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## International cooperation for nursing human resource development in Lao PDR: Investing in nursing leadership

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**Abstract:** Strengthening nursing leadership in health systems has been identified as a priority for achieving Universal Health Coverage (UHC). We aimed to analyse the characteristics of Japanese technical assistance projects for nursing human resource development in Lao People's Democratic Republic (Lao PDR) and suggest directions for future assistance. An upgrading program, as part of human resource development, was initiated in the 1990s; it has contributed to the development of nursing leaders. Moreover, technical assistance from development partners has had synergistic effects by consistently promoting the involvement of nursing leaders in administration, education, and clinical practice to establish a functional regulatory system. In resource-limited settings, the application of both edge-pulling (leadership development) and bottom-up (quality improvement of the mass population) strategies are required. From a long-term perspective, development partners should continue to invest in increasing the number and quality of nursing leaders by upgrading the courses and leadership training programs, starting from the younger generation.

*Keywords*: leadership, nursing, capacity building, strategic planning

### Introduction

Strengthening nursing leadership in health and academic systems is the priority for achieving Universal Health Coverage (UHC) and other health goals, as stated in the Global Strategic Directions for Nursing and Midwifery 2021–2025 (1). The first State of the World's Nursing Report revealed the need for investments in leadership development of both current and future leaders to ensure that nurses have an influential role in the health policy formulation and decision-making, together with a massive acceleration of nursing education and the creation of nursing jobs to address the projected shortage and inequitable distribution of nurses worldwide (2).

The Japanese Official Development Assistance program has been providing technical and financial support for the capacity development of nurses and midwives since the 1990s. Technical advisors on nursing were sent to Lao People's Democratic Republic (Lao PDR), Vietnam, Cambodia, and Myanmar, among other Southeast Asian countries. The cooperation initially focused on improving nursing management and in-service training in the hospital settings, and then expanded to strengthening the health system including the primary health care settings. Since the 2000s, the development of a regulatory framework for a registration and licensing system has been a common goal, as the Association of Southeast Asian Nations (ASEAN) member states have signed Mutual Recognition Arrangements. Moreover, enhancing the capacity of educators/trainers and leadership development has been the current focus to ensure the safety and quality of healthcare services (3).

We aimed to analyse the characteristics of Japanese technical assistance projects for nursing in Lao PDR and suggest directions for future assistance in nursing human resource development.

Table 1 shows the chronology of regulations and policies related to human resources for health, education programs for nurses, regulations for nursing education and services, and Japanese technical assistance in Lao PDR, explaining how these regulations and policies related have emerged.

### Ensuring the quality of healthcare professionals

The Government of Lao PDR has committed to establishing an effective system to ensure UHC by

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Tablé	Table 1. Evolution and chronology of human resources for health- and nursing-related issues, and technical assistance projects for nursing*	ces for health- and nursing-related issue	s, and technical assistance projects for nursing	4
Years	Regulations/policies related to Human Resources for Health	Education Program for Nurses	Regulations related to Nursing Education and Services	Technical assistance projects for nursing by Japanese Official Development Assistance
Before 2004		1950s- 2002 Auxiliary nurses as low- level 1960s- 2010 Diploma of nursing and technical nursing as middle - level 1990s -2014 Upgrading program to Bachelor of Science in Nursing in Thailand 2003- on-going Bridging program low- to middle- level		
2005 2006	Law on Health Care (No. 09/NA) ASEAN Mutual Recognition Arrangement on Nursing Services			Project for Human Resources Development of Nursing and Midwifery; - Strengthened nursing and midwifery administration
2007 2008			Nursing and Midwifery Regulations (No. 0656/MoH) including establish fundamental regulation Scope of Nursing Practice (No.40/MoH) - Strengthened the nursing education sy Nursing/Midwifery School Management and develop school implementation guideline Implementation Guidelines (No.0039/MoH)	including establish fundamental regulations - Strengthened the nursing education system including develop school implementation guideline
2009 2010 2011	tel Development Strategy by 2020	Higher Diploma of Nursing as high- level Upgrading program to high- level Bachelor of Science in Nursing		
2012	(No. 831/MoH)			Project for Sustainable Development of Human Resource for Health to Improve Maternal, Neonatal and Child
2013		Higher Diploma of Nursing (Revised) to be competency-based	National Competencies for Licensed Nurses in Lao PDR (No.1132/MoH)	Health Services; - Institutionalization of the nursing education system
2014	Law on Health Care (Amended) (No. 58/NA) Health Sector Reform Framework Laos 2013-2025 (No. 029/GOV)			<ul> <li>- Capacity building of nursing education institutions</li> <li>- Strengthening the coordination mechanism for improving the nursing education system</li> </ul>
2015	Strategy on Healthcare Professional Licensing and Registration System in Lao PDR 2016-2025 (No. 2098/MoH)		Scope of the Nursing Practice (Revised) (No.0726/ MoH)	
2016	The 8th Health Sector Development Plan (2016– 2020)		Instruction for Management and Implementation of Non-University Higher Education Institution for Health (No. 0176/M0H)	
2017	Ministerial Decision on Licensing and Registration Upgrading program to l of Healthcare Professionals in Lao PDR (No. 1307/ Nursing (in-country) MoH) Ministerial Decision on Health Care Professional	Upgrading program to Bachelor of Science in Nursing (in-country)		
2018	Council (No.0131/MoH)		Ministerial Decision on Approval and Implementation of Quality Assurance of Higher Diploma Education (No. 1118,MorH)	Ministerial Decision on Approval and Implementation Project for Sustainable Development and Quality of Quality Assurance of Higher Diploma Education Assurance of Health care Professionals; (No. 1118/MOH) Establishment leoislation for resistration and licensing
				system

