

Situation, Challenges and Potential Reforms for Healthcare Systems of Malaysia and Bangladesh: Overview of Dental Counterpart

Malezya ve Bangladeş Sağlık Sistemlerinde Mevcut Durum, Zorluklar ve Potansiyel Reformlara Dış Hekimliği Cephesinden Genel Bakış

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Abstract

Objective The purpose of this research paper is to concisely discuss the health care systems of two middle-income countries, Malaysia (upper middle-income) and Bangladesh (lower middle income) using published government documents as observed by dental counterparts. These international appraisals of health systems allow a reflection on and evaluate health care performance of these two countries which could influence policy makers to promote accountability. Whilst most international comparisons seek to identify high performers with the best outcomes, these cross-national comparisons provide empirical bases to drive reform for better health policy. The first part of the research paper will focus on the overview of both organisations that includes description, structure and governance of health care systems, includes dentistry across above-mentioned countries. The second part of this paper will analyse, evaluate and compare financial support, workforce and health delivery concerning equity and efficiency of services. Finally, a summary of the healthcare systems, including an overview of recent changes and proposed future reforms in these countries will be provided.

Keywords healthcare, challenges, Malaysia, Bangladesh and dental counterparts

Özet

Amaç Bu araştırmanın amacı, iki orta gelirli ülkenin, Malezya (üst orta gelirli) ve Bangladeş'in (düşük orta gelirli) sağlık sistemlerini dışhekimliği tarafından gözlemlenen yayınlanmış devlet belgelerini kullanarak tartışmaktır. Sağlık sistemlerinin bu uluslararası değerlendirmeleri, politika üreticilerini hesap verebilirliği teşvik etmeyi etkileyebilecek olan bu iki ülkenin sağlık hizmetleri performansına bir yansımaları ve değerlendirmesi sağlar. Uluslararası karşılaştırmaların çoğu, en iyi sonuçları elde eden yüksek performans gösteren kişileri belirlemeye çalışsa da, bu ülkeler arası karşılaştırmalar, daha iyi sağlık politikası için reformu teşvik etmek için ampirik temeller sağlar. Araştırma raporunun ilk kısmı, sağlık hizmetleri sistemlerinin tanımı, yapısı ve yönetişimini içeren her iki kuruluşun genel bakışına odaklanacak ve yukarıda belirtilen ülkeler arasında dış hekimliği konularına odaklanacaktır. Bu yazının ikinci kısmı, hizmetlerin eşitliği ve etkinliği ile ilgili finansal destek, işgücü ve sağlık dağıtımını analiz edecek, değerlendirecek ve karşılaştıracaktır. Son olarak, bu ülkelerde yapılacak son değişikliklere ve önerilen gelecekteki reformlara genel bir bakış içeren sağlık sistemlerinin bir özeti sunulacaktır.

Anahtar Kelimeler : Sağlık, zorluklar, Malezya, Bangladeş ve dış hekimliği

INTRODUCTION

Upper Middle-Income Country of Malaysia

Malaysia is a country in South-East Asia. It is composed of two different regions, Peninsular Malaysia and East Malaysia^{1,2}. The country has three federal territories and thirteen states. The country practices parliamentary democracy and the Prime Minister leads the government along with a constitutional monarch. Malaysia is an upper middle-income country that enjoyed political and financial strength. While Islam is the official religion of the country, it is a predominantly secular country where a multicultural society lives harmoniously. The country had an average annual growth rate of 1.1 per cent and the estimated population in Malaysia is 32.4 million in 2018^{3,4}. Furthermore, as indicated by national statistics, three-quarter of Malaysians live in Peninsular Malaysia while the rest reside in East Malaysia⁵. The surface area of Malaysia is approximately 330,800 square kilometres with a population density as of 2018 of 98 individuals per square kilometre⁶. On the other hand, based on the 2017 Salaries and Wages Survey Report, the average monthly income of employees has increased 8 by 1% to Malaysian Ringgit (MYR) 2, 880 compared to the previous year⁷.

