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Main Article

Audit in clinical practice

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Abstract

Background and objectives Audit dates back to as early as 1750 BC when king Hammurabi of Babylon instigated audit for clinicians with regard to outcome. Clinical audit is a way of finding out whether we are doing what we should be doing. It also verifies whether we are applying the best practice.

Methods An audit cycle involves setting-up of standards, measuring current practice, comparing results with standards (criteria), changing practice and re-auditing to make sure practice has improved

Results and interpretations A 'clinical audit' is a quality improvement process that seeks to improve patient care and clinical outcomes through a systematic review of care against explicit criteria, and the implementation of change. Changes are implemented at an individual, team or service level and a subsequent re-audit is done to confirm improvement in health care delivery.

Conclusion The importance of audit in healthcare sector needs to be appreciated by the relevant authorities. The most frequently cited barrier to successful audit is the failure of organizations to provide sufficient fund and protected time for healthcare teams.

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Introduction

Clinical audit is the systematic process to evaluate the best practice of medicine. It compares what we are doing, to what should be done by judging our present clinical practice to the national or international standards for the given situation or condition.

Clinical audit and research are closely related, but distinct disciplines. Research is creating new knowledge about whether new treatments work and whether certain treatments work better than others. Research forms the basis of nationally agreed clinical guidelines and standards – it determines what the best practice is.

A case in example is the National Prospective Tonsillectomy Audit (NPTA) set-up in 2003 in the UK. The audit showed elevated hemorrhage rates in tonsillectomies performed using diathermy for dissection and hemostasis when compared to cold steel dissection and ties to achieve hemostasis [1].

The results of this evaluation brought about a change in the tonsillectomy surgical technique in the UK and a repeat audit confirmed reduced post-tonsillectomy hemorrhage rates.

Background

Audit dates back to as early as 1750 BC when king Hammurabi of Babylon initiated audit for clinicians with regard to outcome [2]. There were serious consequences for the clinician, both financially as well as with regard to life and limb in the event of poor performance.

Method

The component of a clinical audit are:

1. Setting standards

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2. Measuring current practice
3. Comparing results with standards (criteria)
4. Changing practice
5. Re-auditing to make sure practice has improved

This process is known as the *audit cycle* (Fig. 1)

Preparing for an audit

Selecting a topic for audit needs careful thought and planning. The following questions could be a useful discussion guide for prioritizing audit topics:

- Is there evidence of a serious quality problem in the issue being addressed? (for instance, primary or secondary hemorrhages in tonsillectomies)
- Is good evidence available to form standards? (examples would include systematic reviews or national/international guidelines)
- Is the problem concerned amenable to change?

Once the topic for a clinical audit has been selected, the purpose of the audit must be defined.

Selecting criteria/standards

Systematic methods should be used to derive criteria from evidence. These include methods for deriving criteria from good quality guidelines or from systematic reviews.

Criteria should relate to important aspects of care and be measurable. Clinical audits usually look at processes (i.e., whether we are doing the things we should), but can also look at outcomes (whether those processes are producing the right results).

Measuring performance

Patient registers are used to identify patients, but registers can be incomplete. The identification of patients using several sources can be an appropriate response.

Other components of this stage include planning, data collection, identifying users, sampling and data analysis.

Comparing results with standards

The results are compared with set national or international standards and the cause of the problem is identified. The

