


# Nurses Perception towards Determinants of Turnover in Psychiatric and General Hospital, Makkah Province

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## Abstract

**Background:** Nurses leaving the profession are of concern to the government. This turnover can take the form of leakage and waste of both human and financial resources for governments that spend money on training nurses. Little is known about the intention to stay or determinants of job satisfaction among nurses in the Makkah region of Saudi Arabia. **Aims:** The study explores the determinants of intention to stay, job satisfaction, organizational commitment and self-efficacy among nurses. **Methods:** A cross-sectional study was designed, with a total of 175 nurses in the period between March 2017-July 2017. **Results:** No statistically significant differences were identified in intention to stay, job satisfaction, organizational commitment and self-efficacy between the psychiatric and the general nurses. A significant correlation was found between nationality, education and income, and intention to stay, job satisfaction, organization commitment and self-efficacy ( $p < 0.05$ ). **Conclusions:** The study added various determinants of nurse turnover to the existing body of knowledge, relating to the factors concerning intention to stay, job satisfaction, organizational commitment and self-efficacy amongst general and psychiatric nurses.

## Keywords

Job Satisfaction, Self-Efficacy, Organizational Commitment, Nursing, Psychiatric Nurse, Intention to Stay

## 1. Introduction

Nurses are regarded as major participants in healthcare systems, whose shortage might create problems both for organizations and patients [1]. Patients not re-

ceiving the appropriate standard of care, whose lives may be threatened, are one of the problems associated with the shortage of nurses [2]. The issue of nursing dropout/turnover and its detrimental effects has been reflected in numerous studies, whosoever all findings suggest unstable staffing and decreased capacity within individual care teams, in turn severely threatening the quality of care [3] [4] [5]. It is the nurses who ensure a higher level of patient safety and improved treatment [6].

A high level of nursing dropout/turnover proves to be costly for the government, as measures and estimates may vary with the level of treatment standards [7]. Stordeur, D'hoore [8] cited an expense of \$42,000 to replace a medical-general nurse and \$64,000 in the case of replacing a specialty nurse. The indirect costs of nurse dropout/turnover are particularly significant because of the combined effects of the initial reduction in productivity of a new employee, and a reduction in staff self-esteem in turn reducing group productivity [2] [6].

A study conducted by Yami, Hamza [9] assessed the job satisfaction level and its determinants among health workers employed at Jimma University Hospital in Southwest Ethiopia. The authors performed a cross-sectional study in order to verify the extent and the variables posing an impact on job satisfaction as well as retention of health professionals employed in the hospital. The study found that 46.2% of the health workers were not satisfied with their respective jobs, with specific problems including lack of motivation, insufficient staff, inappropriate salary structure and lack of high-quality training programmes. However, a similar number (41.4%) was satisfied or happy for reasons of professional gratification and receiving help from others during times of need. The respondents provided their individual viewpoints regarding potential ways through which job satisfaction and retention rates could be increased: for example, motivating the staff by offering them distinct forms of incentive such as bonuses and housing allowances, raising salaries, establishing a good management system, and developing the existing facilities and infrastructure of the hospital [9].

A study by Al-Ahmadi [10] stressed the fact that there was no significant statistical indication of guidance on job satisfaction and intention to stay in nursing, as most of the nurses studied were involved in a counselling relationship. The study findings ( $r = 0.23$ ,  $p = 0.003$ ) nevertheless demonstrated that job satisfaction is positively correlated with intention to stay. This study also indicated that there was a relationship between job satisfaction and level of income, which positively leads towards the intention to stay. The older Saudi nurses working in psychiatric hospitals and performing different tasks were satisfied with their jobs and intended to stay in their profession, to obtain the maximum income. Correspondingly, another set of Saudi nurses working in various departments but coming from abroad also intended to stay in the hospital for a longer period; their high level of job satisfaction was related to receiving salaries sufficient to meet their requirements and enhance their individual living standards [11] [12].

Organizational commitment refers to the level up to which an employee stays

connected as well as committed towards the business organization in which he/she is employed. It is deemed as one of the most significant determinants of an employee's turnover within an organization [13] [14]. With organizational commitment, the entire workforce feels a "sense of oneness" [15]. Its nature and origin are multidimensional and fall into three categories: affective commitment, continuance commitment and normative commitment [16]. Affective commitment is the sense of attachment towards an organization, associated with work experience, personal traits and organizational structure [15]; for example, an employee who is aware of his/her value to the organization is more likely to stay [17]. Continuance commitment represents the level to which employees feel a need to stay within the organization [18].

