# **ORIGINAL ARTICLE**

# **Evaluation of quality certification programs for public** health facilities in tribal villages of Dahod district, Gujarat

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#### **ARTICLE CYCLE**

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#### ABSTRACT

**Background**: Rural and tribal India poses significant challenges in addressing healthcare quality. Along with healthcare staff, beneficiaries' perspectives nowadays play a crucial role. The Government Health system has started to implement various quality certification programs (QCPs) like National Quality Assurance Standards, Kayakalp etc. on a wider scale. So, it's very crucial to measure the results and evaluate the impact of these QCPs on the health system. Aims & Objective: To investigate the impact of quality certification programs for public health facilities in tribal villages. Material and methods: A qualitative study was undertaken in 18 PHCs of one of the tribal blocks of Dahod district. The participants were selected using purposive sampling. The participants included staff working at healthcare facilities and patients who have availed services at those facilities. Qualitative data was collected using in-person in-depth interviews (IDI). A total of 19 health staff and 23 patient IDIs were conducted. The audio recording was done for the interviews. Later on, process of transcribed verbatim and manual thematic analysis was done. Result: The transcripts' manual thematic analysis part produced 12 different categories, 6 different sub-themes and 3 major themes, while the staff part, yielded 16 different categories, 6 different sub-themes and 3 major themes. Beneficiaries were satisfied with a noticeable improvement in healthcare services. Staff found these programs helpful but predominantly raised concerns about the implementation of QCPs. Conclusion: QCPs have demonstrated a significant positive impact on healthcare services; it's very promising specifically in the context of rural and tribal health facilities. These programs hold great promise as they enable and empower these facilities to achieve quality and higher standards with the availability of better care.

# **Keywords**

Quality Certification Programs; Tribal and Rural Health; Public Health Facilities

#### **INTRODUCTION**

Quality remains a crucial component of healthcare settings. When discussing

healthcare quality in rural and tribal India, it is evident that considerable effort is required.(1) The QCPs implemented by India in the last few years have started to yield promising results. Programs like National Quality Assurance Standards NQAS and Kayakalp started to have an impact on the healthcare system. (2,3,4) Presently along with working staff at healthcare facilities, beneficiaries' perspective also holds great significance.(5) It is vital to closely observe the potential impact these quality certification programs (QCPs) could have made. India is often seen as lagging behind other developed countries in this aspect, but these quality improvement programs have the potential to bridge the gap by delivering high-quality care to beneficiaries.(6) This study incorporates insights from both healthcare staff and patients, aiming to provide a comprehensive assessment of the situation.

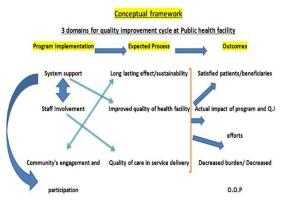
# Aim & Objective(s):

- To explore the impact of quality certification programs like NQAS, Kayakalp, and LaQshya for public health facilities in tribal area
- To evaluate the changes made as perceived by health centre staff and beneficiaries.

# **MATERIAL & METHODS**

**Study type**: This study was conducted to investigate the perspectives of different health cadres and patients, and a qualitative design was chosen. It employed an approach that included In-depth interviews. This study employed 2 paradigms: Constructivist and Advocacy & Participatory paradigms. Based on the conceptual framework (Figure 1) designed around these paradigms, the study was undertaken. An impact evaluation framework was used to measure the outcome and results of the program.(7)

# Figure 1: Conceptual framework for study



**Study area**: This study included all 18 Primary Health Centers (PHC) in Dahod taluka of PHC Dahod district in Gujarat state. The study included total 18 PHCs and 53 Sub-Health Centers- Health and Wellness Centers (SHC-HWC).

**Study duration**: Study was done between November 2022 to October 2023.

**Inclusion criteria**: Staff working at public health facilities at PHC and at SHC-HWC like Medical officers, Staff nurses, Community health officers, Lab technicians, and Multipurpose workers who have at least experience of 2 years were included for indepth interviews to gather their perspectives.

