

## RESEARCH ARTICLE

**Medical Student Career Choice's Determinants: A Qualitative Study****Rizma Adlia Syakurah,<sup>1,2</sup> Yayi Suryo Prabandari,<sup>3</sup> Doni Widyandana,<sup>4</sup> Amitya Kumara<sup>5</sup>**<sup>1</sup>Department of Public Health, Faculty of Medicine, Universitas Sriwijaya, Palembang, Indonesia,<sup>2</sup>Graduate Program, <sup>3</sup>Department of Public Health, <sup>4</sup>Department of Medical Education, Faculty of Medicine, Universitas Gadjah Mada, Yogyakarta, Indonesia, <sup>5</sup>Department of Public Health, Faculty of Psychology, Universitas Gadjah Mada, Yogyakarta, Indonesia**Abstract**

Choosing a career is an essential stage in medical students' life. Previous researchers all across the world have been conducted studies to examine determinants of career choices in general and medical careers in sociodemographic and behavioral perspectives. While most of the studies centered on general career choices determinants and located mostly in western countries with general career choices as their topics, few studies explore about medical students' career choices determinants in a collectivist culture like Indonesia. Hence, this study aimed to explore and describe determinants of medical students' career choices in collectivist culture setting. Participants, 62 students in total, were recruited from all stages of undergraduate medical students in Sriwijaya University in November 2015 until January 2016. Each of focus groups was led by a facilitator to explore medical students' career choices' determinants. Transcripts encoded according to recurring topics and themes that came up during their discussions. Eight themes identified from the discussions were: four major, two intermediate and two minor issues. Major themes were financial gain, prestige, personal interest and family influence. In conclusion, some points can be used to increase medical students' interest in various medical career fields. Exposure to medical career information should not target merely on medical students but also to their family and the community as well. Government roles in providing financial incentives as well as career opportunities to medical fields to increase the interest of medical students in the certain medical field.

**Key words:** Career choice, medical career, undergraduate**Determinan Karier Mahasiswa Kedokteran: Sebuah Studi Kualitatif****Abstrak**

Pemilihan karier merupakan salah satu fase yang penting dalam kehidupan seorang mahasiswa kedokteran. Berbagai penelitian di seluruh dunia telah dilakukan dalam menemukan dan menganalisis determinan pemilihan karier seseorang, baik secara umum, maupun dalam dunia kedokteran secara khusus yang dilakukan pada perspektif sosiodemografi dan perilaku. Saat ini masih sedikit sekali penelitian yang dilakukan pada mahasiswa kedokteran yang bertujuan mengeksplorasi determinan pemilihan kariernya, terutama dalam lingkungan dengan kultur kolektivisme seperti di Indonesia. Penelitian ini ditujukan mengeksplorasi dan menjelaskan alasan pemilihan karier mahasiswa kedokteran pada lingkungan dengan kultur kolektivisme. Partisipan adalah semua mahasiswa kedokteran prelinik di Fakultas Kedokteran Universitas Sriwijaya yang berjumlah 62 orang. Penelitian dilakukan pada bulan November 2015–January 2016. Tiap kelompok diskusi terarah dipimpin oleh seorang fasilitator yang melakukan eksplorasi terkait alasan pemilihan karier mereka. Hasil diskusi dicatat dan transkrip dikelompokkan sesuai dengan tema yang sering muncul selama kegiatan diskusi berlangsung. Delapan tema teridentifikasi dalam diskusi, yaitu empat tema mayor, dua tema menengah, dan dua tema minor bergantung pada seringnya tema tersebut muncul dalam semua diskusi. Tema mayor yang muncul adalah pendapatan, prestise, minat pribadi, dan pengaruh keluarga. Keterpaparan informasi karier kedokteran perlu dilakukan tidak hanya pada mahasiswa, tetapi juga pada keluarga dan lingkungan. Pemerintah juga berperan dalam memberikan insentif dan peluang pada bidang karier yang membutuhkan lebih banyak tenaga kerja di masa yang akan datang untuk meningkatkan minat mahasiswa pada bidang karier tersebut.

**Kata kunci:** Mahasiswa kedokteran, karier kedokteran, pilihan karier

Received: 5 August 2017; Revised: 20 November 2017; Accepted: 19 December 2017; Published: 27 December 2017

**Correspondence:** Dr. Rizma Adlia Syakurah, M.A.R.S. Department of Public Health, Faculty of Medicine, Universitas Sriwijaya. Kompleks RSMH. Jln. Dr. Moh. Ali, Palembang 30126, South Sumatra, Indonesia. Telepon: (62711) 580964. HP: 628194863001. E-mail: rizma@azzahragroup.co.id

## Introduction

Career decision making is an ongoing process throughout ones' academic live, so makes the medical career.<sup>1</sup> The medical specialist is still considered the most sought after career options in the medical field.<sup>2-4</sup> Career preference towards specialists in a long-term affects the composition of the physician workforce. Because although other medical fields aren't as popular and interesting, those professions hold the same importance as specialists. However medical students aren't interested in pursuing those non-specialist professions because they are considered to be less prestigious medical career professions.<sup>2</sup>

To fill the needed sectors and to balance the distribution of medical careers, finding determinants are importance to modify methods of admission selection, medical school curricula, practice opportunities to match local needs and student personal interests.<sup>5,6</sup> Generally, determinants of career decisions were in a vast spectrum, from personal characteristics, role model, characteristics of certain careers, to income related issue.<sup>2,3,5,7</sup> This study aimed to explore the determinants of medical students' career choice in collectivist culture setting which heavily regard social and community approval compared to individuality in choosing big decision in their lives, like career choices.

