

# Knowledge and perception of nursing staff regarding organizational commitment in northern borders government hospitals in Saudi Arabia

Fahad Khamis K. Alshammari<sup>†1</sup>, Mshary Benian Al Enzi<sup>2</sup>

#### **ABSTRACT**

**Background**: Nurses play an important role in rendering high-quality services. Considering nurses' critical role, the level of nursing staff organizational commitment has been closely associated with the quality of care rendered by nursing staff from different health care institutions. It has been proved before that nurses who possess a high level of organizational commitment exhibited a low level of burnout; In the past five years in the Northern Borders government hospitals of Saudi Arabia, feedback from nursing staff regarding organizational commitment was not evaluated.

**Aim:** This study was conducted to gather information with regard to nurses' level of organizational commitment in this specified region of Saudi Arabia.

**Method:** This study utilized a quantitative, descriptive correlational design in determining the organizational commitment of nursing staff in Northern Borders government hospitals in Saudi Arabia, with 487 nurses from the target hospitals selected using a convenience sampling method. The study used one questionnaire divided into two parts: a demographic survey and the Three-Component Module (TCM) Employee Commitment Survey. The collected data were analyzed using both descriptive and inferential statistical tools.

**Result:** The results showed that nurses in the Northern Borders governmental hospitals in Saudi Arabia had above-average organizational commitment, with affective followed by normative and then continuous. Moreover, there were significant differences in all styles in terms of gender (with an advantage for females), nationality (with an advantage for non-Saudis), education (with an advantage for bachelor-degree holders), and experience (with an advantage for those with more than 10 years of experience).

**Conclusion:** It has been recommended that the healthcare administration should ensure that nurses are committed to their work in order to avoid future undesirable hospital outcomes.

Keywords: Organizational commitment; Perception; Knowledge; Nurses staff

# Introduction

### ■ Background of the Study

Nurses play an important role in rendering highquality services. Considering nurses' critical role, the level of nursing staff organizational commitment has been closely associated with the quality of care rendered by nursing staff from different health care institutions [1]. With nurses forming a significant proportion of health workers in the Saudi Arabian health service, their commitment to stay in health care organizations was necessary to produce a quality health care service [2]. This is the reason why it was important to constantly monitor the commitment of nursing staff to their health care organization, as this could affect the delivery of care. Organizational commitment may be defined as the level to which employees associated with the goals of the organization [3]. It did not only include the extent to which a member associates himself with the organization, but it also included the effort and desire of a particular member to remain in the organization.

Researchers have studied organizational commitment in the nursing sector since the 1970s [1]. The way nurses perceive their level of organizational commitment was an essential

Received: 29-Sep-2022,

Manuscript No. IJOCS-22-76219

**Editor assigned:** 02-Oct-2022, PreQC No. IJOCS-22-76219(PQ);

**Reviewed:** 05-Oct-2022, QC No. IJOCS-22-76219(Q);

Revised: 07-Oct-2022.

Manuscript No. IJOCS-22-76219(R);

Published: 13-Oct-2022,

DOI:

10.37532/1753-0431.2022.16(10).260

Author for correspondence: Fahad khamis k Alshammari, Nursing Supervisor, Rafha Health Sector, Northern Borders Health, Ministry of Health, Saudi Arabia, E-mail: fkalshammari3@moh.gov.sa

<sup>&</sup>lt;sup>1</sup>Nursing Supervisor, Rafha Health Sector, Northern Borders Health, Ministry of Health, Saudi Arabia.

<sup>&</sup>lt;sup>2</sup>Director of Training and Continuing Education in Public Health Hafr Al-Batin, Ministry of Health, Saudi Arabia.

factor in understanding the behavior of the members and the organization as a whole [4]. organizational Furthermore, commitment has been an important factor in determining the performance, satisfaction, and turnover of employees in the organization. For instance, the study of Hakami et al. (2020) proved that the greater nurses' level of satisfaction in their job, the greater their organizational commitment [5]. Moreover, the success of an employee depended upon the satisfaction he feels, and this can be achieved through the improvement organizational commitment, which consequently increased job performance [6]. In addition, another research has shown that if the organizational climate was perceived to be high by the staff, then the level of commitment of the employees goes high as well [7]. Khalaf and Adam (2018) also found that nurses who possess a high level of organizational commitment exhibited a low level of burnout. The workplaces of health care institutions, and the satisfaction they promote, also affected how committed or uncommitted nursing staff members were. When a particular health institution was managed poorly, negative effects result, such as stress, which consequently led to job burnout and poor quality of health care rendered, with increased mortality rates resulting in hospitals [8]. Previous studies reviewed how health care sectors need an atmosphere where nursing staff can be motivated to work and stay in their organization.

According to the Saudi Arabian Ministry of Health (2016), there was a significant shortage of nurses in Saudi Arabian hospitals [9]. Nurses represented the largest part of service provision in health care [10]. Accordingly, it was a significant matter for nurses to feel satisfied and motivated with regard to their employer, which represented an important reason for them to remain committed to their organization. The success of health care organizations constituted various significant components, in which the commitment of the nurses was of the utmost concern [1]. This study, therefore, contributed significantly by gathering information with regard to the level of organizational commitment of nurses in the specified region, using multiple Northern Borders government hospitals in Saudi Arabia.

# **Goals and Objectives of the Study**

This study aimed at determining the commitment level of nursing staff, as well as their knowledge and perception regarding organizational commitment in Northern Borders government hospitals in Saudi Arabia.

Specifically, the objectives of this study were as follows:

- 1. To identify the extent of organizational commitment among nursing staff in Northern Borders government hospitals in Saudi Arabia.
- 2. To determine the association between the applied organizational commitment style and the demographic profile of respondents in Northern Borders government hospitals in Saudi Arabia.

## Hypothesis

Based on the aforementioned objectives, the null hypothesis of the study was as follows:

**H0:** There is no association between the applied organizational commitment styles and the demographic profile of respondents in Northern Borders government hospitals in Saudi Arabia.

# Significance of the Study

The results of the study are significant in various ways, and to several stakeholders in the health care system, including the following:

**Patients:** This study helped community members to understand how the perception and the level of organizational commitment of the nursing staff affected them indirectly. As they were the main recipients of the services rendered by the nursing staff, they were the most affected individuals in the healthcare sector; thus, the findings allowed them to understand how nursing professionals function as a whole.

Nursing staff: This study represented an important tool for the nursing professionals as well. The findings of this study provided necessary information to enable nurses to fully understand how they perceive commitment in their organization. In addition, nursing staff, as the main focus of the study, were able to understand how organizational commitment works, and how their perception affected them and the delivery of their care. The results of the study were also useful in helping them to find ways to enhance their commitment to their organization, along with other insightful strategies to assist them to become successful in their career.

Hospitals: This study was also important to

# Knowledge and perception of nursing staff regarding organizational commitment in northern borders government hospitals in Saudi Arabia

hospitals, including the nursing administration, for the reason that the results may guide them in effectively devising and imposing guidelines and other regulations concerning the welfare of the organization. The findings also provided scientific support and evidence, serving as the basis for the policies that will be considered in the future.

