QUALITY ASSURANCE OF HEALTH CARE SERVICES OF DISTRICT MEDICAL AND REHABILITATION COMPLEX CHARSADDA KHYBER PAKHTUNKHWA

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ABSTRACT

Objective: To determine the quality assurance of health care services of District Medical & Rehabilitation Complex provided to the people of Charsadda.

Methodology: The study design was cross-sectional descriptive and conducted in District Medical & Rehabilitation Center (DMRC) at Charsadda from April 2015 to June 2015. Sample size was 96 by convenient non probability method and included patients visiting DMRC for seeking health care. Data was collected through questionnaires and analyzed in SPSS.

Results: Out of 96 patients, there were 47 males and 49 females. Among all patients, 18% were less than 20 year of age, 57% in the age of 20 to 40 years, 16% from 41 to 60 year and 9% were more than 60 years of age. At DMRC, 50.9% of patients visited Eye unit, followed by Gynae unit (15.9%), Medical unit (16%), Psychiatry (8%), Orthopedic (3%) and Physiotherapy (2 %). While waiting for the health care providers, 47% patients waited for less than 30 minutes, 26% patient more than 30 minutes and 28% patients waited almost 1 hour. Regarding responsiveness, 99% patients responded about doctor's behavior as polite. Regarding expenditures, 40% respondents spent less than Rs. 100 per visit, 41% spent Rs. 100 to Rs. 500 and 19% spent more than Rs. 500. Overall 61% of patients rated their visits as satisfactory.

Conclusion: DMRC is providing quality services to the needy people of Charsadda and most of the patients are satisfied with it.

Key Words: Quality assurance, District Medical & Rehabilitation Center, Charsadda

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INTRODUCTION

The overall goal of health system of a country is to provide health activities for improving health of their people that are subjective to political, socio-cultural and organizational factors. Deficiency in quality health care is attributed to gaps in knowledge and application of appropriate technologies in medical field. Though during last few decades health expenditure has almost doubled in developed countries; however this strategy of resource allocation has not produced best results in these countries[1].

Health care quality may be considered perspectives of health care provider's technical standards and patient's responsiveness i.e. "proper performance (according to standards) of interventions that are known to be safe, that are affordable to the society in question, and that have the ability to produce an impact on mortality, morbidity, disability and malnutrition"[1].

Quality of any service has become a major element of life. People are frequently searching for worth supplies and health care. Therefore various firms and organizations consider it as an indispensable part of any care and manufacturing process. Wastage of various resources are diminished through enhancing quality of structures and processes[2,3]. As a result, efficiency and productivity improve[4]. Therefore, it is very important to define measure and improve quality of healthcare services. Although there are many definitions and explanations of quality, however there is no single established definition of quality. This has been defined either as excellence and values of services[5,6], conformance to specifications and requirements[7,8], robustness for health care[9], fulfilling the customers expectations[10] and con-

stantly satisfying the customer by providing them medical products and services as per standardized specifications that meet the customer's needs and producer satisfaction[11].

Quality health care is a broad and comprehensive concept. Quality assurance experts are familiar with different dimensions of quality that vary in importance. Activities related to quality assurance consist of the following attributes: 1) need and evidence based and effective delivery of health care with improved health outcomes for populations; 2) efficient, Maximum utilization and avoiding wastage of resources with appropriate health care delivery; 3) delivering health care activities should be accessible, timely and geographically reasonable; 4) delivering health care should be acceptable and patient-centered, that is socially and culturally acceptable to the people; 5) health services should be equitable in terms of personal characteristics such as gender, race, ethnicity, geographical location or socioeconomic status; and 6) there should be safe delivering health care which minimizes risks and harm to end users[12].

All the arrangements and activities that are meant to safeguard, maintain and promote the quality of care require a systematic process to fill the gap between actual performance and the desirable outcomes[13,14]. In essence, quality assurance is that set of activities that are carried out to set standards and to monitor and improve performance so that the care provided is as effective and as safe as possible[15].

