

# Saudi Nurses' Retention in a University Hospital – Cross Sectional Study

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## Abstract

**Background:** The rapid population growth in Saudi Arabia, projected to reach 39.5 million by 2030, have significantly pressured the healthcare system. Vision 2030's healthcare transformation underscores the urgent need for reforms in Saudi nursing, emphasizing retention and professional development to ensure high-quality care. **Purpose:** This study examines factors influencing Saudi nurses' retention within a university hospital, focusing on job satisfaction, leadership, and work environment. **Methods:** Using a descriptive cross-sectional design, data was collected from 82 Saudi nurses. **Results:** Retention factors included the type of patients cared for (50%), workplace relationships (42.7%), and the feeling of making a difference (37.8%). Time off and professional development opportunities (28%) were also significant. Conversely, limited career promotion (69.5%) and inadequate salary (67.1%) were key reasons for leaving, alongside stressful conditions (48.8%), unsafe staffing (48.8%), and lack of leadership support (35.4%). **Conclusions/Implications for Practice:** Adapting Saudi healthcare policies to align with cultural and religious values is more crucial than ever. Policies that integrate these aspects are vital for supporting the predominantly nurse female workforce and ensuring their long-term engagement and satisfaction.

**Keywords:** Nurse Retention, Job Satisfaction, Work Environment, Staff Turnover, Saudization Plan, Leadership.

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## INTRODUCTION

The rapid growth of population in Saudi Arabia is expected to reach 39.5 million in mid-2030, therefore the increase of prevalence of non-communicable diseases is evident. The Healthcare transformation, and specifically of the nursing profession under Vision 2030 is expected to have a profound impact on patient care and healthcare outcomes in Saudi Arabia (Health Sector Transformation Program v3, Vision 2030).

Maintaining a skilled and experienced nursing workforce is crucial given the expanding population and rising demand for high-quality healthcare services. Globally, the healthcare sector is currently facing high turnover rates and challenges in keeping staff nurses, which can have a detrimental effect on patient treatment, staff morale, and healthcare expenditures. (Alharthi *et al.*, 2021). Hence, the recruitment and retention of nurses has become widely recognized as a critical issue in healthcare delivery. (Alsadaan *et al.*, 2021). Nurse

retention has become a critical priority, driven by the escalating nursing shortage—over one million nurses are projected to be needed by 2030 all over the globe—a challenge exacerbated by the COVID-19 pandemic. Additionally, the financial burden of hiring and training new nurses is significant, with costs ranging from \$28,400 to \$51,700 per registered nurse (RN) in the USA. These expenses can quickly accumulate, resulting in annual costs of \$3.6 to \$6.5 million per hospital (American Nurses Association, 2023).

Saudi Arabia faces challenges in nurse retention, reflecting global trends. High turnover rates affect patient care, staff morale, and healthcare costs, a situation worsened by the COVID-19 pandemic. Key issues include job dissatisfaction, limited career growth, work stress, and insufficient leadership support. Existing research often combines Saudi and expatriate nurses, leaving gaps in understanding Saudi nurses' specific retention factors. In recent years, there has been several studies conducted on nurses' intention to leave their

current job (Albougami *et al.*, 2020, Alanazi *et al.*, 2023, Mariano *et al.*, 2022). Quality of life dimensions, such as physical and psychological health has a connection on nurses' intention to resign from their current workplaces (Albougami *et al.*, 2020). Job satisfaction and the intention to leave are important factors affecting nurses' enthusiasm and retaining. Incentives were identified to have positive impact on nurses' satisfaction levels (Alanazi *et al.*, 2023). Nurses aged below 29 years, tend to have higher intention to quit the job. Intention to leave were driven by alternative employment opportunities, ongoing obligations that may be incurrent, expectations from the family or friends and low commitment to workplace and colleagues. (Mariano *et al.*, 2022). Alsadaan *et al.*, (2021) identified several cultural issues for female nurses to leave their employment. Families are considered important component of society and framework of identity of individual nurses. Working in nursing is not supporting to maintain the good family relations. There was also a lack of professional growth and support for working mothers. (Alsadaan *et al.*, 2021). Alsubaie & Isouard (2019) identified in their review a transformational leadership style improving the retention of the nurses.

