Editorial

DEPARTMENTAL CLINICAL AUDIT, AUDIT PRINCIPLES AND THE PRESENT STATUS IN PAKISTAN

Maqbool H. Jafary [1] & *Shaukat Ali Jawaid* [2]

During the deliberation of various medical conferences in the country, it is fairly common to listen to the speakers making reference to the foreign data and then remark that reliable local data is not available from Pakistan. However, non-availability of local data may have been true until a few years ago but it does not hold true anymore. Despite the shortcomings, some data on almost every subject is now available and local researchers and investigators are putting their efforts together to document the data in an environment which is evolving to become conducive to research and data collection. To locate this data one has only to look at different sources now readily available in print as well as on the net. One may have to look at non-traditional indexing services to locate this data eg., ExtraMED and Pakmedinet etc.

Clinical audit is a useful tool which not only generates highly relevant data but also helps improve patient care besides uplifting academic environment in any department and institution. Even though some data is available in Pakistan, the clinical audit has not made much inroads in our set-up in an organized manner so far. However it is about time that the medical institutions, at least the major ones and their respective departments, should take up clinical audit on a regular basis in an organized way.

Correspondence

Maqbool H. Jafary
e-mail: drjafary@fascom.com

Shaukat Ali Jawaid
e-mail: shaukat@pulsepakistan.com

Before highlighting clinical audit scenario in Pakistan, it is essential to give a brief definition and to look at the salient principles of clinical audit.

What is clinical audit?

Clinical audit has been defined in a variety of ways. Perhaps one of the simplest definitions is that it is a clinically led initiative which seeks to improve the quality and outcome of patient care whereby clinicians examine their practices and results against agreed standards and modify their practice where indicated.

In brief the clinical audit provides a method for systematically reflecting on and reviewing practice. It is a means to ensure professional accountability.

Why is the audit done?

One of the prime objectives of the clinical audit is to improve patient care, leading to improvement in service delivery and outcome for the users. It helps to ensure the maximization of the available resources coupled with enhanced efficiency. The clinical audit also provides opportunities for training and education of people involved in patient care. It can also improve the multidisciplinary working in a health care delivery set up and assists in monitoring the consistency of performance.

Steps in the audit

There is a plethora of ways under the framework of audit that has been suggested in the literature. However, for the consumption of the

developing countries, the steps have to be relatively smaller in number and affordable in terms of the time and the funds.

Perhaps the most significant step is to identify the topic of the audit, followed by the use of standards which already exist or standard which are newly set. A careful selection of the participants in the audit is necessary. The process of the audit or the activities related to it needs to be outlined while the resources necessary for it also need to be worked out.[1]

The topics: There are numerous topics which are suitable or in fact necessary. In a hospital setting, various departments could undertake their audit. While selecting a topic, the principle is to select something which has high cost, high risk, high volume with less than optimal efficiency and where the apparent level of satisfaction of end users is low. If we look at our public hospitals, the teeming masses are looking for the treatment of what ails them but also the satisfaction of being listened to sympathetically. The effective use of resources available for medicines is usually lacking partly because of mismanagement and partly because of the outmoded ways of dishing out medicines to a large number of the patients.

To start with, the purpose of the audit should be clear. It usually revolves around the four items: to improve, to enhance, to ensure, to change. The identification of the topics, thus, becomes easier. For example: improve the blood transfusion services; increase proportion of patients with hypertension whose blood pressure is controlled; ensure that every infant has access to immunization against communicable diseases like diphtheria, tetanus, pertussis, polio, influenza B, meningitis C before 6 months of age; change the pattern of record keeping for patients in busy public hospital etc.. Likewise the topics selection could be based on various specialties within a hospital. For cardiovascular medicine, for example, the topic could be that all patients with coronary heart disease be prescribed aspirin unless there is a documented contraindication, or the risk of thrombo-embolic complications should be assessed in all patients with atrial fibrillation and reason for prescribing or withholding warfarin is to be documented etc.

The standards: The international standards are predefined and organized around all important functions in a variety of health delivery settings and these are mostly focused on the patients. These standards are designed to be interpreted within the local culture of a given geographical area as these have been tested out in any country or culture. The core outcome of these standards is the reduction of risk in clinical care process, reduction of the risk in the physical environment and to protect the rights and dignity of the patients.

The International Accreditation Standards of Joint Commission International, for example, lays down specific standards for access and continuity of patients care, assessment of patients, in-patient care, anesthesia, surgical care and it goes as far as outlining the education standards for the patients and their families.

Commission for Health Improvement in the UK is another such a body which has outlined the required standards or criteria against which the audit outcome is measured. Biocollegiate Physicians Quality of Care Committee in Scotland is also setting up clinical audit standards.

International standards are a good guide; however, working out the national standards is of utmost importance, keeping in mind the resource limitations and indigenous culture.

Participants of the audit: A clinical audit is more likely to be successful and of use to service users if all of the key stakeholders are involved from the start. These stakeholders include clinical and non-clinical staff providing the service, service users, people support may be needed to implement the proposals of amendments coming out of the audit e.g., administrators, departmental heads, pharmacy services etc. Key stakeholders, if unable to physically participate, can be kept in the loop through information flow and periodic consultation throughout the process. The roles and responsibilities of the members of the audit team need to be identified.

It is essential to keep in mind that very few

health care procedures involve just one professional discipline and that non-clinical staff such as receptionists, secretaries, porters, ward boys, nurses, managers etc. play a vital role in the quality of service provided. Therefore, the clinical audit is usually a multi-disciplinary activity. Clinical audit, thus can be multi-sectorial i.e., it may involve health and social services, primary or acute care providers, education and health.

