Systems and mechanisms to develop health volunteers to improve the health of the immigrant workforce in four Thailand provinces

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Abstract

Purpose – The purpose of this study was to investigate the provincial-level systems and mechanisms to develop health volunteers to improve the health of the immigrant workforce in Thailand.

Design/methodology/approach – This qualitative study obtained data from document research, in-depth interviews with 58 people involved at policy and provincial levels working to develop health volunteers to improve the health of the immigrant workforce. Data were collected from May–October 2017; then the content of the conceptual framework was analyzed, the research objectives were examined and summary and induction analysis interpreted data from documents, observations and interviews.

Findings – Thailand has four systems for developing health volunteers to improve the health of the immigrant workforce: recruitment, training and knowledge management, welfare and motivational and financial and other supportive resources. Development is driven through the mechanisms of the Provincial Public Health Office with Non Governmental Organizations (NGOs) and network partners. The health volunteer development exhibits two patterns: developing migrant workers to become migrant health volunteers and developing village health volunteers to perform health care for the immigrant workforce. All development patterns mainly rely upon the regular operating budget, which is often inadequate. Frequently, some provinces make attempts to seek other funding sources. In fact, health volunteer development is subjected to local authorities of the four provinces whose systems and mechanisms of development differ from one another.

Originality/value – The findings from this study could help develop health volunteers to significantly improve the health of the immigrant workforce in the Thai health service system.

Keywords Immigrant, Workforce, Health volunteers, Thailand

Paper type Research paper

Introduction

The development of migrant health volunteers (MHVs) for the health of the immigrant workforce in Thailand has been carried out for years. Migrants adopting primary health care

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(PHC) principles take the key role in preventing disease and promoting health [1, 2]. This is one method for extending health care to migrant workforces, families and followers, so migrants can apply self-health care efficiently [2]. The development of MHVs has the same objective as the development of village health volunteers (VHVs) which was developed previously to support the PHC of Thai people. Therefore, the development of MHVs has similar systems and mechanisms to the development of VHVs described below in Methods – Study frameworks. Volunteers' roles are significant to health services for migrant workers as they experience communication barriers that hinder health works. Studies reiterate similar findings that communication and access to health services are key problems among migrant workers [3, 4]. Parties involved stress the importance of including migrant volunteers in the health service system for migrant workers resulting in improved health services, quantitatively and qualitatively, for migrants and those with legal status problems [5].

The direct costs of MHV development of is for health care training, including food, training tools and equipment (handbooks, paper, pens) and traveling costs. There is no tutor cost because tutors are health care workers in the area already employed by the Ministry of Public Health and there is no salary for MHVs [6]. According to MHV training curriculum, the training takes 40 h comprising 20 h of practicing and 20 h of on-site lecture [1]. To estimate the cost of care per migrant, the cost of developing 1 MHV is THB 800–1,000 (~US$26.67–33.33) and 1 MHV is assigned to take care of at least 15 households with at least one person in each household. Therefore, the maximum cost of MHV per migrant (THB 1,000/15 persons) is only THB 66.67 (~US$2.22). In comparing the cost of medical expenses for the immigrant workforce, it was found that the government has policy through two health insurance systems (Social Health Security and Annual Health Insurance). However, many migrants cannot enroll in the systems due to status issues (illegal entry to the country) [2, 7]. Hence, there are significant numbers of migrants who are unable to access healthcare or who may visit hospitals only when they are in serious conditions, which would result in high treatment costs. The cost study of medical expenses for the immigrant workforce among migrant workers in one district revealed a cost of approximately THB 579.61–724.01 (~US$19.32–24.13) person/year [8]. From the data stated previously, it can be concluded that the cost of MHV per migrant is as much as 8.7–10.9-fold cheaper than the medical expenses of one migrant. Developing MHVs leads to health care cost-saving and increases access to PHC among migrants [9].

