

# Alternate careers for medical graduates and house officers in Malaysia

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## ABSTRACT

**Introduction:** In recent years, many unresolved issues pertaining to house officers in Malaysia have led to a longer waiting time and a 'glut' of medical graduates with a surprising 20% dropout amongst those who join the housemanship programme. This appears to reflect the changing times, mindsets and work expectations of millennials who comprise this cohort reflecting a need to consider possibilities of career shifts especially so in these uncertain times. This study explores the perceptions, awareness and interest in alternative career options amongst recent graduates and house officers.

**Materials and Methods:** This was a study done between 2018 and 2019 using a questionnaire which was shared on various social platforms. Data analysis was done using Excel spreadsheet.

**Results:** A total of 450 house officers and 657 medical graduates responded. Expectedly 66.8% claimed lifelong passion whilst another 12.1% claimed family influence as their reason to do medicine. Most were aware of their career challenges and 40% of them were keen to consider career change and reskilling indicating a possible shift from traditional expectations of a medical career.

**Conclusion:** Whilst medicine is often considered a true calling, current challenges will require mental and emotional flexibility to explore other career opportunities. Thus, engagement programmes should be directed at medical graduates and house officers to identify and support those open to career transitions. This will help address current issues of internship bottleneck and rising dropout rates amongst internees. Early career change engagements will give them insight into their true career goals whilst opening up opportunities for those who wish to change.

## KEYWORDS:

*Alternative careers, medical graduates, house officers, career transition*

## INTRODUCTION

In recent years, the Ministry of Health (MOH) has highlighted some grim statistics regarding issues pertaining to

housemanship training programme in Malaysia. Out of an average of 5,000 medical graduates (MG) qualifying annually (2000-3000 local graduates and 1500-2200 overseas graduates), only about 4000 are likely to be absorbed each year, leaving the remaining graduates jobless and waiting for up to eight months or more before job postings.<sup>1,4</sup> Furthermore, out of those who get into the housemanship programme, only 40-50% of them will be offered a permanent civil service position.<sup>1,2</sup> In the current cohort of housemen completing their training, almost all of them were offered contract medical officer (MO) positions in the UD41 category. This is unlike previous years where most MG were absorbed much sooner and every houseman was given a permanent position at the end of their training. Since the 'glut' of graduates in recent years, local news has highlighted their plight and their challenges in getting temporary employment. Many had to seek out jobs such as waiters or drivers while awaiting placement and some have even left the profession altogether.<sup>5</sup> Associations and medical graduates have urged the government to take measures so that they do not lose their skills during the long waiting period.<sup>6,7</sup> The government in turn has in the past few years taken several measures to address this situation. They have increased the number of training hospitals from 38 to 47, increased training positions from 10,835 to 11,706 through various hospitals in Malaysia, even changed the method of appointment from permanent to contract in which the trainees have the opportunity to undergo housemanship and obtain full registration as required under the Medical Act 1971, with the hope that many will leave for private practice. This they hoped would create vacancy to absorb more house officer (HO). They also extended the moratorium with the cooperation of the Education Ministry up to April 30, 2021 on new student intakes locally with the aim of imposing intake quota of medical graduates by universities in the country.<sup>8</sup>

Despite these measures there still remains an oversupply of MG waiting to be absorbed into service yearly and this figure is likely to snowball with increasing graduates from both local and overseas universities and limited internship positions. In the midst of these delays and uncertainties of their future as clinicians in the government service, an intriguing scenario is steadily being observed. There is a significant number of graduates who seem to drop out of the housemanship training program even before completion in

This article was accepted: 22 January 2021

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spite of all the challenges in getting into the training. Recent reports indicate a 20% yearly drop out.<sup>9</sup> Various studies in Malaysia highlight long working hours, stress at workplace leading to burnout, depression, harassment and discrimination,<sup>10-12</sup> post internship contract appointments with low salary (UD 41 position) and with little scope to further themselves in a local medical specialization program as reasons behind them for quitting early in their career.<sup>10</sup>

Dropping out of a medical career for similar reasons is increasingly being seen in other nations as well. In 2017, 57.4% of Foundation Year 2 doctors (FY1 and FY2 in NHS are similar to the 2-year housemanship programme in Malaysia) did not enter higher-training posts and 9000 doctors quit the NHS entirely in United Kingdom(UK).<sup>13</sup> Factors such as changes to junior doctors' salaries, hours-worked, inflexibility with schedules, lack of consistent teamwork, and an understaffed service have been some of the reasons for dropouts amongst the young professionals. Other issues driving the discontentment and dissatisfaction is a lack of feeling valued and supported as stated in studies from the UK and the Philippines.<sup>13,14</sup>

