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Factors deterring registered nurses from pursuing post graduate nursing degree in a private hospital in Penang, Malaysia

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Background: In Malaysia the percentage of diploma registered nurses outnumber the percentage of degree registered nurses. Internationally, most registered nurses earn associate degrees or bachelor's degrees in nursing. Malaysia is in the pipeline of ensuring that its registered nurses are professionally qualified with nursing degree by year 2020. Registered nurses with diploma qualification are feeling the pressure to upgrade their qualification to degree. There are concerns as to why these nurses are not pursuing their post registration nursing degree.

Objective: To determine factors that are deterring the registered nurses of a private hospital in Penang from pursuing the post registered nursing degree.

Methods: This descriptive study utilised a convenient sample of 150 registered nurses from Lam Wah Ee Hospital in Penang. The instrument of this study was developed based on literature search and the conceptual framework of Force Fields Analysis developed by Kurt Lewin in 1952.

Results: The deterring factors for registered nurses not pursuing post registration nursing degree from this hospital were determined through negative mean score, which was valued at less than 2.5. The top 3 deterring factors identified were: high educational cost, with a score of 1.92; financial commitment, with a score of 2.22 and time constraints and high workload, with a score of 2.27.

Conclusions: High educational cost, financial commitment, time constraint and high workload were the main factors deterring the registered nurses from this hospital from pursuing their post registration nursing degree. Thus it is timely for the organisational management to consider workable measures to assist and motivate their nurses to upgrade themselves with nursing degree in line with Malaysia's vision to meet the increasing challenges and complex needs in the care of clients in health services.

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Key words: bachelor degree in nursing; continuing education; nursing education; Malaysian nurses.

Introduction

The post registration nursing degree programme or nursing baccalaureate programme offers a great range of field of studies which include nursing science, physical science, research, management, social science, humanities and public health (Soon, n.d.). Upgrading oneself to this educational level opens the pathway for registered nurses (RNs) to cope with current demands and workloads in managing the care of clients. The Institute of Medicine (IOM) report (2010) mentioned that the demand of 80% of baccalaureateprepared nurses by 2020 is crucial to meet the higher and greater complexities in healthcare. The Ministry of Higher Education and Ministry of Health Malaysia are strategising to ensure that at least 60% of the nurses' population in this country possess a professional degree in nursing in order to meet the needs for clients care by 2020 (Hamidah Hassan, 2010).

Malaysia has an estimated 90% of diploma holder RNs and 10% of degree holder RNs in year 2012 (Lim, 2012). Based on the results of a local research done on 792 participants in 2013, 76% of the RNs were diploma holder, a small percentage of only 2.3% of RNs had degree and there were no Master or PhD holder among these groups of participants (Chong, Francis, Cooper & Abdullah, 2014). The low percentage in RNs with degree is also evidenced among the population of the RNs from this study site.

Factors deterring RNs from pursuing post registration nursing degree range from time constraints, geographical barrier, work and family responsibilities with childbearing duties, financial concerns and lack of differential treatment between associate-degree prepared RNs and baccalaureate degree-prepared RNs by employers. (Cathro, 2011; Lim, 2012 & Schwarz, 2014). Age and years of experience in nursing were

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found to be positively correlated to the deterring factors (Nash, 2013). The tendency for RNs with many years of working experience in nursing to further their education would be less as it was deemed stressful for them after staying off from studying for some time (Cathro, 2011; Nash, 2013 & Romp *et al.*, 2014). It was acknowledged that RNs were also challenged with time to study and to complete their assignments due to the frequencies of having to work double shifts / overtime (Lim, 2012).

Nurse Managers should provide more opportunities and recognition towards the nursing degree in order to encourage more RNs to upgrade themselves (Chiu, 2005). Many RNs are reluctant to pursue a degree programme due to lack of support from their organisation (Nash, 2013). Educational grant or sponsorship, study leave and time off would be an encouragement for more RNs to study nursing degree (Lim, 2012). Cathro (2011) and Nash (2013) agreed that a flexible working schedule would allow RNs to pursue a nursing degree programme.

The objective of this study was to determine the factors that deter the RNs from pursuing their post registration nursing degree in Lam Wah Ee Hospital in Penang, Malaysia. The result from this study was important to provide the needed insight to the hospital administrators of this hospital to increase the numbers of RNs with degree in line with the national strategy by year 2020. This hospital is still far from meeting this strategy as the numbers of RNs with degree holder were only 67 out of a total of 271 RNs with diploma qualification.

