

Full Length Research Paper

Survey of career identity and job satisfaction among young hospital pharmacists in Guangdong province, China

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The situation of career identity and job satisfaction among young hospital pharmacists in Guangdong, China was investigated. A mail-based questionnaire was sent to young hospital pharmacists in Guangdong, China. The questionnaire was designed to obtain information regarding demographic characteristics, career identity and job satisfaction. Pharmacists who were under 35 years old were defined as young pharmacists. Data were analyzed using SAS software. Of the 625 questionnaires mailed, 619 questionnaires, returned from 14 hospitals in Guangdong, were completed and suitable for analysis. Regarding career identity, only about 22% of young pharmacists thought pharmacists have high social status. Less than half of respondents felt pride when they were introduced as pharmacist in social activity. Only about 28% of respondents expected to obtain professional achievement. Only about 11% of respondents would not change profession had they got more work pay from other jobs. Regarding job satisfaction, about 90% of respondents were satisfied with their working environment, utilization of skills and promotion. About 76% of young hospital pharmacists were satisfied with their work pay. The authors concluded that, although the young hospital pharmacists in Guangdong province, China were satisfied with their current job on the whole, they showed low career identity.

Key words: Career, hospital pharmacists, job satisfaction, China.

INTRODUCTION

Career identity and job satisfaction are the two important factors affecting the subjective initiative of practitioners. Practitioners with high career identity and job satisfaction usually do their jobs better and make more achievement. In modern public hospital, pharmacist work hardly for medicine and other pharmaceutical products in the hospital, which is important for clinical activities. However, an investigation conducted by Wei (2002) in China a few years ago, showed that hospital pharmacist, as a professional group, had been neglected for a long time, the professional role of hospital pharmacist was

often undervalued both by physician and by patients. First, in most hospitals in China, physicians usually graduated from medical college with at least bachelor's degree in medicine while pharmacists typically graduated from middle vocational school. No wonder physicians often pose as Number one professional in hospital. Second, Chinese patients usually took a long time with doctors, while they just contacted pharmacist for a moment as they got their prescription filled. In patient's eyes, hospital pharmacist is just a dispenser. During the past years, even in present-day, in some basic hospitals in China, pharmacist usually has a more common title 'pharmacy worker' (Wei, 2002).

Things have changed with the passage of time. Currently, young hospital pharmacists in China usually completed undergraduate education in Pharmacy College with bachelor's degree. Many have Master' degree and

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Table 1. Demographic characteristics of all respondents (n=619) to questionnaire and employment information.

Variable		Respondents/ no. (%)
Age	<25	140 (22.62)
	25-30	248 (40.06)
	31-35	231 (37.32)
Gender	Male	208 (33.6)
	Female	411 (66.4)
Education	Associate	161 (26.01)
	Bachelor degree	416 (67.21)
	Master or higher	42 (6.79)
Employment	In first-class hospital	502 (81.1)
	In second-class hospital	117 (18.9)
Salary	<2000 CNY*	66 (10.66)
	2001-4000 CNY	289 (46.69)
	4001-6000 CNY	207 (33.47)
	>6001 CNY	57 (9.21)
Practice division	Dispensary	488 (78.84)
	Clinical pharmacy	56 (9.05)
	Others	75 (12.12)

*The exchange rate for currency is 1 USD = 6.6 CNY. The lowest salary is 1250 CNY and the highest salary is 6800 CNY.

Doctor of Philosophy degree. Great change has occurred in education of hospital pharmacists (Zhang, 2003). Because young pharmacists are the main force in the future of hospital pharmacy, their career identity will affect, to a great extent, the development of hospital pharmacy. It is of importance to know their career identity and professional psychological status, to discover problems and solve them. The objective of this study was to supply reference for decision-maker in human resource management in health system in China and we hope efforts will be implemented to improve their subjective initiatives in daily pharmacy or clinical pharmacy practice.

METHODS

Study design

Previously validated questions for career and job satisfaction among pharmacists and questions evaluating respondent's satisfaction with specific intrinsic and extrinsic factors that can affect job satisfaction (Barnett and Kimberlin, 1986; Cox and Fitzpatrick, 1999; Sansgiry, 2001) were utilized and co-developed into a questionnaire by a group of senior hospital pharmacists, psychologists and human resource management experts. The

