



Curiosity and interest towards medical sciences amongst medical undergraduates' students – A cross section study in central India

¹Runali Pravin Bhange, Second MBBS, NKP Salve Institute of Medical Sciences and Lata Mangeshkar hospital, Digdod hills Nagpur 440019 Maharashtra

²Dr Suresh Chari, Professor Biochemistry, Director Research and Medical Education Technology, NKP Salve Institute of Medical Science & Research Centre & Lata Mangeshkar, Hospital, Nagpur.

³Dr Madhur Gupta, Professor and head biochemistry, NKP institute of medical sciences and research center, Lata Mangeshkar hospital

Corresponding Author: Dr Suresh Chari, Professor Biochemistry, Director Research and Medical Education Technology, NKP Salve Institute of Medical Science & Research Centre & Lata Mangeshkar, Hospital, Nagpur.

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Abstract

Context: Literature indicates that there is changing response of students towards this chosen field which is worrisome. The deviation from concept building to only passing can threaten the knowledge gain in the process. Honesty and integrity and habit of asking why, is becoming extinct.

Aims: The objective of the present study is to know the mindset of students towards academics, differences in their perceptions in the willingness, their interest in the way of teaching. Study also addresses to find if the students are unable to perform in their practical and clinical areas and to help the students to see the factors responsible for their decreasing performance, if any.

Settings and Design: This cross-sectional study was carried out at NKP Salve Institute of Medical Science & Research Centre & Lata Mangeshkar Hospital, Nagpur

Material and methods: 258 students from all the years of MBBS were given validated questionnaire which had 25 closed ended and two open ended questions. Questions regarding their interest and focus on studies, about the teaching and lastly their views about current situations or the change they want to see were asked.

Results: About 71.4% students agreed that the curriculum was interesting. Around 76.8% students showed interest in the academics. 45.4% find the teaching pattern good. 64% felt pressured by PG entrance. % agreed that extra private classes for PG entrance is taking them away from present studies. About 53.9% have a goal of only passing exams. 57.7% medicos do not take distinction as a success. more than 60% felt that curriculum is designed properly. Almost 45% disagreed that 75% attendance should be taken seriously by the institute.

Conclusion There is no significant approval that there is decreasing interest. Students find the studies interesting as they have chosen the field. Study helps us in understanding student's thoughts about the learning process and their view that some changes should be there.

Keywords: Curiosity, Interest, Medical Science, Undergraduate.

Introduction

In this era of high-tech technologies conquering, it has become immensely important for a doctor to stabilize his deep roots of knowledge. This can only occur by the accurate and precise understanding of the concept. These concepts are built in the primary years of education. The basic knowledge and practical thinking help a doctor to become a professional. There is a changing response of students towards this chosen field (1-11) which is not a good turn. When we say changing response, it means that their honesty and their sincerity towards study (4). The deviation from concept building to only passing can threaten the knowledge gain in the process.

Despite considerable investment, there appears to be little change in perceptions (1). More and more involvement of students in the clinical field should increase. - Honesty and integrity are key attributes of an ethically competent physician (5). The habit of asking why, is becoming extinct, which is the base of medical science. The investment of students towards the applied knowledge rather than only going to the next step is not a good sign (3). The comprehensive knowledge of both theory and practical is the actual success for a medico. Theory may exceed practical, but reverse should be the case (4). Marks cannot give you the success, but knowledge and concepts can (5).

Objective

The objective of the present study is to know the mindset of students towards the academics. The differences in their perceptions in the willingness or their interest in the way of teaching currently in practice. To know the areas which are to be worked on, to know how exactly the students feel about their studies and the process of studying. The study also addresses the reason the students are unable to perform in their practical and clinical areas and to help the students to see the factors responsible for their decreasing performance, if any.

Methodology

The methodology of research is cross sectional questionnaire based. The students from all the years of MBBS (different academic years) were given a questionnaire. The privacy and identification of the students was maintained. The questionnaire was sent through online mode in Google forms format. Questions regarding their interest and focus on studies were asked. There were questions about the teaching pattern, lastly their views about current situations and whether or not they want changes in the pattern of education. The questionnaire included 27 questions. The study tells us the differences in perception of students, the need to implement changes, the reasons for the lack of interest (with few students) and to know if they want support and help from the teaching staff to gain their interest back.

Inclusion Criteria: medical undergraduates of different academic years which were willing to participate in the research.

Exclusion Criteria: none

Result

The questionnaire was distributed to a total of 258 students. All of whom were of different batches and academic years.

There is total 27 questions out of which 25 were close ended using the following Likert scale.

