

NURSING SHORTAGE CONTRIBUTING FACTORS AND STRATEGIES FOR SOLUTION

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Abstract

Background: The nursing shortage is a major global problem and a multifaceted challenge in healthcare systems that have reached warning thresholds. A shortage of nurses jeopardizes the delivery of quality care to clients. **Aim:** Assess contributing factors of the nursing shortage and its strategies for solution. **Methods:** Cross-sectional study was performed on 50 nurses. The study was conducted in a private hospital in Saudi Arabia. Data were collected by using a structured interview questionnaire to identify contributing factors of the nursing shortage and the strategies for solution. **Results:** The factors of nurses' shortage in a private hospital in Saudi Arabia as low salary income and discrimination in dealing with nurses leads to longer patient hospitalization period and an increased number of medical errors so, for solving these issues it should increase community awareness about nursing value as a profession; give enough support for the nursing profession and restructure nursing education to attract new people to the profession. **Conclusions:** The current study was concluded that main contributing factors to the nursing shortage are financial, and administrative support and community misunderstanding about nursing as a profession **Recommendation:** Increase community awareness about nursing value as a profession; give enough support to nursing profession and restructure nursing education to attract new people to the profession.

Keywords: Assessment; Nursing shortage; contributing factor and strategies of solution.

I. INTRODUCTION

The healthcare system in the world faces many challenges day after day. The most important challenge is increasing healthcare needs, and lack of physical and human funding (Morgan and Somera, 2014). The world faces a severe shortage of nursing staff caused by different reasons from one country to another. In Saudi society, the nursing profession has faced many challenges and issues, and it was one of the most professions in the community because of society's perception, tradition, so a big number of nurses would refuse to continue in the profession for either work-related reasons or personal reasons, in other words, nursing turnover (Zaheer, 2019). The nursing shortage is a global issue that has been investigated over the past decade. It considers is one of the

main difficulties that several healthcare organizations face, leading to inadequate nurse staffing, elevated work stress due to increased workloads, job dissatisfaction, and productivity, and intent to resign and switch to other healthcare organizations. Everhart, (2013).

Although nursing shortage is considered a global problem and appears to be the most significant problem in Saudi Arabia. Exposure to the problems of nursing is repeatable either as work environment problems or personal problems (Alreshidi, 2021). Personal problems could be different between Eastern society and Western, country to another, and even from one individual to another Ref. Society and social relations in the eastern country usually impact individuals and particularly health practitioners because of their open work environment in closed society Ref. Focusing and studying such problems in Saudi Arabia, would assist in finding solutions for nursing problems and reduce the turnover rate) Flavia Munn, (2017).

For the last decade, the nursing profession suffers from a significant shortage specifically in Saudi nurses. Therefore, the Ministry of Health (MOH) and the health organizations have dependent completely on expatriate nurses (Kaddourah, 2018). Twenty years ago, the kingdom has taken a step to Saudis a lot of professions. The health sector was one of the most important sectors that the MOH aimed at Saudis professionals (Oliveira, 2017).

Many challenges are facing the nursing career life such as prevailing tradition, chronic staff shortage, lack of educational development, and subspecialties. Therefore, there are various forms of problems that are linked to the shortages in Saudi Arabia for instance sociocultural factors which influenced the prevailing negative images (Lamadah and Sayed, 2014). Additionally, family obligations have a big impact on the work-life of nursing which could conflict with work duties. If the family is not supporting the career life, in the end, it would lead the nurse to leave the nursing profession (Yang, 2017). Moreover, the scientific background and personal or demographic variables can have an obvious impact on nurses' decision to continue or leave their profession (Al-Yami, 2018).

Al-Hanawi, (2019) mentioned that many outcomes of nursing shortage include increased risks for occupational injury, increased nursing turnover, and greater chances for nurses' high levels of job stress. Insufficient numbers of nurse educators are also an issue and lead to fewer students graduating from nursing schools to keep up with the demand which Ref. This nursing shortage crisis is of concern to nursing careers all over the world (Schmidt & Diestel, 2013). Most studies on employee shortage suggest that is a "hidden" cost for most organizations as additional recruitment and training are very costly (Alluhidan, 2020). Saudi Arabia, like any other country, is no exception to this issue. It is and has been suffering from a nurse shortage which is proven by nurses' high turnover rate and resignation (Kaddourah, 2018).

