Twelve Tips to Facilitate Learning in Community Medicine

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ABSTRACT

Community Medicine education in India is facing numerous challenges. Undergraduate medical students find this subject as an 'Uninteresting subject' due to many reasons. Research says that there should be more participatory and interactive teaching to generate interest among students in Community Medicine. Bringing it's teaching from classroom to community and making this subject more interesting by means of community based research projects, field visits, family health surveys and other inter active teaching methodologies is of paramount importance. This acts as a strong stimulus for learning and active participation of undergraduate medical students in it's implementation to fulfil health needs of community.

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Introduction

Community Medicine is an important subject in medical curriculum. Unfortunately, current Community Medicine education in India is facing numerous challenges. Even though, this subject starts from the first semester and continues until the seventh semester, students take this subject casually, probably due to many reasons like lack of career opportunities as compared to clinical subjects, vastness of subject, continued emphasis on cognitive learning, lack of community oriented field based programs, overemphasis on traditional teaching methods, lack of relevance, lack of interest etc. [1].

Pradeep Kumar reiterated that there should be more participatory and interactive teaching to generate interest among students in Community Medicine [1]. Mitrakrishnan Navinan also emphasized that students lack enthusiasm to learn independently. Experiential, group-centered teaching activities and a constructivist approach may be more effective in promoting independent learning in Public Health [2]. Adoption of multiple classroom interactive tea ching methods, improving feedback to students regarding their performance and promoting cyber public health and e-learning are some key ways to promote learning in Community Medicine among students [3].

The following twelve tips include simple steps that can help medical teachers/public health specialist to introduce measures in their regular teaching to enhance the quality of teaching as well as to create an interest among students about Community Medicine subject.

Tip 1: Specific Learning Objectives (SLOs)

"Sustained display of clear specific learning objectives (SLOs) in classroom throughout the lecture"

It is routine practice of most of the teachers to begin with their lectures with SLOs and immediately proceed to actual lecture content but there is no continuous exposure of SLOs to students during whole lecture. Exposing students with SLOs continuously throughout the lecture help them keep track of what they have learned and help them make connections and develop coherency between ideas, tasks and lessons. SLOs can be projected or written on either side of blackboard or penned out on Flip Chart or handouts can be given.

Tip 2: Emphasis on 'Must know' questions

"Give more emphasis on 'Must know' part only and try to deliver it to students in interactive way"

It is advisable to cover only three or four points in a fifty-minute lecture and four or five points in a seventy-five-minute class [4]. For lecture, faculty / teacher should be ready with 'Must Know' category questions related to topic. Specific Learning Objectives (SLOs) should reflect 'Must Know' questions. During lecture, maximum efforts need to be taken by faculty to cover only 'Must Know' part in more effective way. The best way to make sure that students assimilate all the essential content is to place on them more of the responsibility for learning it, outside of class time [5]. 'Essential to know' and 'Nice to Know' category questions can be given to students as 'Home Assignment'.

Tip 3: Integrated Teaching

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Integrate subject teaching with basic as well as clinical science teaching."

Integrated teaching is an important strategy to promote meaningful learning and make it last for a longer time [6]. It is the need of the hour, and students learn better when engaged by different materials of learning [7]. 'Clinico-social Case Presentation' is one of the regular academic activities in Community Medicine. A case presentation covering basic and clinical subjects by students in front of panel of teachers from various subjects is found to be effective.

Tip 4: Competitions and rewarding students

"Keep small competitions among students and give them rewards"

Competitions have much to offer in education and they are a good measure of how well a discipline is accepted and integrated into the curriculum. A healthy, diverse set of competition events is a positive sign, whereas a lack of good competitions may in some cases be interpreted as negative sign [8]. Competition can create challenging environment and academically challenging classrooms provide learning activities that have a rigorous instructional focus with clear and well-structured procedural rules, together with opportunities for active participation and engagement [9]. It brings positive change in learning behaviour of students. Keep small competitions based on topic being taught in classroom and reward students for their best performance. They could be rewarded in the form of monetary rewards, stationary material, Certificates of participation or simple praise in front of the whole class.

Tip 5: Classroom to Community

"Expose students to community through field based visits and let them present their experiences in classroom"

Current reforms in medical education emphasizes the need of community oriented medical education rather than hospital based medical education [6]. Students need to understand existing public health problems in community, current public health infrastructure, existing heath care practices etc.Therefore, there should be more emphasis on student's visits to various health centres and places of public health importance like;

- Primary Health Centers and Subcenters
- Milk Processing Unit

- Water/sewage treatment plants
- Child care centers
- Old age homes
- TB, Malaria, HIV/AIDS, leprosy control units etc.
- Urban and Rural health training centres

Students can be encouraged to present their observations/experiences form community/field visits in classroom. All visits need to be supplemented with specific learning objectives.