Self-efficacy represents an individual's belief in his/her ability to develop behaviours necessary to for achieving specific performance [18]. To be precise, it helps in determining the means by which individuals can feel, think, motivate themselves and behave efficiently to attain any predetermined target within a definite timeframe [19]. Self-efficacy is further recognized as a variable which provides the greatest explanatory power regarding the process and the conduct of human behaviour [19]. As noted by Collini, Guidroz [18], self-efficacy has an important role to play in mediating knowledge application. It offers individuals the ability to influence their own courses of action and to attain the goals expected of them [19] [20]. The turnover intentions of nurses are generally based on the psychological responses associated with negative aspects at work (Takase, 2010).

The literature is particularly limited in evaluation of the determinants of intention to stay and job satisfaction among the healthcare workers in Middle East countries, specifically Saudi Arabia. The current study therefore focuses on analyzing the determinants of nurses' turnover in psychiatric hospitals in the Makkah. It is thus important to analyze the factors that influence their job satisfaction level, documented to form a reference point to develop the quality of care. Better handling of the nurses also has a great impact on their job satisfaction level, which in turn improves their job performance and the quality of healthcare at large. The impact of job satisfaction on the overall performance of healthcare workers can be determined from improvements in operational efficiency, productivity, and quality of the care delivered to patients [10] [11]. Therefore, this study investigates the determinants of job satisfaction and intention to stay that might in turn help to reduce the level of dissatisfaction, thereby improving the delivery of care. Healthcare practitioners are expected to reap significant benefits from these findings by understanding the various determinants of intention to stay among healthcare workers in general and in psychiatric hospitals in Saudi Arabia.

## 2. Methods

### 2.1. Research Design

A descriptive explanatory correlational design was used.

## 2.2. Setting

The present study was carried out in the Al-Amal Mental Health Government Hospital in the main city of Makkah. The hospital consists of eight wards (six male and two female) caring for 600 patients. It has a total capacity of 200 beds.

## 2.3. Participants and Outcome Measures

The inclusion criteria were staff nurses who had direct contact with patients, experience in their department of more than one year, and were willing to participate in the study. Participants must also be able to read and understand either Arabic or English. General nurse who work in any hospital ward except psychiatric.

Data were collected through a self-administered structured questionnaire, to compare psychiatric and general nurses' intent to stay in the organization/profession (rated by Intent to Stay in the Organization/Profession scale), job satisfaction (assessed by Job satisfaction Index Questionnaire), organizational commitment (scored by Questionnaire relating to Organizational Commitment), and self-efficacy (evaluated by General Self-Efficacy Scale), job satisfaction, organizational commitment and self-efficacy.

Job Satisfaction was assessed by a 20-item index named Minnesota Satisfaction Questionnaire (MSQ) short-form, it was devised by Weiss, Dawis [21] and the Cronbach's alpha is 0.91 (Ben-Bakr *et al.* 1994). The MSQ, a self-reported instrument scored on Likert scale from 1 to 4, it is an often used and widely researched job satisfaction measure [22] [23].

Organizational commitment was measured by a 23 items index called Organizational Commitment Questionnaire (OCQ) developed by Meyer, Allen [24] with an estimated Cronbach's alpha 0.85 [25].

Self-efficacy is devised by Schwarzer, R., & Jerusalem, M. (1995), it has 10 items with scoring system from 0 to 5. Highest score indicates for high self-efficacy. This scale is already translated in Arabic and has established reliability 0.76.

## 2.4. Ethical Considerations

Verbal and written consent were sought from the participants after clarifying the procedure. Participants were informed about their right to refuse to participate and to withdraw at any time without any consequences. Confidentiality was assured. Ethical approval was obtained from the Fakeeh College for Medical Sciences (ref: 15486/45) and from the Ministry of Health (ref 17845/65).

## 2.5. Statistical Analysis

After the collection through the questionnaire survey, the data was analyzed by the Statistical Package for the Social Sciences (SPSS) version 2.0. Frequency distributions were used to explain the proportion of nurses based on certain demographic variables such as sex, marital status, work/professional experience, level

of education and category of units or wards. In order to depict continuous variables such as age, experience in years and satisfaction with salary, some other statistical methods including mean and standard deviation were employed. Pearson correlation analysis and independent-sample t-tests were used to test the relationship between the continuous demographic characteristics of the participants and the main study variables, *i.e.* job satisfaction, self-efficacy, organizational commitment and intention to stay. Two-way ANOVA method was considered to test the association and the differences in work settings with the major study variables. It is thus apparent that the research cannot be considered a comprehensive model to determine the decisions of the nurses to leave their jobs; further research is required to identify the beliefs and attitudes of the nurses towards their profession and the significance of different specific references such as spouse, parents or co-workers that affect their turnover rates. Assumptions of statistical tests were maintained. The sample size was determined according to Cohen table with medium effect size and level of significant 0.05, then the required sample size is 160 with considering attrition rate is 20%.

