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Management

Health workforce situation in rural areas, A Case Study from Cambodia

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ABSTRACT

Health service providers are the personification of a system's core values– they heal and care for people, ease pain and suffering, prevent disease and mitigate risk – the human link that connects knowledge to health action. At the heart of each and every health system, the workforce is central to advancing health. Healthcare workforce is fundamental to providing healthcare quality and access in rural areas. Rural healthcare facilities must not only have an adequately sized health workforce, but those professionals must be able to meet the needs of the community in many ways. Equally important, optimizing how health professionals are used and enhancing coordination among them helps to ensure that patients are getting the best care possible. This paper aims to investigate the factors and barriers that are the source of healthcare workforce shortage in the rural areas. Especially, this paper will explain efficient strategies to motivate and increasing the amount of workforce in order to balance the amount of population in rural areas and health human resource.

Introduction:

Cambodia is a low income country in Southeast Asia and has a total land area of 181,035 square kilometers, with the population of 15,578,000 (17). A large majority of the Cambodian population (80.5% according to the World Health Organization) reside in rural areas rely on agriculture for their household income. Cambodia's Human Development Index (HDI) is in the medium range, ranking 136 out of 187 countries and territories. Between 1980 and 2013, Cambodia's HDI value increased from 0.251 to 0.584. This means that Cambodia has continued to experience an upward, positive change between 1980 and 2013 in the three dimensions measured: life expectancy, education and gross national income per capita (Human Development Report). Cambodia and its population experienced civil war and genocide in the 1970s, which decimated a large part of the infrastructure and skilled human resource (1). The government introduced health sector reforms in the 1990s that emphasized strengthening and extending the delivery of primary health care through the district health system. Importantly, the Ministry of Health (MoH) and donor agencies have undergone a series of policy shifts in an attempt to strengthen the health system in order to provide equitable access to health care for the population. Health systems can be understood as encompassing the supply of services to the target population based on six functions: service delivery, governance, financing, pharmaceutical management, information systems, and human resources (7). Cambodia's health workforce is characterized by a low density of clinical staff (1 per 1,000 people) and an inequitable distribution between rural and urban areas (11).

Literature Review:

Approximately one half of the global population lives in rural areas, these people are served by only 38% of the total nursing workforce and by less than a quarter of the total physicians' workforce. At the country level, imbalances in the distribution of health workers are even more prominent, in both developed and developing countries (6, 16). The effect of these movements can be devastating in countries or settings where there is an absolute shortage of health workers (13). Health care workers in developing countries continue to lack access to basic, practical information to enable them to deliver safe, effective care.

In developing countries, many health care workers have little or no access to basic, practical information. Indeed, many have come to rely on observation, advice from colleagues and building experience empirically through their own treatment successes and failures. In the last decade, some important steps have been made towards meeting the information needs of the "upper" echelons of health professions (research and tertiary care), but remarkably little progress has been achieved in meeting the information needs of primary and district health care providers in the developing world. A qualified and motivated health workforce is a key component for health system strengthening and achieving the United Nation Millennium Development Goals (MDGs) (World Health Organization, 2006). Recommendations suggest a minimum ratio of 2.5 health workers per 1000 people to achieve MDGs for health (5). Nonetheless, most countries experience health staff shortages and misdistribution. This problem is aggravated in poor countries, where resources for producing health workers are scarce and retaining them in rural and remote areas is challenging. Health workers have tended to be concentrated in urban areas, while large rural populations remain under-served (4, 5). The scale of this problem varies considerably: Nepalese data show marked differences in physician-to-population ratios in urban (1:1000) and rural (1:41) areas. In India, 74% of physicians practice in urban areas, where only 26% of the population lives (2).

