

# Research in Pharmacy and Health Sciences

Review Article

## HEALTH CARE SYSTEM IN PAKISTAN; A REVIEW

Shumaila Arshad\*, Hira Waris, Maria Ismail, Ayesha Naseer

Faculty of Pharmacy, The University of Lahore, Defense Road Campus, Lahore, Pakistan

### Abstract:

Health systems are expected to serve the population needs in an effective, efficient and equitable manner. The factors determining the health behaviors may be seen in various contexts physical, socio-economic, cultural and political. Therefore, the utilization of a health care system, public or private, formal or non-formal, may depend on socio-demographic factors, social structures, level of education, cultural beliefs and practices, gender discrimination, status of women, economic and political systems environmental conditions, and the disease pattern and health care system itself. Policy makers need to understand the drivers of health seeking behavior of the population in an increasingly pluralistic health care system. Also a more concerted effort is required for designing behavioral health promotion campaigns through inter-sectoral collaboration focusing more on disadvantaged segments of the population. The paper reviews the health care providers, the national policies emphasizing health services as well as health care systems in Pakistan and the role of the pharmacist in health care system of Pakistan, health and economics of Pakistan and current budgeting policies and the importance of non government organizations in health care system of Pakistan.

**Received:** 17-05- 2016

**Revised:** 09-06-2016

**Accepted:** 19-06-2016

**\*Correspondence to:**

Dr. Shumaila Arshad,  
Email:  
shumailapharmacist@gmail.com

**Funding:** Nil

**Competing Interests:** Nil

**Keywords:** Health Care System, health care providers, National Policies of HCS in Pakistan, Role of Pharmacist

### INTRODUCTION:

Health participates the important function in influencing the human capital .with the Better health the competency and the output of the labour force is developed and eventually it adds to the economic growth and directs the human benefit. Governments subsidise the health care services for its people to achieve enhanced, more skilful, proficient and prolific human capital resources and for this purpose the public sector pays complete or some part of the cost of utilizing health care services. Lamiraud, et al. (2005) argued that social health protection is an important instrument aiming at fair burden sharing and reducing barrier underlining access to health care services. Another good cause for the government spending in distributing essential health care services is to reduce burden of the diseases (BOD) in the productive years of the life. The social rate of return and the BOD force the policy-makers to transfer the public resources towards basic health care facilities. According to the Economic Survey of Pakistan (2005-06) the government with the purpose to make its population more healthy and strong spent 0.75 percent of GDP on health segment. For this purpose many programs like vertical and horizontal programs which are concerning to health facilities are being working in Pakistan. The vertical programs which are federally funded include: Lady Health Worker Program, Malaria Control Program, Tuberculosis and HIV/AIDS Control Program, National Maternal and Child Health Program, the Expanded Program on Immunization, Cancer Treatment Program Food and Nutrition Program, and the Prime Minister Program for Preventive and Control of Hepatitis A & B. The communicable diseases are still a challenge and the statistics reveal that the nutrition and

reproductive health problem in communicable diseases are still liable for the 58 percent of the BOD in Pakistan. Non-communicable diseases (NCD) originated by sedentary life styles, environmental pollution, unhealthy dietary habits, smoking etc. account for almost 10 percent of the BOD in Pakistan. Social Policy Development Centre (SPDC) 2004, reveals that out of every 1,000 children who survive infancy 123 die before reaching the age of five. A large proportion of those who surviving suffers from malnutrition, leading to impaired immunity and higher vulnerability to infections. Malnutrition is big problem in Pakistan. Human Conditions Report (2003) clearly points out that about 40 percent children under 5 year of age are malnourished. About 50 percent of deaths of children under 5 years old children are due to malnutrition [1]

### HEALTH CARE PROVIDERS IN PAKISTAN:

#### 1) MEDICAL DOCTORS

After the completion of one year residential job the qualified doctor is all set and suitable for a job or private practice. Family Physicians have the major role in the deliverance of primary care. They are the first contact of people who not only seek their help for primary care but also in acute emergencies and accidents. There is no organized Family Medicine in Pakistan. The Family Physicians work in a random manner and they have no working relationship with each other. They do not provide evidence based care to people. Many Family Physicians are involved in taking kick backs from pharmaceutical companies, pathological laboratories and private hospitals.

