

## Service Readiness; A Key and A Challenge for Better Utilization of Primary Healthcare Systems in Pakistan

Hina sharif<sup>1\*</sup>, Ume sughra<sup>2</sup>, Zahid butt<sup>3</sup>

<sup>1</sup>MS Public Health, Instructor at Al-Shifa Trust Eye Hospital, Al-Shifa School of Public Health, Rawalpindi

<sup>2</sup>MPH Public Health, FCPS, Assistant Professor at Al-Shifa Trust Eye Hospital, Al-Shifa School of Public Health, Rawalpindi

<sup>3</sup>Associate Professor at Al-Shifa Trust Eye Hospital, Al-Shifa School of Public Health, Rawalpindi.

### ABSTRACT

**Background:** The Government of Pakistan attempted numerous efforts to revive primary healthcare systems but its meagre utilization is still questionable. “Service Readiness” which is now a gold standard for the services that should be present in healthcare facilities in functional form can help to improve utilization of primary healthcare facilities especially in developing countries. This study aimed to assess service readiness at primary health care level of Pakistan. **Methods:** A cross-sectional study of all basic health units was carried out in tehsil (administrative unit) Rawalpindi, Pakistan with the help of structured questionnaire. The Cronbach’s alpha was used to assess reliability of tool which was 0.756. The outcome was normally distributed (Kolmogorov-Smirnov test= 0.091, p=0.20 and Shapiro-Wilk= 0.967, p=0.616). Data were analyzed in SPSS 21, by using descriptive and parametric tests (T-test and One way ANOVA). Cohen’s criteria were used to calculate effect size. The data were collected from face to face interviews with administrative staff of basic health units and researcher’s observations for a checklist as a part of a questionnaire. **Results:** A total of 23 health facilities were included, service readiness ( $1.86 \pm 0.15$ ) was statistically significant for locality of health facility (p=0.000), distance to district health office (p=0.007), political support (p=0.001), health official visits (p=0.022), availability of staff (p=0.001) and availability of residence for staff (p=0.001). Among all blocks of services readiness basic amenities, standard precautions and laboratory capacity showed worst results. **Conclusion:** Our results highlight weak service readiness at primary health level of Rawalpindi and advocate for urgent remedial measures to overhaul the primary health care system. Finances should be allocated on these highlighted issues on immediate basis to revive this most important tier of primary healthcare systems of Pakistan.

**Keywords:** Health systems, primary healthcare, service readiness, basic health units, basic amenities, basic equipments, Pakistan, Rawalpindi.

### Introduction

In 1978, World Health Organization (WHO) raised the slogan of “Health for all”, Pakistan being signatory of this declaration delivered a determined commitment to improve its Primary Healthcare facilities and their services [1]. WHO pointed out four concrete reforms to reach the goal of Primary healthcare (PHC) i.e. universal coverage reforms (to minimize social exclusion and health inequities), service delivery reforms (to make health services responsive), public

policy reforms (to expand health into all businesses of life) and leadership reforms (to strengthen stakeholder participation with policy dialogue) [2]. Health systems are a broad platform but for an ordinary person health systems are mainly the health facilities and services available in these facilities. Next thing that can affect patient is the standard of services delivery in these health care facilities. Therefore “the most quick and prompt result of all inputs into the health systems is the service delivery in the form of financing, health workforce and medicines” [3]. It can be concluded that overall it is the functionality of the services present in a health facility that increases their utilization. Pakistan has a massive infrastructure for Primary Health Care (PHC) system in the form of rural health centers and

\*Correspondence

Hina Sharif

MS Public Health, Instructor at Al-Shifa Trust Eye Hospital, Department of Public Health, Rawalpindi

E Mail: [pcc4u@hotmail.com](mailto:pcc4u@hotmail.com)

basic health units, both were created during 1975-85 to provide curative and preventive care to everyone at their doorstep. Basic health unit provides curative, preventive, referral (to rural health centre) services along with health education against different diseases; hence national health programs can be successful if implemented from this level [4]. Rural health centre is more specialized in services with financial powers as well, basic health units can refer patients to this rural health centre. However the utility of primary healthcare facilities always remained questionable [4]. The Government of Pakistan attempted numerous efforts to revive this primary healthcare system, like the introduction of contracting out health facilities which was initiated in 2005 under Punjab Rural Support Program [5]. Recently, the Government of Punjab initiated 24/7 facilities at basic health units of selective districts. Health watch is another important aspect for provision of better monitoring and supervision of PHC facilities launched with coordination of policy and strategic planning unit and Punjab Information Technology Board [6]. There are also three chains of Monitoring and Supervision i.e. Executive District

