

On the Retention of Younger Nurses

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Abstract

Objective: In Trinidad and Tobago, younger hospital-based registered nurses are at risk of leaving the hospital and the country altogether. Therefore, there is a need to investigate the factors that contribute to turnover intention among younger nurses. The literature on newcomer adjustment has been predominantly used to study the integration and adjustment of younger nurses. However, we focus here on occupational mental health and job attitudes as antecedents of turnover intention across age groups referring to younger, mid-age and older nurses. The aim is to compare across age groups in order to determine whether younger nurses differ in terms of antecedents of turnover intention. The objective is to identify the reasons as to why younger nurses decide to quit the hospital.

Methods: We used a sample of 252 hospital nurses from Trinidad and Tobago. We did a cross-sectional study design and collected survey data using existing instruments. The occupational mental health concepts included role stressors, job stress, burnout, and depression. The job attitudes included organizational commitment, job satisfaction and turnover intention. We divided the sample in three groups: younger nurses, mid-age nurses and older nurses. The analytical strategy includes ANOVA with Post Hoc Bonferroni and stepwise regression.

Results: Younger nurses are more at risk of leaving the hospital. We provide detailed statistical findings revealing that high stress levels and feelings of inadequacy for the job are the most important predictors of turnover intention among younger nurses. We further demonstrate that stress, burnout and depression symptoms are significantly higher and that job satisfaction and organizational commitment are significantly lower among younger nurses. We do discuss findings obtained for the two other age groups as well.

Conclusion: We highlight the need for training and development programs that do go beyond providing knowledge and skill development by considering the occupational mental health of nurses.

Keywords: Nurses; Age; Stress; Burnout; Depression; Job satisfaction; Organizational commitment; Turnover intention; Trinidad; Tobago

Introduction

The current shortage of nurses is estimated to increase to 29% by year 2020 in the United States alone [1]. Moreover, in hospitals where turnover among nurses is high the quality of patient care and nurse outcomes are negatively impacted [2]. It is known for a fact that turnover among nurses tends to reduce with age thereby suggesting that younger nurses are at risk of leaving the hospital and the profession altogether [3]. Generally speaking, younger nurses come trained in the latest advances in health care. When nurses stay with the hospital, they pick up valuable clinical experience that is good for patient care. The retention of nurses promotes a good social climate in the hospital. Turnover among younger nurses is costly to the hospital. It creates problems with staffing, workload, and succession planning, and increases recruitment and training costs. Consequently, research is needed to understand why younger nurses quit more readily and what can be done to prevent it. This can further lead to the development of effective intervention strategies before they actually leave the hospital.

In the Caribbean, turnover intention among hospital-based registered nurses is high [4]. This is compounded by the fact that countries such as the United States recruit nurses from the Caribbean. The emigration of nurses from the Caribbean is known to impact the socio-economic welfare of the country [5]. Such exile of talents is sustained by an increased shortage of nurses in countries from the West. Thus, the retention of younger nurses is a crucial practical problem in the Caribbean.

While much has been said about the retention of older nurses in the profession [6-8], less is known about the retention of younger nurses. Push factors contributing to turnover among older nurses include increased workload, job dissatisfaction, disillusionment, and demoralization among others. Research highlights that flexible work schedule, and greater autonomy along with reduced working hours close to retirement reduce turnover. But there is evidence that all nurses do not behave the same way. Older experienced nurses approach the work differently than the younger nurses and develop work attitudes that are in alignment with the work context. The younger ones seem to struggle more as the work adjustment literature suggests, experiencing stress and anxiety as they respond to the demands of the workplace. Yet less is known about the retention of

