

Original Article

Nurses' Job Satisfaction at the Southeast District, Chattogram in Bangladesh: A Cross-sectional Study

Roy Liton, MPH, BSc in Nursing

Senior Staff Nurse, 250 Bedded General Hospital, Chattogram, Bangladesh

Khan A.K.M. Dawlat, PhD

Research Fellow, MSS, University of Dhaka, Bangladesh

Correspondence: Liton Roy, Senior Staff Nurse, Department of Emergency, 250 Bedded General Hospital, Chattogram, Bangladesh, Email: litonroy75@gmail.com

Abstract

Background: Job satisfaction is a key concept within productive organizations, especially those that provide healthcare. Job satisfaction in nursing is associated with nurse performance, quality of patient care and increased patient satisfaction.

Aim: The aim of this study was to determine the level of job satisfaction in Bangladeshi nurses.

Methods: A cross-sectional study was conducted among the government register nurses in government health care facilities from July to August 2014 at Chattogram District at the southeast part in Bangladesh. A structured self-administered questionnaire following McCloskey/Muller's Satisfaction Scale (MMSS) was used to collect data from the respondents.

Results: Most of the respondents were female (90.7%) and the education level was Diploma in Nursing and Midwifery (72.1%). About half of the respondents' (44.8%) job contract was temporary. The study revealed the seven most moderately satisfying items were salary {Mean \pm SD, (4.08 \pm 0.339)}, maternity leave time (4.06 \pm 0.471), hours that you work (4.03 \pm 0.322), your nursing peers (4.02 \pm .305), recognition of your work from peers (4.02 \pm 0.195), flexibility in scheduling your hours (M = 4.0, SD = 0.363), the delivery care methods (4.0 \pm 0.267). The study also found out eight most very dissatisfying items and 12 items that neither satisfied nor dissatisfied, of MMSS.

Conclusions: The study concluded that nurses' job satisfactions are related to several factors and an in-depth study would be conducted to find out the root causes for the dissatisfaction, and design an intervention or policy implication to increase their job satisfactions.

Key Words: job satisfaction, nurse, cross-sectional study, Bangladesh.

Introduction

Job satisfaction is a key concept within productive organizations, especially those that provide healthcare. In fact, job satisfaction and the well-being of healthcare workers play an important role in the quality of the care provided. Job satisfaction is one of the most important factors in organizations as it is related to organizational effectiveness(Cox,

2003). Job satisfaction in nursing is associated with nurse performance, quality of patient care(Ajamieh, Misener, Haddock, & Gleaton, 1996; Ma, Samuels, & Alexander, 2003) and increased patient satisfaction (Aiken, Clarke, Sloane, & Consortium, 2002; Altier & Krsek, 2006; Burtson & Stichler, 2010).

Job satisfaction is a multifaceted concept associated with many factors such as working

conditions, organizational support, leadership styles, leader empowering behaviors (LEB), structural empowerment (SE), and psychological empowerment (PE)(Laschinger & Finegan, 2005; Laschinger, Finegan, Shamian, & Wilk, 2004; H. Lu, While, & Barriball, 2005; Sellgren, Ekvall, & Tomson, 2008) . The leaders' use of behaviors that empower staff contributes to work effectiveness by enhancing employees' performance (Hui, 1994). Leader empowering behaviors directly affect the ability of staff to accomplish organizational goals, and this enhances organizational effectiveness(Conger & Kanungo, 1988; Sellgren et al., 2008) . Use of leader empowering behaviors in nursing is essential since it creates supportive practice environments where nurses can perform best(BRADY GERMAIN & Cummings, 2010) This, in turn, can lead to increased job satisfaction(Laschinger & Finegan, 2005; Laschinger et al., 2004).Research has shown that structural and psychological empowerment is positively related to nurses' job satisfaction (Laschinger, Finegan, Shamian, & Wilk, 2001; Laschinger & Havens, 1997; Leggat, Bartram, Casimir, & Stanton, 2010; Morrison, Jones, & Fuller, 1997). Structural Empowerment refers to workplace structures that support the job performance of employees and bring about positive outcomes in organization (Laschinger, 2008; Wagner et al., 2010).

