

**Research Article**

An analysis of primary healthcare in terms of service management standards in Khyber Pakhtunkhwa, Pakistan

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ABSTRACT

This study investigates the implementation of the service management quality standards set by the Khyber Pakhtunkhwa (KP) government at primary health care facilities (PHCFs) in district Kohistan. Primary data through a questionnaire was collected from 42 functional PHCFs of district Kohistan. A total of 142 responses were recorded which includes 42 responses from the incharge of PHCFs and 100 from the patients who attended PHCFs facilities. Simple descriptive statistics were used to analyze this collected data. Most of the service management standards were not met in rural health centers (RHCs) However, the state of affairs at Civil Dispensary (CDs) and Basic Health Unit (BHUs) was terrifying. This study identifies the weak areas which require quality enhancement. This study suggests quality improvement in Primary Care Management Committee, A list of notifiable diseases, Essential Equipment, Rubbish Pit, waiting area, SOPs and Guidelines, and Duty roster, Copy of Job Description, Guidelines for Risks, and Hazards and Patient's Feedback Mechanism and Complaint Box. This study suggests that the KP government must defy trouble areas identified by the current study to improve health facilities in PHCFs. This will also reduce the patient's pressure in tertiary health facilities.

Keywords: *Primary Healthcare; Service Management; Khyber Pakhtunkhwa*

1. INTRODUCTION

Primary healthcare is the initial contact of individuals, families, and the community with the health system of any country. It provides care that has easy access to individuals, families, and the community with their full participation at an affordable cost. The fundamental role of primary healthcare is to provide continuous and complete care to patients. The benefits of primary healthcare are the deliverance of care and its maximum accessibility. Quality in healthcare services is associated with the comfort patients get, the loyalty of the patients to the healthcare services, and the productivity and profitability of healthcare organizations. Therefore, healthcare quality services are recognized as a competitive edge by healthcare organizations. Quality standards are the benchmarks to the desired level of services. They provide the guiding details of requirements,

specifications, guidelines, and characteristics of services to meet. The health department of KP and Health Regulatory Authority (HRA) developed quality standards for primary healthcare facilities. There are two Portions of the quality standards manual.

Service Management: These quality standards are related to the management of all kinds of services provided in PHCFs. Service management standards include HRM, Management of equipment, processes and functions, management of basic utilities (Electricity, Drinking water, toilets), management of record and Grievance Redress, etc.

Service Provision: It covers quality standards which are associated with services offered in PHCFs. Service provision includes services such as child's health, health education, availability services accessibility to community, emergency services to patients, diagnosis of diseases, rational prescription of drugs, the privacy of patients, cold chain management, and disposal system, etc.)

This study is aimed at quality standards for the service management portion to analyze the quality of primary healthcare in Kohistan. The objectives of this research are to analyze the quality level of the management of services provided in PHCFs of Kohistan and to investigate the established primary health care (PHC) quality standard in terms of service management. This study for the first time in Khyber Pakhtunkhwa investigates the established healthcare quality standard for service management. It is assumed that these set standards are not followed and implemented fully in Khyber Pakhtunkhwa particularly in Kohistan. A detailed investigation into these standards is needed to identify the gap between the expected and assumed levels of implementation.

specifically, this study has the following purposes

- To analyze the existing level of service management quality standards in PHCF of Kohistan.
- To identify the areas demanding quality improvement in terms of services management.

This research shows the original picture of ground realities about primary healthcare facilities in the light of primary healthcare standards of service management set by the Khyber Pakhtunkhwa government. Service management is a set of specialized capacities of an organization to improve customer value in the shape of services (Nuwulang, 2011). Therefore, it is an organized structure of processes and functions for managing the services in primary healthcare. Activities of PHC staff are quite similar and adherent to the management functions while delivering the services. All the management functions (Planning, Organizing, Staffing, Directing, and Controlling) are exhibited and practiced in PHCFs.

Kohistan is one of the most underprivileged districts of Khyber Pakhtunkhwa. Its total population is 770086 total in number and divided into three tehsils with 38 Union Councils. The Healthcare structure of Kohistan is limited to the primary level only. Primary healthcare is a first aid house where patients are treated generally by general practitioners like Medical officers, Medical technicians, or Dispensers. The PHC structure is composed of CDs, BHUs, and RHCs. At present, there are 7 CDs, 31 BHUs, and 4 RHCs are operational in Kohistan.

This research work is very important because no research has been made earlier in Khyber Pakhtunkhwa which has assessed the established quality standards of services management for primary healthcare facilities. Therefore, the study aims to fill that gap in terms of analyzing healthcare services provided by PHCFs in district Kohistan. The outcomes of this study provide insight to policymakers, government, and stakeholders in the health sector in the following ways. First, Policymakers can take some initiatives to enhance the quality of services provided at PHCFs which are identified as weak aspects at ground level by this study. Second, this study help government to bring serious reforms to pursue and to maintain the quality in service management in PHCFs for sustainable development. Third, the finding of the study helps stakeholders in understanding the ground reality of the existing level of quality in services to decide for future reforms and improvements.

