

The Intention of Working Abroad: The Exploration of Vietnamese Nursing Students

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Abstract— Recently, more nurses from developing countries move to developed regions for seeking better job opportunities. This phenomenon leads to that many prospective candidates entering the nursing profession expect to receive the qualification as a potential chance for their migration intention. The study aimed to explore the intention of working abroad and identify the related factors among nursing students. **Materials and methods:** The study used a cross-sectional descriptive design which conducted from February to April 2022 on 404 nursing students at nursing university in Da Nang city of Vietnam. The study used a self- developed questionnaire based on literature review, consisting of 18 questions to explore the intention of working abroad and the needs among nursing students. Chi square and Fisher tests were used to find the significant relationships between personal characteristics and the needs with the intention of working abroad. **Results:** The study explored that 47.3 % of nursing students intended to work abroad. Personal characteristics associated with having migration intention to work abroad were school years, language skills accessible source of information related to work abroad and relatives or friends living abroad. The needs related to a definite desire to migrate were higher salary, improving capacity related to individual work, better working condition, better quality of life, looking for promotion opportunities in career, experiencing different cultures, approval of family, and travelling hobby ($p < 0.05$). **Conclusion:** The significant percentage of nursing students had intention of working abroad. Foreigner language skills was one of factors influenced nursing students to gain the intention and implement this desire.

Keywords— Intention, work abroad, exploration, nursing student, Vietnam.

I. INTRODUCTION

Over the past decade, the demand to recruit nurses of developed countries has definitely increased because of the nurse's shortage in health care system [1]. According to the statistics of World Health Organization, the shortage of nurses and midwives was accounted for 50% of the present shortage in health providers [2]. As a result, the shortage of nurses' workforce become a real challenge for any country's health system [3]. It was forecasted that Germany would lack of 520000 full-time nurses in 2030 and face to the challenges of increasing demand of qualified nurses [4]. 2.5 million nurses were also a prediction estimated in 23 Organization for Economic Cooperation and Development countries by 2030 [5].

Working abroad of nurses is a great opportunity to experience nursing practice, the healthcare system in another country as well as to personally and professionally enhance individuals [6]. Thus, there is more and more nurses in low-

income countries intent to migrate to high-income countries in looking for better working condition, salaries and higher training possibility [7]. According to the survey of Japan's socio-economic situation in 2018, around 1,460,000 workers were foreigners, about 765,767 workers were from Southeast Asia, and nurses accounted for the largest number [8]. In other statistics of the period 2019-2020, there were more than 250 nurses migrating to work in Germany [9].

With the opportunities and trends of nurses to determine migrating, the intention of working abroad was remarkably interested in Vietnamese nursing students. The research by Tran Thi Nhu Trang and Mai Thi Thanh Thu (2018) pointed out that the proportion of nursing students having intention to work abroad after graduation was up to 42.4% [10]. Furthermore, Vu Thi Cam Doanh, Nguyen Thi Thu Huong and Pham Minh Khue (2020) has showed the study's results that the nursing students' desired to work abroad after graduation accounted for 37.7% [11]. These studies had mostly focused on looking for the rate of nursing students' intention to work abroad. However, it was essential to deeply find out the related factors in order to consider solutions improving knowledge, skills as well as foreign language skills of nursing students so that they would prepare sustainably for their intention of working abroad.

Therefore, this study aimed to explore the intention of working abroad among nursing students and identify the related factors to make their decision working abroad in order to provide evidence for developing appropriate nursing curriculum and well-preparing for working abroad as students' desire.

II. MATERIALS AND METHODS

A. Design

This study was descriptive cross-sectional design.

B. Sample size and Sampling

Eligible participants were nursing students of Da Nang University of Medical Technology and Pharmacy, agreed in the study, and present at the time of the data collection.

The sample size was calculated using the formula:

$$n = Z_{1-\alpha/2}^2 \frac{p(1-p)}{d^2}$$

Where $z = 1.96$ with $\alpha = 0.05$, $d = 0.05$, and $p = 0.424$ that based on the 42.4% of students who had demand of working abroad in the study conducted by Tran Thi Nhu Trang and Mai Thi Thanh Thu in 2018 [10].

The minimum sample size was 375.

