



༄༅། དཔལ་ལྷན་འབྲུག་པ་ཕྱེགས་ལས་ལྷན་ཀྱིས།།

Published by:

Nursing Program, Ministry of Health, Royal Government of Bhutan

PO Box No: 726, Kawang Jangsa, Thimphu, Bhutan. 11001

Tel No: +975-2- 328095/321842

Email: dms@health.gov.bt

Website: www.health.gov.bt

Copyright: All rights reserved © 2021, Department of Medical Services,
Ministry of Health (MoH), Royal Government of Bhutan.

Suggested Citation: Ministry of Health. (2021). *Strategic Direction for
Nursing and Midwifery 2021-2025*, Bhutan, Nursing Program, MoH.

List of abbreviations

AHB	Annual Health Bulletin
AN	Assistant Nurses
BMHC	Bhutan Medical & Health Council
DMS	Department of Medical Services
DoPH	Department of Public Health
FNPH	Faculty of Nursing and Public Health
GNHC	Gross National Happiness Commission
GNM	General Nursing and Midwifery
HRD	Human Resource Division
JDWNRH	Jigme Dorji Wangchuk National Referral Hospital
MoH	Ministry of Health
NHS	National Health Survey
NP	Nursing Program
PHCB	Population and Housing Census of Bhutan
PPD	Policy and Planning Division
QI	Quality Improvement
RCSC	Royal Civil Service Commission
SDG	Sustainable Development Goals
SDNM	Strategic Directions for Nursing and Midwifery
SEARO	South-East Asia Regional Office
SoP	Standard Operating Procedures
WHA	World Health Assembly
WHO	World Health Organization

TABLE OF CONTENTS

LIST OF ABBREVIATIONS	1
ACKNOWLEDGEMENT	3
FOREWORD	4
EXECUTIVE SUMMARY	5
BACKGROUND	6
<i>I. Human Resources</i>	9
<i>II. Services</i>	11
<i>III. Education</i>	12
<i>IV. Research</i>	13
THEMES	14
VISION & MISSION	15
GUIDING PRINCIPLES	15
STRATEGIC FRAMEWORK	16
STRATEGIC GOALS	17
KEY INDICATORS, TIMELINE, AND RESPONSIBILITY	22
REFERENCES	30

Figure 1: Number of nurses in the country	10
Figure 2: Current nursing and midwifery workforce strength versus required numbers.....	10
Figure 3: Nurses trained inside and outside Bhutan	13

ACKNOWLEDGEMENT

The Nursing Program, Department of Medical Services would like to express sincere appreciation to the following core working members in developing the National Strategic Direction for Nursing and Midwifery 2021-2025.

1. Ms. Tandin Pemo, Nursing Superintendent, JDWNRH
2. Ms. Diki Wangmo, Registrar, KGUMSB, Thimphu.
3. Ms. Chhimi Lhamu, Deputy Nursing Superintendent, JDWNRH
4. Ms. Tshering Dema, Deputy Nursing Superintendent, JDWNRH
5. Ms. Manikala Moktan, Assistant Professor, FNPH, KGUMSB,
6. Mr. Tashi Dorji, Chief Nurse, JDWNR Hospital, Thimphu.
7. Mr. Chewang Dorji, Chief Nurse, JDWNR Hospital, Thimphu.
8. Ms. Kencho Zangmo, Chief Nurse, JDWNR Hospital, Thimphu.
9. Ms. Pema Choden, Clinical Nurse, JDWNR Hospital, Thimphu.
10. Ms. Kinley Yangdon, Clinical Nurse, JDWNR Hospital, Thimphu.
11. Ms. Sangay Chozom, Chief Nurse, JDWNR Hospital, Thimphu.
12. Ms. Pasang Wangmo, Senior Lecturer, FNPH, KGUMSB, Thimphu.
13. Mr. Sonam Phuntsho, Senior Planning Officer, PPD, MOH.
14. Mr. Sanjay Puwar, Human Resource Officer, HRD, MOH.
15. Mr. Nima Sangay, Deputy Registrar, BMHC, Thimphu
16. Ms. Khina Maya, Program Analyst, Nursing Program, MOH.
17. Ms. Thinley Zangmo, NPO, WHO Country Office Bhutan

The Nursing Program would like to extend appreciation and gratitude for the financial and technical support extended by country office, World Health Organization. Further, the program expresses appreciation to Ai Tanamizu, Technical Officer, Nursing, WHO SEARO and Dr. Malin Bogren, WHO Consultant for the technical review of this document and national editorial team; Ms. Deki Pem, Ms. Dorji Pelzom, Ms. Roma Karki and Mr. Som Bdr. Darjee.

FOREWORD

Health Human Resource is one of the most important building blocks of the health system. In turn, the Nursing and Midwifery professionals form a major component of the health human resource. They form the backbone of the health system and their contribution should be recognized. It is important for us to recognize the contribution these group of health professionals can make in improving the health system responsive to the health challenges of the 21st century. They can also contribute in accelerating the Universal Health Coverage (UHC) and help achieve health and development goals on both national and global levels.

In Bhutan, nurses and midwives have progressed well over the decades and contributed immensely in strengthening the health care delivery system. Today, the demands on both quantity and quality of the nursing and midwifery workforce have increased by many folds. This is mainly due to evolvement of the needs of the people and the role expansion of nursing and midwifery care and services. The critical nature of their roles and significance were felt immensely during the country's preparedness and response to COVID-19 pandemic.