Structural supports include providing access to information and resources, offering educational and professional opportunities, and providing autonomy for decision-making (Kanter, 2008; Leggat et al., 2010). Psychological empowerment refers to the employee's perception or feeling of being empowered to be successful in the workplace (Spreitzer, 1995). Feelings of psychological empowerment are associated with positive workplace behaviors, and these bring positive outcomes to organizations (Knol & Van Linge, 2009). Nurses continue to report high-levels of

job dissatisfaction (Hayes, Bonner, & Pryor, 2010; Ma et al., 2003; Manojlovich & Laschinger, 2002).

There are many factors that cause job dissatisfaction such as lack of resources, recognition, support, communication and fairness (Hayes et al., 2010; McCloskey, 1974; McNeese-Smith, 1996). McNeese-Smith (McNeese-Smith, 1996) and categorized them into seven groups: patient care, factors that interfere with job/patient care, feeling overloaded, relations with co-workers, personal factors, organizational factors and career stage of the nurse. And verbal abuse from patients and their family, bad patient outcomes, unsupportive working environments and conditions, lack of supplies, night shifts, insufficient staff, heavy workload and unfairness at work were associated with nurses' job dissatisfaction(Lee, 2013).

Job dissatisfaction also brings to bear negative effects on health care and nurses' outcomes. The association between nurses' job dissatisfaction and turnover and intention to leave and found that job satisfaction was negatively correlated with intention to leave (K.-Y. Lu, Lin, Wu, Hsieh, & Chang, 2002) . It is also noted that dissatisfied nurses were more likely to leave their professions(Ma et al., 2003).

Job dissatisfaction of nurses is associated with nursing absenteeism, nursing shortage(Roberts, Jones, & Lynn, 2004), burnout (Ma et al., 2003), recruitment and orientation costs(Hayes et al., 2010), and decreased patient satisfaction (Ajamieh et al., 1996) .Measurement of job satisfaction is with a variety of job satisfaction scales. One of the most-widely used measures of job satisfaction is the McCloskey/Muller Satisfaction Scale (Tourangeau, Hall, Doran, & Petch, 2006) which was developed for the American nursing context.

The MMSS is a 31-item scale measured on a 5-point Likert response scale (very dissatisfied

to very satisfied, see Appendix 1). The MMSS has 8 subscales: “satisfaction with Extrinsic rewards, Scheduling, Family/Work Balance, Co-workers, Interaction, Professional Opportunities, Praise and Recognition, and Control and Responsibility” (see Appendix 1). Mueller and McCloskey (Mueller & McCloskey, 1990) reported a Cronbach’s alpha of .89 for the global scale and alphas ranging .52 to .84 for the subscales.

The job satisfaction of nurses is an important factor in nursing as it is related to quality patient care and other organizational outcomes. Therefore, enhancing the job satisfaction of nurses is important in health care. The objectives of this study were to determine the level of job satisfaction in Bangladeshi nurses.

The aim of this study was to determine the level of job satisfaction of nurses who work in the Government health care facilities in Bangladesh.

Methods and Materials

Study design, setting, period and Sampling

A cross-sectional study was conducted among the government register nurses in government health care facilities from July to August 2014 at Chattogram District at the southeast part in Bangladesh (Figure 1). There were 21 government health care facilities in Chattogram, including 1 medical college hospital (teaching hospital), one district hospital, one specialized hospital, 14 upazilla Health Complex (UHC) and 5 other secondary level health care facilities. Out of these, 8 facilities were selected purposively and 183 respondents were also selected purposively from the facilities.

Data Collection

A structured self-administered questionnaire following McCloskey/Muller’s Satisfaction Scale (Tourangeau et al., 2006) (see Appendix 1) was used to collect data from the

respondents. All the available nurses attending in hospital at the day of data collection, who were willing to attend, filled up the structure questionnaire at their sitting rooms after completing their duty hours or in less work-loaded period.

Data analysis

Data were entered in the Statistical Package for the Social Sciences (SPSS) version-21 and analyzed following descriptive statistical method.

