SHORT COMMUNICATION

Clinical Audit and Its Role in the Practice of Dentistry

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ABSTRACT

Audit is the practice of ensuring good professional practice, which has been practiced in the various fields of professional world for a long time. The concept of clinical auditing which primarily ensures quality provision of equitable, ethical healthcare is still a new concept in the field of health sciences. In dentistry, this concept is even more recent, especially in the developing world. Many dental negligence cases go unaccounted for in various parts of the developing world.

This article outlines the main concepts of clinical audit, explaining what exactly is clinical audit and how may it be implemented in the practice of dentistry.

Key Words: *Clinical Audit, Clinical Governance, Dental Audit, Dental Practice.*

Introduction

Over the past few decades, public opinion and involvement in modern health care has been increasing continuously, so much so that today, in the developed countries, it is unethical for a clinician to formulate a treatment plan without taking the opinion of the patient under consideration. A specific growing concern among the public is that health care brings more harm than good. Several cases involving nurse, doctors and in some instances, dentists became quite popular coming under the light of the media and have brought about change in health care policies. Some examples of these are the Bristol babies case – where about 90 children were reported to have died, owing to sub-standard care by the doctors; the Alder Hey Hospital case and the Harold Shipman case.[1] It is true that these individuals represent a very small proportion of health professionals. However, such negligence should not be left unchecked and a system to monitor and assess quality health care needs to be present. Such systems have appeared over the past few decades, to provide excellent quality health care to the public.[2]

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Defining Clinical Audit

1. Audit – Audit has been described in different ways, depending on what is desired out of the whole process. To put it simply, it is an extension of good clinical practice. A more discrete way of describing audit would be that "it is the systematic and critical analysis of the quality of medical care (i.e. critical analysis review)."[3]
2. Peer Review – In this method, a group of clinicians hold a meeting where they either discuss clinical cases or other protocols regarding the setting of the clinical practice e.g. guidelines for recall intervals in dentistry, dental radiography guidelines or cross-infection control protocols. A peer review group consists of between four to eight dentists from at least two different practices.[4] A full and honest discussion is carried out, where it is discussed whether certain clinical scenarios were managed appropriately or not; and/or whether certain guidelines are appropriate and evidence-based. Any change required in the standards for assessing clinical protocols; or a need for staff training and education may be identified. It is recommended that the review should be completed in eight sessions (of at least two and a half hours) within nine months.[4]

3. Clinical Audit – The clinical audit scheme for dentistry was introduced in the UK in 1995. The purpose of clinical audit was to give the dental practitioners to build upon their peer review activities, going further by identifying standards that they could assess their clinical practice against.[4] Measurement tools or assessment methods are drafted against which the clinicians can go back and assess their own practice settings. They evaluate their own personal clinical settings, and if there are any shortcomings, a plan to change the practice to cater for the respective drawbacks is implemented. Such changes, and the evaluation and monitoring processes are then discussed over the next meetings.

The South West Regional Health Authority in the United Kingdom has defined medical audit from the above mentioned perspective as follows:

"Medical audit is a systematic approach to the peer review of medical care in order to identify opportunities for improvement and to provide a mechanism for bringing them about. It complements and subsequently overlaps financial audit, utilisation review and resource management but it differs in that its purpose is primarily clinical rather than managerial."

Clinical audit can be viewed from the perspective of the health professionals and/or the patients. The desired outcome of these groups would be more or less the same – making efforts for the provision of effective health care. From the perspective of the planners; managers and/or administrators of health care, clinical audit or clinical governance is more of a quality assurance review procedure to ensure that the optimal clinical services are being provided to the public in a manner acceptable to them, in a time and cost-efficient way.

Clinical audit from the perspective of doctors and/or patients

Medical audit is the term used to describe systematic and critical analysis of clinical procedures as carried out by doctors, in order to evaluate the procedures that doctors do. The key elements of medical auditing, as described by Leeman[3], are as follows:

i. Attaining the objectives of the system – this involves achieving the aims and obtaining the desired outcome. The interest of the doctors is to achieve the best clinical results and to fulfil the population's normative needs (the needs of an individual or population as described by a health professional: a doctor or a dentist).[5] The people would be more interested in having a health service that is accessible, accommodating, affordable and acceptable to them.[6] It then becomes the role of the auditing procedure to see to the attainment of these objectives.
ii. Efficiency – As described by Muir and Gray,[7] efficiency is in doing things the right way. This means that the policy objectives are obtained using a process, which uses resources (money, staff, and time) in the most optimal manner.
iii. Effectiveness – As described by Muir and Gray,[7] effectiveness is doing the right things. This implies choosing the process that obtains the best possible results.
iv. Professional assessment of services – This involves judging against a performance indicator. Various protocols can be assessed according to different guidelines, such as those set by the National Institute of Clinical Excellence (NICE)[8] e.g. following the NICE guidelines for following the protocol for third molar extractions or for patient routine recall intervals.
v. Consumer demands – The needs of the

people (felt and expressed needs) should be addressed in a quality health care service. A health need assessment would assist in this purpose.

vi. Consumer complaints – A system to record both verbal and written complaints should be present. Suggestion and complaint boxes and patient satisfaction surveys can be useful in this regard. A dental practice adviser might be hired for this very purpose as well.[9]

The above mentioned definition clearly gives the concept of clinical auditing not being a judgemental, management tool used for financial auditing threatening the practice with strict, disciplinary measures; but rather a methodical analysis of clinical procedures and setting, assessing them against specified measurement tools; assessing changes to maintain an agreeable, accepted standards, along with periodic evaluation and monitoring.

