Chapter 4

Supply of Long-term Care: Care Workforce

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Chapter 4

Supply of Long-term Care: Long-term Care Workforce

1. Definition of Long-term Care Workforce

Traditionally, family members provide long-term care for older persons. However, the number and proportion of older persons are increasing and the number of family members living together is decreasing or even becoming zero. In addition, even though family members are living together, the degree of care is becoming more than what the family member can offer. Professional care, through the social provision system, is surging.

In the analogy of health systems where the workforce such as doctors or nurses, infrastructure such as hospital or health centres, and health finance and expenditure are the main components, the long-term care system can be composed of three aspects: workforce, place of care as home or facility, and finance. In this report, first two – workforce and facility issues – are discussed.

Long-term care workforce is somewhat difficult to define. For countries of the Organisation for Economic Co-operation and Development (OECD), several international comparative researches have already been carried out (Fujisawa and Colombo, 2009; Colombo et al., 2011; OECD, 2015). For non-OECD countries, which are middle- and low-income yet rapidly ageing, the research is ongoing. Health workers, notably nurses, play an important role in long-term care. In addition, lower-skilled care workers are included in the framework of the long-term care workforce. Domestic workers play an important role as caregivers in certain countries. In between, specialised occupations have been created in several countries. Certainly, many categories of occupations are involved in the long-term care of older persons, which are difficult to define, and which vary among countries. This chapter examines the situation of the long-term care workforce in terms of the number employed by category of occupation from several data sources of the target countries.

2. Long-term Care Workforce within the Framework of the Health Workforce

In its endeavour to develop the health workforce, the World Health Organization (WHO) compiled and produced the health workforce report and database by country (WHO, 2018). Internationally established medical professions such as doctors, nurses, and midwives are well covered in the database unlike long-term care workers whose coverage is not adequate.[2] In the database, two categories – personal care worker and community health worker – can potentially be part of the long-term care workforce. The database lists personal care workers in 48 countries in the world, and only 5 countries in Asia (Table 4.1). Not only the number of countries is limited but also the number of workers varies. The database also lists community health workers in eight Asian countries.

[2] Except for the country report of Japan which provides information on the human resources for long-term care (WHO, 2017).

Table 4.1: Number of Potential Long-term Care Workforce in WHO Health Workforce Database

	Year	Number
Personal Care Worker		
Armenia	2014	5,041
Israel	2014	100,333
Kyrgyzstan	2014	990
Mongolia	2002	3,758
Uzbekistan	2014	50,649
Community Health Worker		
Bangladesh	2012	73,838
China	2011	1,126,443
Iran	2004	25,242
Mongolia	2010	437
Myanmar	2012	3,397
Nepal	2004	16,206
Pakistan	2010	11,510
East Timor	2004	10

Source: The 2016 update, Global Health Workforce Statistics, WHO, http://www.who.int/hrh/statistics/hwfstats/, compiled in Hayashi (2018).

Community health workers have been trained mainly in child and maternal health with limited time and resources to promote primary health care and to develop the district health system. Table 4.1 shows that the number is significant. In the context of population ageing and increasing care need of older persons, these community workers can be a potential care workforce with adequate training.

Nurses are included in the database and some of them are anticipated to be engaged in the care of older persons. However, it is not possible to disaggregate the number of nurses by their domain of activities in this database. Social workers play an important role in long-term care, but they are not included in the health workforce; hence, they are not included in the database. Domestic workers are not included either.

3. Long-term Care Workforce by Occupation

In some Asian countries, housemaids or domestic workers are in charge of the long-term care of older persons at home. In some countries, home helpers or home service persons are trained and dispatched to families seeking care. Social workers are professionals in charge of welfare and often work at public offices, but sometimes work as caregivers or caregiving managers at home or in facilities. Specialised professions – such as Certified Care Worker, Care Manager in Japan, or Care Helper in the Republic of Korea – were created, along with the development of the social care system in each country; the number also increased. In addition to these categories of long-term care workforce, health workforce ranging from doctors, dentists, nurses, physical therapist, occupational therapist, speech-language-hearing therapists as well as dietitian are also involved with long-term care.