They do not write proper prescriptions and use multiple medicines and injectable in a very irrational way.

## 2) THE ALTERNATE MEDICAL SERVICES

People do go to Registered Hakims (traditional healers), Registered Homeopaths and quacks in huge numbers. There is a situation of competition between various types of primary care providers. The Hakims (traditional healers) and Registered Homeopaths are free to make any medicine because drug policy does not wrap them and People have a sturdy faith that these two types of treatment will not cause any harm and more beneficial than our scientific medicines. There are two very popular misconceptions in Pakistan even in highly qualified persons and some MBBS doctors as well

1. Sexual problems, Hepatitis A, B, & C are not curable by any other medication except the Hakims.
2. Homeopathy is very safe in chronic ailments especially renal stones, arthritis, etc. To become Hakim there is no need of any basic general education but the famous Hakims are usually Graduates or Master degree holders in non-medical education. They categorize themselves as A-Class, B-Class and C-Class. To become a Homeopathic doctor, the candidate must full fill the following criterion

- 1) At least ten years of study in school
- 2) Four years course called "DHMS" from any out of hundreds of private colleges scattered throughout the country
- 3) All who qualify get registered in their counsel. These people use ultra-sound machines themselves and avail pathology labs and all available diagnostics including CT-scan and MRI. They buy time on famous private TV channels and popular FM radios to project themselves and their work. Every such doctor claims himself to be a new inventor and researcher.

## 3) TRADITIONAL QUACKS

They are prevalent in our society. Many efforts have been made to eradicate them but they are on the mount

## 4) RELIGIOUS QUACKS

Traditional Quacks have been a major threat to the health system for quite long but now a new category of quacks is rising that contain so called religious persons who not only give blessings but also dispense their own made medicines. They are very famous for treatment of Hepatitis A, B, & C.

## THE PARAMEDICAL STAFF

### FEMALE PARAMEDICS:

The following categories which are included under this term "Nurse" in Pakistan;

### CLASSIFIED NURSE:

The female must have passed high school examination in science to get admission into this course. She takes a four years' course in Nursing during which she has to reside in

hospital. She does not pay anything for it rather she is given an attractive monthly helping throughout the course. Despite all these facilities, only girls from poor background enter these courses. Such nurses are only present in big city governmental hospitals and very expensive private hospitals. Due to proper education and training, they work ethically and are aware of the importance of working within their own limits.

### LADY HEALTH VISITOR (LHV):

The female must have passed high school examination in science to get admission into this course. She takes a short course of about two years and she is basically trained in women's' health and midwifery. They are meant for villages and towns but are rarely found there. They usually practice in cities as lady doctors. Most of them exceed their limits and are involved in criminal abortion.

### LOCALLY TRAINED NURSES:

This is the most available variety. Some of them are high school pass but most of them are usually middle passed or less. They are neither adequately educated nor properly trained. They are absolutely not aware of their limits. They work in clinics and most of the private hospitals. Seniors among this category work as lady doctors and are involved in criminal abortion.

### LADY HEALTH WORKER (LHWs)

This type was produced by the government to induce health education and create awareness about women's' health. Females should be only middle pass and a local resident. Unfortunately, they also forget their limits and start acting as lady doctors.

### MIDWIVES OR TRADITIONAL BIRTH ATTENDANTS (TBA):

In Pakistan, TBAs are completely uneducated and non-trained. They not only are unaware of their limits but also do not understand the importance of the referral network. They are a major cause of maternal mortality and morbidity. They cause damage to mothers and newborns due to lack of knowledge and skills. They do not understand the importance of sterilization and use dirty hands on women and on newborns. They cut umbilical cords with non-sterilized knives and tie it with dirty pieces of cloth or thread. They insert harmful weeds and their own made medicines in the vagina and freely inject Oxytocin I/M as a tonic or power injection before delivery.

