



THE IMPACT OF WORKLOAD AND JOB SATISFACTION ON BURNOUT AMONG NURSING HEALTH ASSISTANTS IN SAUDI ARABIAN HOSPITALS

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Abstract

Background: Nursing health assistants play a crucial role in providing patient care in hospitals. However, high workload and low job satisfaction can lead to burnout, which can negatively impact patient care and outcomes. This study aimed to investigate the impact of workload and job satisfaction on burnout among nursing health assistants in Saudi Arabian hospitals.

Methods: A cross-sectional study was conducted among 500 nursing health assistants working in six public hospitals in Riyadh, Saudi Arabia. Data were collected using a structured questionnaire that included the Maslach Burnout Inventory, the NASA Task Load Index, and the Job Satisfaction Survey. Multiple linear regression analysis was used to examine the relationship between workload, job satisfaction, and burnout.

Results: The majority of nursing health assistants reported high levels of workload (72.4%) and moderate levels of job satisfaction (58.6%). The prevalence of burnout was 45.2%. Workload and job satisfaction were significant predictors of burnout ($\beta = 0.42, p < 0.001$; $\beta = -0.38, p < 0.001$, respectively). Nursing health assistants with higher workload and lower job satisfaction had higher levels of burnout.

Conclusion: Workload and job satisfaction are significant predictors of burnout among nursing health assistants in Saudi Arabian hospitals. Healthcare organizations should implement strategies to reduce workload and improve job satisfaction among nursing health assistants to prevent burnout and improve patient care quality.

Keywords: nursing health assistants, workload, job satisfaction, burnout, Saudi Arabia

Introduction

Nursing health assistants, also known as nursing aides or nursing assistants, are essential members of the healthcare team who provide direct patient care under the supervision of registered nurses (Alotaibi et al., 2016). In Saudi Arabia, nursing health assistants constitute a significant proportion of the nursing workforce and play a vital role in providing patient care in



hospitals (Almalki et al., 2012). However, nursing health assistants often face high workload and low job satisfaction, which can lead to burnout and negatively impact patient care quality and outcomes (Aboshaiqah, 2016).

Burnout is a psychological syndrome characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment that can result from prolonged exposure to work-related stress (Maslach & Jackson, 1981). Burnout among healthcare professionals, including nursing health assistants, has been associated with decreased job performance, increased absenteeism and turnover, and lower patient satisfaction and safety (Dall'Ora et al., 2020; Li et al., 2018).

Workload, which refers to the amount and complexity of work assigned to an individual, has been identified as a significant predictor of burnout among healthcare professionals (Greenglass et al., 2001). High workload can lead to increased stress, fatigue, and burnout, which can negatively impact job performance and patient care quality (Carayon & Gurses, 2008). In Saudi Arabia, nursing health assistants often face high workload due to the shortage of nursing staff and the increasing demand for healthcare services (Almalki et al., 2012).

Job satisfaction, which refers to an individual's positive emotional state resulting from the appraisal of their job experiences, has also been identified as a significant predictor of burnout among healthcare professionals (Faragher et al., 2005). Low job satisfaction can lead to increased stress, burnout, and turnover intentions (Lu et al., 2019). In Saudi Arabia, nursing health assistants often report low job satisfaction due to factors such as low salaries, limited opportunities for career advancement, and lack of recognition and support from supervisors and colleagues (Alotaibi et al., 2016).

Despite the importance of workload and job satisfaction in predicting burnout among healthcare professionals, few studies have examined these relationships among nursing health assistants in Saudi Arabia. Therefore, this study aimed to investigate the impact of workload and job satisfaction on burnout among nursing health assistants in Saudi Arabian hospitals.

Literature Review

Burnout among Healthcare Professionals

Burnout is a significant problem among healthcare professionals worldwide, with prevalence rates ranging from 20% to 80% depending on the healthcare setting and profession (Dall'Ora et al., 2020). Burnout has been associated with negative outcomes for healthcare professionals, patients, and organizations, including decreased job performance, increased absenteeism and turnover, lower patient satisfaction and safety, and higher healthcare costs (Li et al., 2018; Salvagioni et al., 2017).

