Factors influencing job satisfaction among nurses in Jordanian public hospitals

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A B S T R A C T

The purpose of the current study was to determine the level of job satisfaction among nurses in Jordanian public hospitals. To explain the relationship between personal characteristics, teamwork, and occupational stress, intrinsic and extrinsic motivation, and nursing job satisfaction. Lastly, to assess the predicting strength between job satisfaction and the independent variables; Due to the dearth of research in the domain. Descriptive correlation study was designed for this study. 423 nurses were randomly selected from nine hospitals of three different regions in Jordan. Modified and validated questionnaire was used to measure the variables. The result from the overall mean of Ranked Satisfaction score showed that the respondents are dissatisfied with a mean (2.0473), (SD 0.84), 41 percent. Pearson correlation revealed the relationship between the dependent variable and the four independent variables where there is no significant correlation between job satisfaction and personal characteristics. A multiple regression analysis indicated that teamwork has the strongest relation to job satisfaction (β = .285, t = 4.678, p < .05), followed by extrinsic motivation, occupational stress, intrinsic motivation respectively. The presented study attempted to fill a void by examining such relationships due to the reason that previous researchers have largely ignored the role nurses play in public hospitals. Lastly, our study forwards robust recommendations and suggestions for future researchers.

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1. Introduction

Previous studies found that health care services depend on nurses’ job satisfaction because job satisfaction is related to the performance. If the employees are happy with their work, they will provide the best services to their customers (Kane et al., 2007; Shekelle, 2013). In addition, the outcome of the patient process has found to be associated with the satisfaction of nurses. Aron (2015) found evidence, which suggested that poor nursing care was related to lower nurses’ job satisfaction. A study also proved that higher satisfaction among nurses was associated with a reduced length of stay among patients (de Cordova et al., 2014). Jordanian nurses complain regarding uncomfortable work situations such as anxiety, unhappiness, and dispiriting work setting (AbuAlRub, 2007; 2010). The points of job satisfaction and intent to stay in their job among Jordanian nurses are on the borderline (Abualrub, 2010; Altaany and Jassim, 2013). A recent study shows that 36.6 percent of nurses leave their nursing career due to the aforementioned factors (Hayajneh et al, 2009).

AbuAlRub (2007) reported that there is a decline in the number of nurses; because of the work environment and low salary. Therefore, Jordanian nurses migrate to the Gulf Cooperation Council countries (Saudi Arabia, United Arab Emirates, Kuwait, and Qatar); where they get high salary, benefit career advancement, professional education as noted in the last decade (Al Nawaaleh, 2015). According to AbuAlRub et al. (2016), Jordanian nurses leave their job because of anxiety, disappointment, and uncooperative working situation. In recent decades, the dependence of good service on the job satisfaction of employee has aroused interest in Jordan too (Mrayyan, 2006; AbuAlrub, 2010; Alsaraireh et al, 2014; AbuAlrub et al., 2016). However, there is not enough research conducted in Jordan regarding the job satisfaction of nurses. Thus, the issue is significantly important for public hospitals and other
hospitals to provide excellent service to their patients. Therefore, the objectives of this study are as follows:

- To determine the level of job satisfaction in Jordanian public hospitals.
- To determine the correlation (personal characteristic, nursing teamwork, occupational stress, intrinsic and extrinsic motivation) on job satisfaction.
- To determine the effect of (nursing teamwork, occupational stress, intrinsic and extrinsic motivation) on job satisfaction

2. Factors influencing job satisfaction among nurses

Many quantitative and qualitative studies have been conducted about job satisfaction among nurses around the world. The factors founded in these studies include work environment (AbuAllRub et al., 2016), organization and personal characteristics (Adams and Bond, 2000), organizational assurance, organizational facilitation, level of education and leadership (Mahmoud, 2008), stress and burnout (Khamisa et al., 2015), nurses’ teamwork (Kalisch et al., 2010), leadership style and management (Negussie and Demissie, 2013), motivation (Atefi et al., 2014), benefit, salary and employment opportunity (Asegid et al., 2014).

2.1. Personal characteristics

Nurse’s job satisfaction has also recommended that demographic variables such as age, gender, and ethnicity have impacted the degree of satisfaction of nurses (Coshow et al., 2009). Several personal characteristics associated with nurses’ job satisfaction have been studied by different researchers. Carrillo-García et al. (2013) in Spain university hospital surveyed 546 healthcare workers. They used a general questionnaire to investigate the relationship between socio-demographic variables and job satisfaction. They found great evidence of the feminization in this study. The job satisfaction level of women was significantly higher than men. Many studies demonstrate that job satisfaction tends to be gender-based. Kim (2005) showed that women are more gratified with their works as compared to men; women give emphasis to intrinsic rewards, whereas men give emphasis to extrinsic rewards. Gürbüz (2007) pointed out that there is a positive association between educational level and job satisfaction. People in diverse situations face different job features and official requests, which absolutely affect the level of job satisfaction (Haijuan et al., 2006; Hayajneh et al., 2009). Experience can bring different satisfaction level due to different abilities and needs (Mrayyan, 2006).

2.2. Teamwork

Teamwork is also associated with job satisfaction (Kalisch et al., 2010). The connection between teamwork and job satisfaction refers to the cooperative working environment between nurses to deliver nursing care to the clients in the hospitals. Additionally, studies have also found a correlation between teamwork and stress. Gadirzadeh et al. (2017) pointed to undesirable relations among colleagues that affect the nurses’ level of professional stress. Ajeigbe et al. (2014) in a cross-sectional survey in USA compared nurses and physicians who are working within different levels of teamwork in the emergency department on the effect of teamwork on staffs’ job satisfaction. The interventional group emergency departments showed high level of teamwork than those who worked in the control group emergency departments. He found that staff who worked in the interventional group emergency departments has significantly greater levels of job satisfaction related to develop practice of teamwork than their counterparts in the control group emergency departments who have no practice of teamwork. American nursing association in 2017 highlighted ineffectual communication between staff or communication breaks can have severe consequences for the healthcare workers and patients. They reported the five side effects of ineffectual communication in the medical field i.e., medication error, long wait time, workplace conflict, poor decision-making, and increased stress.

