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Turnover-attachment motive of Saudi Arabia nursing workforce: A Cross-Sectional study

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Abstract

Aim: This study aimed to explore the association of turnover-attachment motive with socio-demographic data among Saudi and foreign nurses in a hospital in the Eastern Province of Saudi Arabia.

Methods: A cross-sectional correlation study was conducted among $n = 180$ registered Saudi and foreign nurses working at a private tertiary hospital in the Eastern Province, Saudi Arabia. The turnover-attachment motive survey was used to evaluate the eight motivational forces. Data were analysed using JASP version 16 statistical software and Orange 3 version 3.26.0. The data were subjected to correlation analysis and multiple linear regression.

Results: Only 8% of participants were identified with a high intention to leave driven by alternative, behavioural, normative and constitutive forces. Younger healthcare workers tend to have higher intentions to quit the job; the 29–33 age group has a statistically significant negative effect, increasing intention to leave. It was found that those with 5–6 years of clinical experience at Dr. Sulaiman Al Habib Hospital, Al Khobar and no experience abroad had statistically significantly lower intention to leave.

Conclusion: This study presented the factors influencing nursing staff to stay or leave work in a hospital in the Eastern Province of Saudi Arabia that can be a basis for reviewing existing policies and procedures to improve nurses' working conditions.

KEYWORDS
intention to leave retention, nursing workforce, turnover-attachment motivation survey

1 | BACKGROUND

The nursing career is one of the most in-demand healthcare professions worldwide and is constantly evolving to fit the changing healthcare environment, with nursing roles becoming more complex and varied (Al-Dossary, 2018; Alluhidan et al., 2020; Alsufyani et al., 2020). They cover the provision of care in various hospitals and public institutions, health promotion and disease prevention, education and management, emergency preparedness and response, patient safety and comprehensive patient-centred

care. Similar to global trends, in Saudi Arabia, nurses make important contributions to the healthcare sector as healthcare providers. As a result, nursing has become one of the most demanded professions, making an important contribution to the Kingdom's health sector (Al-Dossary, 2018; Alluhidan et al., 2020; Alsufyani et al., 2020).

According to the latest data, there are currently 184,565 Registered Nurses working in Saudi Arabia, of whom 70,319 are Saudi nationals. Foreign nurses comprise about 70% of the total number of nurses and are mostly Indian, Filipino and Malaysian (Ministry of Health, 2018). In addition, the demand for nurses in Saudi Arabia is projected to double by 2030 due to an annual population growth rate of 2.52%. Thus, by 2030, about 150,000 nurses need to be hired. About 10,000 new nurses should graduate and work in Saudi Arabia annually to meet this need without resorting to recruitment from abroad. As the country's population continues to rise at a 2.52 percent yearly rate, the demand for nurses in Saudi Arabia is expected to be more than doubled by 2030 (Al-Dossary, 2018; Alluhidan et al., 2020; Alsufyani et al., 2020).

While nurses spend much time with patients and are directly responsible for their quality of care and safety, the nursing profession is multifaceted and often results in various obstacles to overcome during practice (Alharbi et al., 2019; Alsufyani et al., 2020). These challenges include staff shortages, socio-cultural issues in communicating with colleagues and patients, lack of specific standards, and a well-defined scope of nursing practice, all of which negatively affect the quality of care and prevent reaching the "gold standard" in nursing practice as per Saudi government (Aboshaiqah, 2016; Al-Dossary et al., 2016). Furthermore, simultaneously with the growth in demand for the nursing profession and the growth of the population, the turnover of nurses is also becoming too frequent, which has led researchers to study the causes and ways to prevent frequent staff turnover, thereby addressing staff shortages (Aboshaiqah, 2016; Al-Dossary et al., 2016; Alharbi et al., 2019). Thus, current literature data show that nurses' intention to leave is influenced by their quality of life, including physical and psychological health. Additional reasons for leaving specifically among international nurses were low salary, work-related stress, burnout, unfair and unequal remuneration offered to nurses, psychological factors associated with the employer (Albougami et al., 2020; Alreshidi et al., 2021; Batayneh et al., 2019). In addition, work hours, social stigma towards nurses, career advancement opportunities and the desire to continue higher education or improve skills to influence nurses' decision to leave the organization. It has also been argued that married nurses are more likely to quit their jobs. However, this socio-demographic variable is the subject of current research due to conflicting results in Saudi society. Thus, a recent study among nurses in Riyadh did not show a statistically significant relationship between the quality of a nurse's work and marital status, contrary to the general established nursing patterns (Alboliteeh et al., 2017; Bdair & Alshloul, 2021; Rodwell & Gulyas, 2013).