Hospitals facing financial uncertainty have sought to reduce nurse staffing as a way to increase

profitability (Labrague, 2018) believed that nurse staffing was essential in terms of the quality of patient care and nursing-related outcomes. Nurse staffing can provide a competitive advantage to hospitals and as a result, a better financial performance particularly in more competitive markets. Additionally, Aljohani, (2019) stated that the changes in healthcare delivery left hospitals and clinics in the area with fewer openings and intensified the competition for positions. On the other hand, the conclusion drawn by another study conducted by Figueroa, (2015) & Jennifer Larson. (2016) revealed that challenged nurses in challenged working environments report more employment fulfillment. Yasin, (2017) explained that given the importance of nurses in the overall delivery of healthcare, hospitals in markets with higher levels of competition must successfully recruit and retain nurses to achieve a competitive advantage over other hospitals in the market.

Most participants pointed out that hospital policies have to obey and limit healthcare administrators and healthcare managers from what they can do for specific or individual nurses; these results matched with the findings of research conducted by Dempsey and Reilly (2016)&Chan, (2015) revealed that hospital administrators may enhance positive work environments by understanding and implementing strategies to reduce turnover of hospital employees and creating a positive work environment where employees are satisfied, leaders in healthcare may increase hospital staff retention and reduce nursing shortage by providing a safe environment for their employees free of associated health risks or threats (Dempsey and Reilly, 2016)

Due to shortages, nurses often have to work long hours in highly stressful conditions, which can lead to fatigue, injury and job dissatisfaction. Nurses struggling in these environments are prone to errors and medical errors. The unfortunate result is poor patient quality and can lead to many preventable complications, including medication errors, emergency department overcrowding and, alarmingly, increased mortality. (Labrague, 2018). As hospitals and medical centers across the United States (U.S) face a nursing shortage. Naturally, nurses operate in high-intensity environments but adding all the factors of the nursing shortage intensifies it. According to reports cited by the American Association of Nurses, a lack of nurse staffing is directly linked to an increase in mortality rates, hospital readmission rates, and an increase in hospital infections compared to institutions with an adequate number of nurses. When there are more patients and fewer nurses, medical error is more likely to occur (Jennifer, 2019).

Significance of the study

According to MOH reports which mention that most of Saudi Arabia's health market suffering from a nursing shortage more than any country as estimated that only 2.5 nurses. While the nursing shortage is a global phenomenon, KSA has particular issues in that only an estimated 31.8% of the nursing workforce are Saudi nationals. Saudi Arabia will need an additional 33,000 nursing professionals by 2030 at a conservative estimate; so The Kingdom must hire more than 20 Saudi nurses every day until 2030 to cope with both rising demand and its “Saudization” goals. In order to meet the government’s Saudization goals, In terms of the ratio of nurses to hospital beds, the

Kingdom has one of the lowest in the GCC region — 2.5 nurses per bed compared with a GCC average of 2.8 nurses per bed. This contrasts with 3.1 nurses per bed in the UK and 4.1 nurses per bed in the US (Schmidt & Diestel, 2013).

2. MATERIALS AND METHOD

Aim of the study:

The aim of this study was to assess contributing factors of nursing shortage and its strategies for solution

Objectives:

Assess causes of nursing shortage

Suggest suitable strategies for solution

Research Design:

A descriptive research design was used for this study.

Setting:

This study was conducted at private hospital located at the Jeddah Province of Saudi Arabia.

Sample:

Subject of the study included a convenience number of nursing staff a total of 50 who work in inpatient department, who had been employed as a nurse in Saudi Arabia for more than 6 months, and who voluntarily, consented to participate. Unit heads and nurses managers were excluded because they supervise staff nurses.

Tool:

One tool was used, based on reviewing the related literature in order to collect the necessary information to investigate the contributing factors of nursing shortage in Saudi Arabia and healthcare strategies for solutions and manage it.

Tool (1) one questionnaire developed by the researchers for exploring contributing factors of nursing shortage and strategies of solving it in the Saudi context. The instrument consisted of three sections:

Demographic data, contributing factors of nursing shortage and participant strategy to solving this shortage.

Ethical considerations:

Official permission was taken to conduct the study was granted from the ethical committee and hospital administrators. The purpose and relevance of the current study were discussed for the nurse director to facilitate communication with the staff. Prior to the initial interview with nurses, the researcher introduced herself to every nurse and explained the purpose and nature of the study, and then an informed oral and written consent was obtained from participants who accept to participate in the study. The researcher emphasized that participation in the study is entirely

voluntary and withdrawal from the study can be done at any time without a rational; anonymity and confidentiality were assured through coding the data.

