# **Review Article**

# Health Care Delivery System of Pakistan and Bangladesh: A Comparative Analysis

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Abstract: Health care delivery system is fair distribution, organization, and arrangement of health resources that serves best for any country's population efficiently and effectively for the achievement of organizational goals. Health care services are the multiple services providing to an individual, families, and communities by health care providers who are skilled to prevent disease, promote health, cure illness for the purpose of maintaining and restoring good health. Human development and economic solidarity can be increased ultimately due to better health that labor of a country. Productive human capital resources and healthy labor force can be achieved by planned healthcare services by the government for its people. Worldwide, health regions contrasts from country to country, it depends on how much costs on health is been efficiently utilized.

The primary contributors in health care services are private health sectors, donors, out of pocket expenditures in the most of developing countries which may increase human capital and economic growth of the country as, public health sectors remains deprived due to structural fragmentation, lack of resources, and functional inabilities. In this article we discuss about the healthcare delivery system of Pakistan versus Bangladesh such as organizational structure, analysis of both the healthcare systems, and some recommendations to improve healthcare reform and its application.

Keywords: Health care delivery, System, Pakistan, Bangladesh, Communities, Resources, Organization.

### INTRODUCTION

Health care delivery system (HCDS) depends on the participation of the people. Institutions, agencies and resources, that provide health services to encounter the health demand of the individual, public and population [1, 2]. The basic role of HCDS is to provide care, respect, dignity, value, promotion, restoration and alleviate the suffering of human life. Human needs and population prospects can be effectively achieved due to a good HCDS. Since 1947, Pakistan was inherited with the health care system by the British government. Health care delivery in Pakistan is the prime responsibility of provincial government. In the health care system employee's self-esteem plays a crucial role In the efficient delivery of health care [2]. The main foundation of the HCDS is to promote, to worth of human life, restore, and maintain the health of community that is planned around the health necessities and hopes of people [3]. Good health care services depends on resources as: man, money, and material, therefore, easy approach and availability of resources could contribute adequate health services.

#### HEALTH CARE SYSTEM IN PAKISTAN

There is a reasonable division of the personnel service framework in Pakistan; the public part of state subsidies and the private sector work independently to gain benefits. Some health indicators are improving, for example, vaccination and family scheduling. Lack of education, the low status of

\*Address correspondence to this author at the Lahore School of Nursing, The University of Lahore, Punjab, Pakistan. E-mail: khudija79@gmail.com women and inadequate water and sanitation have completely eased the trend of movement of health indicators for 65% of the country's population. Social barriers hinder the pursuit of healthy openness in the current successful therapeutic management. At the network level, the "Ms. Welfare Workers" program has earned worldwide prestige for its grassroots inclusiveness and support for a solid system that is considered essential for the Office at the tertiary level. However, limited working hours and remote areas of the framework cannot change the image. Subsequently, good practices and tendencies were moderated, especially at national civilian gatherings [4].

#### THE HEALTH STATUS OF WOMEN AND CHILDREN

The low social status of women leads to unacceptable and preventable maternal births and may be the highest mortality rate in South Asia. Undoubtedly, this seriously affects the well-being of women and their young people, especially confidence. In countries in the region, sick women report fewer opportunities to seek human services than men. Women's kids are being suppressed in the family and need to seek authorization from the head of the household or the male in the family to get recovery considerations. Maternal and child medical problems are extremely normal, but due to different reasons within the welfare framework, these issues have not been resolved. The lack of qualified female welfare workers limits women's access to appropriate considerations to a large extent. In Pakistan, more than 80% of births are made by

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untrained midwife or traditional birthing specialists. The suitability of the authorities is more subtle than the social standards and customer needs with clear sexual orientation [5]. In any case, despite the differences in the countries of the region, women in Pakistan have consistently visited health care providers (any framework), while men visit 5 times a year. Despite the problems of regenerative medicine, due to residential and sexual harassment, general deficiencies, grief and nervousness, an important reason for increasing the rate of lawyers may be long-term medical problems. Studies have shown that women's weights of various cardiovascular hazard

