THE ROLE OF MEDICAL EDUCATORS- PERCEPTION OF INDIAN MEDICAL STUDENTS

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ABSTRACT

BACKGROUND

An educator is someone who not only teaches but influences an individual as well. He/she offers direction, mentorship, career counselling, coaching and introspection; provides feedback and helps in moulding an individual's personality. Given the importance of formal educators and the influence they have in moulding young Indian individuals, there is need for research which can cover this aspect of education.

The perception a student has of an ideal educator, the factors influencing behaviour and the role of the educator in shaping the backbone of an individual were the key objectives of our study.

MATERIALS AND METHODS

This is a descriptive study. Fifty students from the final year MBBS course at Goa Medical College participated in a qualitative study comprising of a one-on-one in-depth personal interview. This study helped to identify different role expectations of students from medical educators, the impact of student's experiences on their current perception of an "Ideal Medical Educator" and the influence of teacher's guidance on various areas of a medical student's life.

RESULTS

Our study reveals that the notion of a medical educator from the student's perspective evolves over time from being recognised as a mere source of knowledge to being accepted as an all-round facilitator. Qualities appreciated highly by students in a medical educator were approachability, depth of knowledge, communication skills and ability to unleash creativity.

CONCLUSION

Students seek a facilitator role from teachers in deciding their career path and want them to promote an environment of independent thinking. The findings of this study could provide insight into areas of medical education, which could be positively influenced by a good educator.

KEY WORDS

Medical Educators, Medical Students, Medical Education.

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BACKGROUND

A lot of people hold the designation of a teacher, but few enjoy the credentials of an educator. An educator is someone who not only teaches, but influences an individual as well. He/ she offers direction, mentorship, career counselling, coaching and introspection; provides feedback and helps in moulding an individual's personality.

According to Griffin,⁽¹⁾ teaching is a process which is constantly under constraint. The perceptions of the teacher influence his/ her teaching. The narrower the perception, the more restricted is the teaching. There is need to redefine the guiding principles of teaching in context of today's learner generation.

There is one area of research which states that an educator can play two roles, one is the role of a teacher whose main challenge is to learn and think in context to the demands of teaching⁽²⁾ and the other role is of a mentor which is of a highly interpersonal nature and takes place in the vocational setting.⁽³⁾

Ferrar⁽⁴⁾ has highlighted the impracticality behind the approach of separating the two roles from each other.

By following innovative teaching practices like open book examinations, collaborative form of assessment and research projects as per unique requirements of individual students, educators can promote more academic integrity, team work, creative thinking and encourage a healthy competitive spirit in the classroom.⁽⁵⁾

The medical education system in India is more theory oriented rather than practically applicable. There exists a need to redesign the system, so that it can evaluate learning outcome not only based on examination marks but on the basis of other innovative measurable parameters.

The influence of an educator on an Indian student has been prevalent since time immemorial. It goes back to the Indian model of Guru-Shishya. The guru is a guide or teacher and the shishya is the student he takes under his wing. The guru acts as a knowledge source and shishya has the opportunity to get fully trained and yet shoulders the responsibility for his own art form.⁽⁶⁾

A change in the educator's perception can bring about change in the level of student's motivation towards progress and learning. An educator should know the influential factors of his/ her teaching practices on student's lives and this may help in determining effective teaching behaviour.

Given the importance of formal educators and the influence they have in moulding young Indian individuals, there is need for research which can cover this aspect of

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education. The perception a student has of an ideal educator, the factors influencing behaviour and the role of the educator in shaping the backbone of an individual were the key objectives of our study.

MATERIALS AND METHODS

Sample

The participants in the study comprised a sample of 50 MBBS students (25 males and 25 females) from Goa Medical College.

Inclusion Criteria

Students pursuing graduate studies currently in their final year. All students were of Indian Origin.

Tools/ Materials

A semi-structured interview template comprising of research questions.

Procedure

A pool of medical students meeting the inclusion criteria for the study was created and the sample of 25 males and 25 females was randomly drawn.