2.3. Occupational stress

The occupation stress is defined as a state in which the nurses are under stress and consequently the level of care and the nurses’ personal life is also disturbed (Gadirzadeh et al., 2017). The British Health Education Authority has announced four occupations with a high level of anxiety namely nursing jobs, police, social work, and teaching. The National Occupational Safety Authority has announced four occupations with a high level of anxiety namely nursing jobs, police, social work, and teaching. Farhadian (1996) pointed out that work-related stress is related to job satisfaction and physical burnout in addition to mental health effects (Khamisa et al., 2015). Work-related stress in addition to staff issues, as well as shortage of resources, has also been found to be accompanied by low level of job satisfaction (Graham et al., 2011). Organizational stress and management style are common sources of stress (Mahmoud, 2008). Working with critical patients, the nurses' feelings about death and dying issues, interpersonal conflicts, dealing with the patients' pain and the existence of relatives also become sources of occupational stress (Peters et al., 2013). Other important work-related stressors were learning new things in their job as required and caring for too many patients at the same time.

2.4. Motivation factors

According to Ebert and Griffin (1998) motivation is “the set of forces that cause people to behave in certain ways”, therefore motivation pushes individuals to action and success. Motivation is an internal power
that strengthens triggers or moves and also directs or channelize behaviour on the way to goals. Managing individuals is a hard task to do because people are different, and there is no general way for motivation and to motivate different individuals and improve their performance at work. Budhwar and Mellahi (2016) noted that the motivation of individuals is different; what inspires one individual may not encourage others. Furthermore, none can motivate others to do something; he/she can only encourage others to become self-motivated.

Extrinsic motivation highlighted what has to be reflected when workers are doing activities and adopt behaviors leading to external rewards (Lazaroiu, 2015). Intrinsic rewards generally refer to incorporeal plunders such as esteem, reputation, and admiration. They make individuals pleased and proficient at work (Osterloh and Frey 2000). Previous theories such as Herzberg (1968) two-factor theory discusses those intrinsic factors are more significant than extrinsic factors on job satisfaction. Nevertheless, there are studies on nurse job satisfaction which found that intrinsic factors are more important than extrinsic factors (Thomsen et al., 1999; Sansgiry, 2004).

3. Method

3.1. Sitting and sample

This study was conducted in Jordan from Oct 2017 to Feb 2018. It utilized descriptive correlation design, to gain the understanding of the factors responsible for the job satisfaction and dissatisfaction among nurses in Jordanian public hospitals. The total population of Jordanian nurses (RNs) is about 16,000. 8,500 nurses register, participant related to Jordanian Ministry of Health (JMOH, 2015), according to Dattalo (2008) the minimal sample size in this study is 368. The population was divided into three subgroups before the sampling; to ensure homogeneity of the sample (north, middle, and south).

The researcher randomly selected three hospitals from each part. The participants were randomly chosen by the researcher from the list of nurses’ staff provided by each hospital. The anonymity was ensured as the list only had to identify a number representing nurse in every hospital. The nurses who did not meet inclusion criteria were deleted from the list. A simple random sample of nurses was chosen from every hospital.

All Nurses who work in public hospitals were the accessible population in this study. Head nurses, supervisors, and nurses with less than one year of experience were excluded from this study. Supervisors and head nurses’ work and activities are different from the nature of staff nurses work and activities. Nurses who have at least one year of experience had the ability to identify his/her satisfaction. We preferred to employee more than the minimal number of sample size needed for the account of non-respondent or possible missing data. 600 questionnaires were distributed and 437 responses were obtained, after searching for incomplete questionnaires. Fourteen responses were discarded because of the respondents’ incomplete data entry. 423 questionnaires were found valid and usable, that represents 69% of the response rate.

3.2. Instrument

The researcher developed the questionnaire and it consists of the five scales:

- The first scale: was concerned with nurses’ personal characteristics such as age, gender, marital status, education level, years of experience, department of work, hospital etc.
- The second scale: was concerned with job satisfaction. The job satisfaction was measured with 1 item; the item was “how satisfied are you in your job?” Nurse’s response about their job satisfaction was consisted of 5 points Likert scale, from very dissatisfied to very satisfied. Some studies have listed down the advantages of the satisfaction measurement, that it is easier and takes less time to complete, less expensive, contains more face validity and more flexible than multiple-item scales measuring and have high correlation as compared with multi-item satisfaction measures (Wanous et al., 1997; Nagy, 2002).
- The third scale: This scale was concerned with teamwork. Self-assessment teamwork tool for students' SATTS version 2 was developed and used for this study (Gordon et al., 2016). It consisted of 23-items; and a 7-point Likert scale ranging from poor (scored as 1), to excellent (scored as 7) was adopted for this study. It is clustered into three factors: Team Coordination; Mutual Performance Monitoring; and Verbalizing Situational Information. The SATTS is valued for the use of health professionals and some studies provide evidence to support the validity and reliability of the self-assessment teamwork tool (Gordon et al., 2016). The alpha coefficient in this study was 0.940.
- The fourth scale: Occupational stress was measured by Parker and DeCotiis (1983) tool using a 13-items scale, in two dimensions: time stress and anxiety. Likert type scale with 1-5 response options was used in this phase with 1 indicating a strong agreement and 5 indicating a strong disagreement. The overall alpha coefficient for this scale was 0.917.
- The fifth scale: The intrinsic motivation and extrinsic motivation were developed (Purohit et al., 2016) with a 5 point scale ranging from "not at all", "little bit", "Moderately", "Very", "Extremely", with the scores 1, 2, 3, 4, and 5 respectively. It consisted of 18 items of the following factors: transparency, goals, security, convenience, benefits and encouragement, adequacy of earnings and further growth and power. 7 items were for intrinsic motivation and 11 items for extrinsic motivation. The alpha coefficient for intrinsic motivation scale was 0.876, while for extrinsic scale 0.916.
4. Data collection and ethical issues