Although nurses and midwives comprise the largest group of health workforce in the country, there is still a large gap both in terms of quantity and quality of the workforce. The alignment of production and deployment in harmonization with service standards and evolving needs would go a long way in addressing the current and future needs of nurses and midwives in the country.

Therefore, I am extremely happy to note that a national strategic document is in place, which would guide in strengthening the nation's largest and one of the most important groups of health workforce. Through this document, I am hopeful that it will provide better pathways for development, motivation, retention, and leadership in nursing and midwifery at all levels. I thank all the officials and stakeholders involved in developing this important document.



Dr. Pandup Tshering
SECRETARY

EXECUTIVE SUMMARY

The National Strategic Direction for Nursing and Midwifery [SDNM] (2021-2025) aims to guide policy makers, planners, and implementers at national and institutional levels for strengthening nursing and midwifery services in Bhutan. The document aspires to guide delivery of best nursing and midwifery services and contribute in providing quality healthcare services.

The Strategic Direction was developed in line with WHO Global Strategic Directions for Nursing and Midwifery 2021-2025. The document is guided by National Health Policy and World Health Assembly resolutions and commitments for strengthening nursing and midwifery capacities. The SDNM 2021-2025 has five strategic goals to address the issues in nursing and midwifery:

1. Strengthen Nursing and Midwifery leadership for workforce governance and management
2. Enhance Nursing and Midwifery workforce capacity and working conditions to optimize service performance
3. Strengthen Nursing and Midwifery education system to produce a workforce that is responsive to changing health needs of population
4. Promote Nursing and Midwifery Research and Innovation
5. Strengthen national and international networking and linkages to enhance professionalism, collaboration, and teamwork.

The strategies shall be implemented by relevant stake holders to foster institutional linkages and alliances among nursing and midwifery education, service, research and professional development. In addition, it is expected to guide other professions and partners to commit and invest in strengthening nursing and midwifery services in Bhutan. This will contribute to fulfillment of Ministry of Health's vision of "nation with best health" and achievement of Sustainable Development Goals of leaving no one behind.

BACKGROUND

The modern health services in Bhutan began in the early 1960s with the institution of first five-year plan in 1961. The country began with four hospitals, eleven dispensaries, two doctors, and no trained nurses (Planning Commission, 1967) and currently there are 49 hospitals, 186 primary health centers (Annual Health Bulletin, 2020). The health care services are delivered through three-tiered system with national and regional referral hospitals at the apex, district hospital at secondary level, and the lowest level being primary health care facilities including sub-posts and outreach clinics. The health care services in both modern and traditional medicines are provided free of cost through integrated approach as enshrined in the constitution of Bhutan. With the advent of modern health care services, Bhutan has made a significant progress in the health development. Bhutan achieved the Millennium Development Goals of reducing child mortality, improving maternal health, halting and reversing the spread of TB and malaria (AHB, 2017). The average life expectancy has increased from 66.1 years in 2000 to 70.2 years in 2017 (PHCB, 2017) and approximately 95 percent of the populations live within three hours of walking distance from the nearest health facility (NHS, 2012). The health development plans and goals are guided by GNH philosophy and is aligned with the targets set in the Sustainable Development Goals.

With the arrival of modern health care services in early 1960s, the need for nursing and midwifery workforce was realized as a major contributor to health system building. Initially, building the nursing workforce began with on-the-job training of nine village girls and an establishment of health school in 1974 marked the beginning of structured pre-service education in nursing and midwifery. Amidst speculation and uncertainty, the three- and half-year diploma program in General Nursing and Midwifery (GNM) commenced in 1982 with 10 students. The curriculum and students of the first two intakes

into the GNM programs were done with help from the Rajkumari Amrit Kaur College of Nursing and Safdarjung Hospital both located in New Delhi, India (Wangmo, Windsor & Clark, 2018). The role of nurses in early 1980s was limited to providing basic hygiene, simple bandaging, and to carry out medical instructions. Globally, during this period, much importance was placed on training and qualification of nurses (Pulcini, Jelic, Gul, & Loke, 2010). To this effect, the World Health Assembly passed several resolutions urging member states and international organizations to strengthen nursing education and capacity (World Health Assembly, 1989, 1992, 1996, 2001b). These resolutions served as determinants and gradually the need for professional development of nursing workforce was acknowledged in Bhutan too. This impetus led to the institution of a Bachelor of Nursing program in collaboration with the La Trobe University in Australia; prior to which nursing students were sent to study outside Bhutan (mainly in India, the United States, New Zealand, and Thailand).

At present, Bhutanese nurses work at various capacities including but not limited to clinical nurse providing direct patient care; nurse managers/administrators managing nursing workforce and other programs such as infection control, quality assurance, regulatory bodies; and nurse educators at the nursing institutes. The nursing and midwifery workforce now compose of two nurses with PhDs, 48 with master degree, 260 with bachelor degree, 1050 with diploma, and 229 with certificate qualifications as on 2020. Similar to some of the neighboring countries in the region, a nurse in Bhutan refers to both a nurse and a midwife as there are no separate cadres for nurses and midwives.