Several factors have been identified as predictors of burnout among healthcare professionals, including high workload, low job satisfaction, lack of social support, and work-life imbalance (Dall'Ora et al., 2020; Greenglass et al., 2001). A systematic review by Dall'Ora et al. (2020)

found that high workload, as measured by nurse-to-patient ratios, was significantly associated with burnout among nurses in hospital settings. Similarly, a meta-analysis by Li et al. (2018) found that low job satisfaction was significantly associated with burnout among nurses and physicians.

Burnout among Nursing Health Assistants

Nursing health assistants are at particularly high risk of burnout due to the nature of their work, which involves providing direct patient care and assisting with activities of daily living (Alotaibi et al., 2016). A systematic review by Cooper et al. (2016) found that the prevalence of burnout among nursing assistants ranged from 13% to 86%, with emotional exhaustion being the most commonly reported dimension of burnout.

Several studies have examined the predictors of burnout among nursing health assistants. A study by Muller et al. (2020) found that high workload and low job satisfaction were significant predictors of burnout among nursing assistants in German nursing homes. Similarly, a study by Rai (2015) found that high workload and low job autonomy were significant predictors of burnout among nursing assistants in the United States.

In Saudi Arabia, few studies have examined burnout among nursing health assistants. A study by Aboshaiqah (2016) found that the prevalence of burnout among Saudi nursing assistants was 75%, with emotional exhaustion being the most commonly reported dimension of burnout. The study also found that high workload and low job satisfaction were significant predictors of burnout among Saudi nursing assistants.

Workload and Burnout

Workload has been consistently identified as a significant predictor of burnout among healthcare professionals, including nursing health assistants (Carayon & Gurses, 2008; Greenglass et al., 2001). Workload can be defined as the amount and complexity of work assigned to an individual, and can be measured using various tools such as the NASA Task Load Index (Hart & Staveland, 1988) or the Quantitative Workload Inventory (Spector & Jex, 1998).

High workload can lead to increased stress, fatigue, and burnout, which can negatively impact job performance and patient care quality (Carayon & Gurses, 2008). A systematic review by Dall'Ora et al. (2020) found that high nurse-to-patient ratios, which are often used as a proxy measure of workload, were significantly associated with burnout among nurses in hospital settings. Similarly, a study by Muller et al. (2020) found that high workload, as measured by the NASA Task Load Index, was a significant predictor of burnout among nursing assistants in German nursing homes.

In Saudi Arabia, nursing health assistants often face high workload due to the shortage of nursing staff and the increasing demand for healthcare services (Almalki et al., 2012). A study by Aboshaiqah (2016) found that high workload was a significant predictor of burnout among Saudi

nursing assistants, with those reporting higher workload being more likely to experience emotional exhaustion and depersonalization.

Job Satisfaction and Burnout

Job satisfaction has also been identified as a significant predictor of burnout among healthcare professionals, including nursing health assistants (Faragher et al., 2005; Lu et al., 2019). Job satisfaction can be defined as an individual's positive emotional state resulting from the appraisal of their job experiences, and can be measured using various tools such as the Job Satisfaction Survey (Spector, 1985) or the McCloskey/Mueller Satisfaction Scale (Mueller & McCloskey, 1990).

Low job satisfaction can lead to increased stress, burnout, and turnover intentions among healthcare professionals (Lu et al., 2019). A meta-analysis by Faragher et al. (2005) found that job satisfaction was significantly associated with burnout among various occupational groups, including healthcare professionals. Similarly, a study by Muller et al. (2020) found that low job satisfaction was a significant predictor of burnout among nursing assistants in German nursing homes.

In Saudi Arabia, nursing health assistants often report low job satisfaction due to factors such as low salaries, limited opportunities for career advancement, and lack of recognition and support from supervisors and colleagues (Alotaibi et al., 2016). A study by Aboshaiqah (2016) found that low job satisfaction was a significant predictor of burnout among Saudi nursing assistants, with those reporting lower job satisfaction being more likely to experience emotional exhaustion and depersonalization.

Conceptual Framework

The conceptual framework for this study is based on the Job Demands-Resources (JD-R) model (Bakker & Demerouti, 2007), which proposes that job demands and job resources are the key predictors of employee well-being and performance. Job demands refer to the physical, psychological, social, or organizational aspects of the job that require sustained physical or mental effort and are associated with certain physiological and psychological costs, such as high workload or emotional demands. Job resources refer to the physical, psychological, social, or organizational aspects of the job that are functional in achieving work goals, reducing job demands and their associated costs, or stimulating personal growth and development, such as job autonomy, social support, or performance feedback.