**Future researchers:** Nursing researchers may be able to benefit from the study as well, as the findings may provide them with academic support and a framework for the academic field. This study may also serve as a reference material for researchers who wish to conduct further study to explore the organizational commitment of nursing staff. Furthermore, it served as additional information regarding the topic of interest, which will allow researchers to further understand how organizational commitment works, and how important it is considered to be in the healthcare sector.

# **Definition of Terms**

**Organizational commitment:** In this study, organizational commitment referred to the extent to which staff involve themselves in activities within their organization [11]. This was also described as the level of participation and effort exerted by nursing staff in their organization [12].

**Nursing care:** In this study, nursing care referred to the nursing staff's rendered service to the patients [13].

**Perception:** In this study, perception referred to the point of view of the staff with regard to organizational commitment [14, 15]. It also pertained to how staff feel about their level of commitment [14, 16].

**Knowledge:** This term referred to the awareness of learned information with regard to the organizational commitment of the nursing staff [17]. This was also described as the insights that nursing staff possess about a particular topic of interest [18].

**Nursing staff:** In this study, this term referred to the nursing professionals who were currently working in a hospital and involved in the delivery of patient care [12].

#### **Literature Review and Framework**

### ■ Related Literature and Studies

This chapter reviews the current written literature

and published literary works on organizational commitment to hospital duties among nursing staff.

Several researchers and authors from various countries have defined organizational commitment differently. Experts in management described the term as an attitude which associated the member with the organization [19]. Pien Lee et al. (2011) defined the term as the extent to which a member was involved in a particular organization [20]. Organizational commitment was also referred to as the psychological attachment of staff members to their organization [21]. According to the aforementioned definitions, organizational commitment seemed to be characterized by: 1) involvement of the staff in the organization, 2) the effort they exerted in relation to the organization, and 3) a strong willingness or desire to stay in the organization Researchers also subdivided commitment into three dimensions: normative commitment, continuance commitment, and affective commitment. Affective commitment was described as the emotional attachment of a member to their organization, and their willingness to stay committed in order to achieve the goals of the organization [23]. On the other hand, normative commitment depicted a scenario whereby an individual felt their attachment could be attributed to their sense of duty and obligation to the organization [24], whereas continuance commitment denoted the level to which a particular member felt that they need to stay within the organization.

effect of organizational Generally, the commitment was mostly on the improvement of delivered care; however, other researchers also explored the relationship of organizational commitment in other aspects. For example, Hakami et al. (2020) assessed the relationship of job satisfaction with the organizational commitment of nurses in Saudi hospitals, with 199 participants in the study. It was revealed that there was a correlation between the two. Affective commitment (r=0.636), continuance commitment (r=0.654)and normative commitment (r=0.723) were significant, which meant that the greater the nurses' satisfaction with their job, the greater their level of organizational commitment.

Organizational commitment was also proved to have an influence on job performance. For instance, Loan (2020) surveyed 547 employees and found that organizational commitment had a positive influence on job performance and

job satisfaction, whereas job satisfaction only had a positive influence on job performance if the organizational commitment was treated with control. Following these results, it was then concluded that the success of an employee depended on the satisfaction they felt, and this could be achieved through the improvement of organizational commitment, which consequently increased job performance.

Berberoglu (2018) discussed the perception of healthcare employees in North Cyprus with regard to their organizational climate and its impact on their organizational commitment and performance. The findings showed that organizational climate was significantly correlated with commitment and performance. These findings suggested that if the climate scores were high, then the commitment of employees would be high as well. This meant that if an employee perceived the climate of the organization to be high, then they would be able to have a higher level of commitment. The study implicated that the organizational climate was an important factor in the health care system, which consequently affected the service rendered by the organization.

Organizational commitment was also proved to enhance the effectiveness of an organization. For example, Alrowwad et al. (2019) investigated the three types of organizational commitment in Jordan. It was revealed that normative and continuance commitment had a positive impact on organizational effectiveness, while there was no effect of affective commitment. In addition, the results revealed that the effect of commitment on effectiveness showed no significant difference in terms of gender, experience, age, and academic rank. With the results, the researcher suggested that managers should focus their attention on the commitment of nurses in their organizations.

In a separate study, conducted an evaluation of the professional competency of Iranian nurses and their organizational commitment [25]. The results revealed that the professional competency and the commitment of the nurses to the organization were both at moderate levels. A noteworthy result was also found in that there was no correlation between professional competencies and the commitment of the nurses to the organization. However, there was a correlation between job experience and marital status and the professional competency of the nurses. The results emphasized that the nurses were encouraged to develop more competencies

and more commitment to their organizations. Therefore, the study suggested that the administration of hospitals, especially managers in human resource departments, should formulate strategies to improve the commitment and competencies of their employees.

Cao et al. (2019) conducted a study in China with regard to the organizational commitment, calling, and work engagement of the nurses. The results revealed that the work engagement of the nurses was moderate, while their organizational commitment and calling were both found to be at a moderate to high level. Furthermore, their organizational commitment, calling, and work engagement correlated with each other, while commitment had a mediating role between the two. This study suggested that the nursing administrators must not only focus on interventions to increase the engagement of nurses, but also the aspects of their calling and commitment.

In Egypt, Mousa and Puhakka (2019) also explored organizational commitment, but in terms of how it was affected by the leadership of a physician [26]. A total of 360 respondents participated in the study, and it was revealed that leadership was highly associated with organizational inclusion. Moreover, the inclusion was positively associated with normative and continuance commitment. In addition, the presence of equality, respect and sameness in the health care organization correlated with the leaders being more responsible and committed. Therefore, the study suggested that training to enhance the emotional, normative and continuance aspects of the physicians must be implemented.

On the other hand, Asiri et al. (2016) measured the impact of leadership style and leaders' psychological empowerment on the organizational commitment of nurses [27]. It was revealed that nurses perceived that the nurse managers in their hospital did not exhibit transformational leadership behavior. Furthermore, the commitment of the nurses negatively correlated with the leadership style and psychological empowerment. However, their organizational commitment positively correlated with the transactional leadership style. The data also showed that the commitment of the nurses was associated with their nationality. With these findings, the study suggested that enhancing the leadership style and empowerment of the employees promoted the commitment of the

# Knowledge and perception of nursing staff regarding organizational commitment in northern borders government hospitals in Saudi Arabia

nurses, who were currently working in acute health care settings.

The study of Labrague et al. (2018) focused on Filipino nurses with regard to their organizational commitment and turnover intention. There were 200 nurses from rural hospitals that participated in the study, and the findings revealed that the nurses were moderately committed. It was also revealed that the age, gender, rank, education, and experience of the nurses correlated positively with their commitment, while the age of the nurses and their education correlated with their intention to leave their job. These results emphasized the importance of intervention programs to enhance the commitment of nurses and to decrease their turnover rates.