All above-mentioned studies included both local and foreign workforce. Due to plan of Saudization in the health care sector in Vision 2030 (Health Sector Transformation program; Delivery Plan V2030), there is a need to concentrate on local nurses' perceptions. This is why this study focuses on Saudi nurses' retention. Aligned with Vision 2030's Saudization goals, exploring the perceptions and needs of Saudi nurses is vital. Addressing these factors will help develop targeted strategies to support retention and achieve national healthcare objectives.

The purpose of this study is to investigate the factors influencing Saudi nurses' retention within a university hospital setting. Specifically, this study seeks to examine the relationship between job satisfaction, professional growth opportunities, leadership support, and work environment characteristics on nurses' decisions to remain in their current roles. By providing a comprehensive understanding of these factors, the study aims to offer evidence-based recommendations to enhance nurse retention and reduce unnecessary turnover. These findings are intended to support healthcare organizations in building a sustainable, skilled, and committed nursing workforce that aligns with the Vision 2030 goals for healthcare transformation.

## METHODS

### Aim & Objectives

This study explores the key factors influencing Saudi nurses' retention in university hospitals. It aims to understand the challenges and motivators affecting nurse retention.

The study examines how job satisfaction, professional growth opportunities, and workplace culture impact nurses' decisions to stay. Identifying these factors helps highlight organizational and environmental contributors to retention and engagement. The study design is descriptive cross-sectional design.

### Setting

The sample consisted of one university hospital's Saudi nurses ( $n=117$ ). The hospital is a 406-bed urban teaching institution and provides a range of medical specialties through outpatient services as well as in-patient care. The inclusion criteria are as follows: female or male registered nurses who provide direct or indirect patient care, employed as a nurse or clinical resource nurse and who voluntarily consent to participate. All participants were required to have access to email. Nurses received an invitation to participate in the study through an email containing an anonymous link to the questionnaire. The survey was hosted on Redcap and completing the survey was considered as providing informed consent. It was available for responses from August 26, 2024, to September 25, 2024.

### Measurement

The survey used in this study is based on Casey-Fink Nurse Retention (CFNR) Survey. It was originally developed in 2008 based on a comprehensive review for the literature related to nurse retention and job satisfaction. The CFNR Survey consists of five sections with 70 questions that provide qualitative and quantitative data from work environment, stress, job satisfaction, professional development and demographics. (Mulkey & Casey, 2021) The overall scale's Cronbach's alpha was 0.922, and reliability values for the subscales ranged from 0.767 to 0.939 (Buffington *et al.*, 2012).

Our survey consists of modified items of demographics, work environment and job satisfaction. The survey included 3 questions where you can choose 3 the most important values from a list of possible options. In addition, we modified the survey to be more culturally compatible.

Instrument's content validity was evaluated by clinical experts ( $n=10$ ) working in the hospital. To analyze the instrument's internal consistency and validity, content validity indexes (CVI) were computed for each item based on experts' reviews, and measured across items. The I-CVI ranged from 0.80 - 1.00, S-CVI/Ave 0.99 and S-CVI/UA 0.96 demonstrating good content validity levels across the items (Polit & Beck, 2017, Yusoff, 2019).

### Ethical Considerations

The study protocol was approved by the local institutional review board of Princess Nourah University (Log number: 24-0081). All of the participants provided informed consent before participation as per COPE-The

Committee on Publication Ethics (<http://publicationethics.org/>) guidelines. RedCap platform provided ID number for all respondents and researcher were not able to identify them.

### Data Analysis

The data was analysed in SPSS Statistics (Version 26, IBM Corporation). The results are presented as frequencies and percentages. The associations between background and factors related to retention or intention of quitting their job were tested with using the  $\chi^2$ -test. Observed associations were considered statistically significant if the two-tailed p-value fell below 0.05 (Polit & Beck, 2017).

## RESULTS

Overall response rate was 70.09 % ( $n = 82$ ). Most of the respondents were in the age group of 20 to 30 years old (95.1 %) and females (93.9 %). The most common work experience was from 1 to 10 years for 89 % of the respondents. Educational level for the respondents was high, 62.2 % had bachelor's degree and 37.8 % had master's degree in nursing. More than half of the respondents worked in the in-patient setting (51.2 %), majority only worked during the weekdays (45.1 %) and (52.4%) the majority did not have leadership exposure by working as a charge nurse or team leader before. (Table 1).