While in taking beneficiaries' perspectives, adult patients who have taken treatment atleast for 3 times in the last six months at these facilities were included. The interviews were conducted with out-patient department (OPD), in-patient department (IPD), and perinatal patients who have received treatment at PHCs and HWCs. (Figure 2)

#### **Exclusion criteria:**

For patient: Diagnosed with mental health problems

No exclusion criteria for staff.

The interview guide for beneficiaries consisted of questions aimed to understand their feelings regarding their treatment component and what was lacking according to them. Additionally, their suggestions for addressing these issues were solicited.

Similarly, the interview guide of staff consists of their experiences in implementing QCPs. They were asked about the major challenges they encountered and any insights they gained from these challenges. Their input was also sought regarding potential solutions to overcome these challenges.

**Sample size calculation**: Purposive sampling was used in this study. (8) After 23 interviews with beneficiaries (Table 1) and 19 interviews with staff (Table 2), when there was no new or more required information was obtained, IDIs were stopped. At last, after these numbers of IDIs, no new thoughts or concepts came out, and thus saturation occurred and this process got completed. (9,10)

| Sex                 | Male- 8                     | Female- 15               |  |
|---------------------|-----------------------------|--------------------------|--|
| Age group           | 30-65 years 24-62 years     |                          |  |
| Education           | No schooling- 5             | No schooling - 6         |  |
|                     | Between 1-8 standard- 2     | Between 1-8 standard- 5  |  |
|                     | Between 9-12 standard- 1    | Between 9-12 standard- 4 |  |
| Disease frequencies | Non Communicable Diseases-4 | Perinatal- 11            |  |
|                     | Communicable diseases- 4    | Communicable disease- 4  |  |
| Treatment place     | SHC-HWC-4                   | SHC-HWC- 8               |  |
|                     | PHC-4                       | PHC- 7                   |  |

Table 1: Details of beneficiaries (23 IDIs)

# Table 2: Details of staff (19 IDIs)

| Post       | Medical Officers/Ayush<br>Medical Officers- 7                               | HWC staff (Community Health<br>Officer/Multi-Purpose Workers)- 6 | PHC staff (Nurses<br>and other staff)- 6                                  |
|------------|---|--|---|
| Age group  | 25-35 years   | 25-45 years  | 22- 40 years  |
| Sex        | Male-2, Female-5  | Female-5, Male-1   | Female-3, Male-3  |
| Experience | 2 years- 2  | 3-5 years-3  | More than 3 and up  |
|            | More than 3 and up to 5<br>years- 2<br>More than 5 and up to 10<br>years -1 | More than 10 years-3   | to 5 years- 2<br>More than 5 and up<br>to 10 years -1<br>Above 10 years-2 |
|            | Above 10 years-2  |  |   |

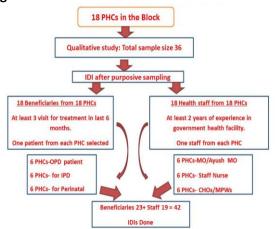
From all the study participants, informed consents were obtained. After consent from the participants, an audio recording was done. With a semi-structured interview guide, one-to-one IDIs were conducted.(11)

Ethical Consideration: The study was initiatedafter obtaining approval from our InstitutionalEthicsCommitteeIEC/BU/140/Faculty/10/271/2022).

Data Collection: The IDI questions were prepared before the study. The researcher was formally trained in gualitative research. IDIs were conducted in a phased mannerintroduction of the study and participants, followed by introductory questions, transition questions, key questions, and conclusion or ending. After each IDI, audios were immediately saved to the computer in a password-protected folder. The duration of IDIs was about 30-45 min. After prior discussion with participants regarding their convenient timings, the interviews were conducted. The participants have chosen the venue of the interview, at their convenience. Informed consent was taken from all the study participants before starting the interview. Confidentiality was maintained during the

interview and privacy was ensured during the interview process. Throughout the interview process, only the participant and interviewer were present. Before the completion of the IDI process, the major and important points were summarised. Confidentiality of the collected information was strictly maintained after the interview. It was ensured that the required permissions for the IDI process and the study were obtained. (12)

The study was conducted as per the guidelines of COREQ- Consolidated Criteria for Reporting Qualitative Research and SRQR- Standards for Reporting Qualitative Research.(13,14) **Figure 2: Flowchart for data collection** 



**Data analysis:** Qualitative data analysis for this study involved a manual approach using thematic data analysis. The data was first transcribed, and then the transcriptions underwent a rigorous review process.