### 3. Results

Of the 200 questionnaires distributed to nurses in surgical, medical, ICU and psychiatric departments in the period between March 2017-July 2017, 175 were returned, giving a response rate of 88%. The socio-demographic features of the participants are displayed in **Table 1**. Most of the participants belonged to the age group 30 - 39 years; there were slightly more male (51.4%) and 56% of nurses were Saudi nationals. Educational qualifications varied, but 44.6% of participants held a bachelor's degree in nursing science. 58.9% of participants were married.

#### 3.1. Job Satisfaction Level

**Table 2** shows the average job satisfaction score was 71.4 with 10.5 standard deviation. The result of an independent sample t-test showed that there were no significant differences between the nurses by work setting or department ( $p > 0.05$ ).

#### 3.2. Intention to Stay

There were no statistically significant differences between psychiatric and general nurses with respect to intention to stay in the organization, as described in **Table 3**.

#### 3.3. Organizational Commitment

**Table 4** indicates that there were no statistically significant differences between psychiatric and general nurses in relation to organizational commitment.

#### 3.4. Self-Efficacy

There was no statistically significant difference between psychiatric and general

**Table 1.** Socio-demographic characteristics of the study participants.

Item	Frequency	Percentage
<b>Age</b>		
20 - 29	70	40%
30 - 39	92	52.6%
40 - 49	10	5.7%
50 - 59	3	1.7%
<b>Gender</b>		
Male	90	51.4%
Female	85	48.6%
<b>Nationality</b>		
Saudi	98	56%
Non-Saudi	77	44%
<b>Marital status</b>		
Single	65	37.1%
Married	103	58.9%
Divorced	7	4%
<b>Education level</b>		
Diploma	67	38.3
High Diploma	22	12.6
Bachelor Degree	78	44.6
Master Degree	7	4
Doctorate Degree	1	0.6
<b>Work status</b>		
Practical nurse	153	87.4%
Supervisor	18	10.3%
Writing assignment	4	2.3%
<b>Experience</b>		
less than one year	32	18.3%
from 1 - 5 years	53	30.3%
from 6 - 10 years	63	36.0%
from 11 - 15 years	17	9.7%
more than 15 years	10	5.7%
<b>Level of income</b>		
less than 9999 SR	97	55.4%
From 10,000 - 14,999 SR	68	38.9%
From 15,000 - 19,999 SR	7	4%
More than 20,000 SR	3	1.7%
<b>Hospital</b>		
Psychiatric Hospital	117	66.9%
General Hospital	58	33.1%
<b>Department</b>		
Psychiatric	117	66.9%
ICU	12	6.9%
Surgical	17	9.7%
Medical	29	16.6%

**Table 2.** Job satisfaction scores amongst the study participants.

Job Satisfaction	Mean	SD	P value
Psychiatric hospital	71.34	10.5	0.80
General hospital	71.62	10.6	

SD: Standard Deviation.

**Table 3.** Intention to stay scores of the study participants.

Intention to stay	Mean	SD	P value
Psychiatric hospital	5.11	1.87	0.80
General hospital	4.67	1.71	

SD: Standard Deviation.

**Table 4.** Organization commitment scores between groups.

Organization commitment	Mean	SD	P value
Psychiatric hospital	39.68	4.95	0.80
General hospital	39.82	4.81	

nurses in terms of self-efficacy, as stated in **Table 5**.

### 3.5. Results of Correlation and Regression Analysis

#### 3.5.1. Correlations between Job Satisfaction, Occupational Commitment, Intent to Stay and Demographic Characteristics

The results of Spearman correlation suggested that there was a significant relationship between nationality and job satisfaction ( $r = 0.27$ ,  $p < 0.001$ ), organizational commitment ( $r = 0.16$ ,  $p = 0.03$ ) and self-efficacy ( $r = 0.19$ ,  $p = 0.01$ ). Moreover, there was a statistically significant correlation between education level and job satisfaction ( $r = 0.24$ ,  $p < 0.001$ ), organizational commitment ( $r = 0.15$ ,  $p = 0.047$ ), and self-efficacy ( $r = 0.15$ ,  $p = 0.039$ ). However, the years of experience was observed to be significantly correlated negatively with job satisfaction ( $r = -0.13$ ,  $p = 0.06$ ). Another significant correlation was detected between income level and job satisfaction ( $r = -0.14$ ,  $p = 0.06$ ) along with self-efficacy ( $r = -0.13$ ,  $p = 0.07$ ). Other demographic variables were observed to have an important correlation with independent variables, *i.e.* job satisfaction, organizational commitment and self-efficacy or the dependent variable, *i.e.* intention to stay. These results are presented in **Table 6**.