**Table 1: Sociodemographic (n = 82)**

Variable	n	%
<b>Age</b>		
20-30	78	95.1
31-40	0	0
41-50	4	4.9
>50	0	0
<b>Gender</b>		
Female	77	93.9
Male	4	4.9
<b>Years worked as a nurse</b>		
<1	1	1.2
1-5	36	43.9
6-10	37	45.1
Above 10	7	8.5
<b>Highest nursing degree received</b>		
Diploma	0	0
Bachelor's	51	62.2
Master's	31	37.8
<b>Practice setting</b>		
In-patient	42	51.2
Out-patient	32	39
Other	8	9.8
<b>Work schedule</b>		
Straight nights	1	1.2
Straight days	16	19.5
Only weekends	0	0
Only weekdays	37	45.1
Rotating days/nights	28	24.1
<b>Worked as a charge nurse/team leader?</b>		
Yes	39	47.6
No	43	52.4

### Factors Related to Work Environment

The most critical factors influencing Saudi nurses' decisions to remain in their current jobs were identified as the type of patients in their care (50.0%), having excellent colleagues (42.7%), and the feeling of making a difference for their patients (37.8%).

Additionally, time off and access to extended education opportunities, such as professional development programs, were equally important for 28.0% of the respondents. The support from nursing leadership was also considered significant, with 19.5% of nurses citing it as a reason for staying (Table 2).

**Table 2: Work Environment: reasons for keeping working in your unit**

Variable	n	%
Types of patients in my care	41	50
Excellent colleagues	35	42.7
Feeling of making a difference for patients	31	37.8
Time off	23	28
Access to extended education	23	28
Head nurse	16	19.5
Being given more autonomy	13	15.9
Promotion opportunities	10	12.2
Charge nurse / team leader	9	11

When examining the relationship between nurses' background factors and their intention to stay in their current roles, having excellent colleagues emerged as the second most important factor ( $p = 0.040$ ). Among the 82 respondents, 35 (42.7%) considered excellent colleagues a key motivator ( $p = 0.032$ ). Furthermore, 12 (14.6%) of the nurses had no previous experience as charge nurses, while 23 (28.0%) had experience as charge nurses or team leaders ( $p = 0.005$ ). Regarding age distribution, 33 (40.2%) of the respondents were aged between 20–30 years, while only 2 (2.4%) were aged between 40–50 years. In terms of work schedules, 11 (13.4%) worked only weekdays, 18 (22.0%) worked rotating day and night shifts, and 6 (7.3%) worked exclusively night shifts ( $p = 0.032$ ).

Further analysis of the relationship between nurses' age and their reasons for remaining in their current units revealed that a substantial proportion of nurses aged 20–30 years (73.1%) did not cite the lack of access to advanced educational opportunities—such as master's programs, conferences, and in-service training—as a reason for leaving. Regarding patient care, responses were nearly evenly divided: 52.6% of respondents indicated that caring for their patients was a contributing factor for staying, while 46.4% reported it was not a significant factor.

The analysis also showed that the type of patient's nurses cared for was evenly split as a determinant for staying in their current units. Specifically, 50% of respondents indicated that the type of patients influenced their decision to remain, while the other 50% did not consider it a contributing factor ( $p = 0.040$ ). Additionally, among the 31 respondents who identified making a difference for their patients as a primary reason for staying, 20 (64.5%) worked in inpatient departments, and 11 (35.5%) worked in outpatient departments ( $p = 0.034$ ).

Finally, promotion opportunities were not deemed a significant factor for retention. Among the 82 respondents, only 10 (12.2%) of nurses identified promotion opportunities as an important reason for staying in their current units.

### Factors Influencing Employee Turnover Decision

More than half of the respondents identified the lack of career promotion opportunities (69.5 %) and salary (67.1 %) the most important work environment related factors, what would make them leave the current organization. Almost half of the respondents expressed the high level of stress (48.8 %) and unsafe staffing levels (48.8 %) as indicator to quit their current job. Lack of support from the nursing leadership was mentioned for 35.4 % of the respondents (Table 3).

**Table 3: Work Environment: what would make you quit your current job?**

Variable	n	%
Lack of career promotion opportunities	57	69.5
Salary	55	67.1
High level of stress	40	48.8
Unsafe staffing levels	40	48.8
Lack of support from immediate nursing leadership	29	35.4
Working hours	27	32.9
Bullying	22	26.8
Lack of support from nursing colleagues	19	23.2
Feeling of inability to give the patient the level of care that you would expect	12	14.6

The analysis of the relationship between Saudi nurses' intentions to leave their current hospital positions and various background factors revealed significant associations. Among the 57 respondents who reported plans to quit their jobs due to a lack of career promotion opportunities, 23 (40.4%) were employed in the inpatient

department, while 28 (49.1%) worked in the outpatient department ( $p = 0.010$ ). Additionally, 33 respondents (40.2%) held a bachelor's degree, and 24 (29.3%) held a master's degree in nursing.

