Factors Contributing to Burnout among Saudi Nurses and their Effect on Patients' Satisfaction at Makkah Al- Mukaramah Hospitals

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Abstract: Background: Burnout is a psychological syndrome affecting individuals who work in caring professions, such as nurses and physicians that develops due to long term interpersonal stressors on the job. Burnout as a concept incorporates three components: low personal accomplishment (PA), Depersonalization (DP) and Emotional exhaustion (EE). Workload is an important factor that could lead to burnout. **Aim:** to explore factors contributing to burnout among Saudi nurses and their effect on patients' satisfaction. **Research Design**: A cross-sectional design was used for this study. **Tools of Data collection**: 1) Interviewing Patient's Satisfaction Questionnaire (IPSQ)**:** It was adapted from Newcastle Satisfaction with Nursing Scale (NSNS) used to measure the patients' satisfaction regarding nursing care provided.**2)** Maslach Burnout Inventory (MBI) consisted of three parts: **Part 1:** Nurses' socio-demographic characteristics as regards their age in year, level of education. **Part 2:** Work Conditions contains 21 questions about her work condition. **Part 3:** Burnout Inventory consists of 22 items. **Setting:** The current study was conducted in five selected hospitals at Makkah Al- Mukaramah. **Results**: Revealed that, the majority of nurses (82.5 %) aged from (20 - <30) years and more than two thirds of nurses (69.3%) had diploma degree. It was found that less than three quarters (71.6 %) of nurses had high levels of burnout. There was cooperation between nurses and physician in patient care with Mean and SD of (3.23 ± 1.49). Also there is statistically significant positive correlation between hospital duration and work duration with (r = 0.812 and P-value = 0.001). Patients were satisfied with nurses' fulfillment for their needs and nursing care activities with Mean and SD of (20.81 ± 4.05). **Recommendations**: Establishing communication skills training programs among health care team to reduce nurses' burnout. Continued administrative support, reinforcement as well as changing work place environment to reduce nurses' job burnout and to improve patients' satisfaction with care.
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1. Introduction:

Burnout is a fuzzy term, involving workplace stress as well as satisfaction that defined as a psychological syndrome that affects individuals who are in the helping or caring professions, such as nurses, physicians, psychologists, therapists, that develops due to long term interpersonal stressors on the job **(Garman *et al.*, 2002).** Burnout as a concept incorporates three components: low personal accomplishment (PA), depersonalization (DP) and emotional exhaustion (EE). Emotional exhaustion occurs when workers feel emotionally depleted which overwhelming work demands deplete the individual's energy and emotional and physical resources. Depersonalization (cynicism), occurs when workers become withdraws or detached from various aspects of their job. Reduced personal accomplishment describes workers feeling a lack of achievement and productivity at work and feelings of inefficacy, in which the individual perceives reduced personal accomplishments **(Maslach *et al.*, 2001 & Demerouti *et al.*, 2001 & Hakanen *et al.*, 2008 and Schaufelt *et al.*, 2009).**

Nursing is a highly stressful occupation and at risk from stress with high rates of turnover, absenteeism, and nurses burnout. Nurses provide both physical and emotional support for patients, constantly on their feet, and are responding to their needs quickly and efficiently. These factors can over time cause sleep deprivation which can directly lead to physical problems like cardiovascular disease. Nurse burnout has effect to nurse's themselves lead to sleep deprivation, impairs cognitive function which may contribute to mistakes by nurses. Low pay, stress, unhealthy factors (poor diet and poor sleep) and lack of

authority contribute to increased frustration, which can negatively impact on their interactions with patients. Poor management and administrative polices are the biggest contributing factors to burnout. All of these factors create stressful environment which makes nurses simply give up away from the profession **(Hakanen *et al*., 2008 and Schaufelt *et al*., 2009).** Caring for patients can be make stressful that might cause physical, mental illness. Some of the stressors are work overload, lack of control at work, non-supporting staff, limited promotion, and death of patients, shift work, routine and underpaid work burnout results in similar symptoms of depression or anxiety. The conditions of burnout can be elucidated from the circumstances in which they appear. Motivation, satisfaction and stress can be part of any job but burnout appears only in supporting relationships **(Maslach *et al*., 2001 and Natasha Khamisa *et al*., 2013).**

Nursing is profession that provides care for individuals, families, and communities during times of wellness and times of illness. Work environments that support professional nursing practice also result in positive patient outcomes. Increase Nurse Workloads are associated with burnout and job dissatisfaction that contribute to poor patient outcomes that threat to patient safety. The concept of satisfaction overlaps with similar themes such as happiness, contentment, and quality of life. One of the key indicators used to measure quality in health care is the patients' satisfaction with services and care. Patient satisfaction with nursing care is important for health care agency because nurses comprise the majority of health care providers (**Mašić, 2007 and Antigoni *et al*., 2011).**

Workload is an important factor that could lead to burnout where the individual is asked to carry a heavier burden and perform more duties than they are capable of doing. Burnout is of special importance in health-care providers can lead to medical negligence and malpractice litigation, as well as suboptimal patient care practices and attitudes, costly leading to increased employee tardiness, absenteeism, turnover, decreased performance, and difficulty in recruiting and retaining staff **(Maslach *et al*., 2001 and Natasha *et al*., 2013).**

It seems unlikely that healthcare organizations with high levels of burnout among health professionals could achieve the performance characteristics. Depersonalization (negative attitudes and feelings as well as insensitivity and a lack of compassion towards service recipients) was negatively related to patient satisfaction with nursing care and there are negative correlations between nurses' emotional exhaustion and patient satisfaction with 4 dimensions of hospital care (nurses, doctors, information, and outcomes of care). There is clear evidence that short staffing has negative impact on patient outcomes **(Garman, Corrigan & Morris, 2002 and Doris *et al*., 2004).**Hospital plays an important role in society. Nurse deals with human being and are responsible for patient care. Hospital administrators have to understand the factors affecting nurse's job satisfaction to empower all personnel to be more productive and improving the quality of care. The hospital nurses' workforce is experiencing greater workloads resulting from shorter hospital stays, rising average patient acuity, fewer support resources and national nurse shortage. Increased nurses' workloads are associated with burnout and job dissatisfaction, poor patient outcome. Patient's satisfaction with nursing care is considered an important factor in explaining patient perception of services' quality **(Hakanen *et al*., 2008 and Schaufelt *et al*., 2009).**

Due to nurses' workloads, nurses' burnout and job dissatisfaction become greater factors in the voluntary turnover that leads to understaffing of hospitals and major threat to patient safety. Consequences of staff burnout are impaired job performance and patient dissatisfaction. Nurse burnout is measured by feeling of emotional exhaustion and lack of personal accomplishment, that has been found to be a significant factor influencing how satisfied patients are with their care **(Argentero *et al*., 2008). Heather *et al*., (2012)** found that, low emotional exhaustion and high personal accomplishment levels in staff were associated with high levels of patient satisfaction with the care provided.

Current nursing work environments with their heavy workloads are stressful. Nurses who working in "good environments" were less likely to suffer emotional exhaustion or above-average depersonalization and patients in units with nurses who reported higher levels of personal accomplishment were more than twice as likely to be highly satisfied with their care. Nurse burnout is affects nurses on a personal level, and directly affects patients who are receiving care from these nurses. The effects of nurse burnout on patients become a rising concern due to changes in healthcare legislation (**Aiken *et al*., 2002 and Maslach & Jackson, 2011**).

The concept of patient satisfaction with health care and healthcare providers is an enormously complex and multifaceted phenomenon. Patient satisfaction is defined as the extent of the resemblance between the expected quality of care and the actual received care Patient satisfaction, used by many agencies as an indicator and benchmark of care outcomes. Patient satisfaction with nursing care is important for any health care agency because nurses comprise the majority of health care providers and they provide care for patients 24 hrs a day. Patient satisfaction assessment is becoming part and parcel of hospital care quality monitoring and improvement program **(Lucie, 2009 and Hekkert, *et al*., 2009).**

Nurse autonomy, staffing adequacy, and relationships between nurses and physicians, as well as characteristics of the nurses, influence patient outcomes by their effects on patient care processes, including nurse surveillance, continuity of care, patient-centeredness, and preparation of patients and their families to successfully manage their care after discharge. More than 40% of hospital staff nurses score in the high range for job-related burnout, and more than 1 in 5 hospital staff nurses say they intend to leave their hospital jobs within 1 year. The understaffing of nurses and the overwork of health professionals in hospitals are ranked by consumers as major threats to patient safety **(Heather *et al*., 2012).**

Nurse burnout can impact patient satisfaction and contribute to any number of problematic patient interactions. However, by instituting a few changes like adjusting shift lengths, listening to experienced nurses, and decreasing factors that frustrate nurses hospitals can help decrease the likelihood of burnout--and with it, improve patient satisfaction and the patient care environment **(Lucie, 2009 and Hekkert *et al*., 2009).**

In this study, we are not only interested in whether there is an association between nurse burnout and patient satisfaction. We are also interested in beginning to explore whether features of the organization climate in which nurses work that are associated with nurse burnout can also be shown to be associated with patient dissatisfaction **(Heather *et al*., 2012 and Fotios *et al*., 2012).**

The aim of the study is:

The aim of the study was to explore factors contributing to burnout among Saudi nurses and their effect on patients' satisfaction.

