



ORIGINAL RESEARCH PAPER

Clinical Science

THE IMPACT OF ROLE MODEL ON MEDICAL STUDENTS DURING BEDSIDE CLINICAL TEACHING .

KEY WORDS: MCI=Medical Council of India, CIMS=Chhattisgarh Institute of Medical Sciences, CG=Chhattisgarh State, RM=Role Model

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ABSTRACT

Introduction: Ninety percent of graduating students had identified a role model or models during medical profession. Personality, clinical skills and competence, and teaching ability were most important in the selection of a role model, while research achievements and academic position were least important. This study was designed to assess the impact of bedside clinical teaching on students and patients with special reference to student-patient ratio. How medical students communicate with patients to enhance their understanding about clinical condition, disease and patient's care as well as how patients respond. A good communication is required to gain trust between doctors and patients and also help patients to disclose information, patient satisfaction as well as produce more effective practices, failure to same may be due to inadequate communication skills, sensitivity, empathy at the doctor's end and can cause decrease confidence and trust of patient's ultimately poor treatment.

Objective: Clinical posting is most important for residency training and the students. The assessment of their exposure to and interaction with patients as role models were the main measurements.

Materials & Method: Our study was part of a comparative study amongst three divided subgroup. Medical teacher asked pre designed questionnaire to three subgroups. Our esteemed Institute has 150 MBBS Students in every year. In clinical posting 150 students divided in three group. Each group has 50 students. They were taught by Medical teachers in respective department routinely in a year. We prepared different sets of questionnaire one is for students (MBBS Junior Final & Final Year) & another for in-door patients. The study group divided into three subgroups A, B and C & comprised 25, 15 & 10 students respectively and were asked them to do their routine clinical posting proceedings, while, 100 indoor patients were included in the study. The observational were made on the different response, depending on the repeatability and nature of questions due to different number of students in different groups, given by the patients as shown in questionnaire.

Results & Conclusion : In the present study we were found that the students of Group C (10 students out of 50 student were selected in clinical posting) represented case as well similarly patients also responded properly and disclosed information maximally as compared to other groups. We concluded that higher student-patient ratio can cause poor treatment due to communication hindrances. Further we suggest the student-patient ratio must be reduced to produce more competent clinician as well as a clear guideline should be framed by MCI for the same and more study is required as very less data, in this regards, is available in Indian scenario.

INTRODUCTION

Role models in medical education not only are important in enhancing learning but also have been shown to affect students' choice of residency and career.¹⁻³ Retaining interest in primary care fields has been a challenge in recent years.^{4,5} The few studies attempting to identify the factors important to promote "generalism" suggest that role models might be influential.^{6,7}

Ficklin et al. asserted that role modeling, or teaching by example, is an educational method that students encounter throughout their medical school training, in the classroom and laboratory as well as during bedside rounds and in the outpatient setting.⁸ They also found that for role modeling to be an effective teaching method, faculty members must understand that all of their inter- actions and attitudes affect students.

Shuval and Adler studied the interaction between medical students and their teachers.⁹ These authors noted that although some teachers and clinicians may be outstanding role models, students generally pick and choose traits from many models so that their internal values are an amalgam from a variety of sources. They noted three basic patterns: active identification (includes classic modeling in which one emulates the role model), active rejection, and inactive orientation (includes reinforcement of the student's preexisting values). Active identification was the most common student-physician interaction.

Some medical schools attempt to foster these important

relationships by assigning a mentor to each student. As Flach et al. noted, although such a program was felt to be valuable, other faculty become "unofficial" role models, and these relationships tend to come about more naturally without special efforts.¹⁰

METHODOLOGY:

Our study was part of a comparative study amongst three divided subgroup. Medical teacher asked pre designed questionnaire to three subgroups. Our esteemed Institute has 150 MBBS Students in every year. In clinical posting 150 students divided in three group. Each group has 50 students. They were taught by Medical Teachers in respective department routinely in a year. We prepared different sets of questionnaire one is for students (MBBS Junior Final & Final Year) & another for in-door patients. The study group divided into three subgroups A, B and C & comprised 25, 15 & 10 students respectively and were asked them to do their routine clinical posting proceedings, while, 100 indoor patients were included in the study. The observational were made on the different response, depending on the repeatability and nature of questions due to different number of interns in different groups, given by the patients as shown in questionnaire.