Written informed consent was obtained from medical students selected for the study including permission for audio recording of the interviews. The interviews were conducted by a panel of two investigators- one of whom administered the questions and the other who recorded the proceedings. This panel remained constant for each interview throughout the study. Subsequently, the interview template including questions were administered. Each interview was transcribed and the data was analysed using content analysis methods.

While conducting every interview, respondents were given a brief description of the research study and its aim. There is a possibility that respondent's answers can reflect their opinions or judgements rather than true experience. To avoid such a scenario, further probing of respondents was

done by the interviewers as per the situation. Confidentiality was ensured.

Content Analysis

The procedure followed is the one suggested by Glaser,⁽⁷⁾ Krippendorff⁽⁸⁾ and Weber.⁽⁹⁾ All comments of research applicability were selected and grouped into major themes. The main purpose behind following this approach was to reflect the core meaning of respondent statements. Statements with unique ideas were reflected in the content analysis, but repetition of the same ideas was avoided.

An inductive approach was followed for content analysis where individual comments were grouped into possible dimensions. Keywords of statements have also been used as a criterion for identification of suitable dimensions. Further, dimensions were clubbed into major themes based on the underlying meaning.

RESULTS

1. How would you describe your Experience of the Indian Medical Educational System so far?

Interviewees made 84 statements in response to the question "How would you describe your experience of the medical educational system so far?" These 84 statements were characterised into 31 dimensions, which were further grouped into 6 major themes.

Experience defined by- 1) Use of Knowledge and Delivery Methodology, 2) Overall impact on Personal Development, 3) Change in the System, 4) Outcome Orientation, 5) Impact of Teaching process, 6) Scope for Change.

Respondents mostly described their Experiences

1. Restricted to theoretical knowledge and rote learning (14%).
2. The learning is highly academic and performance oriented (11%).
3. The learning environment is highly competitive and there is a need for change in the medical education system (18%).

Dimension (Number of Statements)	Sample Statements
Experience defined by knowledge use and delivery methodology	
Focus on theory	Too much emphasis on textbook based assessment
Rote learning	The curriculum unfortunately focuses more on repetition rather than reasoning
Remembering classroom information	You never take more than 20% of your learning back home
Forced to answer tests repeatedly	Had to do compulsorily, this put pressure on us constantly
Experience defined by overall impact on personality development⁽¹⁰⁾	
Overall development	They actually give their students a more holistic approach to everything
Personality development	Basically, this was all in preparation to get you ready for challenges
Experience defined by change in the system⁽¹¹⁾	
Paradigm shift	Methodology has changed from normal to interactive
Progressive change	Education systems do not expect you to rote learn. They expect you to read everything in and around the topic
Challenges	Difficulty in adjusting to traditional methods
Rigidity of system	Not different in this aspect
Experience defined by outcome orientation⁽¹²⁾	
Actual/ Real learning	They do not expect you to rote learn, they expect you to read everything in and around the topic
Performance oriented rather than learning oriented	The learning has taken a back seat and you are just expected to perform

Impractical	Lack of vocational skill learning
Academically oriented	Make us study a lot
Inhibit individual thinking	Cram everything and reproduce on paper, inhibits the student thinking
Experience defined by impact of teaching process	
Encouraging (towards your interest areas)	They always encouraged us to take part in extra-curricular activities
Responsibility	You become grounded
Enjoyable	Once in a while we used to go for field trips and studies came as a second priority, that is what I enjoyed most about the system
Warm and friendly	System is rigid, but at the same time it is very warm, friendly and welcoming
Taught hard working	Where since childhood we are taught to be very hard working
Irrelevant	What is the relevance of those old medical concepts in today's world?
Boring/ Monotonous	It was very monotonous, just rote learning and tests
Competitive	I had to compete for marks, you have to perform to the highest level
Overbearing	Most of the time you are just over-worked
Disciplined	Too much discipline
No seriousness/ No dedication	Let alone the students, even the teachers are not serious about studies
Experience defined by scope for change	
Overall change need	I think the medical education system does need an overall change in that sense
Overall learning	Need of an overall education, not just study
Opportunity to explore	Student should be given more opportunity to explore extracurricular activities
Assessment fallacy	The assessment method needs to change
Table 1. Experience of Medical Education System	

2. Describe the Characteristics of an Ideal Medical Educator based on Your Experience?

Interviewees made 78 statements in response to the question "What, in your opinion, are the characteristics of an ideal educator?" These 78 statements were characterised into 29 dimensions, which were further grouped into 4 major themes.

