

# ANALYSIS OF THE HEALTH CARE DELIVERY SYSTEM IN PAKISTAN AND NEPAL

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## ABSTRACT

**Introduction:** A country's health system (HCDS) plays a key role in its growth and development. Providing efficient, high-quality healthcare leading to a marked decline in illnesses and deaths across the country. These amenities are delivered primarily to promote, protect and maintain the health of population and enable them to participate in the development of the country. Health currently is a global problem and HCDS and its challenges are different and specific in all countries of the world. The assessment of HCDS if a country is essential to determine its critical resources, challenges and efficient and judicial use of these resources. Here we study Pakistan's HCDS in contrast to Nepal, in terms of health services, finance, healthcare professionals, information, medical equipment and technologies, service delivery and finally make some commendations that address the system's critical problems.

**Keywords:** Health, Healthcare Delivery System, Pakistan, Nepal, Healthcare workforce

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## INTRODUCTION

The Health Delivery System (HCDS) delivers healthcare to people, societies and population through systematic efforts of individuals, organizations, institutions and resources. The key objective of HSDS is to protect, promote and preserve the health of community with special needs and values.<sup>1</sup>

Pakistan is a developing country that is the sixth most populous country in the world. It is predictable that if the population is not controlled, the country will be the fourth most populated country by 2050.<sup>2</sup> Pakistan has both provincial and federal governments. Pakistan's HCDS comprises both horizontal and vertical healthcare systems. Primary healthcare services are the foremost strength of HCDS of Pakistan and is delivered by lady health visitors (LHVs), lady health workers (LHWs), and community midwives. They deliver healthcare facilities to

communities at the doorstep.<sup>3</sup> The four approaches of delivery of healthcare amenities are preventive, promotive, curative and rehabilitative. Largely healthcare is delivered by two types of sectors, i.e., private sector and public sector. Public sector hospitals contribute 25% while 75% is contributed by private sectors.<sup>4</sup>

Nepal is a small country situated in Himalaya between China and India. Socioeconomically, it is a low-income country. The country is in transition phase from monarchy or unitary state to democracy or federalized system for changing and implementing new roles of the local, provincial and federal government. As per its constitutional article 35, every single national has the right to benefit free of cost healthcare facilities as well as emergency services and a clean environment. Now free healthcare facilities are being provided at Sub-Health Post, Health Post, Primary Healthcare Centers and at District

Hospitals.<sup>5</sup>

Healthcare services delivery is under local government whereas federal government will frame policies, plans and annual health budget. Being a signatory on Alma-Atta declaration 1978, goal of 'Health for All' was not though achieved but was close to the goal of MDGs, 2015.<sup>6</sup>

The main emphasis of the government is to provide curative services rather than preventive and promotive services. Nearly 5% of the whole budget is allocated for healthcare and a major portion of it is consumed on the hospital's development.<sup>7</sup>

## 2. Health Indicators of both Countries:

Despite socioeconomic and political instability and natural disasters in Pakistan, there is noticeable development in healthcare indicators in the last 25 years. This all is the result of public, private, national and international organizational support but still, there is a need for further improvement.<sup>8</sup> Ministry of Finance reported that life expectancy in Pakistan was 59 years in the year 1990 and now it is 66.6 years, maternal mortality rate is 130/1000, infant death rate is 69/1000 live births, under-five death rate is 85.5/1000 children and population growth rate is 1.92%.<sup>9</sup> Neonatal death rate is still much higher and reported to be 43/1000 live births.<sup>10</sup>

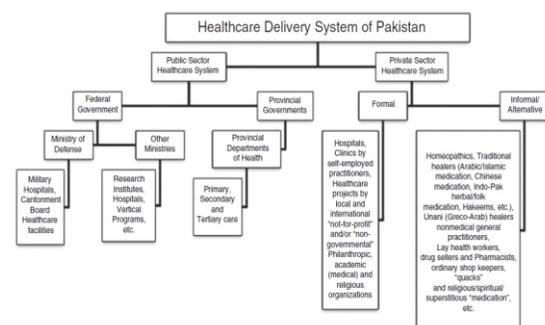
Nepal on the other hand has made an extraordinary improvement in healthcare indicators in past twenty years and declined its under-five death rate i.e., 386 per 1000 live births in 2015, reduced by 73% from 1999 to 2014. Infant death rate 338/1000 live births. Maternal death rate also declined as it was 790/1000 in 1996 and 190/1000 in 2013 declined by 57% from 1990 to 2014.<sup>11</sup> Its life expectancy is 68.4 and the population growth rate is 1.17%.<sup>12</sup>

