## Letters to Editor

## Modular Teaching: An Alternative to Routine Teaching Method for Undergraduate Medical Students

Sir,

In our present traditional subject-based curriculum for undergraduate medical students, most of the teaching is done by the lecture method which has its own disadvantages like passive learning, difficulty for slow learners, etc.<sup>(1,2)</sup> Teaching is a process which facilitates learning by encouraging learners to think, feel, and do. The teacher has to be more of a facilitator and the students have to actively learn. A teacher is also in the pursuit of innovative methods in teaching.<sup>(1)</sup> The Medical Council of India has recommended more of interactive sessions like modular training, group discussions, etc. for the students than lectures.<sup>(2)</sup> These methods would address the cognitive, affective, and psychomotor skills better than the usual teaching methods.<sup>(1)</sup>

Students' training must aim at inculcating scientific temper, logical, and scientific reasoning, clarity of expression, and ability to gather and analyze information. Methods aimed at promotion of self-directed learning must be part of the teaching learning process with greater emphasis on learning in small groups.<sup>(2,3)</sup> Keeping this in mind, a Modular training program on Acute Respiratory tract Infections (ARI) in children was attempted among undergraduate medical students.

Acute respiratory tract infections in young children accounts for 3.9 million deaths worldwide.

About 30% to 50% of hospital visits and 20% of admissions are due to ARI. In India, it is one of the major causes of inpatient deaths (13%) among children in states with high infant mortality rates. Early detection and treatment in the form of good history taking and clinical assessment is important for prevention and management of ARI.<sup>(4)</sup> The guidelines of Integrated Management of Neonatal and Childhood Illness being taught to medical students during their Community Medicine postings emphasize this approach.<sup>(5)</sup>

The objectives of the training program were as follows. At the end of the modular training, students will be able to:

- Understand the Epidemiology of ARI.
- Understand the principles of history taking and clinical assessment of ARI in children.
- Classify ARI based on signs and symptoms.

The training program was conducted for a batch of 32 students for 2 days. The training was covered in 6 h (3 h  $\times$  2 days) by two Community medicine specialists and carried out as follows:

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Activity	Duration
Pre test	15 min
Literature review (self)	30 min
Module reading (with AV aids)	90 min
Exercise (AV aids)	30 min
Discussion	15 min
Post test	

On the first day, ARI in young infants (up to 2 months) was covered and second day ARI in child aged 2 months to 5 years was covered. The learning material was adopted from Integrated Management of Neonatal and Childhood Illness guidelines. The pretest score was  $5.9 \pm 2.2$  out of a total score of 15. Post-test was done 1 week after the training. The mean score was  $8.2 \pm 1.8$ . The difference was statistically significant (*t*=5.56, *P*<0.001). The same content was covered by the lecture method to another batch of 32 students. The lecture was of 2 h duration, delivered by a power point presentation.

The pretest score was  $5.4 \pm 2.4$ . In the post test done after a week, the mean score was  $6.1 \pm 1.8$  and the difference was not significant. In the feedback, the students appreciated the modular training method and preferred to have more similar programs than usual lectures.

To conclude, modular training methods would be superior to usual lecture classes as the students' involvement would be maximized in this method. It would enhance their retaining capacity. Similar modular training programs for other diseases of importance can be considered as an alternative to usual teaching methods for active participation and better learning of students.

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