}

This study revealed that most of the respondents were in the age group of above 35years, were of the Yoruba ethnic group except one respondent who is Igbo, married, mostly Christians who had over 10 years of experience with more than 75% having the intention of migrating to developed countries. All the respondents were females and their preferred developed countries for migration were, Canada, USA, UK, Australia, Ireland and England in descending order. The result of the present study is similar to a study carried out among Nigerian medical doctors which reported that majority of the respondents were married, above 35years of age with more than 10 years of working experience and had the intention of migrating to developed countries.¹⁹ However in contradiction in terms of gender variations with the studies by some authors among medical doctors and other healthcare workers where majority were males.^{10, 19}

Evaluation of social factors influencing the migration of the respondents revealed that inadequate mentorship, pressure from family member, poor infrastructure, personal and family desires to live in another country, and poor infrastructure as well as political

stability in developed country were stated as the social factors influencing the migration of registered nurses and midwives to developed countries. The result of the present study is in line with that of various studies conducted by some authors among Healthcare Workers in Nigeria which revealed that insecurities, political instability, personal better quality of life, professional development opportunities, fulfilment, professional and poor infrastructure are factors influencing migration of healthcare workers in Nigeria.^{20, 21, 22, 23, 24}

This study identified economic factors affecting the migration of registered nurses and midwives to developed nations. Most respondents indicated that income, working conditions, living conditions, lack of research opportunities, limited career advancement prospects, job opportunities for family members, potential for professional growth, and inadequate healthcare systems were significant influences on their migration decisions. This is in consistence with a study carried out in Lithuania which revealed that income, job opportunities and working condition are factors influencing migration among healthcare workers.²⁵ A considerable percentage of respondents identified income as a determinant affecting the migration of nurses and midwives. This is consistent with previous studies that higher wages in developed countries are a major factor for healthcare professionals.^{22, 26} Furthermore, nurses and midwives are often attracted to the prospects of better remuneration, which not only supports their personal and family needs but also allows them to enjoy a higher standard of living. Working conditions was also stated as a factor influencing migration of nurses and midwives. This was in line with previous study that better working conditions in developed countries, including access to modern facilities and equipment, a manageable patient load, and supportive management, are important factors in the decision to migrate.²⁷ Living conditions was also stated as a factor influencing migration. This is consistent with previous study that improved living conditions, including better housing, healthcare, and education for family members, are significant incentives for healthcare professionals to seek opportunities in developed countries.²⁸

Assessment of respondents' knowledge of migration process for registered nurses and midwives to developed countries revealed that majority were aware immigration pathways and licensing process of their desired countries, had researched cultural and social aspects of living abroad, were familiar with healthcare systems, cost of living and financial implication. This is was in line with a similar study titled "nurses on the move: migration and the global health care economy" which also revealed that understanding the migration pathways is essential for a smooth transition and successful integration in the destination country.²⁹ Understanding cultural nuances can ease the transition and improve overall well-being according to Awases *et al.*, 2023 and understanding cost of living and financial implications of migrating are essential for making informed decisions about migration and ensuring financial stability in the destination country.²⁸

CONCLUSION

Migration especially the massive exodus of Nigerian Nurses and Midwives, leads to a shortage of skilled nursing professionals thereby leading to increased workload on remaining staff and subsequently decline in the quality of care given to patients and mentorship training to newly employed or deployed nurses and midwives. Understanding the socio-demographic factors influencing migration and their implications for nursing practice is essential for formulating effective healthcare policies. Healthcare policies supporting the good remuneration, education, training, and retention of nursing professionals in source countries can help mitigate the effects of migration.