Al-Haroon and Al-Qahtani (2020) assessed the organizational commitment of nurses in Saudi Arabia, and found that there were different levels of commitment among those belonging to various age groups. Moreover, continuance commitment was reported to receive the most positive responses from the participants. Furthermore, most of the nurses showed a moderate level of commitment, and age and nationality were related to commitment, with age being the only predictor of the organizational commitment of nurses. The study indicated that the nursing management enhanced commitment by cultivating a sense of obligation among the nursing staff. The authors further suggested that management can ensure the achievement of this goal through the enactment of effective policies, and the retention of committed nursing staff. Therefore, nursing administrators should consider policies that enhance the recruitment and commitment of the nurses in their job.

Khalaf and Adam (2018) examined the relationship between organizational commitment and burnout of nurses in Cairo. The study involved 220 staff nurses, and it was revealed that nurses had a high level of organizational commitment. The majority of them also had a low level of burnout. Furthermore, organizational commitment was found to be correlated with nurse burnout, with the two having a direct impact on each other. The study recommended that organizational commitment and burnout must be addressed, and the work environment of nurses should be highlighted by imposing policies to keep nurses in the labor force.

Al-Yami, Galdas, and Watson's (2018) study results indicated that, in Saudi Arabia, nursing staff had greater organizational commitment levels [28]. The authors further indicated that leadership could provide the appropriate conditions to result in increased levels of organizational commitment. It was also indicated that, with affective commitment, nurses may be willing to stay in their organization, a factor which may help to improve employee retention rates. To achieve affective commitment, Aldawood (2017) suggested that managers of nursing staff should continuously interact with and motivate their staff [29]. The researcher added that this can be achieved by encouraging nurses to share their vision with the hospital management. The advantage of this approach, as identified by the author, was the promotion of a positive relationship between the nurse and their immediate senior, hence promoting an enabling working environment. Furthermore, the author discussed how nursing staff could take various measures to improve their continuance commitment levels. The measures proposed by the author include embracing teamwork projects, developing trust with fellow staff and management, and upholding a high standard of work ethics. This kind of commitment was likely to be in harmony with the Saudization policy, as it would encourage the hired Saudi nursing staff to remain within the organization, rather than seeking employment abroad.

# ■ Gap of the Study

Previous literature has not been addressed the effectiveness of care rendered by nursing staff and its relation to their organizational commitment. In addition, feedback from nursing staff regarding organizational commitment has not been evaluated in the past five years in the Northern Borders government hospitals of Saudi Arabia. Moreover, an assessment of the level of nurses' awareness of their commitment should be undertaken in order to fully understand future actions in the organization. Thus, a new study was conducted to gather information with regard to the level of organizational commitment of nurses in the specified region of Saudi Arabia, filling the gap in the literature.

## **■ Conceptual Framework**

The left, first box of the schema contained the profile of respondents, which was correlated with organizational commitment style and the effectiveness of nursing care. Furthermore, the arrow from the second box pointed to the findings and implications that would lead to the ultimate aim of the study, which was producing effective, positive nursing outcomes (Figure 1).

#### **Theoretical Framework**

The study was grounded by the Three-Component Model (TCM) by Meyer and Allen (1991) [30]. They created the model to aid researchers in the interpretation of other research, and to act as a basis or framework for future research. The model claimed that the organizational commitment of an individual consisted of three components: affective, continuance, and normative commitment. Affective commitment was defined as the positive feeling or emotion that an employee attached to their organization. Meyer and Allen (1991) described it as the "desire" to remain a part of the organization. Continuance commitment was described as the "need" of an employee to remain in the organization. This concerned the gains or losses of an employee while working in an organization. Normative commitment was described as the "obligation" of one's self to stay in the organization. This represented the highest commitment among the three, as it emphasized loyalty. These components can affect the retention of employees, their well-being, and their work performance. According to this model, low levels of affective, continuance, and normative commitment increased the possibility of a particular employee leaving their organization. This model was the basis of the study, since nursing staff, as part of a health care organization, were affected in the same way in their organizations. They may be affected by the three distinct characteristics of organizational

commitment, which led to several consequences, either positive or negative.

# Methodology

## ■ Research Design

This study utilized a quantitative, descriptive correlational design in determining the organizational commitment of nursing staff in Northern Borders government hospitals in Saudi Arabia. A quantitative data collection technique was used to determine the extent of nurses' organizational commitment. A descriptive design was employed, since the study gathered, analyzed and described the data to make conclusions about the organizational commitment of nursing staff. A correlation was also utilized to determine if there was a relationship between organizational commitment styles. Furthermore, a correlation was also utilized to determine the association between the applied organizational commitment style and the effectiveness of nursing care in Northern Borders government hospitals in Saudi Arabia.

# Sample of the Study

### Sampling Design

This study employed a convenience sampling method to select the participants of the study. This type of sampling design enabled the researcher to draw participants from a convenient pool of respondents in the eleven

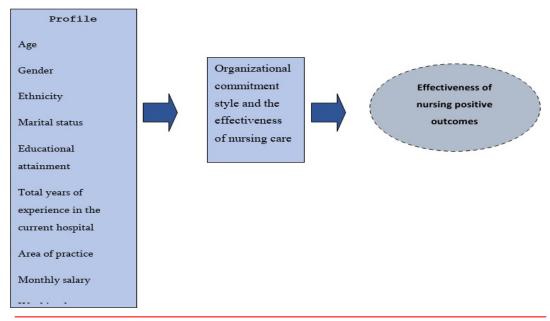


Figure 1: The Conceptual Framework of the study.

# Knowledge and perception of nursing staff regarding organizational commitment in northern borders government hospitals in Saudi Arabia

# **Review Article**

Northern Borders government hospitals of Saudi Arabia, who were readily available to participate. This type of sampling design was selected after considering the busy schedule of nursing staff – inviting those who were available to participate seemed to be the best method with which to choose the respondents.

#### ■ Sample Size

The researcher selected 487 nurses from the eleven Northern Borders government hospitals of Saudi Arabia as the participants of the study, which was equivalent to 40.75% of the total nurses who met the criteria (Table 1). This sample size was chosen in order to help the researcher to produce reliable result.

According to Steven K. Thompson Equation [31], the minimal recommended sample size of this study was 291 (Figure 2).

#### **■ Inclusion Criteria**

Any nurses and nurse leaders who worked in

any of the eleven Northern Borders government hospitals were welcome to participate, provided that they met the following criteria:

- Registered nurse or nurse leader.
- Possessed at least one year of work experience.
- Saudi nurses and expatriate nurses can participate.

#### **■ Exclusion Criteria**

Nurses and nurse leaders who did not meet the following criteria were excluded from participating in the study:

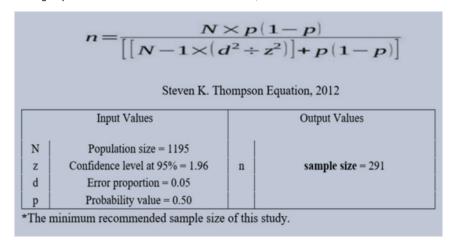
- Unregistered nurses.
- Less than one year of work experience
- Nursing staff on leave at the time of the study.

