ORIGINAL ARTICLE

The Interest and Exam Preferences for Postgraguation of Medical Graduates from a Private Medical College in Lahore who have Completed their one year House Job in 2020

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ABSTRACT

Objective of study: To study the interest and postgraduate exam preferences adopted by young doctors who have successfully completed their one-year house job in May 2020, who graduated from a private medical college of Lahore

Place and duration: The data of doctors was collected from records of Akhter Saeed Medical and Dental college Lahore, who had completed their one-year house job from May 2019 to May 2020.

Study design: It was a cross sectional survey. Non-probability conventional sample was used. The data was analyzed by SPSS-25 and presented in forms of tables, bar charts and pie charts.

Materials& methods: The data of 121 students is collected from college and hospital records who graduated in 2019, started their house job in May 2019 and completed in May 2020. The students who were fail in final professional exam or were not able to complete their house job due to any reason were excluded from study. Each student was contacted in person and required information was collected after verification of their names and roll numbers with their consent. Close ended same set of questions were asked from each student. Data was collected and analyzed by SPSS 25.

Results: Total 121 young doctors were included in our study, 81 (66.9%) females and 40 (33.1%) males. Out of theses 63 (52.1%) responded and 58 (47.9%) didn't. The unviability of getting response was either lack of consent to respond or change of contact numbers. Regarding marital status 32 (50.8%) were unmarried [19 (30.16%) females, 13 (20.63%) males] and 31 (49.2%) were married [20 (31.75%) females ,11 (17.64%) males]. Forty-nine 49 (77.78%) medical graduates actually perused their career and went for some post graduate exams whereas 14 (22.22%) only planned and didn't appear in any exam after completion of one year house job. Among doctors who responded, eleven 11 (17.5%) young doctors [9 (14.29%) females ,2 (3.17%) males], successfully started their residency after FCPS part I examination, twenty-one 21 (33.3%) were waiting for their induction after passing their FCPS part I exam [13(20.63%) females, 8(12.70%) males], eight 8(12.70%) went for PLAB exam [5 (7.93%) females 3 (4.76%) males] and seven 7 (11.1%) attempted part I exam [5(7.93%) females, 3 (4.76%) males] but not declared successful. The other options perused by doctors for postgraduation were MCPS dermatology 1 (0.8%), two years diploma radiology 1 (0.8%), M Phil biochemistry 1 (0.8%), exam of Australian medical council 1 (0.8%) and STEPs 1 (0.8%). There were eleven 11 (17.5%) doctors [5 (7.93%) females, 6 (9.52%) males] who didn't appear in any exams.

The top four favourite specialties preferred by graduates of Akhtar Saeed Medical college were medicine 19 (15.7%), surgery 10 (8.3%), gynecology 7 (5.8%) and anesthesia 3 (2.5%). The remaining were radiology 2 (1.7%), ENT 2 (1.7%), eye 1 (0.8%) and cardiology 1 (0.8%).

Conclusion: It was an encouraging, reassuring and promising trend that young graduates from a private medical college pursue postgraduate qualification timely. Most students were females and majority preferred clinical over basic sciences for postgraduation. These young doctors should be guided and trained in those subjects which face shortfall in specialists. The data can help to find job opportunities in Pakistan to avoid brain drain.

Keyword: Medical graduates, post-graduation, doctors.

INTRODUCTION

Around 50 years back merely getting MBBS degree was enough for majority of doctors as it provided a medical registration and license to start private medical practice in Pakistan. As years passed, awareness level increased and world trends were followed, more and more medical graduates showed keen interest in following postgraduation. Pakistan is amongst countries where doctor to patient ratio is not satisfactory and condition of health providing facilities are not meeting international standards ^{1,2}.

There were only seven (07) medical specialties in Pakistan 1947 which rose to eighteen thousand (18000) in year 2007 ³ which is very positive development. At present 203,000 doctors are registered in Pakistan medical council (PMC) and around 90 medical colleges, in private and public sector, are providing their services ^{4,5}. There are around 129 institutes which provide 10,000 postgraduate training slots for doctors accredited by College of Physicians and Surgeons ^{6,7}. The postgraduation training is a complex program which varies country to country and pattern of postgrad training in United Kingdom is followed by many countries as it shows regular revision and evaluation. In Pakistan, postgraduation training starts after completion of one year house job, either FCPS pathway granted by CPSP or MD/MS granted by medical universities and diplomas are options. In USA or Canada,

STEPS examination after completion of medical school, leads to residency programs 3 to 5 years duration and then Board certification. In Australia different pathways are options after foundation training years. In UK PLAB exam is taken for postgraduation.