The personal details of the participants were not mentioned during the transcription process. All the transcripts were prepared on the same day of the conduct of interviews.

To ensure accuracy and reliability, the transcriptions were compared and validated by the researcher in collaboration with a guide. This verification process helped in maintaining the quality and consistency of the qualitative data analysis.

The process of analysis consisted of a review of all transcripts, coding the data, and getting themes out of it. Initially, the researcher read all the transcripts independently. Categories made from similar codes after clubbing them together. All the themes, codes, and various categories were reviewed for validation. The Gujarati quotes from the participants were represented in Italics.

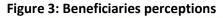
# RESULTS

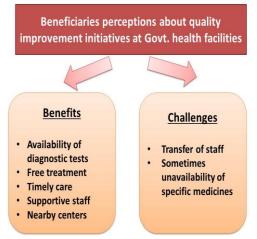
In beneficiaries' part, transcripts' manual thematic analysis came out with 12 different types of categories, 6 different sub-themes with 3 major themes.

- 1. Impact as per patient perspective
- 2. Barriers to effective implementation as per patient perspective
- 3. Recommendations by Patients

IDIs with beneficiaries indicated a generally positive sentiment and patients were quite happy after noticeable improvement in healthcare services. Specifically, the availability of free medication, proximity of the health facilities, and availability of staff as factors contributing to their happiness.

However, there were a few complaints, with only a minority of beneficiaries expressing concerns about the unavailability of specific drugs and the lack of required care provision in their nearby centres. (Figure 3)





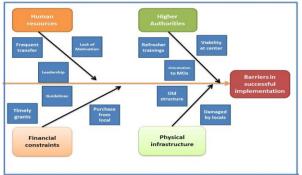
Importantly, beneficiaries provided valuable suggestions which have few ways by which the health system can enhance its quality and provide more satisfaction to patients. These suggestions could potentially lead to further improvements in healthcare services and patient experiences.

Manual thematic analysis of the transcripts from the staff part yielded 16 categories, 6 themes, and 3 themes.

- 1. Barriers to effective implementation as per staff perspective
- 2. Recommendations by staff for effective implementation
- 3. Impact as per staff perspectives.

Despite these challenges and barriers Figure 4, staff members acknowledged the benefits of these programs and supported the need for these types of programs. Furthermore, the staff provided suggestions on how to implement these programs successfully, indicating a willingness to work towards improving the healthcare system and its quality standards.

# Figure 4: Barriers to successful implementation



# DISCUSSION

**From the healthcare staff's perspectives:** Quality improvement programs have been identified as beneficial in this study. The standard guidelines of these programs help the health system to streamline its actions and efforts.

Through IDIs with healthcare staff across various cadres, it was revealed that these quality improvement programs contribute to enhancing the image of government health facilities. This improvement is achieved through the adoption of treatment with protocols, infection prevention practices, cleanliness, and polite behavior. Additionally, the availability of guidelines enables staff to enhance their skill levels.

Other similar studies' results were consistent with the findings of this study.

A study by Dr.Sajini Nair also highlighted the barriers and enablers of National Quality Assurance standards of hospitals in purview of staff perspectives. Some of the barriers were related to the current study. (15) Almost all IDIs mentioned that with the implementation of these QCPs, patients will get more benefits and they will get proper and timely services that are entitled to them. A consistent theme in these interviews was that the implementation of QCPs is expected to bring numerous benefits to patients.

# Verbatim:

"100 % fayde mand che..amuk loko kam karva mange che pan temne idea na hoy to temne pan aa NQAS guidelines male ke idea male to te jaruri che."