Office-health, immunization programs and monitoring and evaluation assistants (previously working for education sector) as well. The outsourcing of least performing basic health units and rural health centers is also an upcoming agenda of Punjab Government, which is actually continuation of people's primary healthcare initiative [7]. Besides all the fidelity shown by Government of Punjab the meagre utilization of primary healthcare facilities still bewilders Pakistan, which is resulting in overburdened health facilities of higher tiers and their less responsiveness [8]. Countries like Jordan, Lebanon, and Tunisia where contracted out primary healthcare facilities did not give the expected results; however they made their efforts relentless for bringing a positive change with the core concept of "quality of care" which is actually a continuous cycle [9]. The notion of "quality of care" is very broad and vague but to make it concise recently WHO introduced the concept of "Service Readiness" (Figure 1) which is now a gold standard for the services that should be present in healthcare facilities in functional form that can eventually lead to improved utilization [10].

| Domain   | Tracer indicators, items or services   |
|--|--|
| <b>II. General service readiness</b>             |  |
| 1. Basic amenities                               | Mean availability of seven basic amenities items (%): power, improved water source, room with privacy, adequate sanitation facilities, communication equipment, access to computer with Internet, emergency transportation   |
| 2. Basic equipment                               | Mean availability of six basic equipment items (%): adult scale, child scale, thermometer, stethoscope, blood pressure apparatus, light source   |
| 3. Standard precautions for infection prevention | Mean availability of 9 standard precautions items (%): safe final disposal of sharps, safe final disposal of infectious wastes, appropriate storage of sharps waste, appropriate storage of infectious waste, disinfectant, single-use disposable/auto-disable syringes, soap and running water or alcohol-based hand rub, latex gloves and guidelines for standard precautions  |
| 4. Diagnostic capacity                           | Mean availability of 8 laboratory tests available on-site and with appropriate equipment (%): haemoglobin, blood glucose, malaria diagnostic capacity, urine dipstick for protein, urine dipstick for glucose, HIV diagnostic capacity, syphilis RDT and urine pregnancy test  |
| 5. Essential medicines                           | Mean availability of 20 essential medicines (%): amitriptyline tablet, amlodipine tablet or alternative calcium channel blocker, amoxicillin (syrup/suspension or dispersible tablets AND tablet), ampicillin powder for injection, beclometasone inhaler, ceftriaxone injection, enalapril tablet or alternative ACE inhibitor, fluoxetine tablet, gentamicin injection, glibenclamide tablet, ibuprofen tablet, insulin regular injection, metformin tablet, omeprazole tablet or alternative, oral rehydration solution, paracetamol tablet, salbutamol inhaler, simvastatin tablet or other statin and zinc sulphate (tablet or syrup) |

**Fig 1: WHO: Service Readiness**

We aimed to measure the service readiness of frontline level of PHC facilities i.e. basic health units in tehsil Rawalpindi, Punjab and also to discern the challenges that this tier is facing despite all efforts by government.

#### Methods

The study was a cross-sectional survey of all basic health units in Tehsil Rawalpindi; rural health centers (second and more advanced level of primary healthcare in Pakistan) were excluded because they cannot be

merged with basic health units owing to differences in services available. The structured questionnaire with a checklist was used that was formulated with help of service availability and readiness assessment reference manual [10] and modifications were made according to Minimum Service Delivery Standards [11] to encompass contextual requirements of Pakistan.

Minimum service delivery standards (MSDS) is the only yardstick for assessment of the primary healthcare facilities prepared by Government of Punjab [12], it has set benchmarks for mandatory services at the primary level. It covers a wide area of healthcare facilities from continuity of care to management of services. For the sake of this study we included: management of medication, health facility infection control, facility management & safety, human resource management and information management systems from MSDS. These areas were later merged with five blocks of service availability and readiness assessment (SARA) i.e. basic equipment, basic amenities, standard precautions, laboratory capacity and essential medicines. Cronbach's alpha was used to assess reliability of tool which was 0.756; face, content and construct validity was ensured with the help of experts of this field. The data were collected from face to face interviews with administrative staff of basic health units and a checklist was completed as personal observation of researcher with three options i.e. not available, available but not functional and available & functional. Independent variables were background characteristics of health facility, supervision & monitoring, coverage capacity, human resource and budget & finance, while the dependent variable was "Service readiness". Service readiness was computed on continuous scale from data collected for blocks of

