Small group methods in medical teaching

Henry Walton

World Federation for Medical Education

1 INTRODUCTION

A teaching skill essential for all medical educators is small group competence. Lack of it can never have been more damaging: medical teachers have now to promote active learning, for which small group methods are optimal. The only kind of medical student now needed is an activated one, equipped for independent lifelong learning and teamwork; current educational innovation, such as problem based learning (Walton & Matthews 1989) depends on small group teaching.

Small group work is a method for generating free communication between the group leader and the members, and among all the participants themselves. The group leader can make positive use of the differences in knowledge and attitudes among participants, made evident as they interact with each other. Small group work enables 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).

Group methods have the particular merit that – when properly used – all participants have the opportunity to take part, and each can see for themselves the impact of their views on the other members of the group. Whenever anybody speaks the response evoked is immediately visible, whether it be assent, disagreement or disinterest. A group is also, most importantly so, a *change system*: those taking part in the dialogue are influenced as they attend to the participants who speak, the facts being expressed, and the attitudes conveyed, and reconsider their own positions.

The group leader (tutor, instructor, moderator, chairman, facilitator) is the crucial agent, not present merely to listen to the views being stated, but responsible for helping the group to identify any errors, misperceptions or biases of its members. This is achieved by encouraging them to communicate their ideas and to correct each others' errors of grasp as these gradually emerge. Only when participants themselves fail to do so is there need for the leader to step in to provide corrective feedback. Minimal intervention characterizes a competent group leader, but that in no way implies passivity or mere compliance on his or her part. Quite

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

2 DEFINITION OF GROUP WORK

By definition, a group is a number of people interacting in a face-to-face situation. Most classes or lecture audiences are not groups. They contain numerous groups, some of which come together informally outside class hours. Such haphazard group formation can foster some learning (informal peer groups can be very valuable educationally). Group work, however, sets out deliberately to generate individual activity as the basis for interaction among all the participants. A reasoning process results in a learning group, directed at resolving the particular tasks set for the group. (Frequently, at conferences notably, socalled workshops are held, with no specific assignment or task clearly set, beyond provision of a title or label, with little outcome resulting and regular frustration. Reporting-back sessions not surprisingly are often excruciating.)

It is worth distinguishing between seminars and free discussion groups. A *seminar* is leader-centred, rather than participant-centred, and the aim in a seminar is more specific: the seminar leader presents the predetermined subject and then ensures that it is adequately explored. A seminar, therefore, is a subject-centred presentation on a defined topic area.

A free discussion group, on the other hand, is participant-centred and requires much more participation from all members present. The group session generates its own issues, over and above the initial topic or task or problem designated (e.g. the cause of breathlessness, or obstructed labour, or haematuria, etc.) and all the relevant issues arising are then progressively clarified on the initiative of the participants themselves.

The essential component of both these methods is the *interaction* among the members of the group, which is not possible if numbers are too large. About eight to 12 is an optimal number, allowing all the participants to be regularly active. (Inexperienced group leaders are especially taxed by silent, non-participitative members.) Twenty is perhaps the maximal size which can work effectively.

3 TECHNICAL REQUIREMENTS

A suitable room of appropriate size is required. The leader's primary obligation is to ensure the essential "housekeeping", making all the provisions necessary for the group to function properly (such as seating, warmth, lighting, quiet, security of information, etc.). The leader does not sit at a desk or in any other authoritative position, but takes his (or her) place on equal terms with the participants. A round table may be helpful for texts, notebooks and elbows. Participation requires that all group members sit in a circle, each participant fully visible to all others, so that body language as well as verbal communication is evident. It should be too obvious to need mention that *eye contact* is critical and obligatory.

The accommodation and *seating arrangements* are critical, and are the responsibility of the leader. It is necessary to have as many chairs as participants, so that when one member is missing, the group remains aware of the absentee's potential influence.

The style of the leader determines the group atmosphere. The classical differentiation of leadership style (Lewin 1948) identified three different styles: autocratic (authoritarian); democratic (collaborative); and laissezfaire (detatched). Any leader requires instruction to become equipped to conduct groups effectively. The group leader's technical ability is the one factor determining the richness, content and direction taken by the discussion.

The style of the leader is therefore crucial. He (or she) has discreetly to counteract with tact, skill and good grace any attempt by the group to place him in charge of the proceedings. His chief function is to listen and encourage ideas and opinions during phases of free discussion, or the presentation of the topic and relevant comment if the group has been set a specific task or assignment. To the extent that the leader acts as an authority or serves as a resource (a fount of knowledge), he is likely to be a restraint upon the participants. Very experienced or conventionally orientated teachers may find it impossible to change from such a didactic posture: their rigidity disqualifies them for group work. Even when a group requires direction and intervention from the leader, this action cannot be authoritarian.