The above challenges faced in pursuing and completing the housemanship programme appears to be significant and concerning for all stake holders. However, it is also important to take note of a changing mindset, career expectations gaps, career opportunities and a desire to seek new challenges<sup>15</sup> or even the awakening to the fact that full-time patient care is not the best fit for some, may be additional factors that drive the young professionals to drop out and seek alternative careers. The traditional mould or expectation that medicine is a lifetime single career with no u-turns or alternative options is being increasingly challenged by millennials within the medical fraternity as well as in other professions around the world. It appears that millennials are more accepting to career changes and job hopping in search of what syncs with their values and expectations.<sup>16</sup> An article in the British Medical Journal (BMJ) stated that the main reason doctors look to transition is due to the rigidity in clinical training as well as lack of suitable opportunities.<sup>17</sup> Thus in UK, career transition search platforms for doctors such as Medic Footprints along with organisations like the British Medical Association (BMA) and the National Health service (NHS) have since aided transition for doctors who wished to seek out alternative career pathways.<sup>18</sup> However, in Malaysia, we are yet to recognise or embrace the possibilities of career transition amongst medical graduates and professionals. Hence, this study aims to explore the perceptions, awareness and interest in alternative career options amongst medical graduates and house officers to gain a better understanding on how these millennial professionals perceive their future in medicine and their willingness to make a career transition. As the reality of unemployment amongst medical graduates and practitioners looms, we hope this information will help the various stakeholders such as Ministry of Health, Education/Higher Education, Malaysian Medical Association and Malaysian Medical council to redesign engagement programs to not only guide those wishing to carry on with a medical career but also identify and support those looking for a career change.

## MATERIALS AND METHODS

This is a questionnaire-based study undertaken between 2018 and 2019. Only HO and MG who are Malaysian citizens were included. The study instrument used was a Google form questionnaire with a total of 34 questions covering issues such as demographic details, academic/undergraduate qualification details, questions related to pre-housemanship temporary employment (where applicable) as well as questions related to alternate career options (this section questions amongst others skills possessed, awareness about non clinical alternative career options, keenness in pursuing an alternative career and willingness to undergo retraining if necessary).

The questionnaire was shared on various social platforms such as Facebook, Malaysian Medical Association (MMA), SCHOMOS, Doctors Only Bulletin Board System (DOBBS), Pre-housemanship Telegram groups and targeted WhatsApp groups. Data analysis was done using Excel spreadsheet (Pivot table).

## RESULTS

### *Demographics*

A total of 1,107 respondents, 450 HO and 657 MG responded to this survey. More than half (51.7%) of the respondents were between the ages of 26-30 and the rest were between the ages 21-25 (who were mainly from the medical graduate category). There were more female respondents at 65.4%. The majority were Malays (47.8%) followed by Chinese (24.8%), Indians (21.7%) and the remaining 5.7% were from minority groups. Most were single whilst only about 188 of the respondents (17%) were married. In terms of income, the majority (66.4%) in the MG category were still financially supported by parents/ guardians with no other source of income, however the remaining 33.65 % of them claimed alternative incomes ranging from RM1000-5000 per month with a surprising 2% even earning between RM8000 to RM10,000/ month. On the other hand, most (75.1%) of the HO were earning RM3000-5000 although some of them (12.6%) claimed to have higher than average earnings of between RM5001 and RM10,000 (inclusive of side incomes). (Table I)

As for their academic background, nearly half (48.1%) of the respondents were recent graduates (2018) whilst the others were from the 2014 batch upwards. About a third of them (32.6%) graduated from Malaysian private colleges and 20.2% were from government universities. The rest were from overseas universities with only a small proportion of 1.2% of the total respondents were from unrecognized overseas institutions.