### B) MALE PARAMEDICS

25 % of this group is qualified but 75% are just locally trained in clinics and pathology labs. We do not have life saving paramedics except in the army. Highly Trained Mobile Paramedics This is a very recent addition to the system. At the moment these are only found in Lahore. These are fully qualified [2]

## HEALTH CARE DELIVERY SYSTEM IN PAKISTAN

The government of Pakistan spends 3.1 per cent of its GDP on economic, social and community services and 43 per cent is spent on debt servicing. About 0.8 per cent is spent on health care, which is even lower than Bangladesh (1.2 per cent) and Sri Lanka (1.4 per cent). However, the health status of the population has improved over the past three decades the rate of immunization of children has more than doubled, and the knowledge of family planning has increased remarkably and is almost universal. For over half the population (66 per cent) living in the rural part of the country poverty coupled with illiteracy, the low status of women and inadequate water and sanitation facilities have had a deep impact on health indicators. Beside limited knowledge of illness and wellness, cultural prescriptions, perceptions of a health service and provider and social barriers, cost has been a major barrier to the provision of an effective health service. This has affected the physical and financial accessibility of the health services. The health care system in Pakistan comprises the public as well as private health facilities.

### PUBLIC SECTOR:

In the public sector, under the Devolution Plan of the Government of Pakistan in 2000, 19 the districts have been given comprehensive administrative as well as financial autonomy in almost all sectors, including health. The districts are now responsible for developing their own strategies, programs and interventions based on their locally generated data and needs identified. Following the principles of Alma Alta, the public health care system is primary care focused. At the community level, the Lady Health Worker (LHW) program of the Ministry of Health, and the Village Based Family Planning Worker (VBFPW) program of Ministry of Population Welfare of Government of Pakistan have been established. These programs gained an international reputation due to their grass root coverage plans. These workers are supported by an elaborate network of dispensaries and basic health units (BHU) (serving 10 000–20 000 population) and rural health centers (RHC) (serving 25 000–50 000 population). The next levels of referral are the taluka/tehsil hospital (serving 0.5–1 million population), and the tertiary level hospital (serving 1–2 million people). The nationwide network of medical services consists of 796 hospitals, 482 RHCs, 4616 BHUs and 4144 dispensaries. However, these basic level facilities have restricted hours of operation are often located distant from the population. Manpower is constituted of approximately 90 000 doctors, 3000 dentists, 28 000 nurses, 6000 Lady Health Visitors and 24 000 midwives. Only 25 per cent of the BHUs and RHCs have qualified female health providers.

### PRIVATE SECTOR:

In private sector, there are some ascribed outlets and hospitals but also many unregulated hospitals, medical general practitioners, homeopaths, Hakeem, traditional/spiritual healers, Unani (Greco-Arab) healers, herbalists, bonesetters and quacks. Non-governmental organizations (NGOs) are also active in the health and social

sector. In urban parts of the country, some public–private partnership proposals exist through franchising of private health outlets. These have been successful to a large extent in raising the level of awareness of positive health behavior among the people. For instance, the increasing contraceptive prevalence rate is due to the efforts of NGO sector and the LHWs of the government. Nevertheless, primary health care activities have not brought about expected improvements in health practices especially of rural population groups. In some areas of rural Pakistan, more than 90 per cent of deliveries are performed by untrained or semi-trained dais or Traditional Birth Attendants (TBAs). Among other diverse and multi-faceted reasons, a poorly functioning referral system may be partly to blame. Given the complex nature of the health care delivery system in Pakistan and the limited resources available to the health care sector, it is essential for the various sectors to plan and work together to improve the health of Pakistanis. Thus it is important to understand the health seeking behavior of the population and the factors driving this behavior [2]

