



Assessment of Quality of Healthcare in Secondary Health Care Systems Doiwala, District of Dehradun

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ABSTRACT

Introduction: In an era of increasing accountability throughout our society, it is not surprising that questions about the efficacy and efficiency of our health care system are also being raised. Both functional and technical qualities have to be monitored and managed effectively.

Objectives: To enhance service effectiveness CHC/PHC health delivery systems. To evaluate the quality of care rendered by CHC, PHCs, Sub centres, AWCs by IPHS guidelines, Likert's scale and WHO Assessment tool. To assess the health workforce in their capabilities. Patient satisfaction in the quality of care.

Methodology: Out of the thirteen districts of Uttarakhand, the district of Dehradun has six blocks of which Doiwala is the largest block. A qualitative study design: One Community Health Centre namely CHC Doiwala, which has five Primary Health centres were studied using three different tools. (i) IPHS standards (ii) SARA (WHO) (iii) Likerts scale for patient satisfaction. However, in the COVID scenario some limitations have been considered in the study.

Results: The quality of health care in the healthcare delivery system has been assessed as per scale and has been found that factors of patient satisfaction, infrastructure and outcomes for assessment of quality are strong contending variables.

Conclusion: The PPP model has upgraded the healthcare system with substantial contribution from the private sector.

Keywords: healthcare, assessment, quality, outcomes, infrastructure, operations, primary, secondary, patient satisfaction, likerts, manpower, capability

INTRODUCTION

"Hospitals are only an intermediate stage of civilization, never intended at all even to take in the whole sick population": Florence Nightingale

India has the second largest population in the World, the access to healthcare with adequate quality of care is imperative to improve population health outcomes¹. Measures of healthcare quality have traditionally been divided into three domains: structure or inputs to care, process or content of care and outcomes of care². The quality of

health care is a hot topic. In an era of increasing accountability throughout our society, it is not surprising that questions about the efficacy and efficiency of our health care system are also being raised.

For the long-run success of a health care organization, both functional and technical qualities have to be monitored and managed effectively. Technical quality refers to the aspect associated with diagnosis and procedures while the functional aspect relates to the manner in which services are delivered to the patients. Technical knowledge is considered

to be within the purview of health care professionals and administrators³. Functional quality is usually considered to be the primary determinant of customers' perceptions about quality as the users find it extremely difficult to assess the technical quality in an accurate manner due to lack of information⁴.

The traditional approach has been to assess health care quality from the viewpoint of health care providers, care takers and government and analyse the health-related statistics over a period of time neglecting the patients' perspective. "In India and many developing countries, the excessive emphasis on service coverage and inputs in the provision of health services has ignored the needs of the very people for whom these health services exist. Incorporating patient views into quality assessment offers one way of making health services more responsive to people's needs"⁵.

The health systems management is one of the greatest challenging tasks in the Indian scenario. The expectation from the patients as well as the desired working conditions for the staff is always a situation that remains to be fulfilled. The quality of health care among the healthcare providers is a multipronged approach and not necessarily of the management hierarchy⁶.

AIM AND OBJECTIVES

The aim of this study was to improve health status through preparedness and information; to enhance service effectiveness CHC; to reduce healthcare disparities; and maintain competent Public Health workforce

OBJECTIVES

The study was conducted with an objective to evaluate the quality of care rendered by CHC by IPHS guidelines, Likerts scale and WHO Assessment tool; to assess the health workforce in their capabilities; and to assess patient satisfaction in the quality of care.

