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Healthcare in Myanmar

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ABSTRACT

Myanmar transitioned to a civilian government in March, 2011. Although the democratic process has accelerated since then, many problems in the field of healthcare still exist. Since there is a limited overview on the healthcare in Myanmar, this article briefly describes the current states surrounding health services in Myanmar. According to the Census 2014, the population in the Republic of the Union of Myanmar was 51,410,000. The crude birth rate in the previous one year was estimated to be 18.9 per 1,000, giving the annual population growth rate of 0.89% between 2003 and 2014. The Ministry of Health reorganized into six departments. National non-governmental organizations and community-based organizations support healthcare, as well as international non-governmental organizations. Since hospital statistics by the government cover only public facilities, the information on private facilities is limited. Although there were not enough medical doctors (61 per 100,000 population), the number of medical students was reduced from 2,400 to 1,200 in 2012 to ensure the quality of medical education. The information on causes of death in the general population could not be retrieved, but some data was available from hospital statistics. Although the improvement was marked, the figures did not reach the levels set by Millennium Development Goals 4 and 5. A trial prepaid health insurance system started in July 2015, to be followed by evaluation one year later. There are many international donors, including the Japan International Cooperation Agency, supporting health in Myanmar. With these efforts and support, a marked progress is expected in the field of healthcare.

Key Words: Myanmar, healthcare, manpower, facility, health insurance

INTRODUCTION

Myanmar is a country with an area of 680,000 km^2 (1.8 times of Japan) surrounded by Thailand, Laos, China, India, and Bangladesh. According to the Census 2014, the population in the Union of Myanmar was 51.41 million in September 2014.[1)] There are 135 different ethnic groups with their own languages and cultures in Nay Pyi Taw Union Territory and 14 states/regions. In addition, illegal immigration across the border is not rare. In this heterogeneous society, there are many obstacles to the provision of health services to the whole nation.

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The election of 2010 led Myanmar to a civilian government in March, 2011. Since then, the democratic process has accelerated, but there are many problems to be resolved in every field. In the field of healthcare, there are problems in maternal and child health, nutrition, infectious disease controls, tobacco controls, access to healthcare services, and quality of services.[2-5]

This paper briefly describes the current situations of healthcare in Myanmar, based on sources available in English from the Internet, as well as scientific papers in English and Myanmar language newspapers reporting the recent changes. The main sources are the official website of Ministry of Health (MoH), Myanmar (http://www.moh.gov.mm) and the 2014 Myanmar Population and Housing Census (http://countryoffice.unfpa.org/myanmar/ census/). This article covers general information on population and birth rate, structure and function of MoH, healthcare facilities and professionals, health insurance, mortality, Millennium Development Goals (MDGs), and support from international donors.

POPULATION AND BIRTH RATE

Accroding to the Myanmar Population and Housing Census 2014, the population in the Republic of the Union of Myanmar was 51,419,000 (24,821,000 males and 26,598,000 females) as of March 29, 2014, which includes an estimated population of 1,206,000. Yangon was the most populated area (7,355,000, 14.3%), and the capital, Nay Pyi Taw, had 1,158,000 (2.3%). According to the Union Report, 28.6% were aged under 15 years, 65.6% were aged 15 to 64 years, and 5.8% were aged 65 years.[6] At the same time, another source, the World Factbook, reports that the estimated population for July in 2015 is 56,320,000; 26.1% for those aged 0–14 years, 68.6% for those aged 15–64 years, and 5.4% for those aged 65 years or over.[7]