Retention and turnover affect health care in several ways, including cost-effectiveness and the need to provide quality care.

Previous studies suggest that effective communication, respect, competitive salary, benefits and empowerment are some of the main strategies to retain the nursing workforce (Halter et al., 2017; Tang & Hudson, 2019). While the statistical significance of nursing to health care in Saudi Arabia is well-established, similar to global trends, nursing workforce turnover has become the subject of ongoing research due to the problem's importance and the nursing turnover level. The Saudi Vision 2030 plays a key role in expanding the opportunities of the nursing profession across the country and addressing these challenges, thereby achieving the "golden standard" (Aljohani, 2020). This, however, requires the involvement of academic leaders and practitioners in creating strategies and operational plans that can support the growth of national nursing education. Finally, there is a need for nurse supervisors to effectively address the challenges associated with the shortage of nursing staff and carry out organizational improvements to increase job satisfaction and retention of both Saudi and foreign nurses (Alsadaan et al., 2021; Elsheikh et al., 2018).

Taking into consideration the data presented in this section, the growing demand for nursing staff and the challenges faced by representatives of this healthcare profession, the present study explores the association of turnover-attachment motive with socio-demographic data among Saudi and foreign nurses in a hospital in the Eastern Province of Saudi Arabia.

2 | METHODOLOGY

2.1 | Study design and sample

This study applied the purposive sampling technique, that is, to identify and select participants who are particularly knowledgeable or experienced and ready to convey experience and opinions related to the study aim (Creswell & Clark, 2017; Palinkas et al., 2015). Inclusion criteria were the local and international nursing staff. Non-nursing medical personnel was excluded. Hence, this cross-sectional correlation study involved $n = 180$ registered Saudi and foreign nurses working at Dr. Sulaiman Al Habib Hospital, Al Khobar, Saudi Arabia. Due to the COVID-19 pandemic, questionnaires were distributed electronically among participants through hospital departments' heads. The e-mail included the aim of the research, consent and a link to the questionnaire. The electronic signature was considered the consent of the participants.

2.2 | Data collection tools

The questionnaires included a cover letter explaining the purpose and procedures of the study and a survey. The survey consisted of two parts. The first part included questions about participants' socio-demographic data, affiliation, unit, duration of clinical experience in Saudi Arabia and abroad. The second part of the questionnaire included the turnover-attachment motive survey (TAMS). The

TAMS was developed and validated by Maertz Jr and Boyar (2012) and consisted of 80 items, divided into 18 subscales that evaluate eight motivational forces (Maertz Jr & Boyar, 2012).

1. *Affective forces* are the general sense of organization and being member in it, for example comfort or discomfort in the organization, which may motivate to stay or leave.
2. *Contractual forces* are organization's remuneration obligations, where alleged breaches of the contract by the organization may motivate to leave the job.
3. *Calculative forces*, where employees calculate their chances of achieving their career goals and values in the current organization.
4. *Alternative forces* are alternative employment opportunities that can psychologically push employees away from their current organizations, whether they are absolutely satisfied with that organization or not.
5. *Behavioural forces* reflect the behavioural and ongoing obligations, the perceived material and psychological costs that may be incurred in the event of leaving a particular organization.
6. *Normative forces* where employees often perceive expectations from family or friends either to stay in or leave their current job.
7. *Moral forces* are indicators of employee turnover that may indicate that leaving a job is indicative of weakness or fickleness of character, implying attachment; or changing jobs regularly is a virtue, implying a motivation to quit.
8. *Constituent forces* associated with workplace commitment components, where an employee may feel attached to or want to separate from various components (friends, colleagues) in the organization (Maertz Jr & Boyar, 2012).

