

Clinical Audit: Essential Input for Enhancing Standards of Care

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Maintaining and enhancing standards of clinical care requires *continuous* effort and vigilance on the part of the care providers. This is partly because standards of care itself is always changing, being responsive to new therapeutic findings or new manifestation and characteristics of the disease or new understanding of its pathophysiology. We are accustomed to the need for adopting new antibiotics or for using new antihypertensive agents with perhaps better safety and efficacy profile or for prescribing new anti-heart failure regimen for better prognostic outcome. Above and beyond these considerations, modern management of patients should also encompass some economic imperatives such as cost-benefit considerations, quality-of-life evaluation and cultural acceptance of new therapeutic initiatives.

In this respect, in our attempt to keep abreast with new developments, we are open to new ideas and findings through keeping up with the literature or attending meetings and conferences and listening to opinion leaders in their respective fields. The buzz words are continuing medical education and evidence-based medicine. Various strategies are being employed to ensure that these are done, including awarding credit points as evidence of participation in these activities.

Despite extensive emphasis on and presumed acceptance by the medical profession of continuing medical education and evidence-based medicine, it comes as a major surprise that all is not well. Examples are abound. Despite the wide availability of potent anti-hypertensive agents and higher awareness of the diagnosis in subjects with hypertension (51% in the mid-70's to 68.4% in the mid-90's in the United States), effective control of the blood pressure is only achieved in 27.4% of

hypertensive subjects in the mid-90's.¹ Anti-heart failure therapy is another example. There has been extensive data from well conducted large clinical trials which conclusively established the value of angiotensin converting enzyme inhibitor (ACEI) therapy for these patients. Yet at least 20% of patients with heart failure are not receiving ACEI therapy.

These intriguing observations pertaining to a gap between what should be and what really is need further exploration. It may be that the new therapies are too expensive to be affordable but it could also be that the patients one sees, the case mix, in the clinic may not perhaps fit in with the patients being studied in these clinical trials. Thus a look at one's practice, a process of audit, is a good start at identifying these discrepancies. Audit will reveal what the reality is and may help identify weaknesses which need rectification. It needs be emphasised that data from audit does not and cannot replace data from clinical trials and thus cannot be used as evidence in supporting the choice of certain therapy or procedure in preference to the other.

In the current issue of the Journal, two papers^{2,3} illustrate what audit can reveal. They also show that audit can be performed both at the local individual unit level as well as at a more extensive scale at the national level. Presumably such information so obtained will benefit the care providers and ultimately the patients and the health system in which care is provided. Zainal and Yusha² reported that in their experience with 54 intravenous drug users with infected pseudoaneurysms *Staphylococcus aureus* was the commonest pathogen. Management of these patients involved simple ligation and debridement with daily dressing and antibiotics.

Four patients (7.3%) required amputation. Although the authors viewed this as adequate therapy with acceptable outcome with 'low' rates of amputation, further information including an assessment of the functional status of the limbs so salvaged should have been provided to substantiate their claim. It needs to be emphasised though that audit data only describes what actually happens and does not therefore provide adequate evidence for viewing certain procedure or management strategy as superior or more beneficial than the other(s). Such evidence is forthcoming from formal clinical trial research.

In the more extensive audit involving over 200,000 surgeries³ performed in Malaysian hospitals, the overall perioperative mortality was 0.34% which was favourably comparable to world standards. High risk group of patients and current shortcomings in the provision of optimal surgical care were identified by the investigators. These include inadequate critical care facilities for post-operative care, inadequate pre-operative assessment and inadequate close supervision

seem among the most pressing and thus require immediate redress. In this respect, it is well to reflect on the suggestion that "..... failures of care are seldom due to 'mistakes' being made by doctors or other health professionals, but more commonly reflect an inadequate system of care".⁴

Audit can thus be both revealing and rewarding. For a start, medical records will improve as data will be entered in a more focussed and purposeful manner in a way which is more legible and easily retrievable. Further, apart from a will to be committed to its process, essential elements required to make an effective medical audit include an agreed criteria for standards of care, a reliable and valid method of measuring these criteria and mechanisms for effecting appropriate change in clinical practice. Whilst this can be viewed as a further intrusion into one's time and professional practice, the commitment to maintaining and enhancing standards of care would ensure that audit will be required to be undertaken both at local and national levels.

References

1. The sixth report of the Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure. National Institutes of Health 1997.
2. Zainal AA and Yusha AW. A 3 year audit of infected pseudoaneurysms in intravenous drug users managed surgically in the Vascular Unit, Hospital Kuala Lumpur. *Med J Mal* 1998; 53: 372-375.
3. Inbasegaran K, Kandasami P and Sivalingam N. A 2 year audit of perioperative mortality in Malaysian hospitals. *Med J Mal* 1998; 53: 334-342.
4. Hopkins A. Medical audit: a second report. *J Roy Coll Physic London* 1993; 27:131-2.