Based on the Census 2014, the government estimated that the crude birth rate in the previous one year was 18.9 per 1,000 population. The annual population growth rate was estimated to be 0.89% between 2003 and 2014.[6] Despite the government historically encouraging population growth and adopting a laissez-faire policy towards fertility in the past,[8] fertility has been steadily falling. Myanmar's total fertility rate estimated by the Census 2014 was 2.29, which down from 6.1 in 1965.[9] Fertility rates in the urban areas were low (1.7 in Yangon Region and 1.9 in Mandalay Region), and those in the surrounding regions were hovering just above replacement fertility (2.1 in Magway Region, 2.1 in Nay Pyi Taw Union Territory, 2.2 in Bago Region, 2.6 in Ayeyarwady Region, and 2.3 in Sagaing Region). Further away from the urban areas, the rates were relatively high (2.4 in Mon State, 2.7 in Shan State, 2.8 in Kachin State, 3.0 in Tanintharyi Region, 3.3 in Kayah State, 3.4 in Kayin State, and 4.4 in Chin State). While providing direct support to family planning in order to improve women's reproductive health, it has only been in the last 20 years that the government has taken actions with regards to fertility, seeking to maintain replacement-level fertility.[10]

ADMINISTRATIVE STRUCTURES

Myanmar healthcare systems have drastically evolved with recent changes of political and administrative systems. Although the healthcare systems are a mixture of public and private sectors both in the aspects of finance and supply, MoH remains the major provider of healthcare services. As shown in Fig. 1, there are 6 departments in the MoH, which facilitate all aspects of health for the whole population.[11]

The Department of Public Health is mainly responsible for primary healthcare and basic health