#### **■** Research Instrument

The study used a questionnaire, in which the

able 1: Bed Capacity, Total Nurses and Nurses meet the criteria in Northern Borders government hospitals in Saudi Arabia					
City	Government Hospital	Bed Capacity	Total Nurses	Total nurses meet the criteria	
	North Medical Tower 300		257	212	
	Maternity and Children Hospital	300	357	305	
A	Prince Abdulaziz Bin Musaad Hospital 110 153		153	132	
Arar	Mental Health Complex 100 66		35		
	Convalescence and Medical Rehabilitation Hospital	50	49	54	
	Cardiac Centre	50	77	54	
Turaif	Turaif General Hospital	200	282	253	
Rafha	Rafha Central Hospital	100	143	117	
Al Uwaygilah	Al Uwaygilah Hospital	50	64	44	
Shoabat Nusab	Shoabat Nusab General Hospital	50	40	32	
Jadidat Arar	Jadidat Arar Hospital	50	15	11	
Total	11 Hospitals	1360 Beds	1493 Nurses	1195 Nurses	

<sup>\*</sup>Regional Nursing Department in Northern Borders Health Affairs, 2020



**Figure 2:** Sample size calculation of this study.

first part concerned the demographic profile of the participants. The profile of the respondents included their age, sex, nationality, civil status, highest educational attainment, position, and number of years in service. To collect the other data required the second part, which included the TCM.

## **■ TCM Employee Commitment Survey**

The revised version of the TCM by Meyer, Allen, and Smith (1993) was used to determine the organizational commitment of the nursing staff [32]. Furthermore, this tool was used to determine the commitment types of staff to an organization. In addition, the survey had three scales: the Affective Commitment Scale (ACS), the Normative Commitment Scale (NCS), and the Continuance Commitment Scale (CCS). These scales were scored separately, allowing the researcher to identify the commitment profile of the nursing staff in the healthcare organization. The revised version included 6 items for the Affective Commitment Scale, 6 items for the Continuance Commitment Scale and 6 items for the Normative Commitment Scale. The nursing staff read each statement, and thereafter indicated how strongly they agreed or disagreed with the statement by selecting a number ranging from 1 (strongly disagree) to 7 (strongly agree). In order to achieve the scoring purpose, the responses of the nursing staff to all the items in a given scale were averaged to obtain the overall score of the three commitment scales. There were also some items with the letter "R" written after statements, which signified that the stronger the nursing staff's agreement with the statement, the lower their reflected commitment level. The use of "R" following statements indicated "reversekeying" of items.

# Scoring System

The Organisational Commitment Scale consisted of three sub-scales/dimensions (affective, continuous, and normative), each one measured by 6 items, including 4 reverse items, and using the 7-point Likert scale (from strongly disagree=1 to strongly agree=7). The level of range was calculated using the following formula:

Interval level=(highest value–lowest value) / (number of points)

Interval level=(7-1)/7=0.85, so the level is presented in Table 2 from very high to very low.

#### ■ Data Collection

After the researcher obtained the approval of

the Local Research Ethics Committee in the Northern Borders Health Affairs Directorate, and the necessary permission to conduct the study was obtained from the respective authorities in the university and hospitals, the researcher immediately started the data collection phase. Prior to the distribution of the questionnaire, the researcher conducted a preliminary introduction for respondents to clarify that the gathered data would be confidential, and an informed consent form would be provided for them to complete, signifying that they participated in the study through their own will, and that they clearly understood the purpose of the study. Subsequently, the questionnaires were distributed to the participants. The distribution was personally done by the researcher to ensure 100 percent retrieval of the questionnaire, and to assist the participants if they required clarification or had concerns regarding the items. The respondents were given ample time to fill in their answers in order to obtain clear and useful data from them. A reminder messages sent constantly to those who did not participate by their nursing administrations to encourage them to be a part of this study and to alleviate the number of responses. After that, the questionnaires were retrieved to proceed in analyzing the raw data.

## ■ Data Analysis

Regarding the statistical analysis of the study, the data was first tallied and tabulated before analysis commenced. Data was collected using Google Forms, and then analyzed using SPSS version 23.0. The study used both descriptive and inferential statistical tools, such as frequency count and percentage, to determine the demographic profile of the respondents. Weighted mean was computed in order to quantify the collective perception of the nursing staff concerning organizational commitment. Lastly, the Pearson r Coefficient of correlation was used to test relationships between the applied organizational commitment styles. In order to conduct the variance tests, the normality was inspected using the One-Sample Kolmogorov-

Table 2: Interval level of the seven points likert scale.				
Interval	Level			
1-1.85	Very low			
1.85-2.71	Low			
2.72-3.57	Below average			
3.58-4.43	Average			
4.44-5.29	Above average			
5.30-6.15	High			
6.16-7.00	Very high			

Knowledge and perception of nursing staff regarding organizational commitment in northern borders government hospitals in Saudi Arabia

Smirnov Test, so the non-parametric tests were approved, as a result. The Mann-Whitney test and Kruskal Wallis value were used to test the research hypothesis. The p values of less than 0.05 were considered statistically significant.

# Normality

The distribution of the data was an assumption that needed to be considered before conducting further analysis. As shown in Table 3, the One-Sample Kolmogorov–Smirnov test was conducted to test the normality, the organizational commitment styles were not normally distributed (p<0.001), the analysis with parametric data used tests such as T tests and analysis of variance (ANOVA), while the analysis with non-parametric data used tests such as the Mann Whitney U test and Kruskal Wallis test. As a result, the Mann Whitney test and Kruskal Wallis test were considered for the current study.

### **■ Ethical Considerations**

Before conducting the study, the researcher obtained the tool approval from authors (Appendix 3). Also, the researcher applied to Institutional Review Board (IRB) of the Local Research Ethics Committee in the Northern Borders Health Affairs Directorate to indicate that the study would clearly abide by the research ethics set by the Ministry of Health. The IRB approval for this study was obtained and numbered H-09-A-51. The researcher also emphasized the distribution of an informed consent form to each of the participants. The informed consent form clarified the queries of the participants with regard to how the data were treated. Apart from the treatment of data, it also indicated how the data were handled with respect to anonymity, assuring the participants that the data collected did not include their names, or any other means that would reveal their identity.

# **Results**

# **■ Demographic Profile**

As shown in Table 4, 487 nurses participated, 371 (76.2%) were female and 116 (23.8%) were male, more than a half aged between 30 years–39 years old, and 328 (67.4%) were non-Saudi; the majority were married and had obtained a bachelor's degree, and were working as staff nurses. Regarding years of experience, 190 (39.1%) had 6–10 years, and 158 (32.5%) had 5 or less years, with 138 (28.4%) having more than 10 years.

