Relationship between Job Burnout, Interpersonal Conflicts and Intentions to Leave

Sofia Safdar¹, Abdul Khaliq Alvi^{1*}, Arif Jawaid², Parveen Kaur³, Rao Bakht Yawar⁴

¹Department of Management Sciences, Lahore Garrison University, Pakistan, ²Department of English, Lahore Garrison University, Pakistan, ³Department of Sociology, University Malaysia Sarawak Jalan Datuk Mohamad Musa, 94300 Kota Samarahan, Malaysia, ⁴Institute of Advance Studies, University of Punjab, Lahore, Pakistan *Email: khaliqalvi@gmail.com

Received for publication: 18 September 2019. Accepted for publication: 08 December 2019.

Abstract

Deficiency of nurses is one of the very prominent issues in many countries. A high turnover rate among nurses is contributing to the deficit; interpersonal conflicts, job burnout, and intentions to leave. All these have been identified as the predictors of nurses' turnover. The evidence demonstrates that the working conditions for nurses certainly influence nurses' interpersonal conflicts, burnout and intentions to leave. From the best of the researchers knowledge the relationship of these variables in a single model has not been investigated worldwide. For investigating the mediating role of job burnout in the relationship between interpersonal conflicts and intentions, a crosssectional research design was utilized in this study. The data was collected from 232 nurses of public and private teaching hospitals in Lahore, Pakistan. Three standardized scales were used: the Interpersonal Conflicts Scale, the Job Burnout Scale and the Intentions to leave Scale. The nurses working in the hospitals with less intentions to leave have significantly less interpersonal conflicts and job burnout. Moreover, job burnout partially mediates the relationship of interpersonal conflicts and intentions to leave. Results of demographic data show that number of female nurses is overwhelmingly more with none from top level management. The nurses' intentions to leave are a significant concern. They can be facilitated by reducing the nurses' interpersonal conflicts and job burnout in Pakistani teaching hospitals. Interpersonal conflicts and 'intentions to leave' partially mediate job burnout. Reducing interpersonal conflicts for nurses may decrease burnout and intentions to leave. Hence, focusing on these research outcomes, it is likely to retain nurses in the hospitals. This research may help policymakers and health managers to minimize interpersonal conflicts and job burnout. They can make policies to employ more women especially men in nursing profession to overcome the shortage. They may also encourage the nursing staff to compete for top level management. Future research can be extended beyond interpersonal conflicts, job burnout and intentions to leave

Keywords: Interpersonal Conflicts, Job Burnout, Intentions to Leave, Nurses, Nursing Policy, Public and Private Teaching hospitals, Lahore, Pakistan

Introduction

The deficiency of the nursing staff is not only a crucial problem in Pakistanbut also becoming a noteworthy problem of the hospital settings around the world (Nantsupawatet al., 2017). Shortage of the nurses is a critical issue not only in the developing and developed countries (Yasmin and Marzuki 2015) but also in highly developed country such as USA (Juraschek, et al., 2012; Chan et al., 2013). Moreover, nursing outcomes such as burnout and intentions to leave are directly influenced by nursing staff deficiency (Aiken et al., 2012). Hence intentions to leave also considers as global issue.

Employees in any organizations are the valuable talent. The primary threat to any of the organization concern is to attach the employees for a long time because a massive budget is spent on the employees. Consequently, organizations need to focus on their employees' welfare and working enviornment for their retention. The employees of any business entities are the strong support for them. So, to keep them stay comfortably can reduce the intentions to leave (Kaur, et al.; 2010). This study intends to investigate the extent of the interpersonal conflicts affecting nurses' job burnout and intentions to leave within the context of the nurses' teaching hospitals in Lahore, Pakistan.

Alarming situation is worth mentioning in Pakistan where approximately, 180 million people suffer from basic human rights such as education and health (Khan et al. 2015). Here 0.6 nurses serve 1000 people, this figure is comparatively very less than the rest of world namely: Switzerland 17.6, Norway 16.2, Denmark 16.5, Australia 11.6, Japan 11, China 2.2 (OECD/EU. 2016; OECD/Asia. 2016).

Lately, nurses' deficiency is becoming a crisis in hospitals' settings. Many experienced nurses are leaving the nursing profession, and young people are not further choosing nursing sector as a valuable profession. It affects directly patient' health and quality of care. The study aims to explore the impact of interpersonal conflicts on job burnout and intentions to leave in the nursing staff of the teaching hospitals in Lahore Pakistan. The current research emphasizes on intentions to leave in Pakistan in the nursing sector specifically. Significant investigations on "interpersonal conflicts" and its impact on nursing outcomes as "job burnout" and "intentions to leave" have been conducted separately worldwide, but no such study has performed in teaching hospitals in Lahore, Pakistan. Moreover, there is no research on the relationship between interpersonal conflicts and nurses' intentions to leave with the mediation of job burnout among the nurses.