Significance

Patient satisfaction is a global outcome measure of health system performance. Patient satisfaction or dissatisfaction reflects the patient's judgment on all aspects of care, including the technical process, the interpersonal process, and the outcomes of care. The hospital nurses' workforce is experiencing greater workloads resulting from shorter hospital stays, rising average patient acuity, fewer support resources, and a national nurse shortage. These greater workloads are associated with burnout and job dissatisfaction contributes to the understaffing of nurses in hospitals and poorer patient outcomes **(Aiken *et al*., 2001).**

Actually, more than 40% of hospital staff nurses worldwide suffering high job-related burnout **(Clarke *et al*., 2002).** Literature provides evidence that nurses working in hospitals that having shortage in nursing staff and low organizational support have significantly higher levels of nurse job dissatisfaction and burnout and have frequent negative effect on patients such as falls with injuries, patient complaints, and poorer quality of care. Patient satisfaction with nursing care has been found to be one of the most important predictors of overall satisfaction with hospital care. Nurse burnout is associated with negative health outcomes for human services workers **(American Nurses Association, 2000).**

2. Subjects and Methods

Research Design

The cross-sectional research design was used for this study.

Setting

The current study was conducted in five selected hospitals at Makkah Al- Mukaramah.

Sample size and characteristics

A convenient sample of patients and nurses was included in the study. The total subjects included in the present study were 456 consisted of: 228 nurses and 228 patients. This total sample of 228 nurses represents all the available Saudi male and female nurses working at different departments in the five hospitals at Makkah Al- Mukaramah. Meanwhile, the total sample of 228 patients represents all the available patients who were receiving their nursing care from the Saudi male and female nurses included in the study sample.

The following inclusion criteria were chosen for the current study:

For patients	For nurses
* Conscious, oriented and stable. * Age: 20-50 years. * Both Genders. *All nationalities.	* At least one year of experience. * Both Genders. *Saudi nurses.

Tools of data collection

Tools of data collection: Data were collected through using the following two tools:

First tool 1-An Interviewing Patient's Satisfaction Questionnaire (IPSQ): It was adapted from Newcastle Satisfaction with Nursing Scale (NSNS) **(Gutysz-Wojnicka *et al*., 2013)** IPSQ was used to measure the patients' satisfaction regarding nursing care provide. The Questionnaire consists of two parts as follows:

Part 1: Patients' socio-demographic characteristics as regards their age in years, gender, nationality, number of hospital admission and level of education.

Part 2: Patients' satisfaction regarding nursing care provided through using the following subscales: 1) Nurses' communication consists of 10 items, 2) Patient needs and expectations includes 8 items and 3) Nurses' skills and competences includes 10 items.

Scoring system: The total score was calculated by gathering the scores for the total items. The items that were gathered to create the subscales are 3-point Likert- type items which range from 1 = disagree to 3 = agree, where a response of two (2) means neutral. It

consists of the following three subscale 1) Nurses communication include 10 items, the score of 18 points and more than (60%) indicates satisfied, 2) Needs and expectations include 8 items, the score of 14 points and more indicates satisfied, 3) Skills and competences include 10 items, the score of 18 points and more indicates satisfied.

2- Second Tool: Maslach Burnout Inventory (MBI), (Maslach & Jackson, 2011) the inventory consisted of three parts:

Part 1: Nurses' socio-demographic characteristics as regards their age in year, level of education, work status, years of experience and work experience...etc.

Part 2: Work Conditions, this section contains 21 questions about her work condition.

Part 3: The burnout Inventory consists of 22 items that operationalize 3 dimensions of burnout: emotional exhaustion, depersonalization, and personal accomplishment. Emotional exhaustion (EE) consists of 9 statement, questions number: 1, 2, 3, 6, 8, 9, 13,16,18., example: I feel used up at the end of the day. Depersonalization (DP) was consisted of 6 statement, questions number: 5,10,11,15,20,22, example: I treat some patients as if they were impersonal objects; and personal accomplishments (PA) that consists of 7 statements, questions number: 4,7,12,14,17,19,21, example: I deal very effectively with the problems of my clients.

Scoring system

The items that was summed to create the subscales are 7-point Likert- type items which range from 0 = never to 6 = everyday, where a response of a zero (0) means the feeling (example: I feel depressed at work) never exists and a response of 6 means that the feeling exists every day. Unlike the two other subscales of the burnout, the personal accomplishments subscale items are positively worded, thus, higher PA scores indicate lower burnout. The modified MBI is psychometrically sound and is being used in research studies instead of the original MBI. The reliability coefficients for subscales were, 0.89 for emotional exhaustion subscale; 0.77 for depersonalization and 0.74 for personal accomplishment.

Pilot study

A pilot study was carried out on 10 % of study sampling at the previously mentioned settings to test the study tool for its clarity; validity and time require filling the tool. The necessary modifications were done through adding or omitting the unneeded or repeated criteria prior to data collection. The patients and nurses in the pilot study were excluded from the study sample.

Statistical Analysis

Data was coded for entry and analysis using SPSS statistical software package version 18. Data was presented using descriptive statistics in the form of frequencies and percentages. Interval and ratio variables were presented in the form of means and standard deviations. Chi Esquire was used for nominal and ordinal data. Pearson r used to test correlation. The Significance level was chosen as ($p<0.05$).

Ethical Considerations and Procedure

Before any attempt to collect data, a formal letter was issued from the faculty of Nursing at Umm Al - Qura University to obtain an official approval from the administrators of the hospitals where the data was collected to conduct the study. The letter identifies the researchers, the title and aim of the study. The data collection of the study was carried out in 4 months. The researchers were introducing themselves to the subjects, and explain the aim of the study to the subjects. Each subject was notified about the right to refuse or to participate in the study, before taking her verbal consent. Anonymity and confidentiality of the information gathered was ensured. Then, the questionnaire interview was conducted during morning shift for three day/week. This was repeated in each hospital.

3. Results:

Table (1) reveals that, the majority of nurses in the study sample (82.5 %) aged from (20-<30) years, while only (14.5%) of them aged between (30 - < 40) years. The Mean age and SD were (28.33±4.76). As regards nurses' gender it was found that, more than three quarters (76.8 %) of nurses in the study sample were females. Regarding years of experience it was found that, more than half of nurses in the study sample (57.9 %) had less than less than 5 years of experience, while more than one third (36%) of them had (5-<10) years of experience. Concerning nurses' education it was found that, more than two thirds of nurses in the study sample (69.3%) had diploma degree of education while more than a quarter (28.9%) of them had bachelor degree. Also it was found from this table that, more than one third (67.1%) of nurses in the study sample had fulltime job while about one third of them (32.9%) had part time job.

Figure (1) depicts that, less than three quarters (71.6 %) of nurses in the study sample had high levels of burnout. Meanwhile, approximately a quarter (23.4%) of nurses in the study sample had moderate level of burnout but only (5%) of them had low level of burnout.

Table (2) shows that, nearly half of the patients in the study sample (47.8%) aged less than 30 years while (18.0% and 16.7 %) of patients aged (30 – <40yrs) & (40 – < 50yrs) respectively. Also data revealed that, nearly two thirds of patients in the study sample (64.9%) were females. Regarding hospital department it was observed that, more than half of patients in the study sample (55.3%) were hospitalized in surgical department while the rest of them were in medical

department. As regards the number of hospital admissions it was found that, more than one third of patients in the study sample (34.2%) had first time hospital admission while more than a quarter of patients in the study sample (28.9%) were admitted more than 2 times to hospitals.

Table (3) illustrates that; total Mean and SD for nurses' emotional exhaustion were (34.50 ± 8.47). Also it was observed that, nurses felt emotionally drained from work with Mean and SD were (3.54 ± 2.36). Also nurses felt burned out from work, with Mean ± SD were (4.83 ± 1.65). It was found from this table that, nurses felt frustrated from their job with Mean and SD were (4.60 ± 1.54). Regarding nurses' depersonalization (DP) this table revealed that, total Mean and SD for nurses' (DP) were (20.13 ± 5.69). It was observed that nurses felt worry and their job were hardening them emotionally with Mean and SD were (4.75 ± 1.48). Meanwhile, It was found that nurses who said (I don't really care what happens to some recipients), had Mean and SD of (4.70 ± 1.68). Concerning nurses' personal accomplishments data revealed that, nurses who felt very energetic had Mean and SD of (4.70 ± 1.47) while nurses who felt working too hard with job had Mean and SD of (4.84± 1.55) with total Mean and SD for nurses' personal accomplishment of (20.48± 8.28).