We also found that out of the 82 respondents 55 (67.1%) considered quitting their due to low salary and 27 (32.9%) did not consider this an enough reason to quit. Out of those 55 respondents that would quit their job due to low salary 28 (34.1%) worked in the inpatient setting and 21 (25.6%) worked in the outpatient setting, 27 (32.9%) have never worked as a charge nurse/team leader and 28 (34.1%) have worked as a charge nurse/team leader before, 35 (42.7%) had a bachelor' degree and 20 (24.4%) were master' holders.

Furthermore, and still statistically significant, 68 respondents (85.4%) did not view the inability to provide the desired level of patient care as a sufficient reason to quit their jobs ( $p = 0.040$ ). Additionally, 42 (51.2%) did not consider that high levels of stress were sufficient reason to quit their job. Moreover, 61 (74.4%) did not consider that not having the equipment and consumables to perform their tasks was enough reason to

quit their jobs and 60 respondents (73.2%) did not consider that bullying was sufficient reason to quit their job.

The four primary strategies that Saudi nurses believe organizations can implement to improve nurse retention in hospitals. The most frequently mentioned strategy was offering better salaries, with 84.1% of respondents highlighting it as a key factor. Following this, 59.8% of nurses emphasized the importance of more promotion opportunities and mentorship programs, 58.5% pointed to the need for greater support from the Chief Nursing Officer (CNO) and 53.7% emphasised the value of additional benefits such as housing and discounts (Table 4). Furthermore, over 40% of respondents identified access to extended education opportunities and recognition for their contributions as critical factors in encouraging retention (Table 4).

**Table 4: Work environment: What do you think the organization can do to keep nurses in the hospital**

Variable	n	%
Better salary offer	69	84.1
More promotion opportunities, mentorship	49	59.8
More support from your Chief Nursing Officer	48	58.5
Benefits (like housing, discounts etc)	44	53.7
Recognition and appreciation nurses for their contributions	39	47.6
More access to extended education	34	41.5
More support from your Director	32	39.0
More s support from your Head Nurse	29	35.4
More time off/annual leave	26	31.7
More support from your Manager	24	29.3
Being given more autonomy	20	24.4
Flexible working hours and shifts	20	24.4
More support from your charge nurse/team leader	17	20.7
Feeling of making a difference for the patients	14	17.1
Feeling of making a difference for the patients	14	17.1
Improved open/transparent communication	11	13.4
More teamwork with your nursing colleagues	10	12.2

Among the 69 respondents who identified better salaries as the most critical retention strategy, 34 (49.3%) worked only weekdays, 21 (30.4%) worked rotating day and night shifts, and 14 (20.3%) worked straight days ( $p = 0.031$ ). Regarding educational qualifications, 45 (54.9%) of these respondents held a bachelor's degree, and 24 (29.3%) held a master's degree.

Promotion opportunities and mentorship were considered the most effective strategies for retention by 49 respondents. Of these, 25 (51.0%) held bachelor's degrees, while 24 (49.0%) had master's qualifications ( $p = 0.011$ ).

A particularly statistically significant finding ( $p = 0.004$ ) was related to the provision of more time off or increased annual leave. Although only 26 out of 82 respondents (31.7%) identified this as a key retention strategy, most of these nurses, 22 (84.6%), held bachelor's degrees, and 4 (15.4%) had master's degrees.

#### Organizational Strategies for Nursing Retention

Furthermore, 60 (73.2 %) of the respondents preferred increased salary as the best way to have praise or recognition for a job well done, out of those 60 respondents 26 worked in the inpatient setting and 28 (34.1%) in the outpatient setting (Table 5). The second most voted form of recognition was public recognition for the whole hospital 14 (17.1%).

