

# Peer Review of Physicians' Performance Is it a necessary quality assurance activity?

Lamk Al-Lamki

هل أن مراجعة الزملاء لأداء الأطباء ضرورية لضمان الجودة؟

ملك المكي

**T**O UNDERTAKE PEER REVIEW IS TO “evaluate professionally a colleague’s work”.<sup>1</sup> In medicine, peer review is defined as “the objective evaluation of the quality of a physician’s or a scientist’s performance by colleagues”.<sup>2</sup> In peer review, physicians professionally and candidly, but confidentially, evaluate each other’s performance, typically at the same institution, but quite often externally. The aim of peer review is not to spy on others, but rather to self-identify openly one’s weakness in the presence of trusted colleagues. Peer review is one of the most respected activities in the circles of quality assurance and total quality management. Unfortunately, it is not an activity that is particularly favoured by many professionals; it is certainly not well accepted by physicians particularly in Eastern countries. Physicians have difficulty accepting evaluation of their performance by fellow colleagues even when given equal opportunity to monitor others. Peer review is generally more accepted, albeit often with reluctance and reservations, in the United States where it started and in some other Western countries. Health insurance companies in the USA are now demanding evidence of quality assurance activity among the doctors in an institution prior to entering into a financial arrangement with the group of doctors or with the institution. Following the American example, peer review was gradually introduced in the United Kingdom by various National Health authorities who began demanding some form of medical audit of their Doctors.<sup>3, 4</sup> A few countries in the East are now introducing peer review among their physicians including the Sultanate of Oman where the physicians at the Sultan Qaboos University and its hospital now embrace peer review. This could possibly be a

example for the whole region.

Improving the quality of care to our patients is the main concern of doctors everywhere, whether East or West. There are several ways this can be achieved, but certainly peer review falls among the most important methods once physicians have completed their training. At this stage and having taken the oath to do his utmost for patient welfare, the doctor then has the responsibility of caring for them. Whatever specialty the doctor chooses, it is his responsibility to ensure that his management is evidence-based and in keeping with the latest knowledge on the subject. As a corollary to this, it behoves the physician to ensure that his colleagues are also delivering quality care to their patients.

It all started with the introduction of quality assurance and continuous quality improvement in medicine after the foundations had been established by the gurus of quality assurance, best exemplified by Juran, Crosby and Deming, and sustained by the requirements of the International Organization for Standardization (ISO), the Joint Commission International (JCI) and similar organisations.<sup>5,6,7</sup> Juran pointed out that “resistance to change” by leaders and managers is what holds back progress in quality assurance. This is indeed an apt description of many physician leaders. The “Juran trilogy” states that management for quality consists of a) quality planning, b) quality control and c) quality improvement.<sup>5</sup> Crosby has pointed out that “defects must be prevented, not inspected out”, and has also highlighted the “cost of non-conformance”; both of these apply today directly to medical errors as well as his philosophy of “zero defects”.<sup>6</sup> Crosby also introduced the six C’s: comprehension, commitment, competence, communication, correction and continuance<sup>7</sup>

which are clearly and directly applicable to quality medical care. However, perhaps the greatest impact on medicine comes from several of the 14 points of Deming who pointed out the importance of good leadership, “creating constancy of purpose” and “driving out fear” in the process of quality assurance and peer review. He stressed that quality assurance activities must never be used either punitively or for reward. Deming also stressed the overwhelming importance of “customer satisfaction” and “measurable data” both of which are still given great importance in medicine and stressed by the JCI; in Deming’s words, “If we cannot measure it, we cannot manage it”<sup>8</sup>

The question that is often asked is what is the relationship of peer review to medical audit and clinical audit? The difference is only a matter of terminology. Medical audit is the term that is used more East of the Atlantic, in UK and other English-speaking countries, while the Americans use peer review. Basically, medical audit is a systematic critical analysis of the quality of medical care and this can be a review of diagnosis, of treatment, of procedures, etc. while strictly speaking peer review, as defined above, is a professional evaluation of colleagues’ work. When medical audit is used as a critical analysis of physicians’ performance by those involved then it is effectively a peer review. Then there is clinical audit, which, unlike the above two, is a wider auditing system involving more than physicians although in some countries it is used interchangeably with the terms medical audit or peer review. Clinical audit was formally introduced in 1993 in the U.K. National Health Service and it was defined as “a quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria and the implementation of change”<sup>3</sup> In the same reference, peer review is referred to as “an assessment of quality of care provided by a clinical team with a view of improving clinical care”.