The Malaysian population is maturing. Even though the statistics reported that only 6.5% of the population are aged 65 years and above in 2018³, it is estimated that the volume of senior citizens will increase by double digits by 2040⁴. This mirrors the maturing population trend experienced by numerous different countries⁸⁻¹⁰. In recent years, the life expectancy at birth for Malaysia in 2016 is 75 years¹¹. Meanwhile, the male to female ration is at 107 males per 100 females. Approximately 89.7 % of the population are Malaysian citizens originated from a range of ethnic groups, specifically the Bumiputera (69.1%), Chinese (23.0%), Indians (6.9%) and others (1.0%) recorded in 2018³. In this way, the past and current patterns of the local contexts can be utilised to determine whether the Malaysian population is young, growing or maturing.

Malaysia has cultivated various affiliations and collaborates with various international associations, such as the World Health Organizations (WHO) and Association of Southeast Asian Nations (ASEAN) in its effort to enhance general wellbeing^{12,13}. Consequently, Malaysians have profited from a well-developed health care system, better access to clean water and sanitation which has reduced contagious disease illnesses. Nevertheless, the transferrable contagious diseases still remain a concern¹⁴.

Bangladesh (Lower Middle-Income Country)

The People's Republic of Bangladesh (Bangladesh) is a South Asian nation situated by the glimmering Bay of Bengal. Bangladeshi land area is only 147570 square kilometre, which is smaller than Malaysia. However, in spite of having a smaller land area, the country has a significant larger population with around 163 million, s^{15,16}. Furthermore, over 725,000 Rohingya refugees are residing in the country. Bangladesh was reported as the twelfth most densely populated in the world and eighth most populous in South Asia region¹⁷⁻¹⁹.

Bangladesh is a perfect example of a secular country and freedom of religion. This is demonstrated by its population where 88.4% or a majority of its citizens practice Islam, 9.5% Hinduism, 0.3% Buddhism and 0.2% Christianity²⁰. In view of recent financial development, Bangladesh has made more prominent gains in a number of indicators than some of its neighbouring countries with higher per capita income. Over the last few years, the country has achieved drastic advancement in its gross domestic product (GDP) which increased from 1,236 US \$ in 2014-15 to 1,677 US \$ in 2017-18²¹. As it is projected that Bangladesh is going to accomplish the middle-income country status²², Bangladesh is qualified to upgrade its status from a least developed country (LDC) to a developing country²³.

Meanwhile, poverty in Bangladesh is widespread and has always been a concern for Government of Bangladesh. To overcome this, the government has put forward legislation

that have had remarkable progress such as an increasing life expectancy during childbirth (71.7%), and increasing literacy (71.0%)²⁰. The Bangladesh government has also been involved in various collaboration and affiliations with non-government organisations (NGO) such as WHO, United Nations International Children's Emergency Fund (UNICEF), and United States Agency for International Development (USAID) to ensure that the people of Bangladesh enjoy sustainable well-being.

Malaysia's Ministry of Health (MOH) and The Oral Health Program (OHP) Malaysia –Description, Structure and Governance

The Malaysian health care system is divided into two segments, the tax-funded, government-run universal services and the fast-growing private sector¹⁴. The public sector health services are organised under a civil service structure and are managed by the Ministry of Health [MOH]. Every health care professional in Malaysia is regulated by several certified statutory bodies²⁴.

The fast-growing private services are nevertheless predominantly situated in the urban areas while the MOH designs and directs most public sector health services, so far, it exerts little regulatory power over the private sector^{24,25}. At the same time, MOH constantly administers the expansion of health facilities and promotional activities which are fortified by a trade liberalisation policy recently introduced in the country. This is believed to increase population health awareness^{26,27} and could enhance their level of service uptake²⁶. Meanwhile, the ongoing policy that permits the freedom of movement of foreign specialists, including dentists into the country is believed to increase the number of foreign medical professionals in Malaysia. The oral healthcare system in Malaysia involves many different public and private-agencies and organisations. In this light, regardless on whether they act directly or indirectly related to health, dental care facilities including private dental clinics and dental schools are regulated either by the Ministry of Higher Education (MOHE) and

the Ministry of Defence (MINDEF)²⁸. The Oral Health Program (OHP), previously known as Oral Health Division (OHD) in the MOH is the leading public agency which plays an important role in provide oral care to the Malaysian population. The division conducts various activities under its primary, specialist, and community oral healthcare programmes targeted towards toddlers, pre-school children, primary and secondary school students, antenatal mothers, adults and the elderly, as well as special care groups who are mentally, physically or economically disadvantaged^{28,29}. Fundamentally, Malaysian healthcare providers provides primary healthcare to the local community; where there is a referral system from primary to secondary or tertiary care in districts and urban hospitals³⁰.

