

Quality Assurance in Dentistry: A Need in Indian Scenario

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ABSTRACT:

Purpose: To describe the standards of quality dental care, quality control system and the policies concerning quality assurance in dentistry, in Indian scenario.

Data Source: Study of relevant literature and books.

Results: Quality is described as the degree to which the entire set of characteristics of a product, process or service satisfies established or obvious needs. With respect to Quality Assurance, the government merely tends to frame the standards through accreditation. Whereas the professional organizations support the individual dentist by developing a quality assurance system and delivering tools for quality assessment. Different activities within such a quality assurance system are standards of quality dental care framed by NABH, Clinical Establishment Act standards for Dental centres and principles of Total Quality Management & Quality Assurance.

Conclusion: Delivering quality dental services is one of the major challenges that dental healthcare professional are facing in the developing countries. Therefore, effort should be made to develop a fundamentally better patient care system that will lead to an improved performance. The aim of this article is to explore various quality care policies and activities to develop quality assurance system in general dentistry.

Key Words: Accreditation, dentistry, quality assurance, quality control.

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INTRODUCTION

Present millennium is the era of growing interest in providing quality health services by the health care industries, which has become one of the major challenges in developing countries. Quality of the services provided is a comparison of expectations with performance. Perspectives have changed completely due to patient's high expectations from the outcomes of dental treatment, newer technology, cost containment and increasing demands for accountability of the members of the profession. Customers generally compare the service they 'experience' with the service they 'expect'. The professionals encounter difficulties in adjusting the changes due to lack of education, knowledge, experience and absence of a definition for accepted criteria for action. Knowledge and skill acquired during academic education should qualify a dentist to practice dentistry, however professional and social changes constantly demand adaptation and extension of quality dental practices. In case of mismatch of experience and expectation, there arises a

gap. However, the responsibility for quality assurance lies in the hands of the dental professional.

Today, dentistry not only possesses a social and ethical commitment for the society but professional obligation for the members of the profession too. The issue of quality assurance should be measured not only in financial terms, but also in terms of accepting responsibility and working for continuous improvement. Organized dentistry will lead to efficient utilization of the available resources and increase the trust of the public in the profession of dentistry.[1]

Quality Council of India:

Quality Council of India was set up in 1997 as an autonomous body by the Government of India jointly with the Indian industry to establish and operate the National accreditation structure for conformity assessment bodies. To realize the objective of improving quality competitiveness of Indian products and services, QCI provides strategic direction to the quality movement in the country by establishing recognition of India conformity assessment system at international level. The vision of QCI is to be among the world's leading national apex quality facilitation, accreditation and surveillance organizations, to continuously improve climate, system, process and skills of total quality. The mission is to help India to achieve and sustain total quality and reliability, in all areas of life, work, environment, products and services, at individual, organizational, community and social level. Basically, the objectives are to establish and

maintain an accreditation structure in the country, provide right and unbiased information on quality related standards, spread quality movement in the country through National Quality Campaign, facilitate up-gradation of equipment and techniques related to quality & help to establish brand equity of Indian product and services.[2]

Quality of Dental Care:

Quality has been defined as excellence in the product or service that fulfills or exceeds the expectations of the customer. Quality is the degree to which the entire set of characteristics of a product; process or service satisfies established or obvious needs. It is also a primary concern in the hospitality industry. "Dimensions of quality include patient perspective issues, environmental safety, accessibility, appropriateness, continuity, effectiveness, efficacy, efficiency and timeliness of care". It is obligatory to provide insight into the system of health care. Quality of dental care focuses on all the major components of providing dental services including diagnosis and treatment planning, technical skills, patient communication and organizational aspects. An essential part of any attempt to assess the quality of care is the development of explicit criteria.[3] Subsequently, the dental profession has to adopt, well-defined and widely accepted standards of performance, which serve as quality indicators. This is not possible without continuous quality assessment and improvement. These standards are basic tools needed for the evaluation of dental services, appropriateness of treatment and measurement of the outcome of care. In combination with methods for the assessment of dental practices a realistic and effective quality assurance system should be designed.

