

Correspondence

Enhancing students' motivations through early exposure in actual settings is key

When we read Ananthamurthy and Mani's article,¹ we were delighted that they conducted a study similar to our interviews, focusing on motivations and deriving similar results, albeit with a completely different set of interviewees.

Shortage of health workers has long been a global issue.² While research on developing countries has accelerated,³ we empirically posit that recruiting and retaining health workers continue to be difficult in developed countries, as well. This was the rationale for our survey. Furthermore, to recruit future health workers, it is important to find potential students with proper motivation and enhance their motivations.⁴

We conducted interviews with 21 newly enrolled students who were interested in primary healthcare. Our interviews focused on the factors affecting motivation for this career choice. The interviews were recorded, transcribed verbatim, codified and grouped into similar categories. We identified six factors: (i) intrinsic properties; (ii) longing for social contributions; (iii) influence of past important events; (iv) existence of role models; (v) advice from close relatives; and (vi) future stable working environment (Table I).

Ananthamurthy and Mani found important negative factors in their analysis, including pathology being an 'invisible speciality', being 'unaware of the pathologist's role', 'social unacceptance' and 'lack of awareness regarding training curriculum', amongst students aspiring for a pathology career.¹ Although our survey was not regarding a pathology career, we were surprised to obtain similar results. Our findings revealed that if students can find 'visible' role

models and feel 'social contributions/acceptance', their motivations are enhanced. Students can attain these factors through early exposure in actual settings. A previous study found that enhancing intrinsic motivation is important for primary care physicians to sustain community-based education.⁵ If our findings apply to Ananthamurthy and Mani's study,¹ 'affecting motivation through early exposure' may be effective in recruiting and retaining potential students.

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Conflicts of interest. None declared

REFERENCES

- 1 Ananthamurthy A, Mani B. Perception of pathology as a career among undergraduate medical students. *Natl Med J India* 2019;**32**:369–72.
- 2 World Health Organization. *The World Health Report 2006—Working together for health*. Geneva: WHO; 2006. Available at www.who.int/whr/2006/en/ (accessed on 16 Jan 2021).
- 3 Muthuri RN, Senkubuge F, Hongoro C. Determinants of motivation among healthcare workers in the East African Community between 2009–2019: A systematic review. *Healthcare (Basel)* 2020;**8**:164.
- 4 Nguyen VA, Könings KD, Wright EP, Luu HN, Scherpbier AJ, van Merriënboer JJ. Working in preventive medicine or not? Flawed perceptions decrease chance of retaining students for the profession. *Hum Resour Health* 2019;**17**:31.
- 5 Murakami M, Kawabata H, Maezawa M. What primary care physician teachers need to sustain community based education in Japan. *Asia Pac Fam Med* 2014;**13**:6.

TABLE I. Motivational factors influencing career choice as health workers

Factor	Explanation and excerpts
Intrinsic properties	Personal interests, individual characteristics and innate ability: <i>'I've been wanting to interact with people. That's why I want to work in a hospital (not a research lab).'</i>
Longing for social contributions	Altruism with the desire to help those in need: <i>'I can support my patients. Social contribution is priority.'</i>
Influence of past important events	Confronted with and impressed by significant events: <i>'When my grandfather had Parkinson's disease and died of pneumonia, I wished I could have cured his illness.'</i>
Existence of role models	Encounter with someone who is enthusiastic and dedicated to work: <i>'My father is a doctor. When I was a child, I saw the way he treated a patient. I felt he was so cool.'</i>
Advice from close relatives	Recommendation from relatives including parents or siblings: <i>'When I couldn't make a career choice, my mother recommended that I become a radiographer, not a laboratory technician.'</i>
Future stable working environment	Taking life events and work–life balance into account: <i>'Getting a qualification of nurse is important. Even if I become pregnant and take maternity leave, I can return to work.'</i>

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Igniting minds: Debates enhance engagement in small group teaching for postgraduates

Debates consist of constructive argument between two persons or teams that defend opposing positions.¹ The topic is framed as a closed question that can only be answered in the affirmative or in the negative. Each position is defended by a team consisting of 3–5 members, typically. The team prepares beforehand the question of the debate from both positions (for and against).² The debate is divided into three types of turns, each with different functions: introduction or affirmative (introduction of the topic and line of argument), rebuttal (defence of one team's arguments and rebuttal of those of the opposing team) and conclusion (summary of interactions and arguments proposed in the debate).² Usually, the debate lasts for half to one hour.^{1,2}

The learning activities that require students to work together, share and apply information and reflect on their interactions with peers

provide opportunities to enhance clinical reasoning and professional behaviours.³ Debates provide opportunities for participation, active learning, cooperative learning and development of critical thinking.³⁻⁵ We examined the feasibility of using debate as a part of a seminar to enhance learning for postgraduates.

Participants comprised 16 postgraduate psychiatry residents attending the debate on 'legalization of cannabis'. Two residents were assigned to prepare 'for' and 'against' the topic, and all others were randomly divided into either of the two groups. Five key learning points each were identified before the debate. All the participants received relevant study materials. Debate included short PowerPoint presentations of 10 minutes each (i.e. the affirmative), 'for' and 'against' the topic. Thereafter, comments were solicited from the team members. Any point raised by the participant from one group was followed by a rebuttal from the other group. The discussions were actively facilitated and moderated. Finally, all the learning points were summarized by the residents who made the presentations. Feedback was obtained from all the participants after the session.