For example, in Japan, various categories of occupation are involved in long-term care (Table 4.2). Slightly over 2 million people, which corresponds to around 3.5% of the total workforce, are engaged in the long-term care industry. Comparing two data sources – the Survey of Institutions and Establishments for Long-term Care conducted by the Ministry of Health, Labour and Welfare covering long-term care providers, and the Population Census conducted by the Statistics Bureau – one can see that the occupations can be roughly classified into three categories: health, care, and other. Included under the health category are occupations such as doctors, nurses, or physical therapists who can be employed also in the health sector. The care category includes occupations that can be found only in the long-term care industry. The other category includes cooks, drivers, cleaners, and clerical workers who can be engaged in other industries but are also indispensable to maintain long-term care services. Of the total long-term care workforce, 73% is engaged in the care category. They are the main long-term care workers who manage and conduct long-term care. However, the health category, comprising 10.7% by the Population Census or 17.1% by the MHLW Survey of the total long-term care workforce, is significant. Among them, nurses comprise the largest share, followed by physical therapists and dietitians. The difference between the two data sources might be due to the undercounting of health professionals who work for both the health and long-term care industries, and the possible omission of the 'other' category in the MHLW Survey. While this survey gives a much-detailed count by occupation, the Population Census gives clear headcounts of those engaged in the long-term care industry.

Table 4.2: Long-term Care Workforce in Japan, by Occupation

MHLW Survey (2015)			Population Census (2015)[b]		
Occupation[a]	**Number**	**%**	**Occupation[a]**	**Number**	**%**
Doctor, Dentist	16,630	0.8	Doctor, Dentist	2,790	0.1
Pharmacist	2,429	0.1	Pharmacist	890	0
Public health nurse, Midwife, Nurse, Assistant nurse	259,578	11.9	Public health nurse, Midwife, Nurse, Assistant nurse	161,250	7.9
Registered dietitian, Dietitian	26,066	1.2	Dietitian	20,750	1
Dental hygienist	1,221	0.1	Dental hygienist	760	0
Physical therapist	33,642	1.5	Physical therapist, Occupational therapist	21,880	1.1
Occupational therapist	18,510	0.8			

Speech-language-hearing therapist	3,494	0.2	Orthoptist, Speech-language-hearing therapist	1,350	0.1
Judo-orthopaedist	5,864	0.3	Masseuse, Judo-orthopaedist	1,790	0.1
Masseuse	4,051	0.2			
Psychiatric social worker	100	0	Other health workers	8,030	0.4
'Health' Subtotal	**371,586**[c]	**17.1**	**'Health' Subtotal**	**219,490**	**10.7**
Head of facility	6,888	0.3	Manager	23,200	1.1
Certified care worker	630,582	28.8	Other social welfare professions	191,310	9.3
Certified social worker	21,926	1			
Care manager, etc.	260,022	11.9	Caregiver, Home helper, etc.	1,293,880	63.1
Caregiver, Home helper, etc.	682,955	31.2			
'Care' Subtotal	**1,602,374**[c]	**73.2**	**'Care' Subtotal**	**1,508,390**	**73.5**
Cook	46,540	2.1	Cook	96,930	4.7
Other	166,036	7.6	Driver, Cleaner, Clerical worker, Other	225,240	11
'Other' Subtotal	**212,576**	**9.7**	**'Other' Subtotal**	**322,170**	**15.7**
TOTAL	**2,186,536**	**100%**	**Total**	**2,050,050**	**100%**

Note :

[a] Similar occupational categories of the MHLW Survey and the Population Census are matched for comparison, and they are not identical.

[b] Employed in the industry of long-term care in the Population Census (2015). Long-term care industry is defined here as Minor Groups of '85n Welfare services for the aged and care services' and '85p Home-visit care services' of Medium Group of '85 Social insurance, social welfare and care services' of Major Group of 'P. Medical, health care and welfare'.