REFERENCES

1. Aiken LH, McHugh MD. Nurses' migration and health workforce planning: A global challenge. *International Journal of Nursing Studies*. 2020;101:103476. doi:10.1016/j.ijnurstu.2019.103476
2. Buchan J, Perfilieva G. Health worker migration and retention: A global review. *Human Resources for Health*, 2020;18(1), 1-11. doi:10.1186/s12960-020-00473-4
3. Kingma M. The global nursing workforce: Challenges, opportunities, and future directions. *Journal of Nursing Scholarship*. 2022;54(3), 259-267. doi: 10.1111/jnu.12734
4. Oulton JA., Dieleman M. Migration of nurses and midwives: A systematic review of the literature. *Human Resources for Health*. 2022;20(1), 1-13. doi: 10.1186/s12960-022-00733-6
5. Ngoma A., Ismail N. The determinants of brain drain in developing countries. *International Journal of Social Economics*. 2023;40(8):744-754
6. Chimenya A. Investigating the determinants of brain-drain of healthcare professionals in developing countries: The case of registered nurses in Malawi Health sector. *Journal of Human Resources Management Research*; 2023;1-20.
7. Clemens MA., Pattersson G. New Data on African Health Professionals Abroad. Working Paper 95, Centre for Global Development; 2023;231.
8. Migration Policy Institute. The Nigerian Diaspora in the United States (Rad Diaspora Profile). Rockefeller Foundation-Aspen Institute Diaspora Program.2022; Retrieved From www.Migrationpolicy.Org/Sites/Default/Files/Publications/ Rad-Nigeria.
9. George A., Rhodes M. Estimates of Nigerian migration to the United States. *Journal of Migration Studies*. (2023).
10. Buchan J. How can the migration of health service professionals be managed so as to reduce any negative effects on supply? 2023; [Policy brief]. Retrieved from https://www.euro.who.int/__data/assets/pdf_file/0006/75453/E93414.pdf
11. Tankwanchi S. Doctors beyond borders: Data trends and medical migration dynamics from SubSaharan Africa to the United States (Doctoral Dissertation). (Doctor of Philosophy), Vanderbilt University, Nashville. 2022.
12. Global Health Workforce Alliance (GHWA). The Global Health Workforce Alliance Annual Report: Rising to the grand challenge of human resources for health.2021.

- Retrieved from https://www.who.int/workforcealliance/knowledge/resources/ghwa_anual_report_2013.pdf?ua=1
13. Onyekwer J, Egenuka N. Nigeria groans as medical professionals' emigration worsens. *Guardian Newspapers*. 2023. Retrieved from <https://guardian.ng/news/nigeria-groans-as-medical-professionals-emigration-worsens/>
 14. Karaduman HA, Çoban E. Brain drain in turkey: an investigation on the leading motives of skilled migration. *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi*. (2022). 6(7):322-339.
 15. Robinson S. Career planning and development needs of rural and remote nurses. *Journal of Research in Nursing*; 2022;13(3):218-219.
 16. Gibson J, McKenzie D. The microeconomic determinants of emigration and return migration of the best and brightest: Evidence from the Pacific. *Journal of Development Economics*. 2021;95(1):18-29.
 17. Campbell J, Dussault G, Buchan J. A universal truth: No health system can function without its workforce. *Bulletin of the World Health Organization*, 2021;98(10):643-644. doi: 10.2471/BLT.20.255799
 18. Willetts G, Evans J. The impact of Brexit on nurse migration to the UK. *Journal of Advanced Nursing*, 2023;79(1):23-31. doi: 10.1111/jan.15244
 19. Adebayo A, Akinyemi OO. What Are You Really Doing in This Country?": Emigration Intentions of Nigerian Doctors and Their Policy Implications for Human Resource for Health Management. *Journal of International Migration and Integration*; 2022;23:1377–1396.
 20. Chiamaka J, Okafor E, Caleb C. Brain Drain among Nigerian Nurses: Implications to the Migrating Nurse and the Home Country. *International Journal of Research and Scientific Innovation*. 2023;8(1):15-21.
 21. Awases M, Gbary A, Nyoni J, Chatora R. Migration of health professionals in six countries: A synthesis report. *Journal of Migration*; 2023;4(3):37-42.
 22. Buchan J, Aiken LH. Solving nursing shortages: A common priority. *Journal of Clinical Nursing*, 2022;17(24):3262-3268.
 23. Dovlo D. Migration of nurses from Sub-Saharan Africa: A review of issues and challenges. *Health Services Research*. 2021;42(3):1373-1388.
 24. Pungpapong J, Manivel JC, Astudillo L. Migration of nurses and health professionals from South East Asia to developed countries. *Migration and Health in South East Asia*. 2020; 3:221-242.
 25. Gaiduk R, Gaiduk J, Fields D. Limiting the Brain Drain: Determinants of Employee Organizational Attachment in Lithuania. *Baltic Journal of Management*; 2023;4(2):149-168.
 26. Kingma M. Nursing migration: Globalization and the African context. *Journal of Clinical Nursing*; 2021;10(3):315–320.

27. Chandar H, Jauchar J. Postgraduates Perception on the Cause of Brain Drain among Malaysian Professionals. *Articles in problems and perspectives in management*. 2022;2:78-83.
28. Kingma M. Nurses on the move: Migration and the global health care economy. *Journal of Clinical Nursing*, 2020;2:322-328.
29. Buchan J, Dovlo D. International recruitment of health workers to the UK: A report for DFID. Department for International Development. 2029
30. Buchan J, Calman L. The global shortage of registered nurses: An overview of issues and actions. International Council of Nurses.2019.