

Group discussion: Prepare, learn, teach and assess

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In recent times, medical education has witnessed developments and modifications in both teaching and assessing curriculum. They include journal clubs to structured journal clubss, seminars to group discussions and case presentations to mini-case evaluation exercises. These academic exercises aim to achieve competency among residents. Recently, structured journal clubs and group discussions have emerged as parts of both teaching and assessing curriculum.

Teaching and learning are based on synchronous, constructive and constant interactions between the residents and the faculty to develop competency. George Miller's pyramid,^[1] which assesses competency involves the following sequential steps:

1. Knows of
2. Knows how
3. Shows how and
4. Does

Steps such as 'Knows of' and 'does' are the lowest and the highest ends of the spectrum, respectively. Recently, 'heard of'^[2] has also been incorporated into the pyramid. In stage 1 (heard of), the given topic has come to the resident's notice through someone, for example, the resident may have heard of the matter in a seminar or a conference presentation. In stage 2 (knows of), the residents have read the subject. In stage 3 (knows how), apart from reading, the residents have systematically analyzed the subject while in stages 4 (shows how) and 5 (does), they have also put it into practice.

Burge^[3] has cautioned that residents could adopt a superficial approach if they are overloaded with curricula. Teaching centers can use a range of assessment techniques for testing

curricular outcomes. Seminars, case presentations and journal clubs^[4] are various forums of a residency-teaching program, which usually cover the core topics. However, there are certain topics which are often difficult to understand and require maximum mutual interaction to ease learning and reinforce the knowledge. Group discussion (GD) is one such academic exercise that involves a two-way, mutual interaction on a selected topic. In this article, the author presents GD, a resident teaching and assessment curriculum. The toughest chapters in a specialty can be learned in a user-friendly manner by sharing each other's views. The faculty closely monitors the performance of the whole group of residents in a given time, unlike seminars and case presentations, where only a single resident is assessed. Recently, structured journal clubs^[5] and group discussions have emerged as both teaching and assessment curricula. The differences between GDs and seminars are summarized in Table 1.

THE OBJECTIVES OF GD

Poor performance in certain theoretical topics even by the above-average residents in monthly, internal assessments stimulated the faculty to design an alternative curriculum to deal with very challenging dermatology chapters. Residents were asked to pool topics which they found to be difficult. Consequently, GD evolved as a forum to deal with difficult topics.

WHAT ARE DIFFICULT TOPICS IN DERMATOLOGY?

Criteria for including topics for group discussion are summarized in Table 2. Difficult topics actually included for GD are summarized in Table 3. These topics can be given special emphasis in this session.

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Table 1: Differences between group discussions and seminars

Group discussion	Seminar
◇ Two-way interaction	◇ One-way interaction
◇ All residents prepare and participate responsibly as it is an evaluation process.	◇ Presenting resident will prepare.
◇ Residents discuss, pooling information from the assigned sources of literature for the topic.	◇ Presenting resident's responsibility to access and present information.
◇ All residents are individually assessed by all faculty members in a given period of time.	◇ Single resident is assessed in a given period of time
◇ Pooling of views, discussion and debate on a given topic	◇ Presentation followed by questions

DESIGN OF THE GD CURRICULUM

Properly planned groundwork is essential for the success of GD. Two moderators, preferable one senior and one junior postgraduate are entrusted to facilitate GD. The junior moderator acquires the necessary guidance from the senior one in conducting the session. Under the close supervision of faculty who allot the topics for GD, moderators and the participating residents collectively work for the success of the GD. The ideal characteristics of moderating residents, participating residents and faculty for a GD are summarized in Table 4.

Role of moderators

Step 1: Moderators search relevant literature for information on the topic either from the library or from internet surveys. They then recommend the most useful textbooks or continuing medical education (CME) or review articles to other residents before interacting with them regarding the GD topic. The faculty gives the necessary guidance in this matter.

Step 2: Moderators prepare relevant flow charts or diagrams or mnemonics (to remember signs and syndromes) or any illustrative material to make the topic easy and interesting. They even prepare relevant, multiple-choice questions to reinforce the important and difficult points to remember and present at appropriate points in the GD.

Step 3: Moderators systematically prepare the list of questions to be discussed in the GD session.

Role of residents

Having been given the topic and the necessary sources of information well in advance of the GD, they prepare themselves in parallel to the moderators. A good resident should be able to search the relevant literature and contribute equally along with the moderators. GD is thus a forum to assess responsibility, preparation and participation of residents.