# ■ Description of Organisational Commitment Styles

The Organisational Commitment Scale consisted of three sub-scales/dimensions (affective, continuous, and normative), each one measured by 6 items, including 4 reverse items, and using a 7-point Likert scale (from strongly disagree=1 to strongly agree=7). The results were presented as follows.

**Affective commitment:** As shown in Table 5, the overall mean score was  $5.29 \pm 0.98$ , above average level, while item 3 achieved the highest mean  $(5.66\pm1.63)$ , with item 2 had the lowest mean  $(4.72\pm1.71)$ .

**Continuous commitment:** As shown in Table 5, the overall mean score was  $4.57\pm1.19$ , above average level, while item 1 achieved the highest mean  $(5.00\pm1.57)$ , and item 5 had the lowest mean  $(4.25\pm1.74)$ .

**Normative commitment:** As shown in Table 5, the overall mean score was  $4.87 \pm 1.13$ , above average level, while item 1 achieved the highest mean  $(5.75 \pm 1.65)$ , and item 3 had the lowest mean  $(4.26 \pm 1.76)$ .

In summary, participants had above average organisational commitment, with an advantage

Table 3: One sample Kolmogorov-Smirnov Test (N=487)					
	Affective	Continuous	Normative		
Kolmogorov-Smirnov Z	2.59**	1.98***	2.08***		
P value	0	0	0		

\*p<0.05, \*\*p<0.01, \*\*\*p<0.001

Table 4: Demographic factor	rs (N=487)	
Factor		N (%)
Gender	Male	116 (23.8%)
Gender	Female	371 (76.2%)
	24-29	169 (34.9%)
Age	30-39	258 (53.3%)
	40 and more	57 (11.8%)
N-4!	Saudi	159 (32.6%)
Nationality	Non Saudi	328 (67.4%)
	Single	171 (35.1%)
Marital statue	Married	304 (62.4%)
Maritai Statue	Divorced	9 (1.8%)
	Widower	3 (0.6%)
	Diploma	117 (24%)
Education	Bachelor	364 (74.7%)
	Master	6 (1.2%)
Position	Staff nurse	412 (84.6%)
Position	Leader nurse	75 (15.4%)
	5 or less	158 (32.5%)
Experience	6-10	190 (39.1%)
	More then 10	138 (28.4%)

#### Alshammari et al.

for affective commitment, followed by normative commitment, and then continuous commitment (Figure 3).

# ■ Correlation between Organisational Commitment Styles

As shown in Table 6, a Pearson correlation was conducted to test the association/relationship between the styles; there was statistically moderate correlation between styles, ranging between (r= 0.520, p<0.01) and (r= 0.395, p<0.01). These results indicated two main results: 1. The

	commitment styles (N=487).		
Item No.	M ± SD		
1	4.95 ± 1.63		
2	4.72 ± 1.71		
3	5.66 ± 1.63		
4	5.65 ± 1.68		
5	5.58 ± 1.72		
6	5.17 ± 1.51		
Affective	5.29 ± 0.98		
Affective	Above average		
1	5.00 ± 1.57		
2	4.84 ± 1.72		
3	4.42 ± 1.81		
4	4.36 ± 1.75		
5	4.25 ± 1.74		
6	4.53 ± 1.71		
- · ·	4.57 ± 1.19		
Continuous	Above average		
1	5.75 ± 1.65		
2	4.36 ± 1.71		
3	4.26 ± 1.76		
4	5.22 ± 1.42		
5	4.54 ± 1.70		
6	5.10 ± 1.58		
	4.87 ± 1.13		
Normative	Above average		

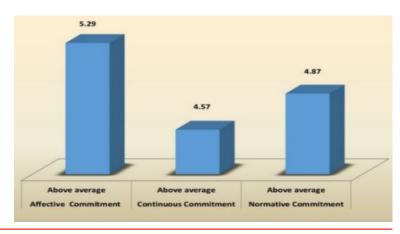


Figure 3: Mean score and level among commitment styles.

validation of the scale was approved; 2. People who obtained high values in one style could also obtained high values for other styles, so it was important to consider all styles.

# Distribution of Organisational Commitment Styles in Terms of Demographic Factors

As shown in Table 7, a Mann Whitney U test and Kruskal Wallis test were considered to present the distribution of organizational commitment styles in terms of demographic factors.

A Mann Whitney U test revealed significant differences in all styles in terms of gender (Affective; U=17878.50, p<0.01=0.006), (Continuous=17613.50, p<0.01=0.003), (Normative=18531.50, p<0.05=0.02), with an advantage for females. Females recorded a higher median score of affective commitment (MD=5.50) than males (MD=5.17), recorded a higher median score of continuous commitment (MD=4.83) than males (MD=4.25), and recorded a higher median score of normative commitment (MD=5.00) than males (MD=4.83).

A Mann Whitney U test revealed significant differences in all styles in terms of nationality (Affective; U = 22650.50, p<0.05 = 0.02), (Continuous = 23158.50, p<0.05 = 0.04), (Normative = 22700, p<0.05 = 0.02), with an advantage for non-Saudis. Non-Saudis recorded a higher median score of affective commitment (MD = 5.50) than Saudis (MD = 5.17), recorded a higher median score of continuous commitment (MD = 4.67) than Saudis (MD = 4.33), and recorded a higher median score of normative commitment (MD = 5.00) than Saudis (MD = 4.83).

The Kruskal Wallis test revealed significant differences in affective commitment only in terms of education (X2=6.29, p<0.05=0.04), with an advantage for those holding bachelor degrees. Bachelor-degree holders recorded a higher median score of affective commitment (MD=5.50), while diploma holders recorded a higher median score of affective commitment (MD=5.17) than master holders (MD=4.92).

The Kruskal Wallis test revealed significant differences in continuous commitment only in terms of experience (X2=7.91, p<0.05=0.02), with an advantage for those with more than 10 years of experience. Those with more than 10 years of experience recorded a higher median score of continuous commitment (MD=5.00), while those with 6 years–10 years recorded a higher median score of continuous commitment

(MD=4.67) than 5 years or less (MD=4.50).

To sum up, the research hypothesis was rejected for gender and nationality, with advantages for females, and non-Saudis was found significantly different in terms of organizational commitment. The same result was affective in terms of education, with advantages for bachelor-degree holders, and supported for continuous in terms of experience with an advantage for those possessing more than 10 years of experience.

# **DISCUSSION**

# Summary of Findings

- 1. There were 487 nurses who participated in the study, with 76.2% female and 23.8% male. More than half of the sample was between the ages of 30–39 years old. Non-Saudis numbered 328 (67.4%), the majority were married and had obtained a bachelor's degree, and were working as staff nurses. In terms of working experience, 190 (39.1%) had 6 years–10 years, and 158 (32.5%) had 5 or less years.
- 2. The nurses in Northern Borders government

<b>Table 6:</b> Correlation between organisational and commitment styles (N=487)					
Style	Affectice	Continuos	Normative		
Affectice	1	0	0		
Continuos	0.395**	1	0		
Normative	0.520**	0.426**	1		

\*p<0.05, \*\*p<0.01, \*\*\*p<0.001

- hospitals in Saudi Arabia had above average organizational commitment, with an advantage for affective commitment, followed by normative and then continuous commitment.
- 3. There was statistically moderate correlation between styles, ranging between (r= 0.520, p<0.01) and (r= 0.395, p<0.01).
- 4. There were significant differences in all styles in terms of gender, with an advantage for females.
- There were significant differences in all styles in terms of nationality, with an advantage for non-Saudis.
- There were significant differences in terms of education, with an advantage for bachelordegree holders.
- 7. There were significant differences in continuous organizational commitment only in terms of experience, with an advantage for those with more than 10 years of experience.