Characteristics are divided as- 1) Work related traits, 2) Personality traits, 3) Behavioural traits, 4) Facilitator toward overall growth.

Interviewees mostly described their Ideal Educator to be-

1. A follower of practical approaches, someone who uses live examples (11%).
2. An effective teacher and an engager (13%).
3. An effective communicator who follows innovative techniques (10%).
4. Facilitator towards overall growth (16%).

Dimensions (Number of Statements)	Sample Statements
Work related traits	
Committed toward the subject	He should be committed and passionate about the subject
Teach via live examples	When your educator comes up with more of personal experiences and relatable things, students relate to it
Provides feedback	They should give a class feedback at least once a week
A two-way communicator	He should learn from students also
Follow practical approach	Should not give theoretical knowledge only
Who promotes constructive learning	Idea is that there should be constructive learning
Good content planner	Good educator according to me is someone who has tried to gauge what is the prior learning of the student and then designed their curriculum in that way
Knowledgeable	He should be very knowledgeable about his subject
Audience centric approach	He should try to find a very simple way to explain it, the way the students will understand
Behavioural traits	
Talent recogniser	He should try and identify talents in each student and which is the best role for them
Innovator	An ideal educator never just uses bookish knowledge to teach a class, they use different kinds of methods
Engager	An educator has to be very engaging and interactive
Effective communicator	Should be able to impart the knowledge very well
Approachability	Students should be able to approach him without fear
Interactive	If you have a monotonous educator, it becomes very boring for the student
Effective teacher	Effective teacher would be someone who will create interest in subject
Encourager	They understood students at every age and actually encouraged them to explore the world
Personality traits	
Friendly	We had a very close and friendly relationship with teachers. They were more of elder brothers rather than teachers

Who can develop a social bond	That is what I call an ideal educator, someone who is with the student throughout the day
Unbiased	I think bias is something that should not be there, favouritism should not be there amongst educators
Trustworthy	Must be able to build a relationship of trust with his students
Respect student	Ideal educator should respect students
Caring	He should be warm and caring
Open minded	I think an educator should not maintain a closed perspective
Well behaved	Also, equally who knows how to treat students well
Empathetic	The educator must have empathy toward students of diverse backgrounds and cultures
Facilitator towards overall growth⁽¹³⁾	
Act as a Mentor	If you really want to make a difference to somebody, you have to be more than a teacher
Direct group towards a goal	Ideal educator should direct group and take everyone together
Help in overall development	Not just studies but be a guide in more than one area of assistance
Table 2. Characterisation of an Ideal Medical Educator	

3. Describe the Attributes of some of the Educators that you have encountered?

Interviewees made 70 statements in response to the question- "3) Describe the attributes of some of the educators that you have encountered?"

These 70 statements were characterised into 29 dimensions, which were further grouped into 6 major themes.

Attributes are classified into- 1) Accommodating Approach, 2) Casual Approach, 3) Structural Approach, 4) Engaging Approach, 5) Behavioural Approach and 6) Realistic Approach.

Interviewees mostly described their Encountered Educator Attributes as them being-

1. Systematic, theoretical and restricted in their approach (20%).
2. Strict, disciplined and closed minded (18%).
3. Those who observed educators following a realistic approach (14%).
4. Accommodating and approachable (14%).