This study intends to investigate the extent of the interpersonal conflicts affecting nurses' job burnout and intentions to leave and also the mediating role of job burnout between the relationship of interpersonal conflicts and intentions to leave within the context of the teaching hospitals.

The study aims to address the following research question:

Does the job burnout mediate the relationship between interpersonal conflicts and the intentions to leave in the nursing sector?

Researchers like Aiken et al. (2012) and Zhu et al. (2012) explored that the nurses' deficiency negatively influenced the patients' health and quality of care. Hence, controlling the interpersonal conflicts is considered as a successful approach to reduce burnout and nurses' intentions to leave their job. Job burnout and intentions to leave are significant outcomes which disturb the nursing personnel and need immediate attention and intervention by the managers, clinicians and policymakers (Flinkman et al. 2010; Bria et al. 2013; Hayes et al. 2012).

While discussing the intentions to leave in Pakistan Yasmin et al (2015) state that shortage of the nurses is a critical issue in the developing and developed countries. Pakistan being an underdeveloped country faces the same scenario. Pakistan is also facing the same problem of nurses' shortage. Scarcity of nurse subsequently deteriorates the situation. Intention to leave is a global concern which exists in developed, developing, and under developed countries. To solve this problem, quantitative analysis was carried out. This quantitative analysis also considered other closely related variables such as interpersonal conflicts and job burnout.

Literature Review Interpersonal conflicts

Jerng et al., (2017) define interpersonal conflict as "a dynamic process that occurs between interdependent individuals, groups, or both, as they experience negative emotional reactions to perceived disagreements and interference with the attainment of their goals."

In any organization, conflicts are considered as a challenging task because organizations provide an attractive level and platform for different goals, concerns, values and beliefs that occur (Rahim, 2011). Notwithstanding, interpersonal conflicts reflect serious encounter in hospital working environment (El-Hosany, 2016) and also many professionals like nurses, doctors, co-workers, managers and directors experience interpersonal conflicts (Guidroz, et al., 2012).

More specifically, interpersonal conflicts occur frequently in operation rooms, intensive care centers and in emergency rooms (Fassier, andAzoulay,2010; Katz 2007; Chan et al., 2014; Lancman et al., 2013). Nurses as necessary part of these settings suffer interpersonal conflicts giving rise to serious concerns in the shape of inferior care of patients, more errors, greater level of job burnout, and increased level of patient care cost (Baldwin and Daugherty 2008; Jerng, et al., 2017). Moreover, 'interpersonal conflicts' among the employees and supervisors result in high level of intentions to leave and job burnout (Frone, 2000; Gierbels and Janssen 2005; Lanz, and Bruk-Lee, 2017; Langove, and Isha, 2017). The above account clearly shows that Interpersonal conflicts have positive relationship with job burnout (Lanz, and Bruk-Lee, 2017).

Job Burnout

According to Maslach, (2001) and Stamm, (2010), "Burnout is a syndrome comprising emotional exhaustion, depersonalization and a reduced sense of personal accomplishment". Burnout is also considered as a significant phenomenon affecting the nursing personnel (Nantsupawat et al., 2017). It is a psychological disorder which cultivates persistent interpersonal conflicts inthe workplace. Unfortunately, nurses face the severe threat of job burnout globally and burnout is also a vital phenomenon affecting the nursing workforce (Poghosyanet al. 2010; Nantsupawat et al., 2017).

To address the nursing shortage, a better understanding of the impact of interpersonal conflicts on intentions to leave and burnout is needed. 'Intentions to leave' remains higher among the nurses due to job burnout (Heinenet al., 2013). CBC (Radio-Canada)reported that 40% of nurses faced iob burnout on everyday basis (Ndawula, 2016) whereas 47.3% nurses of Canada and 36% of Japan face job burnout (Laschinger et al. 2009; Kitaoka and Masuda 2013). Previous investigations manifest that job burnout is the leading cause of real turnover and intentions to leave (Oyeleye et al., 2013; Lu, and Gursoy, 2013).

