

# Assessing perception of medical teachers on the implementation of elective module in an Indian medical college

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Volume: 1, Issue: 1, Pages: 8-14

DOI: <https://doi.org/10.37446/jmedsurg/rsa/1.1.2023.8-14>

Received: 10 June 2023 / Accepted: 10 November 2023 / Published: 31 December 2023

**Background:** As per recent recommendations of the National Medical Commission (NMC) of India, our medical college introduced an elective module for the MBBS admission batch of 2019. Being the inaugural implementation of its kind within our institution and across the nation, our study was designed to gauge the faculty's perception of the elective module. A survey with a cross-sectional design was carried out among the faculty members supervising the implementation.

**Methods:** A pre-validated questionnaire, formulated by members of the Medical Education Unit (MEU) at our college, was utilized for data collection. The questionnaire was distributed to faculty members through online platforms such as WhatsApp groups and email, using a Google Form. The data analysis considered responses from a cohort of faculty members actively engaged in the elective module implementation.

**Results:** The faculty consensus indicated that the elective module's objectives were effectively achieved. The faculty were praised for their supportive and accommodating demeanor, with active involvement in facilitating the electives. The majority of faculty members acknowledged the elective module as a valuable academic activity, citing an appropriate time duration that allowed for the demonstration of creativity and encouraged teamwork. Faculty members expressed apprehension regarding the process of students obtaining signatures in the logbooks.

**Conclusion:** The study's findings indicate a positive reception of the elective module among faculty. This positive perception underscores the value of electives as learning experiences, offering learners the opportunity to immerse themselves in a chosen career stream, discipline, or research project.

**Keywords:** *elective module, medical faculty, perception, India*

## Introduction

The origins of the concept of electives can be tracked back to the University of Virginia in the USA. (Howard, 1918). An elective, also referred to as an 'optional' course, typically entails a brief duration and is not obligatory. Students can 'elect' or choose courses from a variety of accessible options based on personal interests. Elective courses are part of the medical curriculum at many universities throughout the world (Mahajan & Singh, 2021). The faculty's perception of electives for undergraduate medical education has been the subject of this academic study (Daccache et al., 2020; Suzuki & Nishigori, 2018; Willott et al., 2019; Lumb & Murdoch-Eaton, 2014; Kusurkar & Croiset, 2014; Cherniak et al., 2013).

The advantages of electives have been emphasized in a number of studies. These advantages include increased knowledge and abilities, better ability to think critically and solve problems skills, improved interpersonal and collaborative skills, improved inspiration and confidence in oneself, greater breadth of education, possibilities for lateral thinking, experimental learning, immersive instruction, and the growth of a curiosity-driven spirit (Stone et al., 2022; Al-Taher, 2022; Khilnani & Thaddanee, 2022; Storz, 2022; Ramalho et al., 2020; Bath et al., 2020; Stys et al., 2013). Furthermore, electives have an impact on students' future decisions about the way they practice medicine (Dada et al., 2022; Rudasill et al., 2022; Alghamdi et al., 2022; Anand & Sankaran, 2019; Alkhaneen et al., 2018; Zuckerman et al., 2016). In contemporary medical education, there is also a preference for international electives among medical students (Storz et al., 2021; Hasebe et al., 2022).

As a result, electives were formally added to India's undergraduate medical curriculum MBBS admission batch of 2019 by the Board of Governors in Super-Session of the then Medical Council of India (Regulations on GME (Amendment), 2019). In order to facilitate seamless adoption in medical institutions throughout India, the National Medical Commission (NMC) published an elective module (Medical Council of India, 2020). Our medical college introduced the elective module in March–April 2023 in accordance with NMC rules, since the 2019 MBBS admission batch finished third-year (first part) in February 2023 (Medical Council of India, 2020). We started this study to acquire the medical faculty's viewpoint on the elective module's implementation because it was the first time it had been implemented in our institute and across the nation. The outcomes of our study aim to inform suitable modifications and enhancements to elective modules that will be designed for future medical graduates in India.