younger nurses regardless of where they are. In Japan, younger nurses with less than 11 years of tenure who reported high exhaustion were more likely to quit the job [9]. In Finland, it was estimated that 26% of younger nurses have considered leaving the profession. Turnover intention among Finnish nurses was attributed to high job demands, burnout, low job satisfaction, and low commitment among others. However, most research thus far focused on the newcomer adjustment literature revealing that social support at work was crucial to the retention of younger nurses [10-13]. More recently, competence acquisition, opportunities for professional development and socialization were found to reduce turnover intention among younger nurses [14]. Although these factors can enhance newcomers' adjustment and increase the retention of younger nurses within the first two years of employment [14], we do think that the occupational demands experienced by younger nurses may constitute a decisive determinant of turnover intention and reveal some potential areas of intervention in health care management. Consequently, we focus on the occupational stress experienced by younger nurses and related symptoms of burnout and depression.

Stress, burnout and depression are prevalent among hospital nurses [15]. The literature reveals that heavy workload, job strain, stress, and burnout [1,2] are related to higher turnover intention among nurses. In spite of such evidence, the literature did not shed light on the differential impact of such stress on younger nurses. We need to know whether younger nurses are more severely impacted by job stress, burnout, and depression. Besides, the literature also tells us that occupational mental health impacts job attitudes [16]. Therefore, we also need to understand how their job attitudes influence their intention to quit the hospital.

In this study, we will compare younger nurses against mid-age and older nurses in order to assess whether there are significant differences in terms of occupational mental health and job attitudes among these three groups. More specifically, we will analyze the extent to which perceived role stressors, job stress, burnout, depression, job satisfaction, and organizational commitment differ across age groups. Finally, we will determine the relative importance of each of these factors in predicting turnover intention across age groups.

Conceptual Development

High job demands without adequate resources are detrimental to the mental health of nurses particularly in the absence of organizational support [17]. Hospital nurses have to deal with physical, mental and emotional job demands. When there is an imbalance between the demands and the organizational resources available to meet the demands, nurses are more likely to experience role stressors, which are known antecedents of job stress. Role stressors include role overload, role conflict and role ambiguity. Role overload or feeling overextended as a result of high job demands that exceed one's available resources is detrimental to the mental health of nurses. Role conflict or having to respond to conflictual demands and role ambiguity or feeling uncertain about one's responsibilities can increase job stress. It is known for a fact that nurses who experience job stress and who do not develop effective coping mechanisms are more likely to suffer from burnout [16]. However, work experience facilitates the development of strategies aimed at buffering burnout. Thus, we would expect that older nurses are less susceptible to burnout compared to younger nurses. Job burnout is a syndrome composed of three inter-related dimensions. First, emotional exhaustion consists of a feeling of depletion of one's emotional and physical resources after repeated

exposures to role stressors. Second, depersonalization is a self-protective but counterproductive response to excessive demands. It is associated with one's desire to withdraw from interpersonal interactions. Thus, nurses depersonalize patients and co-workers as a self-protective means from the exhaustive emotional and social demands associated with their roles. Third, diminished personal accomplishment involves feelings of inadequacy in one's roles and responsibilities [18]. Frequent symptoms of burnout have the potential to trigger work-related depression [19]. We refer here to depressive symptomatology among normal subjects. When nurses experience high job stress, frequent symptoms of burnout and depression, they are less likely to develop a positive attitude toward the profession [16,20].

Job satisfaction and organizational commitment can be considered as the most proximal antecedents of turnover intention [21] in the context of job burnout [20,22-24]. Job satisfaction refers to the cognitive evaluation of one's working conditions and affective reaction to such evaluation. Organizational commitment is composed of three dimensions. Continuance commitment refers to what one may lose by leaving the job such as benefits, seniority, and status. Normative commitment is related to the professional norms and whether it is acceptable practice to leave the job. Affective commitment results from the development of a strong identification with the profession and the hospital [25]. We do expect that older nurses with longer tenure have higher job satisfaction and greater organizational commitment compared to younger nurses. Consequently, we propose that younger nurses are likely to experience more role stressors, higher stress levels, more symptoms of burnout and depression and lower job satisfaction and organizational commitment compared to older nurses. We will also investigate whether indicators of mental health and job attitudes predict turnover intention differentially across age groups.