Respondents indicated how much they agreed with each item on a seven-point intensity scale (from 1 = strongly disagree to 7 = strongly agree). The scale is reported to have sufficient initial reliability and data validity to be considered a comprehensive diagnostic survey. In addition, the internal consistency reliability above 0.80 as the main baseline psychometric standard is higher than any other (Maertz Jr & Boyar, 2012).

2.3 | Procedures & data collection

The study was approved by the Institutional Review Board of Prince Sultan Military College of Health Sciences (May 4, 2021, IRB-2021-NUR-048). All procedures followed the institutional research committee's ethical standards and the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. Before data collection, participants were informed about the research aim. Informed consent was obtained from all individual participants involved in the study. Participants were also informed that they had the right to refuse to participate and could withdraw from the study at any time without negative consequences for themselves.

2.4 | Data analysis

Microsoft Excel was used to encode the data by double entry and cross-checking. For demographic data, descriptive and frequency analyses were performed. All analyses were performed using JASP version 16 statistical software, which is supported by the University of Amsterdam and Orange 3 version 3.26.0. JASP software automatically identifies if the predictor is continuous or categorical. Given this, it is not needed to do dummy encoding as compared to doing the regression analysis in R or Python.

3 | RESULTS

The demographic data analysis (Table 1) showed that of $n = 180$ participants, $n = 166$ (92%) were non-Saudi residents. The age of the participants ranged from 19-55 years, with a predominance of 24–28-year-olds $n = 74$ (41.1%). The gender distribution showed that most participants were females $n = 169$ (94%). Of $n = 180$ participants, $n = 117$ (65%) were single. The majority, 64%, have a Bachelor's degree in nursing, while 30% have a diploma of 3-years of nursing course. Clinical experience analysis showed that $n = 102$ (57%) have 1–2 years of experience in Dr. Sulaiman Al Habib Hospital, 86% have experience in the KSA and its regions, while 46% of participants have no previous clinical experience outside KSA.

Further data visualization was aimed at evaluating the results of the TAMS questionnaire. Eight factors that can influence nurses' intentions to stay or change jobs based on the Model of Turnover and Attachment Motives (Maertz Jr & Boyar, 2012) were considered. Table 1 shows the distribution of mean scores obtained for these factors. The red shapes indicate participants with high intention to quit the job and how their average scores are distributed across the eight factors included in TAMS and their age group. For example, looking at Figure 1e-h, the mean scores of these factors, namely alternative, behavioural, normative and continuant forces, show a more horizontal distribution than the mean scores of other factors (Figure 1). While only 8% of participants were identified with a high intention to leave, these factors are considered vital in understanding the reasons behind this intention. In comparison, other factors—affective, contractual and calculated forces—proved informative in understanding individuals with a low intention to quit the job.

Furthermore, these categories were subdivided into three based on their source, namely: an organizational level, which comprises the affective, calculative, contractual, constituent and behavioural forces; contextual level composed of alternative and normative and individual level, which is considered the moral category Table 2. These results were further supported by the scoring charts shown in Figure 2 to be considered by the employer to reduce the number of employees leaving their jobs.