In Thailand, The Provincial Public Health Offices are the major engine of health care for the migrant population. Non Governmental Organizations (NGOs) with health projects targeted at migrants also play an integral part in the work [6]. Thus, the development of MHVs and VHVs require several supports from local administrative organizations. These include human resources, financial resources, equipment and supplies such as face masks, alcohol gel, latex gloves and coordination about migrant data information. Since Thailand has a decentralization policy, the Ministry of Public Health has allocated its budget to strengthen PHC on the foundation of Tambon (subdistrict) Health Funds under the support of the National Health Security Office (NHSO) [10, 11]. The development of MHVs has been a success story when dealing with health issues of migrant workers in some provinces. However, continuity and sustainability of the development remain questionable, because such development is optional for provinces [12]. MHV development in Thailand is not a collective effort, but rather an off-handed action. In Thailand, generally, each province has its own development of MHVs, possibly under NGO programs, with the provincial public health office and collaboration between parties. Thus, volunteer development varies by province and seems unsystematic in the aspect of quality and standards, unlike the development of VHVs, which is well established and highly standardized. The Department of Health Service Support, Ministry of Public Health revealed that MHV development for migrant workforce is performed in 31 provinces sharing borders with neighboring countries and in fewer than 10 nonbordering provinces. Additional information from the Foreign Workers Administration

Office confirms that all provinces have registered migrant workers [13]. From these findings, MHVs are in high demand in terms of both quantity and quality. Actually, more complex and dynamic migrant health problems are parallel with rising numbers in this workforce. Legal status also matters to resolve problems. Many migrants are unregistered; thus, no health insurance and check-ups can lead to the spread of disease. Therefore, an important strategy for coping with health service inaccessibility among migrants is to develop MHVs for migrant workers' health.

When categorizing areas by concentration of migrants, four categories materialize. The first is the area bordering Lao PDR including Nong Khai, Nakhon Phanom, Ubon Ratchathani and others. The second category covers bordering areas with Myanmar including Chiang Rai, Tak, Ranong and others. The third area bordering Cambodia includes Sa kaeo, Chanthaburi, Trat and others. The fourth area can be called Thailand's economic hub including Samut Sakhon, Samut Prakarn and Bangkok. These share no border with any country, but need large numbers of migrants to serve industrial, construction, fishery and service sectors. Because of this requirement, migrants from Myanmar, Lao PDR and Cambodia are found in large numbers.

The contexts above create various volunteer development systems and mechanisms to meet provincial contexts on a continued basis. The four areas' knowledge about the development brings benefits to health settings, and NGOs and stakeholders develop MHVs to suit certain contexts in the years to come.

Method

Study framework

Development of MHVs involves supporting migrants to participate in self-health care according to PHC principles. The development of MHVs applies the same principle as the development of VHVs launched earlier. PHC means additional health services extended from the state health service system mainly established to serve people in rural areas, and requires deep collaboration between community leaders and residents. Governmental health officers have been assigned to support communities for problem analysis, planning and counseling to promote necessary activities. PHC workers adapt themselves to integrate with other community development projects, and closely connect with governmental health service systems [2, 14, 15]. The study framework was developed by following the PHC concept aligned with the concept of health volunteer development for the health of the immigrant workforce as well as the Department of Health Service Support, Ministry of Public Health, to implement MHV development [2]. Hence, the systems requiring development include (1) recruitment systems; (2) training and knowledge management systems regarding basic health care; (3) welfare and motivational systems and (4) financial and other supportive resources systems, while the important mechanisms for supporting the development are also important; for example, available public management mechanisms at the provincial level (training courses, budget allocation and networking), which are conducted among public sectors, nongovernmental sectors and local administrative organizations [6, 16–18], Figure 1.

Study design

This documentary research and qualitative study endeavored to answer the study's objectives. Multiple methods could cover the content for the studied group and present provincial systems and mechanisms for developing health volunteers to improve the health of the immigrant workforce in Thailand.

Contexts of study sites

The criteria selected four provinces as case studies. The studied provinces had to meet two criteria. First, each province had to have systems and mechanisms of health volunteer