Methods

We used a sample of 252 hospital nurses from the Caribbean. Questionnaires were distributed to all nurses who were at work at the time the study was conducted provided that they agreed to participate in the study and to complete the survey. Responses were kept anonymous and nurses were instructed not to put their names or any other identifying information on the completed survey. Nurses were given a consent form that explained the purpose of the study in detail. The consent form clearly indicated that they had the right to withdraw from the study at any point in time. Nurses returned the completed survey directly to the researchers.

We divided the sample into three age categories. The youngest group is composed of nurses between the ages of 18 and 35, the mid-age group of nurses between 36 and 45, and the older nurses between 46 and 65 years of age. The literature reveals that nurses under the age of 35 were considered young [26,27]. According to the Idaho Commission of Human Rights, about 50% of the population in the United States is currently over 45 years of age [28]. Although the Age Discrimination in Employment Act of 1967 classifies older workers as age 40 and over, given the current demographics there are more workers age 45 to 55 and this trend will continue to grow. Thus, we selected 45 to 46 years of age as the transition point between mid-age workers and older workers. Moreover, it should be specified that the trend we currently observe in the United States fits the age distribution found in our sample from the Caribbean. We had 81 nurses in the younger category, 53 nurses in the mid-age category, and 92 older nurses. The sample is composed of 21 males and 231 females.

The distribution of nurses reveals that among younger nurses 71% were in their current job for less than 10 years, 16% between 10 and 15 years, and less than 1% for more than 15 years. For mid-age nurses, 28% were in their current job for less than 10 years, 19% between 10 and 15 years, and 53% for more than 15 years. Finally, for older nurses, 22% were in their current jobs for less than 10 years, 2% between 10 and 15 years, and 76% more than 15 years. Older nurses with less than 10 years had either been promoted or were new to the hospital.

Measures

Role overload, role conflict and role ambiguity were measured with the Beehr et al. [29] instrument using a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). A sample item for role overload is “It often seems I have too much work for one person to do”. A sample item for role conflict is “I often have to bend a rule or a policy in order to carry out an assignment”. A sample item for role ambiguity is “I feel uncertain about how much authority I have in my job”. Items were reverse scored where appropriate such that a high score on the scale indicates high role stressor. The number of items per scale was 5 for role overload, 6 for role conflict, and 4 for role ambiguity. Reliability coefficients were of 0.60, 0.79 and 0.61 for role overload, role conflict and role ambiguity, respectively.

Job stress was measured with the 13 items from the Parker and Decotiis’ in 1983 [30] instrument using a 5-point scale ranging from strongly disagree (1) to strongly agree (5). A sample item is “Sometimes when I think about my job I get a tight feeling in my chest.” A high score on the scale indicates high job stress. The reliability coefficient is .88.

The Maslach Burnout Inventory was used to measure the three dimensions of burnout using a 7-point frequency scale ranging from 1 (a few times a year) to 7 (every day) [18]. A sample item for emotional exhaustion is: “I feel emotionally drained from my work.” A sample item for depersonalization is: “I do not really care what happens to those I deal with at work.” A sample item for personal accomplishment is: “I have accomplished many worthwhile things in this job”. Mean frequency scores were computed for each dimension of job burnout. A high mean frequency indicates the manifestation of more frequent symptoms. There were 9 items for emotional exhaustion, 5 items for depersonalization, and 8 items for diminished personal accomplishment. The reliability coefficients are 0.91, 0.79, and 0.76 for emotional exhaustion, depersonalization and diminished personal accomplishment, respectively.

