

Work Base Assessment in Anesthesia for Postgraduate Residents

Imran Khan¹, Sulaman Ashraf², Umar Gill³

1. Post graduate resident
Choudhary Pervaiz Ellahi
Institute, Multan

2. Medical Officer
Choudhary Pervaiz Ellahi
Institute, Multan

3. Medical Officer
Choudhary Pervaiz Ellahi
Institute, Multan

Abstract: Workplace based assessment (WBA) is a collection of evaluation methods that evaluate trainee performance in clinical settings. The aspect of scrutiny of the learner's act in a real-world setting, coupled with appropriate response, is a hallmark of WPBA, promoting reflective practice. WBA consists of peer, coworker, and patient feedback on clinical performance (mini-clinical assessment implementation, direct opinion of technical assistances), conversation of clinical circumstances (case based assessment), & observation of procedural skills (multisource feedback). Competence is simply an observable ability of healthcare specialists, which integrates a couple of additives which includes knowledge, capabilities, values, and attitudes. Competence gives a framework for publications and tests to make certain that healthcare specialists can carry out key requirements of their discipline. In the United States, expert postgraduate education known as residency generally takes place after 4 years of undergraduate study, accompanied via way of means of 4 years of clinical study. It is turning into an increasing number of facts that conventional evaluation techniques that target knowledge, know-how, and visualization degrees aren't enough to evaluate those new key abilities and meet affected person needs. Additionally, many years of failure to examine and completely examine the outcomes of fundamental scientific capabilities, which includes clinical interviews, clinical examinations, knowledgeable decision-making, and scientific reasoning, has had a vast poor effect at the great of care.

Keywords: Case based assessment, Procedural skills; Anesthesia, Post graduate resident

Correspondence Address:
Imran Khan
imrkhan803@gmail.com
Mob #+923326366121

Article Citation: Khan I, Ashraf S, Gill U. Work base assessment in anesthesia for postgraduate residents - Narrative review. Med J South Punjab. 2021;3(1):17-20.

INTRODUCTION

Although various accounts of anesthetic training methods in specific nations have been published¹, there are few, if any, comparative assessments comparing the graduate medical education structure and standards across several countries for any of the medical specialties. This is happening at a time when regulatory authorities in many nations are altering the training requirements. For example, the Accreditation Council for Graduate Medical Education (ACGME) launched the Next Accreditation System in the United States in 2012 as a shift toward competency-based medical education where educational outcomes are emphasized rather than the traditional structure and process-based approach of graduate medical education².

There are continuing attempts in Europe to create suitable minimum criteria of training quality, topic, and duration for all European nations³. The European Board of Anesthesiology and the Society of Anesthesiology have suggested new training standards that offer an outcomes-based curriculum and aim to eliminate training disparities between nations.

The first anesthesiology training guidelines were released in 1996 as part of the Charter on Training of Medical Specialists. These were revised in 2012 to include ten general core competency areas and seven particular core competency domains⁴. Different nations are at varying levels of developing an outcome-based residency paradigm. The competence by design project in Canada will shift graduate medical education away from the conventional time-based paradigm and toward a hybrid type of competency-based medical education⁵.

The medical profession's education began as an apprenticeship program. The student watched, assisted, and performed in a real-world clinical situation, all while receiving feedback from his mentor. With time, we evolved to a paradigm in which the trainees' early years of instruction were limited to speech rooms and demonstration places, and they were only later introduced to actual patients. The years of training were divided into three categories: pre-clinical, Para clinical, and clinical. Postgraduate learners, too gain diverse skills at various levels of exercise with the general objective of being bright to provide specialized health attention.

Methodology

The MEDLINE, EMBASE, CINAHL, and Cochrane library databases are used to perform this search. Retrieving data is linking medical subject headings (MeSH) keywords: workplace-based assessment and small clinical assessment exercises and direct observation of procedural skills and case-based discussions and response from multiple sources.

Rationale and Advantages of WPBA

Medicine is sometimes referred to be a "performance skill established on science and judgment." This indicates that, although assessing the scientific knowledge foundation is necessary, assessment is incomplete without assessing performance and judgment. There is no improved place than in the workshop or in the real world environment. There are several compelling arguments in favor of implementing WPBA.

Adapts to Miller's Pyramid's highest level

- Emphasize clinical abilities, as well as the required soft skills (communication, behavior, competence, integrity, and approach)
- Feedback and remark (in a real-life setting)
- Specificity of context and content
- Makes up for some of the flaws in traditional assessment techniques
- Encourages self-reflection
- A seamless integration of the purpose and concept of In-Training Assessment.
- Learning is in sync with actual work.