(It's 100% useful. Some people want to work but if they don't have an idea about these NQAS and quality guidelines, they must get these guidelines or get an idea about it.)

Documentation is a vital part of the health system. Starting from the registration of patients till discharge, at every step, documentation is very crucial. In the health system, various types of forms and formats are in place, and maintaining them regularly might be a major issue for staff. In our study, we also found out this, and most of the staff has raised this point. "NQAS na mujab registers maintain karva Ghana aghra che. Darek darek indicator je NQAS ma janavela che tene jova e ghanu agharu kam che routine ma."

(It's hard to maintain routine registers as per the mark of NQAS. Hard to look after every indicator as mentioned in NQAS and also in routine practices)

The success and sustainability of any program over the long term depend on the availability and active involvement of committed and complete manpower.

An article by Manoj Mohan et al. mentions the strategies for improving quality of care at rural health facilities. 1 Similar inputs were found in the current study. One of the strategies suggested in this study is to provide the required quality of treatment and proper care in rural India by strengthening skills and capacity building for the working task force at the ground level by giving them incentives and resources to provide better quality care.

Few of IDIs reflect the same thing.

"Main to che ne staff change thai jay che. And MO pa change thai jay che. Main to staff ne shikhvadie and pachi te change thai jayetle taklif pade."

(The main problem is frequent staff changes. And the medical officer changes. Mainly after we teach the staff and then it will be a problem if they get changed.)

To implement QCPs, staff have to work hard as they have to improve their work which requires considerable effort. Meanwhile, they also have to do their routine work which is increasing day by day as per their feedback.

In light of this challenge, a valuable suggestion from 2-3 staff members emerged: the possibility of identifying someone who can only look after these quality certification programs.

A mixed method study on the implementation level of the Kayakalp program in Primary Health Centres' of the state of Karnataka mentioned some similar points to the current study regarding barriers to effective implementation. Like requirements of regular funds or refresher training of human resources or lack of motivation from higher levels. (16) Several valuable recommendations emerged during the study, reflecting the challenges and opportunities for improving the healthcare system. Some of these recommendations include:

- 1. Frequent Refresher Training of staff members
- 2. Frequent visits to certified health facilities
- 3. Assistance from the Higher Authority level in the implementation of QCPs.
- 4. Ensuring the timely availability of financial resources or grants is crucial.

**From patient/beneficiaries' perspectives:** The study revealed that patients expressed satisfaction with the availability of good treatment and they felt that whatever type of treatment was required, they got it.

A study by V. Saravanakumar et al stated that beneficiaries were not happy with sanitation facilities and cleanliness in and around health facilities. This was a descriptive cross-sectional study. In contrast it, the in current study beneficiaries were happy with health facilities.(17)

In any type of health facility, a patient should feel that he or she is getting what is required.

Patients were happy that they get free treatment for various health conditions from delivery to NCD-related medications; they get free from their nearby SHC-HWC or PHC.

**Verbatim:** "hu delivery mate PHC par admit thai hati 3 mahina pahela. 5-6 kalak mate dakhal kari hati. Pan koi khacho nahoto thayo. Badhu free thai gayu hatu and dva pan tya thi j mali gai hati."

(I was admitted to PHC for delivery. 3 months ago. Admitted there for 5-6 hours. But there was no cost. Everything was free, and medicine was also available from there.)

The Usual image of government hospitals is that waiting time is quite long, but as mentioned by several beneficiaries, they got treatment in a quick time.

"PHC par gadi ma gya hta ane jta j delivery thai gai hati and pachi rja aapi didhi hati. Koi kharcho to ni lagyo. Sarvar hari kari hati."

(The delivery was done at PHC. Discharged after resting. No expenses were incurred. The treatment was good.)

Several beneficiaries reported a notable shift in their healthcare choices. Beneficiaries mentioned that usually in the past they were taking treatment from private, but as of now in the last 3-4 years, they have come back to government health facilities and started to take medicines from the government. Some of the reasons are staff availability, medicine availability; new centres nearby, etc.