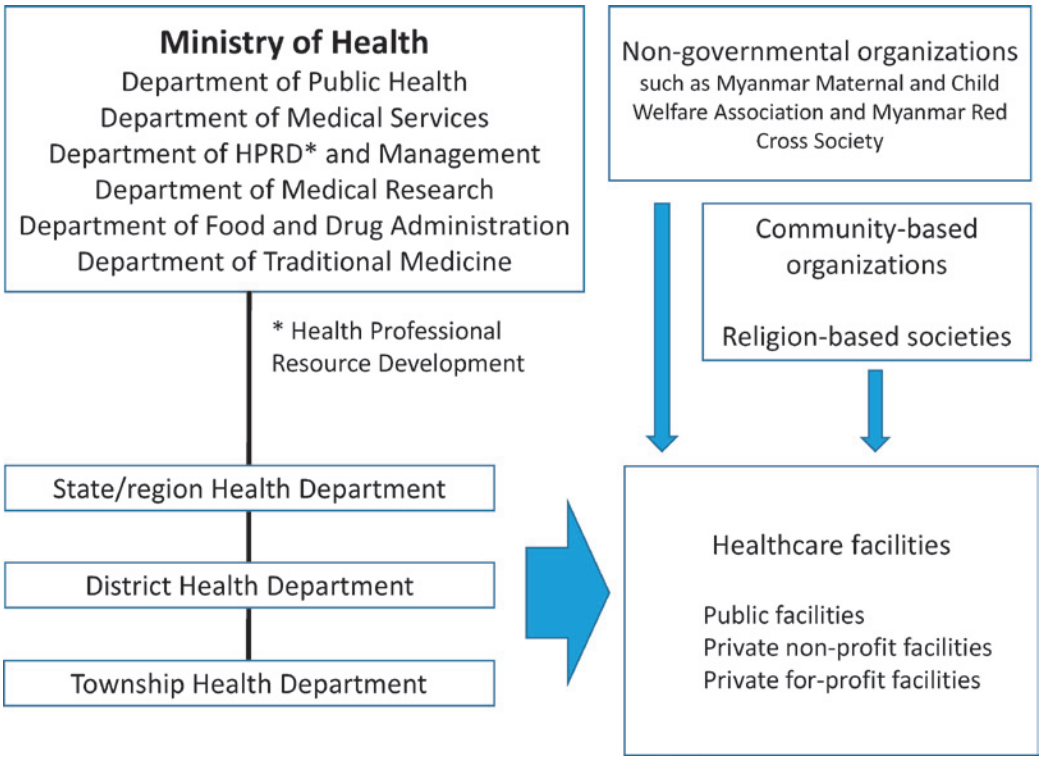

Fig 1 Administrative structures supporting healthcare in Myanmar

services; nutrition promotion, environmental sanitation, maternal and child health, school health, and health education. The Disease Control Division and Central Epidemiology Unit under this Department cover prevention and control of infectious diseases, disease surveillance, outbreak investigations, and capacity building. The Department of Medical Services provides effective treatments and rehabilitation services. Curative services are provided by various categories of health facilities under the control of the Department. The Department of Health Professional Resource Development and Management is mainly responsible for training and production of all categories of health personnel, except for traditional medicine personnel, to attain equitable healthcare for the whole population. The Department of Medical Research conducts national surveys and research for evidence-based medicine and policy making. The Department of Food and Drug Administration ensures safe food, drugs and medical equipment, and cosmetics. The Department of Traditional Medicine is responsible for the provision of healthcare with traditional medicine, as well as training of traditional medicine personnel. There were 6,963 private traditional practitioners in 2014. Most of them were trained at the Institute of Traditional Medicine until 2001, and at the University of Traditional Medicine from 2002 onwards.

In line with the national health policy, non-governmental organizations such as the Myanmar Maternal and Child Welfare Association and the Myanmar Red Cross Society are taking a share of service provision. Nation-wide non-governmental origanizations, as well as locally acting community-based organizations and religion-based societies, also support and provide healthcare services.

HEALTHCARE FACILITIES

Although there are substantial number of private facilities for the wealthy, the English documents concerning these are limited. In 2007 the government issued "The Law Relating to Private Health Care Services". Private Health Statistics 2015 by the Department of Medical Services reported that there were 193 private hospitals, 201 private specialist clinics, 3,911 private general clinics, and 776 private dental clinics. In Myanmar, many charity hospitals run by private sectors are operating for the poor. There are private non-profit clinics run by community-based organizations and religion-based societies, which also provide ambulatory care. Among them, some have developed to provide inpatient care in Nay Pyi Taw, Yangon, Mandalay, and other large cities in recent years, although the funding and provision of care were still fragmented. Since Hospital Statistics by the government covers only public facilities,[12] the information on private facilities both for the rich and the poor is limited.

Public hospitals are categorized into general hospitals (up to 2,000 beds), specialist hospitals and teaching hospitals (100–1,200 beds), regional/state hospitals and district hospitals (200–500 beds), and township hospitals (25–100 beds). In rural areas, sub-township hospitals and station hospitals (16–25 beds), rural health centers (no beds), and sub-rural health centers (no beds) provide health services, including public health services.

Table 1 shows the number of public healthcare facilities in Myanmar in 2014.[13] There were 1,056 public hospitals with 56,748 beds in total. These facilities mainly provide curative and rehabilatitive services. There are 87 primary and secondary health centers, 348 maternal and child health centers, 1,684 rural health centers, and 80 school health teams. These facilities are mainly responsible for preventive services and public health activities. There are 16 traditional

Table 1 Public health facilities in Myanmar, 2014

Facility	Number
Curative and rehabilitative services	1,056
General hospitals (up to 2,000 beds)	4
Specialist/teaching hospitals (100–1,200 beds)	50
Regional/state/district hospitals (200–500 beds)	55
Township hospitals (25–100 beds)	330
Station hospital (16–25 beds)	617
Preventive and public health services	2,199
Primary and secondary health centers	87
Maternal and child health centers	348
Rural health centers	1,684
School health teams	80
Traditional medicine	259
Traditional medicine hospitals	16
Traditional medicine clinics	243

Data from Health in Myanmar 2014[13]

medicine hospitals and 243 traditional medicine clinics.[13]

The Ministries of Defense, Railways, Mines, Industry, Energy, Home and Transport also provide healthcare for their employees and families with their own medical facilities and budget.[11]

HEALTHCARE PROFESSIONALS

1) Current manpower

The numbers of healthcare professionals are shown in Table 2.[13] Classification of public sector or private sector was available only for medical doctors, dentists, and traditional medical practitioners. Some of the public professionals also work at private facilities, while those categorized as private sector work only in private facilities.