Recognizing significance of the roles nurses and midwives play and given their number in the health workforce, the nursing and midwifery workforce was represented by a Joint Director of Nursing at the MoH; which dissolved

with the retirement of the joint director in 1994 (Wangmo, Windsor & Clark, 2018). However, current issues of the nursing and midwifery workforce management including unclear nomenclatures and roles; HR planning issues; skill mix deployment issues; varied services and performances across health facilities; and poor channel of communication is expected to be improved and mainstreamed through establishment of nursing office at the MoH. The resolution from 54th WHA recommends having a nursing representation at policy level in the MoH in order to strengthen and effectively manage the steadily expanding national nursing workforce (WHO, 2001), which is reinforced in the ‘State of the world’s nursing 2020’. Bhutan developed its first Strategic Direction for strengthening nursing and midwifery services 2015-2020 in 2015. However, the document couldn’t be formally endorsed and published, nonetheless, most of the planned activities have been implemented.

SITUATION ANALYSIS

I. Human Resources

As of December 2020, there are 1529 nurse midwives distributed across 49 hospitals in the country. The current average national density of nursing workforce is estimated at 18.5 nurses per 10,000 people (WHO, 2020). The density estimation varies among different Dzongkhags as the density in Thimphu, which is most populous Dzongkhag has 45 nurses per 10,000 people and Gasa Dzongkhag with the lowest population is estimated at 15 nurses per 10,000 people. Nurses and midwives are categorized based on their level of education as: (1) clinical nurse; (2) staff nurse; (3) assistant nurse. Assistant nurses have certificate in nursing and midwifery, staff nurses have diploma in nursing and midwifery, and clinical nurses have different bachelor or master's degree in nursing and midwifery. These categories of nurses although should be providing nursing and midwifery care at different levels based on their education and skill, but because there is no clear nomenclature and role description, they mostly end up performing almost the same tasks (Wangmo, Windsor & Clark, 2018). Approximately 17 % (n= 260) of the workforce are clinical nurses, 68 % (n = 1039) staff nurses, and 15 % (n= 230) assistant nurses. The distribution of different categories of nurses varies across different regions of the country, with most of the clinical nurses concentrated in the three referral hospitals. Nurses with diplomas make up the largest proportion of workforce (65.4%), while nurses with master degree are smallest (1.8 %).

Figure 1: Number of nurses in the country as on December 2020

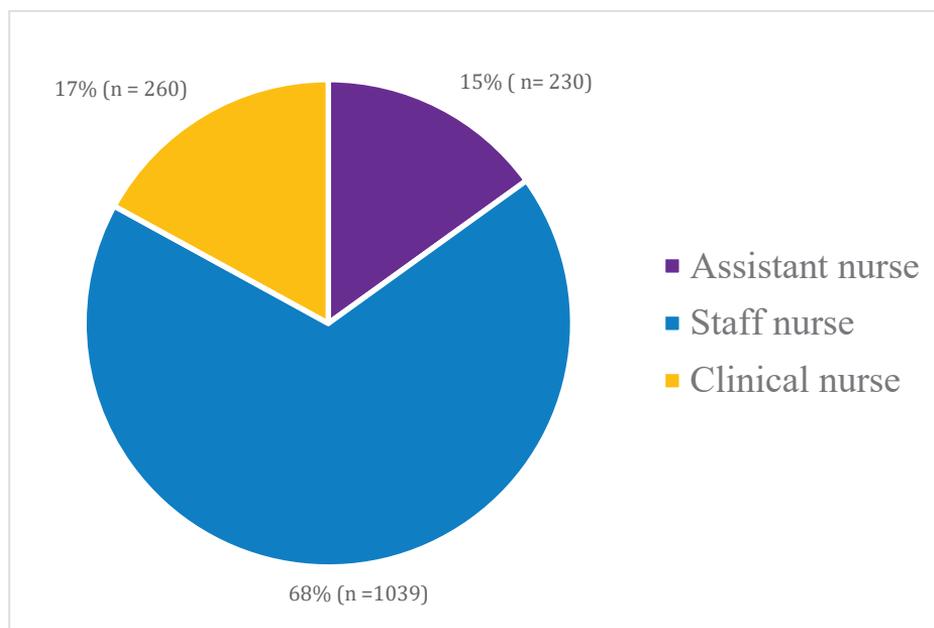
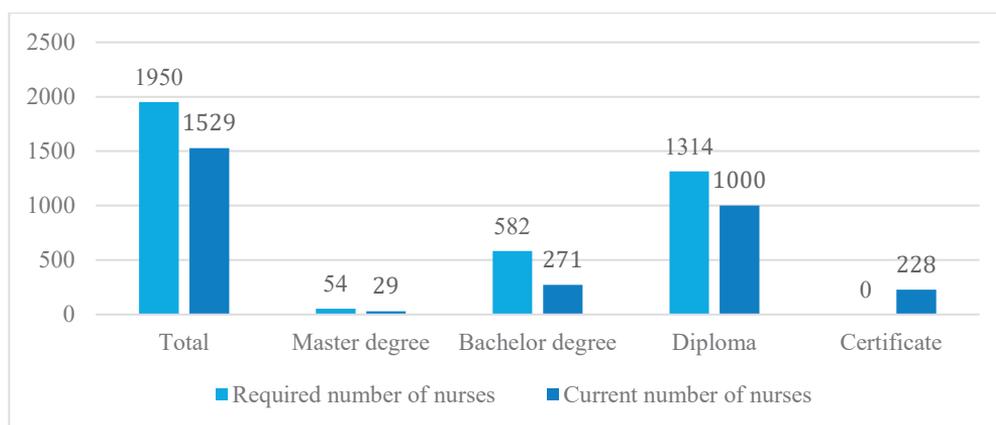


Figure 2: Current nursing and midwifery workforce strength versus required numbers



To provide quality health care services, MoH has set a standard of nurse patient ratio to 1:6 or 1:4 or 1:3 in different non-critical care settings and 1:1 or 1:2 in critical settings (Ministry of Health, 2007). To meet the aforementioned nurse-patient ratio, there should have been 1950 nurses, of which 54 nurses should be with master degree, 582 nurses with bachelor degree, and 1314 nurses with diploma in nursing (RCSC, 2018). Thus, there is a shortage of approximately 625 nurses (figure 2). In addition, 16.2% of the

current workforce consists of those on contract, which has only temporarily addressed the issue of workforce shortage. Moreover, of the small pool of clinical nurses (n=256) that are in workforce, half of them are on contract employment.