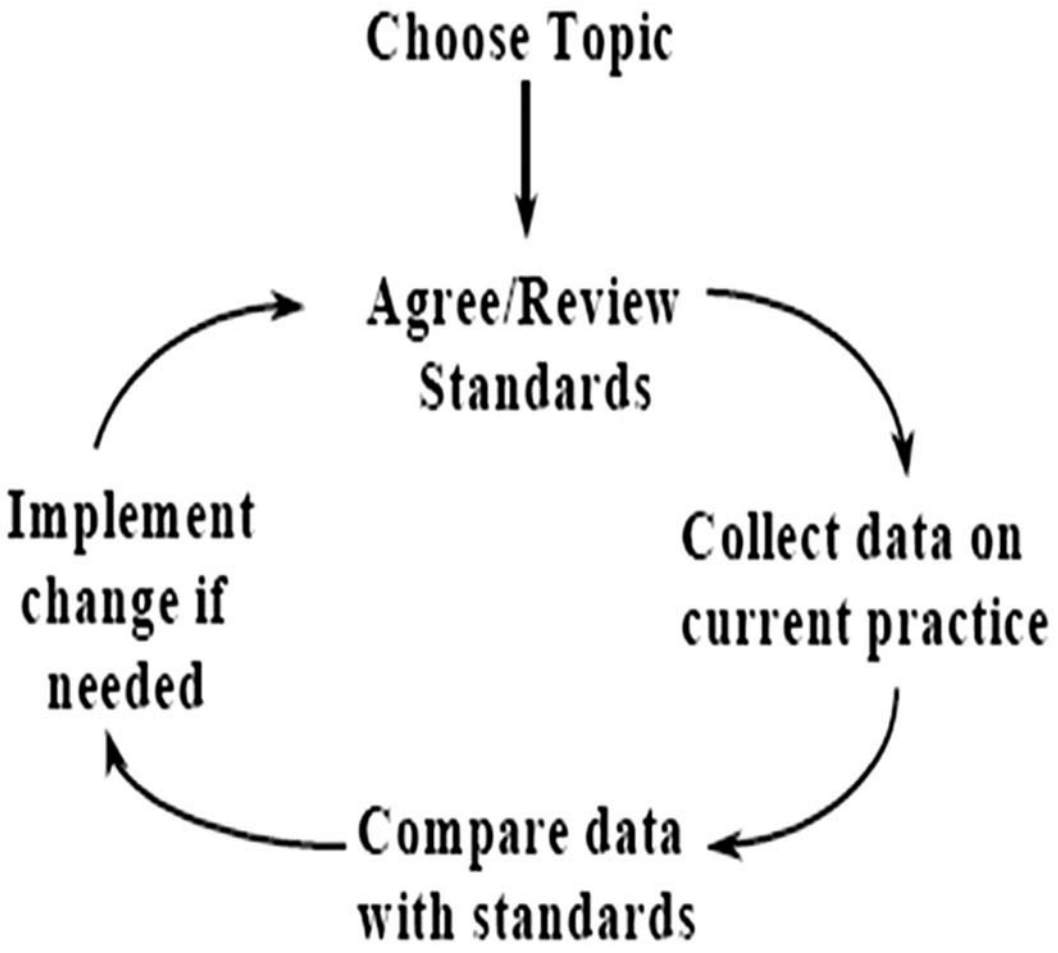

Fig. 1 The audit cycle

next step is to make the necessary changes to the existing practice. This is then re-audited at a later date to make sure that the practice has improved. The audit cycle takes a spiral curve and the loop is closed when the standards are met.

Discussion

A 'clinical audit' is a quality improvement process that seeks to improve patient care and clinical outcomes through a systematic review of the care against explicit criteria, and the implementation of change [2] by an individual, team or a service. A subsequent re-audit is done to confirm improvement in health care delivery.

Clinical audit is also a way of finding out whether we are doing what we should be doing. It also verifies whether we are applying the best practice. It is a clinically led initiative that seeks to improve the quality and outcome of patient care. It involves structured peer review whereby clinicians examine their practices and results against agreed standards, and modify their practice where indicated.

Though research and audit are two different disciplines, there are certain similarities between them. Both are related to the quality of patient care and can be carried out prospectively or retrospectively. They both involve careful sampling, questionnaire design and analysis of findings.

Whereas research can identify areas for conducting an audit, an audit can pinpoint areas where research evidence is lacking. The audit process assists with the dissemination of evidence-based practice of medicine.

As cited earlier, the National Prospective Tonsillectomy Audit (NPTA) was set up in 2003 to investigate the occurrence of complications after tonsillectomy, especially postoperative hemorrhage as well as risk factors for such complications. Elevated hemorrhage rates were observed in tonsillectomies performed using diathermy for dissection and hemostasis compared with cold steel dissection and ties for hemostasis [1].

National guidance on tonsillectomy practice was issued midway through the audit [3] and a subsequent re-audit confirmed that it had influenced surgical practice and reduced overall hemorrhage rate from 4.1% to 2.9%.

To help the reader understand, in summary, the recommendations were for surgeons to exercise caution in the use of diathermy, particularly as a dissection tool in a tonsillectomy. Emphasis was placed on the need for detailed training in the traditional cold steel tonsillectomy. The audit influenced tonsillectomy practice as well as outcomes in the United Kingdom and postoperative hemorrhage rates were seen to reduce.

Conclusion

The clinically led initiative seeks to improve the quality and outcome of patient care. It involves structured peer review whereby clinicians examine their practices and results against agreed standards, and modify their practice where indicated to get better outcomes.

The most frequently cited barrier to a successful audit is the failure of an organization to provide sufficient funds and protected time for healthcare teams. The importance of audit in healthcare sector needs to be appreciated by not only the relevant medical or institutional authorities, but by the clinician as well. It inculcates a scientific temperament across all sections of the healthcare delivery and assures the healthcare recipient of having being provided standard medical practice.

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