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Original article

Feedback from Malaysian pharmacists who underwent a 3-year period of compulsory service with the government

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Abstract:

Since 2004, it is mandatory for all new pharmacy graduates in Malaysia to serve the government for a period of 4 years, before they are free to work as registered pharmacists in a sector of their choice, either public or private. With the enactment of this compulsory service, the government hoped to fill and retain the many positions for pharmacists in the Ministry of Health that had been vacant for a number of years. A survey, using a questionnaire, was carried out to find out the views of the first batch of pharmacists who had completed or were just completing their compulsory service. The total number of pharmacists who participated in the survey was 175. More than 85% of the respondents were female. Graduates from a private university formed the largest group (39%). Overall, 76% were satisfied with the compulsory service and almost 90% of the respondents felt that the compulsory service had played an important role in developing their professional skills. About 68% of them planned to continue working with the government. Among the reasons for wanting to remain in the public sector were job security, benefits provided by the government and the ability to utilize their professional skills. Among those who did not plan to remain in government service, the most frequent reasons given were poor chances of career development and lack of prospects for promotion. Overall, the compulsory service appears to have met one of its goals of retaining the services of pharmacists in the public sector. Concerns about career development and prospects for promotion should be addressed. Recently announced changes in the career structure and promotion scheme for pharmacists will address some of these concerns.

Keywords: Compulsory service; Job satisfaction; Pharmacy graduates; Career prospects; Pharmacists

Introduction

Compulsory service with the government for doctors in Malaysia has been implemented for more than 40 years. In the July 2003, the Minister of Health Malaysia announced that all newly-registered pharmacists would be required to undergo compulsory 3-year public service in an effort to overcome the acute shortage of pharmacists in government hospitals nationwide [1]. In order to facilitate this, The Registration of Pharmacist Act 1952 was amended. During this compulsory service, pharmacy graduates are required to be provisionally registered with the Pharmacy Board of Malaysia (PBM) and engaged in employment as a public servant in a listed premise for a period of not less than one year followed by a further 3 year period of service as a fully registered pharmacist. Failure to serve the government upon full registration may lead to a fine not exceeding fifty thousand ringgit [2].

Healthcare in Malaysia is primarily provided by the Ministry of Health through a comprehensive system of 5454 hospitals and healthcare clinics that provide coverage for both rural and urban populations. Accessibility is not a problem and services are provided at nominal charges or free for the poor and 95% of the costs are subsidized by the government. Medicines are supplied free of charge to patients at government hospitals. On the other hand, there are approximately 8138 private hospitals and clinics. The government and private healthcare facilities see about 69 million and 4 million patients a year respectively. The total number of doctors, pharmacists and dentists employed by the government and private sector are about 26,000 and 15,000 respectively. This gives a healthcare professional to patient ratio of 1:2654 and 1:266 in the government and private sector respectively [3].

Malaysia is not alone in implementing compulsory service. Other countries that have in the past implemented compulsory service for health professionals are the Soviet Union, Ecuador, Bolivia, Mexico and the Dominican Republic [4]. In the Asian region, Thailand started compulsory service with the government for doctors in the 1970s [5] and for pharmacists in 1995. The type of compulsory service discussed in this paper should

be differentiated from services provided by pharmacists in countries with a national healthcare scheme where pharmacists are indirectly working for the government (as they are paid by the government) in providing pharmaceutical care to patients.

The pharmacist to population ratio in Malaysia and Singapore in 2009 was approximately 1:4000 and 1:3000 respectively [6,7]. This is still below the World Health Organisation (WHO) recommendation of 1:2000 which is achieved in developed countries. The high demand for health professionals in Asian countries such as Singapore, Malaysia and Thailand, has resulted in the heavy migration of health professionals from public hospitals to the private sector. This has resulted in an imbalance in the distribution of healthcare professionals and has necessitated the "import" of health professionals from India, Pakistan and the Philippines to work in the public healthcare facilities [5]. In Malaysia, in the years up to 2003, before the implementation of compulsory service, only approximately 10-26% of newly registered pharmacists joined the public service [8]. In 2007, more than 25% of the available posts for pharmacists in the public service were vacant [9]. Newly registered pharmacists preferred to work in the private probably because they could choose their place of work and also the higher starting salary (approximately 50-70% higher) offered in the private sector. Compulsory service for pharmacists in Malaysia was proposed in the spirit of national interest. With the implementation of the compulsory service, pharmacists would be exposed to a wider range of practices of pharmacy than that normally available in the private sector such as hospital, regulatory and enforcement pharmacy.

