The Longitudinal Outcomes of HKU MBBS Students: A 20-year Retrospective Cohort Review

Weng Yee **CHIN** [1,2], Eric **WAN** [1], Karina **CHAN** [2], Julie **CHEN** [1,2], Lap Ki **CHAN** [2,3], Chak Sing **LAU** [2,4]
[1]Department of Family Medicine and Primary Care, [2]Bau Institute of Medical & Health Sciences Education,
[3]School of Biomedical Sciences, [4]Department of Medicine,
The University of Hong Kong

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Introduction

A retrospective cohort review was undertaken to examine the longitudinal outcomes of our MBBS students up to 20 years post-graduation. The objective of this study was examine medical school completion rates, time to graduation, specialization rates, time to specialization, medical council (MCHK) disciplinary action and MCHK de-registration. Factors associated with failure to complete medical school and factors associated with specialization.

Methods

Data was collected on all students admitted into the MBBS program at the University of Hong Kong from 1990-2009. Regression analyses were used to identify the factors associated with medical school graduation, time to graduation, specialization and time to specialization, disciplinary action and de-registration. Factors analyzed included age at admission, gender, and admission scheme (JUPAS vs Non-JUPAS)

Table 1. Demographics of subjects

Characteristics	Jupas (N=2590)	Non-Jupas (N=544)	P-value
Age of Entry	19.1±0.7	20.1±2.4	<0.001*
Gender			<0.001*
Male	1647 (63.6%)	278 (51.1%)	
Female	943 (36.4%)	266 (48.9%)	
Final year of secondary school			<0.001*
HK local	2585 (99.8%)	51 (10.1%)	
HK non local	5 (0.2%)	106 (20.9%)	
Outside HK	0 (0.0%)	350 (69.0%)	
Completed MBBS	2490 (96.1%)	507 (93.2%)	0.002*
Repeated at least one year of medical school	318 (12.3%)	63 (11.6%)	0.651
Repeated year 1 of medical school	30 (1.2%)	16 (2.9%)	0.002*
Among all graduates	Jupas (N=2490)	Non-Jupas (N=507)	
Fail in at least 1 subject in exit examination	281 (11.3%)	63 (12.4%)	0.463
Time to graduation	5.2±0.4	5.2±0.6	0.307
Unsatisfactory performance in at least 1 rotation during internship	147 (5.9%)	21 (4.2%)	0.127
Failure to license	5 (0.2%)	8 (1.6%)	<0.001*
Among graduates before 2011	Jupas (N=2105)	Non-Jupas (N=366)	
Specialty	1386 (65.8%)	213 (58.2%)	0.005*
Among specialty	Jupas (N=1386)	Non-Jupas (N=213)	
Time to 1st specialization	8.5±2.0	8.1±1.3	0.001*
Among licensed doctors	Jupas (N=2485)	Non-Jupas (N=499)	
MCHK disciplinary action	26 (1.0%)	2 (0.4%)	0.172
No longer on registration list	19 (0.8%)	3 (0.6%)	0.697

Figure 1 Graph of MBBS Graduates by Specialty as of 2016
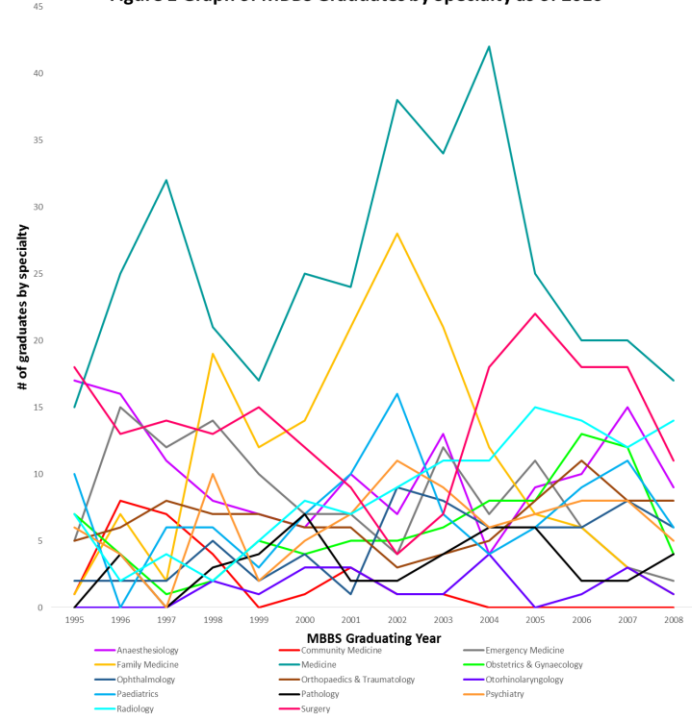
Table 2: Specialization rates by year of graduation

Year of Graduation	(%, n)
1995-1999 (Total 741)	68.02% (504)
2000-2004 (Total 841)	75.27%(633)
2005-2009 (Total 765)	61.31% (469)
2010-2014 (Total 666)	0% (0) as of 2016

Results

Mean age of students admitted was 19.2 years old, 38.6% were female with 85.1% entering via the JUPAS admission scheme. Of the 3134 students who were admitted, 95.6% graduated. Average time to graduation was 5.2 years (SD: 0.5). As of July 2017, 28 graduates had received Medical Council disciplinary action and 22 graduates had de-registered. Students who were older at admission and male were more likely to repeat a year of medical school. Of the 2,471 students who graduated prior to 2011, 64.7% had completed a specialist qualification in an average of 8.5 years (SD: 1.9). Graduates who were older at admission, male or JUPAS students took longer to complete their first specialty qualification.

Conclusions

(1) Most students who entered medical school completed the degree.
(2) Female students appear to perform better academically in undergraduate and post-graduate studies in terms of time taken to complete their degrees.
(3) Older or male students, particularly those who did not attend a Hong Kong local school were at greatest risk of dropping out of medical
school, whilst older or male students were at greatest risk of failing a year of medical school.
(4) The number of graduates who have received disciplinary action or who had deregistered were very low.