and nervousness, an important reason for increasing the rate of lawyers may be long-term medical problems. Studies have shown that women's weights of various cardiovascular hazard variables are more prominent than men's weights, which confirms the number of visits to rehabilitation institutions. Among young people under the age of 5, upper respiratory tract and gastrointestinal diseases (about 6 times a year) are the most common [6]. In Pakistan, the number of normal contacts with human service providers exceeds 54 years per year, four times a year. This visit even exceeded the number of visits in the United States. This reality may be attributed to the severity of the disease in urban and rural areas of Pakistan (an irresistible and non-transmissible disease). Diseases associated with need and underdevelopment are mainly found in rural areas, such as inadequate diet, intestinal peristalsis, intestinal loosening, disease, hepatitis, tuberculosis and other serious and repellent respiratory diseases. In addition, the medical problems of women are still uncertain, which has prompted women to seek medical services from a variety of formal and leisure professional institutions. Again, most of the urban population faces diseases such as diabetes, high blood pressure, malignant growth, joint inflammation and stroke. The whole process makes the huge burden of natural pollution and street traffic damage more chaotic [7].

## THE NON-COMMUNICABLE DISEASE BURDEN

Hypertension and diabetes are two central points in the growing burden of disease. In Pakistan, not all of these diseases are documented, and they are unusually obvious. Due to the predominance of cardiovascular infections, high blood pressure, diabetes, smoking and dyslipidemia become burden of diseases in Pakistan. In contrast, women in Pakistan have a greater clinical cardiovascular risk factor than men. Endless bronchitis is another cause of death. In the age group of 65 years and older, the prevalence of rural women is as high as 14%, while the prevalence of rural men is as high as 6%. In urban areas, the proportion of two people is 9%. Along these lines of thought, one might think that this may be the weight of a non-metastatic disease, and for this reason, such a large number of therapeutic drugs have been recorded [8].

### HEALTH AND ECONOMICS OF PAKISTAN

Health sector in Pakistan has predominantly been the financial analysis. These records were retrieved from financed from private out-of-pocket expenditure by the centre's various reports,. Government's contribution to Rural Health Centre

Shagram mainly serves three the total outlav was only 26.5% in 2007 while other population centers/valleys, though some rare cases also sources, mainly donors' funding through NGOs, come from outside areas. Households residing in these accounted for 3.5% in the same year. Governments of developing countries have always under pressure to meet the health care demands of their increasing growth rate. In South Asia, about 80% of the total amount paid on health care per annum is depends on amount of household out of pocket cost. Out of pocket finance in Pakistan is76%. This factor also determines the ability of individuals or families to meet their human service needs. Undoubtedly, this cost has greatly hindered the search for suitable medical services in Pakistan. This unpredictability is reflected in the pursuit of good behavior, including the use of home remedies and the use of drugs obtained from neighbors or drugs obtained from drug stores for self-medication [9].

#### PRIMARY HEALTHCARE

This is the first degree of Healthcare, where patients have their underlying cooperation with the framework and it gives remedial and preventive Healthcare Services. Basic Health Units and Rural Health Centers are situated at Union Council level and serve catchment populace of up to 25,000. Preventive corrective and referral administrations are given. Maternal and youngster wellbeing (MCH) administrations are likewise part of administration bundles gave at Basic Health Units. BHUs likewise give clinical, calculated and administrative help to Lady Health Workers (LHWs) Rural Health Centers (RHCs) serve catchment populace of up to 100,000 individuals. Here gave promotive, preventive, corrective, diagnostics and referrals alongside inpatient administrations. Additionally give clinical, calculated and administrative help to BHUs, LHWs, and MCH Centers [10].

#### SECONDARY HEALTHCARE

It is a moderate degree of healthcare that is responsible for the arrangement of specialized, remedial and analytic administrations. It is first referral level serving at area and tehsil. Authority discussion and medical clinic confirmations fall into this class. Tehsil Head Quarters and District Head Quarters Tehsil Head Quarters (THQs) serve a population of 0.5 to 1 Million people groups. The greater part of THQs has 40-60 beds. THQs should give fundamental and far reaching Emergency, Obstetrics and infant care. Give referral care to those eluded by RHCs, BHU and Lady Health Workers. Region Head Quarters (DHQs) are situated at area level and serves 1-3 million populace. DHQs give primitive, preventive, therapeutic, diagnostics, inpatient and referral administrations. All DHQs give referral care to patients alluded by BHUs, RHCs and Tehsil Head Quarters [11].