SARA. Overall there were sixty questions including checklist, for computation of outcome (service readiness) it was divided into: basic amenities with ten questions, basic equipment three, standard precautions five, laboratory capacity three and essential medicines had four questions, many questions have sub-sections as well. The health facility that had all services in best form (a standard or ideal health facility if it has all recommended services) had highest score for all blocks of service readiness and hence highest service readiness (outcome). The outcome was normally distributed (Kolmogorov-Smirnov test= 0.091,  $p=0.20$  and Shapiro-Wilk= 0.967,  $p=0.616$ ), histogram also proved this. The data were double entered in Microsoft excel and SPSS version 21. Data were analyzed in SPSS 21, by using descriptive and parametric tests (Independent samples T-test and One way ANOVA). Cohen's criteria were used to calculate effect size. The homogeneity of variance was conformed through significant value of Levene's test. The study was ethically reviewed and approved by ethical review committee of Al-School Trust Eye Hospital, Department of Public Health, Rawalpindi. After getting permission for the research, the data were collected from the administrative staff with the written informed consent.

## Results

The scores obtained for all responses of questions designed for service readiness (basic amenities, basic equipments, standard precautions, laboratory capacity and essential medicines) were added and mean was calculated for all these blocks separately as well as for final outcome of service readiness (Figure 2).

The service readiness ( $1.86 \pm 0.15$ ) for all basic health units (91% rural and 9% urban) lagged behind the service readiness for a hypothetical standard basic health unit that was found to be 2.524 (if all services available in functional form) and none of basic health unit under study showed this readiness. Basic equipments were most close to the expectations designed by minimum service delivery standards; worst condition was for laboratory capacity followed by standard precautions