The aim of the study was to explore nurses' knowledge and perception of organizational commitment in Northern Borders government hospitals in Saudi Arabia. Participating in the study were 487 nurses, with 76.2% of the sample population being female. More than half of the sample was between the ages of 30 years—39 years old. Of the sample, 328 (67.4%) were non-Saudi

Factor		Affective		Continuous		Normative	
		Median	Statistic/p	Median	Statistic/p	Median	Statistic/p
Gender	Male	5.17	U=17878.50**/0.006	4.25	U=17613.50**/0.003	4.83	U=18531.50*/0.02
	Female	5.50		4.83		5.00	
Age	24-29	5.33		4.50	X <sup>2</sup> =2.58/0.23	4.83	X <sup>2</sup> =2.24/0.33
	30-39	5.50	X <sup>2</sup> =1.20/0.55	4.67		5.00	
	40 and more	5.33	1	5.00		5.00	
N - 4! 1!4	Saudi	5.17	U=22650.50*/0.02	4.33	U=23158.50*/0.04	4.83	U=22700 */0.02
Nationality	Non Saudi	5.50		4.67		5.00	
Marital statue	Single	5.33	X²=4.97/0.17	4.67	X <sup>2</sup> =4.10/0.25	4.83	X <sup>2</sup> =2.14/0.55
	Married	5.50		4.67		5.00	
	Divorced	5.00		4.33		4.50	
	Widower	5.33		5.17		5.00	
Education	Diploma	5.17	X <sup>2</sup> =6.29*/0.04	4.50	X <sup>2</sup> =2.35/0.31	4.83	X <sup>2</sup> =2.29/0.32
	Bachelor	5.50		4.67		5.00	
	Master	4.92		4.42		3.92	
Position	Staff nurse	5.33	U=15390.50/0.96	4.67	U=15117/0.77	5.00	U=14319.50/0.31
	Leader nurse	5.33		5.00		5.33	
Experience	5 or less	5.25	X <sup>2</sup> =2.27/0.29	4.50	X <sup>2</sup> =7.91*/0.02	4.83	X <sup>2</sup> =3.58/0.17
	6-10	5.50		4.67		5.00	
	More than 10	5.50		5.00		5.17	

nationals, the majority were married and had obtained a bachelor's degree, and were working as staff nurses. With regard to working experience, 39.1% had 6 years—10 years of experience, while 32.5% had career experience of 5 years or less.

The study also revealed that the nurses had above average organizational commitment, with an advantage for affective commitment (5.29 ± 0.98), followed by normative  $(4.57 \pm 1.19)$  and then continuous commitment (4.87 ± 1.13). This finding contrasted with the findings of the study of Al-Haroon and Al-Qahtani (2020), in which the nurses in Saudi Arabia had a moderate level of work commitment, and the continuous commitment subscale received the highest number of positive responses. This discrepancy in the results did not necessarily mean that the findings of the current study were inferior to those of Al-Haroon and Al-Qahtani. Although both studies were conducted in Saudi Arabia, the demographic and the setting were different. Another possible factor could be that non-Saudi nurses dominated the sample population in the current study, while in the previous study Saudi nurses formed the majority of its sample population. This indicated that the organizational commitment of nurses working in Saudi Arabia was at varying levels, and that there was no definite level of organizational commitment prevalent in the country. The current results also showed that the majority of nurses had reported negative responses towards organizational commitment in the affective domain, as all of the reverse questions resulted in the highest mean scores. In fact, the majority of the respondents reported that they did not feel a sense of belonging and attachment to their organization. This could probably be attributed to the demographics of the respondents in this study, with non-Saudi nurses dominating the sample population, logically explaining why most of them reported that they did not feel any sense of belonging to the hospital in which they were currently working. One major reason for that was probably the difference in cultural, professional, social and language backgrounds. Previous studies showed that foreign nurses experience difficulty in fulfilling the cultural needs of their patients [33, 34]. With this being the case, potentially as a daily occurrence, this was perhaps one of the contributing factors as to why nurses did not feel any sense of belonging. Another reason why nurses may have felt no attachment to their organization could have been the occurrence of a negative incident, such

as workplace bullying. In fact, a study showed that workplace bullying was more prevalent among expatriate nurses [35]. This was most likely the reason why nurses in this study did not feel attached to their organization. Despite that, the majority reported that they wanted to stay in their organization because of the necessity of the job, and due to having no other job options when they leave. Most likely, nurses in this case did not want to leave their organization because the healthcare institution paid them well. In fact, the previous study showed that salary was indeed one of the factors that determined the satisfaction and organizational commitment of the employees [36, 37]. Remuneration was one of the major reasons given by the majority of the nurses regarding why they would continue working in the hospital. Thus, it was important to note that the healthcare administration should ensure that nurses were committed in their work to avoid future undesirable hospital outcomes.

Another finding also revealed that there was statistically moderate correlation between styles, ranging between (r= 0.520, p<0.01) and (r= 0.395, p<0.01). These results indicated two main results: 1. They approved the validation of the scale; 2. People with high values for one style could also had high values for the other styles; therefore, it was important to consider all styles. It was also revealed that there were significant differences in all organizational commitment styles in terms of gender, with an advantage for females. It was further revealed that females recorded a higher median score of affective commitment (MD=5.50) than males (MD=5.17), recorded a higher median score of continuous commitment (MD=4.83) than males (MD=4.25), and recorded a higher median score of normative commitment (MD=5.00) than males (MD=4.83). This finding partially agreed with the result of Khalili and Asmawi (2012), which revealed that women had a higher level in the normative commitment subscale than men [38]. This result was also supported by the finding of Carman-Tobin (2011), who reported that females had higher organizational commitment than males. It has previously been shown that female nurses had more motivation in their job, and that they were more likely to be satisfied with their work [39, 40]. These findings could represent the explanation as to why female nurses had higher values in the continuous commitment scale. It was logical to say that nurses who were satisfied had more reasons to stay committed in their organization, because of

the positive benefits that they received from it. On the other hand, this finding was in contrast with the result of another previous study, in which males showed stronger organizational commitment [41]. Despite this discrepancy, there was not yet a clear and specific reason why organizational commitment differed in terms of gender, with high values in either males or females due to underlying factors which could affect the results of each study. Thus, it was suggested that the healthcare administration should determine, locally, those who were most likely to have higher organizational commitment, and those who have lower organizational commitment, and the reasons why they may feel that way. In that sense, they would be able to clearly lay out some interventions and policies to assist in increasing people's commitment at work.