Intentions to leave

Workers in many business concerns are the valuable asset. The primary challenge of a business concern is to engage the employees for long time because a heavy budget is spent on this workforce. To maximize output in any business organization main priority goes to workers who are strong support to get valuable output. For these factors organizations especially hospitals focus more to reduce the negative thoughts of 'intentions to leave' of the employees. According to Lambert et al., (2012) 'intentions to leave' is defined as "thoughts of employee's or plans to leave from an organization". According to a report, deficiency of nurses occurs in many hospitals globally. To harness the negative thoughts of nurses to leave is the prime objective to control the shortage issue (International Council of Nurses 2014).

A series of countries like USA had played a vital role to maximize the number of listed nurses so they could eliminate the critical conditions related to improve the health care organizations. Present situations showed that recently skilled nurses had engaged in the nursing sector in recent year, with an annual increased rate of 9.8% (National Council of State Boards of Nursing 2010), which was much greater than the estimated required growth rate of 12% (Bureau of Labor Statistics 2011). In 2013, researchperformed in National Health Service (NHS) in England reported about the intentions to leave in nurses was due to job burnout and the administration was mostly unable to provide the high-quality employee wellbeing.

Methodology

Conceptual Framework

The present research was directed by the 'Quality Health Outcomes Model (QHOM)' (Mitchell et al. 1998), which was originated by amending Donabedian's (1966) quality of care model which explains a linear relationship between structure, process and outcomes. Following QHOM in this study, the nurse interpersonal conflicts acknowledges as a structural factor, the process is job burnout and nurses' intentions to leave acts as outcome.

This study is also supported by the theory of interpersonal conflicts introduced by Hammond (1965), who proposed that conflicts between parties are based on purely judgmental in cognitive perspective ignoring their motivation and values. For instance, if conflicts arise among the employees then they result in job burnout leading to intentions to leave.



Figure 1. Conceptual Model: (a) MV; (b) Testing steps of mediation.

Adapted framework consists of interpersonal conflicts as an independent variable, job burnout as a mediating variable and intentions to leave as the dependent variable. These hypotheses have been derived from the above review as stated below

H1: Interpersonal conflicts have a positive influence on intentions to leave.

H2: Interpersonal conflicts have a positive influence on job burnout.

H3: Job burnout has a positive influence on intentions to leave.

H4: Job burnout mediates the relationship between interpersonal conflicts and intentions to leave.

The conceptual framework depicts the relationship of the independent variable with the dependent variable, and mediating role of job burnout forming the theoretical framework.

Research Design

This study was carried out using a longitudinal research design including explanatory research theory that describes the cause and effect relationship.

Population and Sampling Technique

Nurses of public and private teaching hospitals of Lahore, Pakistan were the target population. Both the male and female nursing staff was selected. A total of 232 respondents were included in the research. For the data collection, the selection of the hospital and respondents was made at random.

Sample Size

Following Israel (1992), who suggests best selected sample ranges from 200-500 for simple and multiple regression, 232respondents were selected randomly.

Measurement and Instruments

The first section of the questionnaire was about the demographic information of respondents. It includes questions related to gender, age, managerial level, work experience, working hours, types of hospital, and qualification.

The demographic information was used as a control variable.

To elaborate the scale of interpersonal conflicts consists of 4 items (Spector &Jex, 1998), it ranges from 1 (rarely) to 5 (very often). Another 4 items (Maslach, et al., 2001) scale of job burnout ranges from 1(never) to 5(always). Finally, scale of intentions to leave (Kim et al. 1996) comprises 2 items, that ranges from 1(strongly disagree) to 5(strongly agree). 5-point Likert scale was adopted by the researchers for uniformity and ease of analysis of data.

Data Collection Instruments

Closed ended questionnaire was used for data collection. Researchers personally administered the questionnaires to the respondents to get real and accurate data.

Results

Demographics Results

Demographic information of the sample is presented in table 1. About 89.2% of the nurses were female, and 10.8% were male. 200 (86.2%) belonged to age limit 30-40. 93.5% of the respondents were from the middle level management. 96.6% of the nurses were graduates. Almost 56.5% of the respondents showed experience of more than 10 years. 55.6% of the respondents have been staying in the organizations for more than 10 years. About 97.4% respondents have been working for 9-12 hours on a daily basis.

Reliability, correlation and regression analyses utilized with the help of statistical package for social sciences (SPSS-22). Pearson correlation analysis used for assessment of the interrelationships among quantitative variables. The Cronbach's alpha coefficient calculated the reliability of the developed tools through internal consistency. The value of Cronbach alpha value for intentions to leave was 0.639, the Cronbach's alpha of interpersonal conflicts was 0.798, and job burnout value was 0.653. These values indicate the best and reliable results of the data.