## 3. Analysis of Healthcare Systems of both Countries:

Healthcare delivery systems of both countries are compared according to the framework proposed by World Health Organization (WHO) in 2000 and comprise the subsequent components, i.e., healthcare services, healthcare workers, financing, medical products and equipment, medical technologies, information, and service delivery.

### 3.1. Healthcare Services:

In Pakistan health services are delivered at three levels, first is Primary level which comprise basic health unit (BHU) and rural health center (RHC) at each union council. Secondary level consists of tehsil headquarters (THQ) and District health quarters (DHQ) at the tehsil level. The Third level is tertiary care hospitals which are affiliated with teaching institutions and are situated in large cities. A large proportion of population, about 75%, in Pakistan is using healthcare services throughout of pocket payment from private sector hospitals and only 25% of the total population is using free health services from public sector hospitals and these also include government employees and armed forces personnel.<sup>13</sup> Inadequate infrastructure and inequitable access between rural and urban areas are the main glitches in HCDS of Pakistan and make it non-responsive.



In contrast, Nepali government tries to deliver basic health services to every citizen. The government delivers specialized services and referrals through a chain of tertiary and teaching hospitals mostly situated in urban areas

throughout the country. Free health services in rural areas are provided through the expansion of basic health packages.<sup>14</sup> Community-based healthcare services are delivered that effectively diagnose and treat children and reduce deaths in children under five years of age due to two major diseases that is diarrhea and pneumonia.<sup>15</sup> The 2017 National immunization Program offered free immunization through community outreach and public efforts. This resulted in a massive decrease in childhood disease and death.<sup>16</sup>

### 3.2. Healthcare Workforce:

Pakistan among 57 countries is the one having extreme shortage of healthcare staff including doctors, nurses, paramedics, supporting staff and managerial staff.<sup>23</sup> Doctor to patient ratio is 1:1300 and nurse to population ratio is 1:3568 which is quite alarming.<sup>24</sup> Double job is common among healthcare workers due to less income that affects their attention and quality of service delivery.

In Nepal ratio of doctor to population is 0.17 per 1000 and nurse to population is 0.51 per 1000. This shows extreme shortage of healthcare workers as compared to the population. There is marked absenteeism of healthcare workers and a lot of vacant posts of health workers. Moreover, healthcare workers are lacking knowledge and skills to encounter the health demands of the population.<sup>25</sup> Only a few medical schools and colleges offer specialization resulting in lack of quality education and training. The licensure examination clearance rate is only 35% reported.<sup>26</sup> Nevertheless, medical education act, 2017 focused on quality education and training of healthcare workers and measures to reduce their shortage.

### 3.3. Financing:

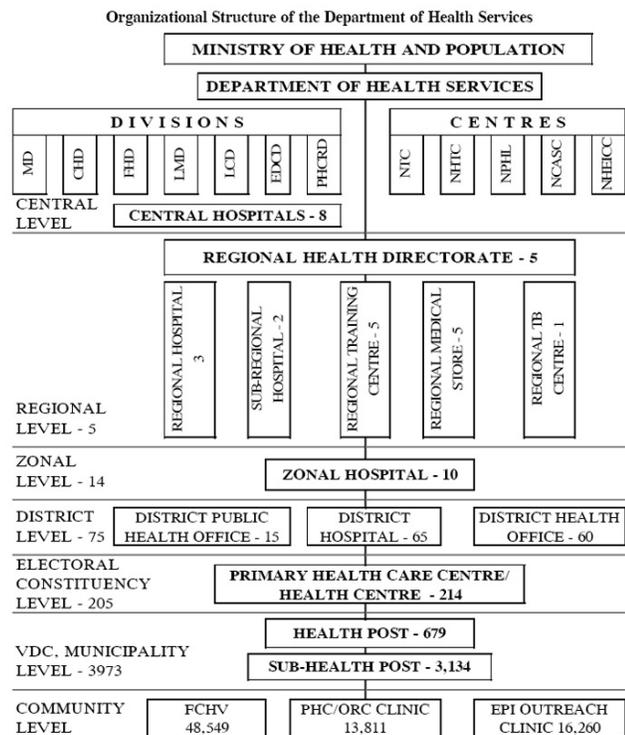
Financing means the procedure in which the revenue is generated and pooled in the delivery of healthcare services. Regrettably, a greater portion of revenue is not pooled in Pakistan with direct out of pocket payments.<sup>17</sup> Pakistan is a developing