## HEALTH AND ECONOMICS OF PAKISTAN

In south Asia, magnitude of household out of pocket expenditure on health is at times 80% of the total amount spent on health care per annum. Economic capability to use health services has not been very different in Pakistan too. For health expenses in Pakistan, 76% goes out of pocket. This very factor also decides the measure of ability of a person or a family as a whole to satisfy their need for health care. The cost has undoubtedly been a major barrier in seeking appropriate health care in Pakistan. This complexity is reflected in the health seeking behavior including the use of home prescriptions and self-medicating with medicine borrowed from a neighbor or purchased from the chemist shop. In NHS, little difference is observed in terms of health service utilization by economic status. This insignificant difference in trends of utilization of health services between rural and urban population does not reflect that both strata of population enjoy the same health status. Though rural poor have more needs yet they actually lack quality services and need based treatments. The distance separating patients from the nearest health facility has been remarked as an important barrier to use, particularly in rural areas. In NHS, findings reveal that at least 5% go to hakims, homeopaths and faith healers. This representation looks very diminutive because the traditional beliefs tend to be intertwined with peculiarities of the illness itself and a variety of circumstantial, economic and social factors. Nearest and most available health provider in a rural proximity would be a non-formal practitioner, who would be consulted mainly because of the low cost incurred. Household economics certainly limit the choice and opportunity of health seeking [3]

## ROLE OF PHARMACIST IN HEALTH CARE SYSTEM OF PAKISTAN

During recent years in most of the public-sector hospitals small numbers of pharmacists were appointed their role was restricted to drug delivery, procurement and inventory control. There was a lack of pharmacy services in the

hospitals and community pharmacies because of the isolation and lack of recognition of pharmacists as health care professionals. The lack of trained personnel and the resulting lack of contact of pharmacists with the public are also among the main contributing factors towards the lack of recognition of the pharmacy profession. In 2003, the Doctor of Pharmacy (Pharm.D) began to be offered as a five-year professional degree program in Pakistan centered mostly towards the clinical aspects of the pharmacy profession. Some 2587 pharmacists have graduated every year. With the current population, this number is not sufficient to provide optimal health care delivery there are a total of 28 pharmacy institutions in the country. The Pharmacy Council of Pakistan was established under the provision of the Pharmacy Act of 1967. It regulates the practice and education of pharmacists in the country. It is also responsible for registration of pharmacy graduates and issuing the license permitting them to practice in the country. Registration activity is decentralized and the regional pharmacy councils (sub bodies) under the Pharmacy Council of Pakistan are responsible for controlling and registering pharmacists in their respective provinces. It has been predictable that around 8102 pharmacists are present in Pakistan, of whom 2836 work in the public sector and 5023 in private settings, while 243 work in private, non-profit-making organizations. Among the total number of pharmacists in Pakistan, approximately 55% are engaged in the production of pharmaceuticals – 15% of them working at the federal and provincial drug control authority and hospital pharmacy level – with another 15% in sales and marketing of pharmaceuticals, 10% in community pharmacy, and the rest 5% in teaching and research. Although elsewhere in the world the role of pharmacists is recognized in community pharmacies, hospital and drug regulatory authorities, the health care system of Pakistan has yet to recognize this role. There are several reasons for the lack of recognition of the pharmacy profession in Pakistan, such as the lack of pharmacists in public health services and the lack of pharmacists in community pharmacies, which direct to the lack of community-pharmacist interaction. The lack of recognition by other health professionals of the pharmacist's role in the health care system is due to their lack of interaction with pharmacists, as most of the pharmacy institutions in Pakistan exist without an attached hospital where pharmacy students can acquire basic clinical knowledge. To overcome this problem it has been proposed that existing pharmacy residency programs or specialized internships in hospitals after completion of the five-year coursework should be extended from six months to one year and it should be made compulsory with a stipend. Besides that final year, Pharm-D students must be involved in extensive clerkships in the hospitals to improve their skills as clinical pharmacists, as this will be important to meet the expectations and needs of the society [4]