Variables	Category	Ν	Percentage %
Gender	Male	25	10.7
	Female	207	89.2
Age	21-30	31	13.4
	31-40	200	86.2
	41-50	1	0.4
Managerial Level	Middle Level	217	93.5
	First Line Manager	15	6.5
Qualification	Intermediate	08	3.4
	Graduation	224	96.6
Type of Hospital	Public	121	52.2
	Private	111	47.8
Total Working Hours	4-8 Hours	4	1.7
Daily	9-12 Hours	226	97.4
	13-16 Hours	2	0.9
Stay in the Organiza-	1-5 Years	13	5.6
tion	5-10 Years	90	38.8
	Above 10 Years	29	55.6

Table 1. Demographic Details of Nurses

Regression Analysis

Regression Analysis of Interpersonal Conflicts and Intentions to Leave

The regression analysis was carried to verify the impact of the independent variable on the dependent variables. The regression analysis manifests the impact of interpersonal conflicts (independent variable) on intentions to leave (dependent variable).

Table 2. Mediation of Job Burnout between the relationship Interpersonal Conflicts and In-
tentions to Leave

Hypothesis Testing and Steps of	В	S.E	F	\mathbf{R}^2	Р
Mediation					
Step 1 (Path c)					
Outcome: Intentions to Leave					
Predictor: Interpersonal Conflicts	0.560	0.076	54.275	0.291	0.000<0.01
Step 2 (Path a)					
Outcome: Job Burnout					
Predictor: Interpersonal Con-	0.495	0.040	156.02	0.404	0.000<0.01
flicts					
Step 3 A (Path b)					
Outcome: Intentions to Leave					
Predictor: Job Burnout	0.694	0.098	49.693	0.284	0.000<0.01
Step 3B (Path c')					
Outcome: Intentions to Leave					
Mediator : Job Burnout	0.397	0.124			0.002<0.05
Predictor : Interpersonal Con-	0.364	0.097			0.000<0.01
flicts					

H1: Interpersonal conflicts have a positive influence on intentions to leave

In Table 2 Step 1 (Path c) shows the value of p=0.000 < 0.01 so this hypothesis is accepted. From the above analysis R square= 0.291 is higher than 0.25, it is considered to be acceptable. This value explains well that independent variable (interpersonal conflicts) causes 29.1% change in a dependent variable (intentions to leave). The value of F is 54.275 and shows the relationship between these variables. Greater is the value of F the stronger is the relationship between the independent variable (interpersonal conflicts) and the dependent variable (intentions to leave). 't' value must not be zero. The results of this analysis meet the requirement. The results also indicate that value of β = 0.560 demonstrates that there is a positive impact of interpersonal conflicts on intentions to leave.

Regression Analysis of Interpersonal Conflicts and Job Burnout

H2: Interpersonal conflicts have a positive influence on job burnout

Table 2 Step 2 (Path a) shows value of p=0.000 < 0.01, so this hypothesis is accepted. From the above analysis R square= 0.404 is greater than 0.25, it is considered to be acceptable. This value shows that independent variable (interpersonal conflicts) causes 40.4% change in a dependent variable (job burnout). The value of F is 156.026 which shows the relationship between these variables. Greater value of F explains the stronger relationship between the independent variable (interpersonal conflicts) and the dependent variable (job burnout). 't' value must not be zero. This analysis also meets up the requirement.

The results also indicate that value β =0.495 demonstrates that there is a positive impact of interpersonal conflicts on job burnout and if there is one unit change in interpersonal conflicts it results in 49.5% variation in job burnout.

Regression Analysis of Job Burnout and Intentions to Leave

H3: Job burnout has a positive effect on intentions to leave

Step 3 A (Path b) elaborates the regression values. The value of p shows a significant level between the variables. If the p-value is smaller than 0.01, 0.05, and 0.10, it satisfies the condition and hypothesis is accepted i.e. (p < 0.01, 0.05 and 0.10 = accepted) but if the p-value is greater than 0.10 i.e. (p > 0.10) then it does not satisfy the condition and hypothesis is rejected. Table 4 also provides the value of p=0.000 < 0.01, so this hypothesis is also accepted.

Table 2 also shows R square values. From the above analysis, R square= 0.284 is greater than 0.25 and is considered to be accepted. This value justifies well that independent variable (job burnout) causes 28.4% change in a dependent variable (intentions to leave).

The value of F49.693 shows the good relationship between these variables. All the values of 't' are non-zero. The results also indicate that value of β = 0.694 demonstrates that there is a positive impact of job burnout on intentions to leave and if there is one unit change in job burnout it results in 69.4% variation in intentions to leave.