### *Medicine as a career*

When exploring their reasons for doing medicine, an expected 66.8% claimed it to be their passion and lifelong ambition to be doctors. Interestingly however about 12.1% of the remaining admitted that they were in it due to family and peer influence, whilst less than 8% of them claimed that they took up medicine due to their good grades and rated the potential good income and job security as reasons to choose the course. (Figure 1)

Table I: Income of the participants

Personal Monthly Income	Number of doctors	Percentage of doctors
No of House officer -450 (40.7%)		
No income	23	5.1%
RM1,000	6	1.3%
RM 1,000 - RM 3,000	26	5.8%
RM 3,001- RM 5,000	338	75.1%
RM 5,001- RM 8,000	51	11.3%
RM8,001 - RM 10,000	2	0.4%
> RM10,000	4	0.9%
Number of Medical Graduate-667(59.3%)		
No income	436	66.4%
RM 1,000	91	13.9%
RM 1,000 - RM 3,000	73	11.1%
RM 3,001- RM 5,000	25	3.8%
RM 5,001- RM 8,000	24	3.7%
RM8,001 - RM 10,000	5	0.8%
> RM10,000	3	0.5%
Total number of participants	1107	100.00%

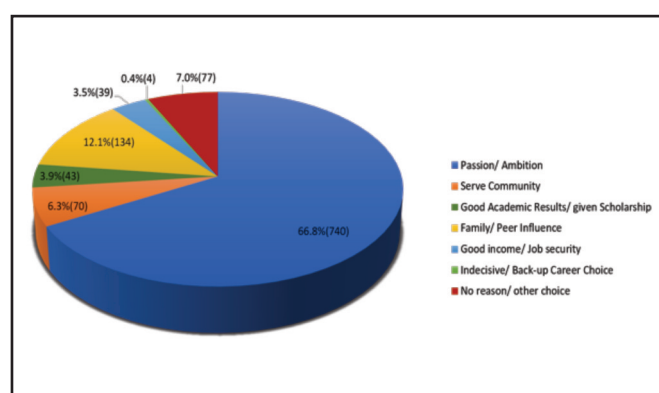


Fig. 1: Reasons for doing medicine.

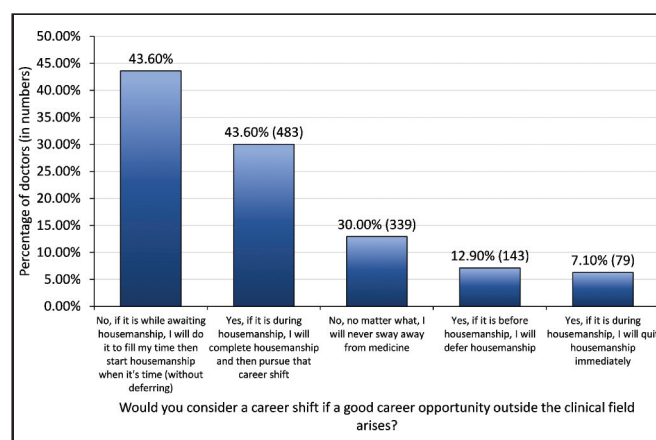


Fig. 2: If a good career opportunity outside the clinical field arises while awaiting housemanship or during housemanship, would you consider a career shift?

When asked about non-clinical career options, a large majority chose from industries such as teaching, Information Technology (IT) and engineering, business, whilst about 12% claimed to prefer health sciences related careers. Only 3% remained steadfast on the pursuit of medicine with no consideration for any other career.

*Temporary employment- perceptions, challenges and job opportunities*

When exploring their perceptions and issues pertaining to getting temporary jobs whilst waiting for their internship, about 45% of the participants preferred to seek out non-medical jobs whilst equal numbers preferred medically related jobs like clinic assistant/nurse, research/lab work and pharmacy assistant to keep in touch with medical knowledge. In terms of salary expectation 75% were expecting an entry monthly salary of between RM1000-2500 whilst 15% were willing to settle for a salary of less than RM1000 per month.

Most (85%) claimed that the challenges they faced in getting temporary jobs were due to limited availability of temporary employment, uncertainty of internship waiting period

leading to lower motivation in performing the said jobs, their own fear of adaptation to jobs as they lack experience or skills outside their medical education, and that employers were often reluctant to engage them due to the possible expectation of a higher pay or them being overqualified for the job.

Amongst the current MG who were in temporary employment more than half of them (57%) were working full time. The main areas in which they were able to secure short term employment were in teaching, business, service industry and only 15% managed to get into preferred areas such as research, clinic/dental assistant jobs as well as pharmaceuticals. Surprisingly only half (53%) claimed to be satisfied with their temporary jobs.