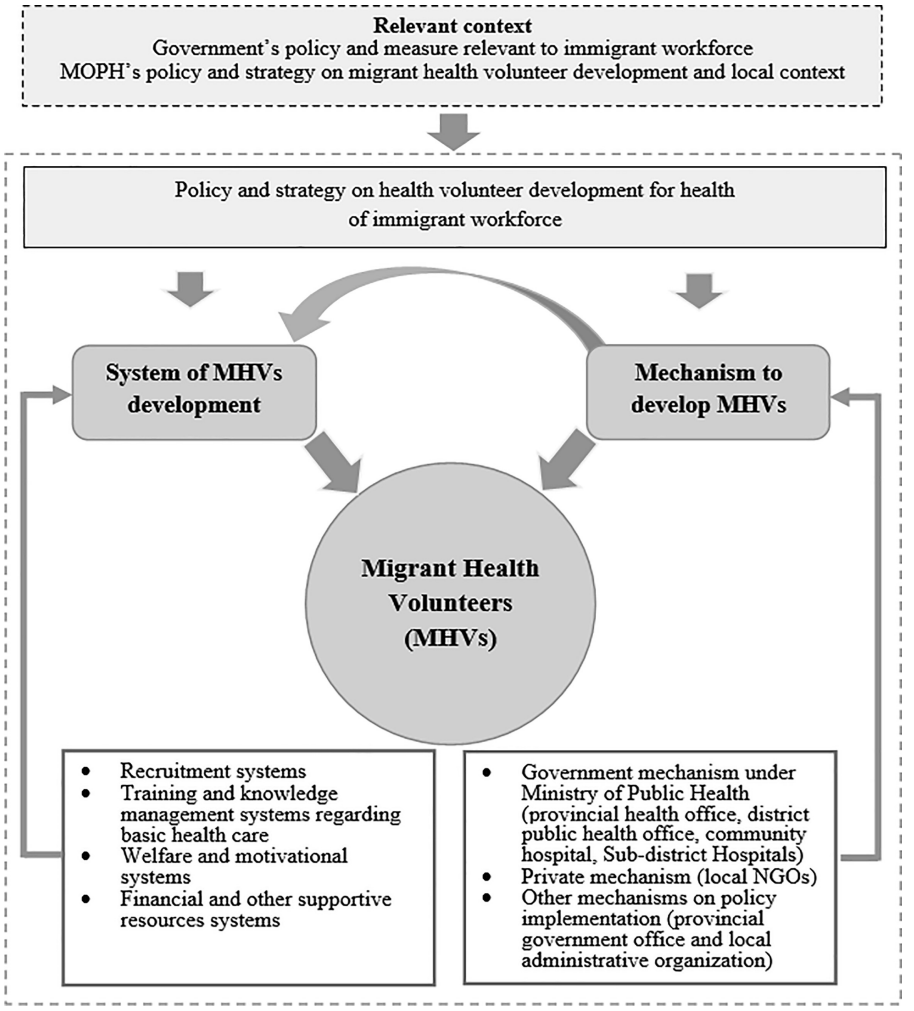

Figure 1.
Study framework

development for the health of migrant workers. These systems and mechanisms are grounded in the province's context. Health volunteers may be named differently by province. Second, the studied provinces had to have developed health volunteers' capacities for the health of migrant workers by using health activities that had been organized collaboratively and continuously by government health organizations and NGOs. Each province illustrated its own distinctive health volunteer development.

(1) The area sharing the border with Lao PDR is represented by Ubon Ratchathani.

(2) The area sharing the border with Myanmar is represented by Tak.

(3) The area sharing the border with Cambodia is represented by Sa kaeo.

(4) The major economic zone is represented by Samut Sakhon.

Informants

This study used purposive sampling to select 58 participants from four provinces including people working in health volunteer development for migrant workers. Selected participants worked at the provincial level (see Table 1). The criteria for selecting participants are presented below.

(1) Staff members from the provincial public health office with at least three years' experience in health volunteer activities.

(2) Staff members from hospitals or subdistrict health promoting hospitals with at least three years' experience working with migrant workers.

(3) Staff members from local NGOs with at least three years' experience.

(4) Health volunteers with at least one year of experience working to improve the health for migrant workers.

Data collection

Data collection methods brought forth the inclusion of data to answer every research question. The methods are described below.

(1) Literature review and analysis of the case studies' contexts, backgrounds of systems and mechanisms, policy implementation and detailed processes facilitated an understanding before undertaking fieldwork. The method laid out the observation and question design for the interviews.

(2) In-depth interviews were conducted with parties involved at the policy and provincial levels, working on developing health volunteers to improve the health of the immigrant workforce including data and audio recording. Data were validated by employing a cross-verification technique (triangulation) from various sources including interviews, observations, on-site data recordings and double-checking against all relevant documents [19]. The data were collected until saturation was reached.

Data analysis

The researchers searched for statements that implied or indicated the studied phenomena; interpreted or gave a meaning to the statements and classified the statements with similar meanings into the same category of topics. Then the researchers wrote down the detailed description of the phenomena in each topic. By doing so, any irrelevant data were excluded. The details of all phenomena were consolidated for further analysis and synthesis to obtain a thorough understanding in accordance with reality.

Ethics consideration

This study was approved by the Committee for Research Ethics (Social Sciences), Faculty of Social Sciences and Humanities, Mahidol University (No. 2017/106.0205) May 2, 2017.