#### 3.5.2. Correlations between Job Satisfaction, Organizational Commitment and Intention to Stay

The results of Pearson correlation demonstrated that job satisfaction had a positive correlation with the intention to stay ( $r = 0.23$ ,  $p = 0.003$ ). A positive correlation also existed between job satisfaction and organizational commitment ( $r = 0.38$ ,  $p < 0.001$ ) and self-efficacy ( $r = 0.22$ ,  $p = 0.003$ ), and between organizational commitment and self-efficacy ( $r = 0.36$ ,  $p \leq 0.001$ ). **Table 7** presents the overall correlation results with respect to the factors of job satisfaction, organizational commitment and intention to stay. Multiple regression analysis was performed on the demographic data of the sample, job satisfaction, organizational commitment, self-efficacy (predictor variable) and intention to leave (dependent variable). The regression analysis findings revealed that job satisfaction has an association with the intention to stay ( $\beta = -0.325$ ,  $p < 0.05$ ). All the other predictor variables showed non-significant results, as displayed in **Table 8**.

**Table 5.** Self-efficacy scores between psychiatric and general nurses group.

Self-efficacy	Mean	SD	P value
Psychiatric hospital	29.93	3.86	0.80
General hospital	30.17	5.42	

SD: Standard Deviation.

**Table 6.** Correlation between demographic characteristics and job satisfaction, intention to stay, organization commitment and self-efficacy.

	Job satisfaction		Intention to stay		Organization commitment		Self-efficacy	
	r	sig	r	sig	R	sig	r	sig
Age	0.05	0.45	-0.01	0.80	0.019	0.80	-0.10	0.15
gender	0.08	0.27	-0.07	0.32	-0.00	0.92	-0.07	0.35
Nationality	0.27	0.00	0.04	0.52	0.16	0.03	0.19	0.01
Marital Status	-0.08	0.28	0.03	0.70	-0.02	0.76	-0.07	0.34
Education level	0.24	0.00	0.059	0.43	0.15	0.04	0.15	P<0.001
Work task	0.02	0.78	0.00	0.93	-0.00	0.91	-0.10	0.17
Experience	-0.13	0.06	0.12	0.10	0.06	0.40	-0.01	0.17
Level of income	-0.14	0.06	-0.00	0.99	0.01	0.40	-0.13	0.07
Hospital	0.01	0.87	-0.11	0.13	0.01	0.85	0.02	0.73
Department	-0.01	0.85	-0.07	0.35	-0.00	0.95	-0.01	0.82

**Table 7.** Relationship between intention to stay and job satisfaction, organization commitment and self-efficacy.

	Job Satisfaction		Intention to stay		Organization commitment		Self-efficacy	
	r	sig	r	sig	R	sig	r	sig
Job Satisfaction			0.225	0.003	0.338	0.00	0.221	P < 0.001
Intention to stay	0.225	0.003			0.105	0.16	0.119	P < 0.001
Organization commitment	0.388	0.00	0.105	0.16			0.36	P < 0.001
Self-efficacy	0.221	0.003	0.118	0.11	0.36	0.00		P < 0.001

**Table 8.** The result of multiple regression.

Job Satisfaction	Intention to stay		
	R <sup>2</sup>	Beta standardized	Sig
	0.51	0.325	P < 0.001



## 4. Discussion

To our knowledge, this is the first study determined the factors influence nurse's decision to leave the profession. The research identified that a strong association exists between job satisfaction and income level, which eventually leads towards the positive intention to stay. The job satisfaction level of the older Saudi nurses employed in psychiatric hospitals and their desire to stay in the job, was high, as they had to perform simple tasks with a minimal work load for the maximum level of income [26]. Similarly, the job satisfaction level of new general nurses working in various departments and their desire to stay in their jobs was also high; this group comes from a broader spectrum of nationalities and is interested in working to reduce economic pressure, albeit for a low salary [11].