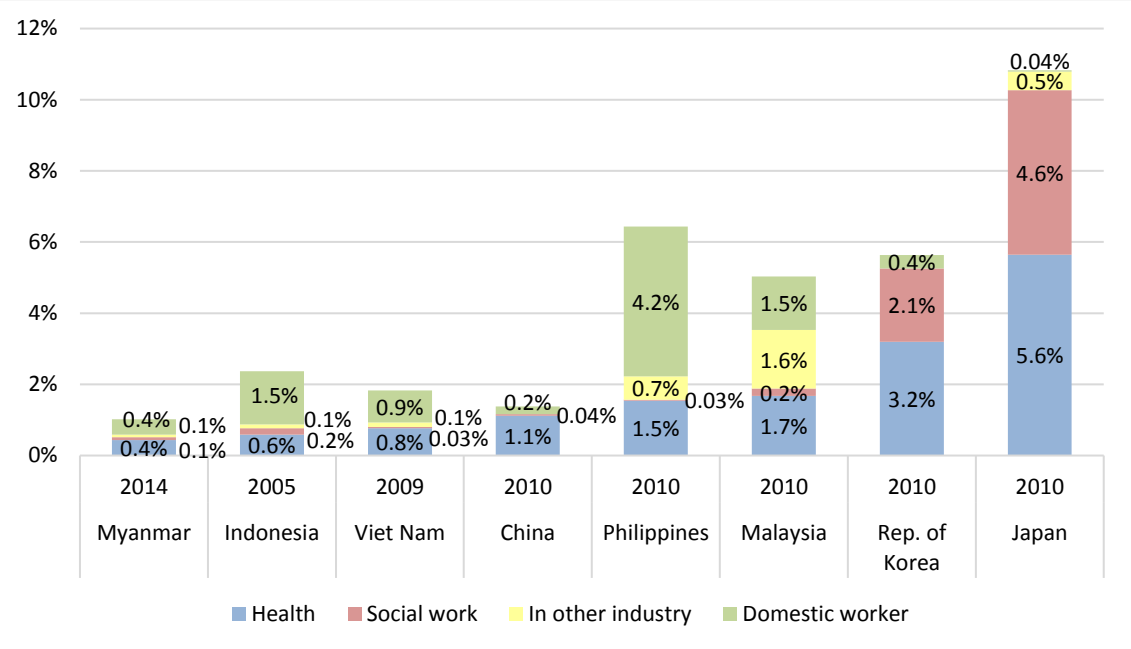
[c] The subtotals of the MHLW Survey are not identical due to the rounding of the numbers according to the survey coverage rate.

Source: Survey of Institutions and Establishments for Long-term Care, Ministry of Health, Labour and Welfare; Population Census, Statistics Bureau of Japan; compiled by Hayashi (2019).

4. Comparison of Long-term Care Workforce

In the context where the long-term care industry is yet to be developed, it would be useful to compare the existing workforce, which is related to the long-term care industry, at large (hereinafter referred to as care workforce). In the census, the workforce is classified by industry and occupation. Among the 21 sections of industry classified in the International Standard Industrial Classification, 'human health and social work activities' can be the main component of the care workforce. This industry is further divided into health and social work (Annex 2, Table 1). However, in some countries, care-related occupations are classified outside of 'human health and social work activities'. So, those care-related occupations are selected to add to the care workforce (as listed in Annex 2, Table 2). Further, if domestic workers are providing long-term care, then they should be counted. In summary, the care workforce is composed of those working in the industry of 'human health and social work activities', care-related occupations engaged outside of the industry of 'human health and social work activities', and domestic workers. The care workforce was calculated using available census data around 2010. Due to the different sizes of the total workforce of each country, the proportion to the total workforce was compared (Figure 4.1).

