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HEALTH CARE SERVICES IN THE BASIC HEALTH UNITS OF PUBLIC AND PUBLIC-PRIVATE PARTNERSHIP SECTOR IN KHYBER PAKHTUNKHWA - A COMPARATIVE STUDY

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ABSTRACT

Introduction: Pakistan has a distressing framework of health care delivery, with only 20% population using primary health care facilities due to economic constraints, poor monitoring and surveillance systems, and lack of governmental commitment. The current study was carried out to compare the quality of services and their utilization in Public sector and Public-Private-Partnership (P-P-P) run Basic Health Units (BHUs) of Khyber Pakhtunkhwa (KP).

Materials & Methods: A cross-sectional study was conducted in three Basic Health Units of Nowshera district (Public-Private-Partnership) and three BHUs of Hangu district (Public sector) of KP from September to November 2012. The sample comprised 150 patients visiting the BHUs selected by convenience sampling (25 patients from each BHU for a total of 75 participants per district). Data were collected through an indigenously designed mixed questionnaire. Data analysis for descriptive statistics was done through SPSS 16, using Chi Square test for comparison of frequencies; $p \leq 0.05$ denoted significance.

Results: The P-P-P sector BHUs showed significant improvements as compared to Public sector BHUs for Preventive, Mother and Child Health care (MCH), and Health Promotion services, availability of Drugs, Family Planning services, and basic Laboratory Facilities ($p<0.001$), whereas no significant difference was observed in curative services. Primary Health Care services in public sector were also under-utilized.

Conclusion: The overall quality and utilization of health services at Primary Health Care level through Public sector is low as compared to Public-Private-Partnership run BHUs. Special attention is needed to improve the framework of primary health care services.

Keywords: Public Health, Public Sector, Public-Private Partnership sector, Health care Reform.

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INTRODUCTION

Health is a fundamental human right as well as a central input to social and economic development.[1] In Pakistan, people are free to seek care from any level and type of health care facility. According to Pakistan Bureau of Statistics (2005-2012) the most popular choice is private health care, whereas public primary health care serves for <5% of health care aggregates in Pakistan.[2] Health care is overseen by the Ministry of Health at the Federal level and by the Health Departments at Provincial level, who are responsible for public health care delivery in Pakistan.[3] In Pakistan, medical services consist of primary, secondary and tertiary health care facilities.[4] Primary health care is comprised of Basic Health Units (BHUs), Primary Healthcare Centers (PHCs), Dispensaries, Mother and Child Health Centers (MCHs), Lady Health Visitors (LHV) and Rural Health Centers (RHCs). BHUs provide the basic preventive and curative health services and serve as a referral point to the next level of health care. Each BHU serves a population of 10,000 or a Union Council (UC) within a radius of 5 kilometers. Secondary heath care facilities consist of District and Tehsil Headquarter Hospitals. Tertiary care centers are located in major cities and offer higher and complex curative services.[5] In 2012, there were

5449 BHUs and 55 RHCs serving the population of 184 million in Pakistan.[3] In Pakistan, the public health sector has been under-utilized due to inadequate focus on prevention and promotion of health, centralization of management, political interference, weak human resource development, lacking of integration and deficiency of healthy public policy.[6] Health system of any country has an important role in its socio-economic growth. Inadequate, inappropriate and unaffordable health systems have a crippling effect on the growth of any country so it is very important to maintain and improve the framework of healthcare delivery systems.[7] Health sectors of developing countries are facing the problems of financing, management and provision. Many countries, both developed and developing are initiating Health Sector Reform in varying degrees and forms.[8] The decade of 1990s is seen as a marker for the beginning of health sector reform in many developing and developed countries of South East Asia.[9] The overall goal of health sector reform is to improve efficiency of health care system, to develop the quality of services, and to create new resources for the system.[10]

Health Sector Reform means "sustained, purposeful and fundamental change to promote the achievement of overall health policy objectives". Health sector reform defines priorities, refines policies, and reforms the institution through which those policies are implemented.[11]