Table (4) revealed that, regarding available resources in work environment nurses' stated that, they found the help they need with Mean and SD of (2.76 ± 1.34). Regarding happenings in work place nurses' answered that, motivation and flexibility happened with Mean and SD of (1.85 ± 1.02) and 2.37 ± 1.06 consecutively). As regards nurses' opportunities to perform their job it was found that, there was cooperation between nurses and physician in patient care with Mean and SD of (3.23 ± 1.49). Also nurses told that, colleagues help them to solve problems had Mean and SD of (3.17 ± 1.34). Meanwhile, nurses who told that they tried to work in a team of health care providers had Mean and SD of (2.66 ± 1.22). Added to that, nurses who told that open discussion was encouraged among them had Mean ± SD of (2.29 ± 1.20).

Table (5) revealed that, statistically significant positive correlation was found between hospital duration and work duration with (r = 0.812 and P-value = 0.001). Also statistically significant positive correlation was found between unit duration and work duration with (r = 0.694 and P-value = 0.001). Moreover statistically significant positive correlation was found between hospital duration and unit duration with (r = 0.776 and P-value = 0.001).

Table (6) shows that, patients were satisfied with nurses' communication with them with total Mean and SD of (27.18 ± 8.03). Moreover, this table reveals that, patients were satisfied with nurses' fulfillment for their needs and expectations through nursing care activities with Mean and SD of (20.81 ± 4.05).On the other hand, it is obvious from the data in this table that, patients were satisfied with nurses' skills and competences either before, during and after nursing care procedures with Means and SDs of (10.92 ± 2.43 & 7.83 ± 1.46 & 7.91 ± 1.19 respectively).

Figure (2) reveals that, more than two thirds of patients in the study sample (69.3%) had high levels of satisfaction, while more than a quarter of them (26.3%) had moderate satisfaction levels. Meanwhile, only (4.4%) of patients in the study sample had low levels of satisfaction toward nursing care provided.

Table (7) reveals that, no statistically significant correlation were found among any of the patients' demographic data (age, gender, nationality, department and number of hospital admissions) and level of patients' satisfaction (either low, moderate or high) with p – value = 0.3, 0.58, 0.69, 0.1 and 0.21 respectively.

Figure (3) illustrates that, no statistically significant correlation was found between nurses' burnout and patients' satisfaction where (r = -0.111 & P = 0.096).

Table (8) illustrates that, no statistically significant correlation was found between nurses' burnout and patients' satisfaction where (r = -0.111 P = 0.096). On the other hand, this table depicts that, there is a statistically significant negative correlation between nurses' burnout and work environment where (r = -0.201 and P = 0.002).

Table (9) revealed that, there was no statistically significant differences were found between nurses' burnout and either their age, work, hospital, duration of work in the same unit and their level of education.

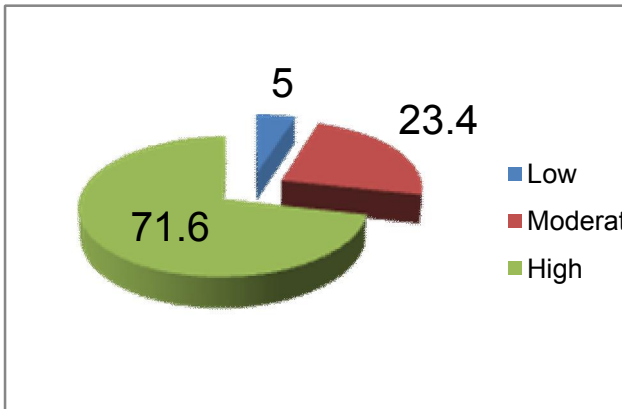


Figure (1): Frequency Distribution of Nurses' Burnout Level (n=228)

Table (1): Distribution of Nurses in the Study Sample According to Their Demographic Data (n=228)

Variables	Number	Percent
Age		
20 – <30yrs	188	82.5
30 –< 40yrs	33	14.5
40 – <50yrs	5	2.2
More than 50yrs	2	0.9
Mean	**28.33**	
SD	**4.76**	
Gender		
Male	53	23.2
Female	`175	76.8
Years of experience		
1 – <5yrs	132	57.9
5 – <10yrs	82	36.0
10 –< 15yrs	6	2.6
More than 15yrs	8	3.5
Mean	**5.49**	
SD	**4.25**	
Years of work in the current hospital		
1 – <5yrs	151	66.2
5 –< 10yrs	69	30.3
10 – <15yrs	3	1.3
More than 15yrs	5	2.2
Mean	**4.61**	
SD	**3.59**	
Years of work in the current unit		
1 – < 5yrs	177	77.6
5 – < 10yrs	48	21.1
10 – <15yrs	1	0.4
15 and more	2	0.9
Mean	**3.70**	
SD	**3.09**	
Education		
Diploma	158	69.3
Bachelor	66	28.9
Master	4	1.8
Job Type		
Part time	75	32.9
Full time	153	67.1

Table (2): Distribution of Patients According to their Demographic Data (n=228)

Variable	NO.	%
Hospital Code	36	15.8
• (Hospital 1)	73	32.0
• (Hospital 2)	35	15.4
• (Hospital 3)	27	11.8
• (Hospital 4)	27	11.8
• (Hospital 5)	30	13.2
Patient's Age		
< 30 yrs	109	47.8
30 – <40 yrs	41	18.0
40 – <50 yrs	38	16.7
50 – <60 yrs	28	12.3
Above 60 yrs	12	5.3
Mean	**36.01**	
SD	**13.90**	
Gender		
Female	148	64.9
Male	80	35.1
Number of hospital admission	78	34.2
First time	84	36.8
Second time	66	28.9
More than 2 times		

Table (3): Distribution of Mean and Standard Deviation of MBl-Humanamong Nurses in the Study Sample (n=228)

MBl-Human Sickens Surrey Items	Mean	SD
Emotional exhaustion (EE)		
I feel emotionally drained from my work.	3.54	2.36
I feel used up at the end of the work day.	4.28	1.87
I feel fatigued when I get up in the morning & have to face another day on the job.	3.94	1.87
Working with people all day is really a strain for me.	2.74	2.04
I feel burned out from my work.	4.83	1.65
I feel I'm positively influencing other people's lives through my work.	4.79	1.54
I feel frustrated by my job.	4.60	1.54
Working with people directly puts too much stress on me.	4.02	2.02
I feel exhilarated after working closely with my recipients.	1.87	2.32
Mean	34.50	
SD	8.47	
Depersonalization (DP)		
I feel I treat some recipients as if they were impersonal objects.	2.64	2.13
I've become more callous toward people since I took this job.	4.28	1.53
I worry that this job is hardening me emotionally.	4.75	1.482
I don't really care what happens to some recipients.	4.70	1.68
I feel like I 'mat the end of my rope.	1.43	2.02

I feel recipients blame me for some of their problems.	2.32	2.18
Mean SD	20.13 5.69	
Personal Accomplishments		
I can easily understand how my recipients feel about things.	2.76	2.23
I deal very effectively with the problems of my recipients.	2.67	2.13
I feel very energetic.	4.70	1.47
I feel I'm working too hard on my job.	4.84	1.55
I can easily create a relaxed atmosphere with my recipients.	1.67	2.38
I have accomplished many worthwhile things in this job.	2.07	2.21
In my work, I deal with emotional problems very calmly."··	1.75	2.10
Mean SD	20.48 8.28	

Table (4): Distribution of Mean and Standard Deviation of Work Environment Assessment (n=228)

Work Environment Assessment Items	Mean	SD
1-The following resources are available in my work		
I have enough time to do my job tasks.	2.76	1.34
I find the help when I need.	2.86	1.20
2-This happen in my work place		
Motivation	1.85	1.02
Flexibility	2.37	1.06
The hospital vision and mission are in congruent with my job	2.64	1.30
3-What is your opportunity to perform their job		
There is cooperation between nurses and physician in patient care	3.23	1.49
My colleague help me to solve problems	3.17	1.34
My administration do their best to solve problems	2.78	1.21
I am trying to work in a team of health care providers	2.66	1.22
My work environment helps me to be productive	2.64	1.04
I can take responsibilities and share in decision making	2.57	1.10
Nurses can develop their plans for professional development	2.42	1.12
Nurses are encouraged to participate in research activities	2.11	1.03
Nurses get the needed support to solve their problems	2.41	1.17
Nurses are encouraged to communicate with patients without restrictions	2.25	1.15
Nurses are involved in assessing their performance	2.54	1.67
Leadership is encouraged among nurses	2.23	1.13
Open discussion is encouraged among nurses	2.29	1.20
Nurses can take independent decisions	2.68	1.31
Nurses are allowed to participate in planning their roster	2.31	1.30
Nurses assess in budget plan	1.86	1.20