**Table 5: Work environment: How would you like to have praise or recognition for a job well done**

Variable	n	%
Bonus of increased salary	60	73.2
Public recognition for the whole hospital	14	17.1
Public recognition in your team	5	6.1
Rewards such as gift cards, time off and discounts.	2	2.4

## DISCUSSION

The majority of respondents in this study were aged 20 to 30 years (95.1%) and predominantly female (93.9%), consistent with evidence from the World Health Organization (2019), which identifies nursing as a predominantly female profession globally. Additionally, most participants had between 1 to 10 years of work experience (89%), reflecting a relatively young, early-to-mid-career nursing workforce.

This demographic contrasts with trends from both UK and US where the average of RN is approximately 44 to 47 years old respectively (Nursing & Midwifery Council, 2024 and American Nurses Association, Nurse Staffing Crisis 2023) indicating a significant aging RN workforce.

These differences highlight the unique demographic composition of the nursing workforce in Saudi Arabia compared to Western countries, with potential implications for workforce planning and policy development. The predominance of young, female nurses accentuates the need to address their specific needs, particularly in the context of Saudi Arabia's family-oriented society, where cultural and religious values play a central role in shaping personal and professional responsibilities. In this setting, women often balance dual responsibilities: fulfilling their professional obligations while managing family commitments. Policies designed to support this workforce must be culturally sensitive and align with local values, ensuring they are both effective and respectful of Saudi Arabia's unique societal context.

A potential approach for healthcare facilities could involve adopting policies such as implementing structured backfilling systems, collaborating with private staffing agencies, or introducing on-site childcare and sick-child care services as proposed by Nursing Workforce in Saudi Arabia report (2019). Such measures are essential to ensuring the retention, satisfaction, and effectiveness of nursing workforce.

Meanwhile, when analysing educational background in this study, most of the respondents had notably high qualifications, with 62.2% holding a bachelor's degree and 37.8% possessing a master's degree in nursing. Leadership exposure was notably limited, as 52.4% of participants reported no prior experience as a charge nurse or team leader. These findings align with the challenges highlighted in The Nursing Workforce in Saudi Arabia report (2019), which identified a lack of structured career advancement

pathways and mentorship opportunities among Saudi nurses.

This demographic and professional profiles suggest that while many nurses demonstrate academic motivation and the qualifications needed for leadership roles, they are not given opportunities to develop leadership skills. This may be attributed to lack of structured career ladders. Addressing these gaps will improve retention and support the broader objectives of Vision 2030.

### Factors Related to Work Environment

The type of patients in their care emerged as the most significant factor, with 50.0% of respondents citing it as a reason for staying. Positive workplace relationships also played a crucial role, with 42.7% of nurses emphasizing the importance of having excellent colleagues. Additionally, 37.8% of respondents highlighted the intrinsic reward of knowing that their work made a meaningful difference for their patients.

These findings align with the results of Hudays *et al.*, (2022) which highlights the importance of workplace relationships, organizational culture, and a sense of purpose as key determinants of job satisfaction among Saudi nurses.

When looking at positive workforce environment Alonazi *et al.*, (2013) found similar results where it was identified that family considerations and organizational factors significantly impact nurse turnover and retention. As well as Hudays *et al.*, (2023) and Alshmemri (2016) that further emphasized the critical role of positive interpersonal relationships and collaborative work environments in enhancing job satisfaction and retention. Thus, as demonstrated in all above findings enabling positive work relationships and promoting supportive workforce environments is vital for nurse retention.

### Factors Influencing Employee Turnover Decision

Most respondents in our study mentioned inadequate salary (67.1%) as the primary work environment factor influencing their decision to leave their current jobs. Additionally, nearly half identified high stress levels (48.8%) and insufficient staffing (48.8%) as significant contributors to their intent to quit. Furthermore, 35.4% of participants mentioned a lack of support from their immediate leadership as a factor driving their dissatisfaction. However, 73.2% of the respondents would not quit their job due to bullying.

Similar findings were discussed by Hudays *et al.*, (2023) highlighting significant disparities in job satisfaction based on salary. On the other hand, the high number of nurses in this study (73.2%) that would not leave their positions due to bullying may stem from several factors. A lack of leadership role models, limited experience in healthy work environments, and insufficient understanding of bullying.

Research published by Hashish *et al.*, (2024) found that perceived organizational justice and nurse managers' caring behaviours are inversely related to the prevalence of bullying behaviours among nurses. Additionally, a lack of exposure to healthy work environments can impede nurses' ability to recognize and address bullying. A study by Hutchinson (2013) emphasized that emotional intelligence and effective leadership are crucial in moderating workplace bullying. Similarly, a study by Clark *et al.*, (2020) underscores the importance of ongoing education and practice sessions to help frontline nurses effectively address workplace bullying.