An organized integrated health system is required for achieving the sustainable development goals (SDGs) in low and middle income countries. Findings of the studies conducted recently in Pakistan, Sri Lanka and Tanzania indicate that poor people avoid medical services perceived as of lower quality and resultantly get access to private sector. In this way poverty may actually get aggravated[16].

The enormous legal necessities for quality assurance (QA) and quality control (QC) of medical instruments and technologies exist in most developed countries[17-19]; while developing countries have yet to fully create adequate guidelines to match those in developed countries,

DMRC is a joint venture of CBM and CHEF International. DMRC has been working since 2011 but it was formally inaugurated on 17th of October, 2012. District Charsadda is having population of over one million and area of about one thousand sq. kilometers. There are 46 union councils that were affected more during the catastrophic floods in 2010. Many people lost their lives and great number of people got disabilities. Responding to this situation, CHEF International took the responsibility of establishing 'District Medical and Rehabilitation Complex' at Charsadda. Purpose of this hospital complex was to provide comprehensive health services regarding ENT, eye, mother & child health, mental health, physiotherapy and orthopedic. All these services were made accessible to people of District Charsadda.

The DMRC is having collaboration with the District Head Quarter Hospital, Charsadda, sharing OPD records with this hospital as well as Lady Reading Hospital, Peshawar. This medical complex has been providing comprehensive medical services regarding eye, ENT, mother & child health and physiotherapy services.

The objectives of this study were to assess the quality assurance of District Medical and Rehabilitation Complex, Charsadda, to assess the patient satisfaction regarding services of DMRC and to recognize services provided by the health staff at DMRC.

METHODOLOGY

This cross sectional descriptive study was carried out in District Medical and Rehabilitation Complex (DMRC), Charsadda over a period of 3 months from April 2015 to June 2015. This medical and rehabilitation complex is situated in Sheikh Kalay, District Charsadda.

Study population consisted of infrastructure, human resource, equipments & logistics of DMRC and patients visiting DMRC for their treatment. Sample size was 96, calculated based on 95% confidence interval, 50% prevalence and 10% precision. It included both male and female patients visiting DMRC. A structured questionnaire was prepared which contains both open ended and close ended questions. It included questions regarding the quality assurance, patient's satisfaction and the services provided by DMRC to the people of Charsadda. Questionnaire also included questions inquiring from patients about personal data (name, age, gender, occupation and education, visiting unit, attitude and behavior of the doctors and paramedical staff, environment of the hospital, time spent during visit, expenditure during visit and overall rating about his/her visit to DMRC. All patients irrespective of their age and gender visiting DMRC were included in the study.

Descriptive analysis like frequency count was used to find the analysis of the data along with tables, histogram, pie chart and bar diagram presentation of the data. SPSS software was used for analysis.

RESULTS

Out of 96 patients visiting DMRC, 49 % were males and 51 % were females. 57% patients visiting DMRC were of 20-40 years, 18% were below 20 years of age, 16% among 41 to 60 years and lastly 9% were above 60 years of age (table 1). Education level of 37% patients was below matric and 19% were above matric, while 44% of patients were illiterate. Occupational status of the patients revealed that government servants were 10%, private job 20%, house wife 37% while oth-

er professions were 33%. 71% patients visit the DMRC through public transport while 15% on their vehicle and 14% patients on foot.

Regarding consultations, 51% patients attended the Eye OPD, 16% Medical OPD, 8% Psychiatry OPD, 3% Orthopedic OPD and 2% Physiotherapy Department (Figure 2). 47% of patients waited less than 30 minutes, while 53% patients waited more than 30 minutes (Figure 3). According to 99% patients, the doctors were polite (Table 2). 40% patients spent less than 100 Rs., 41 % spent 100 to 500 Rs. while 19 % spent more than 500 Rs. during their visit to DMRC. 45% patients spent time less than an hour, 42% spent almost 2 hours while remaining 13 % patients spent more than 2 hours (Figure 4).