In addition, the upcoming specialty hospitals including Multidisciplinary Super Specialty Hospital (MDSSH), National Emergency Trauma Centre (NETC), The Gyalyum Kesang Choden Wangchuck National Eye Centre (GKCNEC), Gyaltsuen Jetsun Pema Mother and Child Hospital (GJPMCH), National Infectious Disease Hospital, Thimphu General Hospital, and ENT hospital will further strain the nursing and midwifery workforce. The upcoming facilities will require an additional nurses and nurses specialized in different areas of nursing as per the projection of MoH. The shortage of nursing and midwifery workforce is due to expansion and advancement of health care services. It is further accentuated by a lack of rational deployment of available nursing and midwifery resulting in a significant mal-distribution. Furthermore, the rising number of nurses and midwives resigning and going on long leave add to the shortage of nursing and midwifery workforce.

II. Services

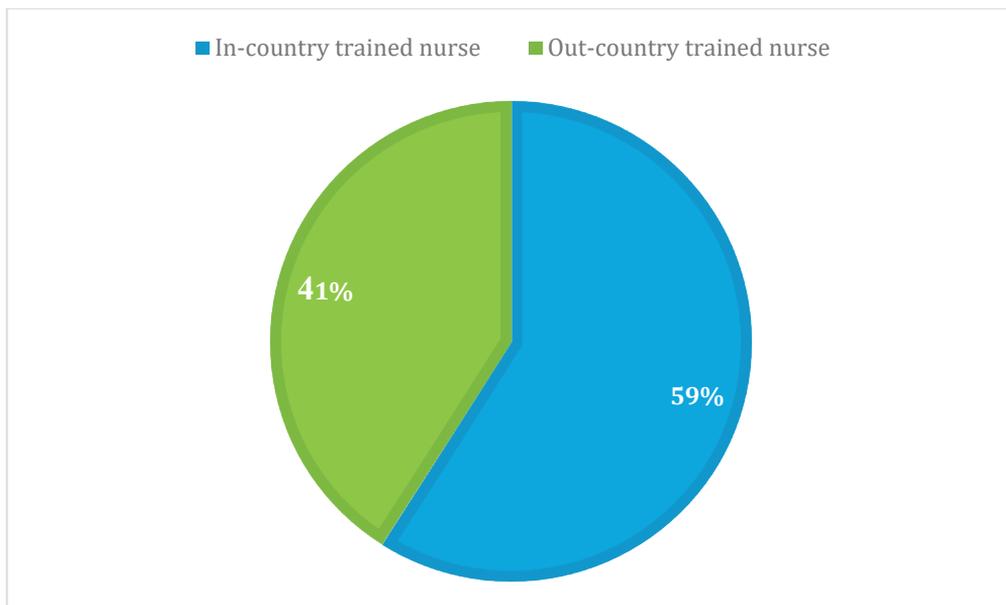
Nurses and midwives are trained to provide essential health care services at all levels of facilities. However, the current deployment of the workforce is confined to only hospitals; thus, limiting them from providing direct primary health care services to communities. In addition, there are ambiguity in role and scope of practice, deployment, and remuneration issues, which has resulted into performing the same tasks by all categories of nurses and midwives despite their levels of qualification, thus compromising the quality of nursing care (Ministry of Health, 2014). Moreover, there are nurses trained to provide specialized care and services, whose skills and knowledge are underutilized due to inappropriate distribution. Therefore, policies should be

in place to maximize the contribution of nurse midwives to improve the primary health care of people in rural and urban communities. Thus, there is a need for representation of nursing and midwifery workforce at the decision-making level which is expected to centralize the nursing and midwifery workforce management. This will ensure the appropriate resource mobilization, planned implementation, and effective monitoring of nursing and midwifery services uniformly across the country.

III. Education

The number and types of nurses and midwives trained each year should be adapted to the needs of the health system of the country. Currently, there are four nursing institutions in Bhutan (1 government and 3 private institutions) producing approximately about 150 nurses and midwives annually. However, current trends show that these institutions are not able to meet the demand created by the service expansion and growing demand for specialized care. The workforce consists of nurses trained from institutions both in the country and outside the country, with almost half of them (41%) trained in institutes outside Bhutan (figure 3). In addition, currently, two institutes offer bachelor's degree in nursing and midwifery. This calls for the need of the nursing institution in the country to start offering accredited degree level nursing and specialized nursing courses to meet the ever increasing and changing need of the dynamic healthcare system of the country.

