



Research Article

Factors Influencing Nurse Turnover in Selected Hospitals in Kabul, Afghanistan

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Abstract

Aim: This study aimed to investigate the factors influencing nurse turnover and identify the main problems faced by nurses in selected hospitals in Kabul, Afghanistan. **Materials and Methods:** A cross-sectional study was conducted and 550 nurses from seven government hospitals, in seven clusters of Kabul Province, were chosen randomly. Data were collected using a questionnaire that consisted of 40 items categorized into seven parts: Demographic characteristics, intention to leave nursing profession, job satisfaction, manager support, interaction with colleagues, salary, and work environment. Finally, SPSS 22 software was used to analyze the data. **Results:** Of the 550 nurses, 272 (49.5%) intended to leave their current profession and 295 (53.6%) were dissatisfied with their job. Further, 149 (27.1%) nurses were graduate or current students in medical college. There was a statistically significant negative correlation between intention to leave and job satisfaction ($r_s = -0.292$), constructive feedback from manager ($r_s = -0.138$), salary ($r_s = -0.067$), medical insurance ($r_s = -0.052$), and growth opportunity ($r_s = -0.042$), ($P < 0.05$). Their main problems were ventilation (54.9%), equipment, and sterilization at the workplace (81.3%), work pressure (90.7%), and doctors' misbehavior (34.4%). **Conclusion:** The study showed that about a half of the nurses were dissatisfied and intended to leave their current profession. Increases in salary and benefits, respect for nursing, reduction in work pressure, provision of health insurance, positive encouragement, and opportunities for advancement could improve nurse retention and job satisfaction.

Key words: Influencing factors, job satisfaction, nurse turnover

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Introduction

Nurses are the largest group of professionals in the global health-care system, with a total of 19.3 million nursing and midwifery personnel in the world.^[1,2] Nursing professionals also have the greatest contact with patients and perform many roles and responsibilities.^[3,4]

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One of the greatest problems within the nursing profession is the high turnover rate.^[5] Every year, about 15–20% of nursing personnel leave their profession throughout the world. Specifically, young and male nurses are typically more interested in leaving their profession,^[6,7] likewise, a study found that the nurses' intention to turnover was the most serious in their first job year, as 25%–50% of nurses decided to leave their first work.^[8]

In the United States, nursing workforce projections indicate that the registered nurse (RN) shortage may exceed 500,000 by 2025,^[9] and in 2008, the national RN vacancy rate in the United States was >8%. Moreover, estimated 30–50% of all new RNs either choose to change positions or leave nursing completely within the first 3 years of clinical practice.^[9]

In addition, the European Commission has estimated that there will be a shortage of 590,000 nurses by the year 2020,^[10-12] and 13% of nurses thought about leaving their

profession frequently in 10 European countries.^[13] Most of the countries within the Organization for Economic Cooperation and Development have reported nursing shortages as well.^[14] Moreover, in Iran, it is estimated that approximately 240,000 nurses need to be employed regularly to service the population, based on the country's size,^[15] meanwhile, nearly one-fifth of the nurses reported high levels of burnout. Furthermore, in China, 45% of nurses were dissatisfied with their current job, suggesting that high burnout and low job satisfaction were prominent problems for Chinese nurses, and improving work environments might be effective for improving nursing outcomes in Chinese hospitals.^[16]

Job satisfaction among RNs has long been recognized as a crucial indicator of nurses' performance, health care institutions' cost savings, and quality of patient care.^[16] As RNs' job satisfaction decreases, their likelihood of leaving their employers increases.^[16] Further, a research has shown that 24.9% of nurses' job satisfaction was low, 72.4% was moderate, and 2.7% was high.^[17] While nurse turnover rates increase, the need for nursing health services worldwide is increasing every day due to population growth, which may be attributed to an increase in birth rate in developing countries or in life expectancy in industrialized countries.^[4,18,19]

The previous studies have identified lower salaries, increasing burden of responsibility, rapid technological development, and the demands of providing complex care as factors influencing nurse turnover rates.^[20] Lack of satisfaction with promotions, lack of opportunities for professional development,^[20-22] imbalances of effort/reward, high psychological demands, and higher job strain^[20] have also been recognized as variables that impact nurses' decision to change professions. Importantly, evidence suggests that increasing nurse turnover results in decreased patient access, patient safety, and quality of care, leading to adverse patient outcomes in general.^[23-35]

Since there are no accurate information and statistics about the status of nurses and health-care personnel in Afghanistan, it is not possible to provide complete information regarding the nurses' situation in the country. In fact, no research has been conducted exploring the nurses' turnover rates in Afghanistan. Therefore, investigating the nurses' intention to leave their profession is considered important.