Ministry of Health and Family Welfare (MOHFW) – Description, Structure and Governance

Initially, the health care system in Bangladesh was predominantly centred on providing remedial care, especially to women, child and newborn babies. A couple of decades later, the emphasis on the provision of healthcare has moved to health promotion and preventative services. Bangladesh has a well-structured health system which comprises of three pyramids of primary health care – Upazila Health Complexes (UHC) at the upazila level; Union Health and Family Welfare Centers (UHFWC), Union Sub-center and Rural Health Center at the union (collection of few villages) level and Community Clinics (CC) at the village level. These clinics provide secondary level care and are sponsored by district hospitals. Secondary level care is also given by General Hospitals, Medical College Hospitals, Nursing Institute, and a number of specialised hospitals such as Tuberculosis and Leprosy Hospital. Tertiary care is provided by a number of specialised institutes and facilities in divisional and national level. Therefore, in a nutshell, the health system in Bangladesh is based on sound standards enveloping a whole range of services and care ranging from health education to treatment, care and recovery. The framework also covers all divisions, districts,

sub-districts and rural communities in the country. In short, Bangladesh has a strong infrastructure for providing primary health care services³¹. The health sector is under the jurisdiction of the Ministry of Health and Family Welfare (MOHFW). The Government has divided by the Ministry into two parts- the Health Service Division; and Medical Education plus Family Welfare Division to ensure proper supervision, organisation and monitoring³¹. In this regard, the governance in the Bangladesh health system is pluralistic with four sectors working in various competitive and collaborative unification that allows each sector to perform its respective roles. These stakeholders include the government sector, the private sector, the NGO sector and the donor community. In this light, the government sector is responsible in enforcing and regulating policy as well as to provide comprehensive health services. Meanwhile, the private sector comprises of different private institutions and the NGO sector focuses on resource allocation to ease the government's effort in providing healthcare for the under-privileged and is part of a broad array of development interventions³². In the government sector, primary dental health care can be accessed until the upazila level. On the other hand, the private sector plays a crucial role at all levels.

Malaysia's Health Financing

The Malaysian public health system is financed by the federal government, mainly through general revenue and taxation collected, while the private sector is funded through out-of-pocket payments from consumers and private health insurance³³. The spending on health (at 4.4% of GDP in 2013) remains less than average for upper middle-income countries³⁴. Future studies predict similar expenditures until 2030³³. The lack of government spending on oral healthcare has caused concern with respect to the government's ability to meet the increasing needs of the population. As a result, the government constantly provides a relatively low allocation for the MOH in the national budget since the 1970s²⁹.

Malaysians of all age groups are eligible to receive publicly-funded dental services, but the range of services is limited in certain areas. In this regard, adults and the elderly enjoy highly subsidised treatments for tooth fillings, extractions, low-cost dentures and emergency treatments. The provision of highly subsidised treatments is costly and this creates a financial burden to the MOH as care providers. Thus, such treatments are only given on an appointment basis with limited slots available. There is a long waiting list for such services, suggesting a low uptake rate for dental services. On the other hand, schoolchildren up to age 18 enjoy dental treatment provided by dental therapists under the school dental programme, which offers totally free dental check-ups and treatments under parents' consent^{29,35,36}.

Meanwhile, adults and the elderly who choose private dental care in need to pay with their own money, since Malaysia has no dental health insurance systems. Furthermore, only a limited number of private organisations (employers) provide dental insurance with subsidised dental care as part of their employee benefits^{29, 33}. This suggests that there is some impediment for dental care due to financial costs. This pattern of spending calls for debates on providing financing options, including the establishment of a social health insurance scheme.