The simple random sampling method was used in the study because each respondent had the similar probability of being collected. The participants were randomly collected by the authors from the first to final year nursing students.

C. Data collection

Data collection was carried out from February to April 2022. The authors met nursing students in the breaking time or at the end of the classes. After explaining all information of the study, the authors gave the forms for participants to self-report. The process took about 10 minutes. All information was used for the research only, without any other purposes.

D. Instruments

The questionnaire consisted of 3 parts.

Part A was information related to personal characteristics of nursing students, including age, gender, school years, residence, family economic status, language skills, used to study or work abroad, accessible source of information related to work abroad, and relatives or friends living abroad.

Part B was measuring the intention of working abroad among nursing students, including one question with Yes/No answer.

Part C indicated the needs of nursing students when working abroad. The questionnaire was developed based on literature review from domestic and international studies [7, 10-14]. The scale consisted of eight questions having a dichotomous answer (Yes/ No). Afterward, the content validity of the instruments was stable when checked by five experts. The instruments were then checked reliability in the pilot study of 30 participants with Cronbach's Alpha was 0.657.

E. Data Analysis

Data was analyzed and interpreted by the SPSS 22.0. Descriptive statistics were used to describe personal characteristics, the intention of working abroad, and the needs of working abroad among nursing students. Chi square and Fisher's Exact tests were used to explore the relationship between the variables. The significance level was less than 0.05.

F. Ethics

This study was approved by Ethical Council for Biological Research of Da Nang University of Medical Technology and Pharmacy (N0.193/QD-DHKTYDDN). All participants fulfilled in the informed consent when received a full explanation the aim of the study, confidentiality, and the right to refuse or withdraw anytime.

III. RESULTS

Total of 404 nursing students participated in the study. More than a half of participants aged from 18 to 20 (56.2%) and the majority was female (95.8%). The percentage of final year nursing students joining in the study was highest (32.2%). Just over a half of participants was living in rural (51%). Nearly two thirds of students considered that the economic status of their family was medium. 185 out of 404 nursing students had ability of English, while 20.3% of them might be able to have Japanese

language skill. Almost of them had never studied or worked in other countries (99.3%). Most of information related to work abroad was obtained from the campus (56.2%) (Table 1).

47.3% of nursing students notified to be likely to work abroad. The large number of participants desired higher salary, better working condition, and preferable quality of life (96.3%, 89.4%, and 86.4%, respectively). Additionally, the majority of nursing students wished to experience different cultures (95.5%). However, there were only 64.4% of them received the approval of family for migration (Table 2).

There were significantly statistical related between school years, language skills, accessible source of information, relatives or friends living abroad, higher salary, improving capacity correlated to individual work, better working condition, preferable quality of life, looking for promotion opportunities in career, experiencing in different cultures, approval of family, travelling hobby and intention of working abroad among nursing students ($p < 0.05$). Age, gender, residence, family economic status, and used to study or work abroad were not the related factors to the intention ($p > 0.05$) (Table 3 and Table 4).

IV. DISCUSSION

1. Intention and needs of working abroad among nursing students

This study revealed that the percentage of nursing students at Da Nang University of Medical Technology and Pharmacy intended to work abroad was 47.3%. This result was higher than that reported in several previous studies also conducted in Vietnam with 42.2% and 37.7% of those who expressed intention of working abroad [10, 11]. The higher percentage of Vietnamese nursing students who desired to work abroad might illustrate the demand of entering in global nursing labour market. Additionally, the international collaboration of the university and government' facilitation might drive this migration. In contrast, the results of this study were lower than the research carried out in Indonesia [12], Serbia [15], and Hungary [16]. This difference might explain that the study conducted on university nursing students, while the previous study investigated nursing students who graduated from nursing colleges and vocational programs.

Regarding needs of working abroad among nursing students, this study indicated that 96.3% and 89.4% of nursing students wanted to moving abroad for working due to desiring a higher salary and better working condition. A similar phenomenon was found among Serbian nursing students who reported that seeking better working condition and higher income were the reasons [15]. Another study which conducted in the public nursing universities in Northern of Vietnam also showed that 64.4% of nursing students wanted to work internationally due to the purpose of desiring higher salary in order to save more money for their families and future life [10, 11]. More importantly, enhancing personal working and professional experience were other needs of working abroad of nursing students with 90.8% and 81.2% in order. Similarly, the study in Korea concluded that Korean nursing students intended to migrate abroad because they wanted to gain professional development [13]. Furthermore, the study illustrated that nearly

96% of nursing students intended to work abroad because of interesting in different cultures' experience. However, a case study conducted in Indonesia reported that there was not the significant association with the interest in other culture's experience like Japan among nursing students [12].