Table	1. Evolution and chronology of human resources 1	or health- and nursing-related is	Table 1. Evolution and chronology of human resources for health- and nursing-related issues, and technical assistance projects for nursing* (continued)	(continued)
Years	Regulations/policies related to Human Resources for Health	Education Program for Nurses	Regulations related to Nursing Education and Services	Technical assistance projects for nursing by Japanese Official Development Assistance
2019	Instruction on the implementation of the registration and licensing healthcare professionals in transition period by 2020 without taking the national		Decision on Endorsement of Professional Code of - Ethics for Nurses and Midwives (No.0147/HPC) a	Decision on Endorsement of Professional Code of - Implementation of the National Examination Nurses Ethics for Nurses and Midwives (No.0147/HPC) and Midwives - Implementation of Professional Internship Program for
2020	cxamination (No.0182/HPC) The 9th Five Year Health Sector Development Plan (2021-2025)		2	Nurses
	Instruction on Implementation of Registration and Licensing of Healthcare Professionals (No. 0108/ HPC)			
2021	Decision on the admission of students in the field of public health both domestically and abroad (No. 2541/MoH)		Decision on Approval of the National Examination for Nurses and Midwives in 2020 (No. 007/HPC) Decision on National Competency for Licensed Nurses in 1 ao DDR (Revised) (No. 0104/HPC)	
2022	Health Sector Reform Strategy 2021-2030 (No.2645/ MoH)		Decision on Approval of the Implementation of Professional Internship Program for Nurses 2021 (No.016/HPC)	
*Data	*Data Source: Official documents released by the Ministry of Health in Lao PDR and JICA project reports, unavailable online.	h in Lao PDR and JICA project reports	, unavailable online.	

2025 since the adoption of the Health Sector Reform Framework in 2014, and its revision in 2022, which were the official documents unavailable online. In this framework, human resources for health are one of the five pillars in the Strategy to achieve UHC: health service delivery, governance, management, coordination, health financing, health information, planning, monitoring, and evaluation. Aligned with the Health Sector Reform Framework, the Lao PDR Ministry of Health (MoH) has been developing and implementing an action plan called the Health Sector Development Plan every 5 years (2016; 2020), which were the official documents unavailable online. In this plan, health personnel management, health personnel development, and health science research are part of the national programs (2020).

In 2015, the MoH implemented the Strategy on Healthcare Professional Licensing and Registration System in Lao PDR 2016-2025 to ensure the safety and quality of healthcare providers. Until then, graduation was the only requirement to be deployed by the MoH as healthcare personnel, due to the absence of a licensing system (4). Subsequently, the MoH reappointed the Healthcare Professional Council, which played a key role in endorsing the regulations necessary to develop the new system in 2017. These include the registration and licencing of current healthcare professionals who meet the qualifications, the conduct of licencing examinations for new graduates, and the implementation of standards for foreign healthcare practitioners following the requirements of the ASEAN Mutual Recognition Arrangements which was signed in 2006. Furthermore, the MoH is currently revising the Law on Health Care (2005; 2014) in accordance with the licencing system and developing a new Health Personnel Development Strategy (2011).