2. LITERATURE REVIEW

There are three types of management practiced in healthcare organizations which are strategic, general, and functional. Many factors including economic, business ethics, expertise, experience, consumerism, value for money, culture, and social responsibilities have an impact on healthcare organizations (Muller et al., 2006). The range of this context extended from global and constitution to business ethics and ownership. Legislative authorities, board of directorate, community, trade unions, managers, subordinates, and other stakeholders play the main role in healthcare management. (Gronroos, 1990) identifies a new type of competition in his work and called service competition. This competition needs a “service know-how” on the strategic and operational levels. By discussing the hazards for management and results of strategic thinking he proposed definition and principles of service management. (Kellogg & Nie, 1995) presented a service package matrix in their work and said that to foster services strategic thinking a service package matrix is presented which is consists of tangible and intangible aspects. This service package is defined by the degree of customer influence found in these elements. Strategic skills are determined and examined along the dimensions of the service process, packages, and the matrix’s major diagonal. Service organizations may use it to achieve strategic insight. This insight can be obtained by aligning the types of service packages and processes.

Johnston (1999) described in his work that the current focus for service management should be on exercising the techniques and frameworks. He also suggests “return to roots” as it is needed to cope with grown service management, operations, marketing, and HRM. Focusing on quality, operational improvements, and design may help to develop service management. In this work, he adds linkage of performance of the operational business, its measurement, and improvement. His study also provides a connection to service design, technology, and its management. (Tudor et al., 2005) investigated the 10- years strategy of the National Health Service (NHS) in Cornwall. Public perception and staff style need to be changed to reduce the barriers. They provide recommendations based on improvement in the organization’s infrastructure and localized control. They suggest forming the strategic partnership of NHS and community. They gave the idea to use the resources and add

methods to reduce waste during recycling which is a step forward to the waste management concept. (Grout & Stevens, 2003) described that reforms in public hospitals focus on incentives. They examine features defining the delivery of public services, adding incentives to staff and team, organizational structure, and framework.

Lazzerini et al., (2017) conducted a study to explore whether, after the training, periodic supportive supervision may improve the quality of pediatric hospital care in Kyrgyzstan, where inappropriate care was common but in-hospital postnatal mortality was low. The study was conducted by using WHO guidelines; 10 indicators were assumed in 20 public hospitals where children's healthcare services were delivered. The primary indicator was including three indicators i.e., unnecessary hospitalization, unnecessary painful procedures, and increased iatrogenic risk. A total of 4626 admitted children aged 2 to 60 months were reviewed. In the hospitals where intervention was allowed the primary indicator decreased from 47% at baseline to 6.8% in 1 year. No changes were recorded in the controlled group. The findings show that supportive supervision significantly improved the overall quality of pediatric care after training courses relevant to WHO guidelines in hospitals for children's healthcare. (McColl-Kennedy et al., 2017) by using the data of six different samples of 1151 healthcare clients find the effect on well-being by inspecting co-creative customer practices. The results show that the well-being is increased while having good interaction with doctors through experiencing collaborative treatment options, friends and family interactions, and related cocreated activities. (Hanefeld et al., 2017) revealed that recognition of the complex nature of healthcare quality is critical for scaling up priority health interventions. For better healthcare services, better technical quality along with better acceptability and patient-centeredness are required.

Mosadeghrad (2013) illustrated that qualitative healthcare is acquiring gratification of the provider and to consummate the patient's need with the provision of adequate, efficient, and effective health care services in the light of current clinical protocols and specifications to delight the client persistently. Likewise, (Lillrank, 2012) conducted a study to define integration and coordination in the production of health services and to propose rules for the basic design. To explore the purpose, context, and design rule science methodology technique based on operations management perspective is used. (Dorgan et al., 2010) conducted interviews in hospitals of Canada, France, Germany, Italy, Sweden, the United Kingdom, and the United States. The research aimed to find if practicing specific management tools in hospitals can change the outcomes of the hospitals? The findings of this research paper are following:

- Management practices have a strong relationship with health outcomes.
- Adopting best clinical practices is associated with good management.
- quality in management is associated with recognized competition
- higher management scores are obtained with having more clinicians as managers
- higher such manager results better management practices
- management practice has a relationship with the size of the hospital.