Methodology

A quantitative descriptive research design with convenient sampling technique was used for this study. In this sampling technique the authors focussed on RNs who were available and willing to participate and they must meet the inclusion criteria of this study. Convenient sampling provides a fast and the least expensive technique of sampling (Burns & Grove, 2009) within a limited timeframe of study. The inclusive criteria were: RNs with a minimum or more than

3 years of working experience that had done, or not yet or still undergoing their post registration nursing degree. Exclusive criteria were RNs who were temporarily employed or under probation period, those with less than 3 years of working experience and the RNs with administrator role of Sister and Matron. The sample size for this study was determined by simplified formula for proportion calculation (Yamane, 1967) with confidence level of 95%, degree of variability (p = 0.5) and level of precision (e = 0.05) from population size (N) of 233. With an added attrition rate of 10%, the calculated sample required was 162.

The research variable of this study was "deterring factors of RNs of a private hospital in Penang pursuing post registration nursing degree". Deterring factors were conceptualised as circumstances, facts or influences that discourage or prevent someone from doing something (Oxford dictionaries, 2014). There were 8 main attributes categorised for measurement under deterring factors. They were lack of personal interest or career advancement, career requirement, high educational cost, financial commitment, family commitment and support, time constraint and high workload, lack of support and motivation from superior or organisation and lack of flexible learning programme. The attributes were measured by a self-reported survey questionnaire formulated based on the conceptual framework of Force Fields Analysis developed by Kurt Lewin in 1952 and literature search. A four-point Likert rating scale was used for the questions, where the participants could either: strongly disagree = 1, disagree = 2, agree = 3 and strongly agree = 4. Informed consent and study information sheets were included with each set of the questionnaire. A pilot study was conducted on 15 RNs (10% distribution of the population) from a selected ward in the studied hospital (these RNs were excluded from the actual study). The RNs were asked to identify any items they had difficulty in answering and to specify the length of time it took for them to complete the questionnaire. Internal consistency test by Cronbach Alpha yielded a score of 0.88. As the pilot study's participants were less than 25 (Hertzog, 2008), the Cronbach Alpha test was computed on the 150 actual RNs responses, which resulted in a good internal consistency of 0.80 to 0.91 for the eight subscales. Content validity for each of the items from the questionnaire was reviewed by 7 panels of experts from the selected private hospital to evaluate the suitability of questions posed. The items content validity index was from 0.8 to 1.0. The items-level content validity index should be not lower than 0.78 (Lynn, 1986).

In the actual study, informed consent and study information sheets were included with the questionnaire placed into a sealed envelope and distributed to units and departments of the hospital. The RNs were given a duration of one month, from 28th November till 28th December 2014, to fill up the questionnaires. The aim was to provide ample time for the RNs to reflect and answer the questions posed taking into

consideration they were busy working with double shifts / overtime. This leniency also allowed the authors to obtain optimum return of questionnaires. Available and willing participants were instructed to return their informed consent and answered questionnaires in a sealed envelope into the designated drop box at various identified locations. This study was approved by IMU Joint-Committee on Research and Ethics.

The data collected was analysed using Predictive Analytics Software (PASW) in frequencies, percentages and mean scores.

Results

The response rate for this study was 92%. There were 159 returned questionnaires; however only 150 respondents had answered all the questions in full. The demographic data of the 150 respondents were tabulated in Table 1 below.

Table 1: Demographic data of respondents. (n = 150)

Characteristic	n	%					
Age (yr)							
< 26	42	28.0					
26 – 30	72	48-0					
31 – 35	20	13.3					
36 – 40	8	5.3					
41 – 45	5	3.3					
> 45	3	2.0					
Marital status							
Single	86	57.3					
Married	64	42.7					
Number of children							
Nil	101	67.3					
1	15	10.0					
2	25	16.7					
3	8	5.3					
4	1	.7					
Year of working experiences in nursing							
3 – 7	105	70.0					
8 – 12	27	18.0					
13 – 17	14	9.3					
>17	4	2.7					