Table (5): Correlation Matrix Between Factors Accounting for Nurses' Burnout (n=228)

Variables		MBI-Human Sickens	Work Duration	Hospital Duration	Unit Duration	Education
MBI-Human Sickens	r	1	0.091	0.116	0.093	0.053
	P-value		0.171	0.080	0.163	0.428
Work Duration	r		1	0.812**	0.694**	-0.128
	P-value			0.001	0.001	0.054
Hospital Duration	r			1	0.776**	-0.125
	P-value				0.001	0.060
Unit Duration	r				1	-0.069
	P-value					0.303
Education	r					1
	P-value					

(**) High Statistically significant

Table (6): Distribution of Patients' Satisfaction Regarding Nursing Care (n=228)

Patient's Satisfaction Regarding Nursing Care	Mean	SD
Nurses' Communication		
The nurse asks about the patient's condition frequently.	2.811	0.464
The nurse listens to the patients complaining carefully.	2.714	0.532
The nurse gives the pt chance for asking question.	2.649	0.608
The nurse answers all the patients' question.	2.679	0.918
The nurse explains the procedure to the pt before done.	2.548	0.631
The nurse gives the patients time to discuss the condition & treatment plan.	2.464	0.685
The nurse encourages patients participation in decision making.	2.438	0.702
The nurse communicates with the pt purposefully & therapeutically.	2.675	0.578
The nurse communicates with a clear tone of voice.	2.578	0.694
The nurse respond for the patient's calling immediately.	2.539	0.617
Mean **SD**	**27.188** **8.030**	
Needs and Expectations		
The nurse checks patient ID, prior to administering medication	2.921	02.05
The nurse maintains the patient right & need.	2.653	0.577
The nurse promotes patient respect and self-esteem.	2.561	0.630
The nurse promotes positive patient self-image.	2.530	0.618
The nurse provides the patient with health education.	2.640	0.533
The nurse monitors the patient safety & security.	2.539	0.610
The nurse provides patient with clean & quite environment.	2.539	0.672
The nurse takes defective equipment from the patient's environment & reporting the defect.	2.438	0.733
Mean SD	20.815 4.050	
Nurses' Skills and Competences		
Before the Procedure		
The nurse washes hands before the procedure.	2.837	0.403
The nurse prepares all needed equipment.	2.793	0.456
The nurse maintains patient's privacy.	2.798	1.954
The nurse explains the purpose of procedure to the pt.	2.500	0.660
Mean SD	10.929 2.437	
During the Procedure		
The nurse has self confidence.	2.640	.58809
The nurse performs the nursing procedures skillful.	2.578	.59209
The nurse understands what she offers to the patients.	2.596	.61864
Mean SD	7.837 1.467	
After the Procedure		
The nurse provides conclusion & takes feedback from the Pt.	2.543	.65221
The nurse documents & reports the patient's conditions.	2.662	.49221
The nurse washes hands after the procedure.	2.719	.49684
Mean SD	7.916 1.1936	

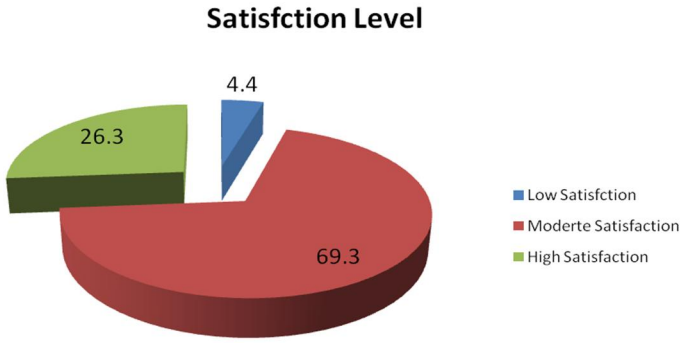


Figure 2: Frequency Distribution of Patients' Satisfaction Toward Nursing Care Provided.

Table (7): Correlation between Some Patients' Demographic Data and their Levels of Satisfaction (n=228)

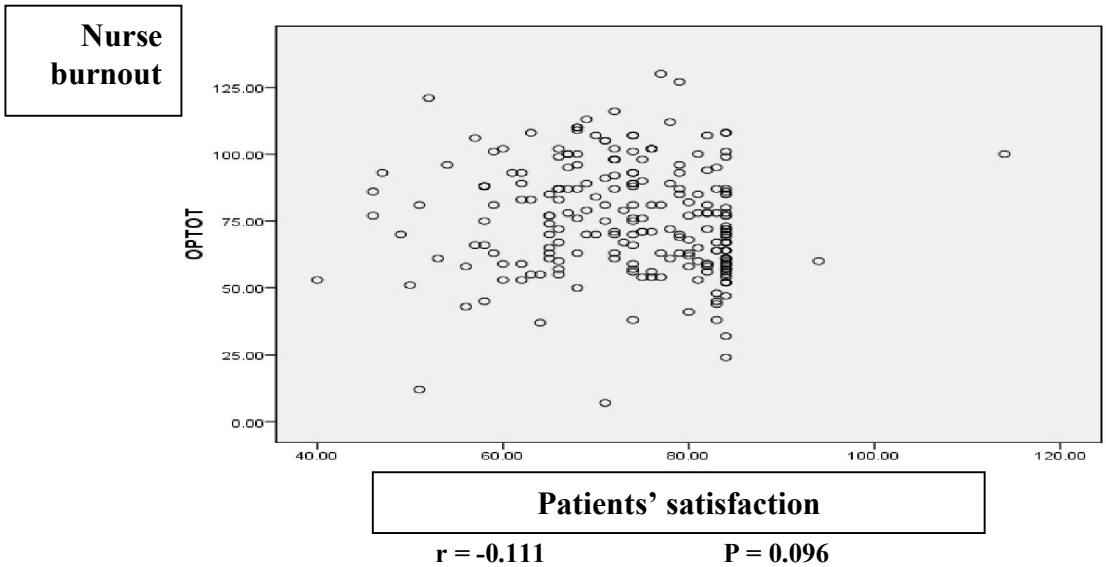
Variables	Patients' Satisfaction						
	Low Satisfaction		Moderate Satisfaction		High Satisfaction		p
	Number	Percent	Number	Percent	Number	Percent	
Patient's Age							
< 30y	6	2.6	80	35.1	23	10.1	0.301
30 – <40y	2	0.9	31	13.6	8	3. 5	
40 –< 50y	1	0.4	23	10.1	14	6.1	
50 –< 60y	0	0	15	6.6	12	5.3	
Above 60y	10	3.5	9	3.9	3	1.3	
Gender							
Female	6	2.6	106	46.5	38	15.8	0.586
Male	4	1.8	52	22.8	24	10.5	
Nationality							
Saudi	6	2.6	83	36.4	35	15.5	0.695
None Saudi	4	1.8	75	32.9	25	11	
Department							
Medical	4	1.8	68	29.8	30	13.2	0.107
Surgical	6	2.6	90	39.5	30	13.2	
Number of hospital admission							
First time	4	1.8	50	21.9	24	10.5	
Second time	4	1.8	64	28.1	16	7.0	0.214
More than 2 times	2	0.9	44	19.3	20	8.8	

Table (8): Correlation between Nurses Burnout, Patient Satisfaction and Work Environment (N=228)

Variable	Nurses Burnout	
	R	P
Patient Satisfaction	**-0.111**	**0.096**
Work Environment	**0.201**	**0.002**

Table (9): Correlation between Nurses' Burnout (MBI human Sickness) with Age, (Work, Hospital, Unit duration and Education (Factors that Account for nurses' Burnout) (N=228)

Variables		Age	Work Duration	Hospital Duration	Unit Duration	Education
MBI-Human Sickens (Burnout)	R	0.157	0.091	0.116	0.093	0.053
	P	0.012	0171	0.080	0.163	0.428



r = -0.111 P = 0.096

Figure 3: Correlation between Nurses' Burnout and Patients' Satisfaction (n=228)

4. Discussion

Burnout predispose to rapid staff turnover, absenteeism or illness that ends in decreased job satisfaction. Ultimately, discontented nurses compromise quality of care and patients satisfaction. Burnout may result from multiple variables in the work place including workload, exposure to emotional burdens of patients' care, and perceived sense of inadequacy and reduced accomplishment **(Mortada & El Seifii, 2012)**. Aim of current study was explore factors that contributing to burnout among Saudi nurses and their effect on patients' satisfaction.