2. Relationship between personal characteristics, the needs and intention of working abroad

The finding disclosed that school year related to intention of working abroad. This was supported to the previous studies [13, 17, 18]. The final year nursing students stated that wishing global career continued approximately four times more likely to work abroad [18]. The study in Kosovo stated that the final year nursing students preferred to look for job in foreign countries [19]. In addition, in spite of no relationship with intention of working abroad in the study, family income was notified an important factor in other study [12]. People who had higher economic family status was more interested in planning of migration than ones from the lower [7].

Foreign language skill was a related factor to intention of nursing student in this study. It was identified to be as an important consideration that influenced nursing students' intention to migrate because this was a motivation to implement their desire and make migration decision [12, 17]. Lack of language skills was really an important barrier to work abroad [13]. Foreign language acquisition may develop the self-efficacy of nursing students when coming in a global labor market competition. Fortunately, English and Japanese were referred as two main languages taught in the curriculum of this university. Furthermore, German was also a favorite foreign language of nursing students after there were some alumni reviewed the sustainable career as nurses in Germany.

Accessible source of information and having relatives or friends living abroad were considered as in the relationship with intention of working abroad. This happened from the true situation of this university. Through international collaboration with some non-governmental organizations of this university about programs such as taking care of the elderly or adding nurse labour for countries that was shortage of this workforce, strategies and workshops had been holding to provide information to students every year, even every semester. Moreover, nursing students who had relatives or friends living in a foreign country were more likely to regard working abroad [15]. The presence of relatives or friends in abroad may supply a support network and job chances that working abroad become more practicable and appealing for nursing students [20]. Family was a protective factor, while family was predictor of intention among Irish nursing students [21].

According to occupation, higher salary and better working condition, improving capacity of individual work, and looking for promotion opportunities in career correlated to intention of working abroad among nursing students. This result was consistent to some researches [17, 19, 22]. The deficiency of freedom and power for making decision were considered as the influencing factors towards dissatisfaction in the job of nurses in Iran in order to convince them to work abroad [22]. As a result, it might change nursing students' career future perceptions when they practiced clinically. Wage, working

conditions and career promotion were in order of affecting intention to migrate among nursing and midwife students in Ireland [21]. Poor working condition was one of point in Philippines that drove nurses to seek for working elsewhere [14]. Indonesian nursing students wished to experience working in the better health care system, look for opportunities to develop a career, and have higher income [12].

Better quality of life, different cultures' experience, and travelling hobby were recognized in the relationship with intention of working abroad. This result was similar with some studies [18, 19, 23]. In developed countries, there were many support systems to gain quality of life such as comprehensive health care, modern infrastructures and facilities [6]. Conversely, experiencing Japanese culture was not interested reason that Indonesian nursing students wanted to work [12].

This study had some limitations, firstly, data collection was carried out by using self-reported questionnaire. It led to some potentially social bias. This indicated that participants might fill in the form with responses which were socially justifiable. Additionally, the study was conducted in one public university, which might potentially influence generalizability.

V. CONCLUSION

The intention of working abroad among nursing students in Vietnam was medium, with desires particularly to get higher salary and improve capacity related to individual career. Nursing students should improve their foreigner language skills to reduce the challenge of approach in the new environment if having the opportunity to migrate. To raise the nursing students' interest to work abroad, career orientation might integrate in the nursing curriculum. This might help the nursing students to prepare ahead of such duties as well as increase their interest to join collaboration of the university to foreign organizations.