While compulsory service would provide some immediate relief for the shortage of pharmacists in the public sector, long term success of the compulsory service would depend on the continued retention of pharmacists, post-compulsory service, which in turn would be influenced by their experiences and perceptions during the period of compulsory service. This study was therefore carried out to find out the perceptions and job satisfaction of the first batch of pharmacists who underwent compulsory service and their choice for

future service after that period of service.

Methodology

Research design and population

This study was conducted as a survey using a self-administered questionnaire. The questionnaires were distributed to about 300 pharmacists who attended a seminar organized by Pharmacy Division of the Ministry of Health, Malaysia. The attendees were all those who were completing their compulsory service within the following few months. The completed questionnaires were collected at the end of the seminar. One of the main objectives of the survey was to try to gauge how many of the pharmacists completing 3-year compulsory service, and who had a choice, would continue to work for the government. Government-sponsored scholars were excluded from the survey because they did not have a real choice and as a condition of receipt of the scholarship had to continue to serve their bond with the government for a further 6 years. Failure to comply with their bond would incur heavy financial penalties and thus these bonds were rarely broken. Those who were not government-sponsored scholars did not have any obligation to continue to serve the government and were free to join the private sector, if they so wished.

Survey instrument

The questionnaire for the survey was prepared by the authors. Face validation and content validation of the questionnaire were carried out by the authors who were a pharmacist with more than 5 years experience and a pharmacist/academician with more than 30 years experience. The questionnaire consisted of 48 questions which were divided into five sections. The sections were demography, job satisfaction, communication and relationships, career pathway and professional association. Most of the questions were in the form of statements and the respondents had to make a choice from a 5-point Likert scale of strongly agree, agree, undecided, disagree or strongly disagree. Some of the questions had to be answered by selecting one or more options from a given selection of options. The first section on demography included age, gender, marital status,

place of work, and educational institution that they graduated from. The last section consisted of nine questions regarding their perception of the Malaysian Pharmaceutical Society (MPS) but those results are not discussed in this paper.

Results

Demographic data

One hundred and seventy five (175) questionnaires were completed and returned. The demographic data about the respondents is shown in Table 1. Majority of the respondents were female (84.5%), Chinese (66.3%), single (65.7%) and graduated from private institutions (54.3%) and currently worked in hospitals (65.7%).

Majority of the respondents (65.0%) opted for the contributory Employment Provident Fund (EPF) scheme that gave a lump sum upon retirement, while the remaining 35.0% of the respondents opted for the non-contributory pension scheme which gave a monthly fixed pension upon retirement. Among those who planned to continue to work with the government 52% chose the EPF scheme, while 48% chose the pension scheme, whereas among those who planned not to work with the government, 95% chose the EPF scheme (Pearson chi square 29.86, $p < 0.01$).

There was a significant difference (Pearson chi square 20.508, $p < 0.01$) between the different races as to their decision to continue to work with the government. Large majority of Malays (89.6%), 55.9% of the Chinese and 100% of the Indians planned to continue working with the government. Similarly there was a significant difference between genders (Pearson chi square 9.206, $p < 0.01$), where 72.2% of the female pharmacists and 42.9% of the male pharmacists wanted to continue working with the government.

The questions in the various categories had satisfactory internal consistency as indicated by Cronbach alpha scores of 0.710 (job satisfaction questions), 0.792 (communication and relationship questions) and 0.89 (career pathway questions). Table 2 shows the response of the pharmacists to questions related to job satisfaction, career prospects and communication and relationship with their bosses.