The study was directed once attaining the ethical permission from UNISZA committee of research, faculty of medicine. The approval to conduct research was also attained from the Ministry of health, Jordan. The participants were protected from hurt, deception, compulsion, and assault of confidentiality by withholding the name of respondents and any features that might lead to participant's identification. Knowledgeable printed consent was achieved from respondents after clarifying the study and permitting them to inquire any questions. The respondents were informed about their rights to draw from the study when they desired.

The nurses were requested to join voluntarily via enrolment letter involved to the questionnaire, the objectives of research and his right to decline to participate in this study were explained. The questionnaire was assembled in the packet and was distributed by the researcher. The questionnaire was finalized in the secluded room and acquired about 20-30 minutes. After finalizing the questionnaire, the participants dropped the questionnaire in a closed envelope in the assembly box to guarantee privacy.

5. Data analysis

The descriptive statistics were calculated in order to distinct measures of demographic characteristics of the study participants. 423 questionnaires were analyzed. The missing data for this study showed 0% for all the variables. Non-response bias was assessed by comparing the participant of primary and late participants. Hair et al. (2006) recommended that the primary and late comparison participants are the common broadly used way in quantitative study to ascertain nonresponse bias. They claim that if there are no substantial differences among primary and late participants, the research consequences can be generalized to the population. This study claimed the first 150 participants as the first participant since they answered fast without any more labours by the researchers, even though the latter 273 participants were claimed as a late participant because of labors used to attain them. Independent t-test was employed to evaluate first and late participants. The result showed that (p>0.05) in all variables, which indicates that there were no significant differences between the first and the late participants. Pearson correlation was used to investigate the relation between dependent and independent variables. Multi-regression was conducted to predict the different independent variables, which produced as a result of the independent variables. The significance of this study determines as (p<0.05).

6. Result

The demographic variables considered included age, gender, years of experience, marital status, department, and education level. Majority of participants reported age group 20-29 years (n=218, 52%), while most of participants have 1-5 years’ experience (n=227, 54%) and (56%) of participant were male versus (44%), (62 %) from participant were single (n=263), majority of nurses had bachelor degree (66%, n=280), master (1.9%, n=8 ), diploma (31%, n=135), the registered nurses were (66.1%, n=288) vs. practical nurses (31%, n=135). Majority of sample were working in emergency unit (23%, n= 96). The demographics of survey participants are shown in Table 1.

| Table 1: Demographic profile | N | % |
|-----------------------------|---|---|
| Age                        |   |   |
| 20 - 29                    | 218 | 52 |
| 30 - 40                    | 135 | 32 |
| 41 - 50                    | 60  | 14 |
| > 50                       | 10  | 4  |
| Gender                     |   |   |
| Male                       | 236 | 56 |
| Female                     | 187 | 44 |
| Marital status             |   |   |
| Single                     | 263 | 62 |
| Married                    | 148 | 35 |
| Divorced and widowed       | 12  | 3  |
| Experience                 |   |   |
| 1- 5                       | 227 | 53 |
| 6 - 10                     | 171 | 40 |
| > 10                       | 25  | 6  |
| Education                  |   |   |
| Diploma                    | 135 | 32 |
| Bachelor degree            | 280 | 66 |
| Master degree              | 8   | 2  |
| Department                 |   |   |
| Ward nurse                 | 62  | 15 |
| ICU nurse                  | 49  | 12 |
| emergency nurse            | 96  | 23 |
| Operation nurse            | 43  | 10 |
| Dialysis nurse             | 77  | 18 |
| Obstetrics and Gynaecological Nursing | 45 | 11 |
| Pediatrics and Neonatology | 51  | 12 |

The descriptive statistics for job satisfaction distributed in 5 Likert scales where 89 nurses answer very dissatisfied, 21% and 270 nurses answer somewhat dissatisfied 63.8 %, 26 nurses they had neutral level of satisfaction 6.1 %, 31 of participant answered somewhat satisfy 7.3%, and only 7 nurses answered very satisfy 1.7%. The result of this study revealed that the nurses had low level of satisfaction (M=2.0473) 41 %, Total 423 100.0

| Table 2: Descriptive statistic for job satisfaction |
|-----------------------------------|-------|-------|
| Frequency | Percent | Cumulative Percent |
| very dissatisfied              | 89   | 21.0  | 21.0   |
| somewhat dissatisfied          | 270  | 63.8  | 84.9   |
| Neutral                        | 26   | 6.1   | 91.0   |
| somewhat satisfied             | 31   | 7.3   | 98.3   |
| very satisfied                 | 7    | 1.7   | 100.0  |
| Total                          | 423  | 100.0 |        |

Pearson correlation was used to examine the relationship between the independent variables and dependent variables. Therefore, the result revealed that there are no significant relationship of gender, years of experience, educational level and department with job satisfaction (p > 0.05), and there is a small negative relationship between age (r= -.221, sig=.000)
and marital status (r = -.105, sig = -.105) with job satisfaction, and positive relationships between teamwork and job satisfaction (r = .783, P < .05). Extrinsic motivation (R = .767, P < .05), intrinsic Motivation (r = .711, P < .05) and job satisfaction, and there is negative relationship between occupational stress (r = -.719, P < .05) with job satisfaction. As presented in Table 3.