Figure 1: Quality assurance cycle

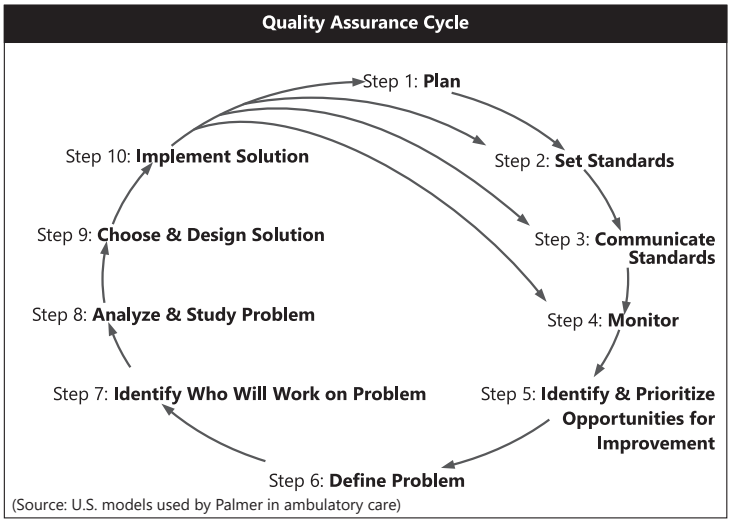


Figure 2: Units attended by the patients at DMRC

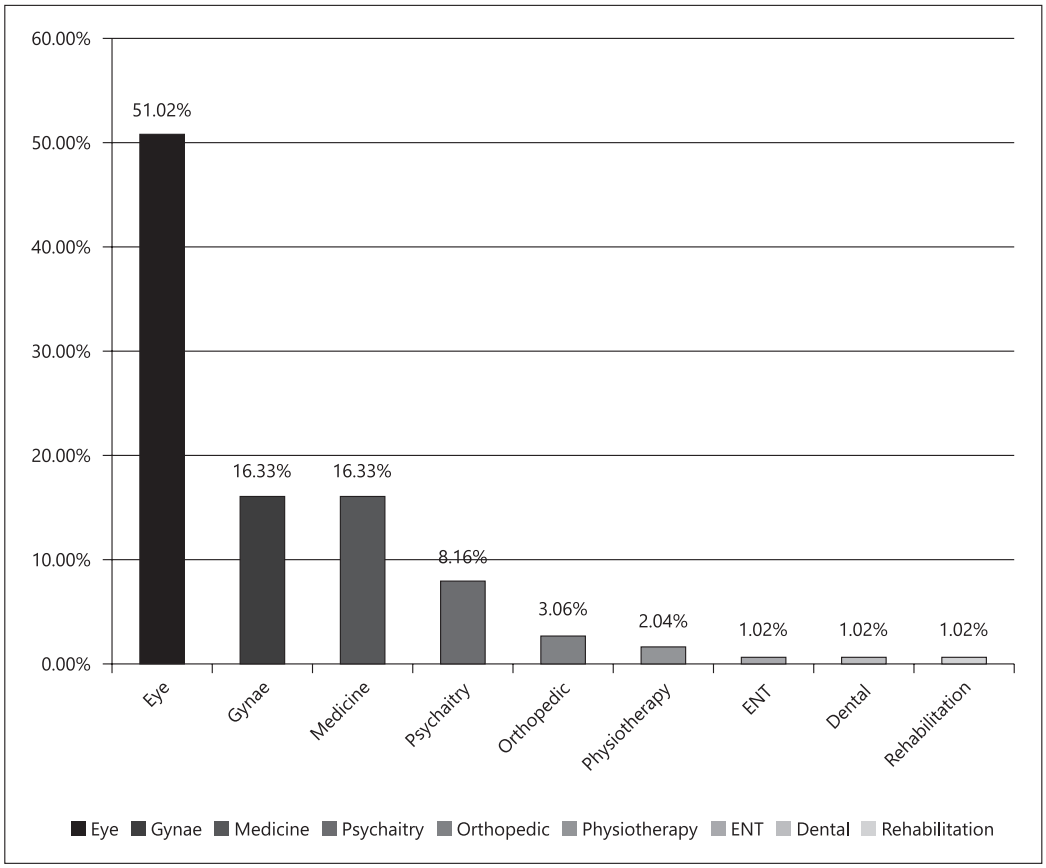