CATEGORIES OF WPBA

There are a variety of WPBA strategies available, all of which attempt to evaluate various aspects of trainee performance.

➤ Direct observation of procedural skills (DOPS):

The Institute Of Anesthesia established DOPS, which is now an important part of WPBA for doctors in their foundation year and those in specialty training. Only 28 papers were examined out of a total of 236. The DOPS technique was shown to have a modest level of satisfaction. The following are the primary advantages of this evaluation method: offering feedback to participants and encouraging independence and practical skills during the assessment. The primary disadvantages of this approach are the stressful evaluation, time constraints for participants, and assessor bias. Most studies have found that the DOPS technique has a positive influence on increasing student performance. The validity and dependability of DOPS were found to be reasonably good. Participants' DOPS performance was deemed to be satisfactory. The primary problems of the DOPS exams are that they do not provide critical instruction on how to take the test, do not provide crucial feedback to participants, and have inadequate time for the test.

➤ Anesthesia Clinical Evaluation Exercise (ACEX)

It is designed to focus on general cases rather than individual components. These are general assessments and can be applied to the management of anesthesia for most patients encountered.

➤ Multi-source feedback (MSF)

Multi-source feedback (MSF) is often (incorrectly) referred to as 360-degree evaluation or evaluation. This type of assessment originated from the organization and workplace environment. Supervisors, "direct reports" and colleagues fill out forms to collect information, evaluate behavior, and provide feedback. MSF uses specific tools to collect data about student specific behavior or professional structure (for example, professionalism and communication skills). In educational settings, observers may include doctors (for example, resident companions, supervising doctors, and medical students), healthcare professionals (for example, nurses, pharmacists, and psychologists), patients, and family member.

➤ Anesthesia List Management Assessment Tool (ALMAT)

Particularly relevant to senior trainees, they are assigned responsibility for the implementation and management of the roster (based on their experience). It allows evaluation of clinical and non-clinical skills.

➤ Case-Based Discussion (CBD)

These provide the opportunity to discuss the case or specific elements of the case in depth. They should also encourage reflection and cover clinical thinking, knowledge, and judgment. Ideally, use the case description + /- anesthesia chart of the case to be discussed.

Assessment Tools for WPBA

Many WPBA tools, such as the Mini-Clinical Evaluation Exercise (mini-CEX) and Directly Observed Procedural Skills (DOPS), contain a communication skills evaluation by default. The assessor's subjective evaluation of the patient-trainee interaction in various scenarios (verified on an international evaluation measure) permits for related response. This also addresses the issue of a rather rigorous checklist-based assessment of statement abilities, which is problematic because professional conduct and communication patterns differ depending on context, clinical condition, nation, and location.

It's worth noting that WPBA isn't meant to be a substitute for traditional evaluation systems; rather, it's meant to be used in conjunction with them for maximum value. WPBA tools are best utilized in a sensible mix that takes into account native possibility and setting. These can be into

the following main categories:

- Logbooks, such as the Logbook and Clinical Encounter Cards, are used to document the trainee's work (CEC)
- Direct observation of student presentation through clinical meetings, such as mini-clinical assessment exercises (mini CEX), direct observation procedural skills (DOPS), acute care assessment tools (ACAT), and clinical worksampling (CWS)
- Individual clinical examples, such as graphically stimulated recall, discussion (CSR; also known as case-based discussion or CBD in the UK)
- Peer, coworker, and patient input on regular performance during clinical practice (multisource feedback) utilizing tools such the mini-Peer Assessment Tool (mini-PAT) and Patient Satisfaction Questionnaires (PSQ).

Results

WPBA entails evaluating doctors' performance and providing feedback on their daily activities. These assessment tools claim to give trainees, assessors, and academics important information, and they have been proven to have some educational influence on learning. To prove its considerable instructional influence in medical education, more evidence-based interventional and experimental models are needed.