Figure 3: Nurses trained inside and outside Bhutan



IV. Research

Promoting research culture among nursing and midwifery workforce is critical in aiding them to stay abreast with current best practices based on evidences that are changing at a rapid pace. A basic knowledge and skill on research should equip nurses and midwives to work in current world with changing evidence and technologies. The situation analysis showed 10.5% of the nurses in Bhutan with exposure to some form of research and only 2.2% of the nurses have published their research papers. In addition, the RCSC mandates nurses and midwives in professional group to have publications for enhancement of their career ladder. Thus, promoting and putting in place an institutional support for research activities is essential not only for enhancement of their service performance but also enhancing their career.

THEMES

Table1 Themes of strategic directions for nursing and midwifery

Themes	Description
Leadership	Refers to the role of nurse and midwife involved in planning, decision-making, and implementing the decisions made to achieve specific health goals. Such leaders are involved in assisting organization to establish vision, share that vision and provide information and knowledge for nursing and midwifery workforce to realize the vision. The leadership role also involves liaising with policy maker and other relevant stakeholders in making decisions related to nursing and midwifery workforce.
Regulation	Refers to the set of rules and regulations meant for recruiting, retaining, licensing, and performance monitoring of nursing and midwifery workforce, which are in place for protection of patients' rights, service providers' safety, and population health and wellbeing at large.
Research	Refers to the building research capacity for nursing and midwifery workforce, in order for them to stay abreast with current evidence-based practices.
Practice	Refers to the enhancing competent, skilled, and specialized nursing and midwifery practices; that is in line with national and international health goals and is responsive to health needs of the people of Bhutan
Education	Refers to a requirement of nursing education system, capable to produce nursing and midwifery workforce with right mix of knowledge and skill. The in-service nurses and midwives will be required to stay abreast with current best practices through continuous nursing and midwifery education and research.

VISION & MISSION

Vision: Excellence in nursing and midwifery services

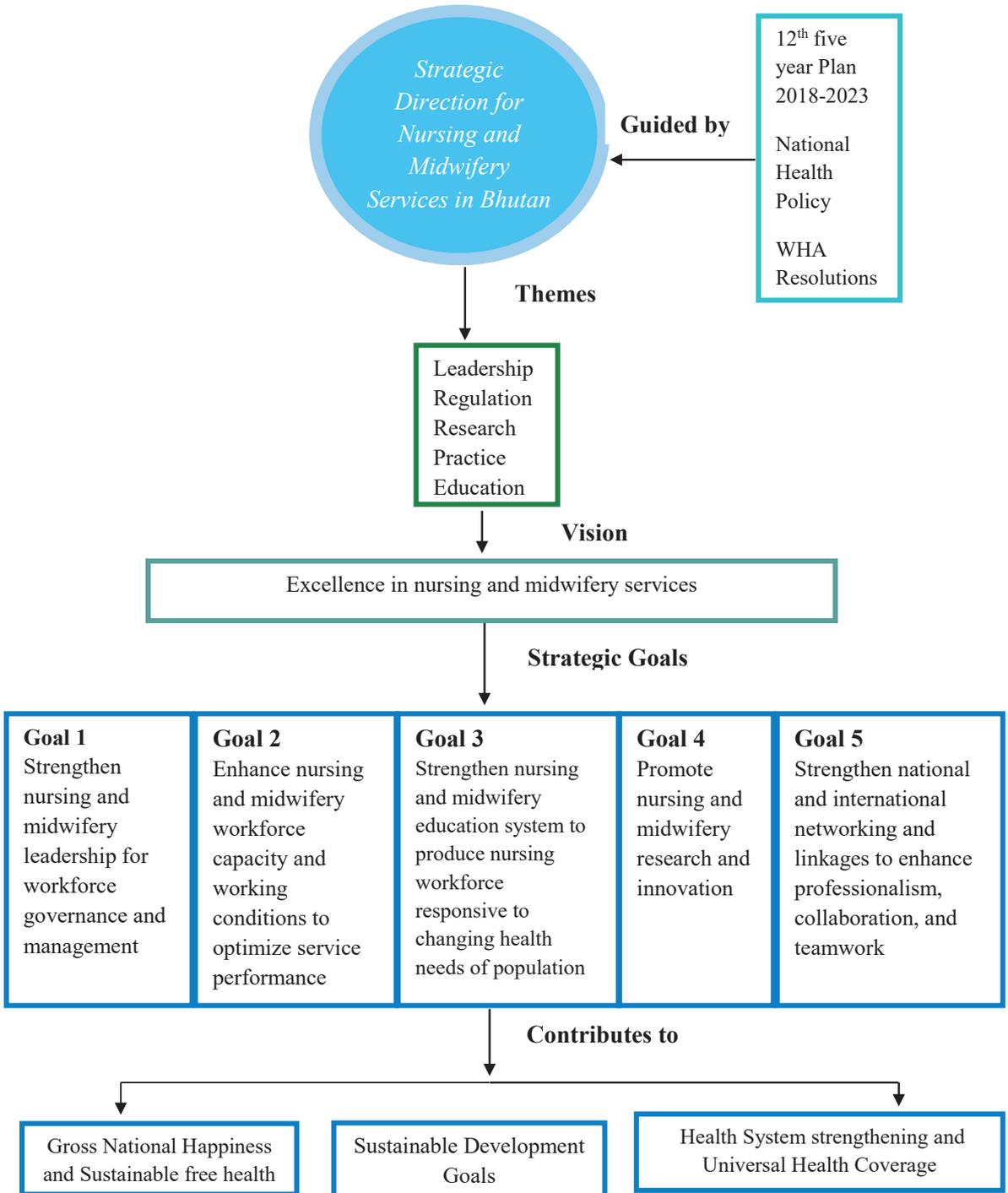
Mission:

1. Provide compassionate, safe, accessible, and equitable nursing and midwifery services to the people of Bhutan
2. Enhance quality of nursing education to produce competent nursing and midwifery workforce to respond to the changing health needs of the nation
3. Strengthen and consolidate nursing leadership in context to health system for policy making and monitoring
4. Strengthen research capacity to enhance nursing care outcomes based on best evidence-based practices
5. Strengthen network and linkages for professional autonomy, collaboration, and teamwork

GUIDING PRINCIPLES

This document is guided by country's development principles of Gross National Happiness; National Health Policy based on building a healthy and happy nation through a dynamic professional health system; and World Health Assembly resolution to strengthening nursing and midwifery workforce.