#### **HEALTH SYSTEM CONSEQUENCES OF THE CURRENT BUDGETING POLICIES**

The insufficiency in health sector budgeting imitates itself in the health and well-being of the populations. Majority of our

population does not utilize the public sector health facilities because of poor quality and untrustworthy. Due to the insufficiency of the public sector to provide sufficient, timely as well as suitable health relief to the poor, people learn to use private health sector far more. The vicious cycle of ill health and poverty becomes further exacerbated due to poor budgeting and financing of health sector. As a result, 73.6% people living below poverty line (US\$2) are deprived of their fundamental rights of quality and accessible healthcare. The collision on the overall indicators is huge as a result of this low investment in health. According to the current demographic and health statistics in Pakistan, most of the indicators have no improved significantly over the past few years. Total fertility rate increased from 3.9 to 4.1% in 3 years period, whereas the contraceptive prevalence rate has remained remarkably stagnant (32% in 2003 and 30% in 2006). Infant mortality rate in Pakistan is one of the highest in south Asia (77 per 1000 live births in demographic and health survey of 2005 and 78 per 1000 live births in 2006 [5])

#### **RECOGNITION OF IMPORTANCE AND ROLE OF NGOS IN HEALTH SECTOR OF PAKISTAN**

About 206 public private service organizations and 600 NGOs are involved in health services provision, research and advocacy. Since many years, the international and local NGOs have attempted to fill the gaps that have been omitted for the public sector in Pakistan. These are mainly the requirement of physical, financial, social and geographical access to the health care facilities, poor distribution of resources among various regions of the country, unavailability of health care providers at the facilities, poor quality of services at government health facilities and most importantly very little emphasis on addressing the social determinants of health due to weak inter-sectoral approach. Working with NGOs besides presenting financial benefits, represents a more attractive enticement which is the transfer of technical knowledge between partners. Moreover, health planning becomes far more participatory and consultative with the inputs of all the stakeholders. Most of the respondents from the government sector and the donor community emphasized the importance of NGOs at macro and micro levels of the health systems in Pakistan giving a boost to the public sector while executing with various government departments [6]

#### **FACTORS AFFECTING HEALTH SEEKING BEHAVIOR**

A variety of factors have been identified as the leading causes of poor utilization of primary health care services. These factors can be classified as cultural beliefs, socio-demographic status, women's autonomy, economic conditions, physical and financial accessibility, and disease pattern and health service issues.

#### **CULTURAL AND SOCIO-DEMOGRAPHIC FACTORS**

Cultural beliefs and practices often lead to self-care, home remedies and consultation with traditional healers in rural

communities. Advice of the elder women in the house is also very instrumental and cannot be ignored. These factors result in delay in treatment seeking and are more common amongst women, not only for their own health but especially for children's illnesses. Family size and parity, educational status and occupation of the head of the family are also associated with health seeking behavior besides age, gender and marital status. However, cultural practices and beliefs have been prevalent regardless of age, socio-economic status of the family and level of education. They also affect awareness and recognition of severity of illness, gender, availability of service and acceptability of service. Gender disparity has affected the health of the women in Pakistan too by putting an un-rewarded reproductive burden on them, resulting in early and excessive child-bearing. This has led to 'a normal maternity' being lumped with diseases and health problems.

### WOMEN'S AUTONOMY

Men play a paramount role in determining the health needs of a woman. Since men are decision makers and in control of all the resources, they decide when and where woman should seek health care. Women suffering from an illness report less frequently for health care seeking as compared to men. The low status of women prevents them from recognizing and voicing their concerns about health needs. Women are usually not allowed to visit a health facility or health care provider alone or to make the decision to spend money on health care. Thus women generally cannot access health care in emergency situations. This certainly has severe repercussions on health in particular and self-respect in general of the women and their children. Despite the fact that women are often the primary care givers in the family, they have been deprived of the basic health information and holistic health services

### ECONOMIC FACTORS

The economic polarization within the society and lack of social security system make the poor more vulnerable in terms of affordability and choice of health provider. Poverty not only excludes people from the benefits of health care system but also restricts them from participating in decisions that affect their health, resulting in greater health inequalities. Access to a primary health care facility is projected as a basic social right. Dissatisfaction with primary care services in either sector leads many people to health care shop or to jump to higher level hospitals for primary care, leading to considerable inefficiency and loss of control over efficacy and quality of services. In developing countries including Pakistan, the effect of distance on service use becomes stronger when combined with the dearth of transportation and with poor roads, which contributes towards increase costs of visits. Availability of the transport, physical distance of the facility and time taken to reach the facility undoubtedly influence the health seeking behavior and health services utilization