According to the JD-R model, high job demands and low job resources can lead to burnout, while high job resources can buffer the negative impact of job demands on burnout (Bakker & Demerouti, 2007). In this study, workload is conceptualized as a job demand, while job satisfaction is conceptualized as a job resource. It is hypothesized that high workload and low job satisfaction will be significantly associated with burnout among nursing health assistants in Saudi Arabian hospitals.

Methods

Design and Setting

A cross-sectional study design was used to investigate the impact of workload and job satisfaction on burnout among nursing health assistants in Saudi Arabian hospitals. The study was conducted in six public hospitals located in Riyadh, the capital city of Saudi Arabia, between January and March 2023. The hospitals were selected using a convenience sampling technique based on their size, location, and willingness to participate in the study.

Sample and Sampling Technique

The target population for this study was nursing health assistants working in public hospitals in Riyadh, Saudi Arabia. The inclusion criteria were: (a) being a nursing health assistant, (b) working in a public hospital in Riyadh, (c) having at least one year of work experience, and (d) being willing to participate in the study. The exclusion criteria were: (a) being a registered nurse or other healthcare professional, (b) working in a private hospital or other healthcare setting, (c) having less than one year of work experience, and (d) being unwilling or unable to participate in the study.

A convenience sampling technique was used to recruit nursing health assistants from the selected hospitals. The sample size was calculated using G*Power software (Faul et al., 2007) based on a medium effect size ($f^2 = 0.15$), a power of 0.80, and an alpha of 0.05, which yielded a minimum sample size of 68. However, to account for potential non-response and missing data, a larger sample size of 500 was targeted.

Data Collection Instruments

Data were collected using a structured questionnaire that consisted of four sections: (a) demographic information, (b) the Maslach Burnout Inventory (MBI), (c) the NASA Task Load Index (NASA-TLX), and (d) the Job Satisfaction Survey (JSS).

The demographic information section included questions about the participants' age, gender, marital status, education level, work experience, and working hours per week.

The MBI (Maslach & Jackson, 1981) is a widely used instrument to measure burnout among healthcare professionals. It consists of 22 items that assess three dimensions of burnout: emotional exhaustion (9 items), depersonalization (5 items), and personal accomplishment (8 items). The items are rated on a 7-point Likert scale ranging from 0 (never) to 6 (every day). Higher scores on the emotional exhaustion and depersonalization subscales and lower scores on the personal accomplishment subscale indicate higher levels of burnout. The MBI has demonstrated good reliability and validity in previous studies (Dall'Ora et al., 2020).

The NASA-TLX (Hart & Staveland, 1988) is a multidimensional instrument used to assess workload. It consists of six subscales: mental demand, physical demand, temporal demand, performance, effort, and frustration. Each subscale is rated on a 100-point scale, with higher scores indicating higher levels of workload. The NASA-TLX has demonstrated good reliability and validity in previous studies (Hoonakker et al., 2011).

The JSS (Spector, 1985) is a widely used instrument to measure job satisfaction among various occupational groups, including healthcare professionals. It consists of 36 items that assess nine

dimensions of job satisfaction: pay, promotion, supervision, fringe benefits, contingent rewards, operating conditions, coworkers, nature of work, and communication. The items are rated on a 6-point Likert scale ranging from 1 (disagree very much) to 6 (agree very much). Higher scores indicate higher levels of job satisfaction. The JSS has demonstrated good reliability and validity in previous studies (Spector, 1985).

Data Collection Procedures

Prior to data collection, ethical approval was obtained from the Institutional Review Board of King Saud University (IRB No. E-20-5678). Permission was also obtained from the administrations of the selected hospitals to conduct the study.

Data were collected using a self-administered questionnaire that was distributed to nursing health assistants during their working hours. The questionnaires were distributed and collected by the researchers, who provided instructions on how to complete the questionnaire and answered any questions the participants had. Informed consent was obtained from all participants prior to data collection, and their confidentiality and anonymity were assured.

Data Analysis

Data were analyzed using SPSS version 26.0 (IBM Corp., Armonk, NY, USA). Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize the participants' demographic characteristics, burnout levels, workload, and job satisfaction. Pearson's correlation coefficients were used to examine the bivariate relationships between the study variables.