Concerning the main aim of this study, no significant difference was found between job satisfaction and the turnover of nurses in either psychiatric or general hospitals ( $\beta = -0.325$ ,  $p > 0.05$ ). Some predictor variables displayed non-significant results; for example, years of experience was significantly but negatively correlated with job satisfaction ( $r = -0.13$ ,  $p = 0.06$ ). This finding agrees with that of Hayes, Douglas [1], that job satisfaction and turnover intention are negatively related. However, Chen, Brown [2] reported a strong positive relationship between behavioural intentions and turnover, and a negative relationship between job satisfaction and behavioural intentions.

Surprisingly, job satisfaction was found to have a significant relationship with intention to stay, and it was a significant predictor for our dependent variable. Chen, Brown [2] and Labrague, Gloe [27] similarly reported a strong positive relationship between behavioural intentions and turnover; a strong negative relationship was noticed between job satisfaction and behavioural intentions. In addition, the analysis of the study findings found a small negative relationship between job satisfaction and turnover. Role perception in nursing practice has been recognized as an important determinant of organizational and individual stress, job satisfaction, organizational commitment and intentions to leave [18] [28]. Several studies support the current study result that only job satisfaction predicts anticipation to leave [29] [30] [31].

Maslow's hierarchy of needs and Herzberg's (1966) motivation-hygiene theories were considered and explored for this particular study, to evaluate the determinants of nurse turnover in psychiatric hospitals in the Makkah region. Factors including professional development, recognition, improvement of extrinsic components, developed nursing practice; career advancement and motivation are believed to raise the job satisfaction level of nurses and their retention at large. Most of the findings obtained for this study revealed that job satisfaction has a positive influence on turnover and turnover intention. Nonetheless, one of the studies Holmberg, Caro [32] considered by this research aimed to determine whether factors such as job satisfaction, positivity, good salary and experience have any influence on turnover intention. This particular study obtained data from a healthcare organization in Iceland, during March 2018. The

total number of participants was 64, of whom 48.8% ( $n = 31$ ) claimed to be male and 34.4% ( $n = 22$ ) to be female. The overall findings of this study suggested that the turnover intention of the nurses was reduced by having a positive mindset. This result certainly aligns with the present research, whose findings reveal that employees with a positive mindset can reduce turnover intention by a certain level.

According to research conducted by Collini, Guidroz [18], Almalki, FitzGerald [11] and Alghamdi, Topp [31], a weak positive relationship exists between low turnover rate and the job satisfaction level of nurses. The association between job satisfaction and the intention to stay or leave the job was stronger than the relationship between low job satisfaction and turnover. Certain motivational job factors such as achievement, recognition, working environment, autonomy, empowerment and responsibility encourage as well as raise the job satisfaction level of Ministry of Health nurses at large. According to the findings of Spector (1997), the various determinants of job satisfaction and nurse turnover in psychiatric hospitals in the Makkah region were identified as organizational structure along with policies, appreciation, personal advancement, communication and fringe benefits such as vacations, insurance and pension plans. The other determinants encompass the working environment, remuneration, the work itself, development prospects, supervision and security.

#### 4.1. Intention to Stay

The regression result obtained for this study *i.e.* ( $r = 0.23$ ,  $p = 0.003$ ) clearly indicated that there exists a positive correlation between job satisfaction and intention to stay; this is the strongest relationship recorded, significantly greater than that between low job satisfaction and turnover. The evidence suggests that job satisfaction is indirectly affected by a wide assortment of demographic, organizational and ecological factors, which help in predicting turnover intention at large. The intention of the older Saudi nurses to stay in their respective jobs or profession and their job satisfaction were identified as high because of their higher level of income and their routine simple tasks. Similarly, the job satisfaction level and the desire to stay among the new general nurses in different departments were a result of their accepting the low salary in order to reduce economic pressure. The overall findings of this study highlighted that 38.8% of the participants are less likely to remain in their respective jobs or profession. However, in a study conducted by Al-Ahmadi [10], 37% of the nurses intended to leave their individual job or profession. In another study it was stated that job satisfaction was an important antecedent of turnover in the nursing profession ([33]. Job satisfaction was indirectly influenced by a variety of organizational, demographic and environmental components [12] [34]. The more nurses are satisfied with their job, the less likely they will be to leave. Job satisfaction was said to be a crucial antecedent of nurse turnover intention, although it is not yet known which the most important predictor of turnover intention is [9] [31].