#### **TERTIARY HEALTHCARE**

Tertiary Healthcare medical clinics are for increasingly

concentrated inpatient care. Specific Healthcare benefits as a rule for inpatients and on referrals from primary or secondary wellbeing experts [11].

#### STATISTICS OF PAKISTAN AND BANGLADESH

The area of Pakistan is covered 881,913 km2 because of this Pakistan is the 36th largest country in the world. It is located in south Asia. Pakistan's population is about 185 million people [12]. The population of Bangladesh is more than142 million and its poverty rate is 33%. Bangladesh's in line with capita within system of health care spending is also low, accounting for 4.13% of its gross domestic product, which is specifically for prone companies which includes women and kids who face highest risk of health risks and high-quality of lifestyles troubles. In Bangladesh a multifaceted complicated phenomenon arises and its result on health factors [13].

#### HEALTH AND CHILD HEALTH STATUS OF BAN-GLADESH

The population of Bangladesh is more than 142 million and its poverty rate is 33%. Bangladesh's in line with capita within system of health care spending is also low, accounting for 4.13% of its gross domestic product, which is specifically for prone companies which includes women and kids who face highest risk of health risks and high-quality of lifestyles troubles. In Bangladesh a multifaceted complicated phenomenon arises and its result on health factors [14]. A loud decline in under-five mortality rate has been observed in Bangladesh during the last 20 years [6].

In this country other factors are interrelated on health issues, so the important thing drivers and capacity ways to solve those components through experience emerge as complicated elements. However, the social, care of health, dietary and financial opportunities of many women and young one's may be visible to be greatly reduced. In addition, family meals insecurity, inadequate care and practices of feeding, without facilities of health circle of relatives surroundings and lack of get right of entry to health care or insufficient clinical offerings can be a aspect influencing the health of kids and maternal health in Bangladesh.

According to the conceptual framework of the United Nations International Children's Emergency Foundation, there is a few studies-based totally evidence of the direct, essential and fundamental determinants of the health repute of children and pregnant female. In order to decide the precise health care system of youngsters and health, it's miles essential to recognize scientific desires and different related problems. The reason of this related literature review is to discover evaluation and summarize current research proof on the determinants of maternal health status and health of children in the population of Bangladesh.

# METHOD

After the extensive review of literature, each segment of the record which consisted on electronic data was explored to recognize the elements of maternal health and health of child in Bangladesh. Related data reviewed and collected from exclusive secondary resources together with the program of World food and the United Nations Development Program. In this regard all relevant information is collected manually and searched out in an easy manner. The record is primarily based on evaluation of an extensive published statistically information regarding health care system of Bangladesh.

The health repute of youngsters in Bangladesh is a primary determinant of infant health, together with increasing poverty that is related to the uncertainty of family meals. System of different health awareness like water, sanitation and sanitation determine the environment wherein children are uncovered to the environmental condition, which are caused and determines oh their hazard of illness. Infections and sicknesses impede the health of kids and ought to therefore be considered because the reason of baby mortality, as shown in Table 1. It is widely recognized that undernourished kids are broadly attributed to the dearth of sure vital micronutrients (Tables 1-3) [15].

Table 1. Health Indicators.

Indicators	Pakistan	Bangladesh	
Population under 15 years	34%	30%	
Population over 60 years	7%	7%	
Infant mortality rate/1000	42%	41%	
Maternal motality rate/100,000	170%	170%	
Crude birth rate/1000	31%	20%	
Fertility rate	3.2%	2.2%	
Immunization coverage	65%	87.5%	

Table 2. Demographics and Diseases.

Diseases	Pakistan	Bangladesh	
Communicable, maternal,	41%	46%	
prenatal, and Nutritional diseases			
Non-communicable diseases	59%	54%	
Cardiovascular diseases	21%	23%	
Injuries	16%	10%	
Cancer	6%	7%	
Diabetes	2%	1%	
Respiratory diseases	7%	5%	
Other chronic disease	7%	8%	

Categories	1994-95	1997-98	2000-01	2004	2012	2015
Morality of Neonatal	53	47	65	41	22	18
Morality of Postnatal	41	52	48	24	21	16
Morality of Infant	91	82	86	56	34	22
Morality of Child	43	53	66	42	29	11
Morality Under 5	142	127	98	78	52	42

Table 3. Mortality Status Bangladesh's Children.