Table 2: Criteria for the selection of topics to be included for group discussion

1. Difficult to understand by individual effort or challenging topics which residents bring to the notice of the faculty or topics that fail to generate interest.
2. Topics not covered in regular residency teaching programs like seminars and case presentations.
3. Topics that are difficult to remember either due to complicated patho-mechanisms involving molecular or genetic steps or equations.
4. Topics involving rare disorders and syndromes.
5. Topics often neglected by residents.

Table 3: Difficult dermatology topics in the canopy of group discussion

1. Anatomy and physiology of human skin
2. Cutaneous molecular biology
3. Clinical immunology, allergy and photoimmunology
4. Genetics and genodermatoses
5. Naevi and developmental defects
6. Skin tumors
7. Disorders of the melanocyte or pigment disorders
8. Connective tissue disorders
9. Purpura
10. Vaculitis
11. Histiocytosis
12. Cutaneous lymphomas and lymphocyte infiltrates
13. Metabolic disorders
14. Cutaneous manifestations of internal malignancy
15. Cutaneous manifestations of systemic disease
16. Psychocutaneous disorders
17. Disorders of nail
18. Disorders of hair
19. Disorders of oral cavity and lips
20. Drug reactions

Note: Any difficult topic brought to the notice of the faculty by the resident can be included in Group discussion. Topics usually not covered in regular teaching programs like seminars and case presentations are given priority.

THE GD SESSION

In each GD session, moderators welcome the faculty and residents, introduce the given topic and highlight its significance. With this background, they begin the discussion by putting questions to their fellow residents. Systematically, each resident's opinion is aired for every question ensuring participation for all residents. Moderators strictly discourage their fellow residents from stating 'No opinion' or simply the words 'Same opinion' to answers by a previous colleague

Table 4: Ideal characteristics of a good moderating resident, participating resident and faculty in a group discussion

Moderating Resident	Participating Resident	Faculty
<ul style="list-style-type: none"> ● Selects relevant literature and the protocol for GD proceedings in advance. ● Effectively analyze each resident's views and periodically summarize before going to another question. ● Illustrates with figures and flow charts, in the appropriate sequence. ● Clears confusion or ambiguity in residents' views. ● Organizes the time effectively. ● Respects fellow residents' and faculty's views. ● Offers solutions for controversial issues raised by fellow residents or faculty. ● Paves way for smooth discussion on the topic. ● Poses thought-provoking as well as multiple choice questions to make the discussion interesting. 	<ul style="list-style-type: none"> ● Prepares the topic well in advance. ● Gives clear reasons and explanations. ● Actively participate by raising relevant issues and constructive views. ● Constructive criticism from moderating residents and faculty are noted carefully. 	<ul style="list-style-type: none"> ● Identifies the missing or omitted items. ● Supervise and gives feed back. ● Monitor the performance of residents and moderators and grade them. ● Respects residents' views.

without attempting to answer. Moderators however, strictly adhere to the set timelines and ensure smooth proceedings.

For each question, moderators observe answers, omissions and additional contributions of their colleagues. They note these points and summarize before proceeding to the next question. They periodically display flow charts or illustrative items prepared by them, at appropriate points in the GD. They introduce multiple-choice questions prepared by them to generate interest or drive home the message on an easily forgettable point. Moderators observe their colleagues not only for correct answers but also systematic analysis as to the why, what and how. For each multiple choice question, residents have to defend their choice logically. Apart from answering or giving additional information, residents are encouraged to counter-question the moderators and their fellow residents regarding any lacunae and they can constructively challenge the answers for a given question. Thus, GD is a mutual interaction between the residents and the moderators.

ROLE OF THE FACULTY

The faculty observes and keeps a track of the interaction between the residents and the moderators, observing, intervening and offering constructive suggestions. The faculty closely monitors the performance of all residents in a given period of time and must resolve any controversies

arising from discussions on a particular question. Hence, GD serves as an effective alternative to internal assessments of theoretical knowledge. Thus, systematically organized and periodic GDs in a department can both teach and assess residents on difficult topics.

A teaching program should have definite learning outcomes. Burge^[3] has highlighted the learning outcomes for a teaching curriculum. In GDs, all residents prepare, learn, teach and assess information to be able to participate, consequently, it motivates them to develop self-motivated learning skills and promotes deeper understanding of the subject. GD enhances learning challenging or often neglected dermatology topics, making these parts of an interesting and friendly teaching exercise. GD is an active learning program for both residents and faculty.

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