

Choices in career specialisation among junior doctors working in tertiary care centres in Sri Lanka: trends and determinants

Fernando D¹, Manchanayaka M A N²

Journal of the Ceylon College of Physicians, 2016, 47, 27-30

Abstract

Background: Sri Lanka has limited published data to offer on this topic that provides key knowledge in planning undergraduate and postgraduate medical education, health policy planning and implementation. This study aims to describe the choices for career specialization in junior medical graduates working in the medical faculties and tertiary care hospitals of Sri Lanka and determine the factors that influenced the choices.

Method: A cross sectional descriptive study was conducted among 270 junior doctors, to evaluate their preferences for specialization and determinants.

Results: There was a predominance of female participants (56.3%). The 4 major specialities were the most preferred choices, with clinical medicine on top (18.9%) while a career in public health was the least favoured option (1.1%). A university career was preferred by 17.4%. There was a statistically significant difference between the specialization choices between men and women. The leading factors that determined the choice were interest and skills and abilities in a given field (45.6%).

Conclusions: Trends of choices and determinants have changed over the last 3 decades, possibly due to the introduction of new specialities, among other causes. Career guidance programmes need to be strengthened. Differences in the career choices and their determinants and reasons why some specialities are less favoured should be studied in detail.

Key words: specialisation, choices, determinants, junior doctors, tertiary care centres

Introduction and background

A doctor's choice in career specialisation depends on a multitude of factors. A profusion of international literature has described the career choices of junior doctors and medical students. Research include studies that have examined the preference for a wide range of specialities^{1,2,3} and for a given specialty, for example, infectious diseases, anaesthesiology and psychiatry.^{4,5,6} Sri Lanka has only limited published data to offer on this topic, one study done 30 years ago⁷ and the other, contemporary.⁶ An array of characteristics on this topic have been examined, including gender differences in career choice,⁸ progression in the chosen speciality^{9,11} perceptions in different stages of their career that includes the undergraduate phase which is influenced by evolving medical curricula.^{6,7}

Determinants for a country at a particular point of time cannot be generalized for the global context¹¹ or even the same region on a long term basis. There is a great degree of complexity in the career preference of doctors that is influenced by external factors such as the dynamics of development of health facilities and availability of specialties and preferences that arise as a result. Economic and societal changes and intrinsic personal factors too play a huge role.^{1,2} Hence it makes sense to continue examining the trends regularly, preferably in a prospective continuum, if valid conclusions are to be made about them.

Knowledge of such trends are invaluable in health policy planning and implementation as evident by the issues identified by the Ministry of Health and Nutrition of Sri Lanka on deficiencies in matching cadre and norms tailored to meet the service demands, work load, demographic, geographical and territorial factors and matching internationally accepted standards in human resources.¹² The ministry also identifies deficiencies in policies and planning for finer specialties and disparities and inequalities in the distribution of both curative and preventive health staff among districts.¹²

This study was conducted to add new knowledge to the prevailing trends in career choices and their determinants in junior doctors, a key area to be considered in planning the medical services, yet inadequately explored in recent times, in Sri Lanka.

¹ Senior Lecturer in Physiology, Faculty of Medicine, University of Colombo, Sri Lanka.

² Research Assistant, Department of Physiology, Faculty of Medicine, University of Colombo, Sri Lanka.

Objective

To describe the choices in career specialization in junior medical graduates working in the medical faculties and tertiary care hospitals of Sri Lanka and determine the factors that influenced the choices.

Methodology

This cross sectional descriptive study was conducted in 2012 among 300 junior medical undergraduates, including those working in tertiary care teaching hospitals in the Western, Southern and Central provinces. A junior doctor was defined as a medical graduate from the time of graduating up to two years of service after registration with the Sri Lanka Medical Council. The study population included pre-intern doctors, intern house officers, resident house officers and senior house officers with less than 2 years of service. Junior doctors working in the Colombo group of teaching hospitals, teaching hospitals in Ragama, Karapitiya and Peradeniya and those who were working in the respective medical faculties were recruited subsequent to obtaining informed verbal consent. Those who had already entered a postgraduate programme and junior doctors working in the private sector were excluded from the study. An anonymous, self-administered questionnaire was used to collect data. The questionnaire collected data in 3 domains that included demographical details, preferred choices for specialization and factors that determined the choices. The determinants were decided upon by the investigators, based on available local and international literature^{1,3,7} and local sociocultural aspects. Data were described as frequencies and percentages. Cross tabulations and Pearson's chi-square test were applied to assess significant differences between categorical variables. The level of significance was set at $p \leq 0.05$. Ethical clearance was obtained from the Ethics Review Committee of the Faculty of Medicine, University of Colombo.