A regression analysis was performed to determine and understand how participants' demographics affect their intention to quit

TABLE 1 Socio-demographic data of study sample (*n* = 180)

Variable	Frequency	Percent
Nationality		
Non-Saudi	166	92.22
Saudi	14	7.78
Age		
19–23	12	6.67
24–28	74	41.11
29–33	57	31.67
34–38	34	18.89
40–45	2	1.11
50–55	1	0.56
Gender		
Female	169	93.89
Male	11	6.11
Marital status		
Divorced	4	2.22
Married	58	32.22
Single	117	65
Widowed	1	0.56
Educational attainment		
BSN	115	63.89
Ph.D.	1	0.56
Diploma of 3–6 months course	3	1.67
Diploma of 3-year course	54	30
Masters	7	3.889
Clinical experience at XX Hospital		
1–2 years	102	56.67
3–4 years	37	20.56
5–6 years	16	8.89
7–8 years	9	5
9–10 years	16	8.89
Clinical experience abroad		
1–2 years	39	21.67
3–4 years	24	13.33
5–6 years	14	7.78
7–8 years	9	5
No Experience	83	46.11
9–10 years	11	6.11

the job, as shown in Table 3. The null, in this case, is 0 since the model was tested without any explanatory power (Ho) compared to the alternative (H1). 0% indicates that the model explains none of the variability of the response data around its mean, and 100% indicates that the model explains all the variability of the response data around its mean. In this case, the *p*-value corresponding to <.001 means that the Ho is to be rejected in favour of the H1, which means that the model has a better fit than using only the mean of dep.

Variable. The 35.4% is consistent with the TAMS score variation explained by the identified predictor variables. It has been found that younger healthcare workers tend to have higher intentions to quit the job. In particular, the 29–33 age group has a statistically significant negative effect (β = −0.562, *p*-value = .020), which increases intention to leave. This may be because they have more career opportunities or want to work in different areas. On the other hand, the analysis showed that marital status has a statistically significant negative impact, especially widowhood (β = −2.505, *p*-value = .003; Table 4).

In terms of clinical experience, it was found that having 5–6 years of clinical experience at XXX Hospital (β = 0.465, *p*-value = .037) and no experience abroad (β = 0.339, *p*-value = .038) statistically significantly reduced the intention to leave. The foreign country in which healthcare workers received clinical experience was determined to be of negligible influence. In terms of educational attainment, it has been observed that highly educated people have higher chances of leaving, primarily because they have more career opportunities. Thus, a postgraduate diploma (β = −0.951, *p*-value = .027) statistically significantly increases the leaving intention Table 4.

4 | DISCUSSION

This research explored the association of turnover-attachment motive with socio-demographic data among Saudi and foreign nurses in a hospital in the Eastern Province of Saudi Arabia. The nursing workforce was mostly composed of female expatriates, indicating that the dependence on foreign nurses remains strong. This finding is consistent with the patterns reported for Saudi Arabia, where the foreign nursing workforce constitutes 63% of all registered nurses (Alghamdi et al., 2018).

Furthermore, most participants in this study (74%) were in the 24–28 age group, indicating that young employees effectively improve patient services through their innovative approach (Aljedaani, 2017). At the same time, most of them were single, which is considered a factor influencing the intention of nurses to leave their jobs and improve their careers (Albougami et al., 2020). In terms of education, the majority of respondents (64%) had a Bachelor's degree and mostly had 1–2 years (57%) of clinical experience, consistent with the study by Alshareef et al. (2020).