questions were designed to obtain information regarding general employment, working environment, career recognition, job satisfaction, career satisfaction, and demographic characteristics. It includes 23 questions under 3 sections: The first part of the questionnaire (6 questions) was designed to gather information about the individual's demographics and general employment, such as, gender, age, education (Table 1). Individuals were also asked to select their hospital grade (first-class hospital, second-class hospital), salary, pharmacy practice division in which they spent most of their time (dispensary for outpatients, dispensary for inpatients, clinical pharmacy, manufacturing pharmacy, drug control laboratory, etc.). The second part of the questionnaire was designed to evaluate career identity. Survey recipients were asked to respond to 10 choice questions (Table 2). The third part of the questionnaire was designed to evaluate job satisfaction. Survey recipients were asked to rate their overall level of satisfaction with their employment on a 3-point Likert scale, with 3, being "highly satisfied", 2 being "satisfied" and 1 being "dissatisfied". Individuals were also asked to rate their level of satisfaction with the individual elements (working environment, supervisor, coworker, work pay, workload, utilization of their skills, promotion) (7 questions) of their current employment on the same 3-point scale.

Apart from the 23 questions, pharmacist may state freely on career requirement and development. The pilot questionnaire was sent to a few young pharmacists in this hospital and all suggestions from respondents were evaluated and changes were incorporated into the final version, as appropriate. The questionnaire was delivered by Guangdong Province Pharmaceutical Association, to young pharmacists in second-class hospital and first-class hospital

Table 2. Respondents to statement choice regarding career recognition and career satisfaction (n = 619).

Statement	Choice	No. (%) of respondents
The social status of pharmacist is	High*	138(22.29)
	Moderate	427(68.98)
	Low	54(8.72)
Pharmacist is	Contributing and delightful professional	351 (56.70)
	Just a means of earning one's living	207 (33.44)
	Irksome career	61 (9.85)
When introduced as a pharmacist in social you feel	Pride	296(47.82)
	Insensitive	269(43.46)
	Self-contempt	54(8.72)
The significance as being a pharmacist for yourself is	Realize life dream**	225(36.35)
	Pleasure	51(8.24)
	Just a job for living	343(55.41)
The No.1 reason to choose pharmacist as a career at first is	Self-realization***	416 (67.21)
	Stable and good welfare	156 (25.20)
	No other choice	47 (7.59)
Will you expect to obtain considerable professional achievement ?	Surely, why not?	176(28.43)
	Yes, if works hard and opportunity knocks	360(58.16)
	No, hard to fame and success	83(13.41)
Your career expectation is	Work in hospital until retirement	454(73.34)
	Change profession if unsatisfied	136(21.97)
	Change profession	29(4.68)
Had you a chance to re-select now, will you still choose pharmacist?	Yes	329(53.15)
	Indifferent	151(24.39)
	No	139(22.46)
Had you got more salary from other jobs, will you change profession?	No, I like the job.	67(10.82)
	Possibly.	274(44.26)
	Yes, I like to try different experience.	278(44.91)
Will you support your relatives and friends to choose pharmacist as lifelong career?	Yes, strongly support	99(15.99)
	Yes	476(76.90)
	No, strongly oppose	44(7.11)

*Well-paid; have a flat, car; with the respect of all. ** When he/she was young, he/she wanted to be a hospital pharmacist. Now dreams come true. ***Become a health worker. Become a professor of clinical pharmacy or clinical pharmacy expert.

in the province. Both second-class hospital and first-class hospital are public hospitals. Pharmacists, who were under 35 years old, were defined as young pharmacists who had been working in the hospital for at least 1 year. Questionnaires that were returned within two months of the original mailing date were included in the analysis. Young pharmacists were required to answer the questionnaire independently and anonymously. No identifiable information, such as name, address, or phone number, was collected.

Data analysis

Data were analyzed using SAS software. Descriptive statistics were used to describe the responder's demographics and employment information. The Mann-Whitney U test was used to examine ordinal data, the chi-square test was used to examine nominal data, and t test was used to analyze continuous data. An a priori of < 0.05 was chosen for statistical significance.

RESULTS

Of the 625 questionnaires mailed, 619 questionnaires, returned on time within two months from 14 first-class or second-class hospitals in Guangdong, were completed and suitable for analysis. The respondents were under 35 years old.

Demographic information

Table 1 includes the respondents' demographics and employment information. Among these young hospital pharmacists under the age of 35, more than 74% of respondents had received normal education and obtained at least bachelor's degree. Less than 10% of respondents engaged in clinical pharmacy work.

Career identity

Only about 22% of young hospital pharmacists thought hospital pharmacists have high social status, 69% of them ranked themselves moderate social status and the remaining 9% of them thought they have low social status. Correspondingly, 57% of young hospital pharmacists recognized pharmacy is a contributing and delightful professional, and less 10% of them thought pharmacy is an irksome career. Approximately 48% of respondents felt pride when introduced as pharmacists in social activity, less 10% of them felt self-contempt (Table 2).