## Materials and Methods

A cross-sectional questionnaire survey was conducted among faculty members actively engaged in the elective module implementation at our institute. The study received prior approval from the ethics committee of our institution and adhered to the standard ethical guidelines (Ethics guidelines for internet-mediated research, 2021; The Declaration of Helsinki, 2008). This fully non-experimental, anonymous study was started only after informed consent was received from all participants.

Members of our institute's Medical Education Unit (MEU) created a pre-validated questionnaire to collect opinions on how the elective module was implemented. An online Google form was used to create the questionnaire, and all participants were sent the link via email and a WhatsApp group. 31 academic members in all answered the questionnaire. The study rejected three participants for not providing valid consent to participate and one participant for submitting incomplete replies. As a result, 27 answers were used in the data analysis.

Microsoft Excel 2007® and SPSS® for Windows Inc., Version 20, were used for data entry and statistical analysis. Thematic analysis was used to examine the qualitative data, and proportions were reported as percentages.

## Results

The predominant response from the faculty indicates that the objectives of the elective module were predominantly achieved. A considerable number of faculty members expressed that students demonstrated receptiveness to their educational needs and proactively engaged in the elective activities, as summarized in Table 1.

Furthermore, a majority of the faculty concurred that the elective served as a commendable academic endeavor, with an appropriate time duration allowing for the display of creativity, lateral thinking, and collaborative teamwork. The whole experience of the electives was predominantly rated as good, very good, or excellent by most faculty members, as outlined in Table 2. While the elective provided a new perspective on preclinical subjects, some concerns were raised about the administrative burden of endorsing numerous signatures in the logbooks, as documented in Table 3.

Faculty participants highlighted several advantages associated with electives, including the prospect to refresh clinical understanding, develop new clinical abilities, acquire additional knowledge, and cultivate new skills, thereby gaining enhanced exposure to patients. The supportive nature of fellow faculty members emerged as a notable strength of the program, as delineated in Table 4.

Despite the positive feedback, a notable proportion of faculty members acknowledged that the program implementation did not meet their expectations, attributing this deviation to their demanding schedules, as detailed in Table 5. Additionally, faculty members provided valuable suggestions for program improvement, as outlined in Table 6.

**Table 1. Faculty responses to questions on elective module**

Question	Yes	No	Maybe	Cannot Say
	n (%)			
Do you think the goals of the elective modules were predominantly realized?	21 (78)	0	5 (19)	1 (3)
Did the students prove to be responsive to their educational needs?	26 (97)	0	1 (3)	0
To what extent were you actively engaged in the elective activities? If not, what factors contributed to your limited participation?	27 (100)	0	0	0

**Table 2. Perceptions of faculty regarding electives**

Perceptions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The academic activity was highly commendable.	9 (33)	15 (56)	3 (11)	0	0
The time duration was proper.	4 (15)	14 (52)	6 (22)	2 (7)	1 (4)
It offered a chance to showcase creativity and lateral thinking.	9 (33)	14 (52)	4 (15)	0	0
It presented an opportunity for collaborative teamwork.	12 (44)	13 (49)	2 (7)	0	0
	<b>Excellent</b>	<b>Very good</b>	<b>Good</b>	<b>Poor</b>	<b>Very Poor</b>
What was your overall impression of the elective experience?	6 (22)	5 (19)	13 (48)	1 (4)	2 (7)

**Table 3. Some Salient perception of Faculty about elective module in own language**

"Had the opportunity to reconsider preclinical subjects from a distinct viewpoint."
"Organising the electives allowed us to acquire new skills enhancing our interest in the electives."
"Putting signatures in students' logbook was exhausting."
"A significant drawback is that only one subject had a clinical orientation, resulting in a lack of clinical exposure to other subjects."