Results

Situation to develop health volunteers to improve the health of the immigrant workforce in Thailand

The four case studies shown in Figure 2 have some similarities. The very first initiatives in developing health volunteers for migrant workers' health resided in NGO projects on health among migrant workers. The year these initiatives commenced varied by the situation of each province. Inside the projects, NGOs built volunteers with the aim of easing

Participants	Staff members from provincial health offices SSJ01–04	Staff members from community hospitals and sub-district hospitals HOS01–06	Staff members from NGOs NGOS01–02	MHVs MHV01–06
Ubon Ratchathani province (14 persons)				
Age (Yrs).	46,48,56	33,34,48,51	53	32,33,35,45,54,55
Work experience (Yrs)	26,28,30	13,14,27,30	15	5,9,11,11,12,14
Education background	2 Master's degree 1 Ph.D	3 Bachelor's degree 1 Master's degree	Bachelor's degree	1 Grade 9 5 Grade 12
Tak province (15 persons)				
Age (Yrs.)	42,49,52	43,44,50,51,53	28,43	47,48,50,51,61
Work experience (Yrs.)	22,30,31	22,23,29,30,31	4,5	8,8,9,10,12,12
Education background	1 Bachelor's degree, 2 Master's degree	2 diploma 2 Bachelor's degree and 1 Master's degree	2 Bachelor's degree	4 Elementary, 1 Bachelor's degree
Sa Kaeo province (16 persons)				
Age (Yrs)	45,51,51,54	30,33,38,41,41,45	50	38,43,45,58,63
Work experience (Yrs)	20,30,30,34	8,11,16,19,21,24	4	2,2,9,20,20
Education background	1 Bachelor's degree, 3 Master's degree	1 Bachelor's degree 5 Master's degree	Diploma	4 Elementary, 1 Grade 12
Samut Sakhon province (13 persons)				
Age (Yrs)	45,52,58	28,30,40,45,57	38	23,28,41,57
Work experience (Yrs)	24,32,34	3,5,12,25,35	15	2,3,4,8
Education background	3 Master's degree	5 Bachelor's degree	Bachelor's degree	1 Elementary, 1 Grade 12 and 2 diploma

Table 1.
Participants in this study

communication obstacles and reaching migrant workers. Some projects on TB, AIDS and maternal and child health needed migrant volunteers as interpreters or migrant health staff (MHS). Migrant workers were selected to receive training on the project-based missions. In the first period of migrant volunteer development, migrant volunteers were named differently, such as volunteers for AIDS prevention, migrant health staff and MHVs.

In the next period, the provincial public health offices of the four provinces recognized the importance of developing health volunteers to undertake health activities in the provinces. This realization coincided with Ministry of Public Health policy on MHV development in border provinces where high numbers of migrant workers exist. The authorities made the selection of targeted migrant workers for the training on health and coordinating work in the health system for migrant workers. Based on the PHC system, migrant workers were expected to assist with health problem-solving in the aspects of well-being and health entitlements.

In developing MHVs at the provincial level, there were two principle organizations to take on the leading role, namely, NGOs and provincial public health offices. NGOs developed

Source(s): https://www.worldatlas.com/maps/thailand

Figure 2.
Four case studies locations

MHVs to serve NGO health projects. Therefore, MHV development relied on the projects' duration and budget, thereby leading to narrow coverage of areas and time limitations. This situation has changed because NGOs do not work alone but with the provincial public health offices. In their role, provincial public health offices, they initially implemented volunteer development as ordered by their executives that concentrated on addressing health problems in their respective provinces. Subsequently, the Ministry of Public Health announced the policy for the provinces with high numbers of migrant workers to develop MHVs to support the public health system. The development run by the provincial public health offices resulted in wider coverage of migrant workers. At present, these offices work in partnership with NGOs in developing MHVs.

With regard to ministerial policy on the migrant health care system, the Ministry of Public Health pushes for extending health care to migrant populations and closing communication gaps. The ministry highlights the development of MHVs as caregivers for migrant workers. In relation to the policy on migrant workers, the ministry has the Public Health Development

Plan and the Strategic Plan on Public Health among the Immigrant Workforce, B.E. 2559–2563 (2016–2020). These plans have combined organizations outside and under the ministry to increase their capacities in migrant workers. Each strategy has a focal point in the organization.

The health volunteer development for migrant workers in the present time in four studied provinces exhibited the following two patterns:

(1) Developing migrant workers as MHVs: This pattern encourages migrant workers in health care management. Their capacities are enhanced, so they can give care to migrant workers. Both volunteers and workers are of the same nationalities, understanding the same languages and lifestyles. Tak, Samut Sakhon and Sa Kaeo use this pattern.