Healthcare Workforce situation and trends in Cambodia:

As widely recognized in the health literature, the amount and quality of human resources are key factors in achieving better health outcomes. As in other low income countries, Cambodia faces challenges to ensure healthcare delivery to people in rural and remote areas because of the unequal distribution of doctors and increasing shortages of midwives (12). Ministry of Health of Cambodia has identified human resource management is one of the core working principle of the health system. The need to ensure the sufficient staffing level with adequate professional profile and competencies, revision of the content of health professional, increase students' intake to school and university, and strengthening of measures to safeguard the quality of training and trainers to meet demand of people of Cambodia. There is a slower rate of growth in the number of Ministry Of Health civil servants compared to population numbers; the continued concentration of health workers in Phnom Penh; the absence of reliable data relating to the size, composition and distribution of the nongovernmental health workforce and on health-worker productivity; official recognition of the ubiquitous private pharmacy service together with consideration of a program for training of personnel; dissatisfaction with health-worker salaries despite recent increases and the limited number and poor distribution of incentive schemes; the introduction of a new health workforce projection tool for health workforce planning and incorporating data on private-sector training activities and the nongovernmental health workforce. Significant success has been achieved in rebuilding the health workforce since 1979, when only 25 doctors survived. In the early years, health planning focused strongly on increasing staff training and staff numbers. Major planning documents included the 1995 Health Coverage Plan and two MOH Health Workforce Development Plans for 1996–2006 and 2006– 2015. Even though, the private for profit sector boast the most facilities, the majority of Cambodian health workers are

employed in the public sector. Public health workforce headcount by 9% between 2004 and 2008, the population grew by only 6.5% (8, 9). Combined with the growth in private for profit facilities, these figure suggest that the ratio of health workers to population has been steadily increasing. Growth rate are, however, disproportionate, with the highest growth being in primary midwife and secondary nurse (15%) while the number of medicals assistant declined. Furthermore, the number of public medical doctors and primary nurse has not kept pace with population growth. Although the number of health workers has increased, their geographical allocation remains unequal and inequitable. There were a total of 18,133 public sector health workers in 2010 and 18,596 in 2011. Nurses and midwives together comprise 68% of the public sector health workforce.

Between 2010 and 2011, there was a 2.5% increase in the total public sector health workforce, including a 7.8% increase in the number of midwives and a more modest 1.8% increase in the number of nurses. The numbers of specialist medical practitioners, dentists and pharmacists also increased, while the number of general medical practitioners decreased by 1.1% over the same period. Data on the health workforce in the nongovernmental sector are not available. The current ministry of health staff is shown in the table.1, including geographical distribution between Phnom Penh city (center) and Provinces.

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Cadres	2012		2013		2014	
	Central	Provincial	Central	Provincial	Central	Provincial
Medical Doctors	879 (49%)	1278 (59%)	825 (38%)	1357 (62%)	761 (35%)	1431 (65%)
Pharmacist	204 (42%)	283 (58%)	222 (42%)	303 (58%)	211 (40%)	315 (60%)
Secondary nurses	1175 (21%)	4523 (79%)	1113 (19%)	4757 (81%)	1103 (19%)	4647 (81%)
Primary nurse	86 (3%)	3195 (97%)	84 (3%)	3228 (97%)	77 (2%)	3079 (98%)
Secondary midwife	271 (11%)	2204 (89%)	271 (9%)	2599 (91%)	257 (9%)	2763 (91%)
Primary midwife	5 (0.2%)	2183 (99.8%)	6 (0.3%)	2361 (99.7%)	6 (0.3%)	2342 (99.7%)

Table1. Ministry staffing by professions and locations, 2012-2014
Source: Department of Personnel, MoH, updated as April 2015.