About 36% of young hospital pharmacists thought, being pharmacists, realized their life dream and, 67% of young hospital pharmacists chose pharmacy as a career due to self-realization. Only about 28% of respondents, expected to obtain professional achievement and, approximately 73% of respondents chose to work in hospital until retirement (Table 2).

However, approximately 53% of respondents would choose pharmacy as a career had they a chance to re-select. And only 11% of respondents would not change

profession had they got more work pay from other jobs. Only 16% of respondents would support their relatives and friends to choose hospital pharmacy as a lifelong career, 7% of them strongly opposed their relatives and friends to choose hospital pharmacy as a career (Table 2).

Job satisfaction

Overall, about 90% of respondents were satisfied with their working environment, utilization of skills, and promotion. Almost all young hospital pharmacists were satisfied with his/her supervisors, co-workers and workload. However, only about 76% of young hospital pharmacists were satisfied with their work pay (Table 3).

On the impact of age factor on job satisfaction, the satisfaction on working environment was decreased as the age increased (91.4, 87.9, and 87%, respectively) ($p < 0.05$). The satisfaction with work pay was increased as the age increased (71, 76, and 80%, respectively). However, the satisfaction on promotion, decreased as the age increased (95.7, 89.5, and 87.9%, respectively) ($p < 0.05$) (Table 3).

On the impact of gender factor on job satisfaction, more female young hospital pharmacists were satisfied with work pay than their male coworkers (77.4 vs. 74.5%). However, less female hospital pharmacists were satisfied with promotion than their male coworkers (90.8 vs. 98.4%) (Table 3).

On the impact of academic degree factor on job satisfaction, young hospital pharmacists with bachelor's degree showed less satisfaction of working environment, work pay and utilization of skills as compared with hospital pharmacists with associate degree or with Master' or Doctoral degrees. The satisfaction of promotion was increased as the degree from associate, BS to MS/PhD (89.5, 90.4, and 92.8%, respectively) (Table 4).

On the impact of employment factor on job satisfaction, hospital pharmacists working in first-class hospital showed more overall satisfaction than those working in second-class hospital. Specifically, approximately 90% of hospital pharmacists in first-class hospital were satisfied with their working environment while only 80% of hospital pharmacists in second-class hospital were satisfied with working environment ($p < 0.05$). Similarly, there was difference of satisfaction with work pay between them (79 vs. 64%, $p < 0.05$) (Table 4).

On the impact of practice division, approximately 91% of responders working in dispensary were satisfied with utilization of skills while, approximately 80% of responders engaged with clinical pharmacy were satisfied with utilization of skills (Table 4).

DISCUSSION

Career identity and job satisfaction among pharmacist in hospital pharmacy had been concerned for a long time

Table 3. Overall and number (%) of respondents on individual job satisfaction by age and gender.

Variables	Respondents (n = 619)	Age			Gender	
		<25 (n = 140)	26-30 (n = 248)	31-35 (n = 231)	Male (n = 208)	Female (n = 411)
Working environment	547(88.37)	128(91.4)	218(87.9)	201(87)	188(90.4)	359(87.3)
Supervisor	607(98.06)	138(98.6)	243(98)	226(97.8)	201(96.4)	406(98.8)
Coworker	610(98.55)	138(98.6)	246(99.2)	226(97.8)	203(97.6)	407(99)
Work pay	473(76.42)	100(71.4)	189(76.2)	184(79.7)	155(74.5)	318(77.4)
Working competence	610(98.55)	139(99.3)	244(98.4)	227(98.3)	201(96.4)	409(99.5)
Utilization of skills	549(88.69)	122(87.1)	209(84.3)	218(94.4)	184(88.5)	365(88.8)
Promotion	559(90.31)	134(95.7)	222(89.5)	203(87.9)	186(98.4)	373(90.8)

(Hammel et al., 1979; Noel et al., 1982a; Rauch, 1981).

Our results indicated that, although most of respondents were satisfied with their job in general, approximately 24% of respondents were not too happy with their work pay. This suggested that monetary reward could contribute to greater job satisfaction. Many young hospital pharmacists were unsatisfied with their work pay, not because of salary itself, but because of unequal treatment.

Currently personnel system reform in public hospitals in Guangdong Province, China is under way. Hospital employees are ranked by two-track system; tenured and contracted. Many underprivileged young hospital pharmacists are recruited as contracted employee meanwhile, a few influential peers are recruited as tenured ones. They do the same work with tenured coworkers but get lower work pay compared with tenured ones.