### Table 3: Correlation of variables

| Independent variables | Correlation coefficient | Strength of relationship |
|-----------------------|-------------------------|--------------------------|
| Personal characteristic's | -221                    | small                    |
| Age                   | -0.23                   | No significant relation  |
| Gender                | -0.03                   | No significant relation  |
| Marital status        | -0.29                   | No significant relation  |
| Years of experience   | -0.21                   | No significant relation  |
| Education level       | -0.02                   | No significant relation  |
| Department            | -0.19                   | No significant relation  |
| Teamwork              | -0.14                   | No significant relation  |
| Occupation stress     | -0.18                   | No significant relation  |
| Intrinsic Motivation  | -0.22                   | No significant relation  |
| Extrinsic Motivation  | -0.76                   | Strong                   |

Multiple regression analysis was used to predict the job satisfaction as a result of differences of factors (nurses’ teamwork, occupational stress, intrinsic and extrinsic motivations).

The outcomes detect that the model summary of the factors (teamwork, occupational stress, intrinsic motivation, and extrinsic motivation) and the job satisfaction pose a positive correlation as detected by the positive R-value (.806). A computed R² value was (.650) with a standard error estimate of (.50176), which explained that 65% of job satisfaction occur as a result of four independent variables. As shown in Table 4.

The outcome exposed an important result. In brief, the summation of squares regression is (195.816) and Mean squares is 48.954. Sum of squares residual is 105.238 and Mean square is (252). Accordingly, (F =194.443 p<.05). This indicates that the predictor variables together and significantly foretell the job satisfaction. Additionally, the ANOVA test showed the prediction for variables as shown in Table 5.

### Table 4: Model summary

| R       | R Square | Adjusted R Square | Std. Error of the Estimate |
|---------|----------|-------------------|----------------------------|
| .806    | .650     | .647              | .50176                     |

Furthermore, the result revealed the relative contribution of each of the predictor variables to the variance in terms of the predicting job satisfaction attribution. All factors are significantly contributing, teamwork contributed the highest (β = .285, t = 4.678, p< .05), followed by extrinsic Motivation (β = .246, t = 2.993, p< .05), then occupation stress (β= -.196, t= -2.927, p< .05) then intrinsic Motivation (β =.163, t = 2.906, p< .05). By explaining of the beta, for every unit increase in teamwork, we expect an increase of .285 in the job satisfaction holding all other independent variables constant. Similarly, for every one-unit increase in extrinsic motivation, we expect a .246 unit increase in the job satisfaction holding all other independent variables constant. Finally, for every one-unit decrease of occupation stress, we expect a .196 unit increase in the job satisfaction holding all other independent variables constant as presented in Table 6.

### Table 5: ANOVA

| Sum of Squares | df | Mean Square | F    | Sig. |
|----------------|----|-------------|------|------|
| Regression     | 195.816 | 4 | 48.954 | 194.443 | .000 |
| Residual       | 105.238 | 418 | .252 |
| Total          | 310.054 | 422 |

### Table 6: Relative contributions of factors

| Coefficients | Unstandardized Coefficients | Standardized Coefficients | t    | Sig. |
|--------------|----------------------------|---------------------------|------|------|
|              | B | Std. Error | Beta |       |      |
| (Constant)   | 1.029 | .370 | 2.780 | .006 |
| Teamwork     | .285 | .061 | .344 | 4.678 | .000 |
| Occupation stress | -.196 | .067 | -.155 | -2.927 | .004 |
| Intrinsic Motivation | .163 | .056 | .150 | 2.906 | .004 |
| Extrinsic Motivation | .246 | .082 | .213 | 2.993 | .003 |

7. Discussion

The study sought to quantify the level of job satisfaction and determine factors affecting job satisfaction and dissatisfaction among nurses in Jordanians public hospitals. The level of job satisfaction among Jordanian nurses is low with around 41 percent. It is significant to proclaim that the current level of satisfaction among Jordanian nurses is higher than the findings in other studies in Jordan. The whole sample mean for total job satisfaction was 2.74 (neither satisfied nor dissatisfied) (Mrayyan, 2006), while the overall job satisfaction was on the borderline with the mean = 2.20 (somewhat dissatisfied) (AbuAlRub et al., 2016). All the studies showed insignificant deviations in scores where all studies, as well as this research, found that Jordanian nurses are dissatisfied to have borderline of satisfaction. The deterioration of the level of satisfaction may be explained by the influx of refugees from neighbouring countries, which cause pressure on health care serves.

The research tries to explore the relationship between demographic variables and nurses job satisfaction. Pearson correlation used to examine the
relationship between category of personal characteristics and job satisfaction the result reports that there is no significant relationship between gender, year of experience, education level and department with job satisfaction (p > 0.05), and there is a small negative relationship between age (R = -.221, sig=0.00) and marital status (R= -.105, sig = -.105 ) with job satisfaction as in which also contradicts some study findings of a positive relationship between personal characteristics and satisfaction (Carrillo-García et al., 2013; Reid et al., 2013; Alghamdi et al., 2018).