Regression Analysis of Interpersonal Conflicts (Independent variable) Job Burnout (Mediating variable) and Intentions to Leave (Dependent variable)

H4: Job burnout mediates the relationship between interpersonal conflicts and the intentions to leave

Mediation effect of Job Burnout between the relationship of Interpersonal Conflicts and Intentions to Leave

Table 2 shows three paths i.e. a, b and c. Path (a) regression of the independent variable (Interpersonal conflicts) on mediator (Job Burnout). For this relationship values of $\beta = 0.495$ and p are less than 0.01. This means that this is significant. After that Path (b) shows the impact of mediator

(Job Burnout) on the dependent variable (Intentions to Leave).For this relationship values of $\beta = 0.694$ and p are less than 0.01. This means that this step is also significant. Finally path(c) shows regression of (Interpersonal Conflicts) on the dependent variable (Intentions to Leave). For this relationship values of $\beta = 0.56$ and p are less than 0.01.This means that this step is also significant. In path(c') we also regressed the (Interpersonal Conflicts) and mediator (Job Burnout) on the dependent variable (Intentions to Leave) collectively. In this step values of $\beta = 0.364$ and p are less than 0.01 for the relationship of Interpersonal conflicts and intentions to leave. The above account shows that three paths are significant and there exists mediation.

There are two conditions of mediations. First condition of mediation is of complete mediation. This condition is met when the value of β for independent and dependent variables becomes zero in the combined effect of independent and mediator on the dependent variable. 2nd condition of mediation is of partial mediation. This condition is met when the value of β for independent and dependent variables provide less value in the combined effect of independent and mediator on the dependent variable. Consequently, the results indicate that partial mediation exist for checking the mediating effect of job burnout between the relationship of interpersonal conflicts and intentions to leave because the values of β for independent and dependent variables are reduced from 0.560 to 0.364. The amount of reduction is equal to 0.199.

The nursing shortage has become as a worldwide issue comprising decrease in healthcare importance, more expenditure, less efficiency and hiring of more nursing staff. Researches reveal that a large number of nurses show their intentions to leave this noble occupation due to burnout. The nursing profession ... frequently experiences a high rate of intentions to leave and burnout. Both are in line with Singh et al. (2008). The findings also indicate that job burnout is one of the leading critical issues for the nurses of Lahore, Pakistan as stated by Ali, & Ali, (2014). Whereas, 'interpersonal conflicts' has a positive impact on job burnout which significantly influences intentions to leave this aspect has also been mentioned by Maslach, (2001) and Aiken et al., (2002).

Consequently, it has been found that a decrease in 'interpersonal conflicts' leads to a reduction in job burnout and intentions to leave. It further indicates that 'interpersonal conflicts' has a significant positive impact on intentions to leave as also claimed by Haq(2011). The findings also informed that more highly qualified, being younger or being male were related with higher intentions to leave are in line with Hasselhorn et al. (2005). It is important to mention that the beta value shows variations due to different factors such as demographic and culture.

To solve the problem of nursing deficiency, it is essential for health officials to promote and recognize noble nursing profession, offer more job opportunities, provide conflict free environment +*-with reduced burnout and improve the nurses' retention. Male nursing staff be hired and encouraged to continue as the demographic data indicated that only 25 out of 232 nurses are male. This implies that there is dire shortage of male nursing staff in Pakistan. They should be encouraged to choose this profession as their career to reduce the national unemployment rate as well. It has also been noticed that a large majority of nurses work at middle level management or as first line managers. They should be involved in decision making process and promoted to next level of hierarchy to get benefits from their empirical experience. Since a great majority of the nurses are graduates. This implies that qualified nurses are available in Pakistan. They should be encouraged to enroll for post-graduate courses and participate in research to increase their competence and become part of top level management. Job burnout has more effect on intentions to leave as compare interpersonal conflicts. That is why nursing professional consider job burnout with intentions to leave, policy makers of nurses should uses job burnout as intervening variable.

The researchers' effort contributes to understand the extent of relationship between the variables such as interpersonal conflicts, job burnout and intentions to leave in the nursing sector of Lahore Pakistan. The study signifies that job burnout partially mediates the relationship between interpersonal conflicts and intentions to leave. The fact of statistically significant correlations and regression results indicate that the independent variables have a substantial impact on their respective dependent variable. Current study also contributes in the body of literature in two ways 1-By proposing interpersonal conflicts, job burnout and intentions to leave in a single model2-By checking the mediation effect of job burnout between the relationship of interpersonal conflicts and intentions to leave.