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TABLE 1. Personal characteristics of nursing students (N = 404)

Characteristics		Number	Frequency (%)
Age	18 – 20	228	56.2
	21 – 24	165	41.3
	> 24	11	2.5
Gender	Male	17	4.2
	Female	387	95.8
School years	1 st	92	22.8
	2 nd	116	28.7
	3 rd	66	16.3
	4 th	130	32.2
Residence	Urban	173	42.8
	Rural	206	51.0
	Mountain	25	6.2
Family economic status	Poor	5	0.67
	Near poverty	36	9.63
	Medium	277	68.9
	Rich	86	21.7
Language skills	English	185	45.8
	Japanese	82	20.3
	Other	35	8.7
	None	102	25.2
Used to study or work abroad	Used	3	0.7
	Not yet	401	99.3
Accessible source of information related to work abroad	Campus	258	56.2
	Social media	109	41.3
	Other	37	9.1
Relatives or friends living abroad	Yes	185	45.8
	No	219	54.2

TABLE 2. Intention and the needs of working abroad among nursing students

		Number	Frequency (%)
Intention of working abroad	Yes	191	47.3
	No	213	52.7
1. Higher salary	Yes	389	96.3
	No	15	3.7
2. Improving capacity related to individual work	Yes	367	90.8
	No	37	9.2

2. Better working condition	Yes	361	89.4
	No	43	10.6
4. Better quality of life	Yes	349	86.4
	No	55	13.6
5. Looking for promotion opportunities in career	Yes	328	81.2
	No	76	18.8
6. Experiencing different cultures	Yes	386	95.5
	No	18	4.5
7. Approval of family	Agree	260	64.4
	Disagree	144	35.6
8. Travelling hobby	Yes	225	55.7
	No	179	44.3

TABLE 3. Relationship between personal characteristics and intention of working abroad

Variables		Intention of working abroad				P
		Yes		No		
		N	%	N	%	
Age	18 – 20	118	29.20	110	27.23	0.626 ^a
	21 – 24	70	17.33	95	23.51	
	> 24	4	1	7	1.73	
Gender	Male	9	2.23	8	1.98	0.633 ^b
	Female	182	45.05	205	50.74	
School years	1 st	51	12.62	41	10.15	0.027 ^{a*}
	2 nd	55	13.61	61	15.10	
	3 rd	37	9.16	29	7.18	
	4 th	48	11.88	82	20.30	
Residence	Urban	77	19.06	96	23.76	0.604 ^a
	Rural	101	25	105	25.99	
	Mountain	13	3.22	12	2.97	
Family economic status	Poor	3	0.74	2	0.5	0.518 ^b
	Near poverty	19	4.7	17	4.2	
	Medium	131	32.4	146	36.1	
	Rich	38	9.4	48	11.88	
Language skills	English	92	22.77	93	23.02	0.010 ^{a*}
	Japanese	68	16.83	14	3.47	
	Other	25	6.19	10	2.48	
	None	30	7.42	72	17.82	
Used to study or work abroad	Used	3	0.75	0	0	0.066 ^b
	Not yet	188	46.53	213	52.72	
Accessible source of information related to work abroad	Campus	118	29.21	140	34.65	0.009 ^{a*}
	Social media	63	15.59	46	11.39	
	Other	10	2.48	27	6.68	
Relatives or friends living abroad	Yes	98	24.26	87	21.53	0.035 ^{b*}
	No	93	23.02	126	31.19	

TABLE 4. Relationship between needs and intention of working abroad among nursing students

Variables		Intention of working abroad				P
		Yes		No		
		N	%	N	%	
Higher salary	Yes	189	46.78	200	49.5	0.007 ^{b*}
	No	2	0.5	13	3.22	
Improving capacity related to individual work	Yes	181	44.8	186	46.0	0.010 ^{a*}
	No	10	2.5	27	6.7	
Better working condition	Yes	181	44.80	180	44.55	0.001 ^{b*}
	No	10	2.48	33	8.17	
Better quality of life	Yes	181	44.80	168	41.58	0.001 ^{b*}
	No	10	2.48	45	11.14	
Looking for promotion opportunities in career	Yes	168	41.6	160	39.6	0.001 ^{b*}
	No	23	5.7	53	13.1	
Experiencing different cultures	Yes	186	46.0	200	49.5	0.090 ^{b*}
	No	5	1.3	13	3.2	
Approval of family	Agree	166	41.1	94	23.2	0.001 ^{b*}
	Disagree	25	6.2	119	29.5	
Travelling hobby	Yes	184	45.5	41	10.1	0.001 ^{b*}
	No	40	9.9	139	34.5	

^a Chi square test

^b Fisher test

* P < 0.05