The TAMS data visualization results showed that only 8% of respondents had a strong intention to leave due to four identified factors influencing their decision to leave, that is alternative, behavioural, normative and constitutive forces. It has been suggested that this may be due to the relatively young age of respondents who seek career development, believing that alternative forces (such as new opportunities) and normative forces (such as support from family or friends) impact the decision to leave work on their initiative (Albougami et al., 2020). In contrast, career opportunities in the organization, the opportunity to learn new skills/knowledge and employment challenges probably explain nurses' intentions to stay with their current employers (Takase et al., 2016).
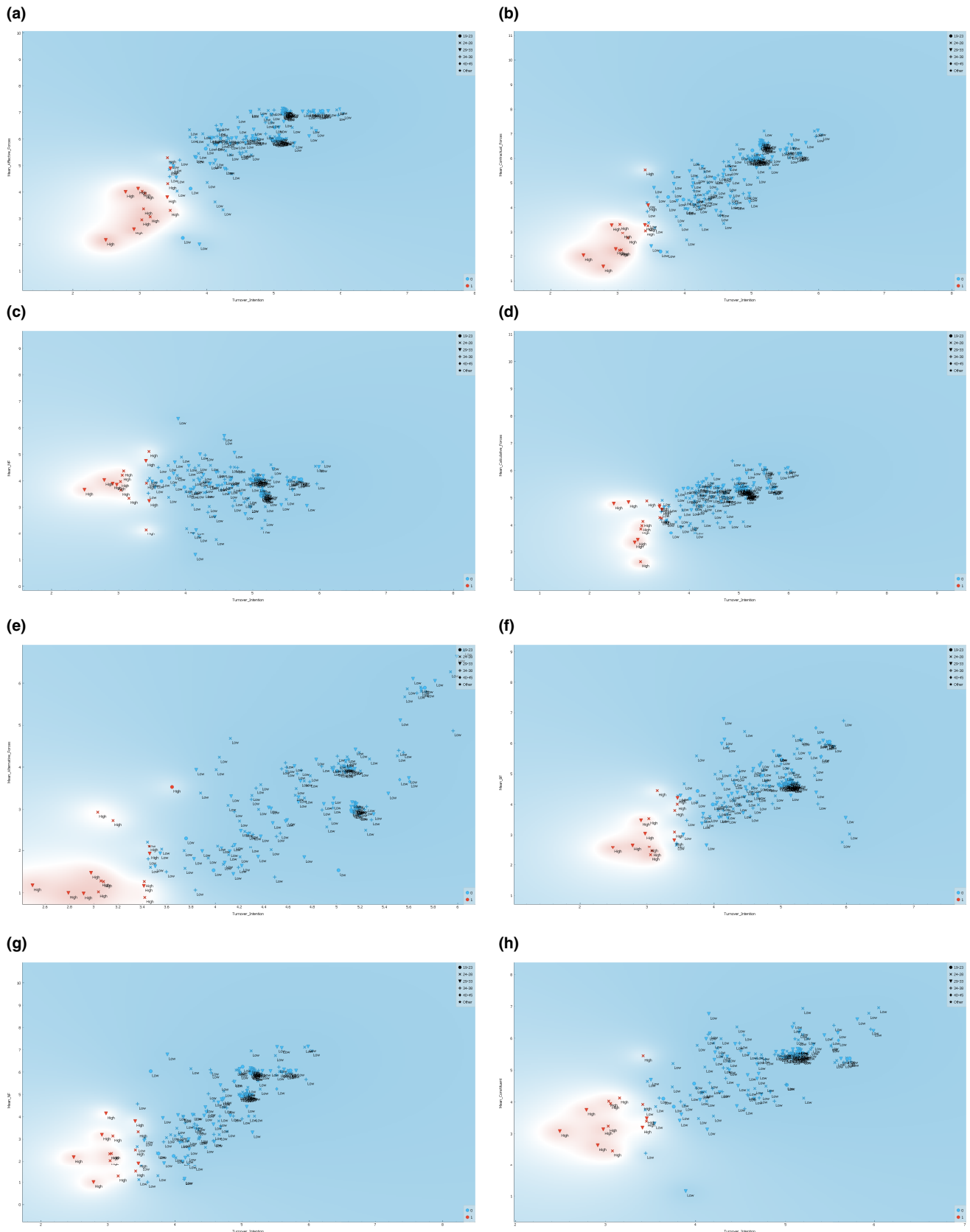
FIGURE 1 Turnover-attachment motive survey (TAMS) Visualization—(a) affective forces; (b) contractual forces; (c) moral forces; (d) calculative forces; (e) alternative forces; (f) Behavioural forces; (g) normative forces; (h) continuant forces

TABLE 2 TAMS rating scale

	Organizational level					Contextual level		Individual level
	Affective forces	Calculative forces	Contractual forces	Constituent forces	Behavioural forces	Alternative forces	Normative forces	Moral forces
Mean	5.927	5.079	5.207	5.030	4.571	3.181	4.444	3.803
S D	1.094	0.579	1.273	0.964	0.897	1.235	1.579	0.664
Minimum	2.000	2.667	1.571	1.167	2.356	1.000	1.000	1.225
Maximum	7.000	6.333	7.000	7.000	6.833	6.833	7.000	6.350

