

EFFECT OF MEDIUM OF EDUCATION DURING SCHOOL ON PERFORMANCE OF STUDENTS IN MEDICAL COLLEGE

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ABSTRACT

Background: All the medical colleges face students with poor performance. Studies have shown that there was no significant relationship between the learning approaches and academic performance.

This study was conducted to know the role of Urdu and English language as medium of education during Primary and Secondary school in Pakistan and its impact on the results of university MBBS professional examinations.

Material and Methods: This study was designed and conducted during September to December 2005 in Gomal Medical College, D.I.Khan. Students of MBBS classes, from sessions 2001 to 2004, were provided with a proforma. The first professional Part-1 examination was expressed as M-1 and other university examinations as M-2, M-3 and M-4 respectively. The medium of learning either Urdu or English during Primary and Secondary level and attempts in their university examinations were asked. The statements regarding medium were randomly checked and the university level performance was verified from results available in the student affairs section of this college. The data was tabulated and statistically analyzed by χ^2 test.

Results: All the 189 students studying in second to fifth (final) year of MBBS classes in Gomal Medical College were included in this study. Among these 47 were in Second year, 57 in Third year, 46 in Fourth year and 42 in Final year. In Second year, students passing in the first attempt in M-1 examination from Urdu medium were 9 out of 19. In Third year, passing M-1 and M-2 in first attempt were 26 out of 44 from Urdu medium. In Fourth year, in first attempt of M-1, M-2, M-3 examinations were 39 out of 72 from Urdu medium. In Fifth year, students passed in M-1, M-2, M-3 and M-4 examinations in first attempt coming from Urdu medium schools were 44 out of 56. The rest of the students from each class were from English medium schools. The results of students from Urdu and English medium schools were compared with each other by χ^2 test for the number of students passing in first and second attempts, the p-value was found to be insignificant ($p > 0.5$).

Conclusion: There is no effect of language as a medium of education during Primary and Secondary school upon the results of university professional MBBS examinations.

Keywords: Basic education, Urdu medium, English medium, Medical students.

INTRODUCTION

Curriculum for MBBS students in Pakistan is five years in all the medical colleges across the country. Talented students are supposed to complete the course in time. Some of the students also take additional sixth or seventh year to complete the medical curriculum.¹ Creditable selection of candidates in the professional colleges is of crucial importance in producing capable and talented doctors to deliver good services to the people.² All the medical colleges face some poor performance students as well.³ To get quality professionals with minimum poor performance ones, the four medical colleges in public sector of our province, North West Frontier Province (NWFP), offer admissions on merit policy. Candidates are selected on the basis of Entry test conducted by Educational Testing and Evaluation Agency (ETEA). The final score of a student is based on; Entry test 50%, Higher Secondary 40% and Secondary schooling 10%

weightage.⁴⁻¹⁰ Evidence has shown that academic achievements of professional graduates could not be predicted on the basis of their professional records. Hence it has been suggested that innovative methods should be evaluated selecting the most suitable professionals.^{11,12}

Pakistan Medical and Dental Council (PM&DC) has recently replaced composite scheme of First professional examination with split scheme. In composite scheme First professional MBBS examination is offered after 2 years in medical college while in split scheme, examination is split into 2 parts, Part -1 after first year and Part-2 after second year in Medical College.¹³ Student's performance was better under the split scheme as compared with the composite scheme of first professional MBBS examination.¹³

Globally over the last two decades, medical education and its learning strategies are being made to

problem-solving in order to produce better clinicians,^{14,15} The basic concept of problem based learning is shifting from unidirectional flow of knowledge as in lecturing to more interactive teaching learning sessions.¹⁴ In Pakistan, there is compelling pressure from some quarters to change the medium of primary and secondary education to English as well. Also there is remarkable mass demand for Primary and Secondary education in the native language. There are many languages across the country but our national language Urdu can be taken as native language.

In Pakistan, Medium of education in primary and secondary stage is Urdu in most and English in many schools. Higher education is in English medium through out the country.

This study was conducted to see any negative impact of Urdu as medium of education in school during Primary and Secondary level, in contrast to English, upon the performance of students during medical education.