Ethical consideration

The study was reviewed by the ethical review board of Bangladesh medical Research Council (BMRC). The study was also approved by the academic research committee of the National Institute of Preventive and Social Medicine (NIPSOM). Prior conducting interview every respondent was informed consent and voluntarily written consent to participate in the study.

Results

Socio-demographic description of the respondents

Most of the respondents were female (90.7%) and more than half of the respondents (52.5%) were between 30 and 39 years old (Table 2). Almost all of them (98.9%) were married. Among the respondents, the highest education level was M.Sc in Nursing/Master of Public Health (MPH) but their number was less (7.1%). However, most of the respondents; education level was Diploma in Nursing and Midwifery (72.1%). About half of the respondents’ (44.8%) job contract was temporary (Table 3). Few were joined recently and few will retire. However, most of the respondents’ (62.3%) working experience was between 11 and 20 years.

Level of Job Satisfaction of the respondents

This study found out the level of job satisfaction of nurses using the MMSS scale analyzed through descriptive statistics,

computing the overall mean for the global score on the MMSS scale (reference). In this scale, the highest score is 155, the lowest score is 31, and the average score is 93 on the MMSS instrument. A mean job satisfaction scores were calculated for the respondents by summing the overall score and dividing by the whole number of items on the MMSS scale (Table 4). If a score of 3 is taken as the neutral point, the seven most moderately satisfying items were salary {Mean \pm SD, (4.08 \pm 0.339)}, maternity leave time (4.06 \pm 0.471), hours that you work (4.03 \pm 0.322), your nursing peers (4.02 \pm .305), recognition of your work from peers (4.02 \pm 0.195), flexibility in scheduling your hours (M = 4.0, SD = 0.363), the delivery care methods (4.0 \pm 0.267).The eight most very dissatisfying items

were compensation for working weekends (1.32 \pm 0.543), opportunity for part-time work (1.34 \pm 0.616), child care facilities (1.48 \pm 0.563), opportunities to write and publish (1.62 \pm 0.752), your participation in organization decision making (1.69 \pm 0.808), opportunities to participate in nursing research (1.85 \pm 1.077), opportunities to belong to department and institutional committees (1.86 \pm 0.712), weekends of per month (1.98 \pm 0.791).In this study, 12 items of MMSS were found neither satisfied nor dissatisfied (Table 4, rank order 8-19, item no (22, 30, 26, 29, 18, 6, 9, 23, 2, 13, 15, 17) from control over what goes on in the work setting (3.98 \pm 0.347), to opportunities for social contact at work (3.02 \pm 0.931).

Table 1: Study Respondent List by Facilities

S/L No.	Hospital / Level Name	Number of Respondent	Level
1	Chittagong Medical College Hospital (CMCH)	83	Tertiary
2	250 Bedded General Hospital, Chittagong (CGH)	49	Secondary
3	Fouzdarhat T.B Hospital, Fouzderhat, Chittagong	21	Specialized
4	Upazilla Health Complex- Anwara	06	Primary
5	Upazilla Health Complex- Boalkhali	06	Primary
6	Upazilla Health Complex- Hathazari	06	Primary
7	Upazilla Health Complex- Patiya	06	Primary
8	Upazilla Health Complex- Sitakunda	06	Primary
	Total	183	

Table 2: Socio-demographic description of the respondents

Variables	Number (N=183)	Percentages
Sex		
Male	17	9.3
Female	166	90.7
Age		
20-29 years	6	3.3
30-39 years	96	52.5
40-49 years	64	35.0
50-59 years	17	9.3
Marital Status		
Unmarried	1	0.5
Married	181	98.9
Separated	1	0.5
Education Level		
Diploma in Nursing and Midwifery	132	72.1
Diploma in Nursing and Orthopaedic	10	5.5
B.Sc in Nursing-GN/PHN	28	15.3
M.Sc in Nursing/MPH	13	7.1