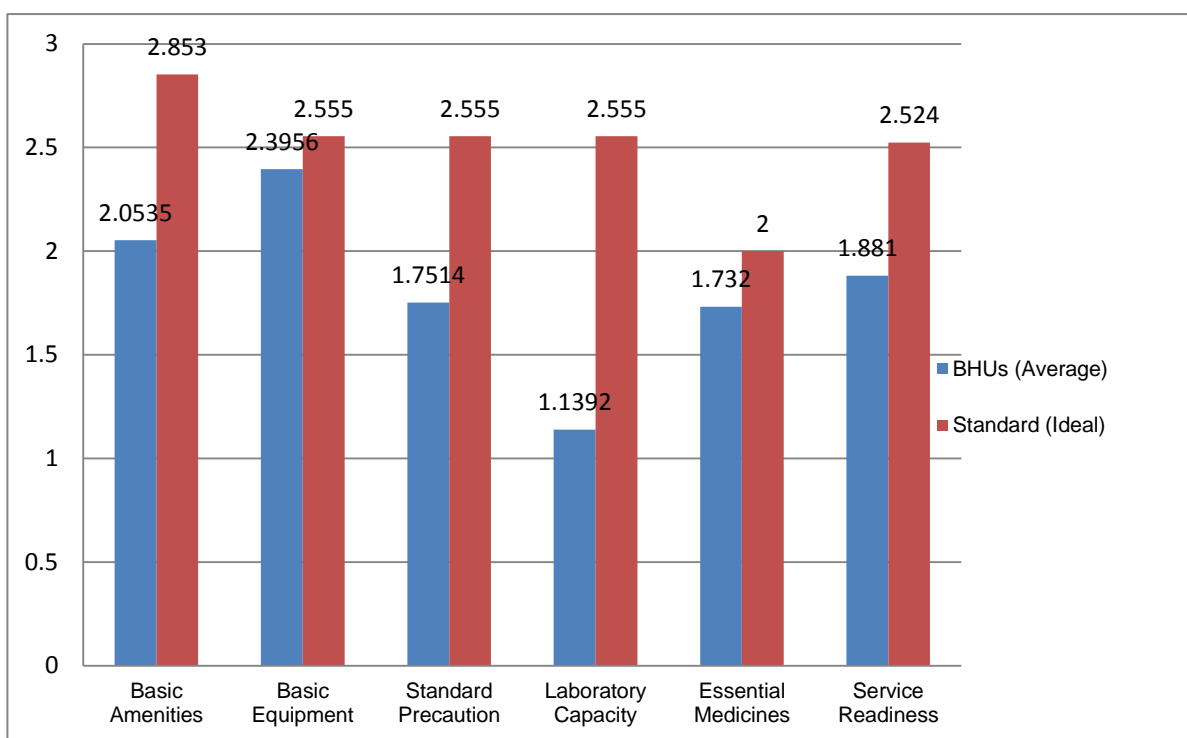


Fig 2: Service readiness: Ideal vs present basic health units

Table 1: Service Readiness-Public Primary Health Care facilities Tehsil Rawalpindi

| Service Readiness Blocks    | Description  | Present in functional form |
|-----------------------------|--|----------------------------|
| <b>Basic Amenities</b>      | Electricity and its Back up                          | 9.2%                       |
|                             | Water supply   | 55.9%                      |
|                             | Toilet and Sewerage                                  | 51.8%                      |
|                             | Landline Telephone                                   | 12.9%                      |
|                             | Separate consultation and Examination room           | 91% & 35% respectively     |
| <b>Basic Equipments</b>     | Blood pressure machine or cuff                       | 20.3%                      |
|                             | Stethoscope  | 87.2%                      |
|                             | Adult weighing scale                                 | 61.2%                      |
|                             | Weighing equipment for child/infant                  | 69.4%                      |
|                             | Thermometer  | 68.8%                      |
|                             | EPI cold box   | 95.5%                      |
|                             | Refrigerator   | 86%                        |
| Updated Stock Register      | 100%   |                            |
| <b>Standard Precautions</b> | Hand-washing soap/liquid soap                        | 100%                       |
|                             | Disposable latex gloves                              | 69.2%                      |
|                             | Needle cutter  | 64%                        |
|                             | Sharps container ("safety box")                      | 56.4%                      |
|                             | Environmental disinfectant (e.g., chlorine, alcohol) | 26.1% (chlorine)           |

|  |                                       |   |
|--|---------------------------------------|---|
|  | Medical masks , Sterilizer, Autoclave | 69%, 61%, 13% respectively                    |
|  | Type of needle/syringe                | 100% Disposable                               |
|  | Guidelines for precautions in written | 100%  |
|  | Isolation area                        | Not defined                                   |
|  | Waste Management                      | Open Pit 2 by 2                               |
| <b>Laboratory Capacity</b>                 | Hb Test                               | 13.6%   |
|  | Pregnancy Test                        | 26.2%   |
|  | Blood Sugar Test                      | 39.1%   |
| <b>Availability of Essential Medicines</b> | 11 recommended medicines by EDO-H     | 100% (Syp. Anthelmintic and Tab. Paracetamol) |
|  |                                       | 22% (Diclofenac)                              |
|  |                                       | 17% (Amoxicillin, Cotrimoxazole, Ampicillin)  |

### Findings-Service Readiness

**Basic Amenities:** The overall condition of basic amenities was overall fair but electricity with functional backup was present in only 9% of BHUs. Water supply was not available in 35% and basic source of water was boring/hand pump in 48% basic health units. The facility of toilet was present in all basic health units but it was functional in only 52% due to lack of water or sewerage system in others. There was no separate room for examination in 39% of basic health units (Table 1).

**Basic Equipment:** Availability of equipments in functional form varied; the necessary equipments like blood pressure machine, thermometer, weighing scales were less than 70% except stethoscope and EPI cold box which was present in more than 90% of basic health units.

**Standard Precautions:** The isolation area was not defined in any basic health unit and pit 2 by 2 was most commonly practiced for waste management which was open in all units. Supply of disinfectants like chlorine was found in only 26% of basic health units. Needle cutter and sterilizer were found in only 64% and 61% of BHUs.

**Laboratory Capacity:** As per the guidelines of MSDS, three basic tests (haemoglobin, blood sugar and pregnancy test) should be functional in all basic health units but only two had the capacity to perform all these tests.

**Essential Medicines:** There were eleven recommended medicines in the list provided by Executive District Office-Health (Rawalpindi, Pakistan). The condition was satisfactory; Syp. Anthelmintic and Tab. Paracetamol was present in required stock in all units. However, rest of medicines was also present but below required stock, Amoxicillin, Cotrimoxazole, Ampicillin was present in 17% basic health units.