Characteristic	n	%					
Current educational level							
Diploma in Nursing	77	51.3					
Post Basic Course	61	40.7					
Degree in Nursing	7	4.7					
Degree in Nursing & Post Basic Course	1	3.3					
Basic Salary Scale							
RM 1500 – RM 2000	52	34.7					
RM 2100 – RM 2500	50	33.3					
RM 2600 – RM 3000	29	19.3					
> RM 3000	19	12.7					
Departmental Shift Pattern							
3 shifts	38	25.3					
12 hours shift	84	56.0					
Office Hours	14	9.3					
Others	14	9.3					

Table 2: Mean scores of demographic data according to the factors of Lack of Personal Interest or Career Advancement, Lack Career Requirement, High education Cost, Financial Commitment, Family Commitment & Support, Time Constraint & High Workload, Lack of Support & Motivation of Superior/Health Organisation, and Lack of Flexibility of Programme (n=150).

Deterring Factors Demographic Data	Lack of Personal Interest or Career Advancement	Career Requirement	High Educational Cost	Financial Commitment	Family Commitment & Support	Time Constraint & High Workload	Lack of Support & Motivation from Superior / Health Organisation	Lack of Flexibility of Programme
Age								
< 26	2.72	2.82	1.89	2.27	2.68	2.16	2.58	3.00
26 – 30	2.80	2.82	1.94	2.30	2.73	2.28	2.28	3.01
31 – 35	2.92	2.78	1.82	1.96	2.25	2.28	2.26	2.95
36 – 40	2.88	3.16	1.88	1.97	2.13	2.21	2.69	2.81
41 – 45	2.96	2.60	2.40	2.30	2.47	2.60	2.53	2.95
> 45	3.00	2.67	1.67	2.00	2.89	3.00	2.72	3.33
Marital Status								
Married	2.77	2.83	1.91	2.23	2.80	2.21	2.69	3.00
Single	2.84	2.79	1.92	2.12	2.37	2.34	2.80	2.99
Number of Children								
Nil	2.80	2.83	1.90	2.30	2.76	2.24	2.69	3.02
1	2.83	2.70	2.03	2.02	2.49	2.31	2.82	3.02
2	2.82	2.92	1.96	2.13	2.29	2.35	2.82	3.01
3	2.83	2.56	1.94	1.97	2.13	2.33	2.67	2.75
4	2.60	3.25	1.00	1.50	2.00	1.67	3.50	2.75

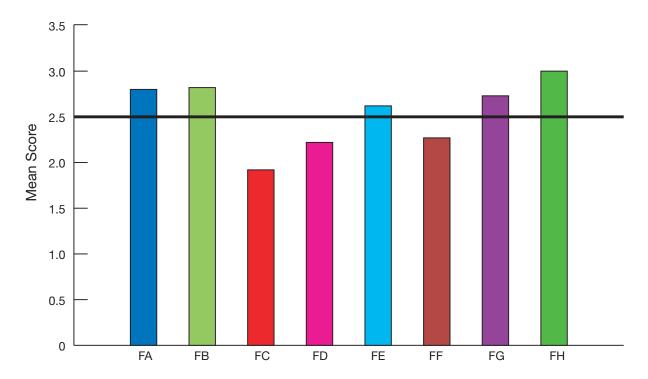
Deterring Factors Demographic Data	Lack of Personal Interest or Career Advancement	Career Requirement	High Educational Cost	Financial Commitment	Family Commitment & Support	Time Constraint & High Workload	Lack of Support & Motivation from Superior / Health Organisation	Lack of Flexibility of Programme
Years of Working Experience								
3 – 7	2.76	2.82	1.99	2.28	2.73	2.22	2.70	3.01
8 – 12	2.89	2.77	1.87	2.11	2.36	2.33	2.90	3.03
13 – 17	2.89	2.93	2.07	2.05	2.28	2.19	2.65	2.82
>17	2.95	2.69	1.88	2.06	2.58	3.17	2.58	3.19
Current Educational Level in Nur	sing							
Diploma in Nursing	2.74	2.76	1.89	2.27	2.63	2.12	2.70	2.98
Post Basic Course	2.84	2.84	1.94	2.16	2.58	2.15	2.74	2.98
Degree in Nursing	3.14	3.14	2.00	2.11	2.71	2.43	2.98	3.12
Degree in Nursing & Post Basic Course	2.88	3.00	2.00	2.35	2.67	2.73	2.77	3.15
Basic Salary Scale								
RM 1500 – RM 2000	2.68	2.80	1.83	2.67	2.68	2.19	2.68	3.01
RM 2100 – RM 2500	2.86	2.82	2.00	2.26	2.68	2.27	2.75	3.01
RM 2600 – RM 3000	2.86	2.90	1.97	2.22	2.54	2.28	2.86	2.97
>RM 3000	2.92	2.76	1.89	2.00	2.39	2.46	2.64	2.97
Departmental Shift Pattern								
3 shifts per day	2.85	2.85	1.92	2.35	2.80	2.17	2.74	3.04
12 hours shift	2.79	2.75	1.98	2.17	2.59	2.32	2.73	3.00
Office Hours	2.83	3.11	1.68	2.14	2.38	2.40	2.74	2.95
Others	2.71	2.86	1.79	2.23	2.50	2.10	2.71	3.00

