Nurse job satisfaction and retention: comparing public to private hospitals in Jordan

MAJD TAWFEEQ MRAYYAN PhD, RN
Assistant Professor, The Hashemite University, Faculty of Nursing, Zarqa, Jordan

Introduction

Nurse job satisfaction and retention are complex issues that have been studied in social and nursing sciences. Many studies used the term intent to stay to explore the concept of nurse retention (Edwards 2002, Schmidt 2002, Armstrong-Stassen & Cameron 2003). The phenomena of interest are multidimensional; influenced by many factors including workers’ value systems and work environments in which they work. Globally, many changes have influenced health care systems, significant among these is the nursing shortage (Baker et al. 2000, Curtin 2000, Armstrong-Stassen & Cameron 2003). Minimizing turnover is a priority for nurse administrators who are concerned about the survival of their health care organizations, particularly with the current escalating nursing shortage.

Nowadays, the nursing shortage is epidemic in nature. However, many health care organizations continue to focus on nurses’ recruitment but without enough emphasis on retention. Nurse job satisfaction and retention strategies are areas that have not been studied extensively enough. Hospitals have to assess why nurses are dissatisfied and leaving their jobs (Romano 2002). Overwork, stress and non-supportive work environments are the common causes of nurse job dissatisfaction and turnover (Shapiro 2001). The researcher stated that hospitals have deflected shortages by offering higher wages or increasing recruitment. As the nursing shortage continues to intensify, most nurses report that they are now working longer hours but earning less than they did in the past few years (Bauer 2001).

Nursing turnover rates have increased over the years, accompanied by a decline in nursing school graduates since 1996 (AHA & The Lewin Group 2001). Nurse dissatisfaction and turnover result from many factors such as lack of autonomy. Dissatisfied nurses are likely to leave their jobs (Price & Mueller 1986, Mueller & Price 1990, Alexander et al. 1998, Cowin 2002).
In the past, nursing shortages have been cyclic. As demand increased, nursing education responded by increasing enrolment through aggressive recruitment efforts, while hospitals striving to create supportive work environment such as provide improved compensation packages (Tanner & Bellack 2001, Tieman 2001).

The health care system in Jordan is composed of 27 public hospitals, 56 private hospitals, two large university-affiliated teaching hospitals, 10 military hospitals, and few centres that are directed by The United Nations Relief and Works Agency (UNRWA). This health care system is characterized by centralization and lack of competition for patients except in private hospitals. Excluding the private sector, health care is provided for people almost free or at nominal charges.

The purpose of this research is to describe Jordanian nurses’ job satisfaction and retention. Specific questions are: (1) What are the differences in demographics, job satisfaction, and retention of nurses in public and private hospitals? (2) What factors influence job satisfaction and retention of Jordanian nurses? and (3) What is the relationship between nurse job satisfaction and retention?

Significance of the study

The knowledge about factors that contribute to job dissatisfaction and turnover has grown in the last two decades. In the 1980s, many studies investigated nurse job satisfaction and retention. However, for nearly a decade (1990s), few studies focused on nurse retention. As a result of the current international nurse shortage, there is renewed interest in nurse retention. Most nursing studies about job satisfaction and retention were conducted in a single type of hospital. Few studies were conducted to estimate the difference between public and private sectors; but these studies were not nursing-related (Paine et al. 1966, Rainey 1979, Solomon 1987, Schneider & Vaught 1993). In nursing, comparative studies were mainly performed between critical and non-critical care units (Bowler & Mallik 1998, Boyle et al. 1999), teaching vs. non-teaching hospital (Polanczyk et al. 2002, Derlet 2003), or a particular type of units such as psychiatric units in two psychiatric settings (Happell et al. 2003). Hospitals are usually compared according to their performance (Griffith et al. 2002). In Jordan, this is the second nursing study linking job satisfaction to retention (the first study was conducted by Suliman & Abu Gharbieh 1996). In another study (Al-Ma’a’itah et al. 1996) investigated Jordanian nurses’ job satisfaction, but did not link it to other variables as retention. The results of current study will provide baseline information for managerial interventions that are needed to be initiated in the future.