The median age of citizens in Kingdom of Saudi Arabia is 26 years **(World Factbook, 2013).** This influences the working experience levels of Saudi national nurses; indeed, the majority of nurses in this study sample aged from twenty to less than thirty years, while nearly one seventh of them aged between thirty to forty years. Finding of current study in agreement with study of **Ibrahim & Mahmood 2013** they found that nearly two thirds of the nurses aged from 20 > 30 years. Due to the importance and cultural sensitivities of nursing as meeting the conservative needs of gender-segregated workplaces, the Ministries of Health and Labor accorded nursing a high priority in recruiting young Saudis including career options for secondary school students (**Al-Sibai, 2013**). In the same line study of **Alsaqri, 2014** found that over half of the sample was aged up to 30 years.

The finding of the present study revealed that was a significant statistical correlation between nurses burnout and study sample age. The results could be due to young Saudi girls would marry early and be wife and homemaker for her family. For Saudi women, the Islamic tenet of placing their family responsibilities above career influences the time they spend on career. For Saudi men, a nursing career is a service duty that has little social status **(Ramady, 2013). Arab (2012)** found that young Saudi women became disengaged when they found difficulty in integrating with the workplace social environment, raising stress levels. Arab also found that social support moderated distress.

In the same line, in a quantitative survey study of young Finnish nurses, **Flinkman *et al*., 2008** found that a quarter of young registered nurses thought of giving up nursing. They reported heavy workloads, lack of professional commitment, low job satisfaction and career-based issues of training and development. Personal issues included burnout, and work and family conflict.

The finding of present study indicated that more than three quarters of nurses in the study sample were females. This result could be due to the new Saudi education system is producing more women graduates than men and the nursing profession appears suitable for women despite the legal commuting and rostering restrictions. Social implications are making Saudization efforts difficult for the nursing profession, yet the economic necessity of working is pulling women into the labor market. At the same time, unemployment benefits were offered in 2011 under Saudisation to encourage women to join the workforce, opening opportunities for a nursing career **(Saudi Gazette, 2013).**

The finding of current study illustrated that more than two thirds of nurses in the study sample had diploma degree of education while more than a quarter of them had bachelor degree. Finding of current study in agreement with study of **Ibrahim & Mahmood (2013),** they found that The nurses' qualifications approximately half percent of nurses have diploma and Bachelor qualifications. The rationale for the results was to new graduate programs were underway for Saudi nurses to retrain those employed in hospitals. Also, University programs for females are still in the preliminary stages. The programs were not developed (both in quality and quantity) to meet the demands of the growing population.

The finding of the present study found that found that, more than half of nurses in the study sample had less than five years of experience, while more than one third of them had from five to less than ten years of experience. **Al-Turki *et al*., 2010** reported that, younger age was a predictor of emotional stress and burnout in nurses because older nurses are believed to be equipped with rich experience in handling challenging situations and higher ranking that earns them more respect from others, better economic reward, and less requirement of shift work. Against the results of this study, **Ismail, 2015** found that that older nurses scored higher burnout levels than the younger age groups. Also, **Bridgeman, 2013** who studied the relationships between job satisfaction, caregiver burnout and quality of care provided by nurses in Florida had found that, there was as a negative association with burnout and a positive association with job satisfaction.

The finding of the present study showed that nurses perceived the mean values on the three burnout components as follows: emotional exhaustion, personal accomplishment and depersonalization. Thus this nursing sample had relatively high levels of emotional exhaustion and moderate levels personal accomplishment and depersonalization. These results agree with **Eva Garrosaa *et al*., 2006** who found that, emotional exhaustion was the variable with the highest amount of explained variance: 26%. Usually, stress factors are related to emotional exhaustion. These results could be due to nurses less experience and spend their time on non-nursing tasks that contribute to burnout, dissatisfaction, and higher turnover rates. Also, religious and social implications are making

Saudization efforts difficult for the nursing profession, yet the economic necessity of working is pulling women into the labor market. Moreover, the low levels of personal accomplishment may be an indication of job dissatisfaction among hospital nurses and nurses' negative attitude toward the nursing profession.

This result is consistence with **(Al-Turki et al., 2010)**, who found that the prevalence of burnout syndrome among nurses may be high. Frequency emotional exhaustion had high followed by depersonalization and nurse had a sense of low personal accomplishment. The study established that younger nurses reported higher rates of burnout, confirming the stressful situations in Saudi hospitals. The increased demands at work, due to the use of sophisticated technologies; competition among hospitals; lack of staff; overwork; lack of work autonomy and feedback; as well as decreased possibility of advancement, seem to be the main factors affecting emotional exhaustion of workers **(Kamal, *et al*., 2013).**

Similar results were reported by, **O'Mahoney 2011** conducted a literature search and an empirical study using burnout as an independent variable, finding that more than half of the sample of nurses experienced high levels of emotional exhaustion and depersonalization, and that these results were significantly related to the working environment. In an international study of employees, **Jamal 2010** compared significant numbers of workers' experiences in Canada, China, Malaysia and Pakistan. Jamal found that overall job stress: work overload, conflict, ambiguity and resource inadequacy, were significantly related to burnout and intention to leave in each of these countries. Moreover, **Vallejo & Fuentes, 2013** studied burnout, job satisfaction and job stress for critical care nurses. Results showed a high level of emotional exhaustion and moderate depersonalization, with a negative view of career.

In the same line, **Mitchell 2009** also established high emotional exhaustion and depersonalization leading to burnout. A study by **Al-Zahrani 2011** established that management practices and perceptions of organizational justice influenced burnout in nurses in Saudi private hospitals. The study found that burnout is an effect of work stress and organizational justice minimized burnout levels among the nurses. Another factor of burnout, fatigue, was found by **Hooper *et al*., 2010** who reported compassion fatigue among American oncology nurses. **Hamaideh, 2011 and Keshvari, *et al*., 2012** stated that, burnout-related factors as fatigue was prevalent in burnout factors for Jordanian psychiatric nurses and Iranian nurses.

In fact, work overload and personal conflict for workers lead to emotional exhaustion, making it difficult to face another work day **(Jaramillo *et al*., 2011). Maslach, 2003** explained that, emotional exhaustion is a result of acute or chronic burnout, resulting in feeling emotionally drained and is the primary stress component of job burnout. Depersonalization in healthcare workers is characterized by detachment; inability to emotionally respond to clients or patients, resulting in a lack of empathy and an inability to engage with either their charges or team members. Reduced personal accomplishment refers to feelings of incompetence and reduced engagement with the organization's objectives, that is, self-evaluated reduced productivity at work. Thus, work environment and workplace relationships are fundamental to nurses' burnout **(Diestel & Schmidt, 2010).**

The findings of **Aiken *et al*., 2013** provided some empirical evidence regarding nurses' burnout as he found that, the key elements of nurses' work dissatisfaction include work redesign and management. He added that, healthcare cuts and redesign have affected the working nurse, resulting in loss of managerial positions increased patient load and increased responsibility for other personnel on the unit.

The finding of the current study found that all nurses suffered from moderate levels of depersonalization, which is an indication of burnout among nurse participants. Depersonalization "points to the development of negative, callous and cynical attitudes towards the recipients of one's services. **Maslach, (2003)** in agreement of our study and emphasized that health care professionals have a high vulnerability to burnout as a result of experiencing high levels of emotional strain, owing to stressful working environments exacerbated by sick and dying patients to whom they provide care. Nurses have been found to experience higher levels of burnout compared to other health care professionals owing to the nature of their work **(Banovcinova & Baskova, 2014).**

In Germany ***et al*., 2013** investigated personal burnout among nurses found that there was significantly linked to higher levels of personal burnout and low personal burnout was related to greater job satisfaction and better health.

Based on the findings of the current study clarified that less than three quarters of nurses in the study sample had high levels of burnout. Meanwhile, approximately a quarter of nurses in the study sample had moderate level of burnout but only fifth percentage of them had low level of burnout. These results could be due to emotional exhaustion, absence of autonomy, nurses' feeling that of having more job responsibilities, heavier workload, and longer working hours added to their multirole either in their families or communities which inevitably lead them to experience burnout. This result agrees with **Kozak *et al*., 2013** who investigated personal burnout among nurses and found that, higher

levels of personal burnout was significantly related to lots of job duties and compromised health.

Actually, the central focus of Arabian communities is the family and central to the concept of family is the woman with her multirole in caring for the entire family in each and every life situations. So, when woman is working and assuming her role among community workforce with the resulting well known work duties, rules, policies and obligations; this may lead to family suffering from deficient family care responsibilities (Arab culture). This meaning is thus rarely mentioned in the literature, the single reference to work and family for Saudi nurses being **(Tumulty, 2008).** Saudis have not yet embraced the notion of nursing as a satisfying career **(Alotaibi, 2008). El-Jardali *et al*., 2009** broadly attributed nurse turnover and burnout to work stress, low remuneration, desire for professional development, lack of recognition and respect either from the community or within work setting, dissatisfaction with supervisors, inflexible working hours, desire to work in different fields, high workload and family reasons.

