

## Comparison Review on Healthcare System between Cambodia and Kazakhstan

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**Abstract:** This review was indicated on healthcare development of Cambodia and Kazakhstan. This paper aimed to comparison studies on healthcare system between Cambodia and Kazakhstan. The healthcare system of these two countries is significantly different, and healthcare reform in Kazakhstan was just a little better than in Cambodia; although, the health situation in both countries was virtually the same, and needs the government to improve more on this sector. The MOH is the principal authority who has overall responsibility on this sector, and strongly assures this sector has been improving. In suggestion, to enhance this sector, MOH should be watchful on policies, legislation, strategic plan, financing and increasing health workforce.

**Keywords:** Healthcare situation, Healthcare delivery system, Healthcare expenditure, Quality

### INTRODUCTION

Cambodia is an agricultural country located in Southeast Asia with a surface area of 181,035 km<sup>2</sup>. The population is approximately 15,578,000 in 2015. The proportion of the population living in rural areas is 80.5%; only 19.5% of the country's residents live in urban areas [1]. Kazakhstan, a republic of the former Soviet Union that has been independent since 1991; it is situated in the central part of the Eurasian continent. Kazakhstan is the ninth largest country in the world — covering more than 2.72 million km<sup>2</sup>, with a 2015 population of 17,625,000 [2, 3]. This country is the one most sparsely populated in the world.

Cambodia and its population experienced civil war and genocide in the 1970s, which decimated a large part of the infrastructure and skilled human resource [4]. Kazakhstan, after independence, the country also faced many challenges including an oversized and inpatient-oriented system of health facilities and a drop in health financing in the early transition year [5]. The two most salient health-related problems linked to poverty in Cambodia are malnutrition and access to health care, and it is estimated that currently, approximately 34.7% of the total population are living below the poverty line [6]; because The health system of Cambodia has suffered from war and chronic under funding and is having a more difficulties to cope with the health needs of the population in the latter half of the 20th century [7, 8]. Kazakhstan, since 1991, health care has consistently lacked adequate government funding; in 2005 only 2.5% of gross domestic product went for that purpose [5, 9]. It takes notice of the both

countries is trying to take action to development on healthcare for all people to access on this service. As a result, the healthcare sector of both countries is getting better than the past.

Cambodia, to improve the health status of the Cambodian people, the Ministry of Health (MOH) developed the Health Sector Strategic Plan for 2008-2015 (HSSP2). The HSSP2 is to enhance sustainable development of the health sector for better health and well-being of all Cambodian, especially of the poor, women and children, thereby contributing to poverty alleviation and socio-economic development; and to provide stewardship for the entire health sector and to ensure supportive environment for increased demand and equitable access to quality health services in order that all the peoples of Cambodia are able to achieve the highest level of health and well-being [10]. In the wake of the economic upswing fuelled by oil revenues in recent years, in 2004 Kazakhstan initiated a comprehensive National Programme of Health Care Reform and Development for the period 2005–2010 [5]. In 2010, the Kazakhstani government increased the budgetary allocation to the health sector of 4% of GDP, and a compulsory health insurance system has been in the planning stages for several years [9].

This paper aims to review the development on healthcare system in Cambodia, and to study on comparison with Kazakhstan, to find on the health situation, health financing, delivery of healthcare, and quality.

### Health Situation

The health outcomes of Cambodia have improved recently. The infant mortality rate has decreased from 45 per 1,000 live births in 2010 to 27 per 1,000 live births in 2014 [1, 11]. Life expectancy at birth is 67 years for males and 71 years for females [11]. General government expenditures on health per capital increased from US\$69.50 in 2012 to US\$183 in

2014 [4, 11]. The health status of the Cambodian people has steadily improved in a number of key areas; nonetheless, challenge remains in many other areas. In table 1 has shown the health statistic of Cambodia comparison with Kazakhstan by the World Health Organization on the homepage of World Health Statistic in 2016.

**Table-1: Comparison of Health statistic between Cambodia and Kazakhstan**

	Cambodia	Kazakhstan
Total population (2015)	15,578,000	17,625,000
Life expectancy at birth (male/female) (2015)	67/71	66/75
Maternal mortality rate (per 100,000 live births) (2013)	170	26
Mortality rate, infant (per 1,000 live births) (2014)	27	13.5
Total expenditure on health per capita (US \$) (2014)	183	1,068
Total expenditure on health as % of gross domestic product (GDP) (2014)	5.7	4.4

Source: WHO, World health statistics

Table 1 has demonstrated that the health outcomes of Kazakhstan and Cambodia were almost alike. Although, the health situation of Kazakhstan was preferable to Cambodia, and the health expenditure per capital was much more than Cambodia so far. So, to improve the health situation to be a good outcome, the Cambodian government should increase more on health expenditure.