Literature review

Nurses’ roles become complicated and overlapped. Thus, innovative interventions that would influence nurse job satisfaction and retention are required. Although not studied in Jordan, internationally, many researchers linked between job satisfaction and retention (Price & Mueller 1981, Irvine & Evans 1995, Alexander et al. 1998, Cowin 2002).

Nurse job satisfaction

In the 1980s and 1990s, many researchers have been addressed nurse job satisfaction. The understanding of nurse job satisfaction and its contributing variables are important for any health care organization to exist and prosper. Job satisfaction is defined as the degree to which employees enjoy their jobs (McCloskey & McCain 1987). Nurse job satisfaction is a multi-dimensional phenomenon that is influenced by many variables. Autonomy has been identified as the strongest predictor of nurse job satisfaction, which in turn reflects positively on nurse retention (Boyle et al. 1999, Chaboyer et al. 1999, 2001, O’Rouke et al. 2000, Upenieks 2000, Finn 2001).

Sengin (2003) supported Hinshaw and Atwood (1984), who are in a comprehensive literature review identified variables that influence nurse job satisfaction. These factors included: (1) demographic variables: education, experience, and position in the hierarchy; (2) job characteristics: autonomy, tasks repetitiveness, and salaries; and (3) organizational environment factors: degree of professionalization, type of unit, and nursing care delivery model. Recent research identified new variables that influence nurse job satisfaction such as environment and job settings (Shaver & Lacey 2003). Non-supportive work environments increase nurses’ stress and job dissatisfaction (Sims 2003), which negatively influence nurse retention.

There was one Jordanian study assessing nurse job satisfaction and retention (Suliman & Abu Gharbieh 1996). The researchers identified factors that influence Jordanian nurses’ job dissatisfaction and estimated the magnitude of anticipated withdrawal from practice (number of nurses that leave their jobs/year). The results indicated that Jordanian nurses were dissatisfied with many work variables such as payment, career opportunities, nursing and hospital administrators’ support,
transportation, and child care facilities. The withdrawal rate of Registered Nurses (RNs) was 18.4%.

Nurse retention

With each nursing shortage, the focus on nurse retention is renewed but not sustained. Cyclical fluctuation of nurse turnover is a complex problem (Boyle et al. 1999). The primary reasons for focusing on nurse retention are concerns about the quality of patient care and the high cost of recruiting and orienting new staff. Many models and strategies have been suggested to explain and enhance nurse retention (Hinshaw et al. 1987, Riggs & Rantz 2001). Salary compression, where base wages are tightly clustered together with little variability is a common problem in nursing (Greipp 2003). A salary scale that is adaptable with increased life requirements is suggested as an important strategy to enhance nurse retention. Other predictors of nurse retention include but are not limited to nurse job satisfaction, supervision, work environment, organization and context-specific, personal factors such as experience, education, and age (Al-Ma’aitah et al. 1996, Krueger et al. 2002, Strachota et al. 2003).

Job dissatisfaction has been identified as a predictor of burnout and turnover among nurses (Kalliath & Morris 2002). Nurse dissatisfaction and turnover rates are stressful with reported levels as follows: 41 and 22.7% consecutively in the USA, 32.9 and 16.6% in Canada, 36.1 and 38.9% in England, 37.7 and 30.3% in Scotland, and 17.4 and 16.7% in Germany (Aiken et al. 2001). In the United States, hospital nurses’ job satisfaction is reported to be lower than the average for other workers (Aiken et al. 2001). In Jordan, the turnover rate was reported to be 18.4% (Suliman & Abu Gharbieh 1996); however, there are not any recent reported statistics about such trend.

Turnover indices are usually used to study nurse retention. Turnover is defined as the number of resignation or termination divided by the average of direct and indirect care of registered nurses full-time equivalent (FTE) positions for the same year, which estimated to be 21.3% in 2000 (The HSM Group 2002). Nurse turnover has been linked to dissatisfaction (Hinshaw et al. 1987, Alexander et al. 1998, Tai et al. 1998, Larrabee et al. 2003), low salaries (Jones 1996), few years on the job and insufficient time to perform job tasks (Davidson et al. 1997), job possibilities elsewhere and supervisor behaviour (Tai et al. 1998), and some demographic characteristics as being male and unmarried (Jones 1996).