FIGURE 2 Score plots

Behavioural factors are the desire to keep working, which means that nurses may be committed to their job because they do meaningful work rather than move up the career path. This highlights the importance of studying this factor to prevent nurses from leaving the organization (Maertz Jr & Boyar, 2012; Van der Heijden et al., 2020). Reasons for leaving are often driven by a lack of support from managers (i.e. constituent forces). Knowledge from earlier research confirms the role of nurse supervisors in nurses' job satisfaction and their intention to remain in their current organization (Aljohani & Alomari, 2018; Çamveren et al., 2020; Falatah & Salem, 2018). With the implementation of knowledge and experience from previous research, nursing supervisors at XXX Hospital can focus on the gaps that need to be addressed by applying the best leadership styles in their practice to reduce the intention to leave (Aljohani & Alomari, 2018; Çamveren et al., 2020; Falatah & Salem, 2018).

In order to retain nurses, social support from nurse leaders, organizational commitment and autonomy are essential for the organization to reduce the turnover of nurses working in the Saudi healthcare system (Alghamdi et al., 2018; Alilyyani et al., 2022). An earlier study by Alharbi et al. (2020) showed that autonomy and control over the work environment indirectly influenced nurses' intention to leave due to emotional exhaustion. It was further reported that some of the main factors that nurses need in order to stay at

work include compatibility of employee goals and organization goals, direct participation, deep involvement of nurses in the work or task, participation in problem-solving, decision-making, training and continuous quality improvement (Bashehab, 2016; Irwin et al., 2018; Kerzman et al., 2020).

Nurses who were less motivated to leave the hospital were influenced by the other four forces: affective, contractual, moral and calculative. This study found that most respondents developed mutual relationships that benefit nurses, as the organization recognizes their work (contractual forces), leading to good feelings. It has been shown that employees' affective attachment to their organization is facilitated by this form of experience and their commitment to contribute further. The importance of the mutual contribution of nurses and organizations in minimizing the tendency of nurses to quit the job was also confirmed by Takase et al. (2016). Unlike other studies, work-related stress, burnout, low wages, low nurse-to-patient ratio, contract termination, discrimination and poor living conditions were not compelling reasons for leaving work (Ahmed et al., 2014; Batayneh et al., 2019; Kerzman et al., 2020).

Regression analysis showed that the intention to quit the job, especially among young and inexperienced nurses, can be explained by insufficient professional skills to cope with a difficult and stressful working environment. Nurses may find it difficult to work under stress due to their inexperience and immaturity (Al Rashoud et al., 2014; Bashehab, 2016; Irwin et al., 2018). According to a recent systematic review, newly qualified nurses are not adequately prepared for their job at the time of qualification, and even when they demonstrate their competence, they lack the self-confidence to work independently, leading to retention due to a lack of clinical training experience of medical workers (Hussain & Saleem, 2014). Moreover, marital status has a statistically significant negative effect. In contrast, the long-term experience was an important factor influencing nurses' motivation and job satisfaction (Bashehab, 2016; Irwin et al., 2018; Kerzman et al., 2020). Finally, the results of this study showed that highly educated participants have a strong intention to leave, which contrasts with other studies showing that more educated nurses performed better in their professional roles, had greater work autonomy and were more likely to stay (Al-Maabadi, 2020).