If a group meets sequentially, *cohesiveness* is essential: the leader must have the skills to weld the group into a social structure, so that all participants attend every session.

The leader in a learning group must function as a catalyst, certainly not as the authority who is imbued with the answers: it is not his task to solve the problems arising in the course of discussion. The leader has of course to be in control of the session, but by virtue of expertise in the group process, and not by exercising dominance or pulling rank. The success of small groups depends on the leader's use of appropriate skills (Barrows 1988, 1994.)

The participants may find it frustrating, even irritating, when the leader abdicates the leading role. In fact, when in a phase of passivity a group may be actually enraged if the leader declines to feed them with facts when perplexity arises. (Traditional methods of instruction habitual in conventional medical schools have created students characterized by induced passivity.) All the leader's tact may be called for when pressure is put on him by exasperated group members bent on trapping him into defensive resumption of a traditional didactic role.

4 GROUP DYNAMICS

The social forces active whenever people gather in groups are documented extensively, their role in education precisely formulated over the course of half a century (Lewin 1948). A knowledge about group dynamics is essential. Nonetheless, every day all over the world hordes of teachers are deputed, and acquiesce, to lead an educational group without such prior instruction. (That is not to mention all the chairpersons of many committees who conspicuously are similarly unequipped.) Very frequently neophyte group leaders are left to sink or swim with, at best, the meagre instruction not to answer participants' questions directly, but to turn the query back on them as skilfully as they can.

Grasp of certain *key concepts* can immediately enhance the effectiveness of a leader of small group sessions. If the group is to meet over a period of time, and therefore participate during a series of sessions, like all groups meeting sequentially it will pass through distinct stages (Tuckman 1965). Knowledge about these stages can orient the leader, and equip him to make *facilitating* interventions appropriate to the group's evolutionary status. (A *restrictive* intervention is one which fails to evoke fresh discussion, but instead is followed by silence, perplexity, or sometimes plain resentment.)

1. Forming: Initially members of a new group will talk superficially, at times apparently irrelevantly, some

members joking and others withdrawing, as participants and leader get to know each other.

- **2. Norming:** In the second stage, the norms, rules and goals of the group will be worked out informally; there will normally be comments about lack of a defined goal, about uncertainty how to proceed, and expressions of frustration.
- 3. Storming: The atmosphere of purposelessness is dispelled by the next sessions when natural leaders emerge, and various participants are recognized by others as having special talents, resources or knowledge to contribute; in this stage there may be much emotion, usually anger and impatience. The group leader's task, now particularly, is to hold members of the group together.
- **4. Reforming:** During this phase in the sequence of meetings the participants agree on decisions about the tasks which the group will undertake, the steps to be adopted, and how best to collaborate to achieve their goals. There is now considerable cohesiveness, with pleasant fellow-feeling and a sense of satisfaction as tasks begin to be realistically accomplished.
- 5. **Disbanding:** The final stage is the termination phase, when the group takes note that time has run out, reviews and summarizes its accomplishments, and the members plan to disperse. Expressions of appreciation are usual, with comments on how the group experiences have influenced members.

The importance of knowing about these normal stages, through which any group passes when meeting in series, is that the leader will not be discouraged by aimlessness and disillusionment expressed at stage 2, he will restrain himself from imposing premature solutions during stage 3, and will be in a position to counteract gloom in stage 5 by helping members to gain a realistic perspective about the group's achievements.

The leader using group methods deliberately with-draws from being the focus of attention, directing participants' efforts towards encouraging them to interact with one another. The leader's aim is to mobilize the *motivation* of participants to solve problems as a group. For this to occur, he must ensure that the participants interact on the peer level as well as with him, thereby promoting group inter-activity and providing opportunities for participants to express their own intellectual and social assets, and put these to the advantage of the group.

A word of caution

Small group discussion inevitably evokes, and provides expression for, psychological complexes of the participants. (Psychotherapy groups are an exceptionally potent form of psychiatric treatment, as are self-help groups also, such as Alcoholics Anonymous.) However, while participants can be expected to disclose their psychopathology to the extent that they are psychologically disturbed, as they would in the course of ordinary living, it is not the task of the leader of an educational small group to focus on any aspect of personal abnormality of group members. Indeed, even the pioneering group therapist Michael Balint (1964), in his training seminars for general practitioners now widely used, would not comment on or interpret directly the complexes or morbid traits of doctors evident as they reported on patients in their care (instead Balint advocated that fellow practitioners could be free to react if so disposed: e.g. "Why is it that you always take a hostile and derogatory attitude to any assertive woman patient, as if you think all women must always be meek and submissive?".) Group members can certainly expect to improve their self-awareness and the sensitivity necessary in relationships with patients; and educational small groups do powerfully influence attitudes (Walton 1968), but education group leaders should never be sidetracked to embark on psychotherapy in their sessions.