**Other Findings:** Basic health units are supposed to work from 8a.m till 2 p.m but recently government of Punjab, Pakistan introduced 24/7 services at selected basic health units and 17% basic health units from tehsil Rawalpindi were upgraded with 24/7 service. Basic health units cater population of up to 25,000 but 39% BHUs were serving for population less than 15,000 and 4% with greater than their limit (Table 2).

**Table 2: Determinants of Service Readiness**

| Variable                           | N (%) | Mean SD     | t/F-value | p-value | Effect size $\eta^2$ |
|------------------------------------|-------|-------------|-----------|---------|----------------------|
| <b>Demographic Characteristics</b> |       |             |           |         |                      |
| <b>Gender</b>                      |       |             | 0.77      | 0.45    | 0.16                 |
| Medical officer (male)             | 48%   | 1.84 ±0.102 |           |         |                      |
| Medical officer (female)           | 52%   | 1.89 ±0.190 |           |         |                      |

|   |     |              |       |       |       |
|---|-----|--------------|-------|-------|-------|
| <b>Locality</b>                                 |     |              | 4.23  | 0.000 | 0.875 |
| Urban   | 91% | 2.20 ±0.089  |       |       |       |
| Rural   | 9%  | 1.83 ± 0.114 |       |       |       |
| <b>24/7 services</b>                            |     |              | 1.86  | 0.08  | 0.38  |
| Present   | 17% | 1.75 ±0.025  |       |       |       |
| Absent  | 83% | 1.89 ±0.157  |       |       |       |
| <b>Distance to district health office (Km)</b>  |     |              | 1.066 | 0.363 | 0.09  |
| 0-40  | 48% | 1.9± 1.80    |       |       |       |
| 41-60   | 43% | 1.85± 0.11   |       |       |       |
| >60   | 9%  | 1.74± 0.18   |       |       |       |
| <b>Political Support</b>                        |     |              | 3.79  | 0.001 | 0.51  |
| Yes   | 9%  | 1.11 ±0.118  |       |       |       |
| No  | 91% | 1.22 ±0.102  |       |       |       |
| <b>Catchment Population</b>                     |     |              | 1.228 | 0.314 | 0.11  |
| <15,000   | 39% | 1.82± 0.10   |       |       |       |
| 15-25,000                                       | 56% | 1.89± 0.18   |       |       |       |
| >25,000   | 4%  | 2.01± 0.01   |       |       |       |
| <b>Supervision</b>                              |     |              |       |       |       |
| <b>Health official visits (last six months)</b> |     |              |       |       |       |
| <10   | 4%  | 1.83 ±0.00   |       |       |       |
| 10-15   | 69% | 1.82 ±0.12   | 4.67  | 0.022 | 0.32  |
| >15   | 26% | 2.01 ±0.19   |       |       |       |
| <b>Coverage</b>                                 |     |              |       |       |       |
| <b>Total out-patient visits (last month)</b>    |     |              |       |       |       |
| <1000   | 52% | 1.83 ±0.12   | 8.67  | 0.002 | 0.37  |
| 1000-2000                                       | 39% | 1.85 ±0.12   |       |       |       |
| >2000   | 9%  | 2.20 ±0.89   |       |       |       |
| <b>Human Resource</b>                           |     |              |       |       |       |
| <b>Percentage of available staff</b>            |     |              |       |       |       |
| <60%  |     |              |       |       |       |
| 60-90%  | 48% | 1.80 ±0.11   | 10.42 | 0.001 | 0.51  |
| >90%  | 43% | 1.87 ±0.12   |       |       |       |
|   | 9%  | 2.19 ±0.09   |       |       |       |
| <b>Residence for staff (Functional form)</b>    |     |              |       |       |       |
| Available (functional)                          | 13% | 2.13 ±0.12   | 9.31  | 0.001 | 0.48  |
| Available (non-functional)                      | 74% | 1.82 ±0.118  |       |       |       |
| Not available                                   | 13% | 1.83 ±0.80   |       |       |       |
| <b>Budget &amp; Finance</b>                     |     |              |       |       |       |
| <b>Total deposit (last one year) US\$</b>       |     |              |       |       |       |
| <95.5   | 30% | 1.84 ±0.11   | 0.734 | 0.001 | 0.49  |
| 95.5-286.5                                      | 61% | 1.85 ±0.12   |       |       |       |
| >286.5  | 9%  | 2.20 ±0.89   |       |       |       |

The number of beds sanctioned from district health office for BHUs is two and these were present in all BHUs. The study showed that most of the BHUs (52%) had less than 1000 out-patients registration during last month of study and female out-patients comprised more than half of the registered patients in every basic health unit during last month. The results showed a significant relationship ( $p$  value  $<0.05$ ) for locality of BHU, distance from district health office, political support, out-patients registered (last month), total deposit in last year, total health official visits, percentage of available staff and presence of residence with mean service readiness.