Figure 4.1: Proportion of Care Workforce in East and Southeast Asia



Note: 'Health' is Division 86 and 'Social work' is Divisions 87 and 88 in Annex 2, Table 1. 'In other industry' designates care-related occupations in industries other than the health and social work industries. This figure was not retrievable in Indonesia, China, and the Republic of Korea. 'Domestic worker' does not include those in the health and social work industries in Malaysia, the Philippines, Viet Nam, and Indonesia. Overseas workers in the Philippines are excluded.
Sources: Censuses of the Philippines and Viet Nam, SUPAS (sample survey) of Indonesia through IPUMS International. Data of China, Japan, Malaysia, Myanmar, and the Republic of Korea are from the respective countries' census data. Compiled by Authors.

There is a wide variation in the proportions. In Myanmar, the proportion of those engaged in health was only 0.4% of the total workforce whereas it was 5.6% in Japan. The wider disparity existed for social work such that the proportion was almost non-existent in Viet Nam (0.03%), the Philippines (0.03%), China (0.04%), and Myanmar (0.08%), whereas certain proportions were observed in the Republic of Korea (2.1%) and Japan (4.6%). As described in the previous section, in Japan, the long-term care workforce is included in the category of social work. The workforce in the social work category would be the potential long-term care workforce. Those countries with an almost-zero proportion of social work might be facing a severe shortage of long-term care workforce in the future. Although the shortage of care workers is a serious problem in Japan, it is better than other countries so far.

On the care-related occupations engaged outside of the human health and social work activities, shown as 'in other industry' in Figure 4.1, the proportion of Malaysia is noticeable at 1.6%. Outside of the industry of human health and social work activities, care-related occupations are engaged in public administration, manufacturing, and education. They might be working in public hospitals, health centres, or university hospitals.

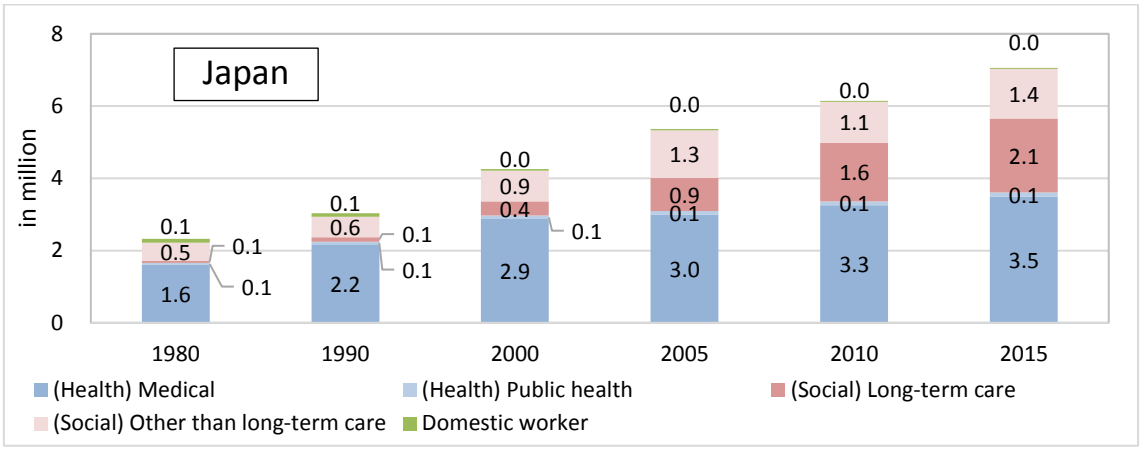
The proportion of domestic workers also vary among countries – with Japan having the smallest proportion at 0.04% and the Philippines having the highest at 4.2%. In the Philippines, Indonesia, and Viet Nam, the proportion is more than or the same level as the health and care workforces. Also, in Malaysia, there is a sizeable proportion of as much as 1.5%. In view of a shortage of care workforce in the world, the abundance of domestic workers can be a clue to a solution.