Almost 70% of the population resides in rural areas. Basic health staff are the main health care providers for them. Generally, one rural health center (RHC) has four sub-centers. The staff is made up of one public health supervisor grade I at the RHC, four public health supervisors grade II (one at each sub-center), five midwives (one at the RHC and one at each sub-center), one lady health visitor at the RHC, and one health assistant at the RHC. The basic health staff is responsible for maternal and child health (clinic or homecare), school health, nutritional promotion, immunization, community health education, environmental sanitation, disease surveillance

Table 2 Healthcare professionals in Myanmar

Professionals	2009–10	2011–12	2013–14
	N	N	N
Medical doctor	24,536	28,077	31,542
Public*	9,728	11,675	13,099
Private	14,808	16,402	18,443
Nurse	24,242	26,928	29,532
Midwife	19,051	20,044	21,435
Pharmacist**	1,998	2,405	2,553
Medical technologist**	2,085	2,458	2,604
Dentist	2,308	2,770	3,219
Public*	703	774	782
Private	1,605	1,996	2,437
Dental nurse	262	316	357
Traditional medical practitioner	6,627	6,752	6,963
Public*	890	885	1,048
Private	5,737	5,867	5,915
Lady health visitor	3,278	3,371	3,467
Health assistant	1,845	1,893	2,062
Health supervisor	2,174	2,330	5,650

Data from Health in Myanmar 2014[13]

* Includes those who had a part time job in private factilities.

** Data from an unpublished source

and control, treatments of common illnesses, referral services, birth and death registration, and training of volunteer health workers (community health workers and auxillary midwives). These health workers face many challenges in their effort to reach out to the remote villages, with meager resources and support.

According to World Health Organization (WHO) health statistics, in 2013–2014 the number of doctors, nurses and midwives, and dental surgeons per 100,000 population in Myanmar were 61, 100, and 7, respectively, while in South-East Asia as a whole there were 59, 153, and 10, respectively.[14] Despite an increase in health workforce, there is an uneven spread of skillful health workers between urban and rural areas.

2) Education for healthcare professionals

The MoH, Ministry of Education, and Ministry of Defence are responsible for the training and production of different categories of health workforce for the whole population. There is no private medical university in Myanmar. Under the MoH and Ministry of Education, health professionals are being produced by 15 universities and 46 nursing and midwifery training schools. There are a medical school and an allied university under the Ministry of Defence. Currently, 39 doctorate courses, 12 PhD courses, 47 master courses, and 12 diploma courses are provided in medical and allied universities.[13]

To produce qualified medical doctors, the 9th Medical Education Seminar agreed to reduce the annual student intake of four medical schools from 2,400 to 1,200 (300 in each university) in 2012 and thereafter. Meanwhile, a new medical school was opened recently in Taung-Gyi, the capital city of Southern Shan State (150 students in 2015). In addition, the study period of medical students was extended from 6 years to 7 years.[15] For capacity building, candidates from different disciplines have been selected and sent for oversea training in the courses for PhDs, master's degrees, and other diplomas, as well as for short term training. Medical doctors, dental surgeons, and nurses must join the civil service in order to pursue postgraduate degrees. In Myanmar, the following examinations have been held with the close collaboration of Royal Colleges of the United Kingdom: Membership of the Royal Colleges of Physicians (MRCP), Membership of the Royal College of Surgeons (MRCS), Membership of the Royal College of Paediatrics and Child Health (MRCPCH), and Membership of the Royal College of Obstetricians and Gynaecologists (MRCOG).[15]

Under the Department of Traditional Medicine, the University of Traditional Medicine was established in 2001, providing bachelor's and master's degrees. The bachelor's degree is a five-year course, including one-year internship. The curriculum covers traditional medicine, as well as the basic science of western medicine. The yearly intake is about 100 candidates. The University had already produced 1,139 graduates. In the year 2012, the University opened a Master of Myanmar Traditional Medicine course and Bachelor of Myanmar Traditional Medicine bridge course.[16]

3) Employment

Previously, the members of the public sector health workforce were hired as civil servants by the central government's Union Civil Service Board (UCSB). The employment rules and regulations were applied for all public health facilities. At present, the health workforces are recruited not only by UCSB but also by the state/region governments. In addition, they are hired with the civil servant benefits such as permanent contracts, career advancement, opportunities for postgraduate medical education, and so on. In Myanmar, the MoH is the key player in public sectors for the production, utilization, and governing of the health workforce.