The objective of the present study was to investigate the factors influencing nurse turnover and identify the main problems faced by nursing staff in select hospitals in Kabul, Afghanistan. The findings of this study would help health-care policy-makers to understand the situation of nurse turnover and its related factors. It could also serve as a reference point for the government to identify and recognize the main problems faced by nursing staff and implement policies to increase their retention.

Materials and Methods

Study design and population

This descriptive, cross-sectional study conducted on 2019, included nurses working at seven official hospitals (including two teaching hospitals) located in seven sites of Kabul. These hospitals were selected randomly from seven clusters; the sample size was 600. A 95% confidence interval and $P = 0.05$ was used. Based on the random sampling formula, the sample was increased 1.5 times for cluster sampling and 550 nurses (response rate 91.6%) completed the questionnaire, and their responses were deemed acceptable for analysis.

Instrument and data collection

We used a questionnaire which included seven parts: Demographic characteristics, intention to leave nursing profession, job satisfaction, manager support, interaction with colleagues, salary, and work environment.

The collected data included information regarding the participants' gender, age, level of education, work experience, type of employment, and role in nursing. The questionnaire also included the measures of turnover (four items), job satisfaction (ten items), administrative support (five items), interaction with colleagues (five items), salary and benefits (five items), and work environment (five items).

The Job Descriptive Index (JDI)^[28] and a review of the existent literature were used to develop the questionnaire mentioned above.^[4,10,27] The items were answered on a 5-point Likert scale with response options ranging from 1 (strongly disagree) to 5 (strongly agree). The Cronbach's alpha of our questionnaire subscale ranged from 0.710 to 0.820, indicating good reliability for the entire questionnaire. The questionnaire was translated by a professional from English to Persian and was delivered and collected by the authors and trained nurses to all the nurses in selected hospitals and at each data collection site. The purpose of the study was explained to the participants before they completed the questionnaire.

Inclusion criteria

In this research, all employed nurses, male and female, who consented to participate in the study were included in the study.

Exclusion criteria

Nurses who did not consent to contribute to this study, those who were in training or vacations, nurses with severe health problems, and nurse students who were practicing in these hospitals were excluded from the study.

Ethical considerations

Approval from the ethics committee of the Kabul University of Medical Science (numbered 1731 and dated August 5,

2018) was obtained. Written permission was obtained from hospitals where the questionnaires were distributed, and verbal permission was also obtained from the nurses.

Data analysis

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) IBM v. 22. Descriptive statistics were employed to determine characteristics of the sample. Spearman correlation coefficients were calculated to analyze the relationship between the nurses' intention to leave their profession with factors such as job satisfaction, salary, growth opportunity, medical insurance, and constructive feedback from the manager. The Kruskal–Wallis test was carried out on the demographic characteristics in relation to the nurses' intention to leave, and a Chi-square test calculated the relationship of environment-related problems.

Results

Participant characteristics

Of the total 600 distributed questionnaires, 550 were returned, yielding a response rate of 91.6%. All items on the demographic profile were completed. Of the 550 participants, 260 (47.3%) were male and 290 (52.7%) were female. Respondents were categorized into five age groups; 170 participants were 20–26 years (30.9%), 105

were 27–30 years (19.1%), 70 were 31–39 years (12.7%), 123 were 40–49 years (22.4%), and 82 participants were above 50 years of age or older (14.9%). The vast majority of respondents – 453 of 550 (82.4%) had a diploma degree, 45 had a bachelor's degree (8.2%), and 51 were qualified below a diploma (9.3%). Around half of the respondents, that is, 320 (58.2%) had work experience of 10 years or less in hospitals. The highest proportion of respondents were employed officially (508, 92.4%). Further, 508 were staff nurses (92.4%), the details are presented in Table 1.