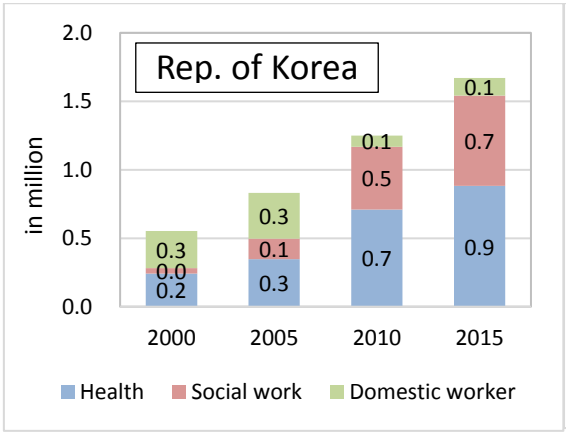
5. Chronological Trend of Care Workforce

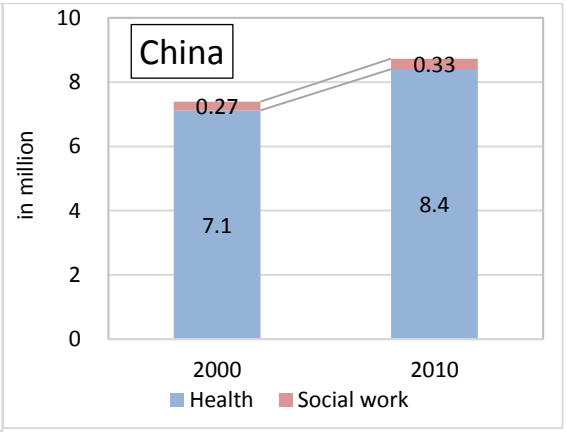
In most countries, the number of health and care workers has been increasing recently (Figure 4.2). For example, in Japan, the health and care industry workers totalled only 2.2 million in 1980 and grew more than threefold to 7.0 million in 2015. The increase was first rapid in the medical sector, doubling from 1980 to 2000. Then there was a marked increase in the social work sector, especially of long-term care workforce, growing fivefold from 2000 to 2015. The start of the long-term care insurance system in 2000 certainly contributed to this increase. Among the economists, the economic impact of the long-term care insurance system was not proved unanimously, but its effect on job creation is undeniable. In the Republic of Korea also, the workforce of 'social work' category increased sharply between 2005 and 2010. The introduction of the long-term care insurance in 2008 must have affected this increase.

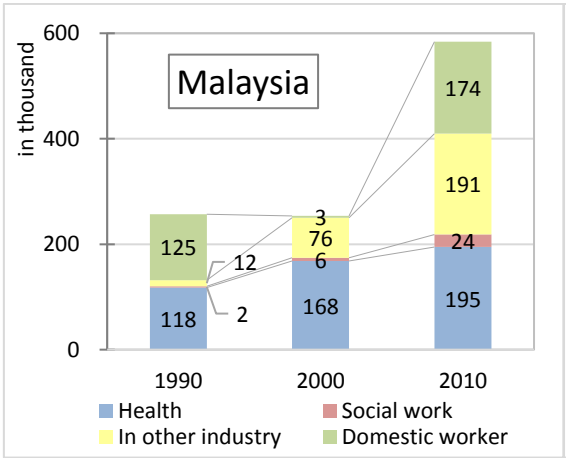
For China, although the total workforce of the health and social industries increased, the health sector was overwhelmingly predominant than the social work sector. The workforce of 'social work' category increased by 22% from 2000 to 2010. However, considering the 4.7 million needing care in 2015 (Table 2.1), which is double than that of Japan's 2.0 million, there is obviously a shortage of professional caregivers in China.

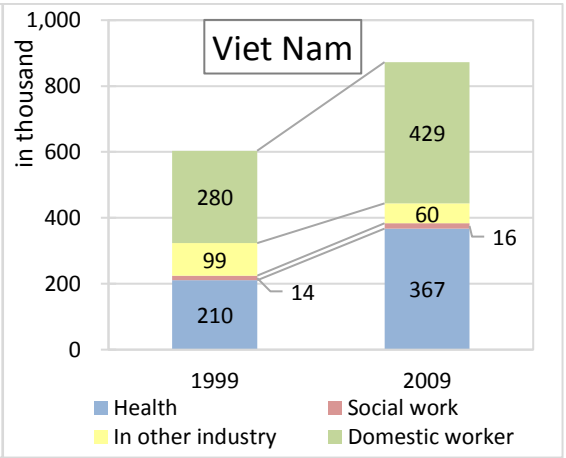
Figure 4.2: Trend in the Number of Care Workforce