Data Gathering and Procedure:

The researcher reviewed the current local and international related literature to be more acquainted with the problem, to design the study instruments, and to finalize them by using books, articles, magazines, and the internet. The actual fieldwork was carried out from the beginning of September 2021 up to the end of February 2022 of data collection. The researchers ask the permission to distribute the questionnaire for nurses who answering the questionnaire. The researchers were available in the study settings four days/week, at the morning shift from 8.00 am to 2.00 Pm. the researchers introduced themselves to the nursing staff members in the previously mentioned setting. The researchers clarified the nature and the purpose of the research and asked for cooperation; then after answering the questionnaire, the researchers collect all the questionnaires and making the analysis, interpretation, findings, conclusion, and recommendation of the study.

Statistical analysis

Statistical Package of Social Science (SPSS) version 20 was used for statistical analysis of the findings. The data was obtained in the study were organized, reviewed, coded, tabulated, analyzed, and presented using descriptive statistics in the form of frequencies and percentages for variables; Means, standard deviations, and test of significance was used for comparison between the study and the control groups.

The collected data were coded and analyzed. Descriptive statistics for the variables were calculated using, frequency mean and standard deviation. The variables were significant at P value < 0.05. Data were entered and analyzed by using SPSS (Statistical Package for Social Science) statistical package version 20.

3. RESULTS

Figure 1: Distribution of studied sample according to their age and nationality:

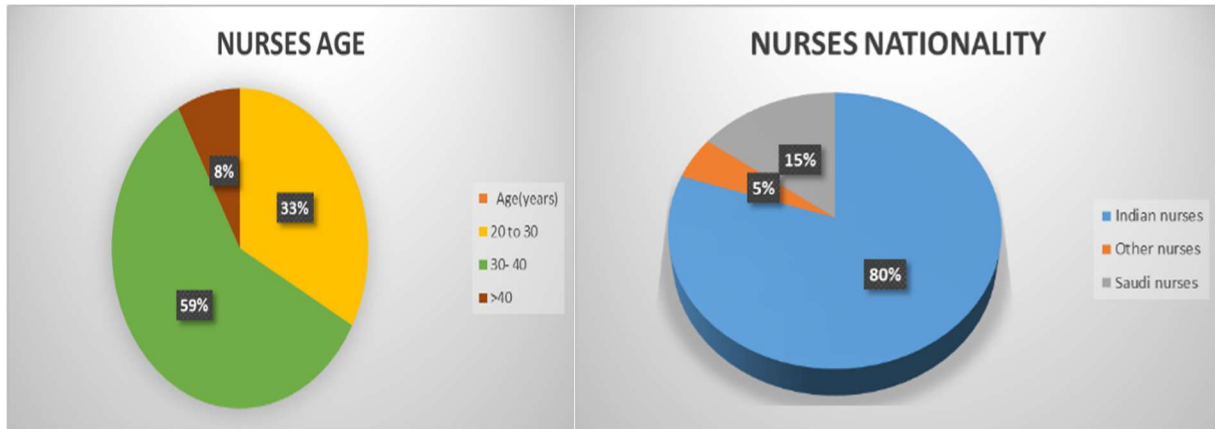


Figure 1 showed demographic characteristic of studied sample. As presented in more than half of nurses aged between 31-40 years (59%) while the minority of them aged more than 40 years old (8%).