Nurses' intention to leave their profession

This study showed that 272 out of 550 nurses (49.5%) intended to leave their current profession, and 57 were undecided and might leave in the future (10.4%). Of the 550 nurses, 102 (18.5%) had decided to change their current hospitals, and 149 (27.1%) were graduates or current medical students, which may increase their level of intention to leave in the future. The details are presented in Table 2.

Nurses' demographic characteristics and intention to leave

A Kruskal–Wallis H test showed that there was a statistically significant difference in the intention to leave score between age groups (Chi-square (4) = 62.379, $P < 0.001$)

Moreover, there was a statistically significant difference between intention to leave and education level (Chi-square (2) = 7.670, $P = 0.022$). There was also a statistically significant difference between the intention to leave and work experience (Chi-square (4) = 35.592, $P < 0.001$)

The margin of statistical significance was the difference between male and female (Chi-square (1) = 3.318, $P = 0.069$) and there was a slight difference among them. The details are presented in Table 3.

Influencing factors on nurses' intention to leave their profession

A Spearman's rank-order correlation was run to determine the relationship between job satisfaction, salary, medical

Table 1: Demographic characteristics of participants ($n=550$)

Demographic characteristics	Variables	Number	Percent
Gender	Male	260	47.3
	Female	290	52.7
Age (years)	20–26	170	30.9
	27–30	105	19.1
	31–39	70	12.7
	40–49	123	22.4
	More than 50	82	14.9
Education level	Bachelor or above	45	8.2
	Diploma	453	82.4
	Under diploma	51	9.3
Work experience	<1 year	18	3.3
	1–2 years	102	18.5
	3–5 years	119	21.6
	5–10 years	81	14.7
	More than 10 years	230	41.8
Type of employment	Official	508	92.4
	Contractual	41	7.5
	Other	1	0.2
Duty	Training	27	4.9
	Financial	5	0.9
	Official	10	1.8
	Services	508	92.4

Table 2: Nurses intending to leave the profession, change hospitals

Questions (items)	Options (number) (percent)
How strong is your desire to leave your job?	Very weak or weak (221) (40.2)
	Undecided (57) (10.4)
	Strong or very strong (272) (49.5)
How long would you like to continue working in this hospital?	For a long time (411) (74.7)
	Undecided (37) (6.7)
	For a short time (102) (18.5)
Are you a student or graduate of medical school?	I am currently a student (63) (11.5)
	I have graduated (86) (15.6)
	I have not decided (286) (52.0)
	I do not want to study (115) (20.9)

insurance, growth opportunity, constructive feedback from manager, and the nurses' intention to leave their careers. Job satisfaction was more negatively related to nurses' intention to leave ($r_s(548) = -0.292, P < 0.001$) than to salary ($r_s(548) = -0.67, P = 0.118$), medical insurance ($r_s(548) = -0.052, P = 0.226$), growth opportunity ($r_s(548) = -0.042, P = 0.326$), and constructive feedback from manager ($r_s(548) = -0.138, P < 0.001$). The details are presented in Table 4.

Factors influencing nurse turnover

The most common factors influencing nurse turnover were medical insurance, work pressure, lack of opportunities for professional development, low salary and benefits, resource inadequacy, lack of praise and recognition for achievements, lack of involvement in decision-making related to their units, job stress, lack of job security, and doctor's misconduct.

Overall, the top 10 factors that influenced respondent's intentions to stay in their positions were capacity building, performance, balanced work, involvement in work schedule, doctors' respect for nursing, increased salary, appropriate equipment, medical insurance, encouragement, and involvement in decision-making.