In rural and remote areas, the availability of diagnosis and infrastructure facilities, the availability of medicine and required laboratory tests are very crucial. Beneficiaries also found it very important in their health aspect. Some of the IDIs reflect these aspects.

The patient's treatment outcome somewhat also depends upon the staff's attitude and behavior. The courteous and supportive behavior of the staff helped the patient and his or her relatives quite a lot.

A study by Ritu Narang et al mentioned that beneficiaries could not judge technical quality as they were not up to it but they could feel human behavior and attitude toward their care. The current study also found that beneficiaries felt good about the courteous behaviour of staff. (18)

This point is reflected in a few of the interviews.

"saheb phc ma complete javab aape. Govt ma badhu barabar samjave, mast vat kare, badhu samjave."

(Sir gave a complete answer in PHC. In the government system, doctors explain everything properly, talk coolly, explain everything.)

In most cases, patients and relatives judge treatment facilities and treatment outcomes on various aspects like staff behavior, available infrastructure and other facilities, availability of medicine and diagnostic facilities, etc. Feedback from patients is reflected in these verbs.

One notable concern among patients was the availability of medicines. Sometimes availability was there but continuous supply was not there. So this was one concerning point from the patient's perspective.

"Pahela insulin mate injection aapta hta, have nathi aapta. Mane nathi jarur pan loko ne joie che.

(Earlier they used to give injections for insulin, but now they don't. I don't need it but people want it.) The study revealed that certain areas of the healthcare system did not meet the expectations of the beneficiaries. They have some expectations that were not met, so they have some suggestions that can be implemented to satisfy them, and it will help to gain their confidence in the government health system.

"Aa ben che tya sudhi saru che, ben jata raheshe pachi kon aavshe ane shu karshe te nathi khabar Baki ben che etle saru che."

(As long as she is there, it is good, if she will leave, then who will come and what will he /she do? She is there, so it is good.)

The government health facilities are designed to provide essential healthcare services that align with the requirements of the local community. Few beneficiaries spoke up and mentioned their views.

"Je che te badhu barabar j che, sari dva kare che etle bhul kadhvano koi matlab nathi, badhu saru j kare che. Dava sari kare che to khotu boli ne shu kam?"

(Everything available is right, good medicine, it works, so there is no point in making arguments or finding mistakes, everything works well. What is the use of telling lies if their treatment makes you better?)

# CONCLUSION

Quality certification programs have shown significant impact on healthcare services; it's very promising specifically for rural and tribal health facilities as it will enable them to stand high. The positive impact of QCPs is particularly important in underserved areas where access to quality healthcare is crucial for the wellbeing of the population.

#### RECOMMENDATION

QCPs indeed bring significant benefits to the healthcare system. They are designed to make the system more beneficial for patients, the staff and it has elements to strengthen the system. The main concern with the implementation of these programs is they were not implemented in a step by step manner and sometimes due to lots of work pressure and handling lots of national health programs, these programs were not implemented as suggested which should be taken care of. Addressing these challenges and ensuring a more structured and phased implementation process is important to fully realize the potential benefits of quality certification programs

#### **LIMITATION OF THE STUDY**

This study was done in a limited geographical area, within a large tribal district, providing valuable insights into the local context.

#### **RELEVANCE OF THE STUDY**

This study will help program managers and system persons to take care of loose parts of the implementation cycle of these QCPs. It can guide implementers that this is not a singletime process but it is a continuous process and if these programs are implemented correctly, it will be beneficial for patients, the staff, and the system. It highlights the areas for potential improvement in the implementation cycle of Quality certification Programs

# **AUTHORS CONTRIBUTION**

The first and second authors contributed to conceptualization and planning while the second author's contribution was for the data collection. The first author and third authors contributed to transcription, data analysis, and preparation of the manuscript.

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#### **CONFLICT OF INTEREST**

There are no conflicts of interest.

# DECLARATION OF GENERATIVE AI AND AI ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

The authors haven't used any generative AI/AI assisted technologies in the writing process.