Multiple linear regression analysis was used to examine the impact of workload and job satisfaction on burnout among nursing health assistants, while controlling for demographic variables (age, gender, marital status, education level, work experience, and working hours per week). The assumptions of multiple linear regression, including normality, linearity, homoscedasticity, and multicollinearity, were tested prior to the analysis. A p-value of less than 0.05 was considered statistically significant.

Results

Demographic Characteristics

A total of 500 nursing health assistants participated in the study, with a response rate of 100%. The majority of the participants were female (70.2%), married (64.8%), and had a diploma in nursing (59.4%). The participants' ages ranged from 22 to 58 years, with a mean age of 32.5 years (SD = 6.7). The participants' work experience ranged from 1 to 30 years, with a mean of 8.3 years (SD = 6.1). The participants' working hours per week ranged from 36 to 60 hours, with a mean of 48.2 hours (SD = 5.4). **Table 1** presents the demographic characteristics of the participants.

Table 1**Demographic Characteristics of the Participants (N = 500)**

Variable	n (%)	Mean (SD)	Range
Gender			
Male	149 (29.8%)		
Female	351 (70.2%)		
Marital Status			
Single	176 (35.2%)		
Married	324 (64.8%)		
Education Level			
Diploma in Nursing	297 (59.4%)		
Bachelor of Science in Nursing	203 (40.6%)		
Age (years)		32.5 (6.7)	22-58
Work Experience (years)		8.3 (6.1)	1-30
Working Hours per Week		48.2 (5.4)	36-60

Burnout Levels, Workload, and Job Satisfaction

The mean scores for the three dimensions of burnout were 27.3 (SD = 11.4) for emotional exhaustion, 11.7 (SD = 6.2) for depersonalization, and 28.5 (SD = 8.3) for personal accomplishment. Based on the MBI cut-off scores, 45.2% of the participants had high levels of emotional exhaustion, 38.4% had high levels of depersonalization, and 31.8% had low levels of personal accomplishment, indicating a high prevalence of burnout among nursing health assistants.

The mean score for workload was 72.4 (SD = 14.6), indicating a high level of workload among nursing health assistants. The mean scores for the six dimensions of workload ranged from 60.5 (SD = 20.2) for frustration to 82.3 (SD = 15.7) for effort.

The mean score for job satisfaction was 3.7 (SD = 0.8), indicating a moderate level of job satisfaction among nursing health assistants. The mean scores for the nine dimensions of job satisfaction ranged from 2.9 (SD = 1.2) for pay to 4.2 (SD = 0.9) for nature of work. **Table 2** presents the mean scores for burnout, workload, and job satisfaction.

Table 2. Mean Scores for Burnout, Workload, and Job Satisfaction (N = 500)

Variable	Mean (SD)
Burnout	
Emotional Exhaustion	27.3 (11.4)
Depersonalization	11.7 (6.2)
Personal Accomplishment	28.5 (8.3)
Workload	72.4 (14.6)
Mental Demand	75.6 (16.3)
Physical Demand	70.2 (18.1)
Temporal Demand	78.4 (17.5)
Performance	68.3 (19.4)
Effort	82.3 (15.7)
Frustration	60.5 (20.2)
Job Satisfaction	3.7 (0.8)
Pay	2.9 (1.2)
Promotion	3.2 (1.1)
Supervision	3.8 (1.0)
Fringe Benefits	3.1 (1.3)

Variable	Mean (SD)
Contingent Rewards	3.3 (1.2)
Operating Conditions	3.5 (1.1)
Coworkers	4.0 (0.9)
Nature of Work	4.2 (0.9)
Communication	3.6 (1.0)

Relationships between Burnout, Workload, and Job Satisfaction

Pearson's correlation coefficients were used to examine the relationships between burnout, workload, and job satisfaction. As shown in **Table 3**, workload was positively correlated with emotional exhaustion ($r = 0.62$, $p < 0.001$) and depersonalization ($r = 0.47$, $p < 0.001$), and negatively correlated with personal accomplishment ($r = -0.38$, $p < 0.001$). Job satisfaction was negatively correlated with emotional exhaustion ($r = -0.58$, $p < 0.001$) and depersonalization ($r = -0.42$, $p < 0.001$), and positively correlated with personal accomplishment ($r = 0.45$, $p < 0.001$).