### Healthcare Delivery System

Delivery of healthcare in Kazakhstan is provided by a network of primary, secondary and tertiary care facilities [5, 9]. Healthcare facilities are largely being exploited by the public sector represented by the Ministry of Health. Health insurance is now primarily provided by the government in the public sector. Cambodia has a mixed service delivery system. Public health service delivery is organized through two levels of services, both provided in all operational

districts: 1) The minimum package of activity provided at the health centres 2) The complementary package of activity provided at the referral hospitals [10, 12]. Kazakhstan, a big share of medical healthcare is delivered through a vast network of primary care facilities called ambulatories and polyclinics [9]. In Cambodia, patients can go to any doctor or any medical centre, including hospitals, which they choose without the referral slip but most poor people who live in rural areas prefer to go to visit the health centre first because of medical fees and transportation [6]. Table 2 has shown the health workforce per 1,000 populations between Cambodia and Kazakhstan. The findings made the result of the different year. Kazakhstan, the consequence received from 2005, and released by WHO Regional Office for Europe in 2007. Cambodia, the consequence received from 2012, and was announced by, Ministry of Health Workforce Projection Plan, 2012–2020, MOH Personnel Department.

**Table-2: Health workforces per 1,000 populations between Cambodia and Kazakhstan**

Cambodia (2012)			Kazakhstan (2005)	
	Specialist doctor	0.18	Physicians	3.53
	Dentist	0.16	Dentist	0.09
Secondary	Nurse	3.99	Nurse	7.83
Primary		2.30		
Secondary	Midwives	1.73	Midwives	0.39
Primary		1.53		
	Pharmacist	0.34	Pharmacists	1.03

Source: Ministry of Health Workforce Projection Plan, 2012–2020, MOH Personnel Department; WHO Regional Office for Europe

### Healthcare Expenditure

In Cambodia, since 2009, expenditures on health services were paid for by the government (21.27%), mainly from general taxation revenues with substantial support from external development partners, and out-of-pocket payments (73.1%) [13]. Government expenditure on health rose from US\$4 per capita in 2000 to US\$9.36 in 2009, and increased US\$ 183 in 2014 [11, 14]. Most out-of-pocket payments (68%) go to private medical services, including payments to unregulated private practitioners, to unofficial payments in the public sector and to various participation costs, such as transportation costs. Only 18.5% is spent in the public sector [14]. Coping strategies to pay these health costs include using savings (51%), using wages/earnings (45%), borrowing money (18%), and selling assets (8%), all of which can contribute to increasing poverty [14]. Kazakhstan, according to WHO report, the government expenditure on health rose from US\$128 per capital in 2006 to US\$1,068 in 2014 [3]. Public health expenditure of Kazakhstan consists of recurrent and capital spending from government (central and local) budgets, external borrowings and grants (including donations from international agencies and nongovernmental organizations), and social (or compulsory) health insurance funds.

### Quality

The government of Kazakhstan has been development of the system of quality control on the health sector since 1996, and the system was development to assess the quality of health service that is as part of the implementation process for the mandatory health insurance for the period 1996-1998 [15]. The MOH of Kazakhstan established new rules for the quality of the service provided by health facilities. In Cambodia, all private medical facilities must be registered with the MOH to provide services. In 2008, about half the total number of pharmacies, depot pharmacy and drug outlets were licensed (1,371) with 1,239 unlicensed [14]. Similarly, in the same year, around 40% of private clinic (1,513) were licensed, and 2,177 unlicensed. By 2011 the MOH reports that 100% of such facilities are licensed, and that the numbers have increased by about 35%. Public sector facilities are not required to register [14].

### CONCLUSIONS

In discussions, the healthcare system of these two countries is quite different based on some parameters. The comparison of the healthcare system between these two countries, we can obviously relate to the health reform in Kazakhstan was just a little better than in Cambodia; although, the health situation of these two countries is almost the same. The development on healthcare sector needs more to improve from the government. In order to improve the quality of healthcare in both countries, MOH has

overall responsibility of the health sector, including: policies, legislation, strategic planning, resource mobilization and allocation, monitoring, evaluation, research, providing training to support the provinces, and coordination of external aid. The MOH's main objective in health sector reform has been to improve and extend primary health services through the implementation of the operational districts system.

### Acknowledgments

The authors would like to thank the anonymous reviewers and the academic editor of this journal for the invaluable comments and suggestions which have substantially improved the manuscript.

### Conflict of Interest

No potential conflict of interest relevant to this article was reported.

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