A – strongly disagree

B – disagree

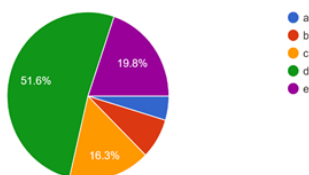
C – can't say

D – agree

E – strongly agree

The remaining two questions are open ended.

The curriculum is interesting-
258 responses



About 71.4% students agreed that the curriculum was interesting.

Fig.1

Around 76.8% students showed interest in the academics.

I get interest in academic-
258 responses

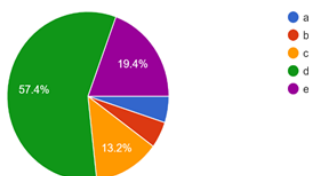


Fig.2

Almost 46.9% felt that there is no decrease in interest in the subject. 26% were not sure.

My interest in the subject has decreased over the period -
258 responses

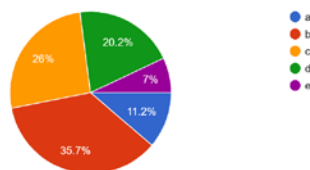


Fig.3

51.1% agreed that there was increase in interest over a period. 26.4% were not sure.

My interest has increased over the period-
258 responses

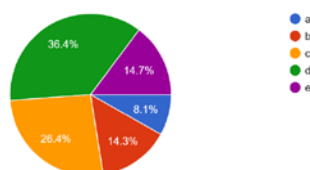


Fig.4

45.4% find the teaching pattern good. 27.9% were not happy with the pattern. 26.7% were not sure.

The teaching pattern is good -
258 responses

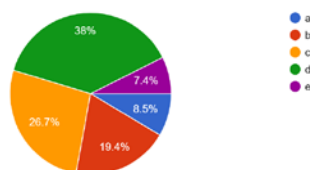


Fig.5

37.2% stated that their doubts were not cleared. 34.1% were not sure.

The pattern covers all my doubt in the subject -
258 responses

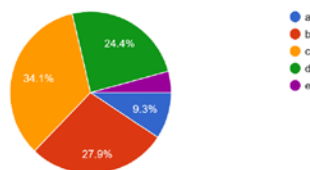


Fig.6

65.5%, students agreed that there should be change in pattern.

I think there should be change in the pattern
258 responses

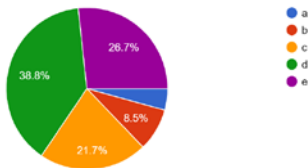


Fig.7

Almost 64% felt pressured by PG entrance.

The pressure of PG entrance has affected my studies presently-
258 responses

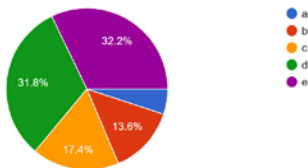


Fig.8

39% agreed that extra private classes for PG entrance is taking them away from present studies. 32.1% disagreed whereas 28.3% were not sure.

The extra private classes for PG entrance is taking me away from present studies-
258 responses

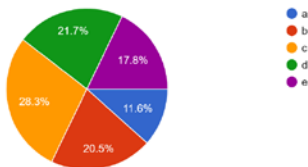


Fig.9

60.5% students agreed that there is loss of focus from clinics.

My focus from clinical and practical studies is getting hampered-
258 responses

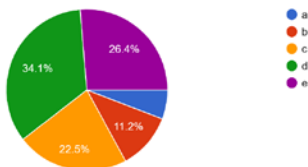


Fig.10

About 53.9% have a goal of only passing exams.

Today passing the exam is my only goal -
258 responses

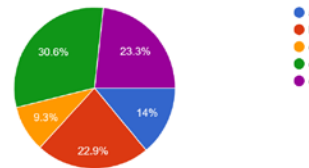


Fig.11

36.8% students are disciplined while 34.9% were not sure where they stand.

I think I'm disciplined toward my study -
258 responses

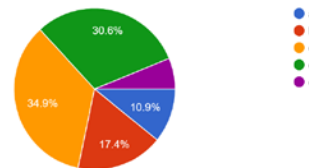


Fig.12

82.9% chose the field themselves.

The field has been chosen by me -
258 responses

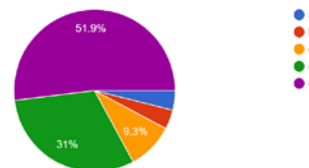


Fig.13

60,1% students felt some unknown pressure disturbing their studies.