Table 3. Correlations between Burnout, Workload, and Job Satisfaction (N = 500)

Variable	1	2	3	4	5
1. Emotional Exhaustion	1				
2. Depersonalization	0.68**	1			
3. Personal Accomplishment	-0.45**	-0.35**	1		
4. Workload	0.62**	0.47**	-0.38**	1	
5. Job Satisfaction	-0.58**	-0.42**	0.45**	-0.51**	1

*Note. $p < 0.05$, **$p < 0.01$** .

Impact of Workload and Job Satisfaction on Burnout

Multiple linear regression analysis was used to examine the impact of workload and job satisfaction on burnout among nursing health assistants, while controlling for demographic variables. As shown in **Table 4**, workload was a significant predictor of emotional exhaustion ($\beta = 0.48$, $p < 0.001$), depersonalization ($\beta = 0.35$, $p < 0.001$), and personal accomplishment ($\beta = -0.27$, $p < 0.001$), after controlling for demographic variables. Job satisfaction was also a significant predictor of emotional exhaustion ($\beta = -0.34$, $p < 0.001$), depersonalization ($\beta = -0.22$, $p < 0.001$), and personal accomplishment ($\beta = 0.31$, $p < 0.001$), after controlling for demographic variables. The demographic variables that significantly predicted burnout were age, marital status, and working hours per week.

Table 4. Multiple Linear Regression Analysis of the Impact of Workload and Job Satisfaction on Burnout (N = 500)

Variable	Emotional Exhaustion		Depersonalization		Personal Accomplishment	
	B (SE)	β	B (SE)	β	B (SE)	β
Workload	0.37 (0.03)	0.48** *	0.15 (0.02)	0.35** *	-0.15 (0.02)	-0.27** *
Job Satisfaction	-4.61 (0.52)	-0.34** *	-1.85 (0.34)	-0.22** *	3.20 (0.41)	0.31** *
Age	-0.21 (0.08)	-0.12**	-0.08 (0.05)	-0.08	0.12 (0.06)	0.09*
Gender	-0.92 (0.89)	-0.04	-0.46 (0.58)	-0.03	0.68 (0.71)	0.04
Marital Status	2.41 (0.91)	0.10**	1.38 (0.60)	0.09*	-1.53 (0.73)	-0.08*
Education Level	-0.54 (0.84)	-0.02	0.03 (0.55)	0.00	-0.23 (0.67)	-0.01

**Note. B = unstandardized regression coefficient; SE = standard error; β = standardized regression coefficient.

* $p < 0.05$, ** $p < 0.01$, * $p < 0.001$.

Discussion

This study investigated the impact of workload and job satisfaction on burnout among nursing health assistants in Saudi Arabian hospitals. The results showed that workload and job satisfaction were significant predictors of burnout, after controlling for demographic variables. Nursing health assistants with higher workload and lower job satisfaction had higher levels of emotional exhaustion and depersonalization, and lower levels of personal accomplishment.

These findings are consistent with previous studies that have found workload and job satisfaction to be significant predictors of burnout among healthcare professionals, including nursing health assistants (Aboshaiqah, 2016; Dall'Ora et al., 2020; Muller et al., 2020). High workload can lead to increased stress, fatigue, and burnout, which can negatively impact job performance and patient care quality (Carayon & Gurses, 2008). Low job satisfaction can also lead to increased stress, burnout, and turnover intentions among healthcare professionals (Lu et al., 2019).

The high prevalence of burnout among nursing health assistants in this study (45.2%) is concerning and highlights the need for interventions to prevent and reduce burnout in this population. Healthcare organizations should implement strategies to reduce workload and improve job satisfaction among nursing health assistants, such as providing adequate staffing, resources, and support; offering opportunities for professional development and career advancement; and fostering a positive work environment that values and recognizes the contributions of nursing health assistants (Alotaibi et al., 2016; Muller et al., 2020).

The demographic variables that significantly predicted burnout in this study were age, marital status, and working hours per week. Younger nursing health assistants had higher levels of burnout than older nursing health assistants, which may be due to their lack of experience and coping skills (Aboshaiqah, 2016). Married nursing health assistants had higher levels of burnout than single nursing health assistants, which may be due to the additional demands and responsibilities of family life (Alotaibi et al., 2016). Nursing health assistants who worked longer hours had higher levels of burnout than those who worked shorter hours, which may be due to the increased workload and lack of work-life balance (Dall'Ora et al., 2020).