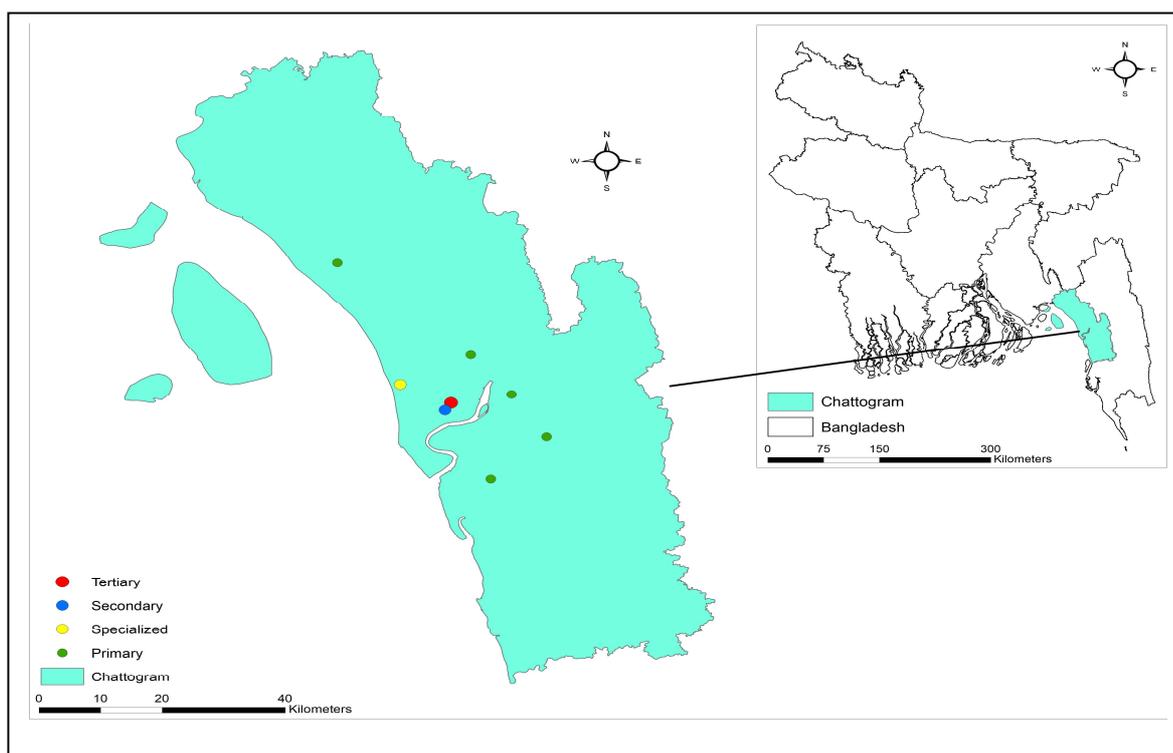
Table 3: Characteristics of respondents' Occupation

Characteristics	Number (N=183)	Percentages
Mode of Occupation		
Temporary	82	44.8
Permanent	101	55.2
Years of Experience in nursing as a Nurse		
1 – 10 years	18	9.8
11-20 years	114	62.3
21-30 years	46	25.1
31 years and above	5	2.7
Current Nursing Designation		
Staff Nurse	25	13.7
Senior staff Nurse	154	84.2
Ward in Charge	1	.5
Nursing Supervisor	3	1.6

Table 4: Distribution of the respondents by the level of job satisfaction

Rank	Item No.	Item description	Mean	SD	Range	Min	Max
1	1	Salary	4.08	.339	3	2	5
2	11	Maternity leave time	4.06	.471	4	1	5
3	4	Hours that you work	4.03	.322	3	2	5
4	14	Your Nursing Peers	4.02	.305	3	2	5
5	25	Recognition of your work from peers	4.02	.195	2	3	5
6	5	Flexibility in scheduling your hours	4.01	.363	3	2	5
7	16	The delivery of care method used on your unit (e.g. functional, team, primary)	4.01	.267	3	2	5
8	22	Control over what goes on in your work setting	3.98	.347	4	1	5
9	30	Your control over work conditions	3.96	.285	3	1	4
10	26	Amount of encouragement and positive feedback	3.96	.311	3	2	5
11	29	Your amount of responsibility	3.95	.359	4	1	5
12	18	Opportunities for social contact with your colleagues after work	3.92	.412	3	2	5
13	6	Opportunity to work straight days	3.92	.559	4	1	5
14	9	Flexibility in scheduling your weekends off	3.91	.429	4	1	5
15	23	Opportunities for career	3.82	.642	4	1	5