In Bangladesh, the corresponding feeding methods are frequently inadequate or inappropriate and begin too early or too late, resulting in lower ranges of micronutrients in children. In addition to many research studies, dietary variety is a manner to conceptualize gold standard nutrient consumption. It hyperlinks family nutritional diversity signs to advanced vitamins consumption in the developed countries. Limitations of nutritional diversity increase micronutrient deficiencies, which are the main cause of child health issues in Bangladesh. Although breastfeeding is not unusual in Bangladesh, approximately 69% of health do no longer endorse breastfeeding exclusively at some point of the primary six months of lifestyles, for an expansion of environmental, cultural and financial motives [16].

# STATUS OF MATERNAL HEALTH IN BANGLADESH

The quality of life of among mothers of children with autism spectrum disorder was deprived and one in two mothers was found to have major depression in urban Dhaka, Bangladesh [17].

The quarter of global population is affecting due to deficiency of micronutrients and resulting in anemia. It is proved that in developing countries the burden of anemia is high due to poor dietary habits and inadequate intake of food rich in micronutrients such as fresh fruits and vegetables [18]. Maternal health is a main element affecting a child's dietary fame, in particular within the early tiers of infancy. The outcomes of the look at suggest that in Bangladesh, maternal factors have a significant effect on each nutritional severity and mild acuteness. It must be mentioned that low tiers of maternal nutrition are related to child waste, low birth weight, and a better threat of acute health issues. The motive of maternal health can also be visible in Fig. (1). The incidence of malnutrition among adolescent ladies and pregnant women in Bangladesh is excessive, with one 1/3 of female having low anemia and BMI [19].

#### NUTRITION AND DIET OF HEALTH AND CHIL-DREN

Food uncertainty is defined as the condition in which people do not have enough physical, social or economic access to food. Food security has a major impact on hunger and under nutrition. Under nutrition can lead to a vicious circle of disease and malnutrition. It has been discovered that there may be a robust high-quality courting among the feeding of own family ingredients and the negative feeding behavior of babies. Another aspect to consider inside the context of Bangladesh is how meals safety itself is laid low with seasonal elements. A previous look at in northern Bangladesh showed a close link between circle of relatives' meals anxiety and child losing and maternal health. The fashion of nutritional status of youngsters below 5 years of age turned into mentioned. The simple socio-monetary and gender-based totally elements of nutrition and maternal vitamins are extensively overlapped here. In addition, current studies have shown a courting among food costs and under nutrition [20].

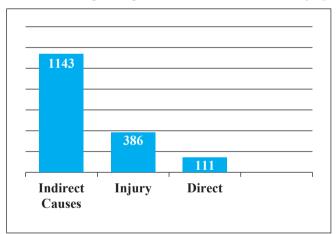


Fig. (1). Maternal Health Problems.

#### HEALTH SYSTEM AND CHALLENGES FOR BAN-GLADESH

In the hospitals within tertiary hospitals also encompass nation-degree high-quality specialty hospitals or facilities that offer high-cease clinical offerings, in particular in a selected vicinity of health care. The survey found that a complete of 626 public hospitals in Bangladesh provided 42,562 beds for inpatient services. Local hospitals are regularly known as secondary health care hospitals due to the fact, unlike medical university hospitals; those hospitals have a small variety of specialized care centers. The Medical School Hospital is positioned in a nearby city middle protecting multiple regions and gives specialist care in a huge range of disciplines. In the past few many years, Bangladesh has experienced fast expansion of secondary and tertiary care networks national, but this has not yet finished the preferred dreams. Despite the truth that compared to other developing international locations, Bangladesh honestly does not have sufficient beds to provide a big population. In addition, in lots of public hospitals, available ambulances do now not function or are used by physicians with other employees. It is obvious that Bangladesh has long lacked properly trained health staff assets, including docs, nurses and midwives. In quick, there may be a gap between the principles and practices of public health businesses, which seriously undermines the accessibility of regular human beings [15].