The low use of MCH centers, dispensaries and BHUs in Pakistan is discouraging. It may be due to lack of health education, no availability of drugs and low literacy rate in rural areas.[6]

Pakistan is in critical need of health sector reform as Public Health Sector is facing numerous problems such as financial constraints, poor governance and lack of delivering specific functions. The process of reform offers an opportunity to confront long-standing challenges, constraints, and inadequacies within Pakistan's health systems. Health planning at the provincial and district levels may be more effective at problem identification, prioritization and setting clear objectives within local budgets. In Pakistan, 66% of the population lives in rural areas where they face poverty, illiteracy and inadequate healthcare, that in turn contributes badly to decline in health indicators.[8,11] The Government of Pakistan has been spending 0.6-1.19% of its GDP and 5.1-11.6% of its developmental expenditure on health over the last 10 years.[12] This devastating health condition led to the concept of contracting out primary health care services. The idea of Public-Private Partnership (P-P-P) is one of the ways of health sector reform to improve management, service delivery and cost sharing.[13]

Due to inadequate coverage and utilization of Primary healthcare services, the National Health Policy 2001 suggested different models of public-private partnership for provision of primary healthcare services.

One such model was tried as a pilot project in Rahim Yar Khan under the Chief Minister Initiative on Primary Health Care in 2003. This model was evaluated by World Bank in 2005 and showed positive results.[14]

In 2005, the federal government took an initiative by launching a country-wide program of People's Primary Health Care Initiative (PPHI, formerly known as President's Primary Health Care Initiative).[15]

The present study was conducted to compare the provision, quality and utilization of services at primary health care level between Public and Public-Private-Partnership (P-P-P) sectors. The study will provide tangible data to be used by public health policy officials, and provide a basis for future extended studies in this area.

MATERIALS & METHODS

This cross-sectional comparative study was carried in three BHUs of Nowshera district (Rashakay, Behram kallay and Ghandero kallay run by Public-Private Partnership) and three BHUs of Hangu (Toogho, Darban and Muhammad Khawaja kallay, run by Public sector) from September to November 2012; 25 visiting patients were selected from each BHU making a sample of 75 patients from each district. Convenience Sampling was used to select the total 150 patients from both districts. Data were collected through indigenously structured mixed questionnaire which had both closed and open-ended questions. The questionnaire was translated into Urdu as well. Informed consent was taken from all the patients, ensuring confidentiality. As most of the subjects were illiterate, so data were collected through direct interview in Pushto (local language) based on translation of the questionnaire. Data were analyzed for descriptive analysis on SPSS version 16. The Chi square test was used to compare frequencies keeping $p \leq 0.05$ as significant.

RESULTS

Most of the patients coming to BHUs were from low socioeconomic group. Male to female ratio was 1:2, as mostly women used to come to the BHUs for their personal health problems and those of their children at a time of day when men had gone out for livelihood.

Services offered at BHUs were at primary level, meant to provide preventive, curative and health promotion services, such as immunization programs, Dengue awareness program, TB DOTS program, Growth monitoring program for children, Nutritional support program for mothers, promotion of Breastfeeding and treatment of common ailments like diarrhea, acute respiratory illness (ARI) and malaria, etc.

As shown in Table 1, there was a significant difference in the availability of health promotion, preventive and MCH services in P-P-P sector as compared to public sector ($p<0.001$), whereas there was no significant difference in curative services.