Figure (2) **Distribution of studied sample according to their experience:**

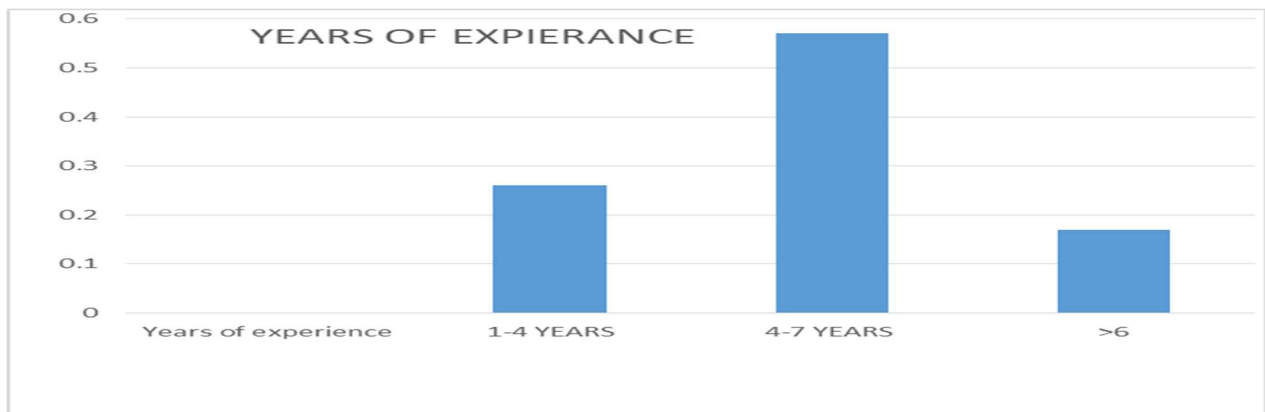


Figure 2 showed nurses years of experience, it was revealed that 57% of nurses were had 4-7 years of experience; and most of nurses (80%) were Indian nurses in both hospitals and minority of them were Saudi nurses (15%) in both hospitals.

Table 1: percentage distribution of Nursing Shortage Contributing Factors

Reason of shortage	NO.	Percentage
Low salary	16	32 %
nurse/ patient ratio	9	18 %
Discrimination	4	8 %
No financial benefits	8	16 %
No upgrading	5	10 %
Administrative treatment	7	14 %

Community view to nursing	3	6 %
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Table 1 represents factors contributing nursing shortage. It was revealed that approximately one third of participated nurses (32 %) agreed that Low salary and low nurse: patient ratio was the most common reasons for leaving employment. Other participant represent other factors that contributed to nursing shortage as no increments and no financial benefits ,also administrative way of dealing and policies were 14% of nurses agreed on it.

Table 2: percentage distribution of study sample strategies to solve Nursing Shortage

Strategy	NO.	Percentage
Financial	17	
Increase salary and financial benefits		33%
Administrative support	5	
Transparency in policy	2	9%
Stop discrimination	5	5%
Improve professional growth		10%
Improve work place	7	
Flexibility in changing workplace and schedule	6	14%
Minimizing understaffing	4	12%
Decrease paperwork		7%

Table (2) represent 33% of staff suggest to increase financial benefits to manage staff shortage; 14% stick to improve work place by more flexibility in scheduling and manage under staffing; the least percentage staff response is 5% was suggest to stop discrimination between staff.

Table 3 relation between socio-demographic data and reason of shortage

Items	Age		Work Experience		Nationality	
	R	p	r	p	r	p
Low salary	.08	.006*	.06	.007	.03	.09
nurse/ patient ratio	.1	.9	.1	.0009*	.06	.5
Discrimination	.02	.002*	.05	.6	.3	.004*
No financial benefits	.07	.005*	.1	.003*	.002	.9
No upgrading	.1	.9	.07	.06	.02	.89

Significant at p-value<0.05

Table (3) illustrate a statically relation between participant age and low salary, discrimination and no financial benefits with respect for p value (.006*, .002*, .005*); also there's a strong reelection between the work experience and financial benefits (.003*).

4. DISCUSSION

According to labrague, (2018) Nursing is a key element for the success of any health program in Saudi Arabia and other countries(Aly et al.,2022). The current study results of Saudi private health care organization “confirmed that the shortage of nursing is present and affected on their hospital negatively and they try to put general frame to face this shortage aiming to be in the first line of health market.

Regarding the demographics of the participants, more than half of the participants' ages (31-40 years old) show years of impaired family responsibilities. In other words, a predictable career transition plan. This finding was supported by a cross-sectional study of 9,796 nurses in the United States by Mazurenko Gupte and Shan (2015) examining the factors associated with the decision making to vacate a job versus leaving profession on 9796 nurses in the US and the study presented that married women had high turnover rates within age of (30- 45) years old.

But this not the main cause because the result figure that the most of nurses was Indian (80%) and most of them alone without their families in case of married nurses have a high clash between their work and family role; which lead these nurses to face resistance and problems with their families and husbands. This results supported by results of “Alluhindan, 2020” research which discus the factors influencing nurses turnover in Saudi Arabia (2020).

Regarding the years of experience the current study illustrated the more than half of study their experience were ranged 4-7 years old which that most of them were experience and qualified but most of these findings indicate that staff dissatisfaction, and has intention to leave as a result of higher workload, lower professional support and low salary which is the higher percentage 32% of staff mention the it as a main cause of turnover among RNs in Saudi Arabia hospital.