Atinga et al., (2011) studied that a set of five factors i.e. communication, facility environment, courtesy, waiting time and support moderately anticipate satisfaction of the patients with

healthcare quality in two hospitals of Ghana. The findings show that the five-factor model determines as 51% explanatory power of the dependent variable. (Castañeda-Méndez et al., 1998) in his work define how important is the balanced scorecard for the determination of practices, outcomes, quality, value, and costs in healthcare. A balanced scorecard is a set of measures that shows how hospitals, employees, and patients are interdependent. An action plan is developed by using these measures. An action is composed of four elements which are who is responsible, accountable, and who is authorized to take action, what is the action when it will be complete, and why the action is taken. (Aagja & Garg, 2010) measure patients' perceived quality in public hospitals developed a public hospital service quality scale. The scale measures five dimensions (admissions, overall service, discharge process, medical service, and social responsibilities) of hospital service quality. To conduct the study "standard scale development procedures" were applied. Delphi method was used. (Kunkel et al., 2007) presented a three-factor model for a quality system. The goal of their study was to explain quality systems by interpreting the structures, processes, and outcomes and whether they have a mutual relationship. The finding of the study shows that to describe, evaluate and compare quality systems the model could be beneficial.

Mickan et al.,(2005) provide evidence of the outcomes of the effective team. Well, an enthusiastic and well-trained team spares hospital time and cost, minimizes sudden admissions, improves coordination of care, and eases the patient's accessibility. (Ennis & Harrington, 1999) reported on the findings in the Irish healthcare sector on qualitative management by quantitative research. According to the study experiencing quality management in hospitals becomes cost-effective and efficient. (Tabish, 1998) explains that hospitals use most of the health resources share provided by the governments in developed countries but in developing countries, they have been neglected. according to (Mitchell et al., 1998) healthcare quality is affected by many factors to achieve desired outcomes. This "quality health outcomes model" sufficiently provides guidelines to develop a quality improvement database and to manage the outcomes. (Vera, 1993) described the client's view of high-quality care in Santiago, Chile. It is the ethical duty of healthcare providers to guarantee quality in services. Better quality care makes contraception more secure and highly effective.

The government of KPK along with IQHCS and GIZ developed quality standards for the services provided in healthcare facilities. These established standards are believed as benchmarks for the management of services provided in primary healthcare facilities. The quality standards are designed to ensure a high level of performance deliverance by experiencing and utilizing the established methods and tools. The established quality standards in terms of service management were analyzed in this research in District Kohistan. To highlight the existence and achieved the level of service management quality standards is the objective of the study. To expose the enacted level of quality in primary healthcare facilities is the need and hence it is the target of this research.

3. MATERIALS AND METHODS

The Population of the current study consists of PHCFs of KP Province. There are 447 CDs, 784 BHUs, and 111 RHCs in the whole KP Province. PHCFs of district Kohistan were

taken as a sample, firstly, because of its geographical importance in China Pakistan Economic Corridor. Secondly, it is the most underprivileged district of KP, and finally, it is easily manageable to the researcher within the cost and time constraints of this study. There was a total of 44 PHCFs in district Kohistan but 2 PHCF are non-functional due to the non-availability of staff or land mutation. Therefore, the sample of this study only consists of 42 functional PHCFs which includes 7 CDs, 31 BHUs, and 4 RHCs.

The data about quality standards for service management is collected by using a questionnaire where Likert and dichotomous scales were used as per the nature of the questions. There were two sections in the questionnaire (Staff portion and Patient Portion). Out of the total 142 questionnaires, 42 were filled by incharge of the PHCFs, and 100 were filled by patients. Collected data is processed with the help of the Statistical Package for Social Sciences (SPSS).

4. ANALYSIS & RESULTS

The data collected about the Primary health care quality standard for services management set by the Khyber Pakhtunkhwa government is analyzed using descriptive statistics. A total of 142 PHCFs (7 CDs, 31 BHUs, and 4 RHCs) were studied. The standards set by the Khyber Pakhtunkhwa government were highlighted in bold against which the performance of 42 PHCFs was measured¹. The following section contains the analysis and discussion of the data collected against each service quality standard.

4.1. A PRIMARY CARE MANAGEMENT COMMITTEE (PCMC) PLANS AND MANAGES ITS RESOURCES, SUPPORTS THE SERVICE'S PROCESSES, AND COMMUNICATES DECISIONS AND INFORMATION TO RELEVANT PERSONS AND ORGANIZATIONS

We asked about the functionality of PCMC by the staff of PHCFs. PCMC is non-functional in all 7 CDs and 24 BHU of district Kohistan whereas it is only functional in 7 BHUs and 4 RHCs. This shows that the standard is not achieved at CD and BHU levels. Hence the measurable criteria of this standard are dependent on the functionality of PCMC in PHCFs so the data for each measurable criterion is collected from 11 PHCFs where PCMC is functional. In 11 PHCFs where PCMC is functional representatives from local Governments, staff, and users are only included in 71.4% of functional BHUs and 50% of RHCs. Similarly, minutes of PCMC meetings are not kept for 5 years and are not available at any of the PHCFs which means that this measurable criterion is not followed. When we asked about the usefulness of the district health information system (DHIS) from the head of the PHCFs only 14.28% of BHUs and 25% of RHCs heads agreed that the DHIS reports are helpful to identify problems and to make recommendations while 71.42% of BHUs and 100% of RHCs submit monthly DHIS reports to EDO health. All functional BHUs and RHCs reported that the annual plan is not implemented and reviewed on regular basis. All functional BHUs and RHCs reported that the committee never meets regularly according to a set agenda that

¹ Primary health care standards can be access through (healthkp.gov.pk/public/uploads/downloads-199.pdf)

includes follow-up from the last meeting. This means that this criterion is not followed at any of the PHCFs of Kohistan.