The question, however, is: “Why should we undertake peer review at all?”, given that only 15% of the time a medical error is the result of an individual’s error while 85% of the time it is the result of system errors, as repeatedly shown by Deming in his quality assurance quest. The reasons that we, as physicians, need to undertake peer review are many. Perhaps the simplest reason is that peer review offers physicians and other medical staff the privilege of participating

in shaping the future since we have accepted the responsibility of stewardship of society’s health. We need to encourage our patients to trust us individually and collectively as a medical profession. It is therefore our responsibility to undertake peer review for the collective good. The professional independence that we enjoy as MDs is a privilege and not a right. It is a privilege that can easily be lost without self-regulation through peer review. We have been privileged with this professional independence by a society that has always trusted its doctors and expected them to work for its well being. In response to the demands of the public, health authorities will intervene and regulate our practice of medicine unless our self-regulation is satisfactory. The public is now connected to the internet where general education and knowledge are freely available. The public also notes that industry, especially larger organisations such as oil companies, now insists upon peer review among employees. Some boards of education and high-quality private education organisations have recently instigated peer review among their staff. Why don’t medical schools and medical organisations and institutions follow suit? Law makers, prosecutors and defence lawyers are all aware of the various laws passed in several countries such as the “Health Care Quality Improvement Act of 1986”<sup>9</sup> Thus lawyers have become more demanding and so has the public. The demands will likely become unreasonable and society that had previously granted us its trust may suddenly become alienated from us. For those of us who work in a university set-up, we will find that it will be our senior administrators who will be making unreasonable demands of us. To avoid all this, we as keepers of the public’s trust must preserve it by having the foresight to undertake peer review and medical audit as part of good medical practice. Practising peer review and consulting each other frequently will stand doctors in good stead with respect to society’s trust and confidence in them as individuals and as an independent professional group.

Undertaking peer review is simply a way to ensure that both you and your colleagues practice medicine of the highest grade on a par with the rest of the world. In addition, peer review allows you to achieve this without spying on each other, without an authoritarian and demeaning inspection of junior staff by the senior staff or the head of the department.

Peer review is an act of quality assurance and the principles of quality assurance mean that everybody is concerned not just the privileged few.<sup>10</sup> In fact, those who are involved need it most, and can do it best. For example, if a department decides that the interpretation of electrocardiograms (ECGs) is a potential source of errors because of their “high volume”, then every attending staff member must be involved in the double reading (two physicians interpreting the ECG independently and later compare) of ECGs not just a few senior staff. Likewise, if a department decides that other potential “problems” such as the reading of cytology slides in pathology, or the reporting of computed tomography (CT) scans in radiology require double reading because of their “high volume” or “high risk” and therefore their potential as “problems”, then these are targets for peer review and a certain percentage of them should be double read by all involved staff, typically 5-10% of the total number of studies performed. The staff members involved are the best people to identify the problem or issue they wish to review. This problem has to be “high volume, high risk or high cost” in their daily medical practice in the department or the institution. The problem chosen also has to have the potential, when solved, to improve the quality of patient care or the potential to raise the level of quality awareness and thus gradually change the culture of the practice and the institution. Once the group chooses the problem to peer review, there are 5 or 6 other steps to undertake before the peer review is achieved.<sup>10, 11</sup> The initial step is for the participants to decide and formulate criteria and standards based on a review of the literature and on evidence-based medicine as well as on the influence of local practice and culture related to that problem. In other words, the group has to decide what the acceptable level of performance is. The tough decision comes when it is time to collect the data. The participants have to decide on what data are to be collected and how to collect them. “What data?” is a tough decision and a source of major disagreement among medical colleagues; here is where we as medical professionals have to accept compromises because we have to collect data about practices that are dear to us and which we believe are above scrutiny. It is in this component of peer review that the difference between the attitudes of physicians in the East and those in the Western countries is most striking. The