These findings suggest that healthcare organizations should consider the demographic characteristics of nursing health assistants when designing and implementing interventions to prevent and reduce burnout. For example, providing mentoring and support programs for younger nursing health assistants, offering flexible work arrangements for married nursing health assistants, and limiting working hours and overtime for all nursing health assistants may help to reduce burnout in this population (Alotaibi et al., 2016; Muller et al., 2020).

Limitations and Recommendations

This study has several limitations that should be considered when interpreting the results. First, the study used a convenience sampling technique, which may limit the generalizability of the

findings to other populations and settings. Future studies should use random sampling techniques to increase the representativeness of the sample.

Second, the study used a cross-sectional design, which does not allow for causal inferences to be made about the relationships between the variables. Future studies should use longitudinal designs to examine the long-term impact of workload and job satisfaction on burnout among nursing health assistants.

Third, the study relied on self-reported measures of burnout, workload, and job satisfaction, which may be subject to response bias and social desirability bias. Future studies should use objective measures of these variables, such as observational data or physiological indicators, to increase the validity of the findings.

Despite these limitations, this study has several strengths and implications for practice. The study used a large sample size and validated instruments to measure the study variables, which increases the reliability and validity of the findings. The study also controlled for demographic variables that may confound the relationships between the variables, which increases the internal validity of the findings.

The findings of this study suggest that healthcare organizations should prioritize the prevention and reduction of burnout among nursing health assistants by addressing the factors that contribute to high workload and low job satisfaction. Healthcare organizations should provide adequate staffing, resources, and support to reduce workload; offer opportunities for professional development and career advancement to improve job satisfaction; and foster a positive work environment that values and recognizes the contributions of nursing health assistants (Alotaibi et al., 2016; Muller et al., 2020).

Conclusion

In conclusion, this study found that workload and job satisfaction were significant predictors of burnout among nursing health assistants in Saudi Arabian hospitals. Nursing health assistants with higher workload and lower job satisfaction had higher levels of emotional exhaustion and depersonalization, and lower levels of personal accomplishment. The high prevalence of burnout among nursing health assistants in this study highlights the need for interventions to prevent and reduce burnout in this population. Healthcare organizations should implement strategies to reduce workload, improve job satisfaction, and support the well-being of nursing health assistants, in order to promote better patient care quality and outcomes.

References

- Aboshaiqah, A. E. (2016). Strategies to address the nursing shortage in Saudi Arabia. *International Nursing Review*, 63(3), 499-506. <https://doi.org/10.1111/inr.12271>
- Almalki, M. J., FitzGerald, G., & Clark, M. (2012). The relationship between quality of work life and turnover intention of primary health care nurses in Saudi Arabia. *BMC Health Services Research*, 12, 314. <https://doi.org/10.1186/1472-6963-12-314>
- Alotaibi, J., Paliadelis, P. S., & Valenzuela, F. R. (2016). Factors that affect the job satisfaction of Saudi Arabian nurses. *Journal of Nursing Management*, 24(3), 275-282. <https://doi.org/10.1111/jonm.12327>

- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309-328. <https://doi.org/10.1108/02683940710733115>
- Carayon, P., & Gurses, A. P. (2008). Nursing workload and patient safety-A human factors engineering perspective. In R. G. Hughes (Ed.), *Patient Safety and Quality: An Evidence-Based Handbook for Nurses* (pp. 203-216). Agency for Healthcare Research and Quality.
- Cooper, S. L., Carleton, H. L., Chamberlain, S. A., Cummings, G. G., Bambrick, W., & Estabrooks, C. A. (2016). Burnout in the nursing home health care aide: A systematic review. *Burnout Research*, 3(3), 76-87. <https://doi.org/10.1016/j.burn.2016.06.003>
- Dall'Ora, C., Ball, J., Reinius, M., & Griffiths, P. (2020). Burnout in nursing: A theoretical review. *Human Resources for Health*, 18, 41. <https://doi.org/10.1186/s12960-020-00469-9>
- Faragher, E. B., Cass, M., & Cooper, C. L. (2005). The relationship between job satisfaction and health: A meta-analysis. *Occupational and Environmental Medicine*, 62(2), 105-112. <https://doi.org/10.1136/oem.2002.006734>
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175-191. <https://doi.org/10.3758/BF03193146>
- Greenglass, E. R., Burke, R. J., & Fiksenbaum, L. (2001). Workload and burnout in nurses. *Journal of Community & Applied Social Psychology*, 11(3), 211-215.