Results

The response rate was 90% with 270 doctors completing and returning the questionnaire. There was a predominance of female doctors (152/56.3%). 40.4% graduated from the Colombo Medical Faculty. 98% of the respondents were between 25-30 years of age, with the median age being 27 years. 50.2% respondents belonged to intern and immediate post-intern category.

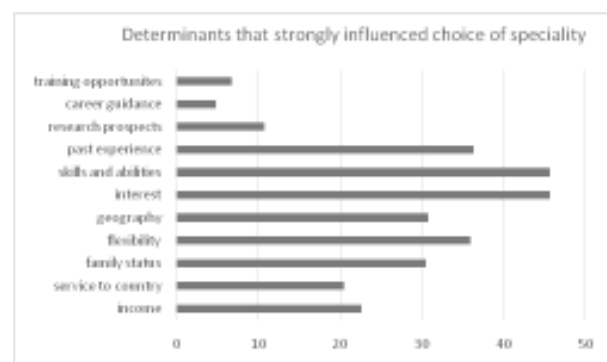
At the time study, only one third of the respondents had made a firm decision on their choice of specialization. Hospital based major specialties were the most attractive, clinical medicine ranking first (18.9%), followed by surgery (15.5%), paediatrics (9.6%) and obstetrics and gynaecology (9.3%). General practice ranked next. Psychiatry, anaesthesiology, medical administration and public health

were among the less favoured fields. A university academic career was favoured by 17.4%. The choices for specialization are presented below.

Specialty of first choice	Proportions male: female ratio	
Medicine or sub specialties	18.9	(14:37)
Surgery or sub specialties	15.5	(31:11)
Paediatrics	9.6	(4: 22)
Gynaecology and obstetrics	9.3	(21:4)
General practice	6.7	(8:10)
Lab based specialties	5.9	(3:13)
Psychiatry	4.8	(4:9)
Medical administration	3.8	(4:5)
Anaesthesiology	3.3	(2:7)
Public health	1.1	(1:2)
University career (all departments)	17.4	(17:31)
Other	3.7	(4:6)

Females preferred clinical medicine, paediatrics and haematology with a statistical significance ($p < 0.05$) while males preferred surgery and obstetrics and gynaecology ($p < 0.05$).

Leading factors that strongly influenced the choice of specialization were interest in the field (45.6%), skills and abilities on a field (45.6%), past experience during undergraduate and intern periods (36.3%) and flexibility of working hours (35.9%). Service to the country (20.4%), income (22.6%), geographical stability (30.7%) and having a family (29.3%) were the next set of factors that influenced the career choice while non-availability of training opportunities (6.7%), career guidance programmes (4.8%) and research prospects (10.7%) were ranked lowest as strong influents.



Determinants of choices

Discussion

Our study surveyed the choices in specialisation and determinants of junior doctors in 7 major teaching hospitals and 4 medical faculties in 3 provinces with the highest population density. Our study is likely to represent the profile of specialisation choices of junior doctors working in tertiary care, teaching hospitals, but not including non-tertiary care institutions and hospitals in other 6 provinces and private hospitals is a limitation. Further, we did not collect data on merit position of the participants and hence, it was not possible to analyze whether the choices differed according to their rank in the merit list.

The participants were at the earliest stage in their career before they choose a specialty for postgraduate qualification. While it is prudent to know the career preferences early, there is a higher likelihood of them deciding on their choice at the time they actually choose their postgraduate course. This could be the reason for only one third being definite in their choice.

In the earlier Sri Lankan study, the four major specialties attracted the majority of participants.⁷ Interestingly, this pattern of choice was consistent with that shown in a New Zealand study conducted 20 years later.³ British doctors placed general practice, surgical specialties, paediatrics, psychiatry and anaesthesiology high up in their preference list.¹ We observe a change in the trend of preferences since 1984, with the four major specialties attracting a lower proportion of junior doctors. 86-88% were attracted to major specialties back then,⁷ and 30 years later, the proportion has reduced to 61.3%. This pattern is consistent with data from the other European countries.¹ Among the possible reasons for the change, rising popularity of general practice as a career option and branching out of specialties into finer specialties are likely. The proportion who opted for a university career has risen over the years. The geographical stability of a university job could be a major contributor to the choice. Psychiatry, medical administration, anaesthesiology and public health have retained their place among the less popular choices, resembling the situation in 1984,⁷ with less than 5% of the participants preferring them as the first choice. However, the numbers preferring them have increased.

Interest and skills and abilities in the field of choice are the two strongest influencing factors in our study while flexibility of working hours follows closely. Our findings fall in line with New Zealand findings³ in this respect and show similarity to British observations,¹⁴ where both female and male doctors were strongly in favour of flexible working patterns. Determinants show similar trends in other European studies.¹ Fear and stigma associated with the specialty have been stated

as reasons that may preclude recruitment of Sri Lankan trainees to psychiatry.¹⁰ We did not examine the reasons for not preferring a particular field.