# **RESEARCH, DEVELOPMENT AND IMPROVEMENT OF HEALTH OF MATERNAL AND CHILD**

In Bangladesh, many institutions are worried inside the improvement, studies and development of maternal and child health care. In addition to those inside the Ministry of Health and Family Welfare, there are many government and non-governmental groups worried in the research and development of maternal health, including the National Institute of Population Research and Training, and the Bangladesh Institute of Essential Necessities. It need to be mentioned that maximum of these sports are carried out with the monetary help of donors. International and bilateral organizations together with the World Health Organization, the United Nations Population Fund (formerly the United Nations Population Fund), UNICEF, UNDP, the United Nations High Commissioner for Refugees, the World Bank, the Asian Development Bank and the Department for International Development (DFID) provide the foundation Facility improvement to improve the health zone additionally plays a crucial function in presenting coverage guidance and finishing support by financial management.

## CARE OF ANTENATAL IN BANGLADESH

Global policy attention and scale up efforts such as the Millennium Development Goals (MDGs) that focused on key aspects of improving child survival and health have played a major role in the reduction of childhood related diseases (including diarrhea, tetanus and measles), with subsequent impact on child mortality. Despite this improvement, child mortality remains a major health issue in resource-constraint communities in sub-Saharan Africa and South Asia countries, including Bangladesh [14], study revealed that multiple antenatal micronutrients and IFA (Iron Folic Acid) supplementation did not decrease all-cause infant mortality, but reduced the prevalence of stillbirths and preterm births [21]. This study found that a combination of IFA supplementation and ANC (Antenatal Care) TT (Tetanus Toxoid) vaccination were protective against postnatal and child mortality in Bangladesh [21].

# WASTE MANAGEMENT IN PAKISTAN AND BAN-GLADESH

Improper handling of infectious waste produces challenges for occupational and public health. Pakistan and Bangladesh are developing countries and facing many infectious diseases due to improper disposal of biomedical waste as hepatitis, needle stick injuries and scabies. In Pakistan 75.90% waste is non risk and 10.255 is risk waste that needs careful disposal [22] and approximately 20 million tons of physical waste is generated annually in Pakistan, with the annual growth rate of about 2.4% [23]. Karachi is the largest city of the country, which generates more than 9000 tons of physical waste daily [24], construction waste (CW) is a main point of solid waste generation in the Islamic Republic of Pakistan [23]. The study was conducted in Bangladesh that reveals, the proper waste management is not possible without having the proper awareness and knowledge in waste management. It is also very important to follow the occupational health safety issues when it deals with hazardous waste [25].

The Dhaka City Corporation (DCC) is primarily responsible for collecting and managing waste in Dhaka, Bangladesh. A significant amount of waste in Dhaka is not collected due to lack of infrastructure, funds and collection vehicles. Despites Dhaka's limited waste management service, community based door-to-door waste collection from households to local waste bins is considered as a success. Informal waste recycling systems is also highly effective in waste recycling and job creations for the poor [26].

Bangladesh is generally faced with rapid deterioration of environmental and sanitation condition due to the conventional system of collection, transportation and crude dumping of solid waste. In order to achieve proper solid waste management system, a lot of efforts in Bangladesh have been focused on waste collection and disposal only. However, the recycling and composting component of solid waste management have been ignored by the city authority of the country. Therefore, it is very essential to assess the sustainable waste management system emphasizing on recycling and composting [27].

Organic waste collected from District Lahore constitute 60 % of the total Municipal waste which depicts high potential of availability of biodegradable organic waste which can be escaped from entering the disposal system in district Lahore. From the results, as obtained from the research conducted, it is obvious that high volumes of municipal solid waste being generated in District Lahore can easily be handled by collecting it at a predefined frequency and can be converted into Compost, which is equally efficient as commercial green fertilizers available [28].

#### CONCLUSION

Bangladesh is one of the growing nations within the global, and indicators of health and nutrition related to kids and

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maternal upgrades have improved during the last few many years. The hazard of maternal loss of life and morbidity among females dwelling in Bangladesh is high and the kid's health is certainly no longer met. In preferred, cultural barriers nevertheless want to be assessed, which have a terrible effect on maternal health and socio-financial alleviation within the form of coverage adjustments and feature efficiently reduced baby and maternal mortality and nutrition-associated mortality and complexity. Various NGOs and government-funded businesses should perform treasured programs to absolutely triumph over the situation in Bangladesh. The authorities ought to arrange for extra awareness packages and must have precise finances and authority to carry out this task. More studies have to be performed in these areas.

#### AUTHORS' CONTRIBUTION

Declared none.

#### **CONFLICT OF INTEREST**

Declared none.

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