Bangladesh's Health Financing

Health financing in Bangladesh is mainly tax-based, and receive financing from development partners. In Bangladesh, the Total Health Expenditure (THE) is about 3.4% of GDP, where the government contribution is almost 30% of it³⁷. In this manner, the country's THE is about US\$ 12 per capita while public health expenditure is only around US\$ 4³⁸. 63% of the total expenditure on health is privately financed through Out-Of-Pocket (OOP) payments and the remaining 23% (public financing) is financed by the government. More precisely, the government finances 26% of THE in the rural area and 17% of THE in the urban area. On the other hand, the OOP health expenditure is

61% of the THE in the rural area and 68% of the urban THE, respectively³⁷. Similarly, the public dental health sector in Bangladesh is funded by the government while there is a larger private medical industry comprising of private hospitals; clinics as well as private chambers which are funded by out-of-pocket expenditures. In this regard, unlike in other countries where health insurance is used as a mechanism for financing private health care, it has not yet been utilised fully in Bangladesh. Despite the various employer-operated scheme offered by public and private sector, these schemes only cover limited additional cost of charged by public facilities or charges in private facilities. These health insurance schemes are often included in the health allowance benefits offered to employees.

Medical and Dental: Facilities and Workforce Government of Malaysia

The number of private and public primary care providers, including dental clinics, has increased along with the quantity of hospital beds³⁹⁻⁴¹. Moreover, the supply of health professionals has expanded over the years, as the result of the government's effort to increase medical training facilities. However, it is yet to reach the required number³⁰. The largest group of dental professionals comprise of registered nurses, including community and dental nurses. The majority of doctors are working in the public sector, particularly in district hospitals, compared to the private sector in 2016⁴¹. On the other hand, the present dental workforce in Malaysia comprises dental health professionals, namely general dentists and specialists, and dental auxiliaries. Dental auxiliaries consist of dental therapist, dental technicians and dental surgery assistants (DSAs) which are also known as Dental Care Professionals (DCPs) in the United Kingdom (UK)²⁹. In Malaysia, both the dental therapist and dental health professionals are considered as operating clinicians but their job scopes are varied based on the complexity of dental treatment and the age groups of the patients³⁴. According to the Dental Act 1971, previously, dental nurses (therapists) trained by the health ministry are only allowed to work in the public sector and

they mainly deliver oral health care to schoolchildren under the supervision of dentists⁴². In the meantime, with the provision of the newly established Dental Act 2018, dental therapists are now allowed to work at private sector and legislated to register with the Malaysia Dental Council (MDC) and the minimum age for them to start practising has been increased by one year to 18⁴³. This may suggest potential market changes of the future Malaysian dental profession^{35,43}.

Government of Bangladesh

Bangladesh has an extensive public sector health infrastructure across the country, which are provided through primary, secondary and tertiary health care facilities. The secondary and tertiary facilities are often more advanced than primary healthcare facilities. Bangladesh has been ranked at the top position of countries that provide free medical services at the community level through various public health facilities⁴⁴. However, the increased numbers of migration to the urban area has moved people to squat in urban slums in large cities and the rapid influx of migrants are creating continuous pressure on urban health care service delivery. In order to overcome this situation, the Government of Bangladesh has increased the number of public and private hospitals, including dental clinics and hospital beds. In all, there are 607 public hospitals under the administration of the Directorate General of Health Services (DGHS), which are still insufficient³¹.

It was reported that the Bangladeshi health workforce is plagued "shortage, skill mix and inequitable distribution". While number of the professional health workforce has increased over time, the number is still inadequate. The health workforce (doctors, dentists, nurses) is mostly concentrated in the urban areas. At present, there are 85633 registered physicians with a Bachelor of Medicine, Bachelor of Surgery or equivalent, and 8130 registered dental surgeons with a Bachelor of Dental Surgery and Equivalent 20. Meanwhile, low retention and absenteeism among health workers are two major problems in rural areas⁴⁵.

In a similar vein, dental service providers are concentrated in urban areas and dental services are provided by both the public and private sector. The positions for dental surgeons (dentists) are available at upazila-level but most of the positions remain vacant and at the same time, it is difficult to retain dental practitioners in rural areas. Meanwhile, dental auxiliaries are registered by Bangladesh Medical & Dental Council (BM&DC), and are referred as “dental technologists” in Bangladesh. As reported in 2012, the number of registered dental technologists were 1886⁴⁶, while according to the DGHS health and education survey, this figure has raised to 11216 in 2017²⁰.

In Bangladesh, dentists work as clinicians while dental technologists provide assistance to dentists. Foreign dentists are welcomed to practice dentistry in Bangladesh, since there are a lot of vacant positions in both the public and private sector. Prospective dentists need to pass the license exam conducted by BM&DC in order for them to practice in the country⁴⁷.