Beginning in 1992, the Royal Monarchy in Saudi Arabia decreed that all sectors of the workforce would be subject to the policy of Saudization, that is the process of filling positions with Saudi

TABLE 3 Regression analysis. Summary model of the intention to quit the job

Model summary				
Model	R	R^2	Adjusted R^2	RMSE
H_0	.000	0.000	0.000	0.727
H_1	.595	0.354	0.191	0.654
ANOVA				
Model	Sum of Squares	df	Mean Square	F	p
H_1	Regression	33.451	36	0.929	2.175	<.001
	Residual	61.097	143	0.427		
	Total	94.548	179			

Note. The intercept model is omitted as meaningful information cannot be displayed.

nationals (Aboshaiqah, 2016; Al-Dossary et al., 2016). As a result, there has been an increase in nursing schools and public hospitals being established. However, as shown in this study and confirmed by data from previous studies in the four decades since the decree, the number of Saudi nurses is still lower than the foreign workforce. The shortage of nurses in Saudi Arabia consists of many factors such as socio-cultural problems, lack of a clear and defined scope of nursing practice, policies and regulations and lack of family, community and employer support (Ahmed et al., 2014; Batayneh et al., 2019; Kerzman et al., 2020). In this study, participants with a high intention to leave were driven by alternative, behavioural, normative and constituent forces of the TAMS scale. Younger and single healthcare workers and those with higher education tended to have higher intentions to quit the job. Lastly, participants with longer experience at XXX Hospital have statistically significantly lower intention to leave. This shows that while the concept of Saudization is an ongoing process, it is not necessarily related to the participants' intention to leave or stay.

Over the past four decades, Saudi Arabia has witnessed rapid urbanization and changes in SES that have ultimately had a statistically significant impact on the health of Saudis, resulting in growth rates of non-communicable diseases (NCDs) such as cancer, cardiovascular disease (CVD) and diabetes (Al-Qahtani et al., 2019; Khoja et al., 2017). In this regard, NCDs kill more than 90,000 people annually in KSA and are responsible for 78% of all deaths (Al-Qahtani, 2019; Al-Raddadi et al., 2019). In addition to the existing health pattern, the COVID-19 pandemic has created a huge psychological and economic burden for the Saudi healthcare system and the world (Baskin & Bartlett, 2021; Moussa et al., 2021). Thus, some factors that can affect the intention of the nursing workforce can be associated with unhindered psychological distress, burnout and psychosomatic symptoms reported during the COVID-19 pandemic. This creates a basis for future studies looking into the pandemic's impact on nurses' intention to quit the job.

While over 90% of the sample represented the expatriate workforce, it was important to present the turnover and retention patterns in the nursing staff as such and not be limited to Saudi nurses. However, given the growing demand for nursing and Saudization, it is recommended that future studies include only

the sample from Saudi Arabia. A nursing staff planning strategy is required to address the shortage of nurses in Saudi Arabia and the problems reported in this study. While nursing is considered a valuable and honourable profession, the poor social image of the nursing profession continues to be a critical factor in Saudi society. Therefore, the efforts of policymakers should be aimed at ensuring the sustainability of the nursing profession. In addition, nursing staff should be provided with the best possible environment and support, clear expectations of the role of a nurse, recognition of their need for support and appropriate remuneration. Finally, the role of the nurse manager is critical to creating an enabling environment for nursing career practice and their growth. Saudi Arabia has entered a new era of progress and prosperity with the development of Vision 2030, one of which is to improve healthcare delivery. Hence, Vision 2030 can be a new opportunity for the healthcare system to create a work environment that allows full use of the nursing workforce, with a range of opportunities for innovation further strengthened by recruitment mechanisms, organizational structures and management approaches that stimulate positive change.

4.1 | Study limitations

The present study hypotheses were supported to explore and study the demographic factors influencing nurses' decision to leave or stay in their existing jobs in Saudi Arabia. However, further research is needed to identify multiple factors of nurses' turnover intentions (i.e. individual, health-related, social-work environment factors) and to examine the observed relationship between the variables using a longitudinal study that would generate scientific knowledge to design interventions capable of reducing nurses' turnover. In this study, younger age and marital status statistically significantly negatively impacted the intention to stay. This may be due to factors such as women's desire to have children, religion, faith and other related factors associated with this age group. Therefore, future research is recommended to study the causes that form an intention to quit the nursing practice. Hence, further research may use a mixed-method design that

TABLE 4 Regression coefficients[a]