Quality Assurance:

Dental practices are expected to have a quality assurance system, which covers all areas of dental practice. The aim of quality assurance system is to maintain and improve standards of patient care and safety. Quality assurance measures the quality of the clinical practice and aims at improvement of oral health thereby increasing patient satisfaction.

Basically, quality assurance has two goals; it should attempt to assure the continuous improvement of the work of all practitioners and bring improvement in those practitioners who prove to be less competent in practice. [4] A quality assurance system should assure the quality of dental care by proper assessment and identifying strengths & weaknesses. The strengths should be reinforced and the weakness rectified, in concordance with the approach based on continuous improvement. Services that pass inspection should continue to be provided as usual. Services that fail inspection are reviewed in greater detail and improvements are made to ensure improved quality in the future. These efforts help in improving the public

trust in dentistry. The different regulatory bodies also require evidence of effective quality assurance by dental service providers. Safety, effectiveness, caring attitude, response to people's need are few criteria while assessing the services. Quality assurance requires an organizational culture, which should encourage participation; value education & research; learn from mistakes; share good practices and ensure consistency. [5]

Quality Improvement:

Quality Improvement encourages a proactive prevention approach, where quality is built into the work processes that produce a product or service. Recognizing the potential for defects and doing something about it before the outcome is complete, is the job of everyone involved in the process. Teams of individuals, who have knowledge of the process requiring improvement, most frequently accomplish the activities. The essence of Quality Improvement includes: Satisfying customers; eliminating waste; a culture that encourages ethical, open, respectful and participative behavior; and formal systems based on continuous improvement.[6]

Quality Improvement Process is a continuous process and to make it ongoing a PDCA cycle can be implemented that includes: Plan change (**Plan**), Pilot test improvements (**Do**), Analyze results of the test (**Check**), and institutionalize the change (**Act**). Quality improvement requires a balanced approach where planning, doing, checking and acting are all given equal attention. Action without sufficient planning and root cause analysis may compromise success therefore may require major changes later. This situation can be minimized with sufficient and comprehensive planning. Data collection and analysis methodologies should be built into every process within the health care system.

Quality Control:

Quality control is "The supervision and control of all operations involved in a process, usually involving sampling and inspection, in order to detect and correct systematic or excessively random variations in quality." The term is used most commonly in healthcare in conjunction with the daily calibration of laboratory instruments and equipment and testing of reagents, but also can be applied to a dental practice. Most of the Quality assurance and improvement activities conducted in the healthcare field are actually quality control activities, which are used to assess and maintain process stability.

Clinical Establishment Act Standards for Dental Centre:

Clinical Establishment Act, 2010 has been enacted by the Central Government to provide for registration & regulation of all clinical establishments in the country with a view to prescribe the minimum standards of

facilities and services provide by them. This act is applicable to all kinds of clinical establishments from the public and private sectors, of all recognized systems of medicine including single doctor clinics. The dental centre is stand-alone clinical establishment having dental services without inpatient facility.

Clinical Establishment Act includes the following -

- Scope (as applicable)
 - Services provided at a dental clinic / hospital to be defined
- Infrastructure requirements
 - Prominent board/signage displaying the services; name of the clinic/ centre with timings; in a bilingual language
 - The establishment shall be developed and maintained to provide safe, clean and hygienic facility for patients, their attendants, staff & visitors with standard minimum space requirement as per the scope of services.
- Equipment/ Instruments/drug requirement
 - Establishment shall have adequate equipment/instrument commensurate to the scope of services
 - To provide safe & secure patient care, establishment shall have indicative list of minimum equipments in dental hospital/ clinic with their maintenance plan.
 - The establishment shall also maintain adequate drugs including emergency drugs.
- Human Resources requirements
 - Services provided by the dental professionals, registered with State Dental Council of India, shall be in consonance with their qualification, training and experience.
 - The Dental clinic/centre shall have basic minimal essential manpower as applicable: 1. Dentist 2. Dental Hygienist, 3. Dental Assistant/Auxillary, 4. Dental Technician, 5. Multipurpose worker 6. Others - anesthetist, general physician, general surgeon on call, as required.
- Support Services
 - Reception & billing counter with availability of tariff list.
 - In house or outsourced diagnostic services – which shall comply with the applicable law and regulations.
 - Facility for sterilization & cleaning instruments and bio medical waste management including mercury waste management as per rules.
 - Ensure that contact details of ambulance/hospital etc are available whenever required.
- Legal/Statutory requirements
 - The establishment shall comply with the requirements of local laws and regulations as applicable by the local/state health authority: 1. Registration under Nursing Home Act/ Clinical

Establishment Act, 2. Bio-medical waste management Licenses, Authorization of HCO by PCB, MOU with Vendor, 3. AERB License for X-ray/OPG etc. 4. NOC from fire department, 5. Lift license (if available), etc.