On the other hand, the lack of necessary equipment and consumables to perform their tasks (74.4%) were not considered a strong factor for resignation. This finding may be attributed to the nature of their roles. A substantial proportion of nurses in the study held master's degrees, which could correlate with their placement in administrative or leadership positions which frequently means less involvement in direct patient-facing tasks. Similarly, a study by Haegdorens *et al.*, (2019) found a positive correlation between job satisfaction and the availability of resources.

### Organizational Strategies for Nursing Retention

The findings suggest that while only a minority of respondents (31.7%) identified increased time off or improved annual leave as a key retention strategy, most of these individuals, 22 (84.6%), held bachelor's degrees, and 4 (15.4%) held master's degrees. This highlights that adequate rest and work-life balance may have a more significant influence on the retention of younger nurses with bachelor's qualifications.

This finding contrasts with some international studies and reflects a potential mismatch between educational attainment and job expectations in Saudi Arabia. Particularly because nurses with lower qualifications reported in previous studies (Hudays 2023) experienced higher job satisfaction than those with higher educational qualifications (BSN, MSN, Ph.D.). Organizations need to consider tailored approaches to retention strategies, addressing both professional and personal needs to maintain a stable nursing workforce.

Regarding retention strategies, nurses were asked about their preferred forms of recognition and praise. Among the respondents, 60 (73.2%) indicated that an increased salary was the most valued form of

recognition for a job well done. This aligns with findings from Bradley *et al.*, (2021), who highlight the effectiveness of compensation strategies in fostering a loyal and committed nursing workforce.

### Limitations

This study included several limitations. Firstly, the survey had a limited target population (Grove *et al.*, 2020). The participants were selected from one tertiary hospital that covers only a very small population in Saudi Arabia. In addition, the survey were only in English, which may have caused a misinterpretation of the questions.

Regarding strengths, the response rate was high reaching 70 %, which proves that respondents were motivated to answer and engaged in improvement. Appropriate measures were taken to make the survey relevant to Saudi nurses and the culturally compatible (Polit *et al.*, 2017) before starting the data collection, that is, the instrument was modified and tested by Saudi nurses. The Content Validity Index (CVI) demonstrated good reliability and validity (Youssef, 2019).

### CONCLUSION

This study outlined the key factors influencing job retention including time off, professional development opportunities, positive workplace relationships, and supportive leadership.

The recommendations gathered from the analysis of the data are the importance of preventing workplace bullying through leadership development, fostering healthy work environments, and providing comprehensive education on recognizing and addressing bullying behaviours.

When considering the financial implications of nurse retention, it is estimated that nurse turnover costs in Saudi Arabia may be comparable to those in the United Kingdom. In this context, this issue is estimated to cost the Saudi healthcare system approximately SAR 2.6 billion annually (The Saudi Health Council, 2019). These findings emphasize the critical need for strategic retention initiatives to address this pressing challenge.

Furthermore, adapting Saudi healthcare policies to align with cultural and religious values is more crucial than ever. By bridging the gap between female nurses' family and professional commitments, organizations can promote equality in the workplace while respecting societal norms. Policies that integrate these aspects are vital for supporting the predominantly nurse female workforce and ensuring their long-term engagement and satisfaction.

Future research should investigate the long-term effects of these strategies on staff retention, patient care quality, and overall healthcare delivery. By implementing these evidence-based approaches,

healthcare organizations can align with Vision 2030 objectives, build a resilient nursing workforce, and improve healthcare outcomes in Saudi Arabia.

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**Conflicts of Interest** none declared

### Abbreviations

I-CVI (item-level content validity index)

S-CVI/Ave (scale-level content validity index based on the average method)

S-CVI/UA (scale-level content validity index based on the universal agreement method)

