

Attrition Rate at a Faculty of Medicine in Western Saudi Arabia

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ABSTRACT. To determine the attrition rate at the Faculty of Medicine and Allied Sciences of the King Abdulaziz University in Jeddah, Saudi Arabia and to make some recommendations for analysis of the factors contributing to this problem. Review of the faculty records for the academic years 1395/1396H (1975/1976G) till 1419/1420H (1998/1999G) regarding student's intake and number of graduating students and the number still registered at the end of the academic year 1419/1420H (1998/1999G). A total of 4,985 students were admitted to the faculty during the study period. 1,945 students graduated. 1,180 students were still studying. This means that 1,860 students left the faculty before graduation. 37.3% of the students left the faculty before graduation. This is a very high rate for a reputable faculty. Possible causes will be discussed and recommendations for further analysis made.

Keywords: Attrition, Undergraduate medical education, Saudi Arabia

Introduction

In Saudi Arabia, the percentage of expatriates among health professionals is around 80%. Health professional education in general and medical education, in particular, has been given high priority by the decision makers and is fully paid by the government. Taking the total budget for the medical faculty and its attached university hospital in Jeddah and the number of students enrolled, it is estimated that government spends approximately SR150,000 per student per year. On the other hand, we accept only the top of school graduates (above 90% school grade average).

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From these efforts it is obvious that attrition in undergraduate medical education has both a significant adverse socio-emotional effect on the student and his/her family and a major adverse financial effect on public resources.

To my knowledge there has been no quantitative study on attrition rates in Saudi medical schools.

Material and Methods

Faculty records of the Faculty of Medicine, King Abdulaziz University were reviewed and the number of students accepted during the study period tabulated (Table 1). Also, the number of students graduating during this period was determined (Table 2). The number of students registered at the end of the last year of this study was also determined.

TABLE 1. Number of admissions per year and gender.

Academic Year	Medicine	
	Male	Female
1975 - 76	82	33
1976 - 77	69	52
1977 - 78	70	55
1978 - 79	68	61
1979 - 80	95	64
1980 - 81	88	75
1981 - 82	96	80
1982 - 83	88	92
1983 - 84	89	100
1984 - 85	80	80
1985 - 86	81	100
1986 - 87	91	92
1987 - 88	81	80
1988 - 89	84	89
1989 - 90	148	89
1990 - 91	192	112
1991 - 92	162	96
1992 - 93	256	119
1993 - 94	168	110
1994 - 95	148	125
1995 - 96	187	147
1996 - 97	116	105
1997 - 98	125	115
1998 - 99	134	116

TABLE 2. Number of graduating students per year and gender.

Academic Year	Medicine	
	Male	Female
1400 / 1980 (1st Grad.)	31	
1401	38	24
1402	48	32
1403	36	40
1404	43	53
1405	56	41
1406	49	53
1407	54	58
1408	66	45
1409	63	59
1410	55	47
1411	58	62
1412	60	61
1413	64	57
1414	60	46
1415	82	58
1416	83	48
1417	55	36
1418	87	37

Attrition is defined as the number of students leaving the faculty without graduating.

Results

In Table 3, the total numbers of admissions and graduates for the whole study period are summarized. Taking the number of students still studying in the faculty into consideration, the rate of attrition is calculated to be 37.3% (36.7% for males and 37.9% for females).

TABLE 3. Summary of study results.

Number of	Males	Females	Total
Total Intake	2,798	2,187	4,985
Total Graduated	1,088	857	1,945
Still Registered	681	499	1,180
Leavers without Graduating	1,029	831	1,860
Attrition	36.7%	37.9%	37.3%

Discussion

Admission to the medical faculty is regarded very high in the Saudi society. Competition is, therefore, very high and admission criteria very tight. Approximately every third to fourth applicant is accepted at our faculty.

An attrition rate of 37.3% is considered very high compared to attrition rates in western countries ranging from 5 to 12%^[1-3].

Our definition of attrition may not be generally acceptable. Within the non-graduating students there is a certain percentage of students transferring to other medical schools or withdrawing voluntarily for personal or health problems. Our preliminary analysis showed that this is a negligible percentage and that by far most important reason of academic failure.

Because of its socio-emotional and financial implications an in depth analysis of this problem is recommended which should address the following questions: 1) At which educational level does most attrition occur?; 2) Which subjects constitute a significant cause of academic failure?; 3) What is the average duration of study?; 4) Is there a correlation between the student's performance in the pre-clinical and clinical years, for those who finish their study successfully?; 5) Are our students selection criteria valid? Selection is important in predicting educational outcome^[4] but is there a correlation between school grades and performance in the faculty? Is our written admission test predicative? Is the non-structured interview predicate?.

Because of the importance of this problem, my recommendations do not stop at the level of statistical analysis of data. There are issues, which are not expressed in figures. Yet, they contribute a lot to the overall educational atmosphere and, hence, to the educational outcome.

The first issue is about our curriculum structure and contents. We follow the subject or department based type of curriculum, which has been changed and no longer applied in many reputable medical schools throughout the world. Recently, there have been a few publications from Saudi medical faculties criticizing this curricular model^[5-8] with its overloading of isolated factual knowledge and limited early clinical experience exposure. A more intense discussion at a national level is needed. Are the course objectives clear and do all students know them? Are we overloading our students with factual knowledge more suitable for a specialist rather than a general doctor (and in a foreign language) to the extent that many students just cannot cope with and end up failing academically? The second issue is about instructional methods. We depend mainly on lectures as the method of instruction. We teach students rather than stimulate them to learn. In spite of being convenient to the teacher and suitable for large students numbers, lectures are considered to be one of the poor methods of instruction. Can we resort more to better methods in spite of our limited resources? The third issue is the assessment. We use all types of written and oral examinations. Oral examina-

tions are even given a higher weight, especially, in the clinical sciences. In contrast, continuous assessment has a much lower weight, if at all done. We assess mainly at the knowledge domain. Testing skills and attitude is far less represented.

We should make all efforts to improve our educational program and instructional methods to allow more students to complete their studies successfully without compromising on the quality of the graduates. We can also make the study a more pleasant and less stressful experience to the successful students.

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الفاقد الدراسي بإحدى كليات الطب في غرب المملكة العربية السعودية

طلال بن محمد بخش

قسم الجراحة ، كلية الطب ، جامعة الملك عبد العزيز

جدة - المملكة العربية السعودية

المستخلص. الهدف: معرفة نسبة الفاقد الدراسي بكلية الطب والعلوم الطبية بجامعة الملك عبدالعزيز بجدة - المملكة العربية السعودية. الطريقة: تم مراجعة ملفات إدارة الشؤون التعليمية لتحديد أعداد الطلاب المقبولين والمتخرجين في الفترة من العام الدراسي (١٣٩٥ - ١٣٩٦ هـ الموافق ١٩٧٥-١٩٧٦ م) وحتى نهاية العام الدراسي (١٤١٩ - ١٤٢٠ هـ الموافق ١٩٩٩-٢٠٠٠ م) وتحديد عدد الطلاب الذين لا يزالون مندرجين في الدراسة بالكلية بنهاية هذا العام الدراسي.