### Nursing human resource development

Lao PDR is a lower-middle-income country located in the Indochina Peninsula, with a population of 7.4 million in 2021. Rural residents accounted for 63% of the population in 2021 (5). A total of 7,930 (40% of the total health workers) nursing workers were in the public sector in 2020, which eventually increased to 7,115 (36%) in 2014, according to the Annual Report on Health Personnel Distribution 2019-2020 and 2014 which were official documents released by MoH, not available online. During this period, the ratio per 1,000 population remained 1:1. Approximately 64% of the nursing workforce were assigned in the district and health centre levels, providing primary healthcare services. Currently, two professional educational programs for nurses are available: a 4-year bachelor's course and a 3-year higher diploma course. Since 2011, the bachelor's course has been offered only in the Faculty of Nursing Sciences, University of Health

Sciences, in the capital of Vientiane. Higher diploma courses that were introduced in 2009 are currently offered in eight provincial-level educational institutions. Both courses require 12 years of general education for admission (6).

The Ministry of Home Affairs divided the public sector health workforce into three levels according to the status of civil servants: high, middle, and low. Nurses who completed the above programs were categorised as high-level nurses, accounting for 22% of the nursing workforce. The other 55% and 23% of the nurses were in the middle- and low-level nursing workforce, as they had completed the previous educational programs within less than 3 years, referred to the Annual Report on Health Personnel Distribution 2019-2020 which was official documents released by MoH, not available online. Therefore, educational institutions have been continuously offering courses to nurses who want to achieve a higher diploma and bachelor's degree since 2010 and 2017, respectively (6). From 1990, four batches of Laotian nurses were able to complete a bachelor's degree in Thailand (personal communication with Nursing and Midwifery board members, 2023). A joint program with Konkaen University, Thailand, started in-county continuous courses in 2002 at the Faculty of Nursing Sciences, University of Health Sciences, to support nurses achieve a bachelor's degree (7). Most graduates who completed this program took master's and PhD programs overseas under the official recognition of the MoH.

As of 2020 in Health Personnel Information Management System, 28 nurses completed a master's degree or higher in nursing. As they are considered highly educated, they became the leaders of the workforce in terms of the administrative, educational, and clinical aspects. However, the younger generation was underrepresented; none of the 28 nurses included those aged < 30 years, 25% were between 31 to 45 years old, and half were 50 years and older. Due to the limited health budget, young nurses must spend several years working as volunteers or contract staff status to be recruited as civil servants. Civil servants' status is a requirement criterion for upgrading opportunities. Therefore, the chances for upgrading for younger generations were minimal (8).

### Technical assistance projects for nurses to strengthen the human resource development by the Japanese Official Development Assistance

In Lao PDR, technical assistance projects for nurses, implemented by the Japan International Cooperation Agency under the Japanese Official Development Assistance (hereafter, the project), were initiated in 2005 to strengthen the human resource development system in terms of the administrative, educational, and clinical aspects. The first project supported the development of nursing and midwifery regulations as a foundation for providing professional services by stipulating the scope of nursing practice (2007), establishing management and implementation guidelines of quality assurance for nursing educational institutions (2008), and developing a guidebook on fundamental nursing practice to improve the quality of nursing education.

The second project involved the development of a national competency framework for licenced nurses (2013), the revision of the associate diploma curriculum into a competency-based curriculum (2013), and the provision of various training programs for nurse educators and clinical instructors to bridge the gap between actual nursing services and stipulated regulations (2015; 2016). Meanwhile, the project supported the development of the abovementioned national strategy for the registration and licencing of healthcare professionals in 2015 (3).