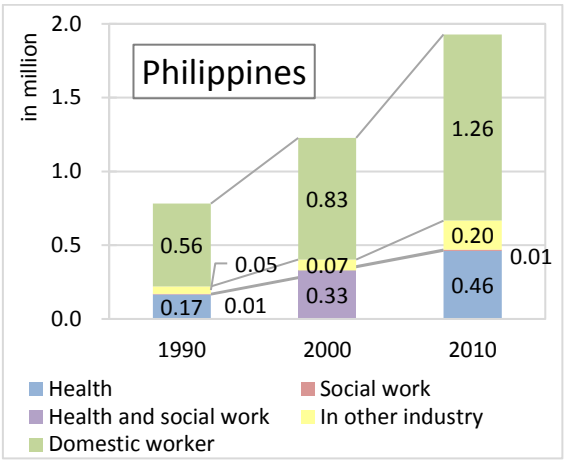










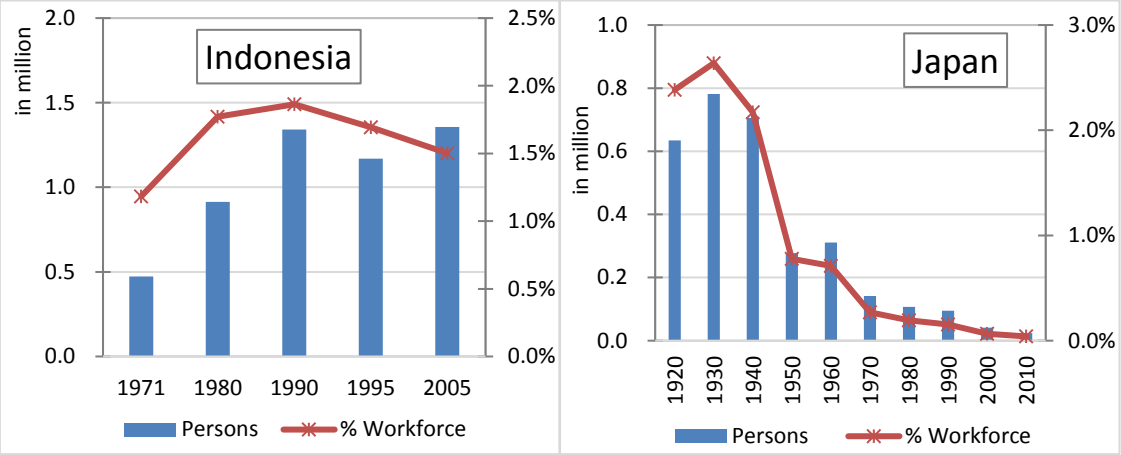


Sources: Censuses of the Philippines and Viet Nam, SUPAS (sample survey) of Indonesia through IPUMS International. Data of China, Japan, Malaysia, Myanmar, and the Republic of Korea are from the respective countries' census data. Compiled by Authors.

As for domestic workers, the trend is ambiguous. In the Philippines (Figure 4.2), domestic workers have been continuously increasing since 1990, but this straightforward increase is not found in Indonesia where the number of domestic workers oscillated recently and the proportion to the total workforce has been declining since 1990. Also, in Malaysia, according to the Labour Force Survey, domestic workers decreased from 219,900 in 2001 to 106,200 in 2017. However, in the census data, domestic workers counted 125,000 in 1990, 3,000 in 2000, and 174,000 in 2010, showing no consistent trend, probably due to the definition and category change (Figure 4.2). The continuous decline observed in the Labour Force Survey should be further examined.

In Japan, both number and proportion have been dramatically decreasing since the 1930s (Figure 4.3). This decline is explained by the cultural practice of not having maids at home, by the smaller family and house sizes which reduce the need for maids to come and work, and by the decrease of potential labour due to the increased educational level of women (Koizumi, 2012).