Amongst reasons given by those who did not seek out temporary jobs were that they preferred to take a break, had family issues, temporary jobs were not medically related, studying for specialization exams as well as logistics as reasons whilst less than 10% claimed not to be in financial need.

*Career Shift -awareness, interest and willingness*

Although 97% of respondents were aware of recent challenges and uncertainties they face in pursuit of their career in medicine, surprisingly only 40% were aware of any alternative career options. So, expectedly most of them showed keenness to know more about alternative career options. More than half of them gave reasons such as burn out and loss of passion as possible drivers to look for alternative careers. The remaining cited poor career progression with job uncertainties, a higher income in nonmedical careers and concerns about work life balance as other possible reasons for the same. When enquired about additional knowledge, skills or experience that could potentially contribute towards an alternative career, most listed teaching, business, research, sports and fitness, media and even performing arts, nutrition, Information technology and finance.

However, when asked if they would seriously make a career shift if an opportunity arose, a little over half (56.5%) preferred to stay on with a medical career, whilst more than a third (37.1%) were keen to take up a career move either by deferring their housemanship if they had the option or upon completion of internship if they were already in the programme. About 6.3% were even willing to quit housemanship to take up an alternative career opportunity. (Figure 2) All those who were interested in a career change were also willing to undergo transition training/ reskilling for a new career of their choice.

When probed on their choice of program delivery for retraining in an alternative career most preferred to have an attachment and /or online learning. Acquiring a university degree was their least favourite choice. Half of them instead, preferred to acquire their new skills part time. When choosing an alternative career, not surprisingly more than 70% still preferred to be in non-clinical but health related fields. The favourite non-health industries were food and beverage, sports and fitness, IT, Media and performing arts.

Majority of those who were keen to explore alternative careers preferred to register with a job matching service that offered short term internship with participating organisations, transparent job matching method, training workshops and curricular vitae writing, meet and greet sessions with doctors who have made successful transitions.

Slightly over 40% of the respondents were keen to pursue a career change. In sub-analysing initial passion versus ultimate career decisions, it was not surprising that most (90%) who were interested in career change belonged to the group of respondents who claimed not to be 'passionate about medicine' at the out start and were willing to undergo training/ reskilling for an alternative career implying changing mindsets and possibly the need to accommodate to current challenges and employment expectation gaps.

**DISCUSSION**

Career expectations are jointly influenced by personal and environmental factors and the decision to be a physician is often made in the early stages of academic life sometimes even before attending high school as observed by a Finnish

study, stating varying motivations including interest in people, prestigious professions, good salary and a smaller percentage indicating family influence.<sup>19</sup> In our study most of respondents claimed it to be their passion and lifelong ambition to be doctors whilst some others claimed pressures due to family and peer influence, good grades as well as potential good income and job security as reasons to choose the course. Interestingly another study also noted parental pressure as a reason to do medicine, especially if parents themselves were doctors.<sup>20</sup> So although the initial reasoning was passion, however unlike in other professions such as teaching or food industry where a student can gain some experience doing meaningful internships prior to completion, in medicine one cannot get to "experience" being a doctor without actually becoming one. Hence, it is likely a case of passion meeting reality.

Thus, it was not surprising that 40% of our study subjects were keen to make a career shift due to the current uncertainties surrounding their career progression. The trend of seeking alternative careers has been noticed in other countries as well with most of the reasons being work related.<sup>21</sup> A Philippine study found that job satisfaction was the primary reason for the career shift phenomenon among doctors.<sup>14</sup> Similarly a BMA study found that 3% of the cohort had quit medicine due to dissatisfaction, attractions of other careers, and working and pay conditions.<sup>22</sup> A report by a global analytics and advisory firm, on 'How millennials want to work and live' concluded that millennials (who made up the bulk of our respondents) have quite different approaches and expectations towards career. For millennials, a job is a lifestyle as well, which means their expectations will also require employers and organisations to move away from traditional organizational structures to ones that are inclusive of their values. They report that 21% of millennials claimed to have changed jobs within the past year, which is thrice more than that of non-millennials in the same period.<sup>16</sup> The fact we found a dropout rate of 20% amongst our Malaysian HO in training suggests that besides the need to address work related issues that contributes towards their decision to leave, one must also consider evolving work expectations and employee engagements. Current job insecurities that also limited specialist training opportunities are more reasons for many graduates and junior doctors to seek out opportunities elsewhere.

