Research Paper Medical Science

A Questionnaire Based Survey from First Year M.B.B.S. Students About Teaching Learning Methods of Physiology in Private Medical College

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ABSTRACT

Background- Time to time evaluation of medical curriculum by experts is the routine practice in medical education. However the student's perception and opinion about the teaching - learning methodology is equally important because it is meant for them. So, evaluation of teaching -learning methodology by the students in a medical college may further help in modification and construction of the medical curriculum. Considering these facts the present study is undertaken.

Objectives- To understand the preferences and perception of medical students about the current methods of teaching and learning, aids used for teaching and also the qualities of the teacher influencing them .

Materials and Methods: A detailed structured questionnaire was given to 100 students of 1st year in a our institution. Descriptive statistics were used for analysis of data. Frequency was expressed as percentage.

Results - A total of 100 students (54 % males and 46% females) participated in this study. The most preferred teaching method was small group discussion (57%) while practical was the least preferred (18%). The most preferred learning method was tutorials (49%) and quiz programme (42%) while student seminar was the least preferred (9%).The most preferred modality of teaching aid was found to be Black board preferred by 34% students followed by Over Head projector (OHP) and PowerPoint Presentation(PPT). The most influencing quality of the teacher was the ability to teach (42%) and knowledge(38%) followed by enthusiasm(31%), while the personality was least preferred (6%).

Conclusion- The results generated in this study suggests that students prefers active learning which should be student centered. Also the traditional chalk and board method with a blend PPT and quiz programme is appealing to the students. So, by using various methods appreciated by the students the teaching and learning of physiology can be made effective , interesting and enjoyable .

KEYWORDS physiology, teaching - learning methods, medical student's perceptions, India

Introdiction :-

Medical education is a powerful tool for building a knowledge based society of 21st century. The quality of which depends upon the teaching learning methodology. With this belief, one of the important ways to strengthen the medical education is through the student's perception about teaching learning methodology. There has been a growing interest over the past decade for a paradigm shift from teacher-centered mode of delivery to student-centered [(1)]. A number of teaching methods are employed at the undergraduate level to appeal to students with different learning styles. It includes didactic lectures, role playing, case studies, demonstrations through videotapes, problem based learning (PBL) and several others to address specific learning styles of students by providing them contextual opportunities. But whether and how these things are appealing to the students need to be answered. Also, yet another challenge in medical education is the planning a lesson which make the student to gain maximum knowledge in short span of time[(2)]. It is very important for any medical teacher to meet the educational need of the students regarding the knowledge, attitude, and the skill. At the same time it is necessary to note here that the students represent the population which differs in age, place, ethnicity, level of preparedness, learning styles and preferences[(3)]. Considering all these issues, the present study is done.

Objectives :-

1. To find out which teaching approach and aid the first year medical students prefer and least prefer in their physiology teaching -learning method.
2. To explore the most influencing qualities of a teacher as perceived by first year medical students.
3. To help them to express their views on the current method of learning by them.
4. To get suggestions from the students for their preferences regarding teaching learning methods in physiology.

Material and methods:-

The present study was carried out on 100 first year M.B.B.S. students of D.Y.Patil Medical College, Kolhapur. All the students were in age group of 18-21 years. None of them was suffering from any major medical or psychiatric illness. A questionnaire was designed, prevalidated by Faculty members & administered to the 1st year undergraduate students of our institute. Prior approval was obtained from the Institutional Ethics Committee. Students were briefed about the purpose of study and the questionnaire. Informed written consent was obtained from all participating students. They were assured about the anonymity and confidentiality of responses given through questionnaire. The students were briefed about the questionnaire & asked to respond freely and fearlessly. They were informed that the information given by them is for the research and evaluation purpose only and will be confidential.

Data collection

Data were collected at the end of first semester with the assumption that students would be better prepared to give informed answers having experienced the different types of teaching and learning environments that are presented to first year students. Moreover it was felt that by this time students would have received feedback (marks and grades) from different modules that had employed these different teaching and assessment styles.

Data analysis

Data were collated and presented in tabular and graphical form. The preferences provided by students were subjected to percentages technique.

Observation and results:-
Out of 100 medical students, the mean age was found to be 19.4 years. In gender distribution male students (54%) were little higher than female students (46%).

The most likely method of teaching (Figure- 1) was small group discussion. Regarding the teaching aids (Fig- 2)71% felt that chalk and board is most helpful for understanding the topic followed by overhead projector (19%) and Powerpoint presentations (10 %).

About various teaching learning methodologies in Physiology (Fig- 3), 49% students said quiz programmes are most enjoyable way of learning followed by tutorials (43%) where student's seminar (8%) was least likely method of learning.

Students were asked to give opinion about the qualities of a teacher which influence them. The most influencing quality of a teacher(Fig- 4) was a teacher who had art of teaching (42%) and'good knowledge' (38%). In second place came enthusiasm (31%) and rapport and personality had the lowest ranks in most preferred qualities of teacher.

Discussion :-
It is said that students look taller than the teachers because they are standing on the shoulders of the teachers. So, the strengths of of medical service are supported by the sound foundation of medical teachers. For this reason , our medical teachers would need to adapt in all fields of practice and the beginning will be undoubtedly from the students views and suggestions about it.