Table 3: Kruskal–Wallis test for comparison of intention to leave

Characteristics	Variable	N	Mean rank	P-value
Gender	Male	260	287.25	0.069
	Female	290	264.96	
Ages	20–26	170	297.04	<0.001
	27–30	105	325.49	
	31–39	70	325.07	
	40–49	123	223.15	
	More than 50	82	203.05	
Educational degree	Bachelor or above	45	315	0.022
	Diploma	453	275.61	
	Under diploma	52	234.25	
Work experience	<1 year	18	313.33	<0.001
	1–2 years	102	289.03	
	3–5 years	119	324.16	
	5–10 years	81	293.65	
	More than 10 years	230	234.97	

Table 4: Correlation between influencing factors and nurses' intention to leave (r)

Variable	R	P-value
Job satisfaction	-0.292	0.01*
Salary and benefit	-0.67	0.16
Growth opportunity	-0.042	0.32
Medical insurance	-0.052	0.22
Constructive feedback from the manager	-0.138	0.001*

Correlating intention to leave scores with demographic factors revealed that work experience, education level, and age were statistically significantly correlated to the nurses' intention of leaving ($P < 0.01$). There were no specific gender-related differences and intention to leave. Work experience was a significant factor affecting intention to leave: Nurses who had more than 10 years of work experience were less likely to leave than those who had <10 years' experience. Further, those who were <30 years old were more likely to leave than those who were older than 30 years old. With regard to education levels, those who had diplomas or did not have one yet were more inclined to leave than those with higher credentials, but intention to leave was markedly higher at the diploma level.

Nurses' main problems at the workplace

The nurses' main problems at the workplace included lack of equipment, non-conformity to sterilization, long work hours, lack of adequate lighting, lack of ventilation in the workplace, and doctors' disrespect of nurses. The details are presented in Table 5.

Discussion

This study examined the current situation, intention to leave, and the main problems of nursing staff in the Kabul Province. The study included 550 nurses from seven hospitals. Findings showed that almost half of the nurses 272 (49.5%) intended to leave their current profession, and 295 (53.6%) were dissatisfied with their job. Of the total number of participants, 149 (27.1%) were in medical school (MD), thus their level of intention to leave could increase in the future.

Spearman's correlation analysis in Table 4 showed that intention to leave was negatively related to job satisfaction, salary, growth opportunity, medical insurance, and

Table 5: Chi-square test for comparison of main environmental problems

Nurses environmental problems		n (%)	Chi-square	P
Ventilation in the workplace	Yes	248 (45.1)	5.302	0.021
	No	302 (54.9)		
Adequacy of materials and tools	Adequate	103 (18.7)	215.156	<0.001
	Inadequate	447 (81.3)		
Enough light at the workplace	Yes	308 (56)	7.920	<0.001
	No	242 (44)		
Sanitary work environment	Yes	213 (38.7)	27.956	<0.001
	No	337 (61.3)		
Lack of work pressure	Yes	51 (9.3)	364.916	<0.001
	No	499 (90.7)		
Doctors respect for nurses	Yes	361 (65.6)		
	No	189 (34.4)		

constructive feedback from the manager. Lack of these factors was the main cause of the nurses' intention to leave. The Kruskal–Wallis test results in Table 3 showed that intention to leave was significantly related to age, work experience, and educational level. However, gender-related differences were slight. In Table 5, the main problems reported by nurses included lack of ventilation, inadequate equipment, non-conformity to sterilization at the workplace, work pressure, and doctor's misbehavior.

In this study, the proportion of nurses intending to leave their profession was higher than that reported in a study conducted in 2010,^[17] in the USA,^[9] and the 2014 study conducted by Li-Feng Zhang and colleagues in China.^[27] This may be due to differences in job satisfaction, availability of sufficient equipment and facilities, and the importance of health-care managers as nurses in these studies. Further, personnel may have had higher salaries and more benefits compared to the nurses in our sample and those working in developing countries.

The intention to leave rate was low compared to the rates reported in the study by Hongying and colleagues in the Jiangsu Province, in China,^[30] and the study in Amman.^[31] This might be because hospital nurses in Afghanistan are not likely to conceal their real intentions and concerns due to a fear of being threatened by managers. However, participants were assured of anonymity and informed that the information would be used only for the purpose of scientific research. Furthermore, the hospitals' permission had been procured. Nonetheless, some participants might not have reported honestly due to the dictatorial system prevalent in Afghan hospital departments. In addition, a majority of young nurses are enrolled in medical school while simultaneously working at hospitals. The government offices are aware of this and measures have been taken to stop them. Therefore, some participants might not have reported truthfully to be safe from the authorities.