Most of students decide about their future medical career in later years of their under graduation. There are different factors which influence this decision.

MATERIALS AND METHODS

The data of 121 students is collected from college/hospital records who graduated in 2019, started their house job after passing final year exam in first attempt, in May 2019 and completed in May 2020. The students who didn't pass final professional exam or were not able to complete their house job due to any reason and those who didn't give consent to answer the questions were excluded from study. An interview based, structured questionnaire with close ended questions was used to get data. Each student was contacted in person and required information was collected after verification of their names and roll numbers with their consent. Data was collected and analyzed on SPSS 25. Results were shown in form of tables, bar graph and pie chart.

RESULTS

Total 121 young doctors were included in our study, 81 (66.9%) females and 40 (33.1%) males. Out of theses 63 (52.1%) responded and 58 (47.9%) didn't. The unviability of getting response was either lack of consent to respond or change of contact numbers. Regarding marital status 32 (50.8%) were unmarried [19 (30.16%) females, 13 (20.63%) males] and 31 (49.2%) were married [20 (31.75%) females actually perused their career and went for some post graduate exams whereas 14 (22.22%) only planned and didn't appear in any exam after completion of one year house job. Among doctors who responded, eleven 11 (17.5%) young doctors [9 (14.29%) females, 2 (3.17%)

males], successfully started their residency after FCPS part I examination, twenty-one 21 (33.3%) were waiting for their induction after passing their FCPS part I exam [13(20.63%) females, 8(12.70%) males], eight 8(12.70%) went for PLAB exam [5 (7.93%) females 3 (4.76%) males] and seven 7 (11.1%) attempted part I exam [5(7.93%) females ,3 (4.76%) males] but not declared successful. (table 1) The other options perused by doctors for postgraduation were MCPS dermatology 1(0.8%), two years diploma radiology 1 (0.8%), M Phil biochemistry 1 (0.8%), exam of Australian medical council 1 (0.8%) and STEPs 1 (0.8%). There were eleven 11 (17.5%) doctors [5 (7.93%) females ,6 (9.52%) males] who didn't appear in any exams.(Bar chart)

Table 1: showing gender, response, marital status and postgrad exam appearance

| | | | Female | Male | Total | Total |
|---|-----------------|------------------|-------------|-------------|-------------|------------|
| 1 | GENDER | FEMALE | 81 (66.90%) | | 121 | 121 (100%) |
| | | MALE | | 40 (33.10%) | | |
| 2 | RESPONSE | RESPONDER | 39 (32.23%) | 24 (19.83%) | 63 (52.07%) | 121(100%) |
| | | NOT RESPONDED | 42 (37.71%) | 16 (13.22%) | 58 (47.93%) | |
| 3 | MARITAL STATUS | MARRIED | 20 (31.75%) | 11 (17.46%) | 31 (49.20%) | 63 (100%) |
| | | UNMARRIED | 19 (30.16%) | 13 (20.64%) | 32 (50.80%) | |
| 4 | POST GRADUATION | PERSUED ACYUALLY | 33 (52.38%) | 16 (25.40%) | 49 (77.78%) | 63 (100%) |
| | | PLANNED ONLY | 6 (9.52%) | 8 (12.70%) | 14 (22.22%) | |

The top four favourite specialties preferred by graduates of Akhtar Saeed Medical college were medicine 19 (15.7%), surgery 10 (8.3%), gynecology 7 (5.8%) and anesthesia 3 (2.5%). The remaining were radiology 2 (1.7%), ENT 2 (1.7%), eye 1 (0.8%), cardiology 1 (0.8%) and basic subjects Biochemistry 1 (0.8%) as shown in Pie chart.

Table 2: shows chi square test showing independence of variables.