Following the above strategy, the third project aims to establish a licencing system in Lao PDR. Fulfilling the criteria of the ASEAN Mutual Recognition Arrangements, the Nursing and Midwifery board (hereafter, the board) of the Healthcare Professional Council has developed various official documents (e.g., decisions and instructions) to establish registration and licensing system, including National Licensure Examination and Professional Internship Program from 2017. Three rounds of National Licensure Examination as a competency assessment since 2020 has been conducted. The examination committee, consisting of board members, faculty members, and clinical leaders, developed an examination blueprint in line with the curriculum and course syllabus; created a question bank; and examined the quality of questions using indicators such as the rate of correct answers and quality index. According to the cycle management system, the quality of examination questions improved gradually (9). In addition to the written licensure examination, the MoH implemented a mandatory clinical internship training program to ensure clinical nursing competency since 2022. To this end, the board revised the competency framework following the ASEAN core competencies (2021) and developed an 8-month training curriculum. Central and selected provincial hospitals have offered this training program to those who passed the above examinations. The project supported providing trainings for clinical instructors in conducting clinical teaching for new graduates and strengthening the training management system by enabling central hospitals to provide supportive supervision to provincial hospitals. In December 2022, the first cohort of 37 new graduates who completed the program received their professional licences, marking the achievement of a milestone in the new registration and licencing system of Lao PDR. Moreover, other healthcare boards under the Healthcare Professional Council followed suit with the lessons

learned to establish this new system, modelling the efforts of the board and the project.

# Nursing leaders' involvement in the improvement of healthcare services

Nursing leaders in administration, education, and clinical practice have contributed to the strengthening of healthcare services in Lao PDR. Currently, they play vital and responsible roles in decision-making under the MoH, such as deputy directors of hospitals and deans and vice deans of educational institutions. They are also actively cooperating with various development partners, including multilateral and bilateral organisations and non-governmental organisations, to respond to the healthcare needs of the diverse population in Lao PDR. They also follow the requirements of the ASEAN Joint Coordination Committee and directions from the global nursing community. With the support of the Thailand International Cooperation Agency, nursing leaders are currently developing a clinical nursing leadership competency framework. In the future, they aim to establish the National Nursing Association as one of the three pillars, along with the Government Chief Nursing Officer and the board. One of the core nursing leaders stated, "We are looking at the same direction to improve the quality of nursing care in Lao PDR". This is one of the strengths of the human resource development system in the Lao PDR, which leverages and enhances the nursing leaders' solidarity.

# Further improvement and necessary investment for nursing human resource development

The long-term perspective and commitment of the MoH has played a substantial role in the development and implementation of healthcare policies (10). Needless to say, the MoH's strategy of offering bridging courses to prepare for higher degrees in nursing since the 1990s has contributed to the development of nursing leaders. Technical assistance from development partners has had synergistic effects by consistently promoting the involvement of nursing leaders in the administration, education, and clinical practice in establishing a functional regulatory system for nursing professionals and providing services in resource-limited settings for 20 years. Nursing leaders are essential in driving implementation and linking all necessary regulatory functions (11, 12). The development of human resources in low- and middle-income countries requires the application of edge-pulling (leadership development) and bottom-up (quality improvement of the mass population) strategies based on long- and middle-term perspectives (13). Furthermore, nursing leaders are expected to contribute to evidence-based policy-making in workforce governance and management (1).

Therefore, in line with the government policies as

the Ministry of Health mitigated criteria for upgrading courses (2021), development partners should continue to invest in increasing the number and quality of nursing leaders through upgrading courses (14) and leadership training programs (15) starting from the younger generation (1), in collaboration with academic institutions and professional organisations. While the Lao Women's Union has played a central role in developing and promoting the status of women for over 40 years, and the Lao PDR government has made progress in adapting Law on Gender Equity (No.77/ NA, 2019) to enhance gender equality in political participation, economic opportunities, education, labour and social protection (16), many female leaders are reluctant to take up chances because of their life courses. Thus, it is important for further gender considerations should be taken into account, in line with the Lao PDR government's efforts as a principle for the implementation of Official Development Assistance (17). Such investments would contribute to the achievement of UHC and education, gender equality, decent work, and inclusive economic growth among the targets for Sustainable Development Goals (2).