Medical and Dental Healthcare Services: Malaysia

Malaysians of all age groups are eligible for publicly-funded health services, however, these subsidised services are certain aspects, and the range of available services differs across the country. Furthermore, public primary care services are under considerable strain. Patients in public hospitals and health clinics often face staff shortages, hence, patients with non-emergencies might encounter long waits. The national health policies are mainly focussed on public health and health promotion²⁴. Hospital policies are created with two main objectives, empowering speciality care in large hospitals and enhancing the number of ambulatory centres¹⁴. In regard to dentistry, adults and the elderly are eligible for subsidised tooth fillings, extractions, dentures and emergency treatments. These treatments are available only on an appointment basis. This leads to a low uptake rate for dental service with limited slots available and long waiting list to obtain such services. In the meantime, schoolchildren up to age¹⁷, with their parents’ con-

sents, have access to free dental check-ups and treatments which are provided by dental therapists under the school dental programme^{29,35,36}.

Malaysia is constantly experiencing demographic and epidemiological transitions as the country approaches the developed nation status. The advent of new technology also expands the possibilities for intervention as the population’s demand for health care continues to rise. Undoubtedly, this will increase the expectation for more high quality health care. Hence, the government will need to address the growing concerns of equity and efficiency while balancing the policy-politic influence in such financial constraints for a better health reform for Malaysia in the year 2020 and beyond⁴⁸.

Medical and Dental Healthcare Services: Bangladesh

The health services in Bangladesh are provided by two main providers, the public and private sectors. Public health services, including health promotion and preventive services are provided by Ministry of Health and Family Welfare. The Government of Bangladesh is constitutionally committed to “supply the basic medical requirements to all segments of the people in the society” and the “improvement of the nutritional and the public health status of the people”⁴⁹. Primary and ambulatory cares are delivered through a vast network of public facilities, particularly community-based health care programme delivered by the community clinics⁵⁰. Patients tend to visit outpatient departments of major urban hospitals to receive ambulatory care. Meanwhile, secondary and inpatient cares are provided through public facilities at the upazila, district health clinics, medical colleges and specialist urban hospitals, as well as private hospitals which are mainly located in the urban areas⁵⁰.

Referral system plays a major role in the health care delivery system in Bangladesh. This ensures that minimal cost is spent. Community clinics are responsible to treat minor conditions while patients with more severe condi-

tions will be referred to bigger district hospitals or specialist hospitals. At present, there are 35 dental colleges and dental hospitals; 9 are public hospitals, and 26 are private. Both public and private hospitals have sufficient outdoor facilities and the fees for dental treatment are expensive at the private dental hospitals²⁰. In contrast, public dental hospitals offer lower fees for dental treatment. Therefore, they attract more patients and there is a long waiting list, since the fees are cheaper at public hospitals. Manpower shortage at the public dental hospitals has worsened the long waiting issue. Consequently private dental hospitals have more sophisticated treatment facilities based on appointment. The government of Bangladesh however does not provide any school oral health program and no NGOs have provided primary and secondary care for dental health services been reported elsewhere.

Bangladesh has set a good example of low cost provision of public healthcare and it has been proposed as a role model for other developing countries in the region. Yet, it is going through a transition period where the health system is facing enormous challenges in catering for the health needs of more than 163.0 million people, along with influx of forcibly displaced Burmese nationals. The sheer number of new arrivals has overwhelmed the existing health services and this caused significant gaps in the overall provision of essential lifesaving health services to affected populations and surrounding communities. In 1961, Dhaka Dental College, the first dental college was established at Bangladesh as part of the Dhaka Medical College. At that time, people's knowledge about dental treatment was very low. It took around 20 years for the dentists to achieve dental awareness among the people in the city. In 1980s, many dentists were given the opportunities to further their studies in various specialties area in Japan and other countries. However, despite the arrival of new technologies and new dental facilities in this country, the number of qualified dentists is still inadequate and the overall public oral health awareness is still low⁵¹.