#### REFERENCES

- Mohanan M, Hay K, Mor N. Quality Of Health Care In India: Challenges, Priorities, And The Road Ahead. Health Aff (Millwood). 2016;35(10):1753-1758.
- National Quality Assurance Standards, National health system resource centre. [online] [Accessed 25 October 2024]. Available from: https://qps.nhsrcindia.org/national-qualityassurance-standards

- Kayakalp, National Health Mission. [online] [Accessed 25 October 2024]. Available from <u>https://nhm.gov.in/images/pdf/in-</u> <u>focus/Revised Kayakalp Guidelines.pdf</u>
- Labour room and quality improvement initiative, National Health Mission. [online] [Accessed 25 October 2024] Available from <u>https://nhm.gov.in/index1.php?lang=1&level=3&su</u> <u>blinkid=1307&lid=690</u>
- Tancred T, Mandu R, Hanson C, Okuga M, Manzi F, Peterson S, Schellenberg J, Waiswa P, Marchant T; EQUIP Study Team. How people-centred health systems can reach the grassroots: experiences implementing community-level quality improvement in rural Tanzania and Uganda. Health Policy Plan. 2018;33(1):e1-e13.
- Das J, Holla A, Das V, Mohanan M, Tabak D, Chan B. In urban and rural India, a standardized patient study showed low levels of provider training and huge quality gaps. Health Aff (Millwood). 2012;31(12):2774-84.
- Dongre A, Deshmukh P. Practical Guide: Qualitative Methods in Health and Educational Research. Chennai: Notion Press Media Pvt. Ltd; 2021
- Palinkas LA, Horwitz SM, Green CA, Wisdom JP, Duan N, Hoagwood K. Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. Adm Policy Ment Health. 2015;42(5):533-44.
- van Rijnsoever FJ. (I Can't Get No) Saturation: A simulation and guidelines for sample sizes in qualitative research. PLoS One. 2017;12(7):e0181689.
- Vasileiou K, Barnett J, Thorpe S, Young T. Characterising and justifying sample size sufficiency in interview-based studies: systematic analysis of qualitative health research over a 15-year period. BMC Med Res Methodol. 2018;18(1):148.

- Boyce, C. and Neale, P. (2006) Conducting In-Depth Interview: A Guide for Designing and Conducting In-Depth Interviews for Evaluation Input. Pathfinder International Tool Series, Monitoring and Evaluation-2.
- Vimal M, Dongre AR, Nishanthi A, Kagne RN. Student support system for medical undergraduates: A qualitative exploration of stakeholder perspectives. J Educ Health Promot. 2021;10:150.
- Dossett LA, Kaji AH, Cochran A. SRQR and COREQ Reporting Guidelines for Qualitative Studies. JAMA Surg. 2021;156(9):875-876.
- Noble H, Smith J. Issues of validity and reliability in qualitative research. Evid Based Nurs. 2015;18(2):34-5.
- Enablers and Barriers of NQAS Certification of Hospitals in Kerala, PRC Report Series 2019-20: 2 [online] [Accessed 25 October 2024]. Available from: https://qps.nhsrcindia.org/sites/default/files/2021-05/Report%20on%20Enablers%20and%20Barriers% 20of%20NQAS%20accreditation%20of%20Hospitals \_%20PRC%20Kerala.PDF
- Level of Implementation of KAYAKALP in PHCs of Karnataka and its Impact, PRA Dharwad, March 2020. [online] [Accessed 25 October 2024]. Available from:

https://qps.nhsrcindia.org/sites/default/files/2021-05/PRC%20Dharwad KAYAKALP-Karnataka 0.pdf

- Assessing the reasons for poor performance of Public Health Facilities in Tamil Nadu, in Kayakalp Award, PRA Tamilnadu, February 2020. [online] [Accessed 25 October 2024]. Available from: https://qps.nhsrcindia.org/sites/default/files/2021-05/PRC%20Gandhigram\_Kayakalp%20Assessment% 20in%20Tamil%20Nadu.pdf
- Narang R. Measuring perceived quality of measuring quality health care services in India. Int J Health Care Qual Assur. 2010;23(2):171-86.