This result was clarified by (Shelton 2003, Ward et al. 2003, Mabel 2002)who stated that Qualified nurses may leave for different reasons including increased stress, low morale, and lack of job satisfaction. Also (Chen et al 2008) added the Sources of support were found to reduce intention to leave and burnout and enhance satisfaction and retention through job satisfaction of employees and direct relationship and staff follow-up has frequently been reported between job satisfaction level and nurse intention to remain employed. Thus, it was not surprising that Larrabee et al (2003) and Cai and Zhou (2009) found that they may also leave for family reasons such as pregnancy and child care.

Moreover the result illustrated that more than ten percent of staff mention that the administrative treatment is one of major causes to leave their work. This result was supported by

(Do H 2006, ICN 2007) who mention In order “to retain qualified nurses in a competitive labor market, hospitals need to develop personnel policies and benefits comparable to those in other lines of work and businesses”. These policies and benefits should include: life-long professional development, opportunities for career advancement, flexible scheduling, competitive salaries and improved work design, work climate and workforce management (Aiken et al 2001).

Concerning to the other cause of nursing shortage ; the study results presented that are few percent mention that the community view to nursing is a cause which make Saudi population away of nursing filed even they work they leave the work. This result was supported by park, (2015) & hannu, (2015) which stated that several factors that influence nursing shortage as poor social image, working with men, failure to get family agreement to work in nursing, long working hours, changing the duty pattern, lack of respect.

Also Hayes, 2013 presented in his study that nursing and nurses in media was poorly and incorrect portrayed which somehow asserts and enhances the society perception not only about this profession but for any matter in society. (Lamadah and Sayed, 2014) further added that long working hours and changing the shift pattern factors make society especially men not accepting the idea of marrying a female who works as a nurse because of continues and long absences from home. This clarify our research result especially Saudi respondents mention that the community view and their understanding for nursing as a profession still negative and most of families don't prefer nursing as career for their son or daughter

To solve that shortage in health organization, more than third of participant in current study mention that the government and other related agencies should increase financial benefits and staff salary as a strategy to solve this shortage and keep nurses retention. This result was congruent with mary cadwell , (2019) who mention that the government ministry and other related-agencies should carry out more intensive care from administrative support and financial support to decrease their intention to leave; also this result was supported by general recommendation suggested by klunklin, (2015) in his review of literature about factors influencing turnover in Saudi Arabia which declared that the most of participant suggested to improve financial system , organizational structure, leadership support, work environment because it effect on Client care, nurses satisfaction and their retention.

Also the study result found statically relation between the work experience and financial benefits and there's a strong reelection participant age and low salary, discrimination and no financial benefits. This study result was supported by (Albougami, 2020) who is concerning about the monthly gross salaries of nurses, these salaries are considerably related to the intention to leave. It is most certain that expatriate nurses may look for opportunities in other developed countries for higher compensation and better working conditions. Also these findings were also supported by an integrative review assessing the previous literature on nursing turnover in the

Saudi Arabian context, which revealed that the monthly gross salary was a determinant of the turnover and intention to leave of nurses (Falatah, and Salem, 2018).

5. CONCLUSION

Based on the current study results it can be concluded that the factors of nurses' shortage in private hospital in Saudi Arabia illustrated that most of Filipino and Indian nurses have a low monthly income, discrimination in dealing with nurses; also the current study mentioned that a higher nurse turnover leads to longer patient hospitalization period and increased number of medical errors. So this current study put some recommendations for solving this issues as increase community awareness about nursing value as a profession; give enough support for nursing profession and restructure nursing education to attract new people to the profession.

6. RECOMMENDATION

- The organization should concerns about the nursing shortage and made recommendations and implemented strategies to address nursing workforce issues as
- Development nursing personnel with skills appropriate to the health care system, the public, policy makers and the profession
- Enhance Strategies of recruit and retain to overcome workforce issues that discourage long-term commitment to a career in nursing.
- Introducing greater flexibility into work environment structure and scheduling programs;
- Rewarding experienced nurses for serving as mentors and/or preceptors for new nurses;
- Implementing appropriate salary and benefit programs.
- Establishing appropriate management structures within the health care system;
- Ensuring adequate nurse staffing; and providing nurses with sufficient autonomy over their practice in all settings.
- Redesign work to enable an aging workforce to remain active in direct care roles

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