

FAILURES IN MEDICAL EDUCATION

by

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Introduction

Time and again one wonders as a teacher, why students who come from highly merited community of school and college students fail to make the grade in medical studies. This problem has perplexed the minds of authorities in medical education as well as in the Government to the extent that in December 1975 there was a communication from the Dean, B.J. Medical College to all Professors of the college requesting them for suggestions to find out ways and means of minimising failures and for improving performance of students, specially students belonging to the backward classes.

With a view to investigate this problem of failures and to improve the students' performance the present study was proposed.

Material and Methods

Sixty-five medical students who had failed in either the first or final M.B.B.S. University examination of November, 1975, were interviewed individually and confidentially as per a proforma designed for the purpose of this study.

The proforma was prepared with the

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help of some of the senior members of the teaching staff at the B.J. Medical college who had previous experience in collecting such information. It was an exhaustive proforma designed to evaluate data such as caste, premedical career of the student, the background of the students with educational and economic status of the family members.

The opinion of the students regarding various classes, teachers, method of examination and assessment of students were recorded. Finally, their opinion regarding the reasons for their failure and suggestions to improve the performance were obtained.

The information thus obtained was then analysed by various computations to find out which of the above factors influenced the performance of the students.

Observations and Results of Analyses

Out of a total of 65 students who were interviewed, 32 had failed in the first year and 33 had failed in the third year. While interviewing the final year students information pertaining to their first and second years in college was also obtained. Of 33 final year students 17 had already failed in the first year and 30 had failed in the second year as well.

All the students who had failed in the first year were male students, whereas of the students who had failed in the final year, only 3 were lady students. Major-

ity of failures therefore occurred in male students.

The performance of these students before admission to the medical college was investigated and is shown in Table I. This is further broken down accord-

classes at the second M.B.B.S. examination is much higher in comparison to other students ($P < 0.01$). At first and third M.B.B.S. there is no difference in the performance between the two groups. The influence of hours of extracur-

TABLE I
Caste/Class Obtained at the Pre-degree and F.Y.B.Sc.

| Exam. | Class obtained | Hindu/Christian/Parsi | | OBC/BC/SC/NT | |
|-------|----------------|-----------------------|----------|--------------|----------|
| | | I MBBS | III MBBS | I MBBS | III MBBS |
| P.D. | I | 11 | 8 | 7 | 11 |
| | II & III | 6 | 5 | 8 | 9 |
| F.Y. | I | 11 | 11 | 6 | 12 |
| | II & III | 5 | 2 | 8 | 7 |

ing to the caste of the students. The performance of students belonging to the backward classes in their premedical education was no worse than that of students belonging to the other classes, since the number of students who obtained second and third Class at the pre-degree and F.Y.B.Sc. examinations are not significantly different in the two groups.

However, the next Table (Table II) shows that the number of attempts made by the students belonging to backward

ricular activity on the performance of the students was next evaluated. It is shown in Table III. It is obvious that in the I Year, the performance of the students is directly related to the hours of extracurricular activity. Many more students who have extracurricular activity of even less than 2 hours per day had taken 2 or more attempts ($P < 0.01$). This did not seem to have a similar effect in the second and third year. During interrogation it was observed, however, that every year as the

TABLE III
Caste/No. of Total Attempts Made at I, II and III M.B.B.S.

| Exam. | No. of attempts | Hindu + Christians | OBC/BC/SC/NT |
|----------|-----------------|--------------------|--------------|
| I MBBS | 1 | 9 | 13 |
| | 2 | 19 | 22 |
| | 3 or more | 9 | 7 |
| II MBBS | 1 | 6 | 2 |
| | 2 | 4 | 11 |
| | 3 or more | 2 | 7 |
| III MBBS | 1 | 6 | 6 |
| | 2 | 4 | 9 |
| | 3 or more | 2 | 5 |

TABLE III

Number of Attempts Taken in Relation to Extra curricular Activity

| Exam. | No. of attempts | No activity | Less than 2 hrs./day | More than 2 hrs./day |
|----------|-----------------|-------------|----------------------|----------------------|
| I MBBS | 1 | 7 | 14 | 1 |
| | 2 | 17 | 18 | 9 |
| | 3 or more | 4 | 10 | 1 |
| II MBBS | 1 | 4 | 2 | 2 |
| | 2 | 8 | 7 | — |
| | 3 or more | 6 | 2 | 1 |
| III MBBS | 1 | 9 | 2 | 1 |
| | 2 | 8 | 4 | 1 |
| | 3 or more | 4 | 2 | 1 |

3rd term approached less and less students were involved in these activities. Similarly, a number of students gave up the activities as they passed from first year to second year and from second year to third year.

The next factor evaluated was the performance of hostel students against that of day-scholars. This is shown in Table IV. From this table it is seen that when

as the number of day scholars who have failed are too few.

Table V shows the total number of attempts made by a student in relation to his father's annual income. The performance of students (in terms of attempts made) in the income group of Rs. 5000 or less is significantly poorer than the performance in the income group of more than Rs. 5000 per annum.