5 SPECIFIC TECHNIQUES

Some of the technical devices that group leaders require to use in the conduct of the group discussions are the following:

- (i) When introductions among group members have been made, the leader should begin with a short presentation to initiate the session and establish its task, to focus the discussion on relevant issues.
- (ii) The leader should prepare several questions in advance with which to promote group participation at the onset, but once discussion is launched should voice such questions only as group members need encouragement or prodding.
- (iii) The group may have been assigned documents to read in advance to help provide a common basis for deliberation, and it must be assumed they have responsibly done so.
- (iv) Most of the questions directed at the leader should be deflected gently, by being reflected back to the group in a facilitative way, for consideration by other participants in response to the member posing the question: e.g. "That does

- seem an important point to consider what do others think?"
- (v) The leader encourages participants to explain or support their assertions, especially when made dogmatically, whether or not the statements happen to be correct.
- (vi) Individuals who are dominating the discussion are invited, first gently and if necessary somewhat more vigorously, to allow less vocal or confident members an opportunity to participate. (Tendencies towards dominance or submission are important individual dynamisms characterizing particular group members, both as students and in real life, needing to be inwardly identified by the group leader, and countered by bringing in others, whether assertive or retiring, to contribute to the dialogue.)
- (vii) Participants who are not contributing verbally are given encouragement to ask questions and express viewpoints, perhaps by encouraging them to express in words the non-verbal cues they provide: e.g. "Can you tell us why you are smiling?"
- (viii) The group leader withholds the information he may have, and certainly does not express value judgments or contradictions which may inhibit participants or restrict their freedom to volunteer their own thoughts and views. Refutation is best left to other group members. Participants can often experience criticism of their views, particularly by the leader, as wounding put-downs.
- (ix) Revelation by a participant of a private belief or tangential thought which is idiosyncratic should not be ridiculed, but should be given consideration by the discussants. The outcome may be beneficial personality change.
- (x) The group leader should establish the rule that his own ideas are of course also subject to question and challenge.

6 GOALS

Group discussion must give participants the opportunity to investigate in depth aspects of the topic which was initially briefly presented; group methods also provide more intimate and personal contact among participants, and allow the leader to give more detailed attention to the views of all participants.

The chief goal of the leader in employing group methods is to encourage independent activity, and thereafter critical re-examination of the topic presented. Group methods depend on active participation (which the leader must generate using unobtrusive skills of social encouragement.) The topic under discussion, essentially, must be explored afresh. This results when participants realize the responsibility being conferred on them: to organize their thoughts on the topic in hand, with respect for their peers, and for the uniquely creative power of a group in fusion.

7 REASONS FOR ADOPTING GROUP METHODS

The decision to use a group as a major educational method is based on firm arguments:

- (i) Difficult subject matter, complex facts, a specialized vocabulary, or involved technical procedures can be grasped more easily if participants can raise their own informally-stated questions.
- (ii) Factual knowledge can be subjected to reasoning, and placed in context, if opportunity is given for discussion.
- (iii) Reasoning, problem-solving and decision-making are not simply cognitive matters, relating narrowly to the intellectual processes. Examination of attitudes, and their modification (affective learning), occurs most easily and is reinforced effectively under small group conditions. A participant's social or emotional bias can seriously impede clarification of an issue and may require modification. Such attitudinal change, as the extensive literature documents, is best achieved in groups.
- (iv) Interaction with fellows deepens a participant's intellectual grasp and increases motivation.
- (v) Group methods enable participants to deal with the present rapid changes in all branches of medicine and the impossibility of learning all there is to know, replacing outmoded knowledge and assimilating new knowledge.
- (vi) Group methods counteract the authority-dependence polarity present in much academic and management activities.
- (vii) Group methods allow the participants to examine their own behaviour and understand better how they relate to others.
- (viii) Because group sessions increase active participation, participants are given the opportunity to learn from each other.
- (ix) Group methods foster peer interactions and increase the ability to work in teams, a skill increasingly necessary in professional practice.

 (World Federation for Medical Education 1994.)