Another noteworthy finding of the current study was that there were significant differences in all styles in terms of nationality, with an advantage for non-Saudi nurses. This meant that non-Saudi nurses had higher organizational commitment than Saudi nationals. This result corroborated the study of Al-Haroon and Al-Qahtani (2020), which found that Saudi nurses were less committed than expatriate nurses. Finance represented one of the reasons why expatriate nurses choose to stay and work in Saudi Arabia (Billah et al., 2020); non-Saudi nurses often decided to migrate because of the higher salary value available [42]. This was probably one of many factors to explain why non-Saudi nurses were more committed to their healthcare organization than Saudi nationals. It has also been commonly discussed that there was a shortage of Saudi nurses in Saudi Arabia [43]. This meant that the country had great reliance on expatriates, and the reason why Saudi nurses represented a smaller proportion of the healthcare sector may be explained by a previous study, in which the majority of respondents reported that they felt ashamed of having a nurse in the family, and only a few wanted to receive nursing care from Saudi nurses [44]. This negative image of nurses in Saudi Arabia affected local nurses in terms of their feeling pressured and dejected with regard to their chosen career, which could cause their lower commitment to the organization. Comparing the results of the previous studies, it made sense that non-Saudi nurses were more committed to their work compared to Saudi nationals. Thus, it was essential to note that the higher authorities in the healthcare industry of Saudi Arabia should

formulate programs encouraging Saudi nationals to pursue a nursing career, and to somehow alleviate the contemporary image of nurses in the country.

Further findings also revealed in this study that there were significant differences in affective commitment, but only in terms of education, with an advantage for bachelor-degree holders. This result contrasted with the previous finding that the level of organizational commitment increased as educational level increased (Khan & Jan, 2015), as it was found that nurses with a master's degree had higher organizational commitment [45]. However, this was not the case in this study. Most likely, the respondents in this study did not have sufficient time to pursue career development, including studying for master's and doctorate degrees, due to having a hectic schedule. The nursing profession represents a demanding job, and it requires the whole effort and time of a nurse to render quality service to patients. This is probably the main reason why nurses in this study with a bachelor's degree, who are not pursuing further career development, can fully commit themselves to their organization, as they can focus on providing quality service to patients.

There were also significant differences in continuous organizational commitment, but only in terms of experience, with an advantage for those with more than 10 years of experience. This finding supported the result of a previous study which reported that nurses with less than 5 years of career experience most likely wanted to leave the job, while workers with more career experience were more committed [37,46]. This can be explained by novice nurses not yet being accustomed to how their healthcare institution works, which most likely caused them to feel unstable, jumping from one healthcare institution to the next. However, those nurses who had more career experience working in a hospital most probably had an established strategy regarding how to effortlessly manage the job, thereby causing them to be more committed to their work, as they felt that they were in control of the situation. Nurses staying in the same organization have made the decision to commit themselves to their institution. This may be due to the fact that they were already accustomed to how the processes and the system work, due to working in the profession for more than 10 years. Moreover, a sense of loyalty to the organization may have developed after serving for more than 10 years. This could be one of the underlying factors why nurses with more experience have higher organizational commitment than those with lesser experience. On the contrary, Timalsina et al. (2018) found that nursing employees with more than 5 years of career experience had a lower tendency to have a high level of organizational commitment. Despite the difference, the fact of the situation is that there are underlying factors which could ultimately influence organizational commitment; thus, determining what these factors are is essential to be able to increase the organizational commitment of nursing pr.

### **Conclusion**

This study was conducted to determine the organizational commitment of nurses in Northern Borders government hospitals in Saudi Arabia. The results of the study revealed that nurses in Northern Borders government hospitals in Saudi Arabia had above average organizational commitment, and it was found that female nurses, non-Saudis, those with a bachelor's degree as their highest educational attainment, and those who have worked for more than 10 years have higher organizational commitment than the rest. If the healthcare institutions and nurses become more aware of their level of organizational commitment, then most likely they will be able to avoid future repercussions, especially at the risk of patients.

# **Limitations of the Study**

One of the limitations of the study was the sample size for the nursing staff. A convenience sample was used, which did not represent the entire nursing staff population in the Northern Borders government hospitals in Saudi Arabia. In addition, the questionnaire that was used required the participants to analyze their past actions in order to fill in the responses, which may have led to recall biases. These limitations were particularly expected, especially when the participants examined previous occasions.

# Recommendations

Based on the results of the study, it is therefore recommended that:

- The healthcare administration must ensure that nurses are committed to their work to avoid future undesirable hospital outcomes. They may conduct constant monitoring or survey in their own organization to identify nurses who need assistance to increase their organizational commitment.
- 2. Higher authorities in the healthcare industry of Saudi Arabia should also formulate programs advocating the necessity of the nursing profession to encourage Saudi nationals to pursue a nursing career, and to somehow alleviate the contemporary image of nursing in the country.
- 3. Future studies may be conducted using a large population, and in other parts of Saudi Arabia, in order to identify the prevailing level of organizational commitment of the nurses currently working. Identifying this may enable authorities to solve large-scale problems and crises in the healthcare industry ofessionals.

# **Appendix 1: Pilot Testing Report**

#### ■ Introduction

The purpose of this report is to pilot the study (to validate the scales used in this study).

# ■ Reliability and validity of the intention to leave the role

The internal consistency method was used to validate the scales. It was used to confirm that the designed items measure the same factor. It is also a function to test how highly these items are correlated, and how well they can predict each other. Cronbach's alpha is a method which is often used.

The relationships between each item and the total degree of the scale (style) were statistically significant; Pearson correlation results (r) ranged between (r=0.806, p<0.01) and (r=0.262, p<0.05). Cronbach's alpha was significant ( $\alpha$ >0.71), so it can be confirmed that the scale was reliable and appropriate for the study.