Table 2: Chi square test showing independence of variables CHI-SQUARE TESTS

| | Value | df | Asymptotic Significance (2- sided) | Exact Sig. (2- sided) | Exact Sig. (1- sided) | | | |
|--|--------------------|----|--|-----------------------------|-----------------------------|--|--|--|
| Pearson Chi-Square | 2.769 ^a | 1 | .096 | | | | | |
| Continuity Correction | 1.828 | 1 | .176 | | | | | |
| Likelihood Ratio | 2.703 | 1 | .100 | | | | | |
| Fisher's Exact Test | | | | .124 | .089 | | | |
| N of Valid Cases | 63 | | | | | | | |
| a. 0 cells (0.0%) have expected count less than 5. The minimum | | | | | | | | |
| expected count is 5.33. | | | | | | | | |
| b. Computed only for a 2x2 table | | | | | | | | |



Figure 1: Bar Chart showing postgraduation preferences



Figure 2: Pie Chart showing students interests for postgraduation

DISCUSSION

Overall number of female medical graduates were more in number than males in Pakistan. It is believed that mostly girls got admissions in medical colleges on open merit but later on mostly left professional life due to some reasons like social set ups, financial factors, gender, family problems etc. Now mode is slightly shifted and females are carrying out their medical profession very successfully. The PMDC report of year 2006 has showed that 39% of all medical graduates were doctors and 20% of these had further higher qualification. At Dow university of Health Sciences, in 2008, 60% of students were females ⁸. In same year, 41% applicants for CPSP part-I entry exam were females and likewise among students who were declared pass in part-II fellowship exams 36% candidate were ladies. Such female medical student's preponderance is also observed in another study on medical undergraduates in Karachi⁹.

There are different aspects to be considered by a new medical graduate while choosing a field for post-graduation. These include gender, socioeconomic status, expected income in future, emergency or non-emergency field, duty hours and demands of profession ^{10,11}. Top three specialties chosen by students were medicine, surgery and gynecology. Similar trend is also observed in other ⁹studies. one study from neighboring country India ¹² had shown similarity. International data from Saudi Arab, Canada and China also supports this preference ¹³⁻¹⁵. There was clear demarcation that mostly showed interest in clinical subjects rather basic ones. In our study only one (2%) chose Biochemistry for M Phil while other 98% had interest in clinical subjects.

Most of the undergraduate select their medical career on basis of their experience gained during their medical studies ^{16,17}. Teaching environment, teaching strategy and educational experience ¹⁸ also influence student career choice in future so mostly students had an idea of future field of post-graduation in final year.

The new doctors who plan to settle in Pakistan opt for fellowship exam by CPSP. The college of physician and surgeons (CPSP) provides a post graduate training based on supervised apprenticeship in a teaching hospital which leads to fellowship FCPS after successful exam. Entry in this program requires passing of part -I exam after one year house job. This exam is relatively tight (pass percentage is around 20-25%), tests basic knowledge of nascent doctor in subjects of surgery, medicine and basic subject in which candidate wants to do fellowship in future. On an average it has pass rate of 20% and high failure rate can be attribute to insufficient clinical acumen developed before entry exam 8,19. It may also be related to increased number of seats in private medical colleges without proper infrastructure and manpower required and demanded by PMC. But CPSP entrance exam maintains transparency and reliability according to foreign analytics.

Differences apart, postgraduate training in Pakistan is well grounded and future prospects are hopeful, if we are able to retain well trained self-motivated doctors.

Few students plan to go abroad ²⁰ in search of better future. Recent data has shown around 11.7% of Pakistani trained doctors practicing in four big countries like United Kingdom, Canada, Australia and USA ²¹. This brain drain affects health system of Pakistan adversely and novel scientific approach is need of time to tackle this major problem.

Similar results which support our findings in the study are also observed in other studies from Pakistan²².

CONCLUSION

It was an encouraging, reassuring and promising trend that young graduates from a private medical college pursue postgraduate qualification timely. Most students were females and majority preferred clinical over basic sciences for postgraduation. These young doctors should be guided and trained in those subjects which face shortfall in specialists. The data can help to find job opportunities in Pakistan to avoid brain drain.

REFERENCES

1. Malik SM, Bhutta ZA. Reform of primary health care in Pakistan. The Lancet.VOL 392, ISSUE 10156, P1375-1377, OCTOBER 20, 2018 DOI:http://doi.org/10.1016/S0140-6736(18)32275-X.