Nurse job satisfaction and retention are interrelated concepts that have to be monitored on regular basis especially in the current rapidly changing health care environment.

Methodology

Design

A descriptive design using survey methods was the framework for the study. A descriptive design is the most appropriate to study such topic in health care systems that have few resources (Brink & Wood 1998), in which satisfying basic human needs comes first. Data were collected in the Fall of 2003, during a 4 weeks period.

Study instrument

The first part of the study instrument asked questions on nurses’ demographics. These include: gender, marital status, shift worked, time commitment, level of education, age, years of experience in nursing and in current area of work, type of units or wards, unit/ward’s average daily census, unit/ward’s organizational structure, model of nursing care delivery, unit/ward’s decision-making style, hospital’s financial situation, and dominant changes that influence the hospital.

Instruments used to assess the main variables, job satisfaction and retention, have reported high psychometric measures. Reliability and validity have been established for all tools by their original researchers (Huber et al. 2000). In this study, nurse job satisfaction was defined as the degree of positive affection employee feels about his/her employment (Price & Mueller 1986). Operationally, nurse job satisfaction was measured using the Mueller/McCloskey Satisfaction Scale (MMSS) (Mueller & McCloskey 1990) as follows: nurse job satisfaction: extrinsic rewards, scheduling, family/work balance, co-workers, interaction, professional opportunities, praise/recognition, and control/responsibility. The MMSS is a 5-point Likert scale rated as: 1 = very dissatisfied; 2 = moderately dissatisfied; 3 = neither satisfied nor dissatisfied; 4 = moderately satisfied and 5 = very satisfied. The MMSS has a Cronbach’s alpha ranged from 0.52 to 0.84 for each subscale. In term of construct validity, the cutoff for item loading on factor was 0.40. In the current study, a Cronbach’s alpha of the nurse job satisfaction subscales ranged from 0.65 to 0.94.

Nurse retention was defined conceptually as the percentage of nurses who stay in their jobs during a period
of a year (Hofmann 1981). In Jordan, there is absence of job records that could be used to measure nurse retention. Therefore, nurse retention was defined operationally as nurses’ intent to stay in their present jobs throughout the rest of their careers. Nurse retention was measured by McCloskey’s Behavioral Commitment Scale (McCloskey & McCain 1987). McCain’s Behavioral Commitment Scale consisted of 38-items; McCain extracted 5-items from this scale to measure nurse intent to stay (McCloskey 1990). McCain’s Behavioral Commitment Scale is a 5-point scale rated as: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly agree. McCain’s Intent to Stay Scale is also a 5-point scale rated as: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly agree. In McCloskey (1990), the Cronbach’s alpha of nurse retention scale was 0.90 while in the current study was 0.91.

Subjects

This study was conducted in three public and two private hospitals, chosen non-randomly from the total number of Jordanian hospitals. These hospitals were located in the Capital and a large district; those were chosen based on their bed capacity (>300 beds) and similarity of work environments. Five hundred and fifty questionnaires were distributed. A convenience sample of 438 nurses was recruited; 124 of the nurses were from public hospitals and 314 from private hospitals. Nurses participated on a voluntary basis. Nurses were sent an invitation letter that included a brief description of the study’s purpose along with the questionnaire and demographic form. Nurses were provided with envelopes that they could seal themselves to protect the information of the returned questionnaires. Nurses were asked to deposit the completed questionnaires in the nursing office mailbox. The response rate of this study was 79.6%.

Statistical analysis

Data were analysed using SPSS software version 10 (SPSS Inc. 2000) at 0.05 alpha levels. The demographics of the sample were treated as categorical variables, thus chi-square was used to test the differences between nurses and hospitals’ demographics (Agresti & Finlay 1999). Other items of the nurse job satisfaction and retention were treated as continuous variables. The t-tests were thus used to measure the differences between public and private hospitals in regard to nurse job satisfaction and retention (Agresti & Finlay 1999).

Descriptive statistics (mean values, SD, and frequencies) were presented for sample’s variables. As the instruments are rated on a 5-point scale, any item having a mean value of above 3 was considered a factor that enhances nurse job satisfaction and retention. Total scores for nurse job satisfaction and retention were calculated for each scale by adding the items and dividing them by the number of items for each scale; total scores would decrease type 1 error.

