

MEDICAL EDUCATION TEACHING-SIGNIFICANCE OF TEACHING-LEARNING PROCESS IN SMALL GROUPS FOR BALANCING THEORY & CLINICAL CASE

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ARTICLE INFO

Article History:

Received 17th February, 2018

Received in revised form 4th
March, 2018

Accepted 20th April, 2018

Published online 28th May, 2018

Key words:

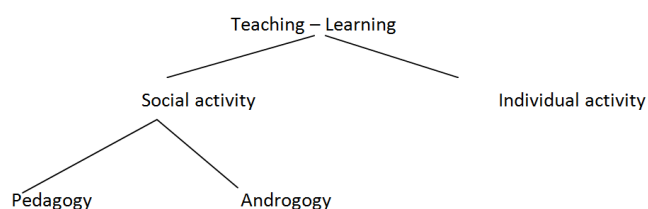
Medical education teaching, medical student, small group, patient

ABSTRACT

In medical education teaching both theory and treatment of patient have importance. Most non medical institutes teach theory class in a large class room (lecture taken by a faculty member). But in medical education theory and patient examination related with each other, so it is not sufficient (Incomplete teaching) to take only a large sized classes for medical teaching. After learning theory, medical student implies his /her knowledge on patient and correlate theory with patient sign & symptom for try to make a diagnosis. Capability of correlation and proper communication with patient is very important for medical student. Communicating skill is such that patient told faithfully all about his /her habits, disease, past history of any disease, and any relevant thing to medical student. So it is very necessary to teach medical student in such a way that he /she after teaching & learning theory of medical subject imply his /her knowledge to examine a patient, it is possible only when teaching done in a small sized class (6-10 student at a time). So preferred mode for medical teaching which will develop in student - A good communication skill (for handling of patient and with each other to understand a difficult subject /patient case to make proper treatment guidelines) is teaching in small groups by different methods.

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INTRODUCTION



Pedagogy

1. Art and science of Teaching children.
2. Teacher centric.
3. Teacher directed.

Androgogy

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Principles of learning

Sequential learning

1. We learn by progressing from simple to complex matter.
2. From observation to reasoning.
3. From a particular point to generalization.

4. From experience to an abstract concept.

Cumulative learning

1. We learn by adding to what we already know.
2. Prior Knowledge needs to be activated to build new.

Adult Learning

1. They made actively self concept.
2. They already have experience into educational activities.
3. They are oriented to learning and have learning experience.
4. They knew importance of learning in their life for making carrier.
5. Adult are mostly self learner.

Curriculum -Curriculum is a plan of action which incorporating the learning outcomes to be attained over a period of time by exposing the learner to various learning experience¹.

Curriculum foundation are represented by 4 question

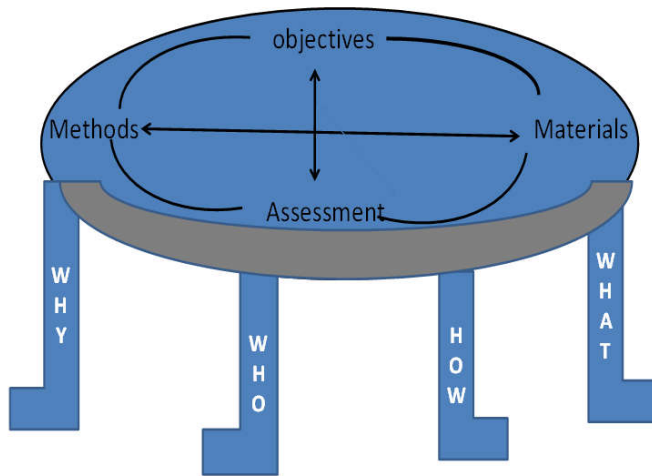
1. Why a subject is being taught (need, rational).
2. Who is being taught (what are characteristics, background and knowledge of learner).

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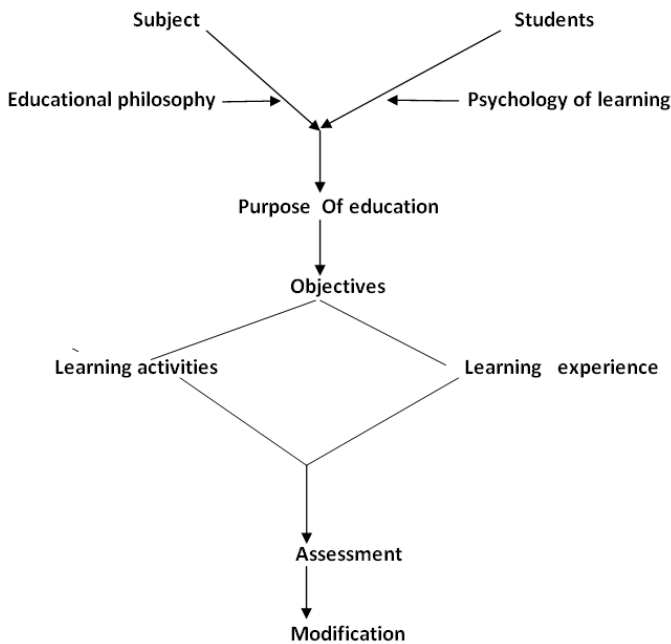
3. How a subject is being taught (ie. Is it a face to face teaching or it through distance mode).
4. What will be the learning outcome after a subject has been taught (achievement of learner).