(2) Developing existing VHVs to give care to migrant workers. Sa Kaeo uses this model and Ubon Ratchathani calls these volunteers ASEAN health volunteers. This model suits the provinces where migrant workers prefer temporary stay and scattered housing. These conditions disallow the selection of migrant worker representatives as health caregivers for migrant workers, but select Thai health volunteers to perform the job.

System and mechanism for developing health volunteers to improve the health of the immigrant workforce in Thailand

Recruitment systems. The recruitment is made using the following two systems:

(1) In developing migrant workers as "MHVs" in Tak, Samut Sakhon and Sa Kaeo, the general qualification follows the requirement set in the Ministry of Public Health's training manual. The volunteers should be 18 years or over, have lived for at least six months in the community or village where migrant workers live and be able to speak two languages (in Tak and Samut Sakhon). NGOs: The provincial public health office makes the selection with support from NGO networks providing the backgrounds of qualified migrant workers. This network knows well about migrant workers because of extensive experience in working together. In Sa Kaeo, the selectors are public health personnel who select purposively because no NGOs have worked in this province for years and migrant workers live in scattered housing. These aspects are reflected in the statement below.

.. The manual guides us in the method for selecting migrant workers to become MHVs. People from NGO networks make the selection together. [. . .] (Provincial Public Health Office Staff).

(2) In developing VHVs to give care to migrant workers, Ubon Ratchathani and Sa Kaeo use this system and select volunteers who meet the qualifications required by the Ministry of Public Health. VHV representatives are jointly selected by public health personnel and chairs of VHVs. The overall qualifications require years of experience, volunteer spirit, willingness and good communication skills. The selected volunteers participate in capacity training on caregiving for migrant workers. These aspects are reflected in the following statement:

"... As for the process of selecting trainees, we ask local organizations and health volunteer chairs to select volunteers with years of experience, skills in the migrants' language and volunteer spirit [. . .]." (Sub-district Health Promoting Hospital Staff).

Training and knowledge management systems regarding basic health care. In all studied provinces, training is the key to building knowledge among health volunteers. The training is aimed at changing attitudes while enhancing knowledge and skills for assigned roles as health volunteers. The training methods vary by provincial contexts, but generally combine both lecture and practice in courses. The trainer teams are staff members from the provincial public health office and its agencies. The training venues are locations to which trainees can travel easily. However, two different training curricula are used in the training as described below.

(1) Curriculum developed by the Province: Tak and Samut Sakhon have their own curricula. This independently developed curriculum version is grounded upon the province's specific context for which each curriculum maintains different emphases. Still, the curricula contain some similarities in courses. These are reflected in the statement below.

"We developed the training course for MHVs, because Tak was among the first provinces that trained MHVs. And we kept updating the manual until it became the ideal curriculum adopted by the Ministry of Public Health. The ministry revised it to become the ministry's curriculum for MHVs [. . .]." (Provincial Public Health Office Staff)

(2) Curriculum Adapted from the Ministry of Public Health 2015 Curriculum: This type of curriculum is used in Ubon Ratchathani and Sa Kaeo. They make use of this curriculum differently.

2.1 Ubon Ratchathani adapts the Ministry of Public Health curriculum to the training for Thai VHVs as reflected in the following statement:

> . . . about the trained ASEAN health volunteers, we developed the curriculum guided by the Ministry of Public Health curriculum. We invited experts to develop our training curriculum [. . .]. (Provincial Public Health Office Staff)

2.2 Sa Kaeo adapts the SRRT Manual developed by the Ministry of Public Health's Bureau of Epidemiology to the capacity-building training for Thai VHVs to take care of migrant workers' health. Sa Kaeo's training stresses disease prevention among migrant workers as reflected in the statement below.

> ... We apply the SRRT manual to our manual to train our volunteers. The manual teaches what diseases require surveillance, what symptoms are and how to report. We endeavor to give them everything; this is the manual we use, and we do not differ from the training curriculum [. . .]. (Sub-district Health Promoting Hospital Staff).

Nevertheless, all provinces manage the post-training knowledge similarly. They organize meetings for experience and knowledge exchange. Public health facilities, such as community hospitals and subdistrict health promoting hospitals have established health learning centers in their areas. Outstanding knowledge management can be found in Samut Sakhon where an MHV school is centrally located for continued learning and volunteer activities. In addition, the nonformal education center is open Sundays to broaden knowledge for the general public and migrant volunteers.