Figure 3: Waiting time by the patients for the doctor during their visit to DMRC

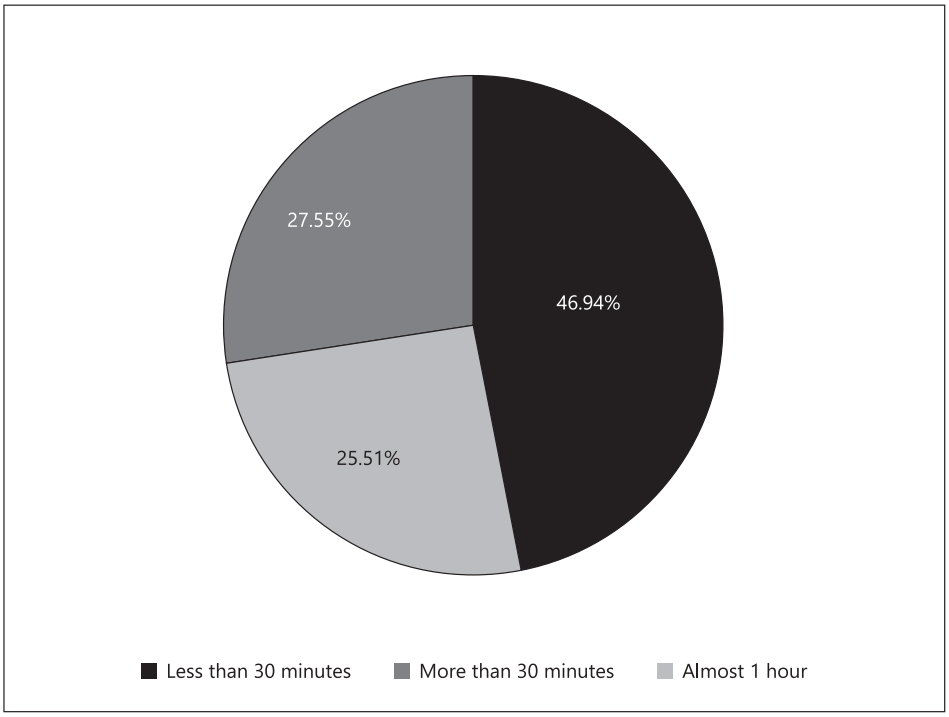
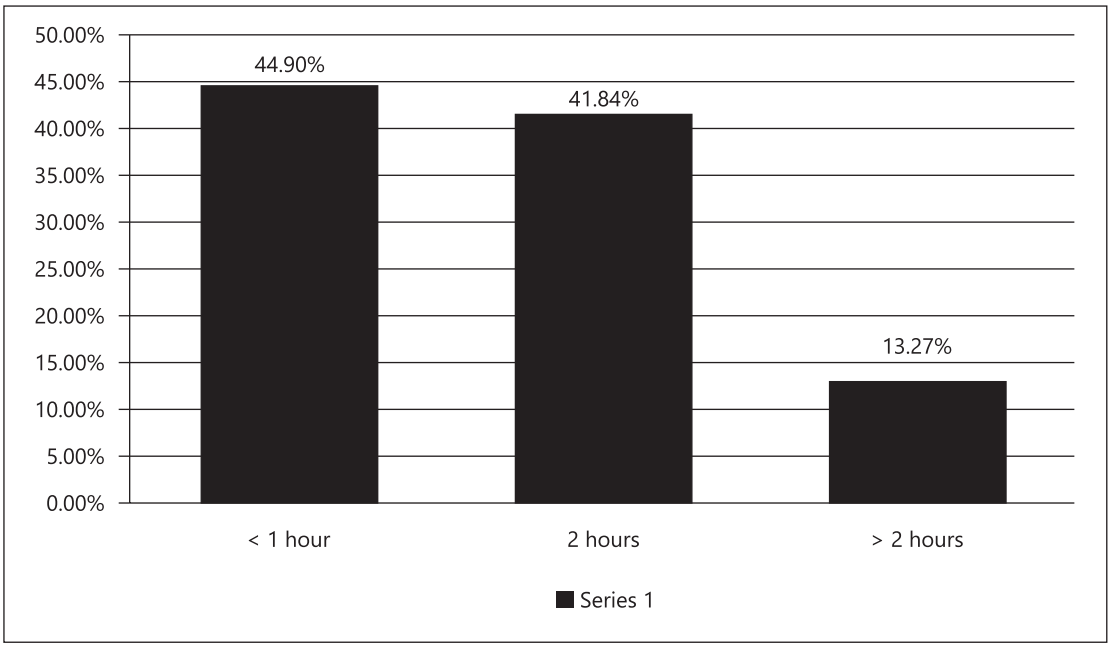


