



### RESEARCH ARTICLE

## RELATION OF EXAMINATION PERFORMANCE AND CLASS ATTENDANCE OF MBBS STUDENTS IN PHARMACOLOGY - A RETROSPECTIVE STUDY

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### Abstract

**Introduction:** Students attendance is considered as an important factor in the academic performance of medical students. Student attendance is an integral part of professional development and, from a regulatory perspective, considered evidence of professionalism. Aim of the undergraduate medical education is to produce competent doctors with adequate medical knowledge, affective attitude for the patients and proper clinical skills for practice. Medical education demands high attendance for good understanding and grasps over the subject.

**Aim:** To study the relationship between student attendance and their performance in theory examination.

**Study design:** A retrospective study was conducted among Second year MBBS pharmacology students. Student classroom (theory) attendance was compared with their marks secured in the internal assessment conducted by the pharmacology department.

**Materials and method:** The second year MBBS students who attended pharmacology internal assessment were included in the study. The attendance of a total of 145 students was compared with their internal assessment marks. Statistical analysis was performed using ANOVA.

**Results:** Among 145 students more number of students attendance lied between 61-70 percent. Only 2 of them got more than 90 percent attendance, in this one got below 50 percent marks and 6 of them got less than 50 percent in both marks and attendance.

**Discussion:** This study clearly demonstrated that the higher the percentage of attendance lesser is the chance of failure in theory internal assessment (P value is 0.002). It shows attending the theory lectures is significant to perform in the examinations.

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### Introduction:-

The main objective of medical education is to produce well efficient health care professional to serve the society. National medical council brought many changes in the academic curriculum to have better outcome for undergraduates. Lectures, tutorials, practicals are the various modes of teaching pharmacology. To gain better skills, appropriate knowledge about health and diseases attending lectures, practical sessions and clinical postings is the only way. Several researches proved an average student gained better medical knowledge and performed

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outstanding in both theory and practical examinations than the students who had low attendance. Universities made a mandatory to have minimum attendance to attend examinations for both theory and practical's.

Absenteeism refers to frequent absence from classes without any good reason. Major factors for absence from lectures from the student point of view are inconvenient class schedule, preparing for other exams, lack of interest, dislike of teaching style, understanding the subject without guidance, illness of student or their family members. Majority of students absent during pre-examination period due to lack of preparedness for exams. From the teaching staff point of view - teaching large number of students in a single room tests the ability of the teacher how he or she conveys the knowledge and keep students attentive, relationship between student and teacher, teachers attitude and teaching methodology play important role in the absenteeism of students from lectures. Many of the students prefer small group discussions with audio-visual effects.

Pharmacology is a vital subject which deals with treatment of health disorders. Understanding mechanism of action of drugs, drug interactions, uses and its adverse effects is most essential for any medical undergraduate which can be done only through proper interaction in lectures and attending practical sessions. As there is no alternative in allopathic medicine, students should have atleast minimum knowledge of all class of drugs while they are graduating itself.

### Materials And Method:-

Study was conducted within the Department of pharmacology, Siddhartha medical college, Vijayawada, Andhra Pradesh. According to medical curriculum pharmacology comes in the second academic year of under graduation. Duration is 18 months. Teaching includes lectures, small group discussions and practicals. Attendance of students are noted in registers regularly.

This is a retrospective study from September 2018 to April 2019. The attendance of each student was calculated for the period of 8 months. Internal assessment marks was taken to evaluate academic performance. Based on the percentage of marks obtained in internal assessment students were divided into 5 groups (70-66, 65-61, 60-56, 55-50, less than 50). Based on the percentage of attendance students were grouped into 6 groups (91-100, 81-90, 71-80, 61-70, 51-60, less than 50). Both the groups are statistically analysed with ANOVA test.

### Results:-

There were 145 students during 2018-2019 academic year, all the student's attendance and their marks in internal assessment were considered and tabulated. Only one student we found with less than 50 percent marks and having attendance more than 90 percent.

From the table it is clearly understood as the percent of attendance decreasing, the number of students falling in the group with marks less than 50 percent was increased.

**Table 1:-** Comparison of percentage of attendance with percentage of internal assessment marks.

Marks in Percentage	70-66	65-61	60-56	50-55	Less than 50
No .of Students with in the range of <b>91 to 100%</b> attendance		01			01
No .of Students with in the range of <b>81 to 90%</b> attendance	04		03	05	13
No .of Students	01	03	07	12	21

with in the range of 71 to 80% attendance					
No .of Students with in the range of 61 to 70% attendance	01	01	06	05	41
No .of Students with in the range of 51 to 60% attendance	01		01	04	07
No .of Students <50 % attendance				01	06

ANOVA test was done between groups and found there is a strong relation between percentage of attendance and academic performance with P value 0.002 which is very significant.

### Discussion:-

We observed positive relationship between academic performance and student attendance. Students with attendance more than 80 percent having failure rate very minimal. Among 27 students who had more than 80 percent attendance, 13(48.1%) got below 50 percent marks. 44 students fall in the group with attendance between 71 and 80 percent 21 students got less than 50 percent marks.

Among 145 students 99 students got less than 50 percent marks only 7 got more than 65 percent. among 99 students who got below 50 percent marks, majority of them attendance were between 61- 70 %( 41) and 71-80 %( 21), 13 of them is having attendance below 60 percent.

Seven students scored more than 65 percent marks, among them 4 students are having attendance more than 80 percent. Twenty one students scored marks between 60-65 percent, among them 13 students were having attendance more than 70 percent.

This retrograde observational cohort clearly indicating attending the lectures, small group discussions and practicals are very much essential to get minimum 50 percent marks.

By using the cut off marks fifty percent in different attendance rate categories threshold of 80% attendance provide reasonable discrimination between securing more than and less than 50 percent.

### Conclusion:-

Among second year medical students with 18 months academic year attendance of teaching classes and practicals, positively correlated with academic performance, with threshold of 80 percent attendance providing reasonable discrimination between more than and less than 50 percent marks.

### Conflict Of Interest:

Nil.

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