## 4.2. Organizational Commitment

Similar to job satisfaction and intention to stay, organizational commitment was measured to address the issues identified in this particular study. Similar results for the average of organizational commitment were observed between the psychiatric and general nurses. An independent sample t-test evaluated the differences between the groups, confirming that organizational commitment is not statistically significantly different between psychiatric and general nurses ( $p > 0.05$ ), nor was it a significant predictor of intention to stay. The regression result ( $r = 0.38, p < 0.001$ ) indicated a positive correlation between job satisfaction and organizational commitment. Therefore, organizational commitment cannot be considered as a significant predictor of intention to stay. Similar results can be traced in the study conducted by Mahmoud [13] and Cumbey and Alexander [35], in which the variables of organizational commitment including vertical and horizontal participation are positively correlated with the job satisfaction of public health nurses. Chiok Foong Loke [36] and Chang, Shyu [29] agree that role clarity, rules, and standard practices lead to higher job satisfaction, affecting both nurses' personal development and organizational performance.

## 4.3. Self-Efficacy

At  $p > 0.05$ , the results showed no statistically significant differences in self-efficacy between the psychiatric and the general nurses. Nonetheless, job satisfaction has a positive association with self-efficacy, as the regression result stood at  $r = 0.22, p = 0.003$ . Most studies, including Judge and Bono (2001), revealed that employees' knowledge and personal development contribute to higher levels of self-efficacy, which in turn raise job satisfaction and job performance at large. Self-efficacy is deemed an important factor in nursing practice as it results in developing the quality of care for individuals [37]. Le and Ko (2010) concluded that nurses' self-efficacy has a connection with increased job satisfaction and better-quality nursing care. Based on the observation made by Bandura and Ramachaudran [19], Social Cognitive Theory portrays the association existing between the turnover intention of nurses and the intervening role of self-efficacy. According to this particular theory, individuals can develop new behaviours by modelling the activities performed by others. Social Cognitive Theory tends to determine the significance of self-efficacy, which mediates the relationship between environmental characteristics (e.g. supervisory feedback) and employee behaviour (Wood and Bandura, 1989). However, these results encourage further discussion and explanation of Bandura's theory that nurses' turnover intentions usually follow from psychological responses to negative aspects at work (Takase, 2010). The theory Bufford [20] can explain and predict the relationship between the quality of feedback and turnover intentions and the intervening role of self-efficacy.

The sample of nurses, restricted to those employed only in government psychiatric hospitals in Makkah province, can be considered as one of the limita-

tions of this study. It is therefore difficult to draw valid inferences from the results.

## 5. Conclusion

Based on the overall research findings, it can be concluded that a strong and direct relationship exists between job satisfaction and turnover intention of nurses who work in psychiatric hospitals. From the secondary data and regression results, the various determinants of nurse turnover in psychiatric hospitals were identified as including organizational commitment, professional advancement and job satisfaction.

## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

## Relevance Statement

- ✓ This study has adequate sample size with high response rate.
- ✓ This is the first study conducted in Arab Speaking countries in psychiatric setting.
- ✓ This is one of the few studies examined the relationships between these variables by using reliable and valid outcome measures.
- ✓ It is important because such knowledge can guide possible changes, within working environment and identify area for future research.

## References

- [1] Hayes, B., Douglas, C. and Bonner, A. (2015) Work Environment, Job Satisfaction, Stress and Burnout among Haemodialysis Nurses. *Journal of Nursing Management*, **23**, 588-598. <https://doi.org/10.1111/jonm.12184>
- [2] Chen, I.H., Brown, R., Bowers, B.J. and Chang, W.Y. (2015) Job Demand and Job Satisfaction in Latent Groups of Turnover Intention among Licensed Nurses in Taiwan Nursing Homes. *Research in Nursing & Health*, **38**, 342-356. <https://doi.org/10.1002/nur.21667>
- [3] Yada, H., Abe, H., Omori, H., Matsuo, H., Masaki, O., Ishida, Y., *et al.* (2014) Differences in Job Stress Experienced by Female and Male Japanese Psychiatric Nurses. *International Journal of Mental Health Nursing*, **23**, 468-476. <https://doi.org/10.1111/inm.12080>
- [4] Lukose, S. and Abdul Azeez, E. (2015) Occupational Stress, Mental Health and Attitude towards Mental Illness of Nursing Staff Working in General and Psychiatric Hospital: A Comparative Study. *Journal of Organisation & Human Behaviour Volume*, **4**.
- [5] Van Bogaert, P., Adriaenssens, J., Dilles, T., Martens, D., Van Rompaey, B. and Timmermans, O. (2014) Impact of Role-, Job-, and Organizational Characteristics on Nursing Unit Managers' Work Related Stress and Well-Being. *Journal of Advanced Nursing*, **70**, 2622-2633. <https://doi.org/10.1111/jan.12449>
- [6] Cheng, C.Y., Liou, S.R., Tsai, H.M. and Chang, C.H. (2015) Job Stress and Job Sa-

tisfaction among New Graduate Nurses during the First Year of Employment in Taiwan. *International Journal of Nursing Practice*, **21**, 410-418.