METHODOLOGY

A qualitative study design and multistage random sampling. The district of Dehradun has been selected for the study out of the 13 districts, and one block Doiwala CHC. The sample study is for one year. The assessment tools for the qualitative study are three different scales namely:

1. IPHS based criteria⁷
2. Assessment tool for primary hospitals in developing countries. (SARA/WHO/USAID 2017)⁸

3. Likert-style questions that assessed level of agreement on a 4-item response scale (strongly disagree to strongly agree), with statements about the role, strengths, and limitations of 6 types of performance measures – processes of care, readmission, patient experience, resources, volume and patient satisfaction^{9,10}

The PUBMED, EMBASE databases searched for articles published in English using the keywords and search strategy. Abstracts from all manuscripts retrieved in the MEDLINE/EMBASE search were screened. The assessment is done on three major criteria namely, structure, process and the outcome of health care.¹¹

The tools used are three scales for assessment of quality of healthcare in healthcare delivery systems namely 1. IPHS standards 2. SARA (services availability and readiness assessment) which is an international tool considered by WHO for low- and middle-income countries 3. Likerts scale for patient satisfaction. The assessment was done in three steps. Patient satisfaction, infrastructure, processes and outcomes.

LIMITATIONS

During the COVID times, the patient clientele were restricted in number and the manpower of the CHC Doiwala were committed partially to the COVID screening duties and surveillance round the clock by the health services. The CHC is now been operationalised in the PPP model (public private partnership).

RESULTS

The Community health centre at Doiwala and its five PHCs and twenty three subcentres have been part of the nationwide initiative for Health for ALL campaign way back in 2000, for catering to the needs of the 1.57 lac population of the Block and the focus of the facility has been to provide secondary care services to the community. It offers OPD services, IPD services including labour room, O T, lab services, HIV testing and counselling, DOTS, Ambulance services including Khushiyon ki sawari for postnatal mothers and their newborn. The CHC has also an administrative control over the five PHCs under it. The reporting channel from sub centre to PHC and finally to the CHC enables a hierarchical structure of Health management by command and control. The PPP mode under which the CHC operates is a new venture by the State Govt to encourage private partnerships and disinvest in funding, health services. The CHC had a workload of 76980 outpatients and 11287 inpatients during the financial year 2019-2020. The Rogi

Kalyan samiti in the Block is active and the Ambulance provided by the MLA funds is servicable and utilised to the fullest capacity. The Central medical stores depot caters for the drug supply based on the indents that are placed by the facility which is under the DG health services situated in Dehradun. Under the new memorandum of understanding, all Specialist services are provided by the private partner namely the Himalayan Institute Hospital Trust and also the paramedical staff and OT and Lab services. The CHC is currently the first referral unit and has a Blood storage facility which is functional 24/7.

Table 1: Distribution of Antenatal care at CHC Doiwala (N=367)

Morbidities	CHC
Anaemia (%)	186 (50.54)
Gest DM (%)	2 (0.54)
Hypertension (%)	7 (2.3)
Others (%)	172 (53.38)

Table 2: Distribution of Intra partum and post-partum services: CHC Doiwala: 2019

Cases	Institutionalised deliveries
Total deliveries (%)	344 (93.7%)
Discharged within 48 hours of delivery	12 (3.4%)
Homebased new born care after institutional delivery	64 (18.6%)
Caesarean section	0

Table 3: Indicators as per WHO Guidelines

Indicators	Formula	Value (%)
Maternity bed density	$15/10 \times 100$	150
Inpatient bed density	$30/25 \times 100$	120

The bed indicators for the facility for secondary healthcare is indicated as target in the SARA tool which is 10 beds for maternity and total of 24 for Inpatient beds

The antenatal cases seen at the CHC Doiwala have been diagnosed in the routine screening and have been followed up by the ANM. The 99% of the ANC have undergone 4 antenatal checkups as per the RMNCH+A programme. The immunisation with Td vaccine has been completed in 97.7% of ANC. The IFA and Calcium distribution has been completed for 100% of the registered cases. Only two cases of Eclampsia were admitted in the tertiary care centre. Deworming has been carried out by the ANM @100% in the ANC. The Hb levels ranged from 9-11gm % in most cases and the severe anemia cases were not reported. No ANC was given corticosteroids for preterm labour.