4.2. CLIENT/PATIENT INFORMATION IS REGISTERED, CODED, ANALYZED, AND USED AS A MECHANISM FOR MONITORING AND PLANNING

The question about the availability of the patient's data register was asked from all heads of PHCFs. It was observed that the patient's data registers are available at PHCFs which shows that this criterion is fully followed across all PHCFs. Furthermore, it was observed that 70% incharges from CDs, 77% from BHUs, and 100% from RHCs kept their register up to date and complete. All incharges of PHCFs reported that they record the patient's date of visit its characteristics, diagnosis, and treatment according to the operating procedures. It is evident from the response of PHCs incharges that a consistent disease coding system is used in 70% of CDs, 61% of BHUs, and 75% of RHCs. When we asked 42 PHCs incharges whether the staff of PHCs analyze the information gathered from patients and provide feedback to the community. Only 33 responses (6 from CDs, 24 from BHUs, 3 from RHCs) came as never such analysis is used by the staff and never its results are feedback shared with the community. However, 9 incharges (1 from CDs, 7 from BHUs, and 1 from RHCs) reported that sometimes such analysis is used and the community is informed about the results.

4.3. NOTIFIABLE DISEASES ARE REPORTED PROMPTLY AND APPROPRIATE ACTION IS TAKEN TO MINIMIZE THE SPREAD OF THE DISEASE

According to PHCs standard incharge of the PHCs facility have a list of notifiable disease available at the facility. Out of all incharges 100% from CDs, 87% from BHUs, and 75% from RHCs responded that list for notifiable diseases is not available at their facility. Among the incharges 100% from CDs, 74% from BHUs, and 75% from RHCs responded that notifiable diseases are not reported within a specified time. Overall this measurable criterion is not followed at most of PHCFs of Kohistan. Only 60% of BHUs and 100% of RHCs submit the weekly report on the prevalence of Polio in Kohistan. Among the incharges 100% from CDs, 87% from BHUs, and 75% from RHCs responded that procedures for managing notifiable diseases are not used and roles and responsibilities are not defined.

4.4. THE EQUIPMENT AND UTILITIES ARE FUNCTIONAL, MEET THE DEFINED NEEDS OF PLANNED SERVICES, AND ARE PROPERLY MAINTAINED AND USED.

According to standard 4.4, PHCFs facility has all necessary equipment available in the facility and it must be operational as well. 85% of CDs, 83% of BHUs, and 100% RHCs incharges confirmed the availability of essential equipment. However, it is reported that provided equipment is not documented in the concerned register properly in almost all PHCs facilities in Kohistan. According to standard PHCFs facility must have six essential types of equipment available at the facility. Response of the incharge of PHCs facility about the availability of six essential types of equipment in a health facility demonstrates that Thermometer, Stethoscope and BP Machines are available in most of PHCFs while Screen,

Gloves, and Torch are not available in most of the CDs and BHUs. PHCFs facilities where this essential equipment is available are never maintained in 100% from CDs, 85% from BHUs, and 75% from RHCs. Similarly, 100% from CDs, 77% from BHUs, and 75% from RHCs responses demonstrated that the damaged equipment is never disposed of according to equipment maintenance and replacement schedule. Out of the total incharges, 100% from CDs and 81% from BHUs told that a stretcher and 2 examination couches are not available in their PHCF while 100% incharges from RHCs said that these are available at their facilities. 67% from BHU and 75% from RHCs where these facilities are available reported that the stretcher and the examination couches are clean. However, 100% from BHUs and 75% from RHCs where these facilities are available reported that the stretcher and couches are not covered.

We also inquire about the functionality of equipment (Baby Weighing Scale, Fetoscope, Neonatal Weighing Scale, Speculum, Refrigerator, Stools, Lantern, Sterilizer, Timing Device, Stainless Steel Bowel, Kidney Bowels, Dressing Drum, Gloves, Masks, Apron, Adult Weighing Scale, Nebulizer, Suction Machine, Oxygen Cylinder, X-Ray Viewer, Suture Set, Needle Safety Box, Resuscitation Kit, ORS Corner, ENT Diagnostic Set and D&C Set) from incharge of the PHCFs. In 67% CDs only Baby Weighing Scale and Adult Weighing Scale are available. In 26% BHUs Baby Weighing Scale, in 19% BHUs Speculum, Adult Weighing Scale and Oxygen Cylinder while in 71% BHUs Stools are available only. Similarly, in 100% of RHCs Fetoscope, Dressing Drum, Suction Machine, Resuscitation Kit, ORS Corner, ENT Diagnostic Set, and D&C Set are not available while all other mentioned equipments are available in RHCs.