1. Medical knowledge
2. Patient care
3. Professionalism
4. Communication and interpersonal skills
5. Practice based learning and Improvement.
6. Systems based practice



Zais model of curriculum planning

Planning modes of teaching



Assessment-Examination drive student's learning-strongest relationship in education².

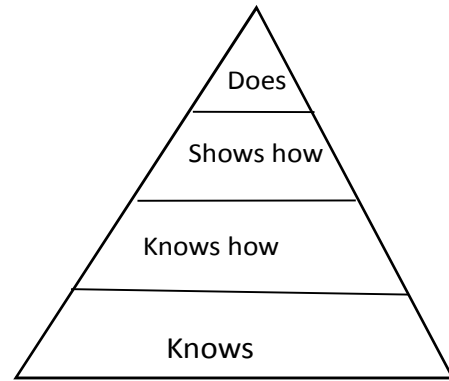
Assessment in is a systematic process of collecting and interpreting information about an individual in order to determine their capabilities or achievement from a process of instruction.

Assessment are an integral part of medical education, enabling us to make decisions about the trainees-whether and how much they have learnt and whether they have reached the required standard Assessment drives learning.

Competence-Competence in medical education is defined as "The habitual and judicious use of communication, knowledge, technical skills, clinical reasoning in day to day practice for the benefit of the individuals and communities being served".

Assessment should test 6interrelated domains of clinical competency -

In miller's pyramid for assessing clinical competence is used as reference, written examination -essay, short answer, MCQ, and viva voice test "know" and "known how"



Miller's framework for assessment

(workplace -based assessment in the Wards or in consulting rooms.)

Miller's pyramid provides a good conceptual model to assess clinical competence by providing tiered levels of assessment.

Balancing teaching styles

Effective teaching in medical education requires flexibility, energy, and commitment amidst a busy background of clinical care, Successful medical teaching also require that teachers are able to address learner's mind.

Teaching Method

1. **Case based discussion** - The trainee discusses his case records with a trained assessor in a standardized and structured oral examination, purpose of which is to evaluate the trainee's clinical decision making reasoning and application of medical knowledge with real patients. Observation is another strategy to improve long case examination.^{3,4}
2. **bed side teaching** -teachers and student examine the patient together. teacher demonstrate a physical finding and focus on a particular point with student at bed side for explanation used for topic like cardiac auscultation, knee examination for effusion, differential diagnosis of knee effusion.
3. **Contract teaching** -teacher and student decide a fixed date for discussion on a research project, Medline search.
4. **Objective-Structured long case examination record (OSLER)** - Glesson developed a.Objective-Structured long case examination record (OSLER) tool, which includes structuring of long case and direct observation of candidate interacting with patient for a small component, eg. explaining a procedure. OSLER is a powerful tool for providing feedback and has great potential to increase clinical competence ^{5,6}.

Long case can be structured to increase objectivity and attend uniformity in making ie. History taking -Pace and clarity of presentation, communication process, systematic approach, Establishment of facts, Physical examination - Systematic Approach, Examination technique, correct physical findings. Management plan.

5. **Mini clinical evaluation exercise -MiniCEX** - involves direct observation of student's communication⁷. Supervisor observes while trainee then performs a focused history taking and physical examination over 15 -20 minutes. Trainee then presents a diagnosis and treatment plan. Trainees are handle at least 6 case during 1 year with a different assessor for each encounter representing a different clinical problem. It is a useful tool for formative assessment of residents in medicine⁸.
6. **Abbreviated case presentation (Aunt Minnie)**-for residents and medical students in a clinic setting. Teacher ask to student to present chief complaint and his presumptive diagnosis. Teacher itself evaluate patient and then discusses the case, by case discussion discrepancies appear between teacher's and learner findings. And then teacher pay focus on a relevant point resulting from case.
7. **Objective-Structured clinical Examination (OSCE)**-Observing faculty a medical student by uses either a checklist of specific behavior to evaluate student performance^{9,10}. This provides a standardized means to assess a variety of clinical skills. These include physical examination and history taking skills, communication skills with patients and family members, depth of knowledge, ability to summarize and making a document, Ability to make a differential -diagnosis or plan treatment and clinical judgments based upon patient's notes. OSCEs are very useful for measuring specific clinical skills and abilities, OSCEs also provide feedback to teachers and help in correcting teaching -learning errors¹¹.

Procedures and to manage life threatening clinical situations of abilities in continuity of case cannot be testing using OSCEs.¹²

8. **Small group method** - Teaching skill in which medical educator educate perfectly and student learn more and more is small group method. Current educational innovation, such as problem based learning (*Wamination lton & Matthews 1989*). Depends on small group teaching.