On the day of the debate, 14/16 (88%) participants were present; of them, 6 (43%) were in the 'for' group and 8 (57%) in the 'against' group. All the participants returned the completed feedback forms. Of the 14 participants, 9 (64%) had read the study materials provided, and 6 (43%) had looked at other sources for additional information. All agreed that they learned from the session; the reasons cited were 'more interaction', 'less presentation, more discussion', 'learnt more information' and 'new concept, interesting'. All the participants reported this method of learning to be better than conventional seminars. The reasons cited included 'more preparation/self-reading', 'active participation', 'more opportunity for involvement' and 'different than usual/not monotonous'.

The positive aspects of this experience were stated as, 'everyone participated', 'interactive', 'more opportunity to participate' and 'different from regular academics'. The negative aspects reported were 'deviation from topic', 'chaos during arguments/everyone speaking at once' and 'presenting arguments without giving facts'. The overall experience was felt to be satisfactory by 11 (79%).

Although many researchers view debates as more adversarial than other teaching methods, we found the experience more satisfying. The majority (79%) of our participants found it to be satisfactory and better than usual seminars. Participating in a debate enhances learning, whereas observing a debate does not.⁶ In our debate, all the participants had the opportunity to put forth their points, thus ensuring active participation. Debates enhance active learning as they encourage listening, reflecting on what others say and speaking.³ This type of learning follows the principles of adult learning and was well appreciated than the conventional seminars, which have fewer opportunities for interaction. Furthermore, debates have been found to enhance critical thinking among the participants.^{3,4}

Three-fourths of the students read the specific reading material provided to them and two-fifths looked up additional reading materials. Thus, the debate also encouraged self-directed learning, which is a step forward to life-long learning. Handouts that highlight key learning points can be distributed during or immediately after the debate to aid learning.

We choose to debate on 'legalization of cannabis', which is a controversial topic with advocates for and against it.⁷⁻⁹ Several such topics have been used in 'Controversies in Psychiatry' debate seminars at Pittsburgh School of Medicine.¹⁰ The students are motivated to search the recent literature to understand the pros and cons of the topic. The presenters identified key learning points and ensured that these are understood by all the participants. Such practice of 'trainees as teachers' has been shown to enhance team-based learning and is considered an essential component of postgraduate curriculum.^{11,12}

However, the downside was some chaos and deviation from the topic when participants argued. Therefore, the moderator should be

mindful of unnecessary digressions from the topic by providing opportunities for everyone to participate and not letting a few to dominate the discussions. The topic for the debate should be carefully chosen as not all topics are suitable for debating. If there is some controversy around the topic, students are likely to actively participate as was seen in our case. Nevertheless, debates have been extended to several areas of learning, for example, what tests to order in case-based debates.¹³ Limitations of our study include a small sample, and that the learning method was tried only once.

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REFERENCES

- 1 Edwards R. *Competitive debate: The official guide*. New York: Penguin Group; 2008.
- 2 Merida D, Baratas I, Arrue M. Guided university debate (GUD): A new promising teaching and learning strategy for undergraduate nursing students. *Nurse Educ Today* 2016;**45**:69-71.
- 3 Darby M. Debate: A teaching-learning strategy for developing competence in communication and critical thinking. *J Dent Hyg* 2007;**81**:78.
- 4 Bell EA. Debate: A strategy for teaching critical thinking. *Nurse Educ* 1991;**16**:6-7.
- 5 Griswold LA. Debate as a teaching strategy. *Am J Occup Ther* 2000;**54**:427-8.
- 6 Lampkin SJ, Collins C, Danison R, Lewis M. Active learning through a debate series in a first-year pharmacy self-care course. *Am J Pharm Educ* 2015;**79**:25.
- 7 Wilkinson ST, Yarnell S, Radhakrishnan R, Ball SA, D'Souza DC. Marijuana legalization: Impact on physicians and public health. *Annu Rev Med* 2016;**67**:453-66.
- 8 Budney AJ, Borodovsky JT. The potential impact of cannabis legalization on the development of cannabis use disorders. *Prev Med* 2017;**104**:31-6.
- 9 Caulkins JP, Kilmer B. Considering marijuana legalization carefully: Insights for other jurisdictions from analysis for Vermont. *Addiction* 2016;**111**:2082-9.
- 10 Ganguli M, Rancurello M. Starting fights: The debate as teaching tool. *Acad Psychiatry* 1990;**14**:39-43.
- 11 Ravindranath D, Gay TL, Riba MB. Trainees as teachers in team-based learning. *Acad Psychiatry* 2010;**34**:294-7.
- 12 Crisp-Han H, Chambliss RB, Coverdale J. Teaching psychiatry residents to teach: A national survey. *Acad Psychiatry* 2013;**37**:23-6.
- 13 Jhaveri KD, Chawla A, Shah HH. Case-based debates: An innovative teaching tool in nephrology education. *Ren Fail* 2012;**34**:1043-5.

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Tumour-induced osteomalacia due to thymolipoma

Tumour-induced osteomalacia (TIO) is a rare paraneoplastic syndrome due to secretion of fibroblast growth factor-23 (FGF-23) from tumours located in extremities or head and neck and rarely in the thorax.¹⁻⁴ We report a patient with TIO caused by a thymus tumour. The patient recovered following resection.

A 31-year-old woman presented with bilateral hip and thigh pain with difficulty in walking for the past 4 years. She was bedridden but did not suffer from any other systemic illness or fractures. Neurological