The 'Purchee' (paper slip for patient admission) fee collected in last fiscal year from basic health units of Tehsil Rawalpindi was at 10,000-30,000 Rs (95.5-286.5 USD) for 61% basic health units. In another question when respondents were asked about the support from political personnel (other than health department), 8.7% respondents claimed this support and had less service readiness, it was statistically significant ( $p$ -value=0.001). All medical officers denied any "financial support" from private organizations but in another question about type of private organization involved in financing the basic health units, 17% respondents mentioned seldom support from "Donors" and these had greater registered patients from others. None of the basic health units were found to be 100% filled by staff; most of basic health units had 31-60% available staff. Not only the filled staff varied but sanctioned staff also did not have any fixed number for basic health units. The results showed that 87% of basic health units had residence for staff; however, only 13% of basic health units had this in functional form. The absence of staff can distort the services of health facility and confidence of patients to utilize those services [13], this was also deduced in results of this study that percentage of available staff had a significant impact on mean service readiness ( $p$ -value=0.001). The distance from district health office proved to be non-significant ( $p$ -value $<0.05$ ) in affecting mean service readiness of primary healthcare facilities. Almost half of the administrative heads were male and half of basic health units had female medical officers, but overall there was not any significant difference in readiness of their facilities ( $p=0.45$ ) which emphasized that administrative powers being exercised by them did not have any disparity. Limited hours of services and lack of ambulance at basic health units is responsible for poor utilization [14] but the outcome of this study showed that there was no difference in service readiness for 24/7 basic health

units and others ( $p$  value=0.08). This study showed a significant impact of number of visits on the service readiness ( $p$ -value=0.022). The results were contradictory to the results of secondary data analysis which concluded uncertainty of the impact of supervision on quality of PHC for low-middle income countries [15].

The findings of the study suggested that locality of PHC facilities had a strong impact upon the service readiness ( $p$ -value=0.000) the findings were reinforced by another study [16] that concluded greater utilization of primary healthcare facilities was found in urban areas. The basic health units with more support from political personnel had poor service readiness and result was significantly different from those that had not this support ( $p=0.001$ ).

## Discussion

This study highlights determinants that are affecting the utilization of frontline tier of Pakistan's healthcare system i.e. basic health units. In this study, non-availability of basic equipments, standard precautions and laboratory capacity was identified as deterministic factors responsible for low utilization of primary healthcare facilities which is consistent with other studies conducted elsewhere [4, 17]. However; this study found additional factors like supervision, human resource, political involvement and financial aspects that can also be responsible for low utilization of primary healthcare facilities. The findings of this study showed that all basic health units showed deviation from the benchmarks designed by minimum service delivery standards of Pakistan in terms of their service readiness. However, it can be improved by upgrading laboratory capacity, standard precautions and basic amenities. The findings of this study are in pace with the result of other studies that mentioned availability of residence for staff at 90% but only 33% functional residence while our results depicted this case with 87% availability and 13% functional availability of residence. Another study reported out of four hundred....had all recommended tests which was similar to our findings [18].

Out of four hundred and ninety three basic health units only one had  $>75\%$  general equipment and only 25% had all recommended tests available [18].

Our study results differ from other similar research conducted previously which reported worse conditions for services like stethoscope (functional form 67%), sharps container (48%) and sterilizer (54%) in basic health units. However, the reported condition of