STRATEGIC FRAMEWORK



STRATEGIC GOALS

There are five strategic goals as:

1. Strengthen nursing and midwifery leadership for workforce governance and management
2. Enhance nursing and midwifery workforce capacity and working conditions to optimize service performance
3. Strengthen nursing and midwifery education system to produce nursing and midwifery workforce responsive to changing health needs of population
4. Promote nursing and midwifery research and innovation
5. Strengthen national and international networking and linkages to enhance professionalism, collaboration, and teamwork

Strategic goal 1: Strengthen nursing and midwifery leadership for workforce governance and management

Objective 1.1. Strengthen nursing and midwifery representation in Ministry of health for better management of the workforce

Line of actions

- 1.1.1. Establish a Nursing Division at the Ministry of Health to represent nursing and midwifery workforce.
- 1.1.2. Define roles and responsibilities of the division.
- 1.1.3. Recruit a qualified nursing professional to lead the division.

Objective 1.2. *Enhance leadership capacity of nursing and midwifery workforce*

Line of actions:

- 1.2.1. Promote sustainable leadership training/ mentorship program/ grooming system for nurses/midwives
- 1.2.2. Redefine nomenclature and establish clear roles and responsibilities for nurse in-charges for management of nursing and midwifery workforce at different levels of health facilities

Strategic goal 2: Enhance nursing and midwifery workforce capacity and working conditions to optimize service performance

Objectives 2.1. *Ensure adequate workforce resource planning and management*

Line of actions

- 2.1.1. Redefine nursing and midwifery workforce roles and functions for optimal utilization of capacity and training
- 2.1.2. Review nursing and midwifery workforce nomenclature and career path in line with education and scope of practices

Objective 2.2. *Ensure an appropriate number, distribution, and skill mix of nursing workforce at different levels of health care facilities*

Line of actions

- 2.2.1. Conduct need assessment for nursing and midwifery workforce distribution at different levels of health facilities in the context of new technology and service expansion.

2.2.2. Review nursing and midwifery workforce recruitment, deployment, and retention plan.

2.2.3. Conduct annual monitoring and review of nursing and midwifery workforce deployment and capacity

***Objective 2.3.** Strengthen nurses' roles and nurse led coordination within inter-professional teams to ensure patient ownership and partnership system in care delivery*

Line of actions

2.3.1. Expand community nursing and midwifery services.

2.3.2. Institutionalize team-based care approach.

***Objective 2.4.** Foster conducive working environment to ensure workplace safety*

Line of actions

2.4.1. Review and implement workplace safety guidelines and SOPs. policies and plans that improve working conditions for nurses

2.4.2. Develop a system of preceptorship and mentoring for novice nurses.

2.4.3. Sensitize workplace safety guidelines and SOPs

Strategic goal 3: Strengthen nursing and midwifery education system to produce a workforce that is responsive to evolving health needs of population.

***Objective: 3.1** Enhance nursing and midwifery education systems to produce a workforce responsive to evolving health needs focused on people, families and community at large.*

Line of actions

- 3.1.1. Upgrade existing nursing and midwifery education systems in line with the current and evolving needs
- 3.1.2. Enhance capacity of nursing and midwifery faculties based on evolving needs of population.
- 3.1.3. Increase intake of nursing and midwifery students in line with country's current and evolving needs.

Objective 3.2 Strengthen need based in-service nursing and midwifery education.

Line of actions

- 3.2.1. Review and upgrade need based in-service specialized training and upgradation programs
- 3.2.2. Conduct nursing and midwifery workforce competency through need based continued nursing education.
- 3.2.3. Participate in online teaching/meeting/seminars for evidence-based knowledge sharing

Strategic goal 4: Promote nursing and midwifery research and innovation

Objectives 4.1. Promote nursing and midwifery research capacity to ensure evidence-based nursing practices

Line of actions

- 4.1.1. Build capacity of nurses and midwives in research methodology and research applications.
- 4.1.2. Advocate, acquire, and allocate resources for capacity building and funding nursing and midwifery research activities
- 4.1.3. Promote collaborative research between nursing and midwifery academic institutes and service provider

- 4.1.4. Collaborate with national and international research centers
- 4.1.5. Institute nursing and midwifery journal in collaboration with nursing institutes.

Objective 4.2. Encourage and facilitate quality improvement projects to address nursing and midwifery issues

Line of actions

- 4.2.1. Identify current issues at practice and address the issues through quality improvement (QI) projects.
- 4.2.2. Build capacity for nursing and midwifery workforce to carry out QI projects.
- 4.2.3. Collaborate with relevant stakeholders for mobilization of resources.

Strategic Goal 5: Strengthen national and international networking and linkages to enhance professionalism, collaboration, and teamwork

Objectives 5.1. Establish platform for exchange of knowledge, expertise, and skills for nursing and midwifery professionals.