Table 1 Demographic characteristics of respondents. (N = 175)

Demographic characteristics of respondents	Frequency	Percentage %
Gender		
Male	27	15.0
Female	148	85.0
Race		
Chinese	117	66.9
Malay	49	28.0
Indian	6	3.4
Others	3	1.7
Marital Status		
Single	115	65.7
Married	60	34.3
Institution of Graduation		
Universiti Sains Malaysia (Public)	31	17.7
Universiti Kebangsaan Malaysia (Public)	24	13.7
Universiti Malaya (Public)	25	14.3
Sepang Institute of Technology (Private)	2	1.2
International Medical University (Private)	69	39.4
Universiti College Sedaya International (Private)	17	9.7
Others (Private)	7	4.0
Place of work		
Hospital	115	65.7
Health clinics	26	14.9
Enforcement Division	17	9.7
National Pharmaceutical Control Bureau (NPCB)	9	5.1
National Pharmacy Administration	3	1.7
Others	5	2.9

Majority of the pharmacists appeared to be satisfied with their job, security of government service and relationship with their bosses and other healthcare professionals but were not sure about their career pathway and if their bosses cared for their needs. Those who planned to stay on with the government had mean scores for job satisfaction of 21.5 ± 3.7 (maximum score of 20) as compared to means scores of 18.2 ± 4.9 for those who did not want to continue working with the government ($t = 4.41$, $p < 0.01$, 95% confidence interval of 1.79-1.43). Similarly, those who wanted to continue working with the government had an overall mean score of 46.8 ± 6.5 (maximum score of 65) as compared to 43.0 ± 6.0 for those who did not want to continue to work for the government ($t = 3.97$, $p < 0.01$, 95% confidence interval of 1.82-5.82). The mean score for their opinion about their career pathway was 17.3 ± 3.8

(maximum score of 20) for those who planned to continue to work for the government as compared to 12.6 ± 4.0 for those who did not plan to continue to work for the government ($t = 723$, $p < 0.01$, 95% confidence interval of 3.40-5.98).

In response to a question about the role of compulsory service and development of professional skills, 89.1% agreed that the compulsory service played an important role in the development of their professional skills. Majority (67.4%) of the respondents planned to continue to work with the government sector even after completing their compulsory service. To another question, 76% of the respondents answered that they were satisfied with the compulsory service introduced by the government. Only 24% of the respondents were not satisfied.

There was a significantly higher percentage (83%)

Table 2 Pharmacists' perceptions about job satisfaction, career prospects and communication and relationships during compulsory services

Statement	Mean score	Standard deviation	Minimum	Maximum
Job satisfaction				
I look forward to come to work.	3.4	1.1	1	5
My salary is commensurate with my responsibilities.	3.2	1.1	1	5
My workload is fair.	2.9	1.2	1	5
I feel that I am contributing to the health of Malaysians.	4.1	0.8	1	5
I am able to contribute to patient care much as I wished.	3.6	1.1	1	5
Career Pathway				
My career pathway in the government sector is clear.	3.1	1.1	1	5
I believe the government will give me with a secure future.	3.5	1.1	1	5
I am satisfied with the opportunities for promotion.	2.8	1.1	1	5
Communication & Relationships				
The senior pharmacists are concerned about my needs and problems.	2.9	1.2	1	5
I am free to give my comments, opinions and recommendations to the senior pharmacist.	3.1	1.1	1	5
I was allowed to attend various kind of CPE programs at the hospital at least once/year.	4.0	0.8	1	5
I was allowed to attend various kind of CPE programs at external sites at least once/year.	3.7	1.0	1	5
My relationship with other health professionals is good and cordial	3.9	0.7	2	5

(5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree)

of graduates from the public universities who wanted to continue working with the government as compared to 55.4% of the graduates from the private institutions (Pearson chi square 15.54, $p < 0.01$). The top 5 reasons why pharmacists wanted to continue working with the government and the top 5 reasons why pharmacists did not want to continue working with the government are shown in Tables 3 and 4 respectively.