The association between nurse job satisfaction and retention was estimated based on the Pearson Product-Moment Correlation. An additional analysis was performed using multiple regressions to determine whether the demographic variables are predictive of nurse job satisfaction and retention.

It was possible to compare between two types of hospitals with unequal sample sizes as a result of the absence of large differences between variables’ SD.

Ethical consideration

The university that funded the research approved its methodology. Approvals for collecting the data were obtained from hospitals’ administrators and nurses before conducting the study. The anonymity of participants and confidentiality of their responses were ensured by using numerical codes for questionnaires, and destroying the data at the end of the study.

Results

Descriptive statistics

To answer research question 1, the demographics of the sample were compared between public and private hospitals (Table 1). There were some significant differences between both groups in term of marital status (P < 0.001): majority of nurses who work in public hospitals were single (n = 89, 71.7%) vs. (n = 152, 49.2%) in private hospitals; shift worked (P < 0.001): majority of nurses in public hospitals worked day or rotating shifts [45.5% (n = 55) and 46.2% (n = 56) consecutively] vs. [27.7% (n = 85) and 67.8% (n = 208)] in private hospitals; time commitment (P = 0.031): public hospitals use part-time nurses more than private hospitals [15.5% (n = 17) vs. 8.3% (n = 24)]; nurses in public hospitals were younger [65.3% (n = 81) of nurses were under 25 years old] than those in private hospitals [36.3% (n = 113), P < 0.001]. Nurses in private hospitals were more experienced in their jobs than those in public hospitals [44.6%, (n = 140) vs. 21.5%, (n = 26), have 5 years
and more of experience] \((P < 0.001)\) and in their current areas of work \([32.4\% (n = 100) \text{ vs. } 11.6\% (n = 14)\], have 5 years and more of experience] \((P < 0.001)\). The financial situations of hospitals were different \((P < 0.001)\); while 40.6\% \((n = 125)\) of private hospitals were reported to have strong financial situations, 16.2\% \((n = 19)\) of public hospitals have the same situation.

In assessing job satisfaction and retention, the sample mean for total nurse job satisfaction was 2.98 ‘moderately satisfied’ (Table 2). Nurses in private hospitals were more satisfied \((\bar{X} = 3.04)\) than nurses in public hospitals \((\bar{X} = 2.85) (P = 0.003)\). The mean for total nurse retention for the sample was 2.94 ‘neutral’. Nurses in private hospitals intended to retain their jobs \((\bar{X} = 3.01)\) longer than nurses in public hospitals \((\bar{X} = 2.77) (P = 0.005)\).

To answer questions 1 and 2, mean values and SD were calculated for each item of nurse job satisfaction in each type of hospitals. The \(t\)-tests were used to compare between public and private hospitals. Findings indicate that nurses who work in public and private hospitals were different in most items of nurse job satisfaction scale (Table 3). These differences were advantageous for nurses who work in private hospitals as follows, external rewards: vacation \((P = 0.012)\), and benefit package \((P < 0.001)\); scheduling: opportunity to work straight days (single shift) \((P = 0.003)\), flexibility in scheduling work hours \((P < 0.001)\), compensation for working weekends \((P = 0.046)\), and hours of work \((P < 0.001)\); family/work balance: maternity leave and child care facilities \((P < 0.001)\) and opportunities to work part-time \((P = 0.006)\); interaction opportunities: opportunities for social contact with colleagues after...
work ($P = 0.001$); professional opportunities: opportunities to write and publish research ($P = 0.034$); praise and recognition: recognition of work from supervisor ($P = 0.033$); control/responsibility: control over what goes in work settings ($P = 0.006$), and participation in organizational decision making.