The government will need to focus on this daunting emergency by for example, primary healthcare provision, reproductive, maternal and child healthcare as well as planning for outbreak preparedness and active responses. The Bangladeshi health system is at a crossroad and investment in health will contribute to the further improvement of the health of the population, and fulfil the government's mission to provide universal health coverage within the foreseeable future and attain its Sustainable Development Goals (SDG)⁵².

Recent Situation and Challenges: Malaysia

The Malaysia government has constantly adopted a balanced development approach that gives equal emphasis to both economic growth and the wellbeing of the Malaysians⁵³. While there is no standard definition of wellbeing, the term is generally associated with a standard of living and quality of life that encompasses economic, social, physical and psychological aspects, and is beneficial for society^{54,55}. Since 1957, the public has recognised the importance of health care services and the government has worked to provide equitable health care and health care financing^{25,33,48}. The ministry has reorganised public primary health care services and accelerated their growth^{25,56}, particularly after the Alma Ata Declaration in 1978⁵⁷.

As stated earlier, the Malaysian government finances the public health services through the Consolidated Revenue Fund under the Ministry of Finance, while the sources from the private sector are essentially from the consumers. The system of financing is inclined towards the public sector and the public only has to pay a nominal fee of RM1 for each outpatient visit⁵⁸ in accordance to the Fees (Medical) Order 1976⁴⁸. Government employees and their family members are given free public healthcare and they benefit from these services even after their retirement. Meanwhile, private employees and those under Social Security Organization (SOCISO) and Employees Provident Fund (EPF) scheme do not receive any health benefits after retirement⁵⁸. The health care service in Malaysia is chang-

ing towards wellness service as opposed to illness service and as mentioned earlier, Malaysian Ministry of Health (MOH), being the main provider of health services, may need to manage and mobilise better health care services by providing better health care financing mechanisms⁵⁶. There are also ongoing changes in the country policy following newly introduced trade liberalisation, which also affects health services, including the medical and dental profession, due to tighter the regulation and legislation for the profession^{42,59}. Trade liberalisation in the dental sector has also been widely debated, as it shifts the economic factors from the public sector to the private sector⁶⁰. It also supports the extensive liberalisation policies on privatisation, fiscal austerity, deregulation, free trade, and reductions of government spending to enhance the role of the private sector in the country's economy^{61,62}. One of the impacts of this policy is the rapid growth in dental education, specifically in developing countries⁶³⁻⁶⁵ like Malaysia. This might also result in uncertainties in the future system, level of care, volume needed, market changes and production of future health workforce^{35, 66}. In this light, strong qualified health workforce is essential for countries to so that they can progress towards the goal of universal health coverage UHC to promote equity and social justice^{12,67}.

The recently announced Eleventh Malaysia Plan (11MP) 2016-2020 has presented a health plan that moving towards achieving universal access to quality healthcare⁵³. In the previous Tenth Malaysia Plan 2011-2015, the government invested significant resources to enhance the wellbeing of the Malaysian people. Improvements in the healthcare sector has led to an increase in life expectancy, decrease in infant and maternal mortality rates, and improvements in access to healthcare services²⁴. In the 11MP, wellbeing remains a priority for realising Vision 2020. Improvements in healthcare will focus on addressing underserved populations, improving health system delivery to enhance efficiency and effectiveness, and intensifying collaboration with the private sector and NGOs⁵³. This is line with WHO recommendation on universal health coverage

approach^{68,69}. Furthermore, the appointment of a new ruling party in the country has led to a growing expectation amongst public and health professionals on whether the healthcare and services in the country will be governed more effectively⁷⁰. The 11 MP is geared up as part of the Malaysian Budget 2019 tabled recently⁷¹, indicating there might be potential transformation and revolution in the Malaysian healthcare system^{48, 58}.

Potential Reform for Malaysia

As clarified earlier, expectation is rising following the appointment of a new ruling party in the country. This necessitates the new government to tremendously improve the level of healthcare in the country. Multidisciplinary involvements are required to promote health financing, health care and disease prevention. Thus, it is recommended for public and private sectors to work collaboratively. Furthermore, the role of traditional medicine should be increased to complement western medicine in medical therapy to support in the delivery of quality health care. Community involvement is also necessary to ensure this that large scale target could be reached. Moreover, the issue of universal health coverage should be addressed through efficiently delivering a wider range of care. This could be done through increase by promoting preventive, curative, rehabilitative, and palliative cares to all individuals, so that they have access to quality services they need at an affordable rate, based on the principles^{67,68}.