Private sectors are more flexible in their employment systems. The recruitment systems and the

benefit packages offered to the health workforce are designed at each health facility. Compared to public health facility employment, private health facility employment is more attractive in terms of being located in urban areas, offering a higher salary, and providing better working conditions, although there are disadvantages in terms of postgraduate medical education.

MORTALITY

Although reporting systems based on ICD 10 exist,[17] the mortality data are not completely available. Accordingly, the mortality rate of each cause of death cannot be calculated, but the percentages of causes of death are obtainable from hospitals.[12,13,18] Table 3 shows the frequent causes of death reported from public hospitals,[12] which do not reflect all death, such as death outside of hopitals. In addition, the percentages may change according to the method of disease grouping. The figures should be interpreted carefully. The most frequent diseases in Table 3 are infection and parasitic diseases (22.5%), followed by circulatory diseases (17.1%) and deaths at perinatal period (12.3%). Since the age distribution of the deceased patients in hospitals is not described in the document, comparison of the percentages with those in a general population is not possible. Age-specific mortality by cause is not available.

Table 3 Top 10 grouped causes of mortality in percent by sex from hospital reports, in 2012, Myanmar

Group basic code	Causes	Males n=18,303	Females n=12,239	Total n=30,542
001–057	Certain infection and parasitic diseases	23.0	21.9	22.5
143–164	Diseases of the circulatory diseases	16.2	18.4	17.1
245–253	Certain conditions originating in the perinatal period	11.9	12.8	12.3
271–289	Injury, poisoning and certain other consequences of external causes	13.8	8.7	11.8
165–179	Diseases of respiratory system	8.0	9.4	8.6
180–197	Diseases of digestive system	9.7	4.7	7.7
267–270	Symptoms, signs, and abnormal clinical and laboratory findings	4.1	5.2	4.5
058–096	Neoplasms	4.0	4.7	4.3
211–233	Diseases of genitourinary system	2.2	3.1	2.6
120–129	Diseases of the nervous system	2.3	2.5	2.4

* Data from page 48 in Annual Hospital Statistics Report 2012[12]

MILLENNIAUM DEVELOPMENT GOALS

The United Nations Millennium Declaration was signed by 189 countries in 2000, which was translated into eight MDGs by 2015 for development and poverty eradication. Myanmar is one of the signatories for the MDGs. MDGs 4, 5, and 6 are on health, and related to each other. However, the achievements of these health-related MDGs are not uniform, based on limited data reported.[3]

MDG 4 is on the reduction of child mortality by two-thirds between 1990 and 2015, based on three indicators: under-five mortality rate (U5MR), infant mortality rate (IMR), and proportion of 1 year-old children immunized against measles. Myanmar has shown moderate progress in this

goal. The U5MR is trending downwards, falling from 106 per 1,000 live births in 1990 to 79 in 2000 and 52 in 2012. The IMR has also fallen in the past ten years from 79 in 1990 to 41 in 2012.[19] The coverage of measles immunization among 1-year-old children was 86.0% in 2013.[20]

MDG 5 on maternal health encompasses two targets: to reduce the maternal mortality ratio (MMR) by three quarters between 1990 and 2015, and to achieve universal access to reproductive health by 2015. Indicators for the latter include the proportion of births attended by skilled health personnel, the contraceptive prevalence rate, the adolescent birth rate, antenatal care coverage, and unmet need for family planning. In Myanmar, the national MMR has declined from 520 per 100,000 live births in 1990, to 200 per 100,000 live births in 2013.[21] Overall, a slow upward trend in maternal health indicators was observed from 1990 to 2010 in Myanmar, though information on some indicators was unavailable. The proportion of skilled birth attendance in 2007 was 64.1%, reaching 72.0% in 2013.[21] The rate of antenatal care coverage of at least one visit in 2008–2012 was 83.1%. Regarding antenatal care, coverage of at least four visits was 73.4% in 2008–2012.[19] The prevalence of married women in Myanmar using any sort of contraceptive method has also been increasing gradually; yet rates of contraception use remain relatively low, lagging behind those observed in many other countries. The percentage of currently married women using any contraceptive method was 16.8% in 1991, 37.0% in 2001, and 41.0% in 2007.[22,23]