Due to a lack of prestige and respect for nurses in Afghanistan, they are more likely to abandon the profession because of their title as “nurses” than because of the variables that affect their work satisfaction; hence, there is a weak negative relationship between intention to leave and factors such as salary, growth opportunity, manager support, and medical insurance.

The results showed that nurses who were younger than 30 years old—those with <10 years of experience, and those who had diploma degrees were more interested in leaving nursing profession. This is not surprising, because in Afghanistan, working conditions for young nurses are better outside of the field of nursing.

Younger nurses were also more likely to leave than older nurses (over 35). This result aligns with findings from the previous studies,^[6,7,31] and it may be explained by the fact that older nurses are more likely to think about retirement than about leaving, and job stability is more important

for them. The finding that nurses with <10 years of work experience were more likely to leave was also similar to previously reported results.^[6,7] This may be because older nurses with greater experience might not be suited for a change in their profession since there might be limited possibilities for them.

The findings related to gender were different from those reported in the previous studies. There was only a slight difference between males and females. This result may reflect the fact that male and female nurses share the same problems which showed above in Afghanistan.

Nurses with diplomas were more interested in leaving than those with higher or lower certifications that could be a reflection of the fact that there is a high number of nurses with diplomas as compared to those with bachelor's degrees. Nurses with a diploma degree also may not receive as much attention as nurses with bachelor's degrees in the hospital. Therefore, providing training and development opportunities for nurses with diplomas could prevent them from leaving their careers.

Among the top 10 factors reported by dissatisfied respondents as influencing their intention to leave were medical insurance, corroborating results from the previous studies. A vast majority of nurses in this study complained about the lack of health insurance and the desire for it. Thus, providing health insurance could reduce the nurses' intention to leave. Work pressure resulting from the shortage of nurses was also an important factor for intention to leave. By increasing nursing staff, work pressure can be reduced and, consequently, reliable health services can be provided to patients.^[31]

Other factors such as lack of opportunities for professional advancement were important for nurses and there was a negative relationship between growth opportunities and intention to leave.^[30,31] Many managers still think that nursing is a profession that does not require growth opportunities and that nurses are only responsible for implementing doctors' orders. Solutions for reducing turnover in nursing could include providing training courses and educational opportunities.

Pay and benefits were identified as another predominant problem that may lead to job dissatisfaction and intention to leave among nurses.^[6,7,31] Afghanistan, like many developing countries, is affected by severe financial problems that affect nursing as well as other hospital departments. Authorities should realize that increasing salary could improve job satisfaction and decrease intention to leave among nurses.

Other factors affecting intention to leave were resource inadequacy, lack of praise and recognition of achievements, lack of involvement in decision-making related to their units, job stress, job security, and doctors' misconduct.^[30,31] Doctors are continually ignoring nurses' comments and

suggestions in the hospital decision-making, and nurses have little scope to participate in hospital management. Therefore, hospital managers should provide additional opportunities for nurses to participate in hospital affairs. Resource adequacy, praising, and recognition for achievements are most important for job satisfaction and intention to stay. This should be considered by hospital managers to prepare enough human resources, and encouragement should be provided to nurses to improve their job satisfaction and reduce their intention to leave. Recognition of the importance of the nursing profession by doctors is a considerable factor affecting intention to stay and it should be acknowledged by hospital managers.

Conclusion

Increase in salary can reduce the intention to leave and may be considered by managers. Work pressure not only leads to dissatisfaction but also prevents nurses from giving sufficient time to provide quality patient care. Managers should increase nursing staff and follow an optimum nurse to patient ratio.^[30,31] Managers may also consider the quality of relationships between doctors and nurses as related to job satisfaction.

Data availability

The data used to support the findings of this study are available from the corresponding author on request.

Conflicts of interest

“The author(s) declare(s) that there are no conflicts of interest regarding the publication of this paper.”

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