Several Malaysian studies noted stress and emotional burnout amongst house officers<sup>23</sup> and work-related anxiety pertaining to work performance, poor relationship with superiors and colleagues as well as work-family conflicts as reasons that together negatively affected their career aspirations.<sup>24</sup> This is further supported by Rubina et al., who highlighted the inverse relationship between job stress and job performance where she noted low job performance amongst the HO who had high job stress. Improved health and good inter-personal relationships among health care professionals was recommended and culture of openness and understanding, rather than of criticism, was also encouraged.<sup>25</sup> To help address the issues of work-related anxiety, job performance, lack of confidence and readiness to work, several organisations in Malaysia have undertaken to initiate and organise HO Preparatory courses, which are conducted for 6-15 months during the waiting period. The

course is a compilation of didactic learning and simulation, helping participants understand the scope of work and what is expected of them in the local setting. The study found that the HO Preparatory Course module was effective in increasing levels of confidence and readiness for medical graduates.<sup>26</sup>

The UK General Medical Council's approach is to have medical students shadow the outgoing new doctor whose post they will soon undertake. At the University of Nottingham, the two-week shadowing period was preceded by lectures/seminars on topics such as common medical/surgical emergencies, contracts, time managements, surviving the first two years of clinical practice, careers advice and so on which was found to be beneficial and highly valued by their graduates especially the experiential knowledge gained during shadowing.<sup>27</sup>

Although most studies highlighted dissatisfaction as a reason to quit housemanship, a Pakistan study by Rathore FA pointed out rising competition for specialty training positions and limited job placement as additional reasons for leaving the medical career.<sup>28</sup> Their findings correlated with our study that showed over 30% were concerned about the lack of directions for a definitive career pathway and the surmounting challenges in getting into speciality training programs.

The issue of oversupply of new MG is one faced by many countries. In Australia the number of medical graduates has increased,<sup>29</sup> and this trend is similarly seen here in Malaysia. Selection of candidates for entry into medical schools are not standardised in Malaysia with the Ministry of Education and the Malaysian Medical Council only setting basic academic requirements for entry into medical school.<sup>30</sup> The UK had implemented Biomedical Admissions Testing and Medical School Admission Testing since 2003 to further assess student aptitude and non-academic skills for medical school admissions. These screenings have been studied and validated extensively with the UK Clinical Aptitude Test (UKCAT) independently predictive of better medical school performance.<sup>31</sup> The introduction of these standardised selection/screening exams prior to medical school has been mooted by the Malaysian Medical Council and the Ministry of Education but yet to be implemented.

There have been suggestions to have graduate entry into medical schools which ensures a first degree in a related field that would allow for wider employment prospects and opportunities later. It also leads to more mature students who are able to handle better, the stress and responsibilities of medical studies.<sup>32</sup> The downside being longer study durations as well as added costs. Besides, the social aspects of mature medical students entering the strenuous path of medical training in their mid-twenties in the midst of greatest social change (e.g. marriage and starting a family) will need consideration.<sup>33</sup>

As an interim measure, the possibility of retraining those who wish to seek an alternative career to address the current issues of oversupply of medical graduates and inadequate placements needs to be explored in Malaysia. Our study results highlight that the majority of respondents were keen

to explore this and were looking forward to guidance and opportunities. Thus, it is timely that the medical associations and universities consider discussions with the Ministry of Human Resources to open up the Human Resource Development Fund (HRDF) for medical graduate retraining.

Medical graduates and professionals quitting their careers is a reality that is increasingly being seen worldwide in the last decade or so. The increasing awareness and demand in seeking out alternative career pathways by medical professionals due to the universal constraints in medical training and employment opportunities has led many organisations such as Medic footprints, Doctopreneurs.com, NEJM careercenter.org and numerous online or career support groups to work together to assist doctors and medical graduates to make career transitions through provision of information, linkages with prospective employers, career events, counselling and career coaching activities.<sup>34-36</sup> Clearly, career shift by medical professionals should be seen as normal and doctors seeking to do so must be actively assisted.<sup>36</sup> Our study results indicating 40% of our respondents were keen for a career transition seems to correlate with MOH data that revealed more than 850 doctors (20%) have quit over the last 3 years during their housemanship programme, bearing in mind this does not include the total number of doctors who may have left clinical practice for non-medical careers beyond housemanship training which could potentially add to the seriousness of having comprehensive support systems and platforms to address this proposition.