MDG 6 is the control of the "big three" infectious diseases; HIV/AIDS, malaria, and tuberculosis (TB). Among the health-related MDGs, MDG 6 is the only one for which targets have already been reached or are on track to be achieved by 2015 in Myanmar. HIV prevalence in the general population aged 15–49 years has stabilized at 0.6%.[20] Among the most-at-risk groups, such as men who have sex with men, female sex workers, and injecting drug users, HIV prevalence rates have significantly declined. However, HIV prevalence among newly diagnosed TB patients has fluctuated around the 10% level. Meanwhile, anti-retroviral therapy coverage among people with advanced HIV infection in Myanmar was still inadequate, at only 24.0% in 2010.

Regarding the MDG 6 targets for malaria incidence reduction, reductions in malaria morbidity and mortality have been observed in Myanmar since the introduction of the rapid diagnostic test and artemisinin-based combination therapy. From 1990 to 2010, morbidity fell from 24.4 per 1,000 to 11.7 per 1,000, while mortality declined from 12.6 per 100,000 to 1.3 per 100,000.[24] In spite of progress in combating malaria, it remains a major public health problem in Myanmar because of climate and ecological changes, population migration, development of multi-drug resistant *P. falciparum* parasite, the rise of insecticide-resistant vectors, and changes in the behaviour of malaria vectors. Two-thirds of the population still live in malaria-endemic area and malaria remains a leading cause of morbidity and mortality.[24] As in the other parts of the world, the use of insecticide-treated nets (ITNs) has helped to reduce malaria-related morbidity and mortality in Myanmar, but the total population covered by ITNs was only 4 million in 2011.[24] However, data were not available on the percentage of children under 5 years sleeping under ITNs and the percentage of children under 5 years with fever who received treatment with any antimalaria drug.

Regarding TB control, appreciable progress has been made in Myanmar as measured in both case detection and treatment success rates. TB case detection rate increased from 8.0% in 1990 to 71.0% in 2010, and TB treatment success rates rose from 77.0% in 1994 to 85.0% in 2009.[24] Deaths due to TB among HIV-negative people has also been reduced from 110 per 100,000 in 1990 to 41 per 100,000 in 2010.[24]

HEALTH COST PAYMENT AND INSURANCE

In Myanmar, health insurance was only provided for government employees by the government, and for employees of international organizations by private health insurance. Government expenditure on healthcare in Myanmar was 3.4% of general government expenditure in 2014–2015. Although financial allocation to the health sector and education sector has been increased, the percentage of out-of-pocket expenditures was still high.[25)]

Very recently, Myanmar government officially announced that the nation-wide health insurance policies would go on sale for the first time under a one-year trial as of July 1, 2015.[26)] State-owned Myanmar Insurance and 11 private domestic companies will offer identical policies, with customers able to buy between one to five units of coverage (one unit costs approximately 50 USD), with a single unit providing the most basic level of coverage. Myanmar citizens and foreign nationals residing in the country who are aged 6 to 65 years and in good health can buy the insurance. Insurers will pay approximately 15 USD per day of hospitalization per unit. A policy holder may receive 30 days worth of hospitalization costs per year. If a policy holder dies in hospital, their designated beneficiary will receive approximately 1,000 USD per unit of insurance in compensation.[26)]

Outside of the health insurance, Myanmar has a social security system called "the Social Security Scheme", run by the Social Security Board under the Ministry of Labour, Employment and Social Security.

INTERNATIONAL DONORS' SUPPORT OF HEALTHCARE

The main international organizations providing technical and financial assistances to promote the health status of Myanmar people are the WHO, the United Nations Children's Fund (UNICEF), the United Nations Development Programme (UNDP), the United Nations Population Fund (UNFPA), the Japan International Cooperation Agency (JICA), the Asia Development Bank (ADB), the World Bank, and the Three Millennium Development Goal (3 MDG) Fund. The United Nations Office on Drugs and Crime (UNODC), the United States Agency for International Development (USAID), the Australian AID, the United Kingdom Department of International Development (DFID), the Korea International Cooperation Agency (KOICA), and the Thailand International Cooperation Agency (TICA) also play certain roles in the support of healthcare systems in Myanmar.