Clinical Audit from the perspective of planner, administrators and/or managers

Administrators view clinical practices from a quality assurance angle. Clinical governance, as described by the NHS Quality Improvement Scotland (2005) is 'the system through which NHS organisations are responsible for continuously monitoring and improving the quality of their care and services and safeguarding high standards of care and services.'

The UK Department of Health's definition (1998) is quite similar to the one above, describing clinical governance as 'a framework through which NHS organisations are accountable for continuously improving the quality of their services and safeguarding standards of care by creating an environment in which excellence in clinical care will flourish.[10]

These definitions differ from the earlier mentioned medical audit definitions in that the medical audit concept was more of an internal assessment and monitoring cycle, whereas clinical governance takes a stance on accountability, excellence in care and quality assurance – with possible influence externally from outside the service possibly playing a role.

However, the concept of clinical audit held by the administrators and the health clinicians are not mutually exclusive or independent of each other. They should, rather, complement each other. Accountability and quality assurance checks within an internally based system, improving the quality of the clinical settings. However, an approach that is threatening in itself would not be welcomed by clinicians.

Clinical Audit in Dentistry

Maidment modified the definition given by the UK Department of Health[7] to describe clinical audit in dentistry as 'a framework through which dental practices are held accountable for continuously improving the quality of services and safeguarding high standards of care by creating an environment in which excellence in clinical care flourishes.[9]

The public outcry and mistrust of the general population when it comes to health care services, resulting from cases of negligence, cannot and should not be denied or ignored. On analysis of these cases, it can be seen that in most of these cases early warnings were unnoticed or in the worst case scenario, ignored. A chain of events leads to complaining and in some cases, serious litigation issues. These issues, as we know, are not only restricted to medical care but affect dentistry as well. In light of all these issues, a quality assurance or clinical auditing mechanism needs to be present to monitor any change or negligence that might be taking place to achieve the set dental standards.[9]

Clinical dental settings and procedures should be following certain standards, such

as the guidelines drawn out by NICE for various protocols. To assess whether these standards are being practiced and maintained, a clinical governance procedure falls right into place.

Role of clinical audit in implementing improvement in the Dental Practice

Several authors have addressed the issue of implementing clinical audit in the dental practice; which has more recently formed a cornerstone to the practice of clinical governance in the dental practice setting. Using Donabedian's quality assurance model8 of structure, process and outcome, they have developed models to show how clinical audit could be implemented in dental practice [9],[11].

Structure

Under structure, administrative issues are addressed. A situational analysis is carried out to have an overview of the practice, describing the organisation of the practice; the staff and their distribution; the resources available; any quality assurance systems that are in place and the managerial structure of the practice.

Process

Clinical procedures, risk management protocols, cross-infection control mechanisms, staff management and responsibilities, implementation of quality assurance protocols, monitoring and evaluation systems should be analysed. This involves all the steps involved from the point a patient is received in the practice till he is discharged after treatment.[2] Examples can be taking proper clinical notes and keeping a record of them; having a system for recording the complaints – verbal and written- by the patients and reviewing these complaints in the dental practice meetings, with the objective of implementing any changes in the practice to minimise future complaints; recording all adverse events cases to minimise the risk of any such event occurring in the future; and having continuing professional development training in place for the staff.[11]

Outcome

Although assessing the outcome in dental practice is a challenging and difficult task, it is impossible and clinical audit is an important tool to assess outcome.[9] An outcome measure in a dental setting is an indicator of the effectiveness of the clinical intervention – whether the proposed treatment plan had the desired effect on the patient's health or not. 'Heath gain' is used to describe the benefit that the patient receives from the treatment – these benefits are not only physical but emotional as well.[3] To assess the clinical effectiveness of any intervention, clearly defined clinical performance indicators should be used and any corrective or preventive actions put into place accordingly.[11] Patient satisfaction surveys can help in assessing the emotional benefits of the proposed treatment.

The above mentioned points are appropriately summarised in the Department of Health's description of clinical audit as encouraging 'individual dental practitioners to self-examine different aspects of their practice, to implement improvements where the need is identified and to re-examine from time to time, those areas which have been audited to ensure that a high quality of service is being maintained or even further maintained.[10]

A Clinical example of clinical audit in practice[12]

An excellent example of clinical auditing in dental practice has been provided by Moosajee and Gibson.[12] They carried out an audit project to evaluate the implementation and monitoring of dental recall intervals' protocols of three different dentists. They based their audit model on Donabedian's quality assurance model as well. They initially carried out a retrospective study assessing the level of the implementation of the protocols in the three different practices

using patient records to assess process and outcome. The results turned out to be disappointing. Henceforth, they discussed these results and the NICE guidelines with the clinicians by having meetings. Changes were discussed and another review was carried out a month later. Another round of meetings was arranged with the three dentists and the same procedure as before was repeated. Another review was carried after another month and by this time; all three dentists had achieved 100 percent results.

Although this was an excellent study on clinical audit, no control groups were used. The selection of dentists was not random. This was a longitudinal study. A randomised control trial would have been on a higher level on the hierarchy of evidence, giving the research much more credibility.

Conclusion

To sum it up, clinical audit is required for the assessment of good quality dental practice and to ensure that quality dental health care is provided to the public. It is important to prevent any unnecessary litigation due to poor dental practice and clinical auditing plays a very important role in this regard. To put it, simply: clinical audit is about changing the way we do things – for the better.

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