

COMPARISON OF STUDENTS' PERFORMANCE UNDER COMPOSITE SCHEME AND SPLIT SCHEME OF FIRST PROFESSIONAL MBBS EXAMINATION

Tehseen Iqbal, Naila Hamid*, Hamid Javaid Qureshi*

Departments of Physiology Nishtar Medical College, Multan and *Services Institute of Medical Sciences, Lahore.

Background: Pakistan Medical and Dental Council has recently replaced 'composite scheme' of first Professional MBBS examination with 'split scheme'. In composite scheme First Professional MBBS examination is offered after 2 years in medical college while in split scheme the same examination is split into two parts, Part-I after first year and Part-II after completion of 2nd year in medical college. **Methods:** This study analyzed the results of two batches of students successively passing the 1st professional MBBS examination at Nishtar Medical College, Multan under two different evaluation systems. One batch of students (N-49) passed under composite scheme in 2001 while the other batch (N-50) passed under the split scheme of 1st professional MBBS examination in 2002. **Results:** Results showed a significant ($P < 0.05$) increase in the pass percentage of students under the split scheme (74.65%) as compared with the composite scheme (64.03%). Students secured more total marks (615.36 ± 35.99) under the split system as compared with the total marks obtained (587.22 ± 33.85) under the composite system. More students (65.35%) obtained first division (60% or more marks) under the split scheme as compared with the composite scheme (36.29%). **Conclusion:** Students' performance seems to be better under the split scheme as compared with the composite scheme of 1st professional MBBS examination.

Key Words: Evaluation, Medical college students, Medical education

INTRODUCTION

Evaluation refers to all the means used in schools to formally measure students' performance¹. Evaluation of students is necessary because research has shown that students learn more in courses that use tests than in those that do not.² In Nishtar Medical College, Multan, up to the year 2001, i.e. student Batch N-49, first professional MBBS examination was conducted under the composite scheme. Under this scheme, students were required to sit in a passing examination conducted by the University after two years of coaching. From the year 2002 i.e. student Batch N-50 onwards, a split scheme of 1st Professional MBBS examination was introduced in Nishtar Medical College, Multan, from admission of academic session year 2000-2001³. Under this scheme, whole course of 1st Professional MBBS was split into two almost equal halves. Each half was separately examined by the University i.e, first half after completion of first year; second half after completion of second year. These two examinations are called as 1st Professional MBBS Part-I examination and 1st Professional MBBS Part-II examination respectively.

Format of examination under the two schemes was almost the same i.e. theory paper, viva voce examination and practical performance in the laboratory were separately assessed. To observe the effects of the two evaluation schemes on the students' performance, we compared the results of two successive batches of students passing under the composite scheme (N-49) and under the split scheme (N-50) of 1st Professional MBBS examination.

MATERIAL AND METHODS

This study was carried out in the Department of Physiology, Nishtar Medical College, Multan, during July 2001 to August 2002. The two batches studied were N-49 and N-50. The batch N-49 passed 1st Professional MBBS examination (Annual 2001), under the composite scheme during July 2001; the batch N-50 passed 1st Professional MBBS examination (Annual 2002) under the split scheme during August 2002. The total number of students appeared in the Annual examination 2001 was 239 and the total number of students appeared in the Annual examination 2002 was 217. The results of the two batches i.e., N-49 and N-50, were comparable because (i) both the batches were admitted on the same criteria i.e., merit compiled after considering the marks obtained in the Intermediate (F.Sc) Examination and marks obtained in the Medical Colleges Admission Test (MCAT); (ii) the faculty coaching the two batches of students remained the same at Nishtar Medical College, Multan; (iii) Bahauddin Zakariya University, Multan with the same set of examiners, conducted both the examinations. So, the only difference between the two batches was apparently of the evaluation schemes under which the two batches of students were examined.

Results of the two batches were compared considering three aspects of result that is pass percentage of students in batches N-49 and N-50, total marks obtained by the students passing their 1st Professional examination and percentage of students

securing 1st division (>60% marks) in the examination.

Students failing the examination were excluded while comparing the marks obtained by the students and while comparing percentage of students securing 1st division. Data from the two batches was compared by utilizing independent sample 't' test using SPSS version 10.