When we enquire about the availability of utility facilities (electricity, gas, etc.) in PHCFs about 71% from CDs and BHUs and 50% from RHCs the staff and patients responded that the electricity is functional in the facility. 100% incharges from CDs and BHUs told that backup generator is not available at their facility while 100% incharges from RHCs said that backup generator is available. However, only 50% incharges from RHCs told that the available generator is functional. Incharges of all RHCs stated that the budget for repair and maintenance of the generator is not provided whereas only 50% incharges of RHCs reported that fuel charges for generator are provided while 100% of the responses in all PHCFs were as the natural gas is not functional in the facility.

4.5. THERE IS A RELIABLE, CLEAN, AND SAFE SUPPLY OF WATER FROM A PROTECTED WATER SOURCE.

Out of the total incharges of all PHCFs, 86% from CDs, 65% from BHUs and 100% from RHCs said that a water pipeline is available. Therefore, this criterion is followed. PHCFs facilities where water pipeline is available, 67% from CDs, 70% from BHUs, and 100% from RHCs reported that water pipeline is functional and water storage system in place in the PHCFs facility which ensure the cleanness of water.

4.6. THE WAITING AREA IS CLEAN AND PROTECTED.

We asked about standard 4.6 from both heads of the PHCFs facility and patients. Out of the total incharges, 29% from CDs, 71% from BHUs and 100% from RHCs said that waiting area is available at their facility. Similarly, out of all patients 29% from CDs, 61% from BHUs, and 100% from RHCs said that the waiting area is available at their facility. PHCFs where the waiting area is available it is protected in 100% from CDs and RHCs while 86% from BHUs. According to patients, 50% from CDs, 47% from BHUs, and 75% from RHCs available waiting area provides protection. The separate waiting area is dependent on its availability of waiting area and therefore question about this criterion was asked from the incharges where waiting area was available. All of the 28 incharges except 1 from RHC told that in their facility separate waiting areas are not available. A good view of the seating arrangement in the waiting area shows a sign of good service management. Chairs and other seating arrangements in the waiting area are dependent on its availability and therefore question for this research was asked only from the incharges where the waiting area was available. Only 4 RHC and 8 BHU have proper sitting arrangements. This shows that only on the RHC level is this measurable criterion is followed. However, 50% from CDs, 68% from BHUs and 100% from RHCs the incharges said that the floor of the available waiting area is clean while out of the patients, only 50% from RHCs only told that the floor of the available waiting area is clean. According to the incharges of the PHCFs facilities, the walls and ceiling of the waiting area are not broken in 50% from CDs, 59% from BHUs, and 100% from RHCs. Similarly, when we asked the same question from patients 50% from CDs, 37% from BHUs and 75% from RHCs patients have the view that the walls and ceiling of the waiting area are not broken.

4.7. THE FACILITY HAS CLEAN LATRINES/TOILETS

We inquired both incharge PHCFs and patients about the existence of Latrines and toilets in PHCFs facility. Out of all incharges, 71% from CDs, 77% from BHUs and 100% from RHCs told that toilets exist within their facility while out of the patients, 57% from CDs, 68% from BHUs, and 100% from RHCs responded that toilets exist. However, 60% of CDs, 33% of BHUs, and 100% RHCs have functional toilets. There is no separate toilet for staff and patients in all CDs and BHUs while it is available in RHCs.

According to incharges from all PHCFs, the available toilets are not locked from the outside and the bowl of available toilets is clean and empty in most PHCFs facilities while out of the patients 25% from CDs, 20% from BHUs, and 100% from RHCs said that the bowl of the toilets remains clean and empty. However, 100% of incharges and patients from all PHCFs told that there is no washing point near the toilet.

4.8. THE FACILITY COMPOUND IS CLEAN AND USES A RUBBISH PIT FOR DISPOSAL OF REFUSE AND MEDICAL WASTE

Out of all incharges only 23% from BHUs and 75% from RHCs told that there is a rubbish pit available in their facility. The quality in PHCFs can only be attained when the premises of the facility is kept free from medical waste, plastic bag and other trashes. The better the

facility is clean the better the services are managed. Therefore, this question was asked from the incharges of the PHCF where a rubbish pit was available. Out of which only 7 responses (5 from BHUs and 2 from RHCs) were as the facility is clean and free from all contaminations. It means that this measurable criterion is followed in most of PHCFs where the rubbish pit is available.