A correlation and regression analyses were conducted to test the hypothesis. The result of this study reveals there is a significant positive relation between teamwork and job satisfaction (r=.783, statistical significant=0) which was the highest correlation between the variables. Multiple regression analysis was carried out to examine the significant impacts of direct effects of independent variables towards dependent variables. Teamwork contributed the highest variance between variables (β = .285, t =4.678, p< .05). Moreover, the result is consistent with Kalisch et al. (2010) which pointed out that high level of teamwork and perceptions of sufficient staffing will massively influence a high job satisfaction with the current position and profession. Adams and Bond, (2000) in their study found that work-group bonding among nurses has a link to the 51 percent of the nurses’ job satisfaction and the staff-patient ratio correlates with 41 percent of nurses' satisfaction. The study results confirm our recommendation to focus more on nursing teamwork in order to improve effectiveness and efficiency. It is apprehended from several studies that excellent inter professional teamwork and job satisfaction are the fundamental preconditions for high-quality care and clinical efficacy (Aleigbe et al., 2014).

This study confirms there is a significant negative relation between occupation stress and job satisfaction (r = -.719, statistical significant=0). Multiple regression analysis was executed and it revealed a significant outcome (β= -.196 t= -2.927p<.05), the finding of the study proved that Jordanian nurses experience high level of stress where it involves onerous workload and high level of occupational stress that lessen nursing quality, and nurses experience complications in meeting patient’s needs. These findings are akin to the reports by Gadirzadeh et al. (2017). Sarafis et al. (2016) have also proclaimed that constant job stress can cause physical deterioration of the nurses besides damaging to the quality of the services. Other than causing the symptoms of stress syndrome, it is also stated that the nurses faced various occupational hazard factors. Some studies which have been conducted in Jordan mentioned that the sources of stress for nurses are patients’ deaths, burdening workload, conflict with physicians, dispute with other nurses, doubt concerning treatments, poor preparation for patient care, and improper treatment of the patient’s family (Hamaideh et al., 2008). Mokhtar et al. (2016) discovered the source of stressors among pediatric intensive care in Jordan are lack of resources and support, the unpleasant atmosphere in intensive care units, poor hospital features and lack of directors’ aid. Many studies in other countries as well have reached similar findings (Khamisa et al., 2015). According to the participants, the sources of stress in this study had found to be pressure with time constraint and the overwhelming workload.

The findings of this study reveal that Jordanian nurses pay attention to extrinsic motivation more than intrinsic motivation i.e., (correlation coefficient = .767, statistical significant= 0) versus (R=7.11 statistical significant =0). Multiple regression analysis was conducted to investigate the significant influences of direct effects of intrinsic and extrinsic towards job satisfaction. Extrinsic Motivation was (β = .235, t = 2.866, p< .05) as compared to Intrinsic Motivation (β = .169, t = 3.267, p< .05). Extrinsic motivation was considered the second highest variance between variables A study in India has used a similar tool resulted in different findings, i.e., the most profound source of motivation in the three professional subgroups investigated (doctors, nurses and office workers) are achievements, with the overall sample of (n = 1353) (Lambrou et al., 2010). A study conducted in a different cultural and socio-economic environment (Turkey) exposed internal self-concept-based motivation was in the highest rank which falls under job attribute factor (Bodur and Inkaf, 2015).

The result of the study is congruent with Shoman’s (2009) study. The study used five predictors: leadership or top management communication with subordinates, supervisor's feedback, and the training program for employees, career opportunities within the company, and teamwork or cooperation among employees. He discovered teamwork or collaboration among employees contributed the most to the prediction of job satisfaction for all the departments. Nurses who work in a cooperative environment and possessing the ability to be a team player were more likely to be satisfied in the workplace.

The majority of the studies that have been conducted in Jordan regarding nurse’s job satisfaction showed the relationship between the intent to stay and turnover rate, and job satisfaction (AbuAlRub et al., 2016; Abualrub, 2010), the result of these studies demonstrate the positive relationship between the intent to stay with the job satisfaction while there is a negative relationship between the turnover rate and job satisfaction. However, Mrayyan (2006) only reported the level of Jordanian nurses’ job satisfaction who working in private hospitals but did not mention the main factors which influence the nurse to be dissatisfied. Most of the study about nurses job satisfaction national wise focus on private and educational hospitals and they ignored public hospitals which serve 87.7% of population (Mrayyan 2006; Abualrub, 2010; Alsaraihe et al., 2014). This is the first study explored the underlying settings of satisfaction of Jordanian nurses’in public hospitals and investigated the factors behind that by using stratified to include all public hospitals. There is only one recent quantitative study that was conducted by AbuAlRub et
8. Conclusion and managerial implication

The findings of the present study fill the gap in the body of knowledge on nurses currently working in Jordan and provide information on their satisfaction. Besides, by identifying work-related conditions in Jordanian public hospital, the results add to the literature as a reflection of the highest and the lowest job satisfaction levels among nurses working in Jordan. From the findings, it is vital for administrators to recognize and quantify the job satisfaction among nurses and the factors that improve their satisfaction and work performance. The result of this study is also a guide to strengthen preservation strategies, recruitment of employees, organizational responsibility, and nursing practice in Jordan. The implications of this study to policymakers are explained using the level of job satisfaction among nurses in Jordan and the factors related to it. To ensure the sustainability of nursing field and prevent high turnover among nurses, the administrators should acknowledge the skills in developing effective policies and procedures for changing work practices concerning hiring process, promotion, and supervision of staff nurse that contribute to the nursing retention.