Table 1: Health Services availability in BHUs of Public and P-P-P sectors

Health Services	Responses Frequency (%)		p value
	Yes	No	
Preventive services			
Public Sector	40 (53.3)	35 (46.7)	0.001
Public Private Sector	69 (92.0)	06 (8.0)	
Health Promotion Services			
Public Sector	19 (25.3)	56 (74.7)	0.001
Public Private Sector	67 (89.3)	08 (10.7)	
Curative services			
Public Sector	59 (78.7)	16 (21.3)	0.288
Public Private Sector	64 (85.3)	11 (14.7)	
MCH services			
Public Sector	20 (26.7)	55 (73.7)	0.001
Public Private Sector	70 (93.3)	05 (06.7)	

The P-P-P sector had a monitoring program and had provided PTCL wireless phones to each BHU so that the attendance of the BHU staff would be taken daily. The Monitoring team gave a surprise visit to each BHU once weekly so the health services were better monitored. Whereas

the monitoring program of public sector was weak. Similarly, MCH services in Public sector could not be practiced easily as compared to the BHUs run by PPHI sector because of non-availability of Lady Health Visitor (LHV) and Female Health Technician (FMT), and female doctors. At the same time there was a threat element from Taliban to the BHU staff. In the PPHI sector, there was a Female Medical Officer (FMO) program for OB/GYN patients on specific days in selected BHUs of PPHI sector. Antenatal coverage was high in PPHI run BHUs because of the availability of FMO and other auxiliary staff.

As shown in Table 2, there was a significant difference ($p<0.001$) in availability of drugs, preliminary laboratory test availability and family planning services in public-private sector as compared to public sector. There was no lab or diagnostic facility available in Public sector run BHUs except for pregnancy test. Whereas in P-P-P run BHUs there was a facility of pregnancy test, Hemoglobin estimate, urine analysis and glucometer. At the same time, there was a facility of A/N ultrasonography on specific days in each BHUs. Similarly, Family planning services were also available and practiced in P-P-P sector but not in Public sector run BHUs. Diseases early warning system for early control of the communicable diseases was working in both the sectors. The provision of drugs in both sectors was not satisfactory. It was observed that the patients were complaining of purchasing half of prescription from outside the health premises in the BHUs of Nowshera district but the condition was worse in Public sector BHUs as there was no supply of drugs for the last 3 months as told by patients and staff of the BHU's. During the visit of BHU, it had been observed that the drug store had plenty of medicine. Most of the medicines were expired. The patient coming to that facility told the research team that Medical Officers and Technicians were involved in private practice and sold their own medicines.

Table 2: Health Facilities availability in BHUs of Public and P-P-P sectors

Health Facilities	Responses		p value
	Yes	No	
Lab facilities			
Public sector	2(2.7%)	73(97.3%)	0.001
Public private sector	71(94.7%)	04(5.3%)	
TB control program			
Public sector	75(100%)	-	-
Public private sector	75(100%)	-	
Provision of drugs			
Public sector	16 (21.3%)	59(78.7%)	0.001
Public private sector	63(84.0%)	12(16.0%)	
Family planning services			
Public sector	19(25.3%)	56(74.7%)	0.001
Public private sector	69(92.0%)	06(8.0%)	
Immunization Services			
Public sector	75(100%)	-	-
Public private sector	75(100%)	-	

As shown in Figure 1, there was a high turnover of outpatients in P-P-P run BHUs compared to Public sector. The utilization of services was judged from the records, and compared in terms of daily patient turnover, patient follow-up turnover / week, Referral turnover / week, and daily Antenatal turnover rate.