Small group work is a method for generating free communication between group leader and member.

Group leader can make positive use of difference in knowledge and attitudes among participants. Small group work enable participants to gain a great deal from their fellows in a type of communication which cannot take place in a lecture hall (*Westberg & Jason 1996*).

The group leader (tutor, instructor, moderator, chairman, acilitator) is the crucial agent, not present merely to listen to the views being stated, but responsible for helping the group to identify responsible for helping the group to identify any errors, misperceptions or biases of its members. Only when participants themselves fail to do so is their need for leader to step in to provide corrective feedback. Competent group leader should minimally interfere in group. The group leader is an

expert at active listening, attentive always to self-esteem of participants and competent to conduct a group meeting by specific methods which result in an enhancing intellectual experience for all members.

Deification of group work

A group is a number of students /people interacting in a face - to -face situation. As in seminar and group discussion.

Seminar

A seminar is leader -centered, rather than participant -centered and aim of a seminar is very specific. In seminar leader present a predetermined topic. So a seminar is a subject -centered presentation on a defined topic area.

Group discussion -A free discussion group is participant -centered (group member).The group session generate its own issues, over and above the initial topic or task or problem designated (eg. Cause of breathlessness or pain in abdomen.) and all relevant issues arising are the progressively clarified.

Essential component of group method is the interaction among the members of group, which is not possible if number are too large.

Technical requirement -A suitable room in which a round table may be helpful for texts, notebooks, It is preferred that all group members sit in circle around the round table. Each participant fully visible to all others. So that body language as well as verbal communication is evident. Eye contact is critical and obligatory.

Seating arrangement is critical and obligatory. When any member is absent, then their seat should be remain vacant. So the group member remain aware about his /her absence. Style of leader determine the group atmosphere. His main function is to listen and encourage ideas and opinion. Thon the leaders success of small groups depends on the leader's use of appropriate skills (*Barrows 1988,1994*). Group Dynamics - Social force active whenever there is meeting occurs. Their role in education precisely formulated since very long time (*Lewin 1948*). Grasp of certain key key concepts can immediately enhance effectiveness of a leader of a group session.

Small group meeting /discussion inevitably evokes and express psychological complexes of participants (psychotherapy groups are an exceptionally potent form of psychiatric treatment).Group members can certainly expect to improve their self -awareness and sensitivity necessary in relationship with patient and educational small groups discussion powerfully influence attitudes of members (*Walton 1968*).

Specific Techniques

1. When introductions among group members. It is duty of leader that he present a session and establish its task discussion, to focus discussion point.
2. The leader should prepare several questions in advance to encourage group discussion.
3. An Important point for considering in group discussion - what do others think.
4. Individuals who are dominating discussion are invited to allow less vocal or confident members an opportunity to participate.
5. Participate who are less vocal are encourage to ask question and express view point.

6. Group leader should establish rule that his own ideas are of course affect and challenge the subject.
7. Participants /group members after experience criticism of their views, particularly by the leader.

Goal - In group discussion participants have opportunity to investigate in depth of topic which we as initially briefly presented, group methods also provide more intimate and personal contact among participants.

Main goal of leader in employing group method is to encourage independent activity and therefore critical re-examination of topic presented.

Reason for adopting group method

1. Difficult subject, complex facts, a specialized documentary, Any new technical procedure can be understand easily in a group discussion.
2. Examination of attitudes, their modification (affective learning) can done easily under small group participant's intellectual group and increase motivation.
3. Group discussion enable participants to deal with the new changes in all branches of medicine and to remain up to date with knowledge of that field. Replacing outdated knowledge and gain new knowledge.
4. Group learning end the authority -dependence polarity present in mostly academic activity.
5. Interaction with each -other deepens a participant's intellectual grasp and increase motivation.
6. Group session participants learn from each -other and clear their misunderstand concept.
7. Group discussion increase ability to work in teams, any skill increase which is necessary in medical professional practice (world Federation for Medical Education 1994).

Micro -Teaching

Micro- teaching is an innovative technique of teacher's education. By it trainee teacher develop competence in teaching skills.

An effective teacher is more than a skilled technician in such activities as presenting a lecture leading a group discussion. Not only new trainee teacher trying to learn new, but also senior and experienced teachers trying to learn new skills can practice through micro - teaching.

Methodology -A short lesson is taught by the trainee teacher to a group of 4-6 students for a time period of 5-10 minutes. The emphasis is on "How to Teach". Not "what to teach".

Self directed learning

Self directed learning is a process in which individual initiate learning itself or by saw others teaching method and take responsibility for learning itself.

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How to cite this article:

Ritubala Soni and Ranjeet Singh Arya (2018) 'Medical Education Teaching-Significance Of Teaching-Learning Process In Small Groups For Balancing Theory & Clinical Case', *International Journal of Current Medical And Pharmaceutical Research*, 04(5), pp. 3296-3299.