Table 2 shows the overall mean scores of demographic data according to the 8 factors deterring the RNs from pursuing their post registration nursing degree. Comparison of findings for marital status according to family commitment showed that the respondents who were single had positive mean score of 2.79 while married respondents had negative mean score of 2.38. Comparing marital status to the number of children, those married respondents with 4 children had lower mean scores then those married but without children.

Comparing the mean scores on years of working experiences to personal interest or career advancement, respondents with working experiences of 17 years and above in nursing had the highest mean score of 2.95. The respondents' basic salary scale which was more than RM 3000 had the lowest mean score of 2.00 when comparing financial commitment. All the departmental shift patterns showed negative mean scores in the comparison with time constraints and high workload.

Figure 1. Overall mean score of factors deterring RNs from pursuing post registration nursing degree.

Mean score of factors deterring RNs from pursuing post registration nursing degree



FA: Lack of personal interest or career advancement

FB: Career requirement FC: High educational cost FD: Financial commitment

FE: Family commitment and support FF: Time constraint and high workload

FG: Lack of support and motivation from superior or health organisation

FH: Lack of flexible learning programme

The mean scores of 8 the factors which deterred the RNs from pursuing the post registration programme are shown in Figure 1. The mean scores identified for deterring factors were less than 2.5. Mean score for high educational cost was 1.92, financial commitment's mean score was 2.22 and mean score for time constraints and high workload was 2.27. They were identified as the top 3 factors that were deterring the respondents in this study from pursuing their post registration nursing degree.

Discussion

The majority of the respondents from this study echoed that offering study opportunities, staff promotion, empowerment and motivated environment by hospital management would work as an encouragement for RNs to pursue their post registration nursing degree. The findings concurred with studies by Romp *et al.* (2014) and Richards (2007), which noted that the initiation of motivational steps from the hospital administrator was important. Factors such as promoting opportunities for further study in nursing degree, promoting the staff and applying empowerment strategies contributed to the nurses' interest in pursuing their nursing degree.

Aiken et al (2014) research found that RNs perceived additional responsibilities as added burden to their profession once they obtained a degree. Megginson (2008) reported that nurses were of the opinion that obtaining a nursing degree was not necessary since their current qualification was adequate to pursue their nursing career (as cited in Bellfield & Gessner, 2010). However, most of the respondents from our study agreed that a nursing degree should be the basic qualification for RNs because they felt that this basic professional qualification increased their confidence and efficiency at work. This result also concurred with the findings from our literature review. Post registration nursing increased confidence and efficiency (Schwarz, 2014), improved skills of leadership and critical thinking of nurses working in a more complex work environment (Nash, 2013 & Morgenthaler, 2009). Nurses with a degree have better nursing knowledge to contribute to enhance patient's outcomes and better hospital workforce (Sarla, 2013). Increasing the number of baccalaureate prepared nurses reduces the mortality rate, increases rescue rate (Estabrooks *et al.*, 2005; Tourangeau *et al.*, 2007; Friese *et al.*, 2008 & Aiken *et al.*, 2003; 2008) and according to Chang and Mark (2009) it reduces medication error incidents (as cited in Bellfield & Gessner, 2010).

As high educational cost was identified as one of the top factors deterring RNs from pursuing the nursing degree in this study, the majority of the respondents strongly agreed that the course fee for post registration nursing degree is expensive and they could not afford to pursue the post registration nursing degree with their current income. The result agreed with the finding reported by Chong *et al* (2014) and Romp (2014). Rising educational costs have driven RNs to increase their incomes by working extra shifts to ease the family economic burden in order to provide financial support to their families (Morgenthaler, 2009).