Line of actions

- 5.1.1. Engage in collaborative research within the country and in the region
- 5.1.2. Initiate exchange programs for good practices learning and sharing

Objective 5.2. Facilitate linkages for nursing and midwifery workforce to enhance their knowledge, skills, and research activities

Line of actions

- 5.2.1. Institute exchange programs for knowledge, skills, and research.

KEY INDICATORS, TIMELINE, AND RESPONSIBILITY

STRATEGIC GOAL 1: STRENGTHEN NURSING AND MIDWIFERY LEADERSHIP FOR WORKFORCE GOVERNANCE AND MANAGEMENT								
Objectives	Line of Actions	Key Indicators	Timeline					Responsibility
			2021	2022	2023	2024	2025	
1.1. Strengthen nursing and midwifery representation in Ministry of health for better management of the workforce	Establish a Nursing Division at the MoH to represent nursing workforce	A Nursing Division established in MoH	X	X				DMS/HRD/PPD
	Define roles and responsibilities of the division		X	X				DMS/Nursing Program (NP)
	Recruit a qualified nursing professional to lead the division		X	X				DMS/HRD
	Promote sustainable leadership training/mentorship program/grooming system for nurses/midwives		X	X				DMS
1.2. Enhance leadership capacity of nursing and midwifery workforce	Redefine nomenclature and establish clear roles and responsibilities for nurse in-charges for	Defined clear roles and responsibilities of chief nurses	X					DMS

	management of nursing workforce at different levels of health facilities								
STRATEGIC GOAL 2: ENHANCE NURSING AND MIDWIFERY WORKFORCE CAPACITY AND WORKING CONDITIONS TO OPTIMIZE SERVICE PERFORMANCE									
2.1. Ensure adequate workforce resource planning and management	Redefine nursing workforce roles and functions for optimal utilization of capacity and training	Competency based framework developed and implemented	X						DMS/BMHC
	Review nursing and midwifery workforce nomenclature and nursing career path in line with education and scope of practice	Nomenclature for nursing and midwifery professionals reviewed	X						DMS/BMHC
	Review and implement strategies for retention and skill protection of nurses and midwives	Strategies for retention and skill protection of Assistant and Senior staff nurse reviewed and implemented	X						NP/HRD/BMHC
2.2. Ensure an appropriate number, distribution, and skill mix of nursing	Conduct need assessment for nursing workforce distribution at different levels of health facilities including upcoming hospitals and expansion of services	Number of need assessments conducted	X	X	X	X	X	X	NP/HRD

workforce at different levels of health care facilities	Review nursing and midwifery workforce recruitment, deployment, and retention plan Conduct annual monitoring and review of nursing and midwifery workforce deployment and capacity	Recruitment and deployment plan reviewed	X	X	X	X	X	X	X	NP/HRD	
		Number of nurses deployed as per the need assessment	X	X	X	X	X	X	X	X	NP/HRD/BMHC
		Number of nurses trained as per the training need	X	X	X	X	X	X	X	X	NP/HRD/BMHC
		Nursing and midwifery HR requirement for upcoming hospital and expansion of services projected	X	X	X	X	X	X	X	X	NP/HRD
		Number of hospitals with nurse anesthetists	X	X	X	X	X	X	X	X	NP/HRD
		Number of hospitals with home-based palliative care nurses	X	X	X	X	X	X	X	X	NP/HRD

	Sensitize workplace safety guidelines and SOPs	Number of nurses/ inter-professionals practicing workplace safety guidelines and SOPs	X	X	X	X	X	X	NP
STRATEGIC GOAL 3: STRENGTHEN NURSING AND MIDWIFERY EDUCATION SYSTEM TO PRODUCE A WORKFORCE THAT IS RESPONSIVE TO CHANGING HEALTH NEEDS OF POPULATION									
3.1. Enhance nursing and midwifery education system to produce workforce responsive to changing health needs, focused on people, families, and community at large	Upgrade existing nursing and midwifery education system	Nursing and midwifery curriculum reviewed and upgraded		X	X	X	X	X	FNP/ KGUMSB
	Enhance capacity of nursing and midwifery faculties based on evolving needs of population	Number of faculties' capacity enhanced	X	X	X	X	X	X	FNP/ KGUMSB
3.2. Strengthen need based in-service nursing programs	Increase intake of nursing and midwifery students in line with country's current and evolving needs	Number of nursing and midwifery student intake increased to meet the shortage	X	X	X	X	X	X	MOH/FNPH/KGU MSB
	Review and upgrade need based in-service specialized training and upgradation programs	Number of specialized training programs developed	X	X	X	X	X	X	FNP/ KGUMSBM oH/BMHC

and midwifery education	Conduct nursing and midwifery workforce competency through need based continued nursing education	Number of nurses trained on competency-based nursing education	X	X	X	X	X	X	X	NP
	Participate in online teaching/meeting/seminars for evidence-based knowledge sharing	Number of nurses and midwives participating in online seminars, teachings, meetings, training, etc	X	X	X	X	X	X	X	NP
STRATEGIC GOAL 4: PROMOTE NURSING AND MIDWIFERY RESEARCH AND INNOVATION										
4.1. Promote nursing and midwifery research capacity to ensure evidence-based nursing and midwifery practices	Build capacity of nurses and midwives in research methodology and research application	Number of research methodology sessions conducted	X	X	X	X	X	X	X	NP
	Advocate, acquire, and allocate resources for capacity building and funding nursing and midwifery research activities	% of nurses who underwent research training	X	X	X	X	X	X	X	NP
	Promote collaborative research between nursing and midwifery academic institutes and service providers	Number of collaboration projects established	X	X	X	X	X	X	X	NP/ FNPH/KGUMSB
	Collaborate with national and international research centers	Number of collaborations	X	X	X	X	X	X	X	NP/FNPH