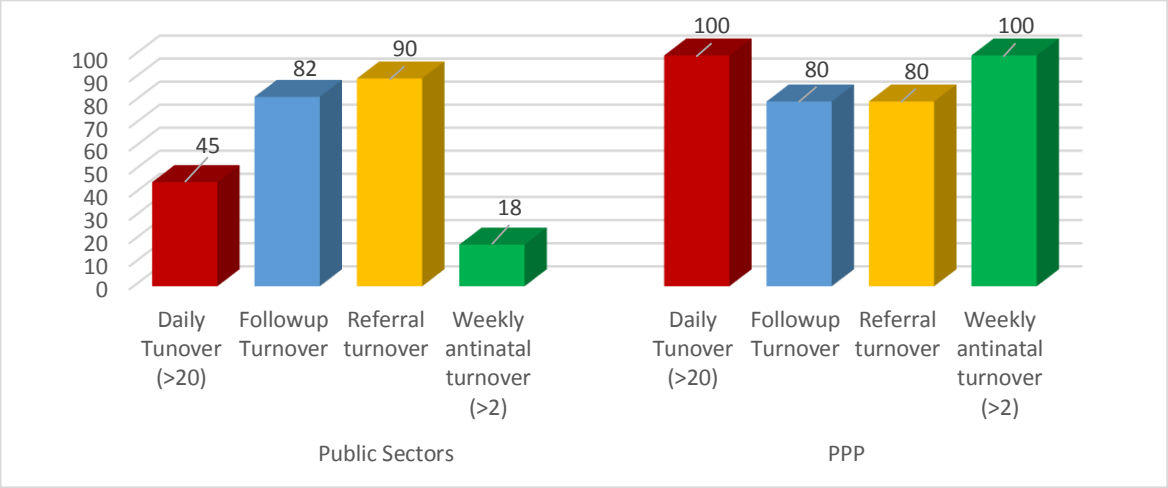

Fig.1: Turnover scores of patients in Public and Public-Private-Partnership run BHUs.

During the study visit, it had been observed that there was no regular/monthly supply of drugs/vaccines in Public Sector run BHUs and confirmed by the BHU staff. Similarly, there was a poor arrangement for safe water supply and sanitation. The infrastructure of Public Sector run BHUs was poor and equipment such as thermometer, B.P. apparatus, and weighing machine were non-functional. Compared to this, the infrastructure of PPHI run BHUs were far better. There was a provision of safe water and sanitation; the equipment available was mostly functional; supply of medicines/vaccines was regular. But the staff and patients both complained of non-availability of measles and BCG vaccine off and on in both the sectors.

DISCUSSION

The framework of primary health care delivery system in BHUs of Nowshera district contracted out to P-P-P sector was far better and encouraging than public sector in terms of infrastructure, availability, quality and utilization of health facilities.

The option of Public-Private-Partnership is not a unique trial. According to World Bank report P-P-P run BHUs were eight times better than the public sector BHUs.[16] It has been shown in several studies that contracting out model of Public-Private-Partnership had a significant impact on the improvement of primary healthcare delivery system. In the year 1999, due to worse conditions of primary healthcare in Punjab, the Health department of Punjab took the initiative to improve the capacity and service delivery of three basic health units in Lodhran district through the involvement of NGO sector. As a first step, the management of three BHUs in district Lodhran was outsourced to National Rural Support program. These three BHUs were run by one medical officer and a fund of Rupees 100,000 was generated by Non-Governmental Organization (NGO) sector for maintaining good quality of medical store.[16]

In 2003, Rahim Yar Khan pilot project, the district government contracted out all its BHUs to Punjab rural support program in which infrastructure of BHUs, control of the facilities, budget, supply and management were given to Punjab Rural Support Program (PRSP). This case study result showed 100 percent availability of doctors and paramedic staff, visible improvement and staff discipline and a threefold increase in delivery of health services. This pilot project was then scaled up to twelve more districts.[17] The shortcoming of this project was that there was little emphasis on preventive health services.[18] Similarly, in 2010 the study result of Third Party Evaluation (TPE) of people's primary health care initiative provided similar results regarding the

utilization, range, quality of services and effectiveness and efficiency at primary health care level. Improvements had been measured by this TPE in staffing, availability of drugs/equipment, physical condition and services delivered.[15]

LIMITATIONS

Only three BHUs, each from two districts, were selected for the study purpose. The sampling technique used was convenient sampling hence all the study units did not have equal chance of being selected in the study.

CONCLUSION

The availability, quality and utilization of Public-Private-Partnership run BHUs are encouraging and better than Public sector which strongly favors the idea that contracting out would upscale primary health care services in Pakistan.

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