laboratory capacity by this study is much better than our results i.e. presence of haemoglobin reagent and blood sugar strips 13% and 39% respectively which is 3% and 14% higher than our results [19]. The results of our study are also similar to the findings of another study that also reported poor performance of basic health units under district government but the condition of essential medicines shown by this study was extremely poorer as compared to our findings [14]. In 2012, Nigeria conducted an assessment with help of United States President's Emergency Plan for AIDS Relief (PEPFAR) and the United States Agency for International Development (USAID) for primary healthcare facilities both in government and private sector to assess availability and readiness of general and specific services including existing HIV services. The survey reported lack of proper funds, irregular budgetary allocation and improper record keeping at primary healthcare facilities [20] which was consistent with our results with the exception of record maintenance which was found to be in order. Basic amenities like electricity, water, communication are most vital for proper involvement of health care providers in their job [21], but this study also showed that proper system for communications, water availability on-site and sewerage system which are most vital for proper involvement of health care providers in their job, were not present for most of the basic health units which is in contrast to previous research. The provision of essential medicines is one of the eighth components of Alma-Ata Declaration [22] and is an important component of any health care system. Although previous research studies from developing countries have reported the absence of essential medicine list in public and private health care facilities [23, 24] our study's results showed that essential drug list was present in all sampled PHC facilities. However, only 31% of medical officers of BHUs were satisfied from the existing list and suggested changes in that list. In this study, Laboratory services were not evenly present in all BHUs in contrast to other countries where this facility was available at every level [25]. The results revealed that 43% of basic health units were not able to do any test from the recommended list. Moreover, there was only one basic health unit that had maintained all standard precautions; it was in contrast to Kenya and Sierra Leone where standard precautions were maintained in all primary healthcare facilities more than fifty percent [26]. The lack of financial power creates lack of ownership among heads of basic health units. A study in Nigeria also concluded that poor service readiness due to lack of budget allocation can be managed by

decentralization of health systems [20] but Pakistan is still facing hindrances for delegating powers at grass-root level. Lack of human resource and limited resource available at basic health units are reported by another study as a hindrance in low utilization of this tier [27]; our study also supports these results. Involvement of political personnel in health sector is very common in Pakistan. It serves as a dual sword; it can be a threat if it is interference or can be strength if it shows some commitment [28] however, this study showed a negative impact of local political involvement on service readiness of basic health units. One of the limitations of this study was small sample size that may hinder generalizability of findings. Although we chose basic health units for our research, this research was conducted in Rawalpindi Tehsil which is one of the more developed areas of Pakistan; it may not represent the status of BHU's in lesser developed areas of the country. However, our findings point to deficiencies in the healthcare system even if the facilities are based in a setting with more or less resources.

## Conclusion

In this study, we found non-availability of basic equipments, standard precautions and laboratory capacity as important predictors of low utilization of basic health units. Laboratory services which are an integral part of any health care system were lacking in most BHU's. Our results highlight weak service readiness at BHU's in Tehsil Rawalpindi and advocate for urgent remedial measures to overhaul the primary health care system. Finances should be allocated on these highlighted issues on immediate basis to revive this most important tier of primary healthcare systems of Pakistan. We recommend that district health government should conduct such assessments on regular basis to evaluate services especially before expansion of services and introduction of new interventions.

## References

1. Nishtar S, Boerma T, Amjad S, Alam A.Y. Pakistan's health system: performance and prospects after the 18<sup>th</sup> Constitutional Amendments. *Lancet*. 2013. 381(9884):2193-206.
2. World Health Report. Primary Health Care: Now More than Ever; Geneva, Switzerland: 2008.