As for financial commitment, the majority of the respondents agreed that high financial and family commitment have deterred them from pursuing their nursing degree. This was supported by the studies by Lim (2012) and Sarla (2013), which noted that financial commitment for car loan or housing loan and personal or family financial commitment increased the nurses' monetary burden. The respondents from this study considered that scholarship, personal or the National Higher Education Fund will help to reduce their financial burden when pursuing their post registration degree. However, other studies by Bellfield and Gessner (2010), Lim (2012) and Nash (2013) stated that personal or government loans will increase the RNs' financial burden if taken to finance the educational fees of their studies.

More than half of our respondents agreed that they had high family expenses but they felt that this would not stop them from pursuing their post registration nursing degree. Somehow, respondents mentioned that family support was important for them to make a move to pursue their nursing degree. A similar finding was reported by Bellfield and Gessner (2010) because they found that the RNs would advance their study if their family would support them emotionally and assist them in their educational journey. Romp et al. (2014) however reported that family responsibilities were the main factor that deters RNs from upgrading their educational level. Lim (2012) concurred that it was difficult for RNs to save enough money to pursue a nursing degree when they had high financial commitment for themselves and family. Further to our brief comparison analysis to the demographic data obtained with the 8 deterring factors, we found that respondents who were married were more demotivated in pursuing post registration nursing degree due to high family commitment. Those married respondents with many children had higher family commitments than those without children. These findings were similar with that of Megginson (2008) whereby family commitment and child care duties deterred RNs from furthering their higher education studies.

Regarding time constraint and high workload, many respondents agreed that their working schedules and workload prevented them from pursuing post registration nursing degree because due to the manpower shortages, RNs have to work overtime plus extra shift work if they are in a 3- shift duty, leaving them with little or no time to study and to complete their assignments (Richards, 2007; Morgenthaler, 2009 & Lim, 2012).

The majority of the respondents from this study agreed that their superior or organisation encouraged them to pursue the post registration nursing degree. They were also willing to pursue this degree if sponsorship was offered. They agreed that extra allowances and promotion opportunities were factors that could drive the RNs to pursue the post registration nursing degree. But the majority of the respondents were reluctant to take up the sponsorship as they were not willing to be tied down with a service contract. The RNs preferred to

have flexible working schedules for them to pursue their study, but on contrary, they encountered difficulties to obtain leave or time off for this purpose. Therefore, this finding was consistent with Bellfield and Gressner (2010) and Chiu (2005), where they noted that hospital administrators play important roles in inspiring RNs to pursue their higher education with Nurse Managers giving more opportunities and emphasising recognition towards the nursing degree and encouraging more RNs to pursue the nursing degree. Nash (2013) also supported that many of the RNs did not pursue their post registration nursing degree due to lack of support from their work organisation.

Many respondents in this study agreed that online or distance learning post registration nursing degree will allow flexibility in study and will permit them to balance their family roles and work duties. This finding was supported by Morgenthaler (2009) and Nash (2013), where they mentioned that online or distance learning post nursing degree provided better study conditions for nurses to pursue their nursing degree. With our finding, we agreed with Halter et al. (2007), that a flexible programme delivery option especially the online programme will allow RNs the opportunity to meet their goals while balancing family and work commitment (as cited in Cathro, 2011).

Recommendations

Organisational management should consider workable measures to assist and motivate their nurses to upgrade themselves with a nursing degree. Measures include possibilities of offering scholarship, sponsorship or study loan for the RNs to overcome high educational cost and financial commitments. Incentives such as extra allowances and promotion for degree holder RNs would definitely attract more RNs to consider taking up the option to further their study. Flexible working schedules, study leave or time off and arranged overtime would also allow the RNs to have a good balance in focussing on their work and studies.

Conclusions

High educational cost, financial commitment, time constraint and high workload were the top 3 factors found to be deterring the RNs in this study from pursuing post registration nursing degree. With the recommended measures the organisation will not only benefit from securing more RNs with better professional qualification to deliver quality care to clients but will also foresee an increase in employee engagement and retention because of employees satisfaction and appreciation with an organisation who is able to provide a good future and better growth prospects for them.

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