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### References

- World Health Organization. Global Strategic Directions for Nursing and Midwifery 2021–2025. https://www.who. int/publications/i/item/9789240033863 (accessed April 6, 2023).
- World Health Organization. State of the world's nursing 2020: investing in education, jobs and leadership. https://www.who.int/publications/i/item/9789240003279 (accessed April 6, 2023)
- Hashimoto C. Future recommendation from 25-year nursing projects implemented by NCGM. In: Nursing human resources development in Cambodia, Laos PDR, Vietnam, and Myanmar and Mutual Recognition Arrangement (MRA) in ASEAN. Bureau of International Health Cooperation, National Center for Global Health and Medicine, Tokyo, Japan, 2018;38- 48. https:// kyokuhp.ncgm.go.jp/library/tech\_doc/2018/Technical\_ Report\_11\_light.pdf (accessed December 1, 2022). (in Japanese)
- Ministry of Health. Strategy on Healthcare Professional Licensing and Registration System in Lao PDR 2016– 2025 (Official translation in English). Vientiane: Lao PDR; 2016. https://hpc.gov.la/la/legislations (accessed August 1, 2022)
- The World Bank. Data for Lao PDR. https://data. worldbank.org/?locations=LA-XN (accessed March 19, 2023)
- Phanpaseuth, S. Nursing Education in Lao PDR. In: Enhancing Nursing Service and Nursing Education in ASEAN (Aungsuroch Y, eds). Faculty of Nursing,

Chulalongkorn University, Bangkok, Thailand, 2016; 118-130. https://sigma.nursingrepository.org/ handle/10755/622928 (accessed March 19, 2023)

- Matsuo J, Mouioudomde P, Akazawa, C. The change of nursing education in Lao People's Democratic Republic. Journal of Nursing Research. 2017; 7:114-123. (in Japanese)
- Qian Y, Yan F, Wang W, Clancy S, Akkhavong K, Vonglokham M, Outhensackda S, Østbye T. Challenges for strengthening the health workforce in the Lao People's democratic Republic: Perspectives from key stakeholders. Hum Resour Health. 2016; 14:72.
- Tamura T, Miyazaki K. Establishment of the Quality Assurance Mechanism for Nurses in Low- and Middle-Income Countries -Creation and Implementation of the National Licensure Examination in Lao PDR-. Bureau of International Health Cooperation, National Center for Global Health and Medicine, Tokyo, Japan, 2022. https://kyokuhp.ncgm.go.jp/library/tech\_doc/PDF\_JPG/ technical\_ReportVol14.pdf (accessed March 1, 2022) (in Japanese)
- Sonoda M, Syhavong B, Vongsamphanh C, Phoutsavath P, Inthapanith P, Rotem A, Fujita N. The evolution of the national licensing system of health care professionals: A qualitative descriptive case study in Lao People's Democratic Republic. Hum Resour Health. 2017; 15:51.
- Michaels-Strasser S, Smith J, Khanyola J, Sutton R, Price T, El Sadr WM. Strengthening the quality and quantity of the nursing and midwifery workforce: Report on eight years of the NEPI project. Ann Glob Health. 2018; 84:31-35.
- 12. Matsuoka S, Fujita N, Koto-Shimada K, Zwi AB. Regulation of nursing professionals in Cambodia:

Strategies to overcome underpinning challenges. Int Nurs Rev. 2021; 68:399-411.

- Koto-Shimada K, Yanagisawa S, Boonyanurak P, Fujita N. Building the capacity of nursing professionals in Cambodia: Insights from a bridging programme for faculty development. Int J Nurs Pract. 2016; Suppl 1:22-30.
- Fujita N, Matsuoka S, Koto-Shimada K, Ikarashi M, Hazarika I, Zwi AB. Regulation of nursing professionals in Cambodia and Vietnam: A review of the evolution and key influences. Hum Resour Health. 2019; 17:48.
- 15. Salvage J, White J. Nursing leadership and health policy: Everybody's business. Int Nurs Rev. 2019; 66:147-150.
- UNDP Lao PDR. Gender Equality Strategy 2022-2026. https://www.undp.org/sites/g/files/zskgke326/files/2022-11/ undp\_lao\_pdr\_gender\_strategy\_and\_action\_plan\_2022-2026-signed.pdf (accessed July 16, 2023)
- Ministry of Foreign Affairs of Japan, Country Assistance Policy. 2019. https://www.mofa.go.jp/mofaj/gaiko/oda/ files/000072258.pdf (accessed July 16, 2023) (in Japanese)

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