Welfare and motivational systems. This study explored how welfare and moral support for health volunteers are incorporated. Normally, basic welfare granted to health volunteers includes honorarium, reduced medical charges, priority booking of patient rooms and scholarships for volunteers' children. Moral enhancement is essentially necessary through certificates or medals and acceptance from communities.

Tak and Samut Sakhon develop migrant workers into "MHVs These volunteers are not entitled to any welfare, but pride themselves on serving as volunteers. They receive training

certificates, T-shirts and other incentives. At events and meetings, meals are provided. In Ubon Ratchathani and Sa Kaeo, Thai VHVs are trained in health care for migrant workers. These volunteers obtain the abovementioned welfare rewards. The honorarium of 600 THB per person is paid on a regular basis. They receive the same moral support in the form of certificates, shirts and free meals in health activities as reflected in the following statements:

> ... About welfare for migrant volunteers, there are. . .like bags, bicycles and shirts. We do not pay for other welfare. We do not have an honorarium for them [. . .]. (Provincial Public Health Office Staff)

> ... ASEAN health volunteers are VHVs. We receive the welfare and moral enhancement entitled to volunteers. We do not receive wages or money, but we feel proud about being ASEAN health volunteers [. . .]. (ASEAN Health volunteer)

Financial and other supportive resources systems. The regular operating budget is the main source for health volunteer development in all studied provinces. The Ministry of Public Health allocates this budget to these provinces. Other sources of budget are the migrant health insurance, the disease and re-emerging disease control program, the border health program, local administrative organizations, subdistrict health funds, health service providers, regional education centers, NGOs, regional health service providers and many more. To receive the regular budget allocation, each province's Public Health Office proposes the work plan and projects on health volunteer development for migrant workers' health with a detailed annual budget. Some provinces receive extra funding from the Ministry of Foreign Affairs' funds for the border health program, the Ministry of Public Health and the provincial development budget. NGOs may provide some funding support for training and production of manuals and materials. The provinces may also fund district health offices, hospitals and subdistrict health promoting hospitals. Apart from the budget, resources such as the equipment essential to volunteers' work are supported by hospitals as reflected in the statements below.

> ..The budget from the Ministry of Public Health the Tak Provincial Public Health Office uses is mainly for developing manuals and bilingual materials distributed to organizations [. . .]. (Provincial Public Health Office Staff)

> ..Most funding for MHV training comes from NGOs working on migrant health and developing MHVs to assist with their projects. Hence, we build MHVs collaboratively because the budget from the Ministry of Health is limited and allocated based on the number of people who are Thais [. . .]. (NGO staff)

Mechanism of health volunteer development

Different mechanisms under the Ministry of Public Health, private sector and others are instrumental in developing health volunteers. The studied provinces have different structures and responsible units. Changes may vary from period to period according to provincial public health office executives. In Ubon Ratchathani, the PHC Unit is responsible for the development. In Tak, the Border Health Unit is responsible whereas the Border Health Program under the Unit of Disease Control is the responsible unit in Sa Kaeo. In Samut Sakhon, the Quality Development and Service Unit holds this responsibility. The development draws in all parties involved at every level from units under the provincial public health office, District Public Health Offices and community hospitals to subdistrict health promoting hospitals. However, Ubon Ratchathani and Tak have committees on health volunteer development. Their committees are constituted of members from all levels. Aside from the Ministry of Public Health organizations, local NGOs actively take part in health issues for migrant workers. By working together, public health organizations and NGOs give rise to improved accessibility to the health service system for migrant populations.

From the case studies of all four provinces, two patterns of volunteer development emerged, namely, developing migrant workers as MHVs and developing existing VHVs to provide care for migrant workers. Both patterns of volunteer development have different systems and mechanisms in each area as shown in Table 2 However, both patterns of volunteers could bridge communication gaps and access public health services. Empowering migrant workers is a major problem as well as being able to assist in effective surveillance, prevention and control systems for health problems in migrant worker communities.

Discussion

The mechanisms and systems of health volunteer development found in this study are tied with responsible local organizations or the provincial public health offices that undertake the development in their own ways. At the same time, support is received from local NGOs and other organizations. When considering the development of VHVs, it is necessary to lay down all of the philosophy, principles, direction, mechanisms, tools and measures guiding the development. By adhering to the participatory approach, VHV development involves government, academic/professional and civil society sectors as well as volunteers working together. These volunteers are built through the following processes: (1) Creating a framework as a work standard; (2) Identifying how the volunteer development is tied to the relevant organization; (3) Assuring the framework is a collective commitment among Thais to help move forward the PHC in a suitable direction and timely period; (4) Recognizing that the participatory approach requires knowledge and information sharing among the parties involved, so the insight into PHC can be generated; (5) Using the framework as a tool for systematic collaboration and feasibility and (6) Making the framework flexible enough to fit with regional, provincial and other requirements [16].

