purposes of kidney "donation". A campaign must be started to dispel myths on cadaveric donations. The transplant programme must include a computerised national database, efficient transportation and a network of state-of-the-art transplantation centres with expert surgeons.

- Reward upright doctors to encourage role models for new entrants in the profession.
- Tackle the problem of doctors shunning government service.
- Support and protect whistleblowers who report medical corruption.
- Form a task force to defend high ethical standards in the medical profession and to fight corruption in public healthcare.

Medical corruption contributes to poverty and misery in a developing country like India. The public must contribute to efforts made by medical professionals and the government to clean up the medical system. It can do this by:

- acting as a watchdog reporting corruption or wrong doing;
- checking unscrupulous elements who blackmail doctors in cases of inadvertent lapses in medical treatment;
- being more responsive to the stress that doctors have to deal with, and
- running awareness groups to educate people on the necessity of organ donation and to encourage the framing of laws that would empower medical authorities to extract organs of unidentified and unclaimed dead bodies within the stipulated time for organ revival.

Corruption is spreading its tentacles far and wide in the medical system. To restore its noble and distinct status, all sections of society must work together to stamp out the biggest killer in the medical system - corruption.

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A farce called the National Board of Examinations

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Abstract

The National Board of Examinations is a body formed to enhance the standards of post graduate examinations in modern medicine in India. Unfortunately, the outdated mode of examinations and the arbitrarily set high cut-off marks for passing the examinations defeat the very purpose of its formation and functioning. The National Board of Examinations (NBE) was established in 1975 with the prime objective of improving the quality of medical education by elevating the level and establishing standards of postgraduate examinations in modern medicine on an all-India basis (1). However, as has been the case with the Medical Council of India (MCI) (2), the NBE has not been able to

carry forward its mission in a transparent and scientific manner.

Accepted methods of postgraduate medical assessment

The Postgraduate Medical Education and Training Board of the United Kingdom (3) has developed specific guidelines for assessment. I quote relevant portions from these guidelines below:

- The overall purpose of the assessment system must be documented and in the public domain.
- The purposes of each and all components of the assessment system must be specified and available to the trainees, educators, employers, professional bodies including the regulatory bodies, and the public.
- The sequence of assessments must match the progression through the career pathway.
- Individual assessments within the system should add unique information and build on previous assessments.
- Assessments will together systematically sample the entire content, appropriate to the stage of training, with reference to the common and important clinical problems that the trainee will encounter in the workplace and the wider base of knowledge, skills and attitudes that doctors require.
- Methods will be chosen on the basis of validity, reliability, feasibility, cost effectiveness, opportunities for feedback, and impact on learning.
- The rationale for the choice of each assessment method will be documented and evidence-based.
- The methods used to set standards for classification of trainee's performance / competence must be transparent and in the public domain.
- Assessments must provide relevant feedback.

Further, the World Federation of Medical Education states that, as a basic standard for assessment methods (4):

Postgraduate medical training must include a process of assessment, and the competent authorities must define and state the methods used for assessment of trainees, including the criteria for passing examinations or other types of assessment. Assessment must emphasise formative in-training methods and constructive feedback.

I am leaving out the quality development portion since that can be addressed only after the basic standard is met.

The Accreditation Council for Graduate Medical Education has also published guidelines for evaluating the postgraduate programmes of various disciplines like psychiatry (5) where formative (during the course) assessment is given more weightage than the summative (at the end) assessment.

In another specialty, anaesthesiology, Kimatian (6) has commented that an ideal system for assessment would provide a continuum of performance data, combining a mechanism for practice surveillance and outcomes assessment with a means for formative and summative feedback.

Epstein (7) discusses the various modern methods of assessing medical students. He talks of written examinations including

multiple choice questions (MCQs), assessments by supervising clinicians including direct observations and video recordings of actual procedures done by the students, clinical simulations involving objective, structured clinical examinations, multisource or 360(assessments and portfolios.

This sort of linking of teaching, learning and assessment methods to each learning objective is now globally used to achieve excellence in postgraduate medical education.