**Table 4. Strengths of the elective module as described by faculty (Thematic analysis)**

Strengths of the module	n	%
Opportunity for Acquiring New Knowledge	7	26
Prospect for New Skills Development	6	22
Enhanced Patient Exposure	4	15
Supportive Faculty Members	3	11
Opportunity for Fundamental Aspects Learning	2	7
Opportunity for Deeper Subject Understanding	2	7
Interactive Learning with Students	1	4
Opportunity for Healthcare Team Collaboration	1	4
Useful for Future Practice	1	4
Confidence-Building Aspect	1	4
Enhancement of Time Management Skill	1	4
Appropriate Objective Setting	0	0
Engagement in Teaching-Learning Activities	0	0
Enjoyable and Informative Experience	0	0
Refreshing Academic Break	0	0

**Table 5. Weaknesses of the elective module as described by faculty (Thematic analysis)**

Weaknesses	n	%
No deficiencies observed	14	51.85
Not meeting expectations due to busy schedules of faculty	9	33.33
Limited diversity among topics	3	11.11
Shorter time duration	2	7.41
Inadequate implementation	1	3.70
It should emphasize practical orientation and be accessible within respective departments	1	3.70
Commencement by the NMC occurred unexpectedly	1	3.70

**Table 6. Salient suggestions by Faculty about elective module in own language**

"The decision made by NMC is considered the most favorable."
"Students should receive all logbook signatures promptly to prevent any inconvenience."
"It is recommended to conduct elective selection online rather than offline."
"Incorporate additional subjects such as emergency medicine and trauma management."
"Consider improving the allotment based on topics rather than assigning by department."
"Participation in activities should be voluntary."

## Discussion

In agreement with the recommendations set forth by the NMC (Medical Council of India, 2020), our medical college introduced an elective module for MBBS students belonging to the 2019 batch. Given the novelty of this implementation within our institution and nationwide, we started with a cross-sectional poll to find out how medical faculty members felt about this elective module being implemented at our medical college. All participating faculty expressed active involvement in the elective module, with the majority highlighting the helpful and responsive nature of faculty members in organising the program. Additionally, faculty affirmed the successful achievement of the module's objectives, aligning with analogous findings in previous research studies (Ahsin & Saeed, 2016; Couper, 2015).

The overall perception of faculty toward the elective module was notably optimistic, with a significant proportion rating the experience as 'good' or higher. Faculty acknowledged the module as a valued academic activity with a suitable time duration, providing them with opportunities to showcase creativity and lateral thinking while functioning as integral members of healthcare teams. The elective experience also afforded them a new perspective on preclinical subjects. However, faculty encountered challenges related to signing in the logbooks from all elective departments, a concern echoed in prior studies (Harvey et al., 2020; Ramalho et al., 2020; van den Broek, 2017; Wu & Greenberg, 2016; Agarwal, 2015).

Faculty members recognized electives as a means of expanding one's knowledge base, honing one's skill set, and getting hands-on experience with patients while discussing the program's merits. They also highlighted the benefit of interacting with faculty members and their helpfulness as program strengths. While most faculty perceived no weaknesses in the program, some noted that it did not meet their expectations due to the hectic timetables of faculty, a sentiment echoed in past studies (Drum et al., 2021; Neel et al., 2018).

Furthermore, faculty provided valuable recommendations to enhance the program, including the timely issuance of logbook signatures to prevent student inconvenience, transitioning elective selection to an online platform, and the inclusion of subjects like emergency medicine and trauma management. These insights offer constructive recommendations for refining future implementations of the elective module.

## Conclusion

Electives constitute a significant component of the bachelor medical education curriculum. The successful implementation of the elective module at our institution resulted in a positive overall experience for the faculty. Given its success, there is a compelling argument for its continued promotion and expansion, with the inclusion of additional topics to offer a more diverse range of selections. This calls for further research on a broader faculty population

nationwide. Moreover, it is imperative to study the viewpoints of students during the design and implementation phases of elective modules.

### Author contributions

Dr Jitendra Patel was involved in study design and development of research article including data collection. Dr Pratik Akhani wrote the entire manuscript including data analysis and interpretation.

### Funding

No funding

### Conflict of interest

The author declares no conflict of interest. The manuscript has not been submitted for publication in other journal.

### Ethics approval

Not applicable

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