Dimensions (Number of Statements)	Sample Statements
Accommodating approach⁽¹⁴⁾	
Good listener	Any ideas you have, the professors are ready to listen to it
Open-minded	He was open and gave me proper time
Helpful	They will give you some inputs and feedback and even refine your ideas
Two-way communicator	She provided us with good feedback
Relatable	In college also, there were a lot of younger faculties who were more relatable
Approachability	At any point in time if we had any issues; homesickness besides studies, we could speak to someone
Casual approach	
Carefree attitude and lenient	Teachers who have been so lenient that they do not really care what you do in class
Structural approach	
Systematic	She was one of the most systematic
Disciplined	Most disciplined and very smart woman I have ever met
Target oriented	But a lot of times I see that teachers are more focused on achieving their targets
Restrictive in teaching approach	They should not restrict themselves and try to have a very comprehensive view of the learning
Theoretical	They taught bookish knowledge
Strict	I have met teachers who have been extremely strict
Close-minded	They kind of force their techniques of problem solving on you
Engaging approach	
Interactive and Fun	Lot of teachers were always very interactive, they had lot of role play
Impactful	They shared their personal experiences, the challenges they have taken
Facilitator	Every teacher tries to put confidence in their students to get them to come out of their shell
Behavioural approach⁽¹⁵⁾	
Empathetic	The educators in medical school were not all empathetic
Sympathetic	The educators in my medical school were sympathetic
Manager	Educators are in the role of a manager, they will grill you
Diligent	He provided me with different ways to solve the problem
Responsible	We felt that Teachers are responsible for us
Caring	There was medical teacher who used to be very loving and caring
Good communicator	His communication skills were so good that students never bunked his lectures
Honest	That particular teacher was very honest
Realistic approach⁽¹⁶⁾	
Application oriented	Make students understand about the practical aspects

Directional	He gives me proper direction
Contributor	Who I think is a really good educator is who really contributed to my learning
Encourager	They would pick up on talent and encourage you to do good stuff

Table 3. Encountered Indian Medical Educator's Attributes

DISCUSSION

This study examined the relationship dynamics of medical educators and students. The study aimed at exploring the influence of medical educators in context of student's past experience with teachers. Although, the study addressed many areas, we will discuss some findings which have possible significance in the context of the present study.

Findings coherent with earlier research.

Respondent's perceptions and expectations of a medical educator's role and their experience with past educators reveal certain findings, which are similar to findings of previous research. Respondents have identified certain attributes of medical educators, which could make them facilitators towards overall growth like Personal Goal Motivator, a Talent Searcher and Career Strengths Identifier. Students feel that development of such attributes can make a medical educator more of a facilitator rather than only a teacher. Some of these findings have been discussed in previous research studies. Salter and Gannon⁽¹⁷⁾ stated that mentors of young people have to understand the needs of young people and adopt a non-directive approach. When respondents were asked about the importance of the role of educators in their career path, students were of the opinion that medical educators influence their career in two ways, one by acting as a moulder who helps in identifying their strengths and finds hidden talents in them and the other by acting as a career guide and knowledge source. This finding is similar to the findings of Scanlon⁽¹²⁾ and Weinberger⁽¹⁴⁾ who stated that beyond a relationship of trust, teacher and student are enrolled in a career path decider relationship. Their research findings state that teachers are not only mentors, but they play a greater role as compared to a mentor in any student's life. Similar findings have been revealed in this research study. Medical students perceive their educators as not only a knowledge source, but as facilitators towards overall growth.

The research study reveals that medical students have experienced more theory based learning in their school phase. Emphasis was given more to grades and marks rather than self-learning and application. Respondents have described their encountered medical educator's attributes as systematic, theoretical and restricted. Findings have revealed that medical educators with a more accommodating and application based approach have more positive influence on overall growth of a student. A medical educator can modify his/ her approach to act as a facilitator toward overall development of a student.

In the following sections, we elaborate on the research study findings that suggests a dynamic influence of medical educators on students. This is in context of student's perception of an ideal medical educator and student's past experience with Indian medical educators and the Indian medical education system.

Student's past experience with medical education system and student's perception of an Ideal Medical Educator

Student's experience with the medical educational system was defined by methodology used by the medical educator to

deliver the knowledge and its overall impact on student's development. The Indian medical education system promotes performance based learning and the learning environment in this system is highly competitive and academically oriented.