A recent World Bank survey on health markets in rural areas estimated the contribution to service delivery at 50% from non-medical providers with 29% from qualified private providers and 20% from public providers (with 1% other) (13). The health workforce relies strongly on nurses, with 3.47 nurses to each doctor, partly because of the emphasis placed by the Health coverage plan on primary health care (PHC) services. At central and provincial levels, medical doctors are the largest component of the health staff, while in rural areas nurses and midwives prevail. Consequently, more than 40% of general medical practitioners are located at central-level facilities. Growth rate are, however, disproportionate, with the highest growth being in primary midwife and secondary nurse (15 percent), while the number of medical assistant declined. Furthermore, the numbers of public medical doctors and primary nurses has not kept pace with population growth. Although the number of health workers has increased their geographical location remains unequal and inequitable. The factors differences between midwifes and nurse were much better, but there was still a discrepancy in access between urban and rural areas. Like many countries, Cambodia has difficulty in posting and retaining doctors, nurses, and midwifes in disadvantages rural areas. The problem being challenge today are: Human resource shortage, Mal-distribution, Skill-mixed imbalance, Negative work environment, Weak knowledge base. The Ministry of Health has designed three strategies to tackle allocation and retention of health workers in rural areas (8).

Methodology:

This study research will be conducted by using the document analysis methodology. Document analysis is a form of qualitative research in which documents are interpreted by the researcher to give voice and meaning around an assessment topic (3). Analyzing documents incorporates coding content into themes similar to how focus group or interview transcripts are analyzed (3). There are three primary types of documents (10):

- Public records: Documents from Ministry of Heath of Cambodia, World Health Organization.
- Personal Documents: News agent, Facebook pages, relevant literatures.
- Physical evident: Documents will be record by my own study and research according to my previous experiences.

Factors driving the health human resource areas:

Figure 1.Factors related to decision to relocate, stay or leave rural and remote areas.
Source: WHO 2010a (15)

After reviewing and analyzing many related data, and especially the table about the number of healthcare workforce showed in the above, i find that the number of healthcare workforce cannot match to the amount of people in rural areas. The range of factors influencing workers' decisions about location and practice in a rural area are highlighted in Figure 1, and are taken from WHO's Increasing access to health workers in remote and rural areas through improved retention: global policy recommendations (14).
In Cambodia, health workers with very low and irregularly paid salaries are forced to seek alternative sources of income for their survival. Financial incentives have been shown to be an important motivating factor for health workers, especially in rural areas where government salaries and wages are insufficient to meet the basic needs of health workers and their families. Rural health workforce often faced the dilemma about how to manage their financial needs on a salary far below what they need to live. Despite recent increases, government salaries for health workers did not adequately reflect the cost of living. Health workers have always tended to move in search of better living and working conditions, and opportunities for professional development from rural to urban areas, or from public to private sector. Anyway, Health care workers receive an extremely low salary compared to living costs. To survive or cover their high living costs, health care workers seek alternative sources of income to supplement their low salary. Non-financial factors affecting health workers include: limited opportunity for promotion or professional development; poor education services, housing and other amenities for their family; weak managerial regimes; limited professional support; distance from family and different social or cultural background. Personal factors are related to the optimism and appreciation of work responsibilities and position.

A survey of 320 health workers in Cambodia identified their main sources of income, explored their motivations for remaining in the public health sector and investigated the size of the financial incentive required to retain and motivate health workers. The findings indicate that public salaries are a minor component of total remuneration, and almost 80 per cent of public health

workers have one or more sources of additional income, including private clinical practice, user fees, per diems and donor supplements (Cambodia, Kingdom of Ministry of Health). While most health workers believed that, they could earn significant more if they left government service, 94 per cent wanted to remain in the public sector. Reasons included developing a strong professional reputation, job security, training opportunities, and career progression.

Conclusion:

Healthcare workforce is fundamental to providing healthcare quality and access in rural areas. The study showed a variation of health human resources in the country from 1996 until the present. The health workforce is really important for caring and treatment, as well as the angels who save people's lives, especially in rural areas. The study showed the key factors that made a decision to continue working or leaving the rural areas. All of these factors make a gap between rural and urban areas, 80 percent of the Cambodian population live in rural areas, but most of the workforce gathered in the city or town, the shortage of health workforce has caused significant impact to the people in rural areas. Thus, the government should take measures and strategies in order to make a balance of the workforce, especially in improving rural health.

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