Besides the two-track system, the duration of working service in hospital, and academic degree has a link with young hospital pharmacist's salary. Different hospitals have different mechanism of salary growth. There is no national regulation for hospital pharmacist salary.

In this survey, approximately 9% of young hospital pharmacists were frustrated to claim their low social status. And about 10% of them thought pharmacy is an irksome job. About 9% of them felt

self-contempt when introduced as pharmacists in social activity. Furthermore, approximately 13% of young hospital pharmacists did not expect to obtain professional achievement because they believed it was hard to fame and success. Considering career expectation, approximately 27% of respondents would not like to work in hospital for a life. About 47% of respondents wanted to try different job if they had re-select chance, and about 89% of them would absolutely change profession if they got more salary from other jobs. As a career guide, approximately 7% of respondents strongly opposed their relatives or friends to choose hospital pharmacy as a lifelong career.

In Chinese society, hospital pharmacy is usually regarded as a low-tech career and an easy job, most suitable for females (Wei, 2002). Males should engage in the career of much decent, high intensity, risky and unstable work in such a traditional culture. Young male hospital pharmacists may be affected by social prejudice easily. This may explain that, career identity of male pharmacist was lower compared to female hospital pharmacists.

In China, there are first-class hospital, second-class hospital and third-class hospital. All first-class hospital and second-class hospital are public hospitals. A few third-class hospitals are private hospitals. First-class hospitals are usually state-owned, large University hospitals, and rich in resources. There are many famous medical experts working in first-class hospitals. A good many patients gather in first-class hospitals waiting for/receive better medical service. In first-class hospitals, pharmacy has many practice divisions; dispensary for outpatients, dispensary for inpatients, clinical pharmacy, manufacturing pharmacy, drug control lab, etc. Second-class hospitals are usually province-owned or city-owned small hospitals and scarce in resources. A few patients visit these small hospitals and among the patients are the poor. In second-class hospitals, pharmacy has two dispensaries; dispensary for outpatients, dispensary for inpatients. Pharmacists working in second-class hospitals were truly pharmacy dispensers, therefore, they were less happy compared with those working in first-class hospitals. Third-class hospitals are just clinics. Most third-class hospitals did not hire hospital pharmacists.

Generally, the results suggested that young hospital pharmacists in China did not identify their career too much. Low levels of career identity among hospital pharmacists may be largely because of the manner in which pharmacy is practiced. Although at present time, most young hospital pharmacists usually graduated from Pharmacy College and mastered highly professional skills in China compared with situations two decades ago, the practice of hospital pharmacy has not kept pace. Many pharmacist complained in their statements saying "we are still a dispensary worker, just like our senior hospital pharmacists", "we are disenchanted with pharmacy practice in the 'real world' compared with our

initial expectations", and "a pharmacist is just a physical laborer, without being mentally challenged." This may result in boredom, low motivation and commitment, and obsolescence of skills and abilities.

Although approximately 87% of respondents expected to obtain professional achievement, approximately 13% of them admitted straight, it hard to fame and success, because they have "no chance and time for learning and self-improvement". Most young hospital pharmacists wished in their statement that, pharmacy directors should give more opportunities to them to continue their education to gain new knowledge and skill. They argued that "physicians can improve their knowledge and professional skill by diagnosis, treatment practice every day but we can't do that". The numerous repeated operations made hospital pharmacists knowledge and skill progress lag, even regress.

In order to make pharmacy as a career more intriguing, the role of the hospital pharmacist should be expanded to include some of the challenging functions presently performed by clinical pharmacists. This could be done by decentralizing pharmaceutical services so that hospital pharmacists have more interaction with patients and other health practitioners. To alleviate dissatisfaction with advancement, a position hierarchy in the pharmacy could be established where hospital pharmacists would be promoted to a higher grade on the basis of merit, tenure, and demonstrated competence. Soliciting employee input at staff meetings may have a positive impact on satisfaction with hospital policies and practices. It is necessary for pharmacy directors to develop the expertise to deal effectively with problems of human-resources management (Noel et al., 1982b). Feeling important in job will make pharmacist reduce the demission rate and increase career identity and job satisfaction (Eden, 2009).

Last but not least, the question of unequal pay for equal work demands prompt solution because monetary reward plays a role in job satisfaction. Since the low career identity exists among young hospital pharmacist in China, efforts should be implemented to improve their subjective initiatives in daily pharmacy or clinical pharmacy practice.

Conclusions

Although the young hospital pharmacists in Guangdong province, China were satisfied with their current job, on the whole, they showed low career identity.

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