TABLE IV

Number of Attempts Taken by Hostelites and Day Scholars

| Exam. | No. of attempts | Hostelites | Day scholars |
|----------|-----------------|------------|--------------|
| I MBBS | 1 | 18 | 4 |
| | 2 | 31 | 10 |
| | 3 or more | 10 | 5 |
| II MBBS | 1 | 6 | 2 |
| | 2 | 14 | 1 |
| | 3 or more | 8 | 1 |
| III MBBS | 1 | 9 | 3 |
| | 2 | 12 | 1 |
| | 3 or more | 7 | — |

failures occur they seem to occur more often in hostel students in all the three years of their medical training. Statistical analysis of this has not been possible

Table VI shows the performance of students in relation to the educational status of his father. When the performance of all students is pooled there are

TABLE V

Total Number of Attempts Made During Medical Career in Relation to Father's Income

| No. of attempts | Rs. 5,000/-p.a. or less | Income Upto Rs. 10,000/- p.a. | More than Rs. 10,000/-p.a. |
|-----------------|----------------------------|-------------------------------------|-------------------------------|
| Upto 2 | 22 | 4 | 1 |
| 3- 5 | 10 | 4 | 6 |
| 6- 8 | 10 | 2 | — |
| 9-13 | 5 | — | — |

TABLE VI

Total Number of Attempts in Relation to Educational Status of Father

| Total No. of attempts | Upto midschool | Upto High school | University |
|--------------------------|----------------|------------------|------------|
| 2 | 9 | 12 | 6 |
| 3- 5 | 3 | 9 | 8 |
| 6- 8 | 3 | 8 | 1 |
| 9-13 | 3 | 2 | — |

no significant differences in the various groups. However, when only the performance at Final M.B.B.S. is considered, the performance of students whose fathers have had education beyond mid-school is significantly better than that of students whose fathers have had either no education or education only upto mid-school. (The level of significance reached is $P < 0.03$).

students with reference to admission to Medical college as per their own choice or parental choice. Most of the students who failed had taken up medical studies of their own free will.

On the question of method of assessment of the students, opinion was equally divided between monthly examinations, terminal examinations, preliminary examinations and combination of all three examinations. However, 12.6%

Table VII shows the performance of

TABLE VII

Total Number of Attempts With Reference to Admission to Medical Course as per Own Choice or Parental Choice

| Total No. of attempts | Personal choice | Parental choice |
|-----------------------|-----------------|-----------------|
| Upto 2 | 26 | 1 |
| 3-5 | 18 | 2 |
| 6-8 | 11 | 1 |
| 9-13 | 4 | 1 |

One student confirmed that he had obtained admission through both his own and parent's desire.

students felt that the students should be assessed solely on the performance at the University examination.

With reference to the basis on which a student should be allowed to appear for the University examination, 21% felt that students should be permitted to appear for the examination on adequate attendance alone. Similar number i.e. 20% were of the opinion that the student should be permitted to take the University examination on his day to day performance alone. Nevertheless, 52% students felt that only those with both adequate attendance and performance should be allowed to go up for the University examination.

Interrogation of students for reasons for their failure brought the following to light:

(1) 37.5% first year students and 30% of second and third year students attributed their failure to difficulty in expression at the time of practicals and viva voce.

(2) Nevertheless, 81.25% of first Year students and 63.36% of second and third Year students confessed that their preparation for the examination was incomplete, but most of them could give no specific reasons for the incomplete preparation. 12.5% of first Year and 42.4% of second and third Year students professed that they had psychological and mental stress during the examination, e.g. death of near relative, marriage in the family, tension due to previous failure, etc.

(3) 27.6% of all students thought that some injustice had been done to them by the examiners and approximately 33% of first year students felt that the

papers set for the examination were difficult.

Suggestions

For improvement of their performance 90% felt that they would benefit if batches for lectures were made smaller. 89% did not think that separate classes for academically backward students should be held. Similarly, 55% did not think that students belonging to backward classes required special attention. Although 33% had difficulty in expression at the time of examination, 60% did not think it necessary to hold separate classes for students with language difficulty. Even so, 58.4% felt that special training in english for writing and expression should be held. Despite this difficulty 89% did not want medical education to be conducted in regional language.

As for the method of examination, 73% opined that the pattern of examination should be changed. 85% of first year students did not approve of the semester system. Approximately 29% of the third year students who wanted a change in the system of examination opted for the semester system. Others were not quite sure of the nature of the change in the method of examination. And although 88.5% did not want the percentage of passing marks to be reduced from 50% to 35%, 58.5% students felt that the marks for Theory and Practicals should be considered together and that the passing in both heads individually should not be mandatory.

Conclusion

In conclusion, from this preliminary study some important facts have emerged. Since the number of students inter-

rogated is small the results obtained should be treated with some reservations. They need confirmation. An extension of this study is called for.

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