Data of the current study revealed that, nurses and physicians were cooperative regarding patient care. This result was expected because any health team members should cooperate with each others for the sake of patients' care. Also this result is consistent with **Abd El-aal & Hassan 2014** who stated in their study that, strong relationships and cohesiveness among employees in the work place will decrease their burnout and improve their satisfaction with quality of work and a sense of commitments. They also added that, the fact that staff nurses are receiving support from physicians, their colleagues as well as their head nurses will positively affect nurses performance through decreasing liability to burnout and job dissatisfaction. Moreover, the effective working relationships among nurses themselves results from recurrent contact with each other are all over 24 hours.

This finding of the current study are congruent with **(Maslach, 2003 and Janssen, *et al*., 2013)** who concluded that**,** high levels of burnout among nurses have often been attributed to prolonged direct personal contact of an emotional nature with a large number of patients and heavy workloads**.** They added that, burnout in nurses has been shown to lead to emotional exhaustion as well as a loss of compassion for others (depersonalization) and a sense of low personal accomplishment. **Lim, *et al*., 2012** stated that**,** exposure to work related stress and low levels of job satisfaction, have also been recognized as factors contributing to high levels of burnout among nurses. Also they added that, these experiences can have very significant implications for the health and wellbeing of nurses**.**

The current study revealed that factors leading to nurses' burnout include emotional exhaustion, depersonalization, and reduced personal accomplishment; emotional exhaustion has the greatest validity as a predictor of burnout. Burnout is associated with adverse health outcomes, increased turnover of nurses and decreased patient satisfaction. This result in satisfaction of staff nurses with high quality of work which is considered an important component of nurse's lives impacting their moral, retention, job performance, commitment to the organization as well as impacting their health outcomes.

The findings of the current study proved that, there is a statistically significant negative correlation was found between nurses' burnout and work environment. These results could be due to the organizational structure of Saudi Arabian hospitals which does not advocate professional practice environment for nurses.

This result came on the same line with **Azri 2013** who found that, interaction between personal burnout and environmental factors and burnout syndrome are the most obvious in health care professionals. **Azri 2013** also added that, it is not the rule that good work environment eliminates burnout and / or job satisfaction.

On the contrary, **Banovcinova & Baskova 2014** emphasized that, inadequate work environment get nurses meet with various working tasks and working times (e.g. night shifts), working conditions (insufficient staffing) and with stress-related situations (suffering and death of patients). Also **Lovering 2008** concluded other factors within the work environment that may lead to nurses' burnout and job dissatisfaction as lack of decision-making status which influences the quality of the nurses' work in Saudi Arabia, where nurses can be subservient to physicians and are not viewed as independent practitioners in conjunction with other members of the interdisciplinary healthcare team

To keep discussing the effect of work environment on nurses' stress and burnout, **Moustaka & Constantinidis (2010)** mentioned that, working environment is one of the most important sources of working stress and burnout. The importance of working stress management is acknowledged, apart from other things, by safety and health protection principles, as it was discovered that it was connected not only with a loss in productivity and shortening of working time, but also with an increase in sickness rate and accidents at work.

The current study revealed that, no statistically significant correlation was found between nurses' burnout and patients' satisfaction. This result contradicts **Zakari, *et al*., (2010)** argued that, nurses thus experience dissatisfaction, frustration and demoralization which inevitably affect quality of patient care satisfaction. **Zakari, *et al*., 2012,**

concluded that**,** lack of resources contribute to the problem in the working environment and contribute to burnout, dissatisfaction and intention to leave**.**

The current findings confirmed the relationship between work related stress, burnout and job satisfaction. Nurses providing direct care while working in poor environments report higher burnout and lower job satisfaction **(McHugh, *et al*., 2012).** It has also been found that, improving work environments reduces job dissatisfaction and burnout among nurses **(Liu, *et al*., 2012).** Difficulty meeting patients' needs, high workload and low job satisfaction are all related to burnout. Nurse staffing was also found to be related to job satisfaction and burnout, with increased patient to nurse ratios relating to higher burnout and lower job satisfaction following an increase in the ratio by one patient per nurse **(Cho *et al*., 2009, *et al*., 2010, and Stimpfel, *et al*., 2012).**

Although work related stressors including nurse physician relationships, management styles and organizational support were found to be related to burnout and job satisfaction further analysis indicated that, work related stress is linked to job satisfaction through burnout **(Bogaert *et al*., 2010). Moreover, Klopper, *et al*., 2012** added that, burnout plays a mediating role in the relationship between work related stress and job satisfaction. Furthermore, work related stress and burnout were not only associated with job satisfaction, but also were strongly predictive.

Regarding work environment the finding of this study clarified that, there was cooperation between nurses and physician regarding patient care followed by cooperation between nurses and their colleagues who help them to any problems or obstacles, and open discussion was encouraged among them. These results could be due to the fact that, basically major poles of the health team are the physician and the nurse in charge who fundamentally cooperate for the sake of patient quality care and outcomes. Also the fact that, nursing leaders have the opportunity for making efforts by collaborating as change agents for the profession is always present.

Improving the nursing work environment presents an opportunity for leaders in Saudi Arabia to inspire the nursing workforce and promote job satisfaction and tenure. **Alasmari *et al*., 2012 and Hayes *et al*., 2013** studied levels of job satisfaction, stress and burnout among nurses and they concluding that, although acceptable levels of job satisfaction and burnout were found, stress with workloads and facets of patient care occurred.

Al-zayyer 2003 found that, job satisfaction efforts in hospitals included teamwork, improved working relationships between department personnel, competitive salaries, happy work environment and adequate support for nursing personnel. Also he added that, the promotion of staff nurses, salary raises, floating of staff nurses to other departments within the hospital, and rapid and effective recruitment efforts to fill registered nurse; all are factors improve nurses job satisfaction.

Patients are the main customer of hospital services and their satisfaction levels may indicate the quality of health care services **(Janssen *et al*., 2013).** Patient satisfaction is an essential tool for monitoring and evaluating hospital care quality. Nurses experiencing burnout provide low quality care to patients; thus, eventually harming the health care organization **(You *et al*., 2013).**

The finding of the current study indicated that, there was no statistically significant correlation found between nurses' burnout and patients' satisfaction. These results could be due to differences in social, cultural context and personality characteristics of Makkah's patients as in fact the majority of patients are expatriates. Cultural differences were experienced as communication and language difficulties, isolation, and professional practice.

This current finding is contradicting the finding of **Karimzadeh & Far, 2016** who found that, patient satisfaction with nursing care was significantly inversely associated with nurse burnout. In other words, there are significant relationships between patient satisfaction with nursing care and nurse burnout so that increase in nurses' burnout leads to a decrease in patient satisfaction with nursing care. In addition, **Vahey, *et al*., 2004** emphasized the effect of work environment on nurses' burnout, and also emphasized the impact of work environment and nurse burnout on patient satisfaction with nursing care.

To maintain on the same line with the current study results, another study conducted by **Habibi *et al*., 2012** showed that, job dissatisfaction and burnout among nurses have negative effects on patient satisfaction with nursing care. According to **Rafii, *et al*., 2012** nurses reduced depersonalization is associated with their positive attitude toward patient care.

From the current study results it could be concluded that, more interventions intended to reduce the risk of nurses' burnout may be more effective by enhancing and positively reinforcing workers' personality rather than just decreasing environmental stressors.

Conclusion:

Based on the findings of the current study it could be concluded that, there was cooperation between nurses and physician regarding patient care. Regarding the factors that lead to nurse's burnout include nurses had emotional exhaustion as (nurses felt emotionally drained from work, nurses burned out from work, nurses frustrated from their job). While nurses'

depersonalization (DP) (nurses feels worry and nurses felt working too hard with job). As regards patients satisfaction it could be concluded that, patient were satisfied with nurses' fulfillment for their needs and were satisfied with nurses' competences either before, during and after nursing care procedures. More than two thirds of patients in the study sample had high levels of satisfaction. The findings of the currents study reinforce the need for change in the work place environments and improvements in nurses' work condition in hospitals to reduce nurse's job burnout and increase both nurses' and patients' satisfaction with their care.

Recommendations:

1. Encouraging the presence of a counseling center in each health care organization to enhance self-assertiveness of staff nurses for decreased nurses' burnout.
2. Further research studies are needed to determine the factors that lead to nurses' burnout and evaluate the interrelationships among burnout and job satisfaction.
3. Hospital organizations should establish communication skills training programs among health care team to reduce nurses' burnout and improve positive interpersonal relationships among nurses and health team.
4. Continuing education programs for nurses regarding quality improvement and nurse's satisfaction for improving work condition to decrease their burnout.
5. Continued administrative support, reinforcement as well as changing work place environment to reduce nurses' job burnout and to improve patients' satisfaction with care.
6. Preventing burnout syndrome through allowing flexible work schedules, better working conditions, professional development and promotion for nurses to reduced work overload, providing nurse's vacation, paid time off, health insurance trends which strongly pursue patients' satisfaction as well as nurses' well-being.