		advancement					
16	2	Vacation	3.41	.995	4	1	5
17	13	Your Immediate Supervisor	3.16	.887	4	1	5
18	15	The physicians you work with	3.03	.901	4	1	5
19	17	Opportunities for social contact at work	3.02	.931	4	1	5
20	24	Recognition for your work from superiors	2.83	.838	4	1	5
21	3	Benefits package (insurance, retirement)	2.68	1.898	4	1	5
22	19	Opportunities to interact professionally with other disciplines	2.38	.855	4	1	5
23	20	Opportunities to interact with faculty of the College of Nursing	2.07	.734	3	1	4
24	8	Weekends off per month	1.98	.791	3	1	4
25	21	Opportunities to belong to department and institutional committees	1.86	.712	3	1	4
26	27	Opportunities to participate in nursing research	1.85	1.077	4	1	5
27	31	Your participation in organizational decision making	1.69	.808	3	1	4
28	28	Opportunities to write and publish	1.62	.752	4	1	5
29	12	Child care facilities	1.48	.563	3	1	4
30	7	Opportunity for part-time work	1.34	.616	4	1	5
31	10	Compensation for working weekends	1.32	.543	3	1	4

Figure 1: Chattogram District Map (including Study Hospitals)

Discussion

In general, terms, job satisfaction can be seen as an affective attitude of an individual to its own work, degree of commitment to work, or the subjective importance of work for a particular individual. Depending on the contribution degree of different work factors to the satisfaction when performing professional activities, general job satisfaction can be also defined as a sum of satisfaction with certain aspects of the particular job (Mladenović & Marković, 2011). Considering the well-known

fact that level of job satisfaction basically correlates with the workplace conditions and the nature of a particular job (Mealer et al., 2012; Ozkula & Durukan, 2017). This study indicates that the nurses were satisfied in few issues related their jobs that were salary, maternity leave time, co-colleagues' behavior, recognition of your work from peers, working hour and flexibility of working hours, and the delivery care methods.

Increasing knowledge about the importance of health professionals' job satisfaction should

have a global social significance, because professional dissatisfaction may seriously affect the quality of performed patient care (Mealer et al., 2012; Piers et al.). Adequate material compensation for realized work is the essential prerequisite of job satisfaction and efficient work of health workers, since the time of Hippocrates (Edelstein, 1943). In the developed countries especially European countries inadequate salary is nowadays the main reason of losing work motivation in the nursing profession. This study findings indicate that the dissatisfaction of nurses were related to compensation opportunity for part-time work, child care facilities and career development for the opportunity of higher education and decision making for health care.

In Bangladesh nurses faced many challenges in healthcare system due to unavailable resources, more complex patients, increased nursing shortage, increased job insecurity, job stress, and increased recruitment costs for healthcare institutions. Bangladesh is no exception in this regard and it is one of the countries with 'severe shortages' of health care workers (WHO, 2006) and also in South Asian countries especially the nurses (Hamid, Malik, Kamran, & Ramzan, 2014).

Limitation of the study: Despite optimum endeavor and careful measures in every steps of the study, still some limitations existed. As the study was conducted with no-probability small sample it might not reflect the actual level of job satisfaction. Moreover, the data were collected using self administered questionnaire there was less scope to clarify the question individually. Therefore, some inconsistencies in the data were observed.