VHV development represents a successful and sustainable model in Thailand [14, 16]. Hence, to obtain best practices, the development of health volunteers for migrant health should duplicate the mechanisms and systems that build VHVs. This means applying PHC principles and involving public health facilities. Subdistrict Health Promotion Hospitals in every subdistrict should make health volunteer development a routine. In this study, all four studied provinces developed health volunteers merely because the policy had been released by their provincial governors. The development was sometimes an assignment derived from the responsible ministry. The study also found that development in some provinces had been undertaken by local NGOs. All these findings demonstrate the inconsistency of health volunteer development for the health of the future immigrant workforce.

Conclusion

A great demand exists for migrant workers to drive the country's economic growth. In the years to come, the number of migrants will continue to rise rapidly [13, 20]. From the past until the present, migrants of different nationalities have entered Thailand, and migrants from Myanmar, Lao PDR and Cambodia have been considered substantial. These countries share borders with Thailand. Importantly, Thailand needs to develop migrant volunteers to work on migrant health. This study summarizes the proposed development of these volunteers as described below.

(1) At the provincial level, the development of health volunteers for the migrant workforce should be incorporated in local health service systems such as Sub-District Health Promotion Hospitals. This is the same model used in VHV development that has been integrated into the existing public health system. This practice has led to sustainable development throughout the country.

Table 2.
Comparison of systems and mechanisms of the development of health volunteers for the health of the immigrant workforce in four areas

Areas	Systems Volunteer selection	Knowledge management	Welfare management	Budget support	Mechanisms
Ubon Ratchathani	(1) Selecting VHVs for capacity building training to become MHVs	(1) Using MOPH training curriculum for MHVs	(1) The same welfare as received by VHVs	(1) Annual budget (2) border health fund (3) Fund from NGOs	(1) Provincial committee composed of public organizations and NGOs
Tak	(1) Selecting migrant workers to the MHV training	(1) Using independently developed training curriculum for MHVs	(1) No welfare as they are migrant workers	(1) Annual budget (2) Border health fund (3) Fund from NGOs	(1) Provincial committee composed of public organizations and NGOs
Sa Kaeo	(1) Selecting migrant workers to the MHV training (2) Selecting VHVs for capacity building training to become MHVs	(1) Using the Surveillance and rapid Response Team in training	(1) No welfare as they are migrant workers (2) The same welfare as received by VHVs	(1) Annual budget (2) Border health fund (3) Budget for provincial development	(1) Organizations under MOPH
Samut Sakhon	(1) Selecting VHVs for capacity building training to become MHVs	(1) Using independently developed training curriculum for MHVs	(1) No welfare as they are migrant workers	(1) Annual budget (2) Fund from NGOs	(1) Organizations under MOPH and NGOs

(2) As a recommended strategy, VHVs should be strengthened to provide care for migrant workers. Provinces employing this strategy to tackle public health problems and health service accessibility among migrant groups should evaluate their outcomes. The evaluation results would be useful in developing health volunteers for the migrant workforce in the future.

(3) Regarding the aspect of knowledge management of PHC, provinces should apply Ministry of Public Health volunteer training to the provincial context. By doing so, MHVs will be trained on essential skills using the same standard.

(4) Provinces should employ a variety of post-training knowledge management practices. This study believes that the trained volunteers' capacity should be enhanced on a regular ongoing basis. This can create more opportunities for them to work with health personnel.

(5) The welfare or compensation for MHVs is not the same as that given to VHVs. The latter receives both honorarium and other benefits. When migrant volunteers are provided with the same welfare, they will maintain their support in the Thai public health system uninterruptedly.

(6) Budget allocation from the Ministry of Public Health and the Thai government on MHV development should be sufficient and based upon the migrant data of each province. Furthermore, budget monitoring is a recommendation aimed at achieving stated objectives.