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**Table 2**
Comparison of total scores of nurse job satisfaction and retention between public and private hospitals

<table>
<thead>
<tr>
<th>Total scores</th>
<th>Whole sample ($N = 438$)</th>
<th>Public hospitals ($N = 124$)</th>
<th>Private hospitals ($N = 314$)</th>
<th>t-Test*</th>
<th>Significance(^{\dagger})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse job satisfaction</td>
<td>2.98 (0.600)</td>
<td>2.85 (0.595)</td>
<td>3.04 (0.595)</td>
<td>-2.98</td>
<td>0.003</td>
</tr>
<tr>
<td>Nurse retention</td>
<td>2.94 (0.820)</td>
<td>2.77 (0.769)</td>
<td>3.01 (0.831)</td>
<td>-2.83</td>
<td>0.005</td>
</tr>
</tbody>
</table>

*Equal variances are not assumed.
\(^{\dagger}\)Significance (2-tailed).
Both scales are on a rating of 1–5.

**Table 3**
Comparison of variables that influence nurse job satisfaction between public and private hospitals

<table>
<thead>
<tr>
<th>Variables of nurse job satisfaction</th>
<th>Public hospitals ($N = 124$)</th>
<th>Private hospitals ($N = 314$)</th>
<th>t-Test*</th>
<th>Significance(^{\dagger})</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External rewards</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salary</td>
<td>3.09 (1.03)</td>
<td>2.80 (1.14)</td>
<td>2.61</td>
<td>0.009</td>
</tr>
<tr>
<td>Vacation</td>
<td>2.54 (1.10)</td>
<td>2.92 (1.98)</td>
<td>-2.52</td>
<td>0.012</td>
</tr>
<tr>
<td>Benefit package (insurance, retirement)</td>
<td>2.20 (1.14)</td>
<td>2.64 (1.12)</td>
<td>-3.58</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td><strong>Scheduling</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weekends off per month</td>
<td>3.11 (1.31)</td>
<td>2.99 (1.20)</td>
<td>0.839</td>
<td>0.402</td>
</tr>
<tr>
<td>Flexibility in scheduling your weekends off</td>
<td>2.99 (1.11)</td>
<td>3.11 (1.22)</td>
<td>-1.00</td>
<td>0.316</td>
</tr>
<tr>
<td>Opportunity to work straight days (single shift)</td>
<td>2.82 (1.27)</td>
<td>3.25 (1.29)</td>
<td>-3.04</td>
<td>0.003</td>
</tr>
<tr>
<td>Flexibility in scheduling your hours</td>
<td>2.72 (1.08)</td>
<td>3.18 (1.06)</td>
<td>-3.96</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Compensation for working weekends</td>
<td>2.70 (1.00)</td>
<td>2.93 (1.15)</td>
<td>-2.00</td>
<td>0.046</td>
</tr>
<tr>
<td>Hours that you work</td>
<td>2.28 (1.23)</td>
<td>3.21 (1.14)</td>
<td>-7.24</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td><strong>Family/work balance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunity for part-time work</td>
<td>2.49 (1.16)</td>
<td>2.84 (1.18)</td>
<td>-2.79</td>
<td>0.006</td>
</tr>
<tr>
<td>Maternity leave time</td>
<td>2.48 (1.19)</td>
<td>3.03 (1.12)</td>
<td>-3.88</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Child care facilities</td>
<td>1.94 (1.15)</td>
<td>2.59 (1.10)</td>
<td>-4.67</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td><strong>Coworkers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The physicians you work with</td>