	Institute nursing and midwifery journal	Nursing and midwifery journal instituted	X						FNP
4.2. Encourage and facilitate quality initiative projects to address nursing issues	Identify current issues at practice and address the issues through Quality Improvement (QI) projects/interventions	Number of QI interventions initiated	X	X	X	X	X	X	NP
	Build capacity for nursing and midwifery workforce to carry out QI projects/interventions	Number of nurses trained on QI methods	X	X	X	X	X	X	NP
	Collaborate with relevant stake holders for mobilization of resources	Resources mobilized for strengthening nursing services	X	X	X	X	X	X	NP
STRATEGIC GOAL 5: STRENGTHEN NATIONAL AND INTERNATIONAL NETWORKING AND LINKAGES TO ENHANCE PROFESSIONALISM, COLLABORATION, AND TEAMWORK									
5.1. Establish platform for exchange of knowledge, expertise, and skills for nursing and midwifery professionals	Engage in collaborative research within the country and in the region	Number of national and international MOUs signed	X	X	X	X	X	X	NP
	Initiate exchange programs for good practice learning and sharing	Number of exchange programs initiated	X	X	X	X	X	X	NP
5.2. Facilitate linkages for nursing and	Institute exchange programs for knowledge, skills and research	Number of exchange programs instituted	X	X	X	X	X	X	NP

<p>midwifery workforce to enhance their knowledge, skills, and research activities</p>	<p>Number of nurses undergone exchange programs</p>		<p>X</p>	<p>X</p>	<p>X</p>	<p>X</p>	<p>NP/HRD</p>
--	---	--	----------	----------	----------	----------	---------------

REFERENCES

- Gross National Happiness Commission [GNHC] (2018). Twelfth five year plan 2018-2023: Volume II: Central plans. Retrieved from <https://www.gnhc.gov.bt/en/wp-content/uploads/2019/05/12FYP-Volume-II-Central-Plans.pdf>
- Ministry of Health [MOH] (2007). National Professional Nursing Services Standard 2007. Retrieved from http://www.moh.gov.bt/wpcontent/uploads/mohfiles/Nursing_ServStandard_2007.pdf
- Ministry of Health [MOH] (2014). Assessment on Health Workforce Education and Training in Bhutan, 2014.
- Ministry of Health [MOH] (2014). National Health Survey (NHS) 2012. Retrieved from <http://www.moh.gov.bt/wp-content/uploads/moh-files/nationalHealthSurvey2012.pdf>
- Ministry of health [MOH] (2020). Annual health bulletin 2020. Retrieved from http://www.moh.gov.bt/wp-content/uploads/ict-files/2017/06/health-bulletin-Website_Final.pdf
- Ministry of health [MOH] (2020). Annual Health Bulletin 2020. Retrieved from <http://www.moh.gov.bt/wp-content/uploads/ftps/annual-health-bulletins/Annual%20Health%20Bulletin-2017.pdf>
- Ministry of Health [MOH] (2011). National Health Policy of Bhutan. Retrieved from <https://www.gnhc.gov.bt/en/wp-content/uploads/2017/05/nationalHpolicy.pdf>

National Statistics Bureau (2018). Population and Housing and Census 2017 (National Report). Retrieved from <https://www.nsb.gov.bt/publications/census-report/>

Pan American Health Organization [PAHO], WHO (2019). Strategic directions for nursing in regions of Americas. Retrieved from https://iris.paho.org/bitstream/handle/10665.2/50956/9789275120729_eng.pdf?sequence=1&isAllowed=y

Planning commission of Royal Government of Bhutan (1967). 2nd five year plan. Retrieved from <https://www.gov.bt/en/wpcontent/uploads/2017/05/02fyp.pdf>

Pulcini, J., Jelic, M., Gul,R., & Loke, A.Y. (2010). An international survey on advanced practice nursing education, practice, and regulation. *Journal of nursing scholarship*, 2(1): 31-9.

Royal Civil Service Commission of Bhutan [RCSC] (2018). Human resource standard for health facilities under the ministry of health.

Wangmo, D., Windsor, C., & Clark, M. (2018). Positioning Nurses in Primary Health Care in Bhutan. *Bhutan Health Journal*, 4(1):33-41.

WHO (2015). Roles and responsibilities of government chief nursing and midwifery officers: a capacity-building manual. Retrieved from https://www.who.int/hrh/nursing_midwifery/cnow/en

WHO (2017). Report of the seventh global forum for government chief nurses and midwives: the future of nursing and midwifery workforce in the context of sustainable goals and universal health coverage. Retrieved from <https://apps.who.int/iris/handle/10665/255045>

WHO (2020). State of the world's nursing 2020: Investing in education, jobs, and leadership. Retrieved from <https://www.who.int/publications/i/item/9789240003279>

World Health Organization [WHO] (2016). Global strategic directions for strengthening nursing and midwifery 2016-2020. Retrieved from https://www.who.int/hrh/nursing_midwifery/global-strategic-midwifery2016-2020.pdf