Past experiences of students with this education system has certainly influenced the perception of students toward an ideal medical educator. Findings revealed that the ideal medical educator should act as a facilitator towards overall growth and should follow innovative teaching methodologies to generate relevant interest in his/her subject. There is one area of research, which states similar findings. It states that one role of a medical educator is to learn and think in context of demands of teaching⁽¹⁸⁾ and the other role is of a mentor which is of a highly interpersonal nature. This role of the educator acts as a facilitator towards overall development of a student and has been recognised as the most favourable attribute of an ideal medical educator by the respondents of our study.

Role of an Educator in deciding the Career Path of a Student (Based on Student's Perception)

Findings revealed that a medical educator's role in the career path of a student is influenced by how student's perception is affected by encounters with some of the past educators in their life. Some of the findings also revealed a link between perceptions of a student formed as per their past encounters with educators and student's perception regarding educator's importance in deciding his/ her career path. Respondents who encountered closed-minded, strict and disciplined educators have experienced very little influence on their career path. 14% of the respondents who have encountered accommodating, friendly and approachable educators have realised major influence on their career decision making process.

An educator can determine effective teaching behaviour if he knows about the influential factors of teaching practices on students' lives.

Student's Perceptions Regarding Educators over time and the Desired Ideal Approach of an Educator

To identify desired behaviour in an ideal educator, respondents were asked to assume themselves to be the educator. As per majority of the respondents (16%), making a class fun and interactive by means of innovative teaching methodology is the priority. Some of the respondents have also revealed that empathetic nature of an educator is one of the most desirable traits.

Most of the students who had experienced a disciplined and restrictive teaching methodology of educators in their school phase yearned for open, flexible and participative learning in their later phase. This finding can be seen as a further extension of the findings of a few research studies,⁽¹⁹⁾ which we have come across that have clearly stated how students and teacher relationships change gradually over time.

CONCLUSION

The current study was conducted on fifty medical students. Interview questions were designed to gain in-depth knowledge of the same. The areas which this qualitative research study covered were- student's experience with the Indian Medical Education System so far, how student's perception regarding educators evolved over time and what exactly students look for in an Ideal Medical Educator. This study revealed that Indian medical students believe that the learning environment in the current education system is highly competitive and the teaching approach is more achievement oriented. It came out as an important belief parameter of students that the present medical education system is restricted to theoretical knowledge and it promotes rote learning. Rote learning acts as an irritant to a person who is looking forward to value addition by means of education. Teaching methodology should inculcate practices of real learning assessment rather than performance evaluation.

Respondents mostly described their ideal educator as someone whom they could approach without any form of hesitation, someone who followed innovative and engaging teaching practices. The most important characteristic which some of the respondents described of an ideal educator were that he was passionate about his own subject and thus able to generate interest of his students. Perception of an ideal medical educator has developed in the minds of students after having certain good and bad experiences with educators in their lives. Some of the attributes of educators which students did not really appreciate were their strict nature and narrow mindedness. Students prefer an educator who can be more approachable and accommodating rather than a disciplined person with restrictive approach.

One of the most interesting findings of the study was how student's perceptions evolved gradually from school to college. The majority of respondents mentioned that the school environment was limited to classroom teaching. It was a form of one way communication. Theoretical learning was prevalent in school phase. But the perception of students changed once they moved into college where they felt that they preferred application based learning. Students realised the importance of two way communication between students and medical educators in college.

The study revealed that the majority of respondents have two types of belief patterns when it comes to the role of an educator in influencing a student's career path. One belief pattern suggests that students look forward to educators as career guides who can advise them about new opportunities, relevant specialties of future study, etc.

The other belief pattern suggests that students see medical educators as career moulders who can identify hidden talent and can help in leveraging these strengths.

A person understands the situation better when he has faced a similar situation himself. Respondents were asked about what they would do differently if they themselves were the medical educators. This question revealed some crucial answers like respondents would like to follow certain innovative teaching practices, which could promote high order individual thinking. This study is a small step towards identifying parameters which could explain the student's perception of an educator and how it evolves with the current medical education system.

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