Gender as a determinant of specialisation trends has become important since 50% or even more of our medical graduates are now women. Their career paths can be quite different to that in men.⁸ Our study, the first to present published data on career choices of Sri Lankan women doctors, showed women preferred clinical medicine and paediatrics among hospital-based specialties while haematology was the most popular laboratory-based specialty. This finding shows similarities and deviations from British studies in which paediatrics and gynaecology and obstetrics were among the top choices.¹³ The preference for laboratory-based specialty could reflect the influence of domestic circumstances for women such as raising children and caring for a family, an aspect of the 'glass ceiling' phenomenon that describes invisible and insidious obstacles for career women in business and academia.¹³ However, increased attraction for clinical medicine and paediatrics could signify readiness to accept the challenges of busy hospital-based specialties. Surgery and gynaecology and obstetrics were the popular choices among Sri Lankan male doctors. Here, the trend is similar to 1984 observations in Sri Lanka, but deviates from European studies in which internal medicine was rated high among preferences in males.¹

Conclusions

There are noteworthy changes in trends of specialty choices in this population of junior doctors from the observations reported 3 decades earlier. Changes with respect to the preference as well as determining factors are observed. However, similarities do exist with regard to most popular and least popular choices, major specialties still enjoying top positions. General practice and university jobs have assumed increased significance as a career choice, while medical administration, anaesthesiology and public health still remain among the less popular choices. Attraction to psychiatry has not increased over the years, a pattern seen in other parts of the world. The most influential determining factors in our study are the interest in the field and perceived skills and abilities in the field of choice. Weak impact of career guidance programmes as a determinant of choice is disconcerting and should be looked into. The choices between male and female doctors show a marked difference. It would be useful to analyze the career determinants of male and female doctors separately and examine the preference with regard to finer specialties. For clarity on why certain specialties are not so popular, studies directed at those specialties are recommended.

Acknowledgements

Contribution of Dr S Perera and Dr P A K T Thiranaga to collect data is acknowledged.

References

1. Soethout MBM, Ten Cate TJ, van der Wal G. Factors associated with the nature timing and stability of the specialty career choices of recently graduated doctors in European countries. *Medical Education Online* (serial online) 2004; **9**(24): 1-9. Available <http://www.med-ed-online.org>
2. Parkhouse J, Ellin DJ. Reasons for doctors' career choice and change of choice. *British Medical Journal* (Clinical Research Edition) 1988; **11** (296): 1651-3.
3. Zarkovic A, Child S, Naden G. Career choices of New Zealand Junior doctors. *Journal of the New Zealand Medical Association* 2006; **119** (1229): 1-8.
4. Alora AT. Infectious Diseases as a Career Choice: Perceptions of Medical Residents in the Philippines. *Phillipines Journal of Microbiology & Infectious Diseases* 1989; **18**(2): 62-6.
5. Khan F, Minai F, Siddiqui S. Anaesthesia as a career choice in a developing country; effect of clinical clerkship. *Journal of the Pakistan Medical Association* 2011; **61**(11): 1052-6.
6. Rodrigo A, Wijesinghe C, Kurupparachchi KALA. Changes in attitudes toward psychiatry with introduction of a new curriculum: experiences of a Sri Lankan medical school. *Sri Lanka Journal of Psychiatry* 2012; **3**(1): 14-16.
7. Karalliedde LD, Senanayake N, Aluwihare APR. Career preferences of the 1984 medical graduates of Sri Lanka. *Medical Education* 1986; **20** (1): 64-8.
8. Allen I. Women doctors and their careers: what now? *British Medical Journal* 2005; **331**: 569-72.
9. Taylor K S, Lambert T W, Goldacre M J. Career progression and destinations, comparing men and women in the NHS: postal questionnaire surveys. *British Medical Journal* 2009; **338** doi: <http://dx.doi.org/10.1136/bmj.b1735>
10. Kurupparachchi KALA. Recruitment and retention of psychiatrists in low-income countries. Correspondence. *British Journal of Psychiatry Bulletin* 2007; **32** (4).
11. Goldacre MJ, Laxton L, Lambert TW. Medical graduates' early career choices of specialty and their eventual specialty destinations: UK prospective cohort studies. *British Medical Journal* 2010; **340**: c3199 doi: 10.1136/bmj.c3199
12. Strategic Framework for Health Services 2016 -2025. MoH - Sri Lanka ISBN978-955-0505-81-4; 62-63.
13. Reed V, Buddeberg-Fischer B. Career obstacles for women in medicine: an overview. *Medical Education* 2001; **35**: 139-147.
14. Allen I. Doctors and their careers: a new generation. London: Policy Studies Institute 1994; http://www.psi.org.uk/site/publication_detail/1700