<td>3.86 (2.71)</td>
<td>3.28 (1.01)</td>
<td>1.34</td>
<td>0.181</td>
</tr>
<tr>
<td>Nursing peers</td>
<td>3.76 (0.976)</td>
<td>3.55 (0.970)</td>
<td>2.06</td>
<td>0.041</td>
</tr>
<tr>
<td><strong>Interaction opportunities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The delivery of care method used (e.g. functional, team, primary)</td>
<td>3.16 (0.985)</td>
<td>3.38 (0.991)</td>
<td>-2.00</td>
<td>0.056</td>
</tr>
<tr>
<td>Opportunities for social contact at work</td>
<td>2.94 (1.06)</td>
<td>3.01 (1.09)</td>
<td>-0.607</td>
<td>0.545</td>
</tr>
<tr>
<td>Opportunities to interact professionally with other disciplines</td>
<td>2.84 (1.00)</td>
<td>3.03 (0.976)</td>
<td>-1.76</td>
<td>0.079</td>
</tr>
<tr>
<td>Opportunities for social contact with your colleagues after work</td>
<td>2.61 (1.11)</td>
<td>3.12 (2.01)</td>
<td>-3.32</td>
<td>0.001</td>
</tr>
<tr>
<td><strong>Professional opportunities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunities to belong to ward and institutional committees</td>
<td>3.20 (1.12)</td>
<td>3.09 (1.09)</td>
<td>0.902</td>
<td>0.368</td>
</tr>
<tr>
<td>Opportunities to interact with faculty of the College of Nursing</td>
<td>2.59 (1.18)</td>
<td>2.72 (1.11)</td>
<td>-1.02</td>
<td>0.309</td>
</tr>
<tr>
<td>Opportunities to participate in nursing research</td>
<td>2.30 (1.20)</td>
<td>2.55 (2.00)</td>
<td>-1.56</td>
<td>0.118</td>
</tr>
<tr>
<td>Opportunities to write and publish</td>
<td>2.19 (1.13)</td>
<td>2.45 (1.09)</td>
<td>-2.13</td>
<td>0.034</td>
</tr>
<tr>
<td><strong>Praise/recognition</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immediate supervisor</td>
<td>3.40 (1.55)</td>
<td>3.37 (1.05)</td>
<td>0.329</td>
<td>0.742</td>
</tr>
<tr>
<td>Recognition of your work from peers</td>
<td>3.17 (0.949)</td>
<td>3.08 (1.01)</td>
<td>0.904</td>
<td>0.367</td>
</tr>
<tr>
<td>Recognition for your work from superiors</td>
<td>2.75 (0.970)</td>
<td>2.99 (1.07)</td>
<td>-2.14</td>
<td>0.033</td>
</tr>
<tr>
<td>Amount of encouragement and positive feedback</td>
<td>2.75 (1.15)</td>
<td>2.75 (1.10)</td>
<td>0.013</td>
<td>0.989</td>
</tr>
<tr>
<td><strong>Control/responsibility</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Your control over work</td>
<td>3.51 (1.10)</td>
<td>3.50 (0.983)</td>
<td>0.109</td>
<td>0.913</td>
</tr>
<tr>
<td>Your amount of responsibility</td>
<td>3.45 (1.11)</td>
<td>3.39 (0.988)</td>
<td>0.477</td>
<td>0.634</td>
</tr>
<tr>
<td>Control over what goes in your work setting</td>
<td>3.00 (0.964)</td>
<td>3.29 (1.01)</td>
<td>-2.77</td>
<td>0.006</td>
</tr>
<tr>
<td>Your participation in organizational decision making</td>
<td>2.73 (1.24)</td>
<td>2.99 (1.12)</td>
<td>-2.02</td>
<td>0.044</td>
</tr>
<tr>
<td>Opportunities for career advancement</td>
<td>2.72 (0.955)</td>
<td>2.78 (1.07)</td>
<td>-0.608</td>
<td>0.544</td>
</tr>
</tbody>
</table>