RESULTS

Results are shown in table-1. Comparison of results showed a significant increase ($P < 0.05$) in the pass percentage (74.65%) of students passing under the split scheme (N-50) as compared with the pass percentage (64.03%) of students passing under the composite scheme (N-49). Total marks for N-49 and N-50 were 1000. More marks were secured by the students (615.36 ± 35.99) under the split scheme (N-50) as compared with the total marks obtained by the students (587.22 ± 33.85) under the composite scheme (N-49). More percentage of students (65.35%) obtained first division (60% or more marks) under the split scheme (N-50) as compared with the percentage of students (36.29%) obtaining first division under the composite scheme (N-49).

Table-1: Comparison of results of N-49 and N-50 batches of students' at Nishtar Medical College

Parameter	Composite Scheme (N-49) Annual 2001 (n=239)	Split Scheme (N-50) Annual 2002 (n=217)
Pass Percentage	64.03%	74.65%*
Total Marks Obtained (mean±SD)	587.22±33.85	615.36±35.99*
Students securing 60% or more marks.	36.29%	65.35%*

* = statistically significant difference between the two groups compared. $P < 0.05$.

DISCUSSION

Apparently, the format of composite scheme and split scheme of 1st Professional MBBS Examination seems to be the same i.e., both having a theory paper, viva voce and Practical performance as different modes of assessment. But the schemes have important differences.

Composite scheme requires students to appear in a final passing examination after the completion of two years. Although students were given class tests during that period yet the performance in these tests had no bearing on the result of final passing examination. In this respect, composite system is a form of summative evaluation

of students' performance. Contrary to the composite scheme, split scheme of 1st Professional. MBBS examination offers two passing examinations instead of one passing examination. Furthermore, class tests taken by the students under the split scheme have a direct impact on the final result as they carry 30% internal assessment marks in the final examination. So split scheme offers more frequent tests as compared with the composite scheme. There is evidence that the more frequently the evaluations take place, the more will be student achievement.⁴⁻⁵ Our study showed a similar pattern of students' performance under the split scheme. Better results under the split scheme might also be due to the fact that overall burden of the course for final passing examination is reduced for the students. Multiple Choice Questions (MCQs) were also included in the split scheme.

Students generally feel it easy to attempt MCQs as correct guess can be made although MCQs do not increment the scoring.⁶ MCQs test the subject understanding of the students. The descriptive questions also examine the creative abilities such as writing talent and language skills. They may require students to combine several concepts in their response.⁷ A number of studies have concluded that amongst various factors affecting the student performance, the evaluation system has the most profound impact.⁸⁻⁹

REFERENCES

1. Chansky NM. A critical examination of school report cards from K through 12. *Reading Improvement* 1975;12:184-192.
2. Dempster FN. Synthesis of research on reviews and tests. *Educational Leadership* 1991;72(8):71-6.
3. Bahauddin Zakariya University, Multan. Academic Branch Notification No. Acad/BOS/Med/1992 September 27, 2000.
4. Crooks TJ. The impact of classroom evaluation practices on students. *Review of Educational Research* 1988;58:438-81
5. Kulik JA, Kulik CL. Timing of feedback and verbal learning. *Review of Educational Research Journal* 1988;21:79-97
6. Manzar S. Would prior exposure to MCQ's make a difference in scoring among medical students? *Pak J Med Sci* 2003;19(4):300-2
7. Wiggins G. Practicing what we preach in designing authentic assessments. *Educational Leadership* 1996;54(4):18-25
8. Boelen C, Mrchais JED, Dohner CW, Kantrowitz MP. Developing protocols for change in medical education: WHO. Report of an informal consultation. Geneva 1992;p 13
9. Siddiqui A, Ahmad HR, Talati J, Herzig JW and Carroll RG. Evaluation and Assessment. In: *Teaching Physiology in the developing world: Models for quality learning*. Oxford University Press, Karachi 2002; 112-144

Address For Correspondence:

Dr. Tehseen Iqbal, Department of Physiology, Nishtar Medical College, Multan. Tel: 061-4541056