The audit process: This process needs the answer to several questions which would include: What standards or criteria will be used? Whether these criteria have been validated to be measurable or realistic? Is the audit retrospective or prospective? What will be the method of collection of data? Who will collect and who will analyze the data? What is the target audience? What resources- manpower and funds are needed? When the results are available who is likely to be influenced by the outcome measures?

The audit process can thus be summarized into five stages as follows:

Stage 1- preparing for audit
Stage 2- selecting criteria
Stage 3- measuring performance
Stage 4- making improvements and
Stage 5- sustaining improvement

Clinical audit of course requires the use of specific methods in addition to creating a supportive environment in which all the stakeholders need to make a commitment.

How effective is the implementation of the audit outcome?

Millions of dollars are spent annually the world over for the clinical audit. In the developed world the share of these millions is the lion's share while the developing world does try it to the best of available resources. There are gratifying reports of the success stories of the implementation of audit outcomes but still the implementation of the outcomes may leave a lot to be desired even in the developed countries. Progress reports of "disappointing results" with less than intended improvements in the patient care going on to total failure of implementation are also common[2-5].

A variety of reasons are potentially possible for the less than optimal implementation of audit outcome or recommendations. One of the major reasons is that the stakeholders may lack commitment to the spirit of audit or lack the agreement on what is important. In other words the ownership of the audit as a project is vital for it. Alternatively, the recommendations of the audit may need heavy resource allocations in technology, which may not be feasible.

Status of clinical audit in Pakistan

A search of the national medical journals reveals that a number of topics in clinical audit have been covered by various authors in a random fashion. Departmental audit however, is still lacking in the form of the published data.

Iftikhar Jan[6] in an audit of circumcision in babies and children studied various methods of circumcision at different age groups. His findings were that circumcision can be safely performed in a hospital set up within one month of life preferably in the first week if the baby is otherwise healthy. He further concluded that Plastibell is a safe method for babies under one year of age and this procedure can even be performed by trained general practitioners under aseptic conditions, thus reducing the burden on hospitals.

Khurram et al.[7] reported a 12-year audit of upper GI endoscopic procedures. Their findings were that the major manifestations of chronic liver disease in this part of the world are gastrointestinal bleeding, portal hypertension and hepatic failure. However no specific recommendations as to the outcome were made.

Khalid et al.[8] studied the diagnosis of acute appendicitis. An audit of 211 cases revealed that clinical judgment still remains the mainstay of diagnosis in acute appendicitis while the laboratory dependence can be misleading.

Zafar and associates[9] did an audit of patient controlled intravenous analgesia (PCIA) in

postoperative surgical patients. They evaluated the effectiveness, adverse events and degree of patient satisfaction with PCIA. The results showed that controlled intravenous analgesia is an excellent method of postoperative pain relief which provides high degree of satisfaction to the patients.

Salman Yousuf Guraya[10] conducted an audit of laparoscopic cholecystectomy reviewing a five years experience. This retrospective study showed that laparoscopic surgery is a safe and feasible procedure and it was recommended that this procedure should be the first line of treatment for symptomatic cholelithiasis.

Asif Nadeem[11] reported an audit of lobectomy for chronic pulmonary disease. His conclusions were that the elective open lobectomy is a safe procedure in our setting with significant benefits for the patients as it has an acceptable rate of morbidity and mortality. Sohail Mahmood[12] reported the audit results of diagnostic laparoscopies for infertility and found it to be a valuable technique and termed it mandatory invasive investigation for complete assessment of female infertility.

Razia Mustafa Abbasi[13] conducted an audit of indications and complications of obstetrical hysterectomy at a tertiary care hospital in Hyderabad. The conclusions were that obstetrical emergency hysterectomy remains a necessary life saving procedure during abdominal and vaginal deliveries. However it can be prevented by good antenatal care, early diagnosis of placental abnormalities and thickness of scar by ultrasound and better monitoring facilities during labour.

Bilal Bin Yuonas[14] audited 100 patients with chronic liver disease. Majority of the patients(65%) were due to hepatitis C infection.

Arshad Siddiqui[15] did an audit of head trauma care and mortality by using standardized assessment parameters in order to identify contributory factors and the deficiencies. The major pre-hospital factors included transfer of inappropriately managed patients, lapses in inter hospital communication, delayed transfer of the patients from the site of accident whereas lack of ICU beds, portable ventilators in emergency rooms, delayed CT scan facilities were some of the deficiencies in hospital services. Their recommendations were to make improvements in head trauma care to focus on initial resuscitation and appropriate surgical management.

All the studies mentioned above are retrospective hospital based case studies and all of them may not necessarily conform to the recognized yardsticks of clinical audit. However the departmental clinical audit by Aamir Bilal[16] published in this issue of Pakistan Journal of Medical Sciences is a pioneering effort. This is arguably the first attempt in Pakistan to present the working of a department in a public tertiary care facility. This audit highlights the achievements as well as the failures and hints at the potential interventions to improve the situation. If such an annual departmental audit is made mandatory in all healthcare facilities it will not only yield very useful data but also lead to significant improvement in patient care.

There are islands of excellence in some of the public health care facilities but the excellence needs to spread to all institutions through the active involvement and self monitoring process initiated by all senior professionals manning these institutions. They need to come out of present slumber to contribute to national database so that a national standard of patient care in all spheres can be established. It is against these standards that the future planned audits should be measured. One such example is for audit of about half a dozen cardiac surgery institutions. The mortality ratio varies from low to high. Those with low mortality could set the pace of yielding national standard for those with high mortality by implementing the necessary corrective measures discovered through their own audits. An added advantage would be that it will generate manuscripts for publications.

Authorities need to look into this aspect and initiate steps for undertaking departmental audit in preferably all institutions but certainly in all the major ones throughout Pakistan.

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