Discussion

Compulsory service is normally justified by governments as a means to fulfill the need for healthcare professionals in rural areas, as a payback for free or heavily subsidized public education and in the nation's

interest to overcome a shortage in the public sector.

Before the implementation of compulsory service, only about 22% of the total number of pharmacists in Malaysia worked in Ministry of Health, while around 72% of the pharmacists worked in the private sector [10]. Most pharmacy graduates who completed their 1-year pupillage would almost immediately opt to work with the private sector which provided competitive salaries and opportunities to develop entrepreneurship according to one's capabilities. Our results show that more than 67% of the respondents planned to continue working for the government thus indicating that one of the goals of the compulsory service to increase retention of pharmacists in the government service was achieved.

Table 3 Top 5 reasons for pharmacists wanting to continue working with the government (by the 118 respondents who wanted to work with the government)

Reason	Frequency	Percentage
Government offers many benefits	69	39.4
Job security	67	38.3
Can make full use of professional skills	58	33.1
Opportunities for career development	56	32.0
Fixed working hours	49	28.0

Table 4 Top 5 reasons for pharmacists not wanting to continue working with the government (by the 57 pharmacists who did not want to continue with the government)

Reason	Frequency	Percentage
Poor opportunities for career development	46	26.3
Poor chances for promotion	40	22.9
Criteria for promotion not transparent	40	22.9
Low yearly salary increment	36	20.6
High workload	29	16.6

Working for the government, while providing stable employment, did not command as high a salary as the private sector and turnover was associated with earning potential [11]. Approximately 60% of the respondents felt that working for the government provided job security although they were not convinced about prospects for career advancement and promotion. Among the popular reasons for wanting to continue working for the government were the benefits provided, job security, ability to use professional skills and fixed working hours.

Approximately 76% of the respondents, who were almost all below 30 years of age, said that they were satisfied with the compulsory service. This is somewhat remarkable because a previous study among Malaysian pharmacists had shown that there were significant differences between age and job satisfaction where the pharmacists in the age group of 26 to 35 reported the lowest scores for job satisfaction and those above 55 years derived the highest satisfaction from their jobs [12]. Younger (less than 30 years) pharmacists in hospital pharmacy practice in Australia also gave lower job satisfaction scores [13]. This could be related to the fact that most (almost 70%) of those who had undergone compulsory service felt that they were contributing to patient care and the health of Malaysians and majority

agreed that they were given opportunities for continuing professional education (CPE). Among strategies that have been found to contribute to pharmacist retention are support for professional development, participatory management style and an emphasis on quality of care for the patient [14].

The shortage of staff, overwork, stress, being tied to tedious tasks, a lack of variety in the jobs, being unable complete tasks to their satisfaction and interpersonal problems among staff have previously been reported to affect job satisfaction [13]. About 40% of the respondent did not agree that their workload was fair and among the common reasons given for not wanting to stay on with the government were high workload and doubts about the process and prospects for career development and promotion. Less than 50% of the respondents agreed that the senior pharmacists were concerned about their needs and willing to receive their opinions and suggestions. In order to maintain job satisfaction, managers should give recognition and feedback on specific performance, encourage two way communications and consider employee preferences [15]. Ability utilization and recognition have been recognized previously as good predictors of job satisfaction [13]. A performance appraisal system that

rewards pharmacist professional performance should be in place rather than just prescription volume, punctuality and good grooming [16].

Government service is traditionally associated with being a stable and low stress job. The results show that these were exactly some of the reasons why the pharmacists wanted to continue working for the government. Probably most of the pharmacists were attracted also by the idea of being able to provide professional services to the patients as compared to a greater emphasis on business and profit in the private sector. Although 32% of the pharmacists were undecided or planned to leave government service, it did not necessarily mean that they would. A study among pharmacists in Great Britain found that only a relatively small number of pharmacists who indicated a high likelihood of quitting actually eventually quit their jobs [17]. They usually found ways to cope with the reasons for wanting to quit.