country and spends only 0.6% on healthcare amenities. The overall provision of budget on healthcare facilities is only 3.4% of which 80% is spent on curative services and only 20% on preventive and primary healthcare facilities.<sup>18</sup> Underprivileged management and lack of knowledge leads to low utilization and lapse of funds. Donor financing in Pakistan is less than 2%. The non-profit organizations and agencies in Pakistan are HANDS, Aga Khan Health Services and Shifa International, whereas external agencies are Department for International Development, UK and USAID work together with the government to improve the health status of the country.<sup>19</sup>

In Nepal health is financed through government budget, out of pocket payments and donor funding. A huge amount of the budget is spent on essential services like education and social services.<sup>20</sup> Eventually leading to a less health budget that is only 3.9% was allocated for health in the year 2016-2017 as compared to 2005-2006, which was 6.3%.<sup>21</sup> This leads to increased utilization of private services. In 1990, there were only 16 private hospitals whereas in 2014 the number increased to 301.<sup>22</sup> Because of lack of amenities in public sector hospitals, individuals are progressively using private sector hospitals, and pharmacies and this results in high out of pocket expenses in the population.

### 3.4. Medical Technologies and Equipment:

In providing preventive, therapeutic and rehabilitative amenities healthcare organization requires various forms of equipment, diagnostic devices, vaccines, drugs and modern technology which is not existing in several HCDS of Pakistan. Health information management system is lacking the reporting and documentation of vital statistics in the country. There was no pharmaceutical company at the time of independence but now there are about 411 registered pharmaceutical companies of which 30 are multinational companies and provide 80%



**Figure 1b.1** Source: Administration Section, HMIS-MD, DoHS

**Acronyms**

MD	Management Division	NHTC	National Health Training Centre
FHD	Family Health Division	NTC	National Tuberculosis Centre
CHD	Child Health Division	NCASC	National Centre for AIDS and STD Control
ED/CD	Epidemiology and Disease Control Division	NPHE	National Public Health Laboratory
LMD	Logistics Management Division	FCHV	Female Community Health Volunteer
LCD	Leprosy Control Division	PHC/ORC	Primary Health Care Outreach Clinic
PHCRD	Primary Health Care Revitalization Division	EPI	Expanded Programme on Immunization
NHEICC	National Health Education, Information and Communication Centre		

of medicinal demands of the country and 20% of its manufacturing are being imported. Still there is a big room for improvement.<sup>27</sup>

Whereas, the first national drug policy in Nepal was formed in 1995 and restructured in 2007. The foremost aim of that policy was to guarantee every single resident of Nepal to receive effective, safe and quality medications at a judicious rate. Total figure of pharmacy retail outlets was 4957 and the wholesale-retail outlets were 855 in 2006, out of which mostly were in Kathmandu. At present, the state is facing a deficiency of resources, equipment and medicines which is a large obstacle in the attainment of the Universal Health Coverage goal.<sup>28</sup>

### 3.5. Information:

Health management and information system (HMIS) is a mainstay for organizing, recording and maintaining statistics related to healthcare.

This information is supportive in formulating policies, implementation of these policies and evaluation of the effectiveness of health-related strategies.

HMIS was introduced in 1991 in Pakistan and until now this system is still unable to show the true picture of health status in the country.<sup>29</sup> The government is still struggling to upgrade this system in partnership with the world health organizations.