Depression was measured with 20 items from the Center for Epidemiological Studies Depression Survey (CES-D) [31] using a 4-point frequency scale ranging from 1 (rarely or none of the time) to 4 (most or all of the time). The CES-D consists of a list of generic

symptoms of depression. Respondents were asked to indicate how often they experienced each described statement in the week that preceded the date of the survey. A sample item is: “I thought my life had been a failure.” The reliability coefficient is 0.83.

Organizational commitment was measured with the Allen and Meyer’s in 1990 [25] instrument composed of 15 items using a 5-point scale ranging from (1) strongly disagree to (5) strongly agree. A sample item is “I really care about what happens to this hospital.” Items were reverse scored where appropriate so that a high score on this scale indicates high organizational commitment. The reliability coefficient is 0.84.

Job satisfaction was measured with one global item. Nurses were asked overall how satisfied they were with their present job. A 5-point scale ranging from (1) very dissatisfied to (5) very satisfied was used.

Turnover intention was measured with one item. Nurses were asked to indicate how likely they were going to quit the job in the coming year using a 4-point scale ranging including 1 (not likely at all), 2 (slight possibility), 3 (quite possible) and 4 (almost certain).

Results

We used ANOVA with Post Hoc Bonferroni to analyze the differences across the groups. Table 1 presents the ANOVA results.

Variable	Mean	Standard deviation	F-test	Significance level
Role Ambiguity	3.79	0.79	3	0.05
Role Conflict	3.28	0.92	5.69	0
Role Overload	2.38	0.78	3.76	0.02
Stress	2.52	0.83	4.11	0.02
Emotional Exhaustion	2.02	0.83	15.71	0
Depersonalization	1.57	0.75	6.64	0
Diminished Personal Accomplishment	2.16	0.81	3.85	0.02
Depression	1.49	0.4	4.68	0.01
Organizational Commitment	3.39	0.66	13.43	0
Global Satisfaction	3.31	1.09	4.36	0.01
Turnover Intention	1.67	0.85	23.46	0

Table 1: ANOVA.

Dependent variable	Age category (i)	Age category (j)	Mean difference (i-j)	Significance level
Role ambiguity	1	2	-0.28	ns
		3	-0.26	ns
Role conflict	1	2	0.39	0.05
		3	0.44	0.01
Role overload	1	2	0.32	ns

		3	-0.01	ns
	3	2	0.33	0.03
Stress	1	2	0.37	0.04
		3	0.31	0.05
Emotional Exhaustion	1	2	0.71	0
		3	0.63	0
Depersonalization	1	2	0.42	0
		3	0.33	0.01
Diminished Personal Accomplishment	1	2	0.32	ns
		3	0.28	0.05
Depression				
	1	2	0.17	0.04
Organizational Commitment		3	0.16	0.02
Global Satisfaction	1	2	-0.34	0.01
		3	-0.49	0
Turnover Intention	1	2	-0.45	ns
		3	-0.44	0.03
	1	2	0.44	0
		3	0.82	0

Table 2: Post Hoc Bonferroni. Note: Only results for younger nurses are reported here along with significant results for the other groups; 1=younger group, 2=mid-age group, and 3=older nurses.

As reported in Table 1, the F-tests were all significant at the 0.05 level or lower. The Post Hoc Bonferroni tests are reported in Table 2. Results reveal that older nurses report significantly more role overload compared to mid-age nurses but not younger nurses. Younger nurses report much higher role conflict compared to the two other groups. There were no significant differences across the three groups for role ambiguity. Younger nurses report higher levels of stress compared to mid-age nurses but not older nurses. They also reported more emotional exhaustion and depersonalization compared to both mid-age and older nurses. There were no significant differences for diminished personal accomplishment. Symptoms of depression were higher among younger nurses compared to the two other groups. Job satisfaction was lower for younger nurses compared to older nurses only. However, younger nurses had lower organizational commitment compared to both mid-age and older nurses. Finally, their intention to quit was also much higher compared to the two other groups of nurses. These findings confirm a higher intention to quit among younger nurses.