The Employees Provident Fund (EPF) scheme is a kind of annuity scheme where the employee deposits a certain percentage of their salary every month and the employer also deposits an equal or greater percentage to the scheme. Even if the employee changes employers, such as moving from the public to the private sector the contributions already made remain in the account of the employee. The total money deposited is available for withdrawal by the employee upon reaching the age of 55. The pension scheme on the other hand is a non-contributory scheme where depending on the years of service with the government, the employee is paid a certain monthly amount for the rest of their life, calculated based on the last drawn salary and the years of service. However, if the employee resigns from government service before the retirement age he forfeits the pension. Therefore, those who are sure of wanting to work for the government till retirement will normally chose the pension scheme, while for those who want to maintain the option of probably not continuing to work for the government at some point, the provident fund option offers more flexibility. The choice has to be made at the start of employment with the government. Interestingly majority (65.0%) of

the pharmacists opted for the EPF scheme upon starting their service, while only 35.0% had opted for pension scheme. This probably could be an indication that approximately 35.0% of the pharmacists had decided early during the compulsory service that they wanted to work for the government past the compulsory service period. However, interestingly, among those who indicated that they would continue to work for the government, 52% chose the EPF scheme, an indication that they probably still wanted to keep the option of leaving the government service.

The positive effect of the compulsory service is further supported by the results of a study among final year pharmacy undergraduates in 3 public universities and 1 private university which found that only 45.5% of the students from public universities and 16.8% from the private university preferred to work with the government [18], whereas in this study 83% of the graduates from public institutions and 55.4% of the graduates from private institutions wanted to continue to work for the government. Graduates from the private institutions typically are Chinese and come from affluent families. Their families are more likely to be involved in business and that influence probably accounts for the larger percentage of pharmacists from private institutions who did not intend to continue working with the government. Female pharmacists probably preferred to work with the government because of the fixed hours, less travel and the perception of a relatively less stressful work environment.

In 2010, the government announced significantly better career development and promotion prospects for pharmacists in the civil service. This will probably result in even greater numbers of pharmacists continuing to work for the government.

Limitation of the study

The survey instrument was developed by the researchers. Face and content validation of the survey instrument was done by a pharmacist with 5 years of work experience and by an academician with more than 30 years of experience. However, future work of this nature should be done using available standardized

instruments after validating them for the Malaysian population.

The actual number of pharmacists who began their compulsory service with this group of pharmacist (and all of whom were invited for the seminar) was 401. This study was conducted among 300 of them who attended the seminar and out of which 175 pharmacists (58%) who were not government-sponsored candidates completed and returned the survey forms. It was not possible to obtain the information about the actual number of government-sponsored pharmacists in this batch. Assuming that a similar percentage of 101 pharmacists who did not attend the seminar were also not government-sponsored, that would give an estimated population of 233 eligible pharmacists. It should thus be borne in mind that the survey result at best represents the views of approximately 75% of the target population.

The information regarding the number of male and female pharmacists and their race in the population of pharmacists who underwent compulsory service was not available. Therefore, the distribution of gender and race in the results may not be indicative of the actual population of pharmacists who underwent compulsory service

This study only used quantitative methodology. However, a better perspective and understanding of the specific reasons why pharmacists wish to leave the government service or continue to work with the government can be obtained by using qualitative research techniques such as focus groups. Combinations of quantitative and qualitative data are much more meaningful.

Conclusion

In conclusion, majority of the pharmacists 76.0% were satisfied with the compulsory service introduced by the government. About 67% of the pharmacists planned to continue their service in the government after the completing the compulsory service. From the services implemented by the extra manpower, the pharmacists will be able to provide more professional pharmaceutical services to patients. They will also be able to expand clinical pharmacy services previously

limited due to shortage of personnel. However, there appears to be a need during the compulsory service for more 2-way communication between the senior pharmacists and the junior pharmacists and to create greater awareness of their career prospects. Generally there is a perception that people dislike or rebel against something that is compulsory. However, this study indicates that compulsory service for health professionals carried out in a planned and considerate manner gives an opportunity to appreciate the professional services and career prospects in the public sector and can lead to greater retention of pharmacists in the government service. Thus, recently announced improved prospects for career development and promotion are expected to further improve retention of pharmacists working with the government.

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