## Methods

The method used is qualitative study using focus group discussions to explore the determinants of medical students' career choice. Focus group discussions method were chosen in this study because this method capture real-life data in the social setting, and group dynamics bring out new insights that might now predict before. Focus group itself is useful in providing information about how people think, feel, or act regarding a specific topic.

The study started in November 2015 until January 2016. The medical students were asked to participate in the study; who recruited from all four years of undergraduate level. Every representative of each class briefed and described the focus group and given sign-up sheets for each class resulting in 62 students recruited as participants, which divided into seven focus groups according to their years of study.

The discussion guide constructed with questions designed to discover medical students'

career choice determinants and their perception toward medical career and career development process in general. Each focus group was led by one facilitator and consisted of four until nine students. Facilitator stimulated the students to elaborate determinants of their career choices based on the provided discussion guide which trained beforehand. Each discussion lasted for one hour until one and a half hour. Author and one assistant were reviewing the transcript independently for three times and coded them according to the topics and themes derived from the discussion using thematic analysis method. The transcripts were coded manually and input in spreadsheets.

This study is a preliminary part of a dissertation titled "Model Development of Career Choice Introduction for Medical Students" which was reviewed and approved by the Ethics Committee at Universitas Sriwijaya Number: 398/KEPKRSMHFKUNSRI/2015.

## Results

Focus groups discussions revealed eight themes related to medical students' career choices' determinants: four major, two intermediate and two minor themes (Table). Major themes appeared in all discussions are multiple responses. Intermediate themes found in more than half of discussions. Minor themes emerged in less than half the discussions. The preferred career among all the participants during discussions was specialists, followed by military/police physician.

Most students talked about their expected financial gain when they consider their career choices. Moreover, their parents and family also recommend them to certain specialists because they were believed to have significant revenue. Although the new system of social insurance started almost two years already, the students' expectation of financial reward in specific careers was the same. They also expressed the concern for family medicine and researcher to have the least recognition and financial gain.

*"Being a specialist is identical with having lots of money, and famous too. But it's all about money in the end."* (FGD 2-2)

Prestige and public perception appeared to be affecting students and their parents in choosing the career. As the societies identify physicians to be the one in hospital being specialist, they

**Table Themes Identified from Focus Group Discussions**

	<b>Financial Gain</b>
Major	Prestige Public perception Family pride Personal interest Passion Personal value Lifestyle Family influence Parents influence Extended family influence
Intermediate	Lecturer as role model Career stability
Minor	Career opportunity Negative incidents

also tend to prefer a specialty as their choice. Their parents will also be proud if they become a specialist. Public perceptions were also reflected in the mainstream media, as students and their family have a particular image and expectation when talking about a medical career in general and about specialists specifically.

*"If I will do pharmacology or nutrition, I'll choose the specialist path instead of the academic one, as Clinical Pharmacology Specialist or Clinical Nutrition Specialist instead of doing Master's Programs, as long as it has 'Sp' in front of it. Maybe because of my parents and relative's perspectives?"* (FGD 1-1)

Students chose the specific careers out of their interest, the value of their preferred lifestyle. This personal interest focused on their particular career choices or field generally, and motivated, so they aren't easy to be distracted by other decisions. Some students stated that their choices also influenced by their plan to have a family and wanting to spend more time with them. Some showed interest in non-clinical fields but worrying about whether they supported by their family and whether their interests can support their life financially.

*"Although my parents recommend me to be a*

*pediatrician, I think it will be too busy for me, as a woman I don't want too cramped schedules."* (FGD 1-1).

Family influence was profoundly influential in medical students' decision in their career. In the collectivist environment, parents' and elderly's opinions heavily regarded. Many students felt like their career choice was not their own, and they need to negotiate their career choices with their family and partners. Family's perception of specific careers becoming more critical because their perception will affect their opinion and suggestions.

*"Lots of suggestions from my family to be specialist, they don't agree with another career."* (FGD 2-2)

## Discussion

Among all themes that arose during the discussions, financial gain, prestige, personal interest and family influences are dominating the discussions. The talks also mainly circled among how the students wanted to be specialists, despite the topic to be general medical career choices. It is similar to previous studies regarding clinical specialties' high interest in medical students.<sup>2-4,7</sup> Students' concerns and their lack of knowledge and interest about non-specialist careers revealed the importance of medical career exposure to medical students. This knowledge needed for the moment students entering medical school and doing other activities to increase the acknowledgment of different career choices. Medical curricula can accommodate varieties of activities to introduce and inform them about careers they can choose.