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References:

1. Abd El-aal1, N. H. and Hassan, N. I. (2014). Relationships between Staff Nurses' Satisfaction with Quality of Work and their Levels of Depression, Anxiety, and Stress in Critical Care Units. Journal of American Science 2014;10 (1).
2. Aiken LH, Clarke SP, Sloane DM, (2002): Hospital Nurse Staffing and Patient Mortality, Nurse.
3. Aiken LH, Clarke SP, Sloane DM, *et al.* (2001). Nurses' Reports on Hospital Care in five Countries. Health Aff (Millwood);20:43–53.
4. Aiken, L., H., Sloane, D., M., Bruyneel, L., Van den Heede, K., Sermeus, W. (2013). Nurses Reports of Working Conditions and Hospital Quality of Care in 12 countries in Europe. International Journal of Nursing Studies, 50 (2), 143 -153. http://www.sciencedirect.com/science/article/pii/S0020748912004105- aff0005.
5. Alasmari, Hajar Ali M. & Douglas, Clint (2012) Job Satisfaction and Intention to Leave among Critical Care Nurses in Saudi Arabia. Middle East Journal of Nursing, 6(4), pp. 3-12.
6. Almalki, M., 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). doi:10.1186/1472-6963-12-314.
7. Alotaibi, M. (2008); Voluntary turnover among Nurses Working in Kuwaiti Hospitals. Journal of Nursing Management, 16(3), 237–245.
8. Alsaqri, S.(2014); Survey of Intention to Leave, Job Stress, Burnout and Job Satisfaction among Nurses Employed in the Ha'il Region's Hospitals in Saudi Arabia, publishing thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy School of Health Sciences College of Science, Engineering and Health RMIT University Melbourne Australia.
9. Al-Sibai, A. (2013); Society is still not Ready to Accept Saudi or Arab nurses. Saudi Gazette. Accessed 6 September 2013 from http://www.saudigazette.com.sa/index.cfm?method=home.regcon&contentid=20130408160361.
10. Al-Turki, H. A., Al-Turki, R. A., Al-Dardas, H. A., Al-Gazal, M. R., Al-Maghrabi, G. H., Al-Enizi,N. H., *et al.* (2010). Burnout Syndrome among Multinational Nurses Working in Saudi Arabia. Annals of African Medicine, 9, 226–229.
11. Al-Zahrani, A. (2011); The Impact of Organizational Justice on Job Burnout: A Study in Private Hospitals in Riyadh, Saudi Arabia. Interdisciplinary Journal of Contemporary Research in Business, 3(6), 627–637.
12. Al-zayyer, W. (2003). The Effectiveness of Recruitment and Retention Strategies and The Severity of Recruitment and Retention Barriers of Staff Nurses In Selected Tertiary Care Hospitals In Saudi Arabia. Dissertation Abstracts International, 64 (12), 6010B. (UMI No. 3114299).
13. American Nurses Association. (2000). Nursing Quality Indicators Beyond Acute Care: Literature Review. American Nurses Publishing; Washington, DC.
14. Antigoni F., Pediaditaki O., and Dimitrios T. (2011): Nursing Staff under Heavy Stress: Focus on Greece A Critical review, International Journal of Caring Sciences, Vol 4 Issue 1, 11:12.
15. Arab, A. (2012); The role of social-problem solving and social support and their relation to well-being in young Saudi women. (Doctoral thesis). School of Psychology, University of Southampton, Southampton, England.
16. Argentero, P., Dell'Olivo, B., & Santa Ferretti, M. (2008). Staff Burnout and Patient Satisfaction with the Quality of Dialysis Care. American Journal of Kidney Diseases, 51, 80–92.
17. Azri, B. (2013); Job satisfaction: A Literature review. Management Research and Practice, 3(4), 77–86. Accessed 12 August 2013 from http://mrp.ase.ro/no34/f7.pdf.

18. Banovcinova, L and Baskova, M (2014); Sources of Work-Related Stress and Their Effect on Burnout In Midwifery Social and Behavioral Sciences 132(2 014) 248 – 254.
19. Bogaert, P.V.; Clarke, S.; Roelant, E.; Meulemans, H.; van de Heyning, P. (2010); Impacts of Unit-Level Nurse Practice Environment and Burnout on Nurse-Reported Outcomes: A Multilevel Modelling Approach. J. Clin. Nurs., 19, 1664–1674.
20. Bridgeman, C. (2013); Caregiver Burnout and Job Satisfaction among Palliative and Non-Palliative Nurses: A mixed-methods study. (PhD thesis). University of Maryland, Baltimore, MD.
21. Cho, S.H.; June, K.J.; Kim, Y.M.; Cho, Y.A.; Yoo, C.S.; Yun, S.C.; Sung, Y.H. (2009); Nurse Staffing, Quality of Nursing Care and Nurse Job Outcomes In Intensive Care Units. J. Clin. Nurs. 2009, 18, 1729–1737.
22. Clarke SP, Sloane DM, Aiken LH. Effects of Hospital Staffing and Organizational Climate on Needle Stick Injuries to Nurses. Am J Public Health. 2002;92:1115–1119.
23. Dasgupta, P. (2012); Effect of Role Ambiguity, Conflict and Overload In Private Hospitals' Nurses' Burnout and Mediation Through Self Efficacy. Journal of Health Management, 14(4), 513–534.
24. Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The Job Demands-Resources Model of Burnout. Journal of Applied Psychology, 86, 499–512.
25. Diestel, S. & Schmidt, K. (2010); Direct and interaction effects among the dimensions of the Maslach Burnout Inventory: Results from two German longitudinal samples. International Journal of Stress Management, 17(2), 159–180.
26. Doris C., Aiken L., Douglas M. Sloane, Sean P. and Delfino V.(2004).Nursing Burnout and Patient Satisfaction, Med Care; 42, 2: II-57–II-66.
27. El-Jardali, F., Dimassi, H., Dumit, N., Jamal, D. & Mouro, G. (2009); A National Cross-Sectional Study On Nurses' Intent To Leave and Job Satisfaction In Lebanon: Implications For Policy and Practice. BMC Nursing, 8(3). Accessed 11 August 2013 from http://www.biomedcentral.com/1472-6955/8/3.
28. Eva Garrosaa, Bernardo Moreno-Jime´neza, Youxin Liangb, Jose´ Luis Gonza´lezc. (2006). The Relationship Between Socio-Demographic Variables, Job Stressors, Burnout, And Hardy Personality In Nurses: An exploratory study. International Journal of Nursing Studies.
29. Flinkman, M., Laine, M., Leino-Kilpi, H., Hasselhorn, H. & Salanterä, S. (2008). Explaining Young Registered Finnish Nurses' Intention To Leave The Profession: A Questionnaire Survey. International Journal of Nursing Studies, 45(5), 727–739.
30. Fotios A., Evangelos L., George P., Julie S., Kostas K., (2012) Physician Burnout and Patient Satisfaction with Consultation in Primary Health Care Settings.
31. Garman, A. N., Corrigan, P. W., & Morris, S. (2002). Staff Burnout and Patient Satisfaction: Evidence of Relationships At The Care Unit Level. Journal of Occupational Health Psychology, 7, 235–241.
32. Gutysz-Wojnicka A., Dyk D., Cudak E. and Ozga D. (2013). Measuring patient satisfaction with the Polish version of the Newcastle Satisfaction with Nursing Scale. Scandinavian Journal of Caring Sciences Volume 27, Issue 2, pages 311–318, June 2013.
33. Habibi H, Mooghali A, Bagheri Lankarani K, Habibi F. (2012); Relationship between Nurses' Job Satisfaction and Burnout with Patients Satisfaction in Shiraz, 2012. Hayat. 20(3):30–42.
34. Hakanen, J. J., Schaufeli, W. B., & Ahola, K. (2008). The Job Demands-Resources Model: A Three-Year Cross-Lagged Study Of Burnout, Depression, Commitment, And Work Engagement. Work and Stress, 22, 224–241.
35. Hamaideh, S. H. (2011); Burnout, Social Support, And Job Satisfaction Among Jordanian Mental Health Nurses. Issues in Mental Health Nursing, 32(4), 234–242.
36. Hayes, B., Bonner, A. & Douglas, C. (2013). The levels of Job Satisfaction, Stress and Burnout in Australian and New Zealand Haemodialysis Nurses. Paper presented at Renal Society of Australasia Conference, Hobart, Tas.
37. Heather K, Spence L, Joan F, Piotr W. (2012): New Graduate Burnout: the Impact of Professional Practice Environment, Workplace Civility, and Empowerment. www.Amazon.com.
38. Hekkert, K. D., Cihangir, S., Kleefstra, S. M., van den Berg, B., & Kool, R. B. (2009). Patient Satisfaction Revisited: A multilevel approach. Social Science and Medicine, 69, 68–75.
39. Hooper, C., Craig, J., Janvrin, D. R., Wetsel, M. A. & Reimels, E. (2010). Compassion Satisfaction, Burnout, And Compassion Fatigue Among Emergency Nurses Compared With Nurses In Other Selected Inpatient Specialties. Journal of Emergency Nursing, 36(5), 420–427.
40. Ibrahim M., and Mahmood S. (2013). The Relationship Between Nurses' Burnout And Mothers' Satisfaction With Pediatric Nursing Care. International Journal of Current Research Vol. 5, Issue, 07, pp.1902-1907, July, 2013.
41. Ismail. (2015). Job satisfaction, Burnout and Associated Factors Among Nurses in Health Facilities, American Journal of Psychology and Cognitive Science, Dubai, United Arab Emirat, Vol. 1, No. 3, pp. 89-96 http://www.aiscience.org/journal/ajpcs.
42. Jamal, M. (2010). Burnout among Canadian, Chinese, Malaysian and Pakistan employees: An Empirical Examination. International Management Review, 6(1), 32–42.
43. Janssen C, Ommen O, Scheibler F, Wirtz M, Pfaff H. (2013). Importance Weighting, Expectation Fulfilment and Satisfaction: An Integrative and Innovative Approach To Measuring Patient Satisfaction With Hospital Stays. Int J Public Health;58(6):955–8.
44. Jaramillo, F., Mulki, J. & Boles, J. (2011). Workplace stressors, job Attitude, and job Behaviors: Is Interpersonal Conflict the Missing link? Journal of Personal Selling and Sales Management, 31(3), 339–356.
45. Kamal, S.M., Al-Dhshan, M., Abu-Salameh, K.A., Abdulas, F.H., Hassan, M.M. (2013). The Effect of Nurses' Perceived Job Related Stressors on Job Satisfaction in Taif Governmental Hospitals in Kingdom of Saudi Arabia. Journal of American Science, 8(3), 119-125.
46. Karimzadeh, and Anahita Almasi Far. (2016). Nurse Burnout and Patient Satisfaction With Nursing Care at Dialysis and Cardiac Care Units, International Journal of Research in Medical Sciences Koy V et al. Int J Res Med Sci. Aug;3(8):1825-1831.
47. Keshvari, M., Mohammadi, E., Boroujeni, A. & Farajzadegan, Z. (2012). Burnout: Interpreting the Perception of Iranian Primary Rural Health care Providers from Working and Organizational Conditions. International Journal of Preventive Medicine, 3(Suppl.1), S79–S88.