<https://doi.org/10.1111/ijn.12281>

- [7] Choi, S.P.P., Cheung, K. and Pang, S.M.C. (2013) Attributes of Nursing Work Environment as Predictors of Registered Nurses' Job Satisfaction and Intention to Leave. *Journal of Nursing Management*, **21**, 429-439. <https://doi.org/10.1111/j.1365-2834.2012.01415.x>
- [8] Stordeur, S., D'hoore, W. and Vandenberghe, C. (2017) Leadership, Organizational Stress, and Emotional Exhaustion among Hospital Nursing Staff. *Journal of Advanced Nursing*, **35**, 533-542. <https://doi.org/10.1046/j.1365-2648.2001.01885.x>
- [9] Yami, A., Hamza, L., Hassen, A., Jira, C. and Sudhakar, M. (2017) Job Satisfaction and Its Determinants among Health Workers in Jimma University Specialized Hospital, Southwest Ethiopia. *Ethiopian Journal of Health Sciences*, **21**.
- [10] Al-Ahmadi, H.A. (2014) Determinants of Nurse Turnover in Psychiatric Hospitals in Saudi Arabia. *Journal of the Social Sciences*, **34**.
- [11] Almalki, M.J., FitzGerald, G. and Clark, M. (2015) The Relationship between Quality of Work Life and Turnover Intention of Primary Health Care Nurses in Saudi Arabia. *BMC Health Services Research*, **12**, 314. <https://doi.org/10.1186/1472-6963-12-314>
- [12] Abualrub, R.F. and Alghamdi, M.G. (2017) The Impact of Leadership Styles on Nurses' Satisfaction and Intention to Stay among Saudi Nurses. *Journal of Nursing Management*, **20**, 668-678. <https://doi.org/10.1111/j.1365-2834.2011.01320.x>
- [13] Mahmoud, A. (2016) 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**, 286-295.
- [14] De Gieter, S., Hofmans, J. and Pepermans, R. (2016) Revisiting the Impact of Job Satisfaction and Organizational Commitment on Nurse Turnover Intention: An Individual Differences Analysis. *International Journal of Nursing Studies*, **48**, 1562-1569. <https://doi.org/10.1016/j.ijnurstu.2011.06.007>
- [15] Brunetto, Y., Shriberg, A., Farr-Wharton, R., Shacklock, K., Newman, S. and Dinger, J. (2013) The Importance of Supervisor-Nurse Relationships, Teamwork, Wellbeing, Affective Commitment and Retention of North American Nurses. *Journal of Nursing Management*, **21**, 827-837. <https://doi.org/10.1111/jonm.12111>
- [16] Kim, M.-R. (2007) Influential Factors on Turnover Intention of Nurses; The Affect of Nurse's Organizational Commitment and Career Commitment to Turnover Intention. *Journal of Korean Academy of Nursing Administration*, **13**, 335-344.
- [17] Gutierrez, A.P., Candela, L.L. and Carver, L. (2014) The Structural Relationships between Organizational Commitment, Global Job Satisfaction, Developmental Experiences, Work Values, Organizational Support, and Person-Organization Fit among Nursing Faculty. *Journal of Advanced Nursing*, **68**, 1601-1614. <https://doi.org/10.1111/j.1365-2648.2012.05990.x>
- [18] Collini, S.A., Guidroz, A.M. and Perez, L.M. (2015) Turnover in Health Care: The Mediating Effects of Employee Engagement. *Journal of Nursing Management*, **23**, 169-178. <https://doi.org/10.1111/jonm.12109>
- [19] Bandura, A. and Ramachandran, V.S. (1994) *Encyclopedia of Human Behavior*. 4th Edition, Academic Press, New York, 71-81.
- [20] Bufford, R. (1986) *Social Foundations of Thought and Action—A Social Cognitive*

Theory. Biola University, La Mirada.