Conflict of Interest: None

References

1. Arayawong W, Thanaisawanyangkoon S, Punjangampattana A, Saengkhong C. Training curriculum of migrant health volunteers (MHVs). Bangkok: Thepphenvanish Printing; 2015.
2. Ministry of Public Health, Department of Health Service Support. Standard training course for migrant health volunteers year 2014. [cited 2017 Jun 18]. Available from: http://phc.moph.go.th/www_hss/data_center/ifm_mod/nw/Training_the_volunteers.pdf.
3. Mon HO, Xenos P. Perception and usage of compulsory migrant health insurance scheme by adult Myanmar migrants in Bang Khun Thian district, Bangkok Metropolitan Area, Thailand. J Health Res. 2015; 29(Suppl.2): S207-13. doi: 10.14456/jhr.2015.70.
4. Archavanitkul K, Kanchanachitra PS. Questions and challenges to Thai state policy in the health and rights dimensions of migrant workers. Nakhon Pathom: Institute for Population and Social research, Mahidol University; 2005.
5. Mahidol University, Institute for Population and Social Research. Thai health report 2013: reform Thailand, power structure reform and citizen empowerment. Nakhon Pathom: Institute for Population and Social research, Mahidol University; 2013.
6. Kosiyaporn H, Suphanchaimat R, Julchoo S, Sinam P. Health system's factors affecting accessibility, understanding and appraisal of health information in migrant health workers and migrant health volunteers in light of migrant-friendly services: a case study in Samut sakhon and Ranong, Thailand. Bangkok: I Printing Color (Thailand) Company Limited; 2019.
7. Kantayaporn T, Mallik S. Migration and health service system in Thailand: situation, responses and challenges in a context of AEC in 2015. [cited 2020 Jun 25]. Available from: https://apps.who.int/iris/handle/10665/204591.
8. Donladlee R, Upakdee N. An analysis of medical care charge for the outpatient of migrant workers at Khao Chakan district, Sa Kaeo province in the fiscal year of 2014–2015. Journal of Health Systems Research. 2017; 11(1): 47-53.

9. Hfocus. Insights into the health system. [cited 2021 Jan 27]. Available from: https://www.hfocus.org/content/2018/04/15692.
10. Phitayarangsarit S, Tosanguan J, Sumalee H. Roles of local government organizations in health promotion and policy proposals on decentralization of health promotion. [cited 2017 Jun 18]. Available from: https://www.hsri.or.th/research/detail/5820.
11. Woraboot S. Roles of Tambon administrative organization in disease prevention and control at Thai-Myanmar border in Mae Ai district, Chiangmai province. Kasalongkham Research Journal. 2011; 5(2): 22-9.
12. Sutheravut T, Niemsri P, Satianpak P, Kerdmongkol A, Suwanna D. Policy recommendations on employing migrant health staff (MHS). Bangkok: Thepphenvanish Printing; 2015.
13. Ministry of Labor. Office of Foreign workers administration. Statistics of foreign workers in January 2017. [cited 2017 Jun 15]. Available from: https://www.doe.go.th/prd/assets/upload/files/alien_th/98802fed607243cb1c1afe248b3d29eb.pdf.
14. Ministry of Public Health, Department of Health Service Support. The four-decade development of primary health care in Thailand; 1978–2014. Bangkok: The War Veterans Organization of Thailand Under Royal Patronage of His Majesty The King (Office of Printing Mill); 2014.
15. Arayawong W, Thanaisawanyangkoon S, Punjangampattana A, Saengkhong C. Training curriculum handbook of migrant health volunteers (MHVs). Bangkok: Thepphenvanish Printing; 2015.
16. Saengsurin P. Development of volunteers in the 4th decade (2008–2017). Khon Kean: Klangnana Vitthaya Press; 2008.
17. Ministry of Public Health, Department of Health Service Support. Modern village health volunteers (VHVs) handbook. Nonthaburi: The Agricultural Cooperative Federation of Thailand; 2011.
18. Kosiyaporn H, Julchoo S, Phaiyarom M, Sinam P, Kunpeuk W, Pudpong N, *et al.* Strengthening the migrant-friendliness of Thai health services through interpretation and cultural mediation: a system analysis. Glob Health Res Policy. 2020; 5(1): 53. doi: 10.1186/s41256-020-00181-0.
19. Yoddamnoen BA, Tangcholthip K. Qualitative data analysis: data handling interpretation and definition. Nakhon Pathom: Institute for Population and Social Research, Mahidol University; 2009.
20. National Housing Authority. Report of the project on study and development of survey and projection of housing demand in Thailand in the 12th national economic and social development plan (2017–2021). Nakhon Pathom: Institute for population and social research, Mahidol University; 2015.

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