Financial gains widely described as driven factors of career choices in both general and medical setting.<sup>8-10</sup> Prestige as medical career determinants was also as supported by previous researchers to the extent of the point of view medical profession not for health, but for the status and power of medical profession itself.<sup>9,11</sup> Personal interest is the only fundamental determinants and supported by theories and researchers.<sup>12,13</sup> Concerning parental influence in career decision-making process in a collectivist culture, career congruence with parents and parents' career expectation were proven influential and supported by previous research.<sup>14</sup>

Parental influence is the only theme that overlapped with all major themes, intermediate and minor themes as well.

Parental influence has the potential to influence others' determinants as they affect students more in a collectivist culture.<sup>14</sup> Quotations regarding both financial, prestige, career stability and career opportunities overlapped with parents' opinion and suggestions. Parents and family pride were also the driving force for medical students' career choice as well. Overlapping theme between personal interest and family influence are in their shared values and lifestyle preference. Although the overlap was in negative context, in which parents suggest certain career because of its' financial expectation. On the other hand, the student wanted a laid back, and busy-free work lifestyle, or defined as controllable lifestyle.<sup>15</sup> Parents also served as a role model just as lecturers if they were physicians themselves.<sup>16</sup>

Having an insight on these factors can lead to better understanding on how medical students and community in general think and feel towards medical careers. It gave more information on what intervention should be done, focusing on those major theme as the focus. Providing information about medical professions shouldn't only target the students but also their family, and community in general too. Moreover, the government need to elevate those much-needed careers with not only financial boost and career opportunity, but also to give those professions more position and spotlight in the community so that people will consider them as equal prestige to others, and students will consider those career fields.

### Conclusion

Our findings showed that financial gain, prestige, personal interest and family influence as major influencing factors toward career choice. These insights can be used to construct effective method to promote other careers, to adjust medical curricula with additional information about medical careers, and to regulate and promote certain medical careers needed to support government's program.

### Conflict of Interest

The authors declare no conflict of interests.

### References

1. Super DE. A life-span, life-space approach to career development. *J Vocat Behav.* 1980;16(3):282–98.
2. Syakurah RA, Sari DA, Riansyah D, Yolanda P. Determinan pilihan karier mahasiswa fakultas kedokteran sebagai spesialis di Indonesia. *JPKI.* 2014;3(2):132–6.
3. Burrack JH, Irby DM, Carline JD, Ambrozy DM, Ellsbury KE, Slitter FT. AA study of medical students' specialty-choice pathways: trying on possible selves. *Acad Med.* 1997;72(6):534–41.
4. Nurhayati E, Respati T, Budiman. Pilihan karier lulusan program pendidikan profesi dokter Universitas Islam Bandung tahun 2015. *GMHC.* 2016;4(2):87–92.
5. Kiker BF, Zeh M. Relative income expectations, expected malpractice premium costs, and other determinants of physician specialty choice. *J Health Soc Behav.* 1998;39(2):152–67.
6. Lefevre JH, Roupert M, Kerneis S, Karila L. Career choices of medical students: a national survey of 1780 students. *Med Educ.* 2010;44(6):603–12.
7. Syakurah RA, Prabandari YS, Widyandana D, Kumara A. Career choices, determinants, and need for medical career introduction among medical students. *Int J Res Med Sci.* 2017;5(5):1998–2002.
8. Reinhardt UE. The net present value and other economic implications of a medical career. *Acad Med.* 2017;92(7):907–11.
9. Moore JN, McDiarmid AJ, Johnston PW, Cleland JA. Identifying and exploring factors influencing career choice, recruitment and retention of anesthesia trainees in the UK. *Postgrad Med J.* 2017;93(1096):61–6.
10. AbouZaid LZ, Nabil NM, Al-Fadil SO, Alatmi A, Saeed AA. Career choice and its influencing factors: perception of senior medical students. *J Contemp Med Educ.* 2014;2(3):168–73.
11. Abbott A. *The system of professions: an essay on the division of expert labor.* Chicago: University of Chicago Press; 1988.
12. Lent RW, Brown SD, Hackett G. Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *J Vocat Behav.* 1994;45(1):79–122.

13. Gibbs KD Jr, Griffin KA. What do I want to be with my PhD? The roles of personal values and structural dynamics in shaping the career interests of recent biomedical science PhD graduates. *CBE Life Sci Educ.* 2013;12(4):711–23.
14. Sawitri DR, Creed PA, Zimmer-Gembeck MJ. Parental influences and adolescent career behaviours in a collectivist cultural setting. *Int J Educ Vocat Guid.* 2014;14(2):161–80.
15. Dorsey ER, Jarjoura D, Rutecki GW. Influence of controllable lifestyle on recent trends in specialty choice by US medical students. *JAMA.* 2003;290(9):1173–8.
16. Maulidira F, Syakurah RA, Fadilah M, Aulia H. Pengaruh role model terhadap pilihan karier pada mahasiswa fakultas kedokteran. *JPKI.* 2015;4(2):75–82.