Some private sectors and armed forces hospitals are sound in infrastructure and HMIS, providing healthcare in a much better way.<sup>30</sup>

HMIS in Nepal was activated at all levels, both in private and public sectors and plays key role in policy making and implementation. Alike other developing states, the HMIS of Nepal is also deprived of in precision and consistency. It is therefore the need of the hour to further mature HMIS through the collaboration of other organizations. Immature and unreliable HMIS would impact badly on the decisions and policy making specifically in such a republic which already has a shortage of resources.<sup>20</sup>

### 3.6. Service Delivery:

Healthcare service delivery system in Pakistan is both horizontally and vertically. In Pakistan, 1096 public sector hospitals, 5527 BHUs, 650 RHCs, and 5310 dispensaries. Public sector hospitals contribute 25% and 75% is contributed by out of the pocket private sector hospitals.<sup>31</sup>

On the other side in Nepal, there is significant progress in health services especially after the adaptation of national health policy in 1991. There are three levels of service delivery in Nepal, primary healthcare delivery system delivers care at district level through primary healthcare centers, sub-health posts, and health posts. Secondary and tertiary healthcare delivery services are offered through regional and

specialized hospitals in the zonal area.

There are 68 health posts, 3129 are sub-health posts, 89 hospitals, 187 primary healthcare centers providing basic health services across the country. But this infrastructure fails to cover the entire populace and private sector is leading service provider in the country.<sup>20</sup>

#### **4. Challenges of Health Care System:**

HCDS of Pakistan is facing many socioeconomic, political and cultural challenges. Corruption, political instability and interference, lack of resources and poor funding, are the chief contributors that hamper its development. A little of the whole budget is allocated to health services yearly. There is no proper referral system at primary healthcare centers which results in extra burden on tertiary care hospitals and consequently there is wastage of resources and poor service delivery. Over the counter sale of medicines is at its peak due to poor inspection and reporting.<sup>32</sup> Double job of healthcare workers is a routine practice that affects the excellence of services. Health disparities especially in rural areas are a major challenge.

Healthcare system of Nepal is also facing noteworthy challenges in the delivery of healthcare services including employees of health such as doctors, nurses, paramedics and a deficiency of medicine, medical equipment and supplies. Health workers are less equipped to accomplish the healthcare demands of the community. The human resource of Nepal comprises 35 thousand individuals who are incapable to meet the health demands of the entire populace. Consequently, there is temporary hiring of health workers and satisfying the health needs through private sectors.<sup>33</sup> The total health budget is quite short as compared to the needs. Health disparity in rural and urban zones is another great task. The increasing burden of non-communicable

diseases, mental health issues and natural disasters are additional key challenges.

#### **CONCLUSION**

The above discussion shows that both Pakistan and Nepal are facing many insufficiencies in their healthcare delivery systems. These insufficiencies must be overcome by upgrading the current healthcare systems. Dealing with the health disparities and the delivery of vital amenities to both rural and urban areas. It is therefore highly suggested to implement a multi-sectorial collaborative approach to improve the healthcare facilities. Furthermore, the healthcare delivery system is under the effect of multiple political, socioeconomic and environmental factors. Healthcare systems of Nepal and Pakistan are looking towards a political assurance to design, formulate and implement such policies which may lead the states to deliver universal health coverage for all populace.

#### **6. Recommendations:**

The writer highly commends that in relation to improving the HCDS of Pakistan and Nepal numerous approaches are being implemented. The governments of both states should upsurge the health budget and deal with fair allocation of resources in rural and urban areas. There must be an initiative for the quality production and development of health professionals according to the population ratio. The stakeholders must be involved in planning and implementation of health policies.<sup>34</sup> There must be more solidification of primary health services and a robust referral system must be implemented for the efficient use of amenities.

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### AUTHORSHIP AND CONTRIBUTION DECLARATION

Sr. #	Author's Full Name	Contribution to the paper	Author's Signature
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2	Shafquat Inayat	Review and format the article	
3	Mohammad Hussain	Provide guidance and support	