I think there is unknown pressure which bothers me and my learning
258 responses

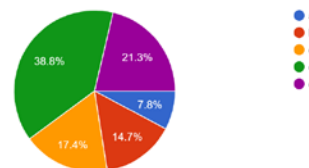


Fig.14

57.7% medicos do not take distinction as a measure of success.

I think distinction in the subject is a measure of success-
258 responses

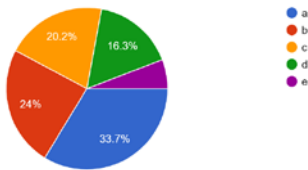


Fig.15

37.2% felt that curriculum is properly designed. Whereas 34.1% felt the need to change the design. 28.7% were not sure.

The curriculum is not designed for learning clinical skills -
258 responses

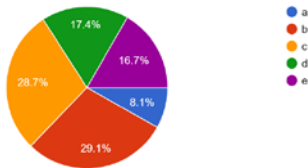


Fig.16

43% agree that they have developed applied knowledge over the years, 36% are not sure.

I feel I have developed applied knowledge over the years-
258 responses

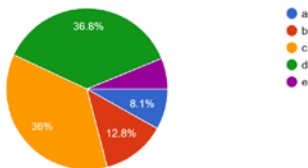


Fig.17

71.3% agree to being more knowledgeable than a lay person.

I find myself more knowledgeable than a lay man -
258 responses

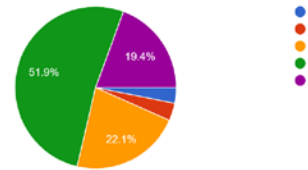


Fig.18

38.8% were not sure if their concepts are clear in clinical practice, whereas 37.6% stated clear concepts.

My concepts are clear in clinical practice-
258 responses

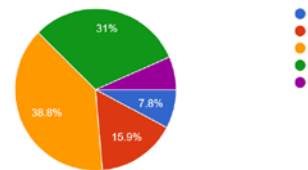


Fig.19

36.4% disagreed that they lack basic knowledge and 34.1% agreed.

I feel I lack basic knowledge-
258 responses

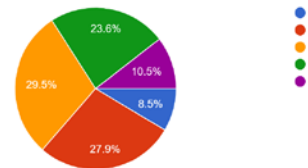


Fig.20

73.2% said they are creative about studies.

I have tried to be creative about learning-
258 responses

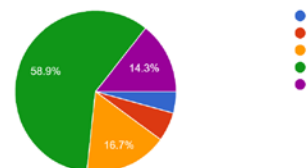


Fig.21

Around 45% did not take studies for granted while 28.7% took studies for granted.

I have considered my exams and studies for granted -
258 responses

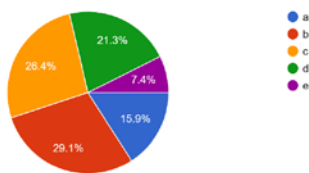


Fig.22

Almost 45% disagreed that 75% attendance should be taken seriously by the institute, whereas 34.2% agreed to the statement.

Compulsory 75% attendance should be the amen seriously by the institute-
258 responses

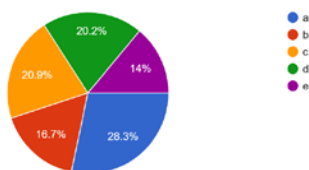


Fig.23

80.6% felt that they have not made any mistake in choosing this medical course.

I now think I made a mistake in choosing this medical course -
258 responses

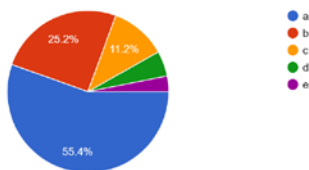


Fig.24

33.7% agree that medical curriculum is not designed properly while 37.6% disagree and think the curriculum is designed precisely.

The present medical curriculum is not designed to keep my interest alive
258 responses

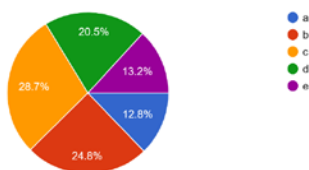


Fig.25

These are two open ended questions below

1.What are your views on the attitude of students towards the course.

About 50% of the students answered the question showing concerns about the attitude. They thought that passing was their only goal.

About 19% of the students thought that they are focused about their studies.

About 12% students talked about their various reasons including financial status, family background, their reason for joining the course, COVID 19.

About 9% students were not sure about themselves or others.

2. which semester did you find the toughest? And why?

There was no one single answer which was in majority. All the answers were vague and not directing to one direction. Therefore, this question cannot be brought to conclusion.