In addition, 57 international non-governmental organizations working in Myanmar, as well as national non-governmental organizations such as the Myanmar Women's Affairs Federation (MWAF) and the Myanmar Red Cross Society, are listed in a governmental report.[11)] The list includes five Japanese organizations; the Japan Heart, the Japanese Organization for International Cooperation in Family Planning (JOICFP), the Japan International Medical Cooperation Organization (JIMCO), the Peoples' Hope Japan, and the Save the Children Japan.

JICA PROJECTS IN THE FIELD OF HEALTH

JICA is the executing agency of Japanese Official Development Assistance (ODA). The ODA is broadly divided into two systems. One is bilateral assistance, which is given directly to recipient countries from Japan. The other is multilateral assistance, which is provided through international organization such as the World Bank, the United Nations Development Programme, the WHO, and so on. JICA has the responsibility of bilateral assistance in the form of Technical

Cooperation, Japanese ODA Loans and Grand Aid.[27] All of JICA's assistance is carried out in principal under the international agreement between each recipient government and the Japanese government. Japan ODA began in 1954 as part of post-war reparations, and JICA was established in 1974.[27-29] The ODA budget has increased in line with Japanese economic growth. In 1989, Japan became the number one donor by amount of ODA. In 2014, Japan was the fifth largest donor in the world.[27,30]

Japan ODA is based on three basic policies, which are "contributing to peace and prosperity through cooperation for non-military purposes", "promoting human security", and "cooperation aimed at self-reliant development through assistance for self-help efforts". Japan considers ODA as "investment in the future", which secures the development and prosperity of the world as a whole, including Japan.[27,28,31] In the field of health, the international community, including Japan, has been working together to achieve the health-related MDGs. In 2013, Japan formulated "Japan's Strategy on Global Health Diplomacy", which positions global health issues as a priority for Japan's diplomacy. It also sets policies for the private and public sectors to work together on the purpose of improving global health.

In February 2015, Japan revised the ODA charter, which was decided as the foundation of Japan's ODA policy in 1992 and revised in 2003. The new charter was named the "Development Cooperation Charter", and contains a broader sense of cooperation. The world is globalizing politically and economically, which makes development issues more diverse and challenging.[28,29] Japan is trying to expand the scope of traditional ODA and invent synergetic effects with other funds like local authorities or private companies.[31]

In Myanmar, JICA has been working on promotion of social participation by the deaf community. Through this project, a standard of sign language was decided and sign language teachers were fostered. Today, sign language teachers have become instructors and are teaching others to increase the number of sign language interpreters.[28] JICA has been working on a variety of healthcare projects in Myanmar since 2000. The projects include projects related to healthcare system preparation and reinforcement, infection control projects like HIV/AIDS, TB, malaria and others, maternal and children's healthcare projects and projects related to traditional or alternative medicine.

RECOMMENDATIONS

There seems to be two important views: one for Myanmar government and the other for international donors. The former suggests an increase in fund allocation to public healthcare services, which will not only expand the services, but also improve the quality of health services. Generally speaking, the larger amount of services causes reduction of the cost per service, improving skills for services.

The latter suggests tighter networks among the donors. Networks may reduce the overlapping functions of the donors, avoiding duplicated donations. The civilian government can allow the donors to discuss the healthcare systems more openly one another.

CONCLUSION

This paper briefly describes the current situations of various aspects of healthcare in Myanmar, based on the most up-to-date data sources. Although the health conditions in Myanmar have been improving as exemplified by MDGs, there is a serious lack of facilities and healthcare

professionals. A new attempt to introduce a health insurance is expected to further improve the conditions. National and international support is needed for successful improvement.

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COMPETING INTERESTS

The authors have declared that no competing interests exist.

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