We did a stepwise regression test for each group to analyze the predictive effect of the mental health factors and job attitudes on turnover intention using the 0.05 level. Results are reported in Table 3. For each group, we report the findings for the variables that had a significant predictive effect and dismiss all excluded variables that were non-significant. Findings were obtained in two steps for each group. We report the significant findings for step 2. For younger nurses, R2

was of 0.27 and the F-test was of 12.55 (p<0.01). Results indicate that for younger nurses high stress levels and diminished personal accomplishment are the two significant predictors of turnover intention. For mid-age nurses, R2 was of 0.36 and the F-test was of 12.71 (p<0.01). Depersonalization increases and organizational commitment decreases turnover intention for this age group. For older nurses, R2 was of 0.22 and F-test of 11.12 (p<0.01). Depersonalization and depression both increase turnover intention among older nurses.

Younger nurses	B	SE	β	p
Stress	0.36	0.1	0.37	0.01
Diminished personal accomplishment	0.35	0.12	0.3	0.01
Mid-age nurses	B	SE	β	p
Depersonalization	0.6	0.17	0.43	0.01
Organizational commitment	-0.37	0.15	-0.3	0.05
Older nurses	B	SE	β	p
Depersonalization	0.3	0.1	0.33	0.01

Depression	0.4	0.17	0.25	0.05
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Table 3: Stepwise regression for turnover intention. Note: Solutions were obtained after two steps. We report only the significant findings at step 2.

Discussion

As expected, younger nurses experienced more job stress and more frequent symptoms of emotional exhaustion, depersonalization and depression and reported more negative job attitudes and higher intentions to quit. Younger nurses who experience high stress levels and diminished personal accomplishment do feel inadequate for the job to the point where they consider leaving the job. These results indicate that training and development is essential for newcomers. However, the presence of psychological distress as exemplified here by more frequent symptoms of depression among younger nurses is a detrimental factor to their retention. Thus, it should be considered as a critical element in the design of newcomer programs.

In comparison, mid-age nurses were in better mental health and reported lower role overload and role conflict, lower levels of stress, emotional exhaustion, depersonalization and depression, and higher organizational commitment compared to younger nurses. It can be concluded that once nurses reach mid-age that they adapt to the demands and develop more productive responses to the role stressors. Mid-age nurses who were committed to the hospital were less likely to quit. However, as for older nurses, depersonalization seemed to be a precursor to their intention to quit.

These findings highlight that older nurses do experience more role overload. However, they cope better with job demands. In fact, they reported lower levels of stress, less symptoms of burnout and depression, and were more satisfied with their jobs as well as more committed to the hospital. However, we do corroborate existing literature by showing here that older nurses who exhibit depersonalization and report frequent symptoms of depression are more likely to quit the job. Thus, feeling demoralized is a key antecedent of intention to quit among older nurses.

There is a need to focus on the retention of younger nurses by analyzing the effectiveness of Human Resource Management training and development programs that focus on newcomer adjustment and the acquisition of knowledge and skills. However, the findings obtained in this study demonstrate that the integration of younger nurses in the profession may require some other types of intervention. For a start, Employee Assistance Programs may be useful in helping nurses develop effective coping strategies to better deal with job stress by providing psychological help when most needed.

Taken together these findings reveal that younger nurses were the most at risk group. Therefore, we do think that researchers should devote more effort to the study of the factors that can contribute to the retention of younger nurses. Mid-age nurses were doing better compared to the two other groups and seemed well adapted. Finally, older nurses who were at risk of leaving the job were more depressed. Older nurses reported higher role overload. Consequently, unless there are changes to the working conditions of these nurses they may also leave the hospital. However, younger nurses are more likely to find opportunities in the countries of the West should they decide to move for better salaries and working conditions. They may also be more mobile and willing to expatriate themselves. In conclusion, the

retention of younger nurses in the Caribbean is an important problem that health care managers have to address in order to sustain quality health care.

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