Figure 4.3: Trend in the Number of Domestic Workers (in million persons)



Note: Philippine data includes overseas workers.
Sources: Censuses of the Philippines and Indonesia through IPUMS International; Japan by the Statistics Bureau. Compiled by Authors.

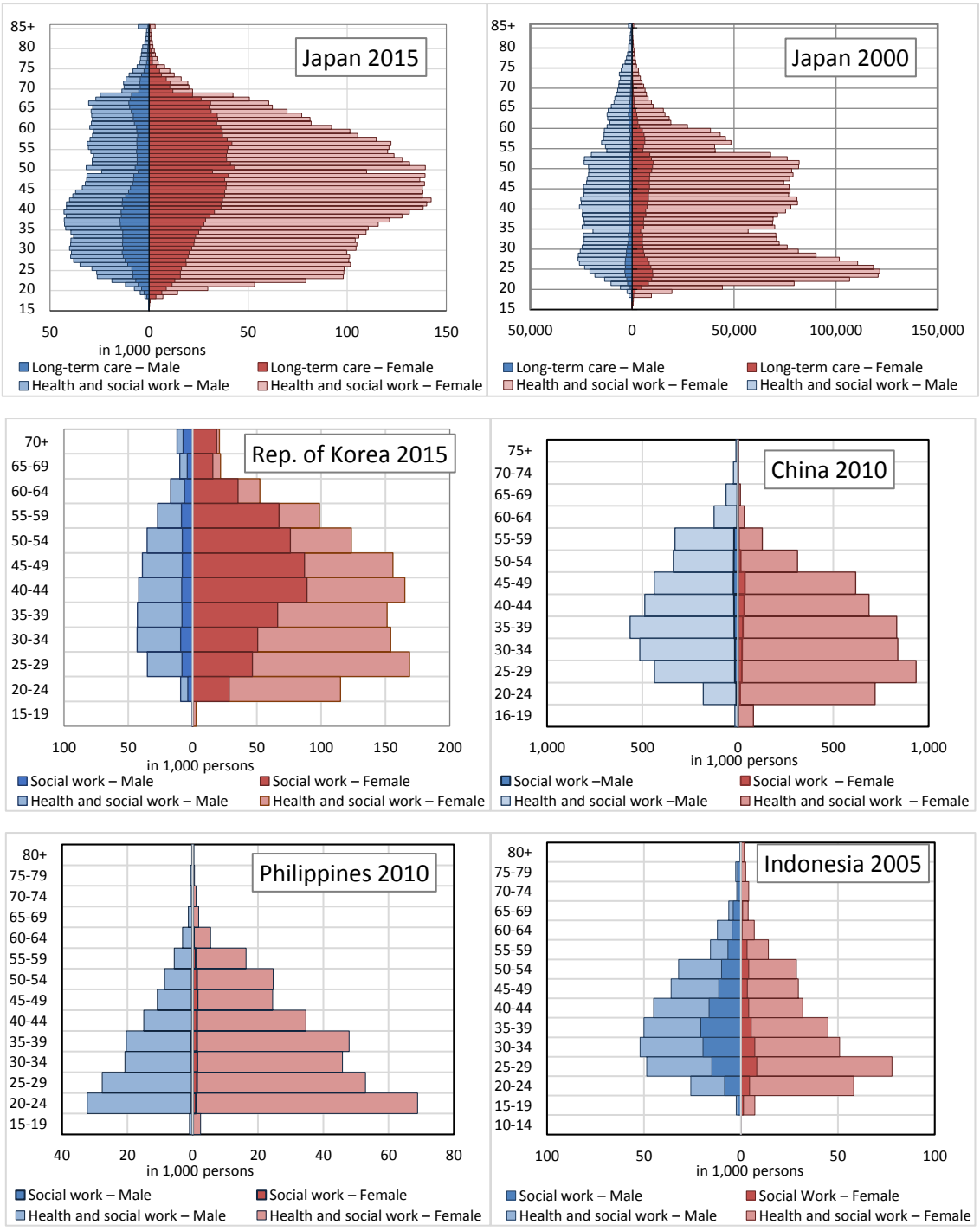
In China, the 2010 census count of domestic workers is very small (1.6 million or 0.4% of the total workforce). However, according to the report published by the Ministry of Commerce, the number of domestic workers counted 23.26 million in 2015 and further increased to 25.42 in 2016 (Ministry of Commerce of China, 2017). According to this report, 16.3% of them were engaged in elderly care in 2016. This implies that there were 4.14 million long-term care workers in the form of domestic workers in 2016, more than double than the 1.6 million domestic workers in 2010. Due to the different sources of data, the difference is not all explained by the increase of elderly care workers at home. However, the recent increase of domestic workers is brought by a new business model – O2O, Online to Offline, a mobile-phone and Internet-sharing business model, and most of whose service providers started around 2014 to 2016. The increase of domestic workers, which also meets the demand for long-term care, can be happening through new technology.