Conclusion: The level of job satisfactions varies in different settings worldwide. Job satisfaction is a multifaceted concept associated with many factors such as working conditions, organizational support, leadership styles, leader empowering behaviors (LEB), structural empowerment (SE), and

psychological empowerment, and dissatisfaction of jobs is a deleterious problem in resource-poor setting like Bangladesh, especially in health care facilities. The study concluded that an in-depth study would be conducted to find out the root causes for the dissatisfaction of jobs, and also design an intervention or policy implication to increase their job satisfactions, to ensure quality of health care delivery services

Acknowledgements:

Authors are thankful to the National Institute of Preventive and Social Medicine (NIPSOM) for approval of the study and to the ethical review board of Bangladesh Medical Research Council (BMRC) for the ethical clearance of the study. We would like to express our sincere gratitude to all the nurses participated in this study

References

- Aiken, L. H., Clarke, S. P., Sloane, D. M., & Consortium, I. H. O. R. (2002). Hospital staffing, organization, and quality of care: cross-national findings. *International Journal for quality in Health care*, 14(1), 5-14.
- Ajamieh, A. R. A., Misener, T., Haddock, K. S., & Gleaton, J. U. (1996). Job satisfaction correlates among Palestinian nurses in the West Bank. *Int J Nurs Stud*, 33(4), 422-432.
- Altier, M. E., & Krsek, C. A. (2006). Effects of a 1-year residency program on job satisfaction and retention of new graduate nurses. *Journal for Nurses in Professional Development*, 22(2), 70-77.
- BRADY GERMAIN, P., & Cummings, G. G. (2010). The influence of nursing leadership on nurse performance: a systematic literature review. *Journal of nursing management*, 18(4), 425-439.
- Burtson, P. L., & Stichler, J. F. (2010). Nursing work environment and nurse caring: relationship among motivational factors. *Journal of advanced nursing*, 66(8), 1819-1831.
- Conger, J. A., & Kanungo, R. N. (1988). The empowerment process: Integrating theory and practice. *Academy of management review*, 13(3), 471-482.

- Cox, K. B. (2003). The effects of intrapersonal, intragroup, and intergroup conflict on team performance effectiveness and work satisfaction. *Nursing administration quarterly*, 27(2), 153-163.
- Edelstein, L. (1943). The Hippocratic Oath: text, translation and interpretation. *Ancient medicine: selected papers of Ludwig Edelstein*, 3-63.
- Hamid, S., Malik, A. U., Kamran, I., & Ramzan, M. (2014). Job satisfaction among nurses working in the private and public sectors: a qualitative study in tertiary care hospitals in Pakistan. *J Multidiscip Healthc*, 7, 25.
- Hayes, B., Bonner, A., & Pryor, J. (2010). Factors contributing to nurse job satisfaction in the acute hospital setting: a review of recent literature. *Journal of nursing management*, 18(7), 804-814.
- Hui, C. (1994). *Effects of leader empowerment behaviors and followers' personal control, voice, and self-efficacy on in-role and extra-role performance: An extension and empirical test of Conger and Kanungo's empowerment process model*: Indiana University.
- Kanter, R. M. (2008). *Men and women of the corporation: New edition*: Basic books.
- Knol, J., & Van Linge, R. (2009). Innovative behaviour: The effect of structural and psychological empowerment on nurses. *Journal of advanced nursing*, 65(2), 359-370.
- Laschinger, H. K. S. (2008). Effect of empowerment on professional practice environments, work satisfaction, and patient care quality: Further testing the nursing worklife model. *Journal of nursing care quality*, 23(4), 322-330.
- Laschinger, H. K. S., & Finegan, J. (2005). Using empowerment to build trust and respect in the workplace: A strategy for addressing the nursing shortage. *Nursing economics*, 23(1), 6.
- Laschinger, H. K. S., Finegan, J., Shamian, J., & Wilk, P. (2001). Impact of structural and psychological empowerment on job strain in nursing work settings: expanding Kanter's model. *JONA: The Journal of Nursing Administration*, 31(5), 260-272.
- Laschinger, H. K. S., Finegan, J. E., Shamian, J., & Wilk, P. (2004). A longitudinal analysis of the impact of workplace empowerment on work satisfaction. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 25(4), 527-545.
- Laschinger, H. K. S., & Havens, D. S. (1997). The effect of workplace empowerment on staff nurses' occupational mental health and work effectiveness. *JONA: The Journal of Nursing Administration*, 27(6), 42-50.
- Lee, S. E. (2013). *Job satisfaction among staff nurses in relation to leader empowering behaviors, structural empowerment and psychological empowerment*. University of British Columbia.
- Leggat, S. G., Bartram, T., Casimir, G., & Stanton, P. (2010). Nurse perceptions of the quality of patient care: confirming the importance of empowerment and job satisfaction. *Health Care Management Review*, 35(4), 355-364.
- Lu, H., While, A. E., & Barriball, K. L. (2005). Job satisfaction among nurses: a literature review. *Int J Nurs Stud*, 42(2), 211-227.
- Lu, K.-Y., Lin, P.-L., Wu, C.-M., Hsieh, Y.-L., & Chang, Y.-Y. (2002). The relationships among turnover intentions, professional commitment, and job satisfaction of hospital nurses. *Journal of Professional Nursing*, 18(4), 214-219.
- Ma, C.-C., Samuels, M. E., & Alexander, J. W. (2003). Factors that influence nurses' job satisfaction. *JONA: The Journal of Nursing Administration*, 33(5), 293-299.
- Manojlovich, M., & Laschinger, H. K. S. (2002). The relationship of empowerment and selected personality characteristics to nursing job satisfaction. *JONA: The Journal of Nursing Administration*, 32(11), 586-595.
- McCloskey, J. (1974). Influence of rewards and incentives on staff nurse turnover rate. *Nursing Research*.
- McNeese-Smith, D. (1996). Increasing employee productivity, job satisfaction, and organizational commitment. *Journal of Healthcare Management*, 41(2), 160.
- Mealer, M., Jones, J., Newman, J., McFann, K. K., Rothbaum, B., & Moss, M. (2012). The presence of resilience is associated with a healthier psychological profile in intensive care unit (ICU) nurses: results of a national survey. *Int J Nurs Stud*, 49(3), 292-299.
- Mladenović, V., & Marković, Z. (2011). Emotional profile and job satisfaction of the health care workers. *Engrami*, 33(2), 5-17.