*Equal variances are not assumed.
\(^{\dagger}\)Significance (2-tailed).
However, nurses in public hospitals were more satisfied than nurses in private hospitals in terms of external rewards: salary \((P = 0.009)\); and co-workers: nursing peers \((P = 0.041)\).

Mean values and SD were calculated for each item of nurse retention in each type of hospitals. Using \(t\)-tests, there were significant differences between hospitals in terms of nurse retention in the public and private hospitals (Table 4). Nurses in private hospitals intended to retain their jobs longer than nurses in public hospitals with respect to all 5-items on the scale. On a 5-point Likert scale, the two highest mean values for nurses in private hospitals were for the items: ‘plan to keep this job for at least 2 or 3 years’ \((\bar{X} = 3.01)\) and ‘plan to work at my present job as long as possible’ \((\bar{X} = 2.90)\).

**Correlation of nurse job satisfaction and retention**

To answer question 3, the total score for nurse job satisfaction was correlated with the total score of nurse retention for the whole sample \((r = 0.503)\), public hospitals \((r = 0.141)\) and private hospitals \((r = 0.130)\) (Table 5).

**Regression of sample’s demographics on total score of nurse job satisfaction**

For the whole sample, the total score for nurse job satisfaction was regressed on samples’ demographics to predict if these demographics would predict nurse job satisfaction (Table 6). Several significant regression coefficients were found, the strongest and positive are: years of experience in nursing \((r = 0.287)\), years of experience in the current area of work \((r = 0.251)\), and age, while the strongest and negative are: hospital’s financial situation \((r = -0.152)\), level of education \((r = -0.143)\), shift worked \((r = -0.116)\), and dominant changes that affect the hospital \((r = -0.102)\).

**Regressions of sample’s demographics and total score of nurse retention**

For the whole sample, the total score for nurse retention was regressed on samples’ demographics to predict if these demographics would predict nurse retention (Table 7). Significant regression coefficients were found between the total score of nurse retention and: shift worked \((r = -0.318)\), marital status \((r = 0.234)\), years...
of experience in the current areas of work ($r = 0.193$), years of experience in nursing ($r = 0.185$), level of education ($r = -0.165$) and age ($r = 0.138$).

**Discussion**

Nurses in private hospitals report higher rates of job satisfaction and higher intentions to retain their jobs than nurses in public hospitals; these results are supported in the literature (Paine *et al.* 1966, Rainey 1979, Solomon 1987). Nurses in private hospitals also tended to be married, working full-time and were more experienced in nursing and current area of work than nurses in public hospitals. Nurse job satisfaction was found to correlate significantly and positively with nurse retention which is evidenced in other studies (Price & Mueller 1981, Irvine & Evans 1995, Alexander *et al.* 1998, Cowin 2002).

As evidenced by other studies, nurse education has a positive impact on nurse satisfaction and retention (Ndiwane 1999, Janney *et al.* 2001), which is also true with age and experience (Blegen 1993, Ndiwane 1999). Aiken *et al.* (2003) reported that surgical patients experienced lower mortality and failure-to-rescue rates when the higher proportions of nurses were educated at the baccalaureate level or higher. However, regressions of this study indicated the negative influence of nurse education on nurse job satisfaction and retention. Such result could be explained that highly educated nurses have higher expectations such as working in highly supportive work environment with adequate and equal professional opportunities. If such environment is not available they intend to leave their job fearing for better chances. Marital status (being single), shift worked (rotating or day), years of experience in nursing and current area of work, and age are other predictive factors of Jordanian nurses’ job satisfaction and retention. In the literature, nurses who work permanent night shift reported to have lower levels of commitment to nursing which in turn influence nurse job satisfaction and retention (Brooks & Swailes 2002). Twelve hour shift when compared with 8-h shift were found to improve nurse retention (Hoffman & Scott 2003). However, nothing is known about the influence of 12-h shift on nurse job satisfaction. Ndiwane (1999) and Blegen (1993) found that age and experience had a positive influence on nurse job satisfaction, which may apply to nurse retention. In Jordan, salaries are not meeting the daily requirements of professionals and their families. Insufficient salaries would lead to nurse dissatisfaction and turnover (Fletcher 2001, Greipp 2003). Career ladders, which offer an opportunity for salary, increased based on indicators such as education, experience, job performance and research participation (Blegen 1993, Fletcher 2001, Greipp 2003) are limited in the Jordanian hospitals. Transformational and visionary leaders with participative leadership style are reported to influence nurses’ motivation (McClure *et al.* 1983). The results of current study have implications for practice and research.

**Implications for practice**

There were significant differences between public and private hospitals. There is a need to focus on interventions that would enhance nurse job satisfaction and retention. These interventions include increase external reward especially the benefit package, decrease worked hours, and compensate nurses for working weekends. Also, child care facilities should be available in work settings; more time has to be available to interact with their colleagues after work (social interaction); nurses should be supported with library time and Internet access to write, publish and participate in nursing research; more encouragement and feedback have to be given for nurses to promote their satisfaction; more career advancement opportunities have to be available for nurses in all settings. Positive perceptions of career development opportunities were a stronger predictor of commitment to nursing (Brooks & Swailes 2002). As a retention strategy, opportunities for career advancement should be expanded and linked to a widening pay scale and clear job description, especially in current nationwide nursing shortage. Career ladder programmes should be explored for their applicability to the Jordanian health care settings.