3. Who. Monitoring the Building Blocks of Health Systems: A Handbook of Indicators and their Measurement Strategies. 2010;1–92.
4. Ahmed J, Shaikh BT, J. A, B.T. S. The state of affairs at primary health care facilities in Pakistan: Where is the state's stewardship? *East Mediterr Heal J.* 2011; 17(7):12
5. Primary healthcare. Government of Punjab, Pakistan; website: <http://www.prsp.org.pk/Home/Home.aspx>. Accessed January 1, 2016.
6. Health watch. Government of Punjab, Pakistan website: <http://pspu2.pitb.gov.pk/>. Accessed March 23, 2016.
7. Outsourcing of basic health units. Government of Punjab website:[http://irg.punjab.gov.pk/initiatives\\_themes\\_result\\_based\\_ongoing\\_previous\\_pphi](http://irg.punjab.gov.pk/initiatives_themes_result_based_ongoing_previous_pphi). Accessed December 6, 2015.
8. Majrooh MA, Hasnain S, Akram J, Siddiqui A, Shah F, Memon Z. Accessibility of antenatal services at primary healthcare facilities in Punjab, Pakistan. *J Pak Med Assoc.* 2013;63(4 Suppl 3):S60–6.
9. El-Jardali F, Hemadeh R, Jaafar M, Sagherian L, El-Skaff R, et al. The impact of accreditation of primary healthcare centers: successes, challenges and policy implications as perceived by healthcare providers and directors in Lebanon. *BMC Health Serv Res.* 2014;14(1):1–10. DOI: 10.1186/1472-6963-14-86
10. Service availability and readiness assessment; an annual monitoring system for service delivery. Geneva: world health organization; 2013 (WHO/HIS/HSI/RME/2013/1)
11. Punjab devolved social services program. *Minimum Service Delivery Standards for Primary and Secondary Health Care in Punjab.* 2006;
12. Minimum service delivery standards. Government of Punjab, Pakistan; website: [www.phc.org.pk](http://www.phc.org.pk). Accessed September 02, 2016.
13. Mahmood A, Arshad MJ, Sadiq M. Situation Analysis of Health Facilities with Special Reference to Family Planning Services in Pakistan: 2012:60
14. Tanzil S, Zahidie A, Ahsan A, Kazi A, Shaikh BT. A case study of outsourced primary healthcare services in Sindh, Pakistan: is this a real reform? *BMC Health Serv Res.* 2014;14(1):1–7.
15. Bosch-Capblanch X, Liaqat S, Garner P. Managerial supervision to improve primary health care in low- and middle-income countries. *Cochrane Database of Systematic Reviews* 2011;9(1):12
16. Minas M, Koukousias N, Zintzaras E, Kostikas K, Gourgoulianis KI. Prevalence of chronic diseases and morbidity in primary health care in central Greece: an epidemiological study. *BMC Health Serv Res.* 2010;10:252
17. National HIV/AIDS Division, Federal Ministry of Health (FMoH) [Nigeria] and MEASURE Evaluation (2014). Assessment of Primary Health Care Facilities for Decentralization of HIV/AIDS Services in Nigeria 2012. Federal Ministry of Health, Abuja, Nigeria.
18. Technical Resource Facility. Essential package of health services for primary health care in Punjab, Islamabad. 2012.
19. Majrooh, M. A., Hasnain, S., Akram, J., & Siddiqui, A. (2015). A cross-sectional assessment of primary healthcare facilities for provision of antenatal care: calling for improvements in Basic Health Units in Punjab, Pakistan. *Heal Res Policy Syst, 13*(Suppl 1):59
20. National HIV/AIDS Division, Federal Ministry of Health, Nigeria and Measure Evaluation (2014).
21. Mir AM, Shaikh MS, Rashida G, Mankani N. To serve or to leave: a question faced by public sector healthcare providers in Pakistan. *Heal Res Policy Syst.* 2015;13(1):85–91.
22. Zaidi, S., Bigdeli, M., Aleem, N., & Rashidian, A. Access to Essential Medicines in Pakistan: Policy and Health Systems Research Concerns. Meara JG, ed. *PLoS ONE.* 2013; 8(5):e63515. doi:10.1371/journal.pone.0063515
23. Malik M., Hussain A, Shaffiq M, Hassali MAA, Shafie AA. Role of Essential Drug List in Effective Management of Essential Anti-Malarial Drugs in Healthcare System of Pakistan Challenges in Policy Development to Practice. *Pharm Regul Aff.* 2014; 03(02). 10.4172/2167-7689.1000120
24. Choi Y, Ametepi P. Comparison of medicine availability measurements at health facilities: evidence from Service Provision Assessment surveys in five sub-Saharan
25. African countries. *BMC Health Serv and Res.* 2013;13(1):1–8. DOI: 10.1186/1472-6963-13-266
26. Sierra Leone Service Availability and Readiness Assessment report. Ministry of health and sanitation. 2012. 99p.
27. Kenya Service Availability and Readiness mapping report. Kenya. Ministry of health. 2013. 121p.
28. Majrooh, M. A., Hasnain, S., Akram, J., Siddiqui, A., & Memon, Z. A. Coverage and Quality of

---

Antenatal Care Provided at Primary Health Care Facilities in the “Punjab” Province of “Pakistan.” *PLoS ONE*, 2014;9(11):1

29. Wazir, M. S., Shaikh, B. T., & Ahmed, A. National program for family planning and primary health care Pakistan: a SWOT analysis. *Reproductive Health*, 2013; 10:60.

**Source of Support: Nil**  
**Conflict of Interest: Nil**