Tip 6: Relevance of Topic

"Make students aware of relevance of topic"

Learning is better with subject matter of immediate relevance [6]. One of the reasons for lack of interest of students in Community Medicine is poor relevance of subject [1]. Students can be motivated to learn in more effective manner by explaining the importance of subject matter with reference to their goal.

Students should be oriented about relevance about particular topic in following aspects;
- Undergraduate examination questions: Theory/ Practical/Viva-Voce
- Post-graduate examination questions: All India Institute of Medical Sciences (AIIMS)
- All India Entrance Examination, State Entrance, United States Medical Licensing Examination (USMLE), Professional and Linguistic Assessment Board (PLAB) and other competitive entrance examinations etc.)
- Relevance to their future medical practice

Tip 7: Interactive Lectures

"Make best use of interactive teaching methodologies"

It was found that the use of interactive lectures led to a statistically significant improvement in student academic performance as compared to traditional lecture approach [10]. He also reported that structured interactive session is better lecture format as compared to didactic lectures. Following interactive methodologies are found to be useful to facilitate learning behaviour amongst students.
- Mini Lectures with check in questions
- Think-Pair-Share
- Explain to New Comer
- Jig Saw Technique
- Three Points Content Review
- Clarification Pauses
- Muddiest point

Tip 8: SMART strategy

"Apply SMART teaching model to teach specific topic and make lecture more effective"

SMART teaching model:
- Step 1: Skit /Role Play: It can be done by involving medical students and faculty members. Facilitators can take help from 'Medical Theatre' of respective institute if available to prepare Skit/Role Play. (Duration: 10 minutes)
- Step 2: Movie (Film) Show : (Duration: 5 minutes)
- Step 3: Activate students with brainstorming exercises (Duration: 5 minutes)
- Step 4: Reinforcing Games: Few games which can reinforce specific lecture content can be conducted. (Duration: 10 minutes)
- Step 5: Teach with Case Based Studies: It will include small structured case stories. (duration: 10 minutes)

At every implementation step, there should an active interaction and involvement of students.

In a Malaysian medical school, role plays have been used to teach communication skills in primary care medicine [11]. At the University of Heidelberg, Germany, introducing role plays augmented the realism of technical training and improved doctor patient communication and to

teach students to obtain a sexual history and discuss sexual health issues [12].

Tip 9: Family Health Survey

"Involve students in family health survey and make them to do Community Diagnosis"

Due to family health survey, students receive good community exposure and understand life style, needs and problems of people residing in slums [13]. Family health survey helps the students to learn the demographic structure and morbidity patterns existing in the community [14]. It is very unique concept in Community Medicine where students have to go to community, visit families in community, elicit social information from them by using structured proforma and reach to specific diagnosis pertaining to respective family. Students need to be oriented on family health survey by trained staff and they should be given an opportunity to present their experiences in classroom.

Tip 10: Research through Community Based Projects

"Involve students in Community based research projects"

Research at an earlier stage, allows the student to think in a systematic way. Research also enables student early exposure to ethics, which is an integral part of medical research and practice [15]. Research experience allows students to better understand published work, learn to balance collaborative and individual work, determine an area of interest and jump start their careers as researchers [16]. Students can be assigned small community based research projects in small groups and also they can be given field based training through rural and urban health training centers. Indian Council of Medical Research (ICMR) has created a platform to promote undergraduate medical research in India through 'Short Term Studentship Programme'. Such platforms need to be created where a large number of community based projects can be implemented.

Tip 11: Guest Lectures

"Conduct guest lecturers of expert and experienced personalities"

Incorporating student service learning and bringing in guest speakers have been found to increase student engagement in traditional classrooms [17]. Student involvement and critical thinking skills in the classroom can be greatly enhanced by bringing in guest speakers [18]. In a study by Kumari, student participation peaked during the guest speakers visits [19].

Guest lectures by renowned and expert guests can create interest, stimulate new perspectives, bring in experiences and communication skills, and also provide expertise in specific content areas. A guest speaker conveys current, realistic information and a perspective on a subject that is not available from textbooks [20]. Once a month or depending upon feasibility, either virtual guest lecture or traditional face to face classroom guest lecture can be arranged.

Tip 12: Double Summative assessment for subject

"Conduct University Examination for Community Medicine Subject twice in entire medical curriculum"

Assessment drives Student's learning [21]. Classroom assessment and grading practices have the potential not only to measure and report learning but also to promote it [22].

Even though, Community Medicine is an important subject in medical curriculum; unfortunately students take it casually, probably because they are formally assessed in this subject only at the end of seventh semester. As 'Assessment drives learning', one more university examination in Community Medicine at the end of third semester may have significant impact on student's learning behaviour as well as attitude towards this subject.

Conclusion

Making Community Medicine subject in India as an *'Interesting Subject'* in medical education is challenging task for teachers as well as public health experts. Bringing it's teaching from classroom to community is of utmost important and making this subject more interesting by means of above mentioned tips can act as stimulus for active participation and positive learning behaviour of undergraduate medical students.

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