Limitations

The WPBA is intended to supplement rather than replace existing assessment techniques, particularly in-training or influential assessment. Learners who do well in their first interactions may become modest, which might stifle their desire to develop. On the other side, poorer learners may be disheartened by their first few meetings and escape from looking for feedback. Because the WPBA places a time constraint on the trainees, they prefer to seek for less senior assessors. It's worth noting that most WPBA instruments are considered "un-standardized" by traditional psychometric criteria. Reliability is built into a standardized instrument, such as multiple choice questions, however for WPBA, it relies on in what way the instrument is utilized. That can necessitate faculty training in order to make the most of these technologies. Students must also increase sensitivity and demonstrate the valuable possessions of comments to sort these tools much suitable. Given the significance of subjective judgment in WPBA, this is an essential factor to address. The capacity to discriminate between learning (residents) and teaching (students) is similarly restricted in this study (based on system courses). Although there is agreement that anesthetic intensive care skills should be taught in a systematic and potentially simulation-based manner, these skills are taught irregularly rather than in a

systematic manner. If they are taught in a systematic manner, it will draw attention to a separate issue and suggest that the teaching approach is flawed. We don't think the most advanced clinical year is the only criterion for competency. Our practical exam, which is the "do" stage of the Miller Medical Competency Model, assesses the greatest degree of competency based on simulations. We don't have a clear grasp of how analogue signals influence judgments and decisions.

Conclusion

In conclusion, 'Competencies are developing,' and their assessment must be as well. Conducting it in real-world circumstances improves the utility even more. The WPBA possesses both of these characteristics, namely, a developmental trajectory as well as authenticity. As a result, any competency-based PG training should seriously consider includes it in the in-training assessment program. As in different research comparing an extensive variety of content material areas, a couple of contacts are required to correctly and appropriately examine talents. The appearance of the life size simulator provides the opportunity to make an objective evaluation without harming the health of the patient. One of the main advantages of using real-life models to train and evaluate clinicians is that an acute diagnosis can coexist with the need to constantly evaluate and manage shifting medical or surgical circumstances. A few phases in the test creation process are required to begin any evaluation approach linked to the practice of anesthesia:

- (1) Ensure that the content of the assessment is pertinent and vital skills are being measured; Have a high level of fidelity model setup for actual clinical care,
- (2) Effectually isolate provider skills from a variety of external factors affecting patient outcomes,
- (3) Establish a method that provide reliable estimates of ability and
- (4) Provide evidence to support the simulation scores. The need to ensure that doctors progress and keep the services required for consultants in training and practice remains the top priority of graduate and ongoing medical training.

The Postgraduate Medical Education Certification Board has implemented the second phase of an initiative that calls for training programs to assess the abilities of residents in six different areas of medical practice. Obviously, those regions include communication, technical abilities or the combination of complicated prognosis and treatment. Skills cannot be measured nicely by the use of conventional pencil and paper tests.

If a checklist is used, the assessment task can be particularly difficult. Complete verification to attain simulation exercises. Similarly, even though worldwide scoring has been proposed as a performance-primarily based totally evaluation scoring method, along with simulations primarily based totally on human models, the recruitment and education of certified assessors may be difficult. Generally speaking, there may be nearly no _____

Although the listing is simple to generate and score, it is able to now no longer replicate the extent of experience. In addition, as documented within the standardized affected person literature, they could praise thorough in place of superior skills. For acute care environments which can be generally modeled on human models, there's no question that sure movements are extra crucial than others. Although increasing the weight of those moves with inside the scoring standards may also alleviate this problem, specialists want to attain a consensus at the objects and unique weights of the list. The normal score, which specialists offer a worldwide score of normal performance, appears appropriate. Experts can record time (for example, rapid diagnosis) and sequence (for example, establishing an airway before providing fluid) in their score. However, if the scorers aren't substantially educated and calibrated, the general rating can be biased, ensuing in error-susceptible potential estimates. Therefore, it is of course necessary to conduct additional psychometric research on the scoring system based on the human body model.

References

1. Seraj MA. The status of anaesthesia services and residency training programmes in Saudi Arabia: facts and personal prospective. <http://ispub.com/IJA/15/1/7686>. The internet J of anesthesiol. 2006;15(1):23-30.
2. Nasca TJ, Philibert I, Brigham T, Flynn TC. The next GME accreditation system-rationale and benefits. *N Engl J Med*. 2012;366:1051-1056.
3. Van Gessel EF, Ostergard HT, Niemi-Murola L. Best Pract Res Clin Anaesthesiol. 26(1):2012. 55-67.
4. Ostergaard HT, Niemi-Murola L. Harmonisation of anaesthesiol training in Europe. *Eur J Anaesthesiol*. 2012;29(4):165-168.
5. Jonker G, Hoff RG, Ten Cate OT. A case for competency-based anaesthesiology training with entrustable professional activities: an agenda for development and research. *Eur J Anaesthesiol*. 2015;32(2):71-76.