OBSERVATIONS & RESULTS:-

Observations:

Table 01: Response of the Group

Group	A	B	C
Positive Response(%)	25(40%)	15(68%)	10(89%)

Graph 01:

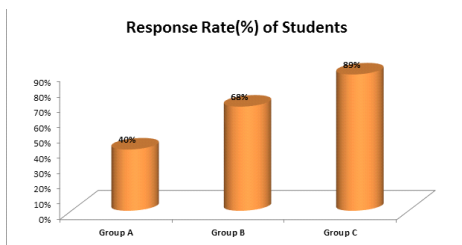


Table 02: Number of students in different groups who satisfactorily Judge clinical condition of patients

Group	A(out of 25)	B(Out of 15)	C(out of 10)
No. of students(%)	11(44%)	11(73.3%)	08(80%)

Graph02:

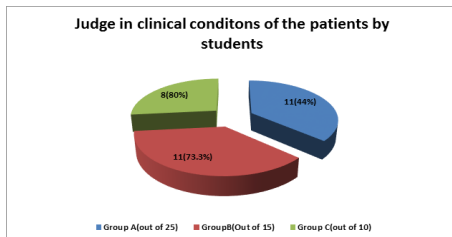


Table 03: The Association between Choice of Residency and Having been exposed to sufficient Role Models in that Specialty (n=50)

Number Exposed to Sufficient RMs* in Specialty	Percentage of who Chose Specialty	Number Exposed to Sufficient RMs and Chose Specialty	Odds Ratio (95% CI) for Choosing Specialty Given the Exposure to Sufficient RMs*
Internal medicine	60	19	3.6 (1.2, 5.7)
Surgery	45	08	1.9 (1.4, 3.3)
Family medicine	21	07	1.7 (1.1, 3.8)
Pediatrics	53	16	2.8 (1.3, 4.5)
(* RM indicates role models.)			50

RESULTS :

Of the 50 clinical students, completed the questionnaire 89% response rate by group C students. The average age of the respondents was 25.4 years; The distribution of choice of clinical field for residency training of these graduating students was as follows: internal medicine 60%, surgery 45%, family medicine 21%, pediatrics 53%, Ninety percent of students identified one or more physician role models during their medical school training. Although a vast majority (89%) of students identified their role model during the third and fourth clinical years of medical college. Odds ratios were calculated to assess the strength of association between their choice of clinical field for residency training and interacting with "sufficient" role models during the clinical years of medical school. As shown in Table 1, the odds were high that students who chose a specific field for residency training felt that they were exposed to a "sufficient" number of positive role models in that area during their clinical rotations.

CONCLUSION:

In the present study we were found that the students of Group C (10 students out of 50 student were selected in clinical posting) represented case as well similarly patients also responded properly and disclosed information maximally as compared to other groups. We concluded that higher student-patient ratio can cause poor clinical skill due to communication hindrances. Further we suggest the student-patient ratio must be reduced to produce more competent clinician as well as a clear guideline should be framed by MCI

for the same and more study is required as very less data, in this regards, is available in Indian scenario.

DISCUSSION:

Similar study were conducted, Meurer et al., 108 studies that examined primary care specialty choice were evaluated for the quality of the research.¹¹ Among the recommendations and conclusions was the need to develop valid ways for studying the influence of mentors and role models. Our study addresses as issue that the group of our students have more clinical skill and communication with the patients in small groups. They have also developed more clinical interest when we take their opinion. In future, they have more interested to go in clinical branch in future. It has shown in table 03 as About 3.6 (Odds Ratio) times more interested students to take internal medicine branch further which are about 19 students out of 50 students. Similarly 2.8 times more interested student to take in future Pediatrics branch which are 16 students out of 50 students. As well as 1.9 times more interested students to take in future Surgery branch which are 08 students out of 50 students. Hence we can say that, Our students have more interested about 86% (43 student out of 50 students) in interested clinical branches. Whereas only 14% (07 students out of 50 students) our students are interested to take in future family medicine branch. Therefore, finally ratio 6:1 shows that our 06 students are interested to take in future clinical branches as compare than 01 student in other medical branches. The 14% our students are interested (07 students out of 50 students) in other areas (as opposed to the core residencies) were divided among dermatology, radiology, neurology, emergency medicine, ophthalmology, radiation oncology, and pathology. Another similar study Jarecky RK et al., These more competitive residencies often attract top students.¹² The Odds Ratio for these students interacting with sufficient positive role models in internal medicine during medical school was 1.0. Potentially, if one could expose these students to more role models in internal medicine, some of these top students might decide to become internists. Clinical skills, personality, and teaching ability (but not research, specialty area, or title) were the more important characteristics making these physicians excellent role models in the eyes of their students. These findings were also observed in our previous study of residents. Interestingly, at many institutions it is the researchers and those with high academic positions who are chosen to serve as the attending physicians and, consequently, are available to be the role models.

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