This study provides valuable information for the hospital management where the hospitals may encounter many factors that contribute to job satisfaction. Therefore, they will build a form of understanding of the fact that each nurse is different and adopt effective measures to improve the nurse's job satisfaction. Kalisch et al. (2007) have discovered essential elements in interventions to improve teamwork. These elements include: (a) promotion of staff feedback, (b) identification of shared values, vision and goals, (c) enhanced communication, (d) coaching (i.e., leadership reinforcement) and (e) implementation of guiding teams (composed of leadership and staff). Furthermore, the teamwork score can be improved by changing the mixture of 8-hour and 12-hours shifts to a 12-hour shift. This method will minimize the hand-offs between shifts and reduce the number of different people they worked with.

Nurse administrators could tackle the specific source of stress, workload, and ineffectual emotional preparation and plan necessary actions to reduce stress among nurses. For instance, the workload can be minimized by reducing non-nursing activities, proper planning of duty schedule, overcoming staff turnover, selecting qualified and experienced nurses and also by disciplining nurses to know their priorities. The manager should play their role in avoiding inadequate emotional preparation among nurses by giving opportunities to enhance their technical skill and providing them with an additional course to sharpen their communication skills and encouraging nurses to stay updated with modern technology and knowledge. Workshops or in-service education programs is one of the alternatives to assist nurses in obtaining additional knowledge and strengthen their self-confidence. Furthermore, occupational stress among new nurses can be reduced by introducing refresher courses to ensure their orientation with routine policies of the hospital.

The study findings indicated that nurses were dissatisfied with the tremendous workloads, low benefit and rewards and the insufficiency of staff nurses. Therefore, it is necessary for the hospital administration to improve the management system. Nurses, managers, and policymakers should provide a positive and healthy practice environment by ensuring adequate staffing, supplies, and equipment which is vital to achieving job satisfaction. Besides, salary, as well as incentives such as sharing profit and benefit should match their performance and specialty.

A clear explanation of the job scope in each cadre of the nursing profession, e.g., diploma nurses, graduate nurses, master nurses and so forth, and making a clear and remarkable line between nursing and non-nursing activity will foster independence of the nurses.

Furthermore, to maintain job satisfaction of nurses at the high level, recruiting specific nurses in specialty areas (e.g., cardiothoracic nurses) will result in better independence and the administration need to sustain following steps to make sure they are providing work according to one's talents and interest. One of the most important things that are often overlooked by superior is appreciating the work well done by the nurses and showing the appreciation through words, awards, increments, and so on. That means the board of administration needs to formulate clear policies concerning promotions, salary progression, and retirements to assure the security of the job. The management needs to recognize the capability and capacity of each nurse before giving challenging work to keep them energetic and able to deliver a high-quality service.

Seniority or merit promotion policy can be modified to give a chance for progression to nurses working in hospitals. Furthermore, giving the employees chances to manage mini projects in work settings can establish a positive working ambiance as well as build leadership qualities among nurses and developing team spirit among nurses. Moreover, nurses should be given a chance to experiment with their fresh idea and create diverse methods instead of sticking to traditional ones. Among the nurses themselves, understanding should be nurtured by respecting the religious belief of each. Not only that, interpersonal relationship between supervisors and staff nurses should be cultivated as well by involving the nurses in the decision-making process even for a simple task. Lastly, ensuring a safe and secure environment at the hospital is also crucial to warrant a positive and healthy working ambiance.
Compliance with ethical standards

Conflict of interest

The authors declare that they have no conflict of interest.

References

Abualrub R, El-Jardali F, Jamal D, and Al-Rub NA (2016). Exploring the relationship between work environment, job satisfaction, and intent to stay of Jordanian nurses in underserved areas. Applied Nursing Research, 31: 19-23. https://doi.org/10.1016/j.apnr.2015.11.014 PMid:27397813

AbuAlRub RF (2007). Nursing shortage in Jordan: What is the solution?. Journal of Professional Nursing, 23(2): 117-120. https://doi.org/10.1016/j.jprofnurs.2006.07.008 PMid:17383605

Abualrub RF (2010). Work and non-work social support and intent to stay at work among Jordanian hospital nurses. International Nursing Review, 57(2): 195-201. PMid:20579154

Adams A and Bond S (2000). Hospital nurses' job satisfaction, individual and organizational characteristics. Journal of Advanced Nursing, 32(5): 536-543. https://doi.org/10.1046/j.1365-2648.2000.01513.x PMid:11012794

Ajeigbe D, McNeese-Smith D, Philips L, and Leach L (2014). Effect of nurse-physician teamwork in the emergency department nurse and physician perception of job satisfaction. Journal of Nursing and Care, 3(1): 141-147.

Al Nawafleh AH (2015). Managing Jordanian nurse migration to the Gulf cooperation council states. EMHJ-Eastern Mediterranean Health Journal, 21(3): 220-225. https://doi.org/10.26719/2015.21.3.220

Alghamdi MG, Topp R, and AlYami MS (2018). The effect of gender on the job satisfaction from the tour of duty among Saudi nurses. Journal of Advanced Nursing, 74(1): 119-127. https://doi.org/10.1111/jan.13985 PMid:28714146

Alsaraireh F, Quinn Griffin MT, Ziehm SR, and Fitzpatrick JJ (2014). Job satisfaction and turnover intention among Jordanian nurses in psychiatric units. International Journal of Mental Health Nursing, 23(5): 460-467. https://doi.org/10.1111/imn.12070 PMid:24890435

Alyanay F and Jassim I (2013). Job satisfaction among nurses working at Jordanian hospital at North of Jordan. International Journal of Business and Management Tomorrow, 3: 1-10.

Aron S (2015). Relationship between nurses’ job satisfaction and quality of healthcare they deliver. M.Sc. thesis, Minnesota State University, Mankato, Minnesota, USA.