Service management includes proper storage and disposition of waste collected in the rubbish pit. The question was asked from the incharges of only 10 PHCFs where rubbish pit was found. Out of which 7 incharges (5 from BHUs and 2 from RHCs) responded as the rubbish pit is neither overflowing nor accessible to children. It shows that this measurable criterion is followed in a maximum PHCFs where the rubbish pit is available.

4.9. THE STAFF WORKS TO WRITTEN OPERATING PROCEDURES FOR MANAGING THE PRIMARY CARE SERVICES, WRITTEN GUIDELINES FOR MANAGEMENT OF PATIENTS AND WRITTEN GUIDELINES FOR COMMON ILLNESS

Service management provides the best tool in the form of written guidelines for managing services, patients, and diseases. These guidelines are the defined ways to act accordingly. Therefore, this quality standard includes such guidelines. For this research, all the incharges of the 42 PHCFs of Kohistan were asked the question about this measurable criterion. Astonishingly all of the 42 responses were as the PHCF does not have any such written guidelines. Similarly, SOPs for managing resources and processes are not available in all PHCFs, therefore, use of such SOPs is out of the question. Furthermore, 100% of incharges from all PHCFs reported that national and provincial treatment guidelines are not available at their facility. In case guidelines are not available at PHCF the staff is expected to draw self-made guidelines to manage resources and processes. This was asked from the incharges of all 42 PHCFs of Kohistan during this research work. Unexpectedly, all of them responded as their PHCF does not have even self-made guidelines to manage processes and resources. Service management includes the management of patient influx. According to this quality standard, such guidelines must be available at PHCF and followed. All incharges of PHCFs responded that their PHCFs were not provided with guidelines for managing patients. This clearly shows that written guidelines for managing the patients are not available in all PHCFs according to all the incharges of PHCFs which shows that this standard is not followed in districts Kohistan PHCFs.

4.10. STAFF OF PHCF IS AVAILABLE FOR SERVICE DELIVERY

The presence of the staff in PHCFs during official time is the basic importance to pursue the quality. A better level of management in services can only be achieved when the human resource is used on time. The presence of the staff during official times was asked from the in charges of PHCFs and the patients dealt at those PHCFs. Almost contrasting responses are recoded from staff and patients about this criterion. Out of the 42 incharges a total of 36 (7 from CDs, 25 from BHUs and 4 from RHCs) responded as always the staff remains present during the official time. Only 6 incharges from BHUs told that often the

staff remains present. However, 1/3 of Patients responses about the presence of staff in PHCFs during official times.

Availability of duty rosters at PHCFs is a sign of better management. About the availability of duty roster was asked from the incharges as well as the patients dealt at PHCFs of Kohistan. 100% of incharges and patients from CDs and BHUs told as staff duty roster is not available while 100% of incharges and 75% of patients in RHCs responded as staff duty roster is available at the facility. Therefore, this criterion is followed in RHCs only. According to quality standards, the available duty roster must be displayed in PHCF. 100% of incharges and 67% of patients told that the duty roster is displayed at the facility. Management of service expects the duty roster must be followed, 75% of incharges responded as always the duty is followed by the staff.

4.11. STAFF IS APPOINTED, TRAINED, AND EVALUATED IN ACCORDANCE WITH DOCUMENTED PROCEDURES. JOB DESCRIPTION AND SERVICE NEED

Highly qualified and experienced HR guarantee better management of service. That is why this quality standard requires the appointment of highly qualified and experienced staff. We asked about this question from the incharges of the 42 PHCFs of Kohistan. According to incharges PHCs, the appointment of the staff is made in line with the required qualifications and experience. According to this quality standard, the staff of PHCFs must be oriented to their positions and induction program. Among all the incharges 43% were from CDs, 51% from BHUs, and 50% from RHCs were undecided that if the staff is oriented to the primary care services and their positions. This quality standard shows that the staff must be provided with a copy of their job description and employment conditions. Among the incharges only 32% from BHUs and 100% from RHCs said that they were provided with a copy of their job description. Among the incharges 100% from CDs, 77% from BHUs, and 50% from RHCs responded as they are not provided with a copy of their condition of employment. The quality standard needs the residential quarters to be provided to the staff of facilities. Out of all incharges 57% from CDs, 58% from BHUs and 100% from RHCs said that they were provided with residential quarters. Among the incharges 100% from CDs and BHUs and 50% from RHCs told that the provided residential quarter is not equipped with essential utilities. It is important for the management of services to repair and maintain the residential quarters. This measurable criterion is dependent on the availability of residential quarters in PHCFs. The data for this criterion was collected from only those incharges of PHCFs where quarters were available. The availability of residential quarters, 100% of incharges responded as never the provided quarters are maintained and repaired.