- 2. Arshad S, Iqbal J, Waris H, Ismail M, Ayesha. Health care system in Pakistan; A Review. Res Pharm Health Sci. 2016;2(3):211-216.
- College of Physicians and Surgeons of Pakistan 2007. The role of the CPSP, Karachi.
- 4. College of Physicians and Surgeons of Pakistan. Training Programs Available from http://www.cpsp.edu.pk/index.php
- Pakistan Medical and Dental Council. List of recognized medical colleges in Pakistan. Available from http://www.pmdc.org.pk/ About Us/Recognized Medical Dental Colleges/tabid/109/Default. Accessed on 21st Jan 2016.
- Rathore FA, Farooq F. Thinking Out of the Box: Alternative Career Choices for Young Doctors in Pakistan. Journal of the College of Physicians and Surgeons, Pakistan. JCPSP. 2016 Feb;26(2):145-147. DOI: 02.2016/jcpsp.145147. PMID: 26876404.
- Pakistan Medical and Dental Council. Statistics http://www. pmdc.org.pk/Statistics/tabid/103/Default.aspx accessed on 21st Jan 2016.
- Biggs JSG. Postgraduate medical training in Pakistan: observations and recommendations. Journal of The College of Physicians and Surgeons Pakistan 2008, Vol. 18 (1): 58-63.
- Shaikh I, Noreen K and others. REASONS FOR CHOOSING SPECIALTY AFTER GRADUATION AMONG STUDENTS OF A PRIVATE MEDICAL COLLEGE IN PAKISTAN. Pakistan Journal of Public Health| Vol. 7, No. 2| June 2017.
- Roupret M, Hupertan V, Chartier KE. The choice of medical career in a population of 600 second cycle French medical students preparing for the national ranking examination. Pre-Med. 2005; 34:786-90.
- Arnold MW, Patterson AF, Tang AS. Has implementation of the 80hour work week made a career in surgery more appealing to medical students? Am J Surg 2005; 189:129-33.
- Subba SH, Binu VŠ, Kotian MS, Joseph N, Mahamood AB, Dixit N, Reddy P. Future specialization interests among medical students in southern India. National Medical Journal of India. 2012 Jul 1;25(4):226-9.
- Abdulghani HM, Al-Shaikh G, Alhujayri AK, Alohaideb NS, Alsaeed HA, Alshohayeb IS, Alyahya MM, Alhaqwi AI, Shaik SA. What determines the selection of undergraduate medical students to the specialty of their future careers. Medical teacher. 2013 Apr 1;35(sup1): S25-30.
- Alawad AA, Khan WS, Abdelrazig YM, Elzain YI, Khalil HO, Ahmed OB, Adam OA. Factors considered by undergraduate medical students when selecting specialty of their future careers. Pan African Medical Journal. 2015;20(1).
- Liang D, Tang CX. The specialty choice of medical students in China: a stated preference experiment. BMC medical education. 2016 Apr 12;16(1):1.
- Harris MG, Gavel PH, Young JR. Factors influencing the choice of specialty of Australian medical graduates. Med J Aust 2005; 183:295-300.
- Wilkinson D, Laven G, Pratt N, Beilby J. Impact of undergraduate and postgraduate rural training, and medical school entry criteria on rural practice among Australian general practitioners: national study of 2414 doctors. Med Educ 2003; 37:809-14.
- Puertas EB, Arósquipa C, Gutiérrez D. Factors that influence a career choice in primary care among medical students from high-, middle-, and low-income countries: a systematic review. Revista Panamericana de Salud Pública. 2013 Nov;34(5):351-8.
- Ansari MN. Postgraduate Medical Training in Pakistan. Journal of the College of Physicians and Surgeons Pakistan. Vol. 18 (1): 1-2. 2008.
- 20. Barbara Stilwell et al. Migration of health -care workers from developing countries: strategic approaches to its management.
- Bulletin of the World Health Organization 2004; 82: 595-600.
 Mullan F. The metrics of the physician brain drain. N Eng J Med 2005; 353:1810-8.
- Kamal A, Shaikh M A. Post-graduation plans of medical students Perspective from Islamabad and Rawalpindi, Pakistan. J Pak Med Assoc. vol. 63, No.2, February 2013.