Another potential reform is to extend the health insurance coverage to dental services. The health insurance scheme, which requires compulsory contribution from employers and employees, is the main funding source for both private and public health care sectors. The traditional support systems in the country only permit medical counterpart to be covered while some private insurance schemes only covered certain types of basic dental treatments, limiting public access to optimum dental care. Therefore, governments need to mobilise these economic-social networks to overcome these problems.

Recent Situation and Challenges: Bangladesh

Bangladesh is a country with a large population, which is around 163 million¹⁵. Despite having a huge amount of Bangladeshi people, 725,000 Rohingya refugees had fled to Bangladesh since 2017, causing overwhelmed population living in this country¹⁷. Meanwhile, in order to overcome this matter, the size of the professional health workforce has been increased over time, but it still yet to fulfil the requirements. As a result, Bangladesh continues to suffer from a critical lack of human resource for health (HRH). The WHO recommends the ratio of 3 nurses for 1 physician, with more than 2 doctors in practice for every 1 nurse. However, in 2007, there were only around 5 physicians and 2 nurses per 10,000 population, particularly in hard-to-reach areas⁷² despite the density per 10,000 population of physicians and nurses had increased over the previous decade from 1.9 physicians to 5.4 physicians, and 1.1 nurses to 2.1 nurses. Similarly, density of dentists has increased, but remains very low from 0.01 in 1998 to 0.30 in 2007⁷².

On the other hand, most public and private dental clinics were situated in the urban areas⁵¹. Doctors posted to rural areas have low retention as they prefer to practice in private clinics in big cities. Thus, both pull and push factors are at work. There is a higher concentration of facilities in the urban areas; prospects of good private practice and better opportunities for higher education and training as well as a higher standard of living and more modern lifestyle. All of these have driven the professionals (doctors) out of the rural areas. Similarly, there are other factors such as the lack of infrastructure, supporting staff, and supplies in rural facilities; political interference, the lack of clear rules for “reward and punishment”, the absence of rules for rural postings and lesser promotion and education opportunities. Doctors in the rural areas also have lower standard of living, which all push professionals (doctors) towards working the urban areas⁷². In addition, the shortage of qualified doctors in the country is compounded by the fact that the “brain drain” (migration of skilled work-

force abroad) is relentless. In the meantime, most people living in the rural areas, especially schoolchildren, do not practice good oral hygiene care. Only one-third of primary schoolchildren in rural Bangladesh use toothbrush, causing a high number of gingivitis, caries and halitosis cases⁷³.

Potential Reform for Bangladesh

Even though Bangladesh has a well-structured healthcare system from to grass root level through the provision of primary health care, the provision of dental care is not yet optimum. There is still lack of dentists and dental facilities in the community level due to a human resource for health (HRH) crisis. Currently, there are 35 public and private dental college hospitals in Bangladesh which supply a qualified licensed dentists to practice in the urban and rural areas. Consequently, this study suggests that post-graduation courses and dentistry training should decentralized in order to train more dentists to serve in hard-to-reach areas⁷⁴.

To increase retention, currently the Bangladesh government has taken an initiative of recruiting a handful of doctors both MBBS and BDS approximately 10,000 through Bangladesh Civil Service (BCS) examination by the year of 2019., the number of recruitment through BCS for government job of BDS doctors (dentists) is quite limited in comparison to the MBBS doctors (physicians). Therefore, it is suggested to open up more facilities and posts for dentists in order to provide better dental care at community and grass root level. School dental care service therefore should be introduced in Bangladesh, in order to improve the oral healthcare awareness among schoolchildren.

Budget allocated to the health sector for the fiscal year 2017-18 was 5.4%, which was decreased to 5% for the 2018-19 fiscal year. This is far below WHO recommendation of 15% of the total budget needs. As Bangladesh has a much lower allocation, it is recommended for the government to offer higher allocation to the health sector in order to ensure universal provision of quality and affordable

health care to everyone ⁷⁵.

These cross-country appraisals of health systems allows a reflection of the respective country's effort to promote greater accountability among policy-makers in order to drive reform for a better health policy. Hence, it is apt to perform comparisons between high performing countries with the best outcomes if it could provide empirical bases for better governance .

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