Figure 4: Total time spent by each patient during their visit to DMRC



DISCUSSION

In health care delivery the emergence of quality assurance is associated with rising health care costs in the face of inadequate resources and to guaranty high quality patient care in a changing health care environment where the power relationship between doctors and patients is shifting towards patients[20].

Findings of our study are nearly similar to the results of MARQuIS Study[21,22]. Findings of this study are also in analogy with the reported results of mean application

Table 1: Age & gender wise distribution of patients seeking health care in DMRC Charsadda

Age Group (years)	Male	Female	Total
Less than 20	7	10	17 (18%)
20-40	23	32	55 (57%)
41-60	9	6	15 (16%)
Above 60	8	1	9 (9%)
Total	47 (49%)	49 (51%)	96 (100%)

Table 2: Behavioral status of the doctors with the patients

Behavior of Doctors	Number of Respondents
Polite	95 (99%)
Not polite	1 (1%)
Total	96 (100%)

rate for the quality assurance strategies. These results have a range of 57-94% in the diagnostics and clinical support services (DCSS)[23]. In this study, quality of health care in terms of accessibility, doctor's behavior, waiting & consultation time and patient contentment was assessed. These findings support earlier researches interms of patient satisfaction and communication with the health care providers[24,25]. Results are also consistent with the findings of the study conducted by Kiguli et al[26]. Findings of a study showed that patients wait for two hours from registration to health care provider consultation, while the contact time is only on average 15 minutes that are based on health care provider attitude, work process, management and supervision problems[27].

Waiting time of less than 30 minutes is consistent with those reported in other large-scale studies. However no considerable changes in patient satisfaction with wait time were identified[28].

Relationship between a patient and a doctor influences the quality of medical services. The quality of the interaction between a doctor and a patient depends on the physician's personal attributes of understanding, kindness and sincerity and technical expertise to attain the patient's confidence. Findings regarding behavior of health care providers of this study are similar to the results of a study of Iranian physicians[29].

LIMITATIONS

There arose some limitations while conducting this study. The authors attempted to select a sample of representative departments/units of the hospital as much as possible. The sample size of the study was relatively small especially with regard to the limited number of departments. Secondly the study was based on a non-probability convenient sampling method and finally due to time and financial constraints, investigator visited the DMRC only twice.

CONCLUSION

DMRC is providing good quality services to the needy people of Charsadda. Most of the people were satisfied with the services provided at DMRC Charsadda. The research showed that all of the patients liked the environment of DMRC and were satisfied with the treatment provided to them.

RECOMMENDATIONS

The following recommendations are put forward to improve the services of DMRC. Outreach services for immunization and mother & child health may be initiated and such services should be replicated to other districts as well. An emergency department should be established working 24/7, so that the patients could avail the services of DMRC in case of any emergency situation. In the Department of Gynecology, the facility of C- section should be made available so that the complicated pregnancies could be treated within the premises of DMRC without any referral. The management of DMRC should promote the hospital by advertising it through different sources like electronic and print media so that most of the people can know about it and take benefit from the services DMRC is providing. There is already a welfare program in DMRC working for poor patients who cannot afford their treatment but it should be made easily accessible so that the poor patients could be benefited from it.

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CONTRIBUTORS

RN conceived the idea, designed the study, collected data, did statistical analysis and prepared the manuscript. ASK, BD, HA, NN, SK and MSK collected data, conducted data analysis and edited the manuscript. All authors contributed significantly to the submitted manuscript.