48. Kiekkas, P.; Spyratos, F.; Lampa, E.; Aretha, D.; Sakellaropoulos, G.C. (2010). Level and Correlates of Burnout among Orthopaedic Nurses in Greece. Orthop. Nurs., 29, 203–209.
49. Kozak, A., Kersten, M., Schillmöller, Z. & Nienhaus, A. (2013). Psychosocial Work-related Predictors and Consequences of Personal Burnout among Staff Working with People with Intellectual Disabilities. Research in Developmental Disabilities, 34(1), 102–115.
50. Lim, J.; Bogossian, F.; Ahern, K.(2010). Stress and Coping in Australian Nurses: A systematic review. Int. Nurs. Rev. 2010, 57, 22–31.
51. Liu, K.; You, L.M.; Chen, S.X.; Hao, Y.T.; Zhu, X.W.; Zhang, L.F.; Aiken, L.H. (2012).The Relationship between Hospital Work Environment and Nurse Outcomes in Guangdong, China: A nurse questionnaire survey. J. Clin. Nurs., 21, 1476–1485.
52. Lovering, S. (2008). Arab Muslim Nurses' Experiences of the Meaning of Caring. (Thesis for Doctor of Health Science). University of Sydney, Sydney, NSW.
53. Lu, H.; Barriball, K.L.; Zhang, X; While, A.E. (2012). Job satisfaction among hospital nurses revisited: A systematic review. Int. J. Nurs. Stud. 2012, 49, 1017–1038.
54. Lucie J. A. (2009). Patient Satisfaction with Nurse Practitioner-Delivered Primary Healthcare Services, Journal of the American Academy of Nurse Practitioners *21* (2009) 610–617.
55. Mašić I. (2007). Service Quality in Health Care. 1. In: Mašić I,. Family medicine. Sarajevo: Avicena:95-114.
56. Maslach C, Jackson SE. (2011). Maslach Burnout Inventory Manual. 2nd ed. Consulting Psychologists Press; Palo Alto, www.maslach.socialpsychology.org.
57. Maslach, C. (2003). Burnout: The Cost of Caring; Malor Books: Cambridge, MA, USA, 2003; pp. 25–121.
58. Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. Annual Review of Psychology, 52, 397–422.
59. McHugh, M.D.; Kutney-Lee, A.; Cimiotti, J.; Sloane, D.M.; Aiken, L.H. (2012). Nurses' widespread job dissatisfaction, burnout, and frustration with health benefits signal problems for patient care. Health Affair. 2011, 2, 202–210.
60. Ministry of Health. (2010). Development of health system and options and alternatives (3rd ed.). Riyadh, Saudi Arabia: Kingdom of Saudi Arabia Ministry of Health.
61. Mitchell, J. (2009).Job satisfaction and burnout among foreign-trained nurses in Saudi Arabia: A mixed method study. Ann Arbour, MI: ProQuest Publishing.
62. Mortada E., El Seifii O. (2012). Clinicians burnout and career satisfaction across the major specialties in Zigzag University Hospitals. Journal of Applies Sciences Research. 8(8):3961-3969.
63. Moustaka H, Constandinidis T. (2010). Sources and effects of Work-related stress in nursing. Health Science Journal, 4(4), 210-216.
64. Natasha Khamisa, Karl P., and brain Oldenburg: (2013). Burnout in Relation to Specific Contributing Factors and Health outcomes among Nurses: A systematic Review. Int. J. Environ. Research Public Health, 10(6):2214-2240.
65. O'Mahony, N. (2011).Nurse burnout and the working environment. Emerg. Nurse, 19, 30–37.
66. Rafii F, Shamsikhani S, Zarei M, Haghani M. (2012). Burnout and its Relationship with the Nurses' Characteristics. Iran J Nurs. 25(78):23–33.
67. Ramady, M. (2013). Gulf unemployment and government policies: Prospects for the Saudi labour quota or Nitaqat system. International Journal of Economics and Business Research, 5(4), 476–498.
68. Saudi Gazette. (2013). Female nurses call for increased protection. Accessed 7 September 2013 from http://www.saudigazette.com.sa/index.cfm?method=home.regcon&contentid=20130408160436.
69. Schaufelt, W. B., Bakker, A. B., & van Rhenen, W. (2009). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. Journal of Organizational Behavior, 30, 893–917.
70. Stimpfel A, Douglas M. and Aiken, L.(2012). The Longer The Shifts For Hospital Nurses, The Higher The Levels Of Burnout And Patient Dissatisfaction Health Affairs, 31, no.11 (2012):2501-2509.
71. Tumulty, G. (2008). Professional development of nursing in Saudi Arabia. Journal of Nursing Scholarship, 33(3), 285–290.
72. Vahey DC, Aiken LH, Sloane DM, Clarke SP, Vargas D. (2004). Nurse Burnout and Patient Satisfaction. Med Care. 42(Suppl):II–57- II-66.
73. Vallejo, R. and Fuentes, P. (2013).The Relationship between Experiential Avoidance and Burnout Syndrome in Critical Care Nurses: A Cross-Sectional Questionnaire Survey. International Journal of Nursing Studies, 47,30-37. http://dx.doi.org/10.1016/j.ijnurstu.2009.06.014.
74. World Factbook. (2013). Saudi Arabia. Accessed 2 September 2013 from https://www.cia.gov/library/publications/the-world-factbook/geos/sa.html.
75. You LM, Aiken LH, Sloane DM, Liu K, He GP, Hu Y, (2013). Hospital Nursing, Care Quality, and patient Satisfaction: Cross-Sectional Surveys of Nurses and patients in Hospitals in China and Europe. Int J Nurs Stud. 2013;50(2):154–61. doi: 10.1016/j. ijnurstu.2012.05.003. [PubMed: 22658468].
76. Zakari, N., Al Khamis, N. & Hamadi, H. (2010). Conflict and professionalism: Perceptions among nurses in Saudi Arabia. International Nursing Review, 57(3), 297–304.

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