- Record maintenance and reporting
 - The minimum medical records to be maintained in physical or digital format.
 - The establishment shall maintain health information and statistics in respect of National program, notifiable diseases & epidemics and furnish the same to the district authorities.
- Basic Processes to be established-
 - Registration; Assessment; Infection Control
 - Medication procurement, dispensing, Prescription, Administration, documentation and monitoring
 - Processes of Safety and Security for patients, attendants, staff and visitors
 - Quality indicators for continuous quality improvement.[7]

Accreditation:

Accreditation is a formal process by which a recognized body assesses and recognizes that a health care organization meets applicable pre-determined and published standards. It is determined by independent external peer assessment of that organization's level of performance in relation to the standards.[8] Many healthcare organizations, including dental clinics, choose to become accredited by a national accrediting organization. The best-known and oldest organization that accredits ambulatory healthcare facilities, including dental clinics, is the Joint Commission.[9] All of the recognized accrediting agencies require certain levels of Quality assurance and Improvement activities, ongoing program evaluation, peer review, adherence to life-safety standards, etc.

Accreditation standards should be:

- Optimal & achievable.
- Designed to encourage continuous improvement efforts within accredited organizations than adherence to minimal standards.
- Accreditation is granted following a periodic on-site evaluation, by a team of peer reviewers, conducted periodically.
- Accreditation is a voluntary process in which organization chooses to participate, rather than required by law and regulation.

Accreditation helps them do the following:

- Find new ways to improve the care and services they offer
- Increase efficiency and reduce costs
- Develop better risk management programs
- Lower liability insurance premiums
- Motivate staff and instill pride and loyalty
- Strengthen public relations and marketing efforts

- Recruit and retain qualified professional staff members
- Develop alliances with other provider groups such as hospitals and patient's care organizations.
- Improve patient care & safety including their relatives and visitors.
- Employee development.
- Benefits for Management
- Services/ facilities for Community

National Accreditation Board for Hospitals (NABH):

National Accreditation Board for Hospitals & Healthcare Providers (NABH) is a constituent board of Quality Council of India, set up to establish and operate accreditation program for healthcare organizations. NABH is an institutional member of the International society for quality in health care (ISQua). ISQua is an international body, which grants approval to accreditation bodies in the area of healthcare as mark of equivalence of accreditation program of member countries. Quality assurance and Improvement are a necessary part of the operations of any healthcare organization, including a dental clinic, regardless of whether or not the organization seeks accreditation. Quality assurance and Improvement is an ongoing process that should be designed into every system and process of the clinic so that it becomes the routine way of doing business rather than just a paperwork burden. It requires the participation and input of everyone working in the clinic and is best conducted through team-related activities. While some processes need to be monitored on a regular basis e.g., daily, weekly, quarterly, all functions of the clinic should be reviewed at least annually to ensure that they are performed according to Quality assurance and Improvement plans, strategic plans, or other organizational objectives. [10]

Standards framed For Dental Healthcare Service Providers by NABH:

Access, Assessment and Continuity of care (AAC): Patients cared for by the Dental Healthcare Service Providers undergo an established initial assessment and periodic and regular reassessment. Assessments include planning for utilization of laboratory and imaging services. These assessments result in formulation of a definite plan of care. Patient care is multidisciplinary in nature and encourages continuity of care through well-defined transfer and discharge protocols.

Care of Patients (COP): The Dental Healthcare Service Providers provides uniform care to all patients in different settings. The different settings include care provided in outpatient units, various categories of wards, intensive care units, procedure rooms and operation theatre. The standards aim to guide and encourage patient safety as the overall principle for providing care of patients.