Teaching Method-
In our study teaching method most favored by students was small group discussion . It suggests that the students like active learning with maximum attention to the students indicating the shift from passive learning to active learning which is student centered[4] .

Learning method-
Regarding the learning method the students least preferred in our study was Student's seminar. The reason may be that teachers are helping the students at every step for their better presentation due to which they do not learn much from the seminar. Also whole class is not actively participating in the seminar at the same time.. On the contrary Quiz programme was the most preferred method of learning. The reason may be it is enjoyable method as well as prize winning spirit in the teams made them to prepare at their level best. 43% students preferred tutorials; it seems the students need the opportunity to discuss the content with classmates and teacher [5]. According to them it will definitely help to boost their confidence. Also it indicates the student's pole diverting towards active learning process. Similar results are shown by other authors[6].

Teaching aid-
The teching aid most of the students like was the chalk and board method . It may be due to while explaining the concepts with chalk and board the teacher -student co-ordination is good . Also students get time to note down the points and also to understand the content which is to be taught which do not happen in powerpoint presentations. It also indicates that the use of teaching aid is to assist the teacher to avoid the monotony in the lecture and not to replace the teacher. Similar results are shown in other studies[7,8].

Qualities of teacher-
Like other studies[9], our study also found that the students are more influenced by the Knowledge and skill of teaching of the subject of the teacher. Students also appreciate the enthusiasm of teaching.It reflects that they want knowledge oriented teaching.

Suggestions/Comments-
Students were also asked to give the suggestion. Following are the suggestions given by the students.

1. Make lectures more interactive and of short duration (should be reduced from 60 min to 45 min.)
2. Teachers must be co-operative.
3. Include more tutorials and quiz programmes.

Limitations of the study-
A sample of small group of students representing a single private medical institute is used which can be biased. So , further studies on this topic using multiple centers with a large sample size should be done.

Conclusion-
From our study we found that students are more interested in active learning. Also students strongly preferred knowledgeable teacher having good skill of teaching. Most of the students like chalk and board method and small group discussion .So, in our opinion, student's perception about teaching and learning methodology would be undoubtedly assist in planning the teaching programme in physiology.

Acknowledgement-
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Figure-1

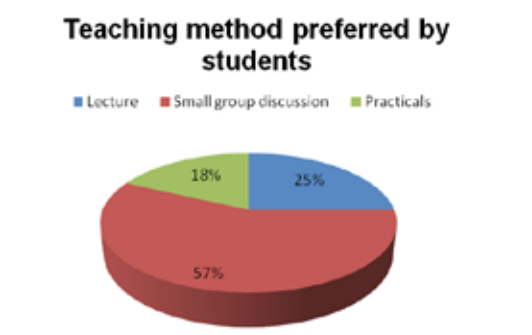


Figure-2

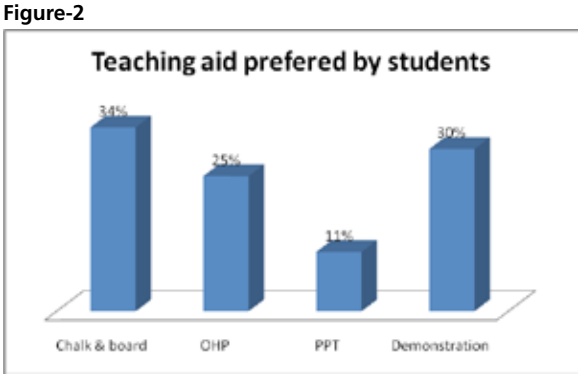


Figure-3

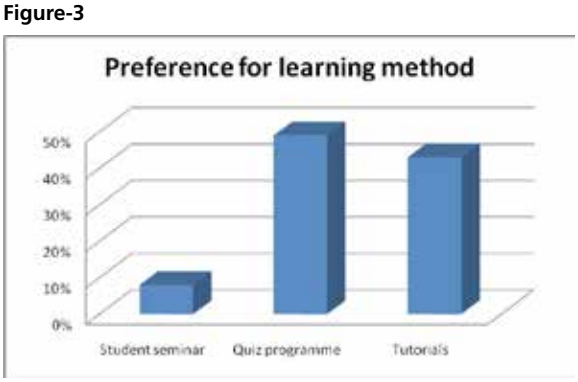
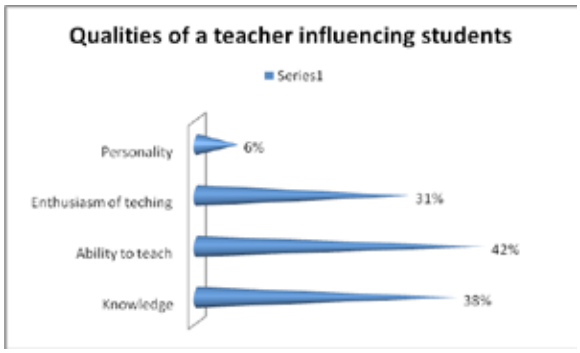


Figure-4



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