The performance appraisal system is an important tool to manage service in PHCF. That is why a good performance appraisal system guarantees the desired quality in PHCFs. During this research, it was asked from all incharges of 42 PHCFs of Kohistan. Out of all incharges 71% from CDs, 77% from BHUs, and 100% from RHCs said that a performance appraisal system is available for their facility. Good service management always evaluates the performance of the staff against the job description. Therefore, the question about this was asked from the incharges of PHCFs where the performance appraisal system was available.

60% from CDs and 50% from BHUs incharges responded that often their performance is evaluated against their job description while 75% incharges from RHCs said as always their performance is evaluated against their job description. However, 60% incharges from CDs and 63% from BHUs were the view as never their job performance is evaluated against set targets while 50% of incharges from RHCs only responded as often their job is evaluated against set targets. Only 60% incharges from CDs, 67% from BHUs, and 100% from RHCs said that they were given ongoing service training relevant to their job is given to them.

4.12. THE HEALTH AND SAFETY OF PATIENTS, STAFF AND VISITORS ARE PROTECTED

The service provided at PHCFs must be safe according to this quality standard. Effective management ensures the safety of services delivered. This measurable criterion was asked from the 42 incharges of PHCFs of Kohistan and 100 patients attended at those PHCFs. Out of all the incharges and the patients only 43% from CDs, 35% from BHUs, and 50% from RHCs agreed that services delivery at PHCFs is safe. A better management always offers respect to its clients. According to 100% of incharges from all PHCFs they always pay respect to patients while providing services at PHCFs but among the patients, only 57% from CDs, 26% from BHUs, and 25% from RHCs responded that staff treats patients respectfully during service delivery.

Safety certificates provide trust in the deliverance of safe services. Management thus focuses to increase the safety and trust in services provided. According to this standard safety, certificates must be provided to PHCFs and must be displayed. It was asked by the staff of all PHCFs. According to incharges of all 42 PHCFs, the current safety certificate and guidelines for risks and hazards are not available at their facility. This clearly shows that this criterion is not followed at any of the PHCF in Kohistan. Healthcare service management always focuses to cope with emergencies. According to this quality standard training on fire safety and handling emergency must be given to staff. All of the 42 incharges said that they were not given such training. The measurable criterion thus was not followed at any of the PHCFs of Kohistan. Effective service management takes care of its employees. This standard, therefore, tells that the staff must be immunized with Hepatitis A, B, and influenza. This was asked from incharges of PHCFs. Among all the incharges 71% from CDs, 90% from BHUs, and 100% from RHCs told that they were immunized with Hepatitis A, B, and Influenza.

According to this quality standard, the services provided should be inspected and declared safe by the competent authority. This increases the morale of management. Therefore it was asked from all the incharges of PHCFs. Unfortunately, all of the 42 incharges responded that such inspections were never carried out. This means that the service provided at all PHCFs of Kohistan is not declared safe. While providing curative services safety of staff is important. Among the incharges 100% from CDs and 25% from RHCs responded that the personal protective equipment is provided to them. Bette management instructs to keep safe the chemicals and drugs. Among the incharges 29% from CDs, 19% from BHUs, and 75% from RHCs have the view that drugs are stored safely always. Service management targets to identify and eliminate all potential risks and hazards. According to this standard risks and hazards must be identified and eliminated in time. According to 100% of incharges

from all PHCFs the risks and hazards are not identified and eliminated. This criterion, therefore, is not followed in any of the PHCF.

4.13. FEEDBACK FROM PATIENTS IS COLLECTED AND IS USED FOR IMPROVEMENT

An effective feedback mechanism increases the efficiency of the management. It not only provides a picture of patient satisfaction but also helps in identifying the problems. The quality standard, therefore, demands a patient feedback mechanism. Questions about the availability of patient feedback were asked from the staff and patients dealt with at PHCFs of Kohistan. Unfortunately, 100% of incharges and the patients said that the patient's feedback mechanism is not available at the PHCF. The quality standard provides different types of feedback mechanism which needs to be available at PHCF. The suggestion box, questionnaire, or regular interview are expected to be conducted to get feedback from patients about the services. This criterion is dependent on the availability of the patient's feedback mechanism. Data about the types of feedback mechanism could not be collected as previously all responses of staff and patients were against the availability of feedback mechanism. This standard is not fulfilled in district Kohistan PHCFs.

4.14. THE COMPLAINTS OF THE PATIENTS ARE INVESTIGATED FAIRLY AND IN TIME

The existence of a complaint box in PHCFs reflects better service management. Question about this measurable criterion was asked from 100 patients attended at PHCFs of Kohistan. All of them responded as the complaint box does not exist in the PHCF. This measurable criterion, therefore, is not followed at any of the PHCF of Kohistan. It is the right of patients to complain. The quality standard thus guides the staff to inform the patients about their right to complain verbally or in writing. During this study, this criterion was asked from 100 patients dealt with at PHCFs of Kohistan. Out of all patients 100% from CDs, 87% from BHUs, and 75% from RHCs responded as never the information about the right to complain is given to patients. This criterion is therefore not followed at the PHCFs of Kohistan. According to the quality standard, the collected complaints must be investigated timely. Investigation of complaints is dependent on the availability of the complaint box. Data about this measurable criterion was not collected as all the PHCFs of Kohistan do not have a complaint box so data regarding the investigation of complaints had not been collected.