# Author Contribution

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

#### References

- Haroon AL, Ibraheem H, Qahtani M. Assessment of organizational commitment among nurses in a major public hospital in saudi arabia. J Multidiscip Healthc 13, 519 (2020).
- 2. Ministry of Health. Saudi Arabia Health Statistical Yearbook 2016. *Minist Health* (2016).
- Alrowwad A, Almajali D, Masa'deh R, et al. The role of organizational commitment in enhancing organizational effectiveness. 9133-9154 (2020).
- Dinc MS, Cemil K, Steta N. Nurses' job satisfaction as a mediator of the relationship between organizational commitment components and job performance. J Workplace Behav Health 33, 75-95 (2018).
- Hakami A, Almutairi H, Otaibi R, et al The Relationship between nurses job satisfaction and organizational commitment. Health Sci J 14, 1-5 (2020).
- Loan L. The influence of organizational commitment on employees' job performance: the mediating role of job satisfaction. *Manag Sci Lett 10*, 3307-3312 (2020).
- 7. Berberoglu A. Impact of organizational climate on organizational commitment and perceived organizational performance: empirical evidence from public hospitals. *BMC Health Services Research 18*, 1-9 (2018): 1-9.
- 8. Khalaf DA, Adam S. Relation between organizational commitment and job burnout among staff nurses. *Egypt J Health Care 9*, 349-364 (2018).
- Saudi Gazette Report. No renewal of labor contracts of non-saudis in public health sector for over 10 years. Saudi Gaz (2020).
- 10. Lamadah S, Sayed H. Challenges facing nursing profession in saudi arabia. *J Biol Agric Healthc 4*, 20-25 (2014).
- 11. Hosseini M, Talebiannia H. Correlation between organizational commitment and organizational climate of physical education teachers of schools of Zanjan. *Int J Sport Stud 5*, 181-185 (2015).
- Mowday R, Porter L, Steers R. Employeeorganization linkages: the psychology of commitment, absenteeism, and

Knowledge and perception of nursing staff regarding organizational commitment in northern borders government hospitals in Saudi Arabia

turnover. NY: Acad Press (2013).

- 13. Farinaz H, Dahinten V, MacPhee M. Effect of nursing care delivery models on registered nurse outcomes. *SAGE Open Nurs 5*, 2377960819869088 (2019).
- 14. Kenyon GN, Sen KC. The philosophy of quality. *Springer* 29-40 (2015).
- 15. Lewis A. The issue of perception: some educational implications. *Sabinet Afr J 30*, 272-288 (2001).
- Bunting SM. The concept of perception in selected nursing theories. *Nurs Sci Q* 1, 168-174 (1988).
- Hunt, DP. The concept of knowledge and how to measure it. J Intellect Cap 4, 100-113 (2003).
- Zouaria M, Dakhlib S. A multi-faceted analysis of knowledge management systems. *Procedia Comput Sci* 138, 646-654 (2018).
- 19. Gautam T, Dick R, Wagner U. Organizational identification and organizational commitment: distinct aspects of two related concepts. *Asian J Soc Psychol* 7, 301-315 (2004).
- 20. Pien LS, Chitpakdee B, Chontawan R. Factors predicting organizational commitment among nurses in state hospitals, malaysia. *Int Med J Malays 10*, 21-28 (2011).
- Labrague L, Petitteb D, Tsaras K, et al. Organizational commitment and turnover intention among ruralnurses in the philippines: implications for nursing management. *Int J Nurs. Sci 5*, 403-408 (2018).
- Carman, MB. Organizational commitment among licensed practical nurses: Exploring associations with empowerment, conflict, and trust. *Univ* Lowa 2011.
- 23. Cao Y, Liu J, Liu K, et al. The mediating role of organizational commitment between calling and work engagement of nurses: A cross-sectional study. *Int J Nurs Sci* 6, 309-314 (2019).
- 24. Jafaraghaie F, Ebadi A, Negarandeh R, et al. A professional commitment scale for clinical nurses: a study protoco. *Med J Islam Repub Iran 31*, 817-822 (2017).
- 25. Karami A, Farokhzadian J, Foroughameri G. Nurses' professional competency and organizational

- commitment: Is it important for human resource management?. *PloS One 12*, 1-15 (2017).
- 26. Mousa M, Puhakka V. Inspiring organizational commitment: responsible leadership and organizational inclusion in the egyptian health care sector. *J Manag Dev* (2019).
- 27. Aboshaiqah A. Strategies to address the nursing shortage in saudi arabia. *Int Nurs Rev 63*, 499-506 (2016).
- Yami M, Galdas P, Watson R. Leadership style and organisational commitment among nursing staff in saudi arabia. J Nurs Manag 26, 531-539 (2018).
- Aldawood A. Developing culturally appropriate leadership for nursing in saudi arabia. Diss Cardiff University (2017).
- Meyer J, Allen N. A three-component conceptualization of organizational commitment. *Hum Resour Manag Rev* 1, 61-89 (1991).
- 31. Thompson S. Sampling (3rd ed). *Wiley* (2012).
- Meyer JP, Allen NJ, Smith CA. Commitment to organizations and occupations: extension and test of a three-component model. J Appl Psychol 78, 538-551 (1993).
- 33. Momani M, Korashy H. Patient experience of nursing quality in a teaching hospital in saudi arabia. *Iran J Public Health 41*, 42 (2012).
- 34. Almutairi AF, McCarthy A, Gardner G. Understanding cultural competence in a multicultural nursing workforce: registered nurses' experience in saudi arabia. *J Transcult Nurs* 26, 16-23 (2015).
- 35. Surimi K, Omar M, Alahmary K, et al. Prevalence of workplace bullying and its associated factors at a multiregional saudi arabian hospital: a cross-sectional study. *Risk Manag Healthc Policy* 13, 1905 (2020).
- 36. Khan A, Khan A. Investigating the demographic impacts on the job satisfaction of district officers in the province of kpk, pakistan. *Int Res J Manag Bus Stud 1*, 068-075 (2011).
- 37. Khan A, Jan F. The study of organization commitment and job satisfaction among hospital nurses. *Glob J Manag Bus Res: Adm Manag 15*, 17-28 (2015).

- 38. Khalili A, Asmawi A. Appraising the impact of gender differences on organizational commitment: empirical evidence from a private sme in iran. *Int J Bus Manag 7*, 100-110 (2012).
- 39. Ayalew F, Kibwana S, Shawula S, et al. Understanding job satisfaction and motivation among nurses in public health facilities of Ethiopia: A cross-sectional study. *BMC Nurs* 18, 1-13 (2019).
- 40. Mutale W, Ayles H, Bond V, et al. Measuring health workers' motivation in rural health facilities: baseline results from three study districts in zambia. Hum Resour Health 11, 1-8 (2013).
- Ayhan A, Sarier Y, Uysal S. The Effect of Gender on Organizational Commitment of Teachers: A Meta Analytic Analysis. Educ Sci Theory Pract 11, 628-632 (2011).
- 42. Billah SMB, Saquib N, Zaghloul MS, et al. Unique expatriate factors associated with job dissatisfaction among nurses. *Int Nurs Rev* 68, 358-364 (2021).
- 43. Asiri SA, Rohrer WW, Surimi K, et al. The association of leadership styles and empowerment with nurses' organizational commitment in an acute health care setting: a cross-sectional study. *BMC Nurs 15*, 1-10 (2016).
- 44. Elmorshedy H, Alamrani A, Hassan M, et al. Contemporary public image of the nursing profession in saudi arabia. *BMC Nurs* 19, 1-8 (2020).
- 45. Timalsina R, Rai N, Chhantyal A, et al. Predictors of organizational commitment among university nursing faculty of kathmandu valley, nepal. *BMC Nursing* 17, 1-8 (2018).
- 46. Cherian S, Alkhatib AJ, Aggarwal M, et al. Relationship between organizational commitment and job satisfaction of nurses in Dubai hospital. *J Adv Soc Sci Humanit* 4, 36373-36400 (2018).