The outcomes of the DNB examinations

For the DNB examinations (8) we find that there are four theory papers, each of which consists of 10 short notes of 10 marks each, to be completed in three hours. If the examinees pass this, they will be allowed three attempts to clear the practical examinations.

Now if we compare the methodology of the NBE with that of those enumerated in the previous section, the irrationality and outdatedness of the method becomes evident. Unless a student passes in these 40 essay-type questions, that cannot measure performance or competence in any way, there is no question of the practical examinations or logbook or dissertation being of any value.

The essay type questions (and MCQs) can only judge the cognitive aspects of knowledge ("knows") and competence ("knows how") of [C1]the student. For the assessment of higher aspects, the [C2]competence ("shows how") and (performance ("does"), these essay type questions are simply inadequate. The knowledge pyramid shows the transition of data to information (organised data with content and perspective), from there to knowledge (useful information that can be used as a guideline), and finally to wisdom (understanding and making the knowledge useful or applicable). Bloom's taxonomy (9) has conceptualised the cognitive domain through the successive steps of knowledge, comprehension, application, analysis, synthesis and finally evaluation. It was later modified (10) through the sequential steps of remembering, understanding, applying, analyzing, evaluating, and ultimately creating. In the affective domain, Bloom's taxonomy has been represented through receiving, responding, valuing, organising and conceptualizing, and eventually characterising by value or value concept. In the psychomotor domain, Bloom's taxonomy evolves through the order of imitation, manipulation, precision, articulation and naturalisation. The DNB examinations do not take care of these which should have been accorded due weightage to further the founding vision of the organisation.

Further, the pass rates through this obsolete method of theoretical knowledge testing are hardly 15-25%, and often as low as 4-6% in disciplines like orthopaedics and anesthesiology (11). And the handful of those who pass are not recognised by the MCI unless they possess an MD (Doctor of Medicine) or MS (Master of Surgery) that are the MCI-recognized post graduate degrees, defeating the very purpose of DNB. Many of those who clear DNB do already possess MD, but the possession of degree or its lack should not interfere with the results/certification of

DNB being accepted by the MCI. Of course, anyone who has cleared DNB exams, especially in the last couple of years, is no less than a genius. But does it mean that the vast majority, especially those who have been fortunate enough to have completed their rigorous training in highly reputed hospitals, are good for nothing? The National Board approves certain hospitals for imparting training and allows them to collect fees up to Rs 50,000 per annum. However, since the pass rates of the trainees from most such hospitals are dismal, the examinations formally declare that the centres approved by the Board are not fit to train the trainees sufficiently to pass the examinations even with repeated attempts. So, what is the value of the approval and the thorough and painstaking training that many such hospitals offer?

Are the pass rates of DNB examinations reflective of quality or farce? During the DNB practical exams the examiners do not even bother to look at the logbook or dissertation. What are these for, then? Not even looking at the logbook means that the meticulous training at the approved centers count for/amount to nothing. In many other countries like the UK (12), Hong Kong (13) and Oman (14), the logbook is given due importance. To make effective use of technology, the UK and Ireland have already operationalised the Pan-Surgical Electronic Logbook (15).

To make matters worse, the NBE does not formally publish the pass rates or even the rating criteria. At present it does not even send candidates their marksheets. However, a recent notification announces that starting in December 2009, marks will be provided, but only to unsuccessful candidates (16). In other words, those who pass are not entitled to know how they have fared in the examinations.

The time may have come to rename it the National Board of Eliminations.

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Diplomate of the National Board: inefficient parallel education

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Abstract

The National Board of Examinations conducts the Diplomate of the National Board in broad specialities as well as in core super specialities. The programme was meant to provide a common standard and a mechanism of evaluation the These programmes, as per the prospectus of the DNB course are meant to provide the basic level of competence required for the postgraduate qualification in that subject. However, it has failed to meet these objectives. It is imperative to re-examine and revamp the system to improve its credibility and acceptability at both the national and international levels.