Asegid A, Belachew T, and Yimam E (2014). Factors influencing job satisfaction and anticipated turnover among nurses in Sidama zone public health facilities, South Ethiopia. Nursing Research and Practice, 2014. Article ID: 9768, 26 pages. https://doi.org/10.1155/2014/979768

Atefi N, Abdullah KL, Wong LP, and Mazlom R (2014). Factors influencing registered nurses perception of their overall job satisfaction: A qualitative study. International Nursing Review, 61(3): 352-360. https://doi.org/10.1111/inr.12112 PMid:24902878

Bodur S and Infal S (2015). Nurses’ working motivation sources and related factors: A questionnaire survey. Journal of Human Sciences, 12(1): 70-79. https://doi.org/10.14687/jhvs.v12i1.2793

Budhwar PS and Mellahi K (2016). Handbook of human resource management in the Middle East. Edward Elgar Publishing, Cheltenham, UK. https://doi.org/10.4337/9781784719524

Carrillo-Garcia C, Solano-Ruiz MDC, Martinez-Roche ME, and Gómez-Garcia CI (2013). Job satisfaction among health care workers: The role of gender and age. Revista Latino-Americana De Enfermagem, 21(6): 1314-1320. https://doi.org/10.1590/0104-1169.3224.2369 PMid:24402344

Coshow SM, Davis P, and Woosin RJ (2009). The ‘big dip’: Decrements in RN satisfaction at mid-career. Nursing Economics, 27(1): 15-18. PMid:19331308

Dattalo P (2008). Determining sample size: Balancing power, precision, and practicality. Oxford University Press, Oxford, UK. https://doi.org/10.1093/acprofos/9780195315493.001.001

de Cordova PB, Phibbs CS, Schmitt SK, and Stone PW (2014). Night and day in the VA: Associations between night shift staffing, nurse workforce characteristics, and length of stay. Research in Nursing and Health, 37(2): 90-97. https://doi.org/10.1002/nur.21582 PMid:24403000 PMCid:PMC3959218

Ebert RJ and Griffin RW (1998). Business essentials. 2nd Edition, Prentice-Hall, Upper Saddle River, USA.

Farhadian M (1996). Assessment of relationship between professional stresses with nurses’ job satisfaction in section of intensive care unit of hospitals affiliated to Tehran University of Medical Science. Tehran University of Medical Sciences, Tehran, Iran. PMid:8881506

Gadirzadeh Z, Adib-Hajbaghery M, and Matin Abadi M (2017). Job satisfaction among nurses working in 9 public hospitals, this sample does not cover a few aspects which are to handle the decreasing level of satisfaction, the increment turnover among nurses, immigrant nurses adaption and cooperation in Jordan, and the decreasing level of nurses' intention to stay. That being said, other crucial topics also need to be addressed in a different prospect as the word job satisfaction is a complicated issue. Therefore, assessing the issue from different angles, recruiting adequate amount of staff nurse and applying strategy to obtain more experience are highly recommended.

Gómez-García CI (2013). Job satisfaction among health care workers: The role of gender and age. Revista Latino-Americana De Enfermagem, 21(6): 1314-1320. https://doi.org/10.1590/0104-1169.3224.2369 PMid:24402344

Goshow SM, Davis P, and Woosin RJ (2009). The ‘big dip’: Decrements in RN satisfaction at mid-career. Nursing Economics, 27(1): 15-18. PMid:19331308

Gurrieri E (2007). An assessment on the effect of education level on the job satisfaction from the tourism sector point of view. Dogu Universitesi Dergisi, 8(1): 36-46.

Haijuan W, Yong Pin N, and Bibo X (2006). Main factors influencing nurse job satisfaction-A cross-country study. M.Sc. Thesis, Kristianstad University College, Kristianstad, Sweden.

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Hamidinia F, and Bolooz RJ (2014). Factors influencing job satisfaction and turnover intention among nurses in Sidama zone public health facilities, South Ethiopia. Nursing Research and Practice, 2014. Article ID: 9976, 26 pages. https://doi.org/10.1155/2014/99768

https://doi.org/10.1016/j.apnr.2015.11.014 PMid:27397813

https://doi.org/10.1016/j.jprofnurs.2006.07.008 PMid:17383605

https://doi.org/10.1011/j1466-7657.2009.00768.x PMid:20579154

https://doi.org/10.1046/j.1365-2648.2000.01513.x PMid:11012794

https://doi.org/10.1111/jan.13985 PMid:28714146

https://doi.org/10.1111/imn.12070 PMid:24890435

https://doi.org/10.1011/j1466-7657.2009.00768.x PMid:20579154

https://doi.org/10.4337/9781784719524

https://doi.org/10.1093/acprofos/9780195315493.001.001

https://doi.org/10.1093/acprofos/9780195315493.001.001

https://doi.org/10.1093/1002/21582 PMid:24403000 PMCid:PMC3959218

https://doi.org/10.1002/nur.21582 PMid:24403000 PMCid:PMC3959218
Mahmoud AH (2008). A study of nurses' job stressors and social support. International Nursing Review, 55(1): 40-47. https://doi.org/10.1111/j.1466-7577.2007.00605.x PMid:18275534

Hayajneh YA, AbuAbub RF, Athamneh AZ, and Almahzoumy IK (2009). Turnover rate among registered nurses in Jordanian hospitals: An exploratory study. International Journal of Nursing Practice, 15(4): 303-310. https://doi.org/10.1111/j.1440-172X.2009.01758.x PMid:19703047

Herzberg F (1968). One more time: How do you motivate employees?. Harvard Business Review, 40(1): 53-62.