The total no of registered cases are 367 out of which 344 deliveries were held in the CHC labour room. The immediate postnatal care and breast-feeding within 1 hour of birth was ensured, with proper rooming-in of the baby with the mother. All hygienic precautions have been followed. The Khushion ki sawari is an ambulance (State Govt initiative) for bringing home the mother and the newborn. It is available in CHC Doiwala for all post natal mothers. Two home deliveries were reported, which was held by the Trained Birth attendant. Follow-up care was given at the CHC Doiwala. The total livebirths at the CHC Doiwala stands at 180 (male) and 165(female). The preterm newborns (<37 weeks of pregnancy) was 14. MTP carried out within 12 weeks of gestation was 41. All lactating mothers have also been provided with calcium and IFA tablets for a period of 6 weeks from the date of delivery. All new-borns have been weighed at birth. The total no of low birth weight (below 2.5kg) babies is 91. The MMR is 0% which is commendable and IMR is 0% as recorded in the previous three year data.

DISCUSSION

The introduction of then Adolescent friendly health clinic (AFHC) in Community Health Centre have had a great impact on the adolescent health. Majority of those availing services are girls and needing clinical and counselling services. This is more so of the fact that there is confidentiality and privacy in the conduct of the clinic. The PPP mode in the CHC has to be viewed with caution. Although the services rendered by HIHT is part of the move by the State Govt to disinvest in health funding and encourage private parties to help the system, not all in the community have welcomed the decision. A regulatory body by the State Health department needs to monitor the progress of the operations, in terms of appropriate medical management within the facility and not by being referred to the private establishment for further management. In the COVID scenario, the work has been partially affected in rendering medical and nutrition services. However, with India having adopted the SDG (sustainable development goals) much of the focuses have shifted in attaining universal health coverage which is affordable, accessible and available to all in need.¹²

Lastly the assessment of the quality of health care by three scales namely Likert s scale, Indian Public Health standards and the Services availability and Readiness Assessment scale used by the WHO and International agencies have been utilised for assessment of the peripheral healthcare delivery systems for the subject of research. It clears brings out numerous issues pertaining to functioning of the

health systems at different levels of assessment. The Likerts scale showed a patient satisfaction scale of 89% in most centres as also the staff and patient relationships were cordial. The physician and ANMs skill and attitude to work was rated as good. No significant negative scores were obtained for the technical competence of the healthcare workers. Allied services in healthcare systems such as pharmacy, laboratory diagnostics were found to be satisfactory. The Community Health centre showed 12 deliveries per month during the PPP mode since 2018, as against the 72 per month in the previous years.

The study by Kapoor et al 2011, shows the physicians competence and skill determines the patient satisfaction as also the services that are available in the facility, he also adds, the cordial and caring attitude shown to the patient clientele determines the nature of quality of health care rendered to the beneficiaries.

Given the demographic scenario, a preponderance of younger population, the health services must also be oriented to the needs of the youth, especially in Adolescent health. The SARA tool for International healthcare quality assessment shows above satisfactory rating for the CHCs as the inpatient bed density is more than 25. The laboratory workload is 12267 tests annually, of which the screening tests for ANC account for more than 20% of the work output. The WHO assessments using the SARA tool is for middle- and low-income countries and have focussed on the outcomes and the resources that are with the facility and not on the patient satisfaction survey or the processes of the healthcare delivery.¹³

However, it needs to be said that the comprehensive assessment shows SARA tool a more efficient scale to measure the quality of health care than the IPHS.

CONCLUSIONS

The CHC Doiwala is one of the healthcare delivery systems, providing secondary care. New trends in the treatment process, patient satisfaction needs to be closely analysed as the venture is new and needs time to bring explicit results. However, the large patient clientele is being clinically managed with the expert team and rendering round the clock service as a first referral unit with blood storage facility. The services have to be augmented by better infrastructure and treatment processes, bringing in quality of health care. It is now operating in a PPP mode with a private collaborator.

New innovative means have to be explored to make universal health coverage a possibility to all.

RECOMMENDATIONS

1. The new venture of PPP has to be seen with utmost caution and meticulous audit of the functioning has been done by the regulatory authority in the State Health services department
2. The Health management information system (HMIS) that is compiling and computing all data on the functions and services rendered by the different health care delivery systems namely the primary health centre and sub centres including the community health centre has to include the referral services from CHC.

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