Conclusions, Limitation and Future Researches

The researchers have successfully met the objectives, research questions and hypotheses of this research such as assessing the relationship between interpersonal conflicts and intentions to leave with the mediating effect of job burnout. The purpose of conducting this research was to explore the extent of interpersonal conflicts on intentions to leave with the mediation effect of job burnout. In this research, nurses' intentions to leave the profession was acknowledged, reviewed and consolidated. A strong impact on nurses' intentions to leave the profession was explained, including demographic, task-related and employee-related variables. The findings and the literature reviewed showed a strong positive impact of interpersonal conflicts on intentions to leave. The research demonstrated positive influence of job burnout on intentions to leave. In this study job burnout was a partially mediator between interpersonal conflicts and intentions to leave. It was found that mediation effect has not been checked before so it is new dimension that was signified in the research. The data collected from the nursing staff of Lahore was analyzed statistically by reliability, correlation and regression analyses with the help of SPSS 22 and revealed very interesting results. The results show iteratively that interpersonal conflicts have a strong impact on intentions to leave among the nurses. Regression analysis was incorporated to assess the level of significance and impact of each variable on intentions to leave. It was found that interpersonal conflicts have a significant influence on intentions to leave.

There were some limitations of this study taken into account when the current results were intepreted. The most limiting factor in this study was the cross-sectional design. It includes only the range of hospitals that are within the boundaries of Lahore Pakistan. Two teaching hospitals were selected for this research, one was from a public hospital, and the other was a private hospital. This research was conducted in Lahore so a limited data was collected hence it is not considered as large scale research. In the regression analysis, demographic variables were treated as control variables. The presented results cannot be generalized especially of male nurses because of overwhelming majority of female nurses. The respondents were both female and male nurses with less opportunity was provided to them to explain their views about the intentions to leave due to closed ended questions.

This study has added value to this specific area of research by providing an example in the form of a research project conducted within specifically selected teaching hospitals from the public and private sector. Following are future directions. 1- Longitudinal studies will facilitate an understanding of the relationship between the variables in more depth. The study aimed to establish links between the variables. Futurestudies may include a more substantial and broader variety of respondents; replication of the study in other regions may produce different results due to demographic and cultural differences. This research can be utilized in various sectors because the intentions to leave is also critical for many others ectors like banking, textile, education, cement industry, telecom, etc. 2-

To elaborate, interpersonal conflicts have two dimensions as relationship conflicts and task conflicts providing in-depth results to fix the problem of intentions to leave among the nursing staff. 3- More hospitals need to be included to generalize the results. 4- Non-teaching public and private hospitals be considered for future research.

References

- Aiken, L. H., Sermeus, W., Van den Heede, K., Sloane, D. M., Busse, R., McKee, M., ...&Tishelman, C. (2012). Patient safety, satisfaction, and quality of hospital care: cross sectional surveys of nurses and patients in 12 countries in Europe and the United States. *Bmj*, 344, e1717.doi: <u>https://doi.org/10.1136/bmj.e1717</u>
- Ali, N., & Ali, A. (2014). The mediating effect of job satisfaction between psychological capital and job burnout of pakistani nurses. *Pakistan Journal of Commerce and Social Sciences*, 8(2), 399-412.
- Baldwin DC Jr, Daugherty SR (2008).Interprofessional conflict and medical errors: results of a national multispecialty survey of hospital residents in the US. *Journal of Interprofessional Care*. 22(6):573–86.doi:10.1080/13561820802364740
- Bria, M., Băban, A., Andreica, S., &Dumitraşcu, D. L. (2013).Burnout and turnover intentions among Romanian ambulance personnel. *Proceedia-Social and Behavioral Sciences*, 84, 801-805. doi:10.1016/j.sbspro.2013.06.650
- Chan T, Bakewell F, Orlich D, Sherbino J. (2014). Conflict Prevention, Conflict Mitigation, and Manifestations of Conflict During Emergency Department Consultations. Academic Emergency Medicine. 21 (3):308–13. doi: 10.1111/acem.12325
- Chan, Z. C., Tam, W. S., Lung, M. K., Wong, W. Y., &Chau, C. W. (2013). A systematic literature review of nurse shortage and the intention to leave. *Journal of Nursing Management*, *21*, 605–613. DOI: 10.1111/j.1365-2834.2012.01437.x
- Donabedian, A. (1966). Evaluating the quality of medical care. *The Milbank memorial fund quarter-ly*, *44*(3), 166-206.doi:10.1111/j.1468-0009.2005.00397.x
- Donley, R. (2005). Challenges for nursing in the 21st century. Nursing Economics, 23(6), 312.
- Eatough, E. M. (2010). Understanding the relationships between interpersonal conflict at work, perceived control, coping, and employee well-being. . Graduate Theses and Dissertations. http://scholarcommons.usf.edu/etd/1623
- El-Hosany, W. A. (2016).Interpersonal conflict, job satisfaction, and team effectiveness among nurses at Ismailia General Hospital. *Journal of Nursing Education and Practice*, 7(3), 115-127.doi.org/10.5430/jnep.v7n3p115
- Fassier T, and Azoulay E.(2010), Conflicts and communication gaps in the intensive care unit. *Current Opinion in Critical Care*. 16(6):654–65. doi:10.1097/mcc.0b013e32834044f0
- Flinkman, M., Leino-Kilpi, H., &Salanterä, S. (2010). Nurses' intention to leave the profession: integrative review. *Journal of advanced nursing*, 66(7), 1422-1434.doi:10.1111/j.1365-2648.2010.05322.x
- Frone, M. R. (2000). Work–family conflict and employee psychiatric disorders: The national co morbidity survey. *Journal of Applied psychology*, 85(6), 888. doi:10.1037/0021-9010.85.6.888
- Guidroz AM, Wang M, Perez LM (2012). Developing a Model of Source-specific Interpersonal Conflict in Health Care. *Stress and Health*. 28(1):69–79. doi:10.1002/smi.1405
- Haq, I. U. (2011). The impact of interpersonal conflict on job outcomes: Mediating role of perception of organizational politics. *Procedia-Social and Behavioral Sciences*, 25, 287-310. doi:10.1016/j.sbspro.2011.10.549

- Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling [White paper]. Retrieved from http://www.afhayes.com/ public/process2012.pdf
- Heinen, M. M., van Achterberg, T., Schwendimann, R., Zander, B., Matthews, A., Kózka, M., ...&Schoonhoven, L. (2013). Nurses' intention to leave their profession: a cross sectional observational study in 10 European countries. *International Journal of Nursing Studies*, 50(2), 174-184. doi:10.1016/j.ijnurstu.2012.09.019

International Council of Nurses (2014). International Centre for Human Resources in Nursing.

Retrieved from http://www.icn.ch/what-we-do/introduction/

- Jerng, J. S., Huang, S. F., Liang, H. W., Chen, L. C., Lin, C. K., Huang, H. F., ... & Sun, J. S. (2017). Workplace interpersonal conflicts among the healthcare workers: Retrospective exploration from the institutional incident reporting system of a university-affiliated medical center. *PloS one*, 12(2), pp1-13. doi:10.1371/journal.pone.0171696
- Juraschek, S. P., Zhang, X., Ranganathan, V., & Lin, V. W. (2012). United States registered nurse workforce report card and shortage forecast. *American Journal of Medical Quality*, 27(3), 241-249. doi:10.1177/1062860611416634
- Katz JD (2007). Conflict and its resolution in the operating room. *Journal of Clinical Anesthesia*. 19 (2):152–8. doi:10.1016/j.jclinane.2006.07.007
- Kaur, K., &Sandhu, H. S. (2010). Career stage effect on organizational commitment: Empirical evidence from Indian banking industry. *International Journal of Business and Management*, 5(12), 141. doi:10.5539/ijbm.v5n12p141
- Khan A, Ghani N and Badsha A (2015).Future Directions of Nursing Education in Pakistan, *Escalating Research*, V 2(2), 31-36.
- Kim, W. G., Leong, J. K., & Lee, Y. K. (2005).Effect of service orientation on job satisfaction, organizational commitment, and intention of leaving in a casual dining chain restaurant. *International Journal of Hospitality Management*, 24(2), 171-193. doi:10.1016/j.ijhm.2004.05.004
- Kitaoka K & Masuda S (2013) Academic report on burnout among Japanese nurses. *Japan Journal of Nursing Science* **10**, 273-279. doi:10.1111/j.1742-7924.2012.00221.x
- Lambert GE, Cluse-Tolar T, Pasupuleti S, Prior M, Allen IR (2012) A Test of a Turnover Intention Model. Administration in Social Work 36: 67-84. doi.org/10.1080/03643107.2010.551494
- Lancman S, Ma [^]ngia EF, Muramoto MT (2013). Impact of conflict and violence on workers in a hospital emergency room. Work: *A Journal of Prevention, Assessment and Rehabilitation*. 45(4):519–27.DOI: 10.3233/WOR-131638
- Langove, N., &Isha, A. S. N. (2017). Interpersonal Conflict and Turnover Intention: The Mediating Role of Psychological Well-Being. Advanced Science Letters, 23(8), 7695-7698.DOI: <u>https://doi.org/10.1166/asl.2017.9555</u>
- Lanz, J. J., &Bruk-Lee, V. (2017).Resilience as a moderator of the indirect effects of conflict and workload on job outcomes among nurses. *Journal of Advanced Nursing*, 73(12), 2973–2986. doi:10.1111/jan.13383.doi.org/10.1111/jan.13383
- Laschinger SHK, Leiter M, Day A &Gilin D (2009) Workplace empowerment, incivility, and burnout: impact on staff nurse recruitment and retention outcomes. *Journal of Nursing Management*.17,302-311. doi:10.1111/j.1365-2834.2009.00999.x