### HEALTH SERVICES AND DISEASE PATTERN

The under-utilization of the health services in public sector has been almost a universal phenomenon in developing countries. On the other hand, the private sector has flourished everywhere because it focuses mainly on 'public health goods' such as antenatal care, immunization, family planning services, treatment for tuberculosis, malaria and sexually transmitted infections. In Pakistan, the public health sector by and large has been underused due to insufficient focus on prevention and promotion of health, excessive centralization of management, political interference, lack of openness, weak human resource development, lack of integration, and lack of healthy public policy. The low use of MCH centers, dispensaries and BHUs in Pakistan is discouraging. It may be due to lack of health education, non-availability of drugs and low literacy rate in rural areas [7]

### DISCUSSION:

To develop balanced policy to offer proficient, successful, suitable, cost-effective, affordable and accessible services we need to understand the drivers of health seeking behavior of the population in an increasingly pluralistic health care system. This correlates both to public as well as private sectors. Increasing the socio-economic status through multi-sectoral development activities such as women's micro-credit, life-skill training and non-formal education have been shown to have a positive impact on health seeking behavior, morbidity and mortality besides the overall empowerment of women population. Gender sensitive strategies and programs need to be developed. Health providers also need to be sensitized more towards the needs of the clients especially the women to improve interpersonal communication. Although there is a fairly large infrastructure of formal and orthodox institutions for health provision the quality needs to be improved. Moreover, it is strongly desirable to further nurture critical, creative and reflective thinking to reorient our health system. Health care providers need to be more compassionate and caring to the needs of the people they serve. They should acquire reliability, creativity and sensitivity and be the role model within health care system and in communities. Introducing a 'self care system' in the community which includes early detection of danger signs in diarrhea, malaria, pneumonia and issues like family planning and personal hygiene could form a package of health education for any community setting. Public health awareness programs should be organized for mothers as components of public health efforts intended to help mothers understand the disease process and difference between favorable and unfavorable health practices. This would enhance the mothers' understanding of disease process and importance of preventive measures for a better family health. With this complex and pervasive picture of health system utilization and health seeking behavior in Pakistan, it is highly desirable to reduce the polarization in health system use by introducing more client centered approach, employing more female health workers, supportive and improved working and living conditions of health personnel, and a convivial ambiance at health service outlets.

**REFERENCES:**

1. Akram M, Khan FJ, Health care services and government spending in Pakistan. 2007, Pakistan Institute of Development Economics Islamabad.
2. Yousif TK, Khaleq B, Epidemiology of Acute Respiratory Tract Infections (ARI) among Children Under Five Years Old Attending Tikirit General Teaching Hospital. 2005;3(5):2006:4.
3. Shaikh BT, Hatcher J, Health seeking behavior and health services utilization trends in national health survey of Pakistan: what needs to be done. Journal of Pakistan Medical Association, 2007. 57(8).
4. Azhar S., et al., The role of pharmacists in developing countries: the current scenario in Pakistan. Human Resources for Health. 2009; 7(1):1-6.
5. Ahmed J, Shaikh BT. An all time low budget for healthcare in Pakistan. J College of Physicians and Surgeons Pakistan, 2008;18(6):388.
6. Ejaz I, Shaikh BT, Rizvi N. NGOs and government partnership for health systems strengthening: A qualitative study presenting viewpoints of government, NGOs and donors in Pakistan. BMC health Services Res. 2011;11(1): 122.
7. Shaikh BT, Hatcher J, Health seeking behaviour and health service utilization in Pakistan: challenging the policy makers. J Public Healt. 2005; 27(1):49-54.

**Cite this article as:** Arshad S, Waris H, Ismail M, Ayesha. Health care system in Pakistan; A Review. Res Pharm Healt Sci. 2016;2(3):211-216.