Model	Unstandardized coefficients	Standard error	t	p
H₀				
(Intercept)	4.655	0.054	85.924	<.001
H₁				
(Intercept)	5.63	0.681	8.269	<.001
Nationality (Saudi)	0.363	0.206	1.763	.08
Age group (24–28)	−0.12	0.211	−0.569	.57
Age group (29–33)	−0.562	0.238	−2.361	.02
Age group (34–38)	−0.28	0.269	−1.04	.3
Age group (40–45)	0.653	0.573	1.138	.257
Age group (50–55)	0.364	0.982	0.371	.711
Gender (M)	0.184	0.295	0.625	.533
Marital status (M)	−0.394	0.39	−1.011	.314
Marital status (S)	−0.803	0.403	−1.991	.048
Marital status (W)	−2.505	0.835	−3.001	.003
Clinical experience (3–4 years)	0.012	0.151	0.079	.937
Clinical experience (5–6 years)	0.465	0.221	2.107	.037
Clinical experience (7–8 years)	0.122	0.299	0.408	.684
Clinical experience (9–10 years)	0.065	0.256	0.253	.8
Clinical experience KSA Emirates & Governorates (Yes)	0.037	0.164	0.227	.821
Clinical experience in foreign (3–4 years)	0.174	0.21	0.826	.41
Clinical experience in foreign (5–6 years)	0.241	0.245	0.983	.327
Clinical experience in foreign (7–8 years)	0.22	0.316	0.695	.488
Clinical experience in foreign (9–10 years)	−0.034	0.304	−0.11	.912
Clinical experience in foreign (No Experience)	0.339	0.162	2.089	.038
Foreign countries (Indonesia)	−0.882	0.903	−0.977	.33
Foreign countries (India)	−0.214	0.968	−0.221	.826
Foreign countries (Jordan)	−1.091	0.826	−1.321	.189
Foreign countries (KSA)	−0.167	0.525	−0.318	.751
Foreign countries (KSA/Philippines)	−0.835	0.868	−0.962	.338
Foreign countries (Not Applicable)	−0.369	0.526	−0.702	.484
Foreign countries (Philippines)	−0.662	0.517	−1.28	.203
Foreign countries (Sudan)	−0.342	0.915	−0.374	.709
Foreign countries (United Kingdom)	0.747	0.897	0.833	.406
Foreign countries (Libya/KSA)	−0.896	0.958	−0.935	.351
Foreign countries (Med/ER)	0.752	0.869	0.866	.388
Foreign countries (Philippines/Egypt)	−0.77	0.848	−0.908	.365
Educational Attainment (Ph.D.)	−0.137	1.06	−0.129	.898
Educational Attainment (Postgrad Diploma)	−0.951	0.427	−2.228	.027
Educational Attainment (Diploma)	0.119	0.122	0.977	.33
Educational Attainment (Masters)	−0.512	0.34	−1.508	.134

[a]Standardized coefficients were not computed as they can only be computed for continuous predictors.

allows qualitative and quantitative data integration, thus providing a broader, in-depth knowledge of the factors that influence the turnover intentions among healthcare workers. Moreover, concerns about the measurement challenges related to the TAMS scale, such as cultural adaptability and conceptual overlap, should be further examined. Finally, while this study was limited to one hospital, more research is required in the framework of trends in the nursing workforce in regions of the Kingdom.

5 | CONCLUSION

This study presents the factors influencing nursing staff to stay or leave work in a hospital in the Eastern Province of Saudi Arabia. This study's results can be a basis for reviewing existing policies and procedures to improve nurses' working conditions. In addition, cooperation between hospital management, educational institutions and the Ministry of Health will be especially important for properly regulating the nursing workforce retaining policies.

DATA AVAILABILITY STATEMENT

Data are available from the corresponding author upon reasonable request.

ETHICAL APPROVAL

The study was approved by the Institutional Review Board of the Prince Sultan Military College of Health Sciences (May 4, 2021, IRB-2021-NUR-048). All procedures followed the institutional research committee's ethical standards and the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

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