### REFERENCES

- Al-Aameri, AS. (2000) Job satisfaction and organizational commitment for nurses. *Saudi Medical Journal*. Jun;21(6):531-5. PMID: 11500699.
- Al-Ahmari, K. A., & Kattan, W. M. (2024). Cultivating Work Engagement and its Related Factors in Saudi Nurses: A Cross-Sectional Study. *The Open Nursing Journal*, 18(1). <https://doi.org/10.2174/0118744346312308240905052110>.
- Alanazi, R., Bahari, G., Alzahrani, Z. A., Alhaidary, A., Alharbi, K., Albagawi, B. S., & Alanazi, N. H. (2023). Exploring the Factors behind Nurses' Decision to Leave Clinical Practice: Revealing Causes for Leaving and Approaches for Enhanced Retention. *Healthcare*, 11(24), 3104. <https://doi.org/10.3390/healthcare11243104>
- Albougami AS, Almazan JU, Cruz JP, Alquwez N, Alamri MS, Adolfo CA, Roque MY. (2020). Factors affecting nurses' intention to leave their current jobs in Saudi Arabia. *International Journal of Health Sciences*; Vol. 14, Issue 3.
- Alharthi, A., Almalki, M. & Taha, Z. (2021). Job satisfaction and turnover intention among nurses in Saudi Arabia: A systematic review. *International Nursing Review*.68 (1), 52-63.
- Almalki, M. J., FitzGerald, G., & Clark, M. (2012). The relationship between quality of work life and turnover intention of primary health care nurses in Saudi Arabia. *BMC Health Services Research*, 12(1). <https://doi.org/10.1186/1472-6963-12-314>.
- Alsadaan, N., Jones, L. K., Kimpton, A., & DaCosta, C. (2021). Challenges Facing the Nursing Profession in Saudi Arabia: An Integrative Review. *Nursing Reports*, 11(2), 395–403. <https://doi.org/10.3390/nursrep11020038>.
- Alshmemri, M., Shahwan-Akl, L., & Maude, P. (2016). Job Satisfaction among Nurses in Saudi Arabia: A Review of the Literature. *Life Science Journal* 2016;13(9):78-83]. ISSN: 1097-8135 (Print) / ISSN: 2372-613X (Online). <http://www.lifesciencesite.com>. 8. doi:10.7537/marslsj130916.08.
- Alsubaie A. & Isouard G. (2019) Job Satisfaction and retention of Nursing Staff in Saudi Hospitals. Review. *Asia-Pasific Journal of Health Management*; 14(2): i215. doi: 10240883/apjhm.v14i2.215.
- American Association of Colleges of Nursing. (n.d.). Your nursing career: A look at the facts. Retrieved [December 28, 2024], from <https://www.aacnnursing.org/students/your-nursing-career-a-look-at-the-facts>
- American Association of Nurses (2023) How to Incorporate meaningful Nurse Recognition. Retrieved [December 23, 2024], from <https://www.nursingworld.org/content-hub/resources/nursing-leadership/nurse-recognition/>
- American Association of Nurses (2023) Nurse Retention Strategies: How To Combat Nurse Turnover. Retrieved [December 23, 2024], from [https://www.nursingworld.org/content-hub/resources/nursing-leadership/nurse-retention-strategies/?utm\\_source=chatgpt.com](https://www.nursingworld.org/content-hub/resources/nursing-leadership/nurse-retention-strategies/?utm_source=chatgpt.com)
- American Association of Nurses (2023) Nurse Staffing Crisis. Retrieved [December 25, 2024], from <https://www.nursingworld.org/practice-policy/nurse-staffing/nurse-staffing-crisis/>
- Bdair, Izzeddin. (2021). Job Satisfaction among Nurses in Saudi Arabia. *International Journal of Advances in Nursing Management*. 9. 204-210. 10.5958/2454-2652.2021.00046.
- Bradley, C. (2021). Utilizing Compensation Strategy to Build a Loyal and Engaged Workforce. *Nurse Leader*, 19(6), 565–570. <https://doi.org/10.1016/j.mnl.2021.07.006>
- Buffington, A., Zwink, J., Fink, R., DeVine, D., & Sanders, C. (2012). Factors Affecting Nurse Retention at an Academic Magnet® Hospital. *JONA the Journal of Nursing Administration*, 42(5), 273–281. <https://doi.org/10.1097/na.0b013e3182433812>.
- Clark, C. (2020) An upstanding approach to address bullying in nursing: Learn how to become more comfortable with speaking up. *American Nurse Journal*, September 2020 31-34. Volume 15, Number 9.
- Donley, J. (2021). The Impact of Work Environment on Job Satisfaction. *Nurse Leader*, 19(6), 585–589. <https://doi.org/10.1016/j.mnl.2021.08.009>.
- Fincham, J. E. (2008). Response Rates and Responsiveness for Surveys, Standards, and the Journal. *American Journal of Pharmaceutical Education*, 72(2), 43. <https://doi.org/10.5688/aj720243>.