4.15. THE SERVICE IDENTIFIES OPPORTUNITIES TO CONTINUOUSLY IMPROVE ITS PROCESSES AND SERVICES, MAKES IMPROVEMENTS, AND EVALUATES THEIR EFFECTIVENESS

According to this standard, the goal of performance improvement can be achieved by measuring, timely reporting, and using recognized indicators for medical bugs and processes. For this research work, it was asked from all incharges of 42 PHCFs of Kohistan. Out of all Incharges, 43% from CDs and 45% from BHUs responded that occasionally while 100% from RHCs responded as Frequently the performance indicators are measured, reported, and used for improvement. Service management counts performance

improvement and therefore expects for it planning. Effective management is to take actions against weak performance and to feedback the results of these actions. Out of all incharges 72% from CDs, 55% from BHUs, and 75% from RHCs responded as occasionally improvements are planned, actions are taken, the effectiveness of the actions is evaluated and feedback on action is evaluated. Service management provides different activities for performance analysis. These are audits, incident reports, complaints, risk assessments, and satisfaction surveys. During this study, the question about activities like audits, incident reports, complaints, risk assessments, and satisfaction surveys for performance analysis was asked from all incharges of PHCFs of Kohistan. 100% of them responded that the audits activity is conducted to collect performance data. Similarly, incharges responses 55% from BHUs and 100% from RHCs that the incidents reports are submitted. All other mentioned activities to collect performance data were not conducted at any of the PHCFs of Kohistan. Monitoring of compliance is very important in service management. Unfortunately, 100% from CDs, 61% from BHUs and 50% from RHCs the incharges said that never the compliance is monitored. Therefore this criterion is not followed.

5. CONCLUSION

This study analyzed the implementation of existing service management quality standards issued by Provincial government in PHCFs of Kohistan by collecting primary data from incharge of PHCs and patients visited these PHCs facilities. This study concludes that most of the standards are followed at RHCs facilities and in BHUs level these standards are not followed at the expected way as resources were provided at very low level. However, On CD level these quality standards are not followed as resources were not provided and hence patients were not satisfied

This research included a detailed analysis of the 15 established quality standards and identified the following areas demanding quality improvements in terms of service management:

- *Primary Care Management Committee:*
PCMC was found nonfunctional in 100% of CDs and 77% of BHUs. To bring the community closer to the services of PHCFs and to improve communication between community and healthcare units the PMCS needs to be functionalized on priority basis.
- *A list of notifiable diseases:*
This list was not available in almost all PHCFs. Similarly, the Notifiable diseases were not reported and Procedures to manage these notifiable diseases were not followed. List of such diseases must be available in all PHCFs. To report and to manage notifiable diseases staff must be trained and well equipped.
- *Essential Equipments:*
Most of the primary healthcare facilities were provided with essential equipments but were not documented, maintained and properly disposed in most of PHCFs. The staff must ensure to keep and update the record of equipment. The competent authority must need to conduct frequent visits to PHCFs for the maintenance and proper dispose of equipments.

- *Rubbish Pit:*
Rubbish Pit was not available in most of CDs and BHUs. PHCFs are meant to provide health to the public therefore these facilities need to be kept clean and free from contamination. The competent author must provide rubbish pit and incinerator to all PHCFs.
- *Waiting area:*
Which was not available in 71% of CDs and 29% of BHUs. The available waiting areas were worst in condition. The competent authority needs to utilize annual repair and maintenance fund functional waiting area in all PHCFs.
- *SOPs and Guidelines and Duty roaster:*
Duty roaster, written guidelines for the management of diseases, services, patients and SOPs for managing resources and process were not available in any of PHCF of Kohistan. It is suggested that health department ensure the availability of SOPs and national or provincial guidelines in PHCs facilities.
- *Copy of Job Description:*
In all CDs, most of BHUs and in few RHC the staff was not provided with a copy of job description and copy of condition of employment. Job description copy must be provided to the concerned employee and a copy of it must be placed in personal files of the employees.
- *Guidelines for Risks and Hazards:*
In all the primary healthcare facilities of Kohistan guidelines for risks and hazards were not found or provided. The staff must be provided with essential training to cope with the emergency situation and the guidelines must be provided to all PHCFs by the competent authority.
- *Patient's Feedback Mechanism and Complaint Box:*
In all the PHCFs of Kohistan patient's feedback mechanism and complaint box was not available. To listen the public complaint boxes must be provided in all PHCFs.

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