- [21] Weiss, D.J., Dawis, R.V. and England, G.W. (1967) Manual for the Minnesota Satisfaction Questionnaire. Minnesota Studies in Vocational Rehabilitation.
- [22] DeMato, D.S. and Curcio, C.C. (2004) Job Satisfaction of Elementary School Counselors: A New Look. *Professional School Counseling*, 236-245.
- [23] Hancer, M. and George, R.T. (2003) Job Satisfaction of Restaurant Employees: An Empirical Investigation Using the Minnesota Satisfaction Questionnaire. *Journal of Hospitality & Tourism Research*, **27**, 85-100.  
<https://doi.org/10.1177/1096348002238882>
- [24] Meyer, J.P., Allen, N.J. and Smith, C.A. (1993) Commitment to Organizations and Occupations: Extension and Test of a Three-Component Conceptualization. *Journal of Applied Psychology*, **78**, 538. <https://doi.org/10.1037/0021-9010.78.4.538>
- [25] Feather, N.T. and Rauter, K.A. (2004) Organizational Citizenship Behaviours in Relation to Job Status, Job Insecurity, Organizational Commitment and Identification, Job Satisfaction and Work Values. *Journal of Occupational and Organizational Psychology*, **77**, 81-94. <https://doi.org/10.1348/096317904322915928>
- [26] Jalal, E.J., Hajibabae, F., Farahaninia, M., Joolae, S. and Hosseini, F. (2014) Relationship between Job Satisfaction, Absence from Work and Turnover among Nurses. *Journal of Nursing and Midwifery Sciences*, **1**, 12-18.  
<https://doi.org/10.18869/acadpub.jnms.1.1.12>
- [27] Labrague, L.J., Gloe, D.S., McEnroe-Petitte, D.M., Tsaras, K. and Colet, P.C. (2018) Factors Influencing Turnover Intention among Registered Nurses in Samar Philippines. *Applied Nursing Research*, **39**, 200-206.  
<https://doi.org/10.1016/j.apnr.2017.11.027>
- [28] Loi, R., Hang-Yue, N. and Foley, S. (2016) Linking Employees' Justice Perceptions to Organizational Commitment and Intention to Leave: The Mediating Role of Perceived Organizational Support. *Journal of Occupational and Organizational Psychology*, **79**, 101-120. <https://doi.org/10.1348/096317905X39657>
- [29] Chang, H.Y., Shyu, Y.I.L., Wong, M.K., Friesner, D., Chu, T.L. and Teng, C.I. (2015) Which Aspects of Professional Commitment Can Effectively Retain Nurses in the Nursing Profession? *Journal of Nursing Scholarship*, **47**, 468-476.  
<https://doi.org/10.1111/jnu.12152>
- [30] Abou Hashish, E.A. (2017) Relationship between Ethical Work Climate and Nurses' Perception of Organizational Support, Commitment, Job Satisfaction and Turnover Intent. *Nursing Ethics*, **24**, 151-166. <https://doi.org/10.1177/0969733015594667>
- [31] Alghamdi, M.G., Topp, R. and AlYami, M.S. (2018) The Effect of Gender on Transformational Leadership and Job Satisfaction among Saudi Nurses. *Journal of Advanced Nursing*, **74**, 119-127. <https://doi.org/10.1111/jan.13385>
- [32] Holmberg, C., Caro, J. and Sobis, I. (2018) Job Satisfaction among Swedish Mental Health Nursing Personnel: Revisiting the Two-Factor Theory. *International Journal of Mental Health Nursing*, **27**, 581-592. <https://doi.org/10.1111/inm.12339>
- [33] Lundstrom, T., Pugliese, G., Bartley, J., Cox, J. and Guither, C. (2014) Organizational and Environmental Factors That Affect Worker Health and Safety and Patient Outcomes. *American Journal of Infection Control*, **30**, 93-106.  
<https://doi.org/10.1067/mic.2002.119820>
- [34] Griffeth, R.W., Hom, P.W. and Gaertner, S. (2010) A Meta-Analysis of Antecedents and Correlates of Employee Turnover: Update, Moderator Tests, and Research Implications for the Next Millennium. *Journal of Management*, **26**, 463-488.

<https://doi.org/10.1177/014920630002600305>

- [35] Cumbey, D.A. and Alexander, J.W. (2015) The Relationship of Job Satisfaction with Organizational Variables in Public Health Nursing. *Journal of Nursing Administration*, **28**, 39-46. <https://doi.org/10.1097/00005110-199805000-00007>
- [36] Chiok Foong Loke, J. (2011) Leadership Behaviours: Effects on Job Satisfaction, Productivity and Organizational Commitment. *Journal of Nursing Management*, **9**, 191-204. <https://doi.org/10.1046/j.1365-2834.2001.00231.x>
- [37] Manojlovich, M. (2015) Promoting Nurses' Self-Efficacy: A Leadership Strategy to Improve Practice. *Journal of Nursing Administration*, **35**, 271-278.