Management of Material, Medicines & Equipment: Dental Healthcare Service Providers should have a safe and organized medication process. The process includes policies and procedures that guide the availability, safe storage, prescription, dispensing and administration of medications. The standards encourage integration of the pharmacy into everyday functioning of hospitals and patient care.

Patient Rights and Education (PRE): The Dental Healthcare Service Providers defines the patient and family rights and responsibilities. Patients are informed of their rights and educated about their responsibilities.

Infection Control (IC): The infection control program is documented and aims at reducing or eliminating infection risks to patients, visitors and providers of care.

Continual Quality Improvement (CQI): The standards encourage an environment of Continual Quality Improvement. The quality and safety program should be documented and involve all areas of the Dental Healthcare Service Providers. Pre-defined data is collected on structures, processes and outcomes, especially in areas of high-risk situations. The collected data is analyzed and actions are taken accordingly for further improvements.

Responsibilities of Management (ROM): The standards encourage the governance of the Dental Healthcare Service Providers to work in a professional and ethical manner. The responsibilities of the management are defined.

Facility Management & Safety (FMS): The standards guide the provision of a safe and secure environment for patients, their families, staff and visitors.

Human Resources Management (HRM): The most important resource of a hospital and health care system is the human resource. Human resources are an asset for effective and efficient functioning of a hospital. The goal of human resource management is to acquire, provide, retain and maintain competent people in right numbers to meet the needs of the patients and community served by the Dental Healthcare Service Providers.

Information Management System (IMS): Information is an important resource for effective and efficient delivery of health care. Provision of health care and its continued improvement is dependent to a large extent on the information generated, stored and utilized appropriately by the Dental Healthcare Service Providers. Provision of patient care is a complex activity that is a highly dependent on communication of information. This communication is to and from the community, patients and their families, and other professionals. The goal is to ensure that the right information is made available to the right person.[11]

Various Principles to achieve Total Quality Management and Quality Assurance are:

1. **Principle of Patient Focus:** care, comfort convenience and most importantly, effective two- way communication, would be the first priority in a quality care oriented Dental Healthcare Service Providers (DHSP).
2. **Principle of top management involvement:** Management first and management last, with everyone and everything intervening, should be there in the premise. Qualities of leadership have to be demonstrated, observed, taught, learnt and evaluated.
3. **Involvement of all people:** United we stand and divided we fall. It is necessary to inculcate a spirit of unity to promote work culture in a Dental Healthcare Service Providers (DHSP).
4. **Process Approach:** Traditionally, the practice of healing has been by apprenticeship, but modern medicine is a process. As a continuum of the foresaid, processes and sub processes of the practice of treating the patient entirely need to be identified, built up and improved upon.
5. **System approach:** Inter-related processes form a system. When all the other aforesaid principles are working full steam, the Dental Healthcare Service Providers will work as a single coherent unit. In today's working conditions, this will lead to better preparedness to meet disasters and prepare to meet new clinical challenges.
6. **Healthy relationship with suppliers of goods and services:** Dental Healthcare Service Providers will very often need to out- source some of its services. Working within the paradigms of the other five principles, external suppliers of goods and services will work with a 'we' approach than a 'me' approach.
7. **Taking decision based upon facts and figures:** Keep in mind that careful observation and analytical thinking will lead to early clinical conclusions, promoting healthy living.
8. **Continual Improvement:** To keep pace with rest of the world, Dental Healthcare Service Providers also should adopt quality systems to bring changes of continuous improvement.[12]

CONCLUSION

Reflections on the quality of health care have made a great leap forward during the last couple of years. By laying down a definition of the concept of quality an important start has been made with the development of a feasible policy for quality assurance. The aim of these policies in dental care is to improve oral health and increase patient satisfaction. However, application of these policies should be carried out authentically and also concentrate on the quality related issues - like infection control, safe guarding children and vulnerable adults, dental radiography, safety of patients, staff and

the wider public, evidence based practice in line with relevant guidance, data protection, employment, training and development, patient information and involvement, fair and accessible care, investigating and learning from complaints and raising concerns. As rightly quoted –“Quality is a journey and not destination.”

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