- Lee, Y. W., Dai, Y. T., Park, C. G., & McCreary, L. L. (2013).Predicting quality of work life on nurses' intention to leave. *Journal of Nursing Scholarship*, 45(2), 160-168. doi:10.1111/jnu.12017
- Li, G., Zhu, R., & Yang, Y. (2012). Polymer solar cells. Nature photonics, 6(3), 153.
- Lu, A. C. C., &Gursoy, D. (2013). Impact of Job Burnout on Satisfaction and Turnover Intention. Journal of Hospitality & Tourism Research, 40(2), 210–235. doi:10.1177/1096348013495696.
- Maslach, C., Schaufeli, W. B., &Leiter, M. P. (2001).Job burnout. Annual Review of Psychology, 52(1), 397–422.
- Mitchell, M. (1998). An introduction to genetic algorithms. MIT press.
- Nantsupawat, A., Kunaviktikul, W., Nantsupawat, R., Wichaikhum, O. A., Thienthong, H., &Poghosyan, L. (2017). Effects of nurse work environment on job dissatisfaction, burnout, intention to leave. *International nursing review*, *64*(1), 91-98. doi:10.1111/inr.12342
- Ndawula, M. (2016). BURNOUT AMONG STAFF NURSES: Examining the causes, coping strategies and prevention.
- OECD/ Asia. (2016). Health at a Glance Asia/Pacific 2016: Measuring Progress towards Universal Health Coverage, *Paris: OECD Publishing*. doi.org/10.1787/23054964
- OECD/EU. (2016). *Health at a Glance: Europe 2016: State of Health in the EU Cycle*, Paris: OECD Publishing.
- Oyeleye O, Hanson P, O'Connor N & Dunn D (2013) Relationship of workplace incivility, stress, and burnout on nurses' turnover intentions and psychological empowerment. *The Journal of Nursing Administration* 43(10), 536-542. doi:10.1097/nna.0b013e3182a3e8c9.
- Poghosyan, L., Clarke, S. P., Finlayson, M., & Aiken, L. H. (2010). Nurse burnout and quality of care: Cross-national investigation in six countries. *Research in nursing & health*, 33(4), 288-298. doi:10.1002/nur.20383
- Ranganathan, V., & Lin, V.W. (2012). United States registered nurse workforce report card and shortage forecast. *American Journal of Medical Quality*, 27, 241– 249.doi:10.1177/1062860611416634
- Singh, P., &Loncar, N. (2010). Pay satisfaction, job satisfaction and turnover intent. *Relations industrielles/industrial relations*, 65(3), 470-490.doi:10.7202/044892ar
- Spector, P. E., &Jex, S. M. (1998). Development of four self-report measures of job stressors and strain: interpersonal conflict at work scale, organizational constraints scale, quantitative workload inventory, and physical symptoms inventory. *Journal of occupational health psychology*, 3(4), 356. doi:10.1037/1076-8998.3.4.356
- Stamm, B. (2010). *The concise manual for the professional quality of life scale (2nd ed.)*. Pocatello, ID: ProQOL.org.
- Yasmin, Kashifa, and Najib Ahmad Marzuki (2015). Impact of Organizational Commitment on Intention to Quit Among Psychaitric Nurses: Evidence from Pakistan. International Journal of Learning and Development 5.4, 89-102. doi:10.5296/ijld.v5i4.8734
- Yusoff, M. S. B., Rahim, A. F. A., Baba, A. A., Ismail, S. B., & Pa, M. N. M. (2011). Prevalence and associated factors of stress, anxiety and depression among prospective medical students. *Asian journal of psychiatry*, 6(2), 128-133. doi:10.1016/j.ajp.2012.09.012
- Zhu, X. W., You, L. M., Zheng, J., Liu, K., Fang, J. B., Hou, S. X., ... & Wu, Z. J. (2012). Nurse staffing levels make a difference on patient outcomes: a multisite study in Chinese hospitals. *Journal of Nursing Scholarship*, 44(3), 266-273. doi:10.1111/j.1547-5069.2012.01454.x