MATERIAL & METHODS

This study was designed and conducted during September to December 2005 in Gomal Medical College, D.I.Khan. Students of MBBS classes Second to Final years, sessions 2001 to 2004, were provided with a proforma to fill in. Medium of education either Urdu or English during Primary and Secondary level was recorded. Higher secondary education is in English medium through out the country. Students in MBBS are promoted to second year on getting through university examination (M-1) under split scheme of examination. The First professional examination (M-2) is held at the end of another one-year study. Likewise the Second professional (M-3) and Third professional (M-4) university examinations are given to Third and Fourth year students respectively. Medical science is a vast branch of knowledge. Poor performing students might be facing art of understanding due to medium of education during school as Urdu instead of English. The failure in First attempt or additional attempts might be reflecting the language problem. This effect was tested by Null hypothesis, Urdu medium at school education may lead to more number of attempts in their university examinations as compared to English medium ones. Student's performance during M-1 and M-2 split up especially and M-3 to M-4 generally was asked in the proforma filled up by the students. The medium of language was randomly also checked by various other means. Attempts in university examinations were verified from records in the Student Affairs Section of the college. The students from Urdu and English medium were separated for each session 2001 to 2004 and the number of attempts in each examination counted for each student. The First and Second attempts with respect to medium of education during Primary and

Secondary school were compared by χ^2 test and the p-value calculated.

RESULTS

There were 50 students admitted to 2nd year MBBS class in each session from 2001 to 2004. Some of the students migrate to other colleges; hence students studying at the time of this study in this college were included in this study. In Second year MBBS, there were 47 students. Nineteen of them came from Urdu medium and 28 from English medium. In First university examination (M-1), 27 students passed in first attempt. Among them, 9 students were from Urdu medium. Results are given in Table-1. The difference in the first attempts of the two groups was not significant (P-Val >0.5)

Table 1: Second year MBBS students passing in first and second attempts in M-1 examination

Attempts	Urdu Medium	English Medium	p-value
First attempts	9	18	>0.5
Second attempts	10	10	
Total	19	28	

In Third year MBBS, there were 54 students. They already cleared two professional university examinations M-1 and M-2. From Urdu medium 26/44. While from English medium 27/64 passed in first attempts. The difference in the first attempts of the two groups was not significant (P-Val >0.5)

Table 2: Third year MBBS students passing in first and second attempts in M-1 and M-2

Attempts	Urdu Medium	English Medium	p-value
First attempts	26	27	>0.5
Second attempts	18	37	
Total	44	64	

There were 46 students in Fourth year MBBS class of Gomal Medical College who already cleared M-1, M-2 and M-3 examinations. Out of 138 attempts, 39/72 from Urdu medium and 45/66 from English medium in first attempt. Results are shown in Table-3. The difference in the first attempts of the two groups was not significant (P-Val >0.5).

Final year MBBS students had already gone for 4 university examinations M-1, M-2, M-3, and M-4. Among 42 students, 14 were from Urdu medium & 28 from English medium Urdu medium students had 44/06 as compared to 70/112 for English medium ones. Results given in Table-4. The difference in the first at-

Table 3: Fourth year MBBS students passing in first and second attempts in M-1, M-2 and M-3 examinations

Attempts	Urdu Medium	English Medium	p-value
First attempts	39	45	>0.5
Second attempts	33	21	
Total	72	66	

Table 4: Final year MBBS students passing in first or second attempts in M-1, M-2, M-3 & M-4 examinations

Attempts	Urdu Medium	English Medium	p-value
First attempts	44	70	>0.5
Second attempts	12	42	
Total	56	112	

tempts of the two groups was not significant (P-Val >0.5).

DISCUSSION

English is a foreign language for Pakistani students. There are two types of school educations in the country. One is Urdu medium and the other English medium. In most of the public set up, Urdu is the medium of education. This set up has a good network of schools nearly all over the province and country. Other set up, i.e. English medium schooling is mostly in the private sector and not in the economic reach of all the masses. The students from both the set ups equally compete for professional educations at higher level. All the professional institutions have English as a medium of education. Students weak in English language may not understand and reproduce the knowledge in examinations. The failing and reappearing students may be because of this factor.³ This hypothesis was utilized in this study. We included the currently studying Second to Final year MBBS students and their academic performance in university examinations.

The vast knowledge of medical sciences cannot be memorized but can be retained by understanding and active learning.¹⁴ The traditional learning is a unidirectional transferring of knowledge.¹⁴ In our set up in the Primary and Secondary level, it is lecture based disciplined learning. In medical colleges problem based learning is adopted, thought to be the more efficient one.^{15, 16} Our study showed no effect of language as a medium of education during Primary and

Secondary schooling in relation to higher education. Evidence has shown that academic achievements of professional graduates couldn't be predicted on the basis of their pre-professional records. Hence it has been suggested that innovative methods should be evolved for selecting the most suitable professionals.² Some known factors like regular attendance in the classes ensure better understanding of the subjects and hence improved results.¹⁷

CONCLUSION

There is no effect of language as a medium of education during primary and secondary school upon the results of university professional MBBS examinations.

Medium of education during primary and secondary school may not be interfered, for better performance in the higher education. It is the talent, not the medium which affects the quality of education in professional institutions.

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