The differences between Jordanian public and private hospitals can be partially explained by the presence of more restrict rules in public hospitals,

<table>
<thead>
<tr>
<th>Table 7</th>
<th>Significant regression coefficients of sample’s demographics with the total scores of nurse retention for the whole sample ($N = 438$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographics</td>
<td>Regression coefficient</td>
</tr>
<tr>
<td>Marital status</td>
<td>0.234*</td>
</tr>
<tr>
<td>Shift worked</td>
<td>−0.318*</td>
</tr>
<tr>
<td>Years of experience in the current area of work</td>
<td>0.193*</td>
</tr>
<tr>
<td>Years of experience in nursing</td>
<td>0.185*</td>
</tr>
<tr>
<td>Level of education</td>
<td>−0.165*</td>
</tr>
<tr>
<td>Age</td>
<td>0.138*</td>
</tr>
</tbody>
</table>

*Correlation is significant at 0.01 level (2-tailed).
especially if these hospitals are university-affiliated. Having worked as a staff nurse in a university-affiliated hospital, I can attest to these hospitals being dominated by physicians, with their decisions prioritized over nurses’ decisions. This would influence the communication styles and conflict management strategies of these professional groups. Moreover, Jordanian nurses play multiple roles in their practice settings, which contribute to unclear job description and stress. Role stress has been found to result in job dissatisfaction (Hoffman & Scott 2003). Differences between nurses’ experience in public and private hospitals may be related to the fact that nurses who retire from public hospitals frequently work in private hospitals to support their families.

Nurse manager must act with supportive leadership styles to enhance the practice environment, which will contribute to higher job satisfaction and nurse retention rates. Many of the suggestions provided above are within the mandate of nurses. Managers at all levels, and particular chief nurse executives, can work together, with their hospital administrators and nurses to strengthen the environment and improve patient care.

Implications for research

Further research is needed to study variables of nurse job satisfaction and retention which include but are not limited to job position, experience, autonomy, commitment, salary, stress and geographical areas. Nurse retention rates need to be calculated based on job records, rather than using a scale. The nurse retention tool needs to be expanded to cover a wider range of variables that may affect nurse retention. As there are 27 public and 56 private hospitals in Jordan, a larger sample of both types of hospitals has to be obtained in further research. Nurse satisfaction and retention have to be assessed on various work shifts; in this study low samples were obtained from nurses working night and evening shifts. Thus, randomized sampling technique is required in future research.

Because of the lack of nursing studies that focused on nurse job satisfaction and retention in Jordan, longitudinal studies have to be conducted. This study was conducted in the Capital and another large district; future studies have to cover other districts in Jordan. Specific and detailed definitions of study’s demographics are needed, for example, the financial situation of the hospital should be assessed based on figures rather than categories. Since experience is an important milestone in nurse job satisfaction, job satisfaction scores have to be calculated in relation to nurses’ years of experience in nursing and in current area of work separately.

An in-depth study of public hospitals using focus groups would provide valuable data on factors contributing to job satisfaction and retention. In addition, as nurse leadership is so strongly linked to nursing job satisfaction, a study of nurse managers and their leadership styles would also add to our understanding of nursing in Jordan. Further nursing researches have to be conducted about the influence of time commitment, marital status, age, gender, shift, organizational structure, average daily census, style of decision making, model of nursing care, hospitals’ financial situation and dominant changes affect the hospitals on nurse job satisfaction and retention. The culture of advancement by seniority is a common issue in Jordanian practice settings. A research has to consider the establishment of professional advancement programmes based on education and experience. These programmes will promote nurses’ interaction with faculty members at the College of Nursing and research participation. The data provided in this study could form the basis for future studies. This study can be considered as a milestone for Jordanian policy-makers.

Summary and conclusion

This study provides evidence about the relationship between nurse job satisfaction and retention. A descriptive design using survey methods was used in this study. A convenience sample was obtained from public and private hospitals. Nurses reported their job satisfaction to be at a moderate level and nurses were ‘neutral’ in reporting their retention. Nurses who work in private hospitals report higher levels of job satisfaction and reported higher intention to stay at their jobs than nurses in public hospitals. The findings emphasize the importance of promoting and maintaining positive work milieu, which is an essential step in enhancing nurse job satisfaction and retention for any health care organization. Nurse managers must act with supportive professional leadership to enhance the practice environment.

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References