- Morrison, R. S., Jones, L., & Fuller, B. (1997). The relation between leadership style and empowerment on job satisfaction of nurses. *JONA: The Journal of Nursing Administration*, 27(5), 27-34.
- Mueller, C. W., & McCloskey, J. C. (1990). Nurses' job satisfaction: a proposed measure. *Nursing Research*.
- WHO. (2006). *The world health report 2006: working together for health*: World Health Organization.
- Ozkula, G., & Durukan, E. (2017). Burnout syndrome among physicians: the role of socio-demographic characteristics. *The Journal of Psychiatry and Neurological Sciences*, 30, 136-144.
- Piers, R., Azoulay, E., Ricou, B., Ganz, F., Decruyenaere, J., Max, A., . . . Rubulotta, F. Ethics Section of the ESICM, APPROPRIUS Study Group.(2011). Perceptions of appropriateness of care among European and Israeli intensive care unit nurses and physicians. *JAMA: Journal of the American Medical Association*, 306(24), 2694-2703.
- Roberts, B. J., Jones, C., & Lynn, M. (2004). Job satisfaction of new baccalaureate nurses. *JONA: The Journal of Nursing Administration*, 34(9), 428-435.
- Sellgren, S. F., Ekvall, G., & Tomson, G. (2008). Leadership behaviour of nurse managers in relation to job satisfaction and work climate. *Journal of nursing management*, 16(5), 578-587.
- Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of management Journal*, 38(5), 1442-1465.
- Tourangeau, A. E., Hall, L. M., Doran, D. M., & Petch, T. (2006). Measurement of nurse job satisfaction using the McCloskey/Mueller Satisfaction Scale. *Nursing Research*, 55(2), 128-136.
- Wagner, J. I., Cummings, G., Smith, D. L., Olson, J., Anderson, L., & Warren, S. (2010). The relationship between structural empowerment and psychological empowerment for nurses: a systematic review. *Journal of nursing management*, 18(4), 448-462.