- General Directorate for National Health Economics and Policy, Saudi Health Council. (2019). *The nursing workforce in Saudi Arabia: Challenges and opportunities*. Saudi Health Council.
- Grove, S. K., Burns, N., & Gray, J. R. (2020). *The practice of nursing research: Appraisal, synthesis, and generation of evidence* (9th ed.). Saunders Elsevier.
- Haegdorens, F., Van Bogaert, P., De Meester, K., & Monsieurs, K. G. (2019). The impact of nurse staffing levels and nurse's education on patient mortality in medical and surgical wards: an observational multicentre study. *BMC Health Services Research*, 19(1). <https://doi.org/10.1186/s12913-019-4688-7>.
- Hashish, E., Alsayed, S., Alnajjar, H. A., & Bakar, S. (2024). The relationship between organizational justice and bullying behaviours among nurses: the role of nurse managers' caring behaviours. *BMC Nursing*, 23(1). <https://doi.org/10.1186/s12912-024-02134-1>
- Health Sector Transformation Program – Delivery Plan 2020-2021 Vision 2030. Ministry of Health. Retrieved from <https://www.moh.gov.sa/en/Ministry/VisionAndGoals/NationalTransformationProgram/>.
- Health Sector Transformation Strategy v3.Vision 2030. Ministry of Health. Retrieved from <https://www.moh.gov.sa/en/Ministry/VisionAndGoals/NationalTransformationProgram/Pages/default.aspx>.
- Hudays, A., Gary, F., Voss, J. G., Zhang, A. Y., & Alghamdi, A. (2023). Utilizing the Social Determinants of Health Model to Explore Factors Affecting Nurses' Job Satisfaction in Saudi Arabian Hospitals: A Systematic Review. *Healthcare*, 11(17), 2394. <https://doi.org/10.3390/healthcare11172394>
- Hutchinson, M., & Hurley, J. (2012). Exploring leadership capability and emotional intelligence as moderators of workplace bullying. *Journal of Nursing Management*, 21(3), 553–562. <https://doi.org/10.1111/j.1365-2834.2012.01372.x>
- Jones C., Kim S., McCollum M., Tran A., (2023). Understanding Registered Nurse Turnover in The U.S.: New Insights for a Recurring Problem. Research Brief: June 2023. *Carolina Health Workforce Research Center Program on Health Workforce Research & Policy* Cecil G. Sheps Center for Health Services Research University of North Carolina at Chapel Hill <http://www.healthworkforce.unc.edu>.
- Mariano, M. E. M., Woodman, A., Zahrani, E. M. A., Naam, Y. a. A., Farrelly, R. R., Al-Jamea, L. H., Mutair, A. A., Al-Ansari, R. Y., Quiambao, J. V., & Balilla, J. (2022). Turnover-attachment motive of Saudi Arabia nursing workforce: A Cross-Sectional study. *Nursing Open*, 10(2), 988–997. <https://doi.org/10.1002/nop2.1366>
- Mulkey, D., & Casey, K. (2021). Factors That Influence the Retention of Graduate Nurses at a Safety Net Teaching Hospital. *Journal for Nurses in Professional Development*, 39(2), 70–79. <https://doi.org/10.1097/nnd.0000000000000804>.
- Noufa A. Alonazi, Maye A. Omar (2013) Factors affecting the retention of nurses. A survival analysis: *Saudi Medical Journal* Mar 2013, 34 (3) 288-294;
- Nursing & Midwifery Council (2024) *The NMC register UK mid-year update 1 April – 30 September 2024*. <https://www.nmc.org.uk/globalassets/sitedocument/s/data-reports/2024/september/the-nmc-register-uk-mid-year-update.pdf>
- Polit, D. F., & Beck, C. T. (2017). *Nursing Research: Generating and Assessing Evidence for Nursing Practice*. Wolters Kluwer.
- World Health Organization (2019) Delivered by women, led by men: A gender and equity analysis of the global health and social workforce. *Geneva: Human Resources for Health Observer Series No. 24*. Licence: CC BY-NC-SA 3.0 IGO.
- Yusoff, M. S. B. (2019). ABC of Content Validation and Content Validity Index Calculation. *Education in Medicine Journal*, 11(2), 49–54. <https://doi.org/10.21315/eimj2019.11.2.6>