- (x) Participation in a group enables individuals to witness their impact on other people and to perceive what effects they have on their patients and professional colleagues.
- (xi) A group, under optimal conditions, can modify its members' behaviour and make this more effective.
- (xii) When appropriately conducted, a group can focus to modify behaviour in predetermined areas
- (xiii) Probably most important of all: since much of Medicine consists of confronting and solving problems, doctors must have directed practice in this set of skills. If they are to make effective use of the information they are acquiring, they need experience in learning how to think critically and systematically. An effective way to improve one's thinking powers is to expose them to one's peers for constructive criticism. This is the basis of audit, and can only occur in small groups.

8 BENEFITS OF GROUP METHODS

Participants, in their turn, are appreciative of effective group meetings, which they value for the following reasons:

- They obtain increased understanding of the subject.
- (ii) They develop greater ability to assemble and present information.
- (iii) They welcome opportunities to think critically.
- (iv) They are able to ask questions and to clear up their difficulties.
- (v) They consider that they are aided by the personal relationship with the group leader.
- (vi) They say that they become more articulate and speak better in public, with increased confidence.
- (vii) They are stimulated to follow the subject further in private, independent study.
- (viii) They are able to influence the content and methods of their work.
- (ix) They obtain instant feedback with each of the efforts they make to solve the problem in hand.

9 DISADVANTAGES

The potential disadvantages of group discussions, inevitable when the group leader is inept and cannot create an interactive group, are the following:

(i) Weak participants can be discouraged by more articulate fellows, deterred from expressing themselves, and have their progress slowed.

- (ii) Some participants may depend too much on others in the group to solve their problems.
- (iii) Some of the group members of a more withdrawn personality type may take no part in the discussion, while others (including inept group leaders) may monopolize it.
- (iv) Able participants may be bored, for it is difficult to cater to a wide range of ability: some group leaders may fail to take account of the needs of participants of differing aptitudes and sophistication.
- (v) It requires care on the part of group leaders to prepare for sessions, which depend upon foresight and proper planning.
- (vi) Far too much group work is irrelevant, unprofitable, unamusing or uninteresting.
- (vii) Group work requires professional educational skills, and is popularly criticized for being less cost-effective than, e.g. lectures.

10 CONCLUSION

Group sessions are a profoundly effective basis for learning and for decision-making. By the same token, they are often a great mistake and are far too casually adopted. Group methods succeed or fail to the extent that work is accomplished. The task of group work is not simply to list drearily all the views expressed by participants, a widespread misapprehension. Participants inevitably comprehend the same topic or issue discrepantly, or show different understanding of the matter under review. These differences of view have first to be expressed verbally, and then resolved.

Through the *facilitatory style* of the group leader, the members of the group contribute facts, concepts, personal experiences, but then progress to achieve novel insights and arrive at a *new synthesis* of the topic under consideration. A group session elicits observation, opinions, preconceptions, but is partial and defective without reflection, review, fresh thought and deliberation.

Unless such reflection actually takes place, group methods are improperly utilized, and traduced in the process. The misuse of group methods is in part responsible for the empty shopping lists of impromptu recommendations which emerge too often from so-called "consensus" conferences. New perplexing or undefined problems call for an "executive function in thinking". An understanding about the group process and its sequential development is essential for managing group unproductivity and dysfunction, and for accomplishing the specified task set before a group.

11 READING

- Balint M (1964) The Doctor, His Patient and the Illness. Pitman Medical, London.
- Barrows H S (1988) *The Tutorial Process*. Southern Illinois University School of Medicine, Springfield, Ill.
- Barrows H S (1994) *Practice-Based Learning*. Southern Illinois University School of Medicine, Springfield, Ill.
- Lewin K (1948) Resolving Social Conflict. Harper, New York.
- McLeish J, Wayne M & Park J (1973) The Psychology of the Learning Group. Hutchinson University Library, London.
- Newble D & Cannon R (1983) A Handbook for Clinical Teachers. Chapter 3: Teaching in Small Groups. MTP Press, London.
- Tuckman B (1965) Developmental sequence in small groups. Psychological Bulletin 54, 229–49.

- Walton H J (1968) An experimental study of different methods for teaching medical students. Proceedings of the Royal Society of Medicine 61, 109–14.
- Walton H J (1990) *The medical teacher as a facilitator.* Medical Education **24**, 99–100.
- Walton H J & Matthews M B (1989) Essentials of problem based learning. Medical Education, 23, 542–58. Also published as Medical Education Booklet No. 23 (Edinburgh: Association for the Study of Medical Education).
- Westberg J & Jason H (1996) Fostering Learning in Small Groups. Springer Publishing Co. Inc., New York.
- World Federation for Medical Education (1994) Proceedings of the World Summit on Medical Education. Medical Education 28, Suppl. 1. ISSN 1352–3929/94.