latter have already more or less accepted the reality and advantages of data collection in peer review. If one’s practice is truly above scrutiny then there should not be any fear to expose it. Department members have to find common ground - a level of agreement as to what constitutes good practice for the problem that the department has selected. The list of steps that have to be performed as part of good practice for that procedure is drawn up and used as a source of data collection. Points of major contention may have to be left out in the initial stages of introducing peer review to an institution or at least until the culture of quality assurance and peer review is more accepted. Data collection is followed by team discussion of the results. In these team discussions, tolerance and acceptance of differences of opinion are a basic foundation, in conjunction with constructive criticism and common courtesy; for example, criticism of ideas not individuals has to be one of the rules of conduct. Unfortunately after all the effort and compromises, stumbling blocks may still be encountered; for example when the group has to take the next step in peer review i.e. to compare their data with that of other institutions and with the literature. Discovery of a wide gap of performance achievement between one’s own level and that of the other institutions and the literature indicates that a change is needed. Implementing change maybe another source of disharmony in the group as change is often resisted as shown by Juran. Unfortunately, unless change is implemented no gain can be obtained. Whatever lesson is learnt from the laborious hours of professional effort must result in a fruitful outcome. Efforts must also be made to sustain the improvement before engaging in a repeat study effort. The timing and style of the “repeat study” has to be predetermined so that a fair and reasonable insight into the improvements is achieved. The above 6 or 7 steps of peer review from identifying the problem to repeat study will be in accordance with the General Guidelines of Clinical Audit, as originally published at the National Institute for Clinical Excellence (NICE).<sup>11</sup> These steps basically incorporate several other methods of quality auditing such as FOCUS and Deming’s Plan-Do-Check-Act Cycle (PDCA).

Being a professional can lead to certain types of behaviour and states of mind; thus some steps in the peer review process can be seen as threatening. Professionals are often not used to comparing given

performance expectations with the achievement of their personal goals; neither are they used to collective responsibility and accountability versus autonomy and individualism. At the same time doctors, because they are professionals, are typically not used to managerial leadership. Sometimes professionals have these characteristics, which unfortunately may interfere with the efforts to enhance public confidence and the all-important trust of the patients. We as physicians need a change in our attitude towards peer review, a change in our culture within medicine and a move towards a revolutionary new outlook in our practice of medicine. We need to change certain aspects of our professionalism. We need to focus on the collective good as our goal.

#### NOTE

*It is with sincere apologies to my female colleagues that in this Editorial I refer to the doctor as he. I assure you it is only for simplicity and ease of sentence flow.*

## References

---

1. WordNet. From <http://wordnetweb.princeton.edu/perl/webwn?s=peer%20review>. Accessed May 2009.
2. Medical Dictionary. From <http://medical-dictionary.thefreedictionary.com/peer+review>. Accessed May 2009.
3. Clinical Audit. From [http://www.uhbristol.nhs.uk/documents/how\\_to\\_ca\\_brief\\_guide.pdf](http://www.uhbristol.nhs.uk/documents/how_to_ca_brief_guide.pdf). Accessed May 2009.
4. Jones T, Cawthorn S. What is Clinical Audit? From <http://www.evidence-based-medicine.co.uk/ebmfiles/WhatisClinAudit.pdf>. Accessed May 2009.
5. Juran JM. The Quality Trilogy: A Universal Approach to Managing Quality. Quality Progress 1986; 19:19-24.
6. Crosby PB. The Eternally Successful Organization. New York: McGraw-Hill, 1988.
7. Boadu VA, Martin L. Quality Management in a Changing Organizational Environment. From <http://ageconsearch.umn.edu/bitstream/18091/1/mi99am02.pdf>. Accessed May 2009.
8. Deming WE. The New Economics for Industry, Government, Education. Cambridge, MA: MIT Centre for Advanced Engineering Study, 1993.
9. Health Care Quality Improvement Act of 1986. From <http://biotech.law.lsu.edu/Books/lbb/x505.htm>. Accessed May 2009.
10. Clinical Audit. From [http://en.wikipedia.org/wiki/Clinical\\_audit](http://en.wikipedia.org/wiki/Clinical_audit). Accessed May 2009.
11. Principles for Best Practice in Clinical Audit (2002, NICE/CHI). From [www.nice.org.uk/pdf/BestPracticeClinicalAudit.pdf](http://www.nice.org.uk/pdf/BestPracticeClinicalAudit.pdf). Accessed May 2009.