Moh (2015). Health statistics. Jordan Ministry of Health, Amman, Jordan. Available online at: http://apps.moh.gov.jo

Kalisch BJ, Curley M, and Stefanov S (2007). An intervention to enhance nursing staff teamwork and engagement. Journal of Nursing Administration, 37(2): 77-84. https://doi.org/10.1097/00005110-200702000-00010 PMid:17273028

Kalisch BJ, Lee H, and Rockman M (2010). Nursing staff teamwork and job satisfaction. Journal of Nursing Management, 18(8): 938-947. https://doi.org/10.1111/j.1365-2834.2010.01153.x PMid:21073567 PMCid:PMC2994317

Kane RL, Shamiyani TA, Mueller C, Duval S, and Wilt TJ (2007). The association of registered nurse staffing levels and patient outcomes: Systematic review and meta-analysis. Medical Care, 45(12): 1195-1204. https://doi.org/10.1097/MLR.0b013e3181468ca3 PMid:18007170

Khamisa N, Oldenburg B, Peltzer K, and Ilic D (2015). Work related stress, burnout, job satisfaction and general health of nurses. International Journal of Environmental Research and Public Health, 12(1): 652-666. https://doi.org/10.3390/ijerph120100652 PMid:25588157 PMCid:PMC4306884

Kim S (2005). Gender differences in the job satisfaction of public employees: A study of Seoul metropolitan government, Korea. Sex Roles, 52(9-10): 667-681. https://doi.org/10.1007/s11199-005-3734-6

Lambrou P, Kontodimopoulos N, and Niakas D (2010). Motivation and job satisfaction among medical and nursing staff in a Cyprus public general hospital. Human Resources for Health, 8(1): 26-35. https://doi.org/10.1186/1478-4491-8-26 PMid:2080954 PMid:PMid:2998451

Lazarouli G (2015). Employee motivation and job performance. Linguistic and Philosophical Investigations, 14: 97-102.

Mahmoud AH (2008). A study of nurses' job satisfaction: the relationship to organizational commitment, perceived organizational support, transactional leadership, transformational leadership, and level of education. European Journal of Scientific Research, 22(2): 286-295.

Mokhtar K, El Shikieri A, and Rayan A (2016). The relationship between occupational stressors and performance amongst nurses working in pediatric and intensive care units. American Journal of Nursing Research, 4(2): 34-40.

Mrayyan MT (2006). Jordanian nurses' job satisfaction, patients' satisfaction and quality of nursing care. International Nursing Review, 53(3): 224-230. https://doi.org/10.1111/j.1466-7577.2006.00439.x PMid:16879186

Nagy MS (2002). Using a single-item approach to measure facets of job satisfaction. Journal of Occupational and Organizational Psychology, 75(1): 77-86. https://doi.org/10.1348/096317902167658

Negussie N and Demissie A (2013). Relationship between leadership styles of nurse managers and nurses' job satisfaction in jimma university specialized hospital. Ethiopian Journal of Health Sciences, 23(1): 50-58.

Osterloh M and Frey BS (2000). Motivation, knowledge transfer, and organizational forms. Organization Science, 11(5): 538-550. https://doi.org/10.1287/orsc.11.5.538.15204

Parker DF and DeCottis TA (1983). Organizational determinants of job stress. Organizational Behavior and Human Performance, 32(2): 160-177. https://doi.org/10.1016/0030-5073(83)90145-9

Peters L, Cant R, Payne S, O'Connor M, McDermott F, Hood K, and Shimoinaba K (2013). How death anxiety impacts nurses' caring for patients at the end of life: A review of literature. The Open Nursing Journal, 7: 14-21. https://doi.org/10.2174/187434601307010014

Purrohit B, Maneskar A, and Saxena D (2016). Developing a tool to assess motivation among health service providers working with public health system in India. Human Resources for Health, 14(1): 15-27. https://doi.org/10.1186/s12912-016-0178-y

Petersen JL, Arnetz B, Nolan P, Soares J, and Dallender J (1999). Occupational stress and related stress, burnout, job satisfaction and general health of nurses working in pediatric and intensive care units. Journal of Advanced Nursing, 30(3): 749-757. https://doi.org/10.1046/j.1365-2648.1999.01141.x

Reid C, Hurst C, and Anderson D (2013). Examination of socio-demographics and job satisfaction in Australian registered nurses. Collegian, 20(3): 161-169. https://doi.org/10.1016/j.colegn.2012.06.004

Sangsiriy SS (2004). Job satisfaction of pharmacists at a large medical center. American Journal of Health System Pharmacy, 61: 405-406. PMid:15011772

Sarafis P, Rousaki E, Tsounis A, Malliarou M, Lahana L, Bamidis P, Niakas D, and Papastavrou E (2016). The impact of occupational stress on nurses' caring behaviors and their health related quality of life. BMC nursing, 15(1): 56. https://doi.org/10.1186/s12912-016-0178-y PMid:27708546 PMCid:PMC5039891

Shekelle PG (2013). Nurse–patient ratios as a patient safety strategy: A systematic review. Annals of Internal Medicine, 158(5 Part 2): 404-409.

Shoman A (2009). Examination of the factors that predict job satisfaction. M.Sc. Thesis, San Jose State University, San Jose, California, USA.

Thomsen S, Arnetz B, Nolan P, Soares J, and Dallender J (1999). Individual and organizational well-being in psychiatric nursing: A cross-cultural study. Journal of Advanced Nursing, 30(3): 749-757. https://doi.org/10.1046/j.1365-2648.1999.01141.x PMid:10499233

Wanous JP, Reichers AE, and Hudy MJ (1997). Overall job satisfaction: How good are single-item measures?. Journal of Applied Psychology, 82(2): 247-252. https://doi.org/10.1037/0021-9010.82.2.247 PMid:9109282