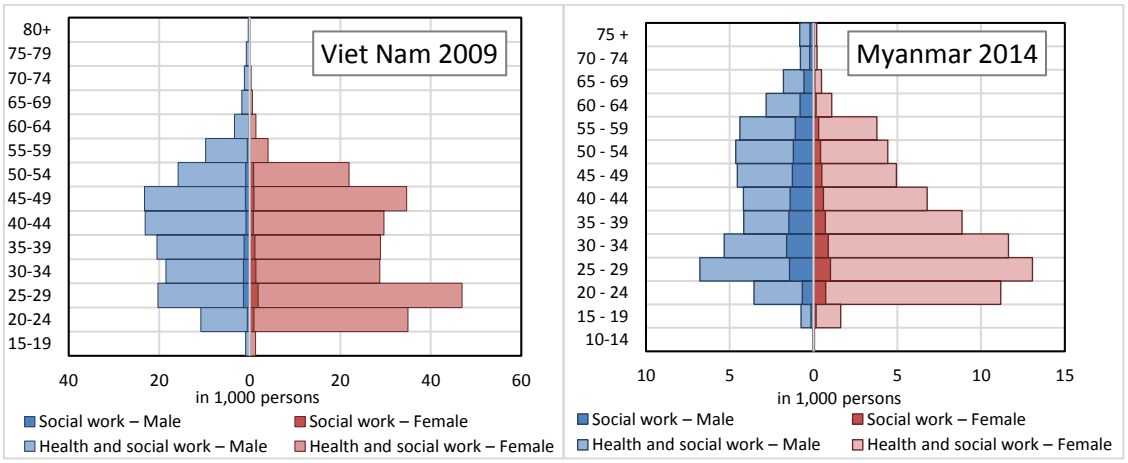
6. The Demographic Structure of the Care Workforce

Each occupation has its specific demographic profile. Figure 4.4 shows the distribution of health and care workforce by age and sex. The health and social care workforce is generally female dominated. In Japan in 2015, the peak of female workers was found in their 40s, whereas for men, the peak was in the 30s. It was different in 2000 when young women in their 20s dominated the workforce. They worked in the health industry as nurses, for example, before they got married and quit. However, recently women's work–life balance changed; fewer women were quitting and more women started or continued to work at an older age in this industry. This shift from young to middle-aged women is even more obvious in the long-term care workforce. The workforce pyramid in the Republic of Korea looks somewhat similar to that of 2000 Japan; it has the peak at the younger age for women. However, if we limit the scope to social work, middle-

aged women are predominant. For China, the Philippines, Indonesia, Viet Nam, and Myanmar, the pyramids show a similar form, young women are abundant. The peak age category of female workforce in health and social work is 25–29 years for Japan, the Republic of Korea, China, Indonesia, Viet Nam and Myanmar, and younger (20–24 years) in the Philippines. This difference might be due to the differences in the job entry system.

Figure 4.4: Care Workforce Pyramid





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