A search on platforms for alternative career support for doctors in Malaysia revealed availability of several blogs and writings on this topic with suggestions on possible careers (both clinical and non-clinical but healthcare related) along with non-specific job portals for job seekers.<sup>37,38</sup> However, only one platform, Medic Footprints Malaysia seemed to be looking to specifically address the issues of alternative careers for medical professionals. They have held events to connect alternative career aspirants with medical professionals who have successfully transitioned.<sup>39</sup>

Our study reveals that there is keenness to explore alternative careers as well as willingness of MG and HOs to re-skill in the light of a very clear declaration of insufficient job availability and poor job security. This should be an impetus to moot dialogues amongst relevant authorities to embrace the everchanging landscape of medical practice by having coordinated programs involving career counselling, meeting with potential employers, on the job training, reskilling courses and certifications to assist medical professionals to successfully make career cross overs.

Most published materials in this theme in Malaysia have highlighted the many problems faced by the government and house officers in addressing the consequences of oversupply of medical graduates. Issues such as insufficient internship training positions, long waiting periods to get into training programme, vacancies created by interns dropping out midway through training and the lowered chances of speciality training due to the contract positions, however, remain unresolved till date.

The aim of our study on the other hand, was to understand their perceptions, awareness and interest in alternative careers which could then help stake holders to assist in coming with solutions to pave the way for successful career transitions.

Limitations of this study was primarily regarding the quality of information collected. As this was a questionnaire-based study and thus tried to keep the form concise and appealing whilst enabling objective evaluation of the responses. Most of our questions were with answers (as options) thus leaving little room for explanations which might have brought to light a broader perspective of issues pertaining to this study.

### Recommendations and future directions

Embracing alternative careers by medical graduates and professionals will require a whole new mind set and willingness to look out of the box by the various persons and agencies involved. This may include:

#### Graduates (and possibly parents):

1. Hone talent and skills right from an early age.
2. Truly reflect on a career that you want and do due diligence before applying for medical school.
3. Work on other interests' part time/distance learning.

#### Medical schools

4. Comprehensive screening and more stringent entry qualifications and criteria.
5. Second skilling or concurrent certificate/ diploma options in industry relevant areas such as IT, business, law etc during and in conjunction with medical education as done in some countries.
6. Periodic counselling to assess ongoing desire and motivation to continue and appropriate career counselling to facilitate change if necessary.

#### Government

7. Better planning and foresight of wider needs in Malaysia which should be communicated to various medical schools which can then increase or decrease intake according to the needs.
8. Stricter regulations of medical schools and common qualification exam for all.
9. Proper expansions of services and posts according to population growth.
10. Redistribution of posts and resolve the maldistribution of workforce.
11. To set up a committee that will liaise, educate and create awareness amongst other corporations/ industries on the possibilities and advantages of employing medical graduates.

#### Community support groups & Corporations

12. Identify careers that can easily use the interchangeable skills that the medical degree offers (e.g., insurance, medico-legal, law, arbitration, pharmaceutical, biotechnology, bioinformatics etc).
13. Have short term internship programs/hands on courses that graduates can attend whilst still in med school.

These measures will not only open a wider net of career options but also allows for adaptiveness during periods of oversupply or career uncertainties.

Fortunately, we are going into times where doctors are increasingly being sought after into the corporate world in various roles for their abilities of critical thinking, dedication, conscientiousness and versatility in creating value.<sup>40</sup> Thus, making this an opportune time to introduce and counsel medical graduates and house officers who wish to make a career switch through a tripartite engagement involving relevant ministries, alternative career communities and support groups along with the corporates working together at several levels.

### CONCLUSION

A career in medicine is usually a call of passion. However, changing times and needs will require mental flexibility and emotional readiness to use knowledge and experience that is gathered in other non-clinical careers that can be equally fulfilling. Pursuing alternative careers has been actively encouraged and practised in many developed nations and it is timely that Malaysian medical graduates embark in that direction too. In the longer term a well-supported system that embraces career transition is likely to address the issues of internship bottleneck and quitting by house officers and contract medical officers early in their careers, whilst working to identify intent for the best job fit.

### ACKNOWLEDGEMENTS

We would like to acknowledge SCHOMOS MMA for supporting this research through advisory and partial financial assistance.

We are also extremely grateful to Natashya Vejayarajah, MBBS, currently working at AJ Biologics for her dedication and hardwork in helping us kickstart this project during its early phase of preparation and piloting of the questionnaire.

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