Discussion

The main focus of the above study is to know about students mindset, curiosity, interest in the medical sciences. As suggested by Tardi Hand and Dogas Z in there research in 2012 (3) individuals who engage in academic dishonesty may continue to exhibit unethical behaviors in professional practice. Our research is an attempt to find if this is true and if yes to know what encourages this behavior. The research also concentrates on the students perception towards the curriculum.

Is there a declining trend in curiosity ? This question can now be explained .

Statement 1&2 itself states that the curiosity among students is alive, but at the same time statement 6 says that 37.2% find that there doubts are not cleared and 34.1% were not sure. Majority of the students (65.5%) agreed to change in pattern of academics. The pressure

of PG entrance whether in preparations or attending private classes, affected many students i.e 64% felt pressured (statement 8 and 14) 39% felt distracted. This pressure can lead to ignorant behaviour by student because of which exams are taken for granted (statement 22).

It's important that the students focus on learning rather than assessment, involve medical students in peer review, and creating a culture of academic integrity, cheating in medical school may have serious long-term consequences for future physician (9). Passing becomes the only goal (statement 11 53.9%). This can also be explained by their discipline towards study. 36.8% said they are disciplined and almost same number of students said that they are not sure (34.9%) from statement 12 ,which is not a good sign. Above results can easily break students patience towards study and can allow them to be disloyal and encourage use of wrong means (7). This is not the way there answers should be when the field is chosen by themselves (statement 13 – 82.9 %).

When it comes to clinics it's the main support ground for all the future medical specialities. The concepts should be crystal clear in this area, but when asked only 37.2 % said that the curriculum is clinical skills based while approximately same number said its not (34.1% statement 16). Almost equal no of medicos were on the opposite side about their concepts of clinics. Clear concept – 38.8% and not clear – 37.6 % (statement 19). Around same numbers were found when discussed about their interest being alive. 37.6% said positive things and 33.7% said interest is decreasing. When they were asked to write their views 50% students showed concern about their clinical knowledge. This tells us that even if the students are trying to maintain their curiosity somethings are lacking behind from the

curriculum and learning pattern. As mentioned before, students are quite dissapointed with their distracted attention which may result in attention to the potential but unintentional pressures placed on medical students to engage in academic misconduct (10). Therefore, strategies should be developed in order to encourage appropriate attitudes and behavior of undergraduates (10) not only students but the institute as a whole need to come forward and help the ones who need this will help. Opening up to their mentors could decrease the gap (4). For this there are ideas that need to be implemented in the pattern that we have been following all these years . cahnge is the nessecity which should be considered. Some of the ideas give by the students themselves include :

- Increasing time for clinical postings
- Making sure after the posting that the have understood the case and if any doubts that should be cleared to.
- Equal importance to all the students irrespective of the academic years
- The atmosphere in the lectures can be a little more friendly so that the students don't hesitste to ask their queries.
- The ratio for students to the guide for clinical postings should be less so that the guide can give attention to every student.
- The institute as whole should come up with some ideas and plan to make themselves aware of the students knowlegde.

After going through the discussion, we do get the numbers for the students that are not satisfied with their knowledge as well as of those who are clear with their learning, but we cannot skip the students which are not sure about the small things they should be sure about. When asked about interest very big amount of them

were not sure about where they stand. this is a clear problem because a student with doubt can clear them a student with no doubt is confident but a student who doesn't even know whether he/she has a doubt is real problem.it will cause confusion and a definite loss of interest. As asked about their discipline or their applied knowledge same is the case. a good percentage of them almost 30-40 % are not sure. This not only lowers their interest but what to do next question arises which they can't answer. This research is a bit different from the researches that have been done before in respect that none of them actually asked about the student's own perspective. Many authors have published papers about the malpractices and behavior of medicos but the facts about the interest and the problems they face because of the education pattern has not been done before. This paper also stands out as a definitive answer is not found like many other papers. The ambiguity about the knowledge of undergraduates is not that quite clear.

Conclusion

There is seen a slight concern among the students about their clinical studies, some even said that there is loss of interest towards the course, but the decrease is not significant to say that there is overall decrease. The students have stated that they are trying their best to keep the interest alive whether it's being creative or being disciplined towards studies, they are maintaining the curiosity alive. Students have themselves said they find the studies interesting as the stream is being selected by their own choice. This study did help us in understanding student's thoughts about the learning process and their view on whether they should be some changes which they all agreed to.

Implications

The main implication of this study is that it will help both the teaching faculty as well as students to

primarily look at the factors affecting their studies. The learning procedure will be more interesting. The students can see what the problems they face are, and this will help making the subject practically implacable to students in their learning.

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