Nurses' Burnout and Its Effect on Implementing Evidence Based Nursing Practices

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Abstract:
Background: Burnout is a major issue among nurses working in Intensive Care Units (ICUs), caused by various physical and emotional stressors. Implementing evidence-based nursing guidelines is essential to improve patient outcomes, reduce the risk of harm, and manage nurse burnout. **Aim:** To assess nurses' burnout and its effect on implementing evidence-based nursing practice. **Research design:** Descriptive correlational research design was utilized in present the study. **Setting:** this study was conducted in intensive care units at Assiut University Hospitals. Including (general intensive care unit, trauma intensive care unit, coronary intensive care unit, anesthesia intensive care unit and alraghi intensive care unit. **Subjects:** convenience sampling of all available nurses working in the previous mentioned setting who were 350 nurses. **Tools:** Two tools were used. Tool I Nnurses' Burnout Assessment Tool, Tool II Implemented evidence-based guidelines checklist. **Results:** Revealed that 54.6% of studied critical care nurse have moderate burnout level. For evidence-based nursing practice 57.1% of studied critical care nurses have good level in implementing evidence-based nursing practice. Also, there was positive and significant correlation between burnout score and pressure ulcers evidence-based nursing practice r= 0.263 and p= 0.013*. **Conclusions:** The statistically significant difference was observed between level of burnout and implemented evidence-based guidelines among intensive care units. **Recommendations:** Nurse managers should enhance the application of evidence-based practices of nursing guidelines in intensive care units through comprehensive strategies and continuous training regarding burnout and evidence-based nursing practice.

Keywords: Implementing Evidence Based nursing practice & Nursing burnout

Introduction:
The intensive care unit (ICU) of a hospital is a specialized space that provides patients with life-threatening illnesses with comprehensive, 24-hours care. Among the many difficulties ICU nurses encounter at work include heavy workloads, providing care for the terminally sick, a hostile social environment, and a dearth of resources. In addition to a daunting undertaking, rude family members, arguments with physicians, a lack of nursing staff, time restraints, staffing difficulties, and violence **(Graham et al., 2023).** The intensive care unit nurses are especially susceptible to burnout because of the demanding nature of critical care and the constant stress of the immediate work environment. Burnout is a term used to describe work-related discomfort syndrome. According to the Critical Care Societies Collaborative **(Marc et al., 2016).** between 35 and 44 percent of critical care nurses will have symptoms of severe burnout syndrome, and up to 86 percent will have at least one of the classic symptoms, such as depersonalization, emotional exhaustion, and a lack of personal accomplishment **(Zaccagnini et al., 2021).** An inability to concentrate, a negative outlook on work, anxiety about going to work, a lack of empathy for patients, withdrawal from personal and

professional relationships, a diminished work ethic, a slower response to requests at work, increased irritability around patients and coworkers, and failure to turn in assignments on time or at all are just a few of the many signs and symptoms of burnout among intensive care nurses **(Zuri, 2023).** The practice of intensive care unit nursing is becoming more and more difficult. Nurses handle clinical problems with complicated patient scenarios on a daily basis, increasing the possibility of complications and death. They must adjust to system integration and practice uniformity in order to improve treatment quality and address patient safety. It is crucial to create an evidence-based practice (EBP) culture that considers the challenges and uses the best available data for patients **(Aitken et al., 2020).** Evidence-based practice is a problem-solving approach to healthcare delivery that takes into account the best available data, professional competency, and patient values and preferences. Nurses should use evidence-based decision making to customize nursing care to the particular needs of each patient. Personal challenges that nurse face when trying to apply evidence to practice include ICU restrictions, the quality of working relationships, and exposure to end-of-life threats in the ICU **(Berenholtz, 2022).** Critical care

using EBP methods alone will not allow nurses to deliver patient care. They must continue their education in order to improve their professional knowledge and practice, collaborate in teams, and provide critically ill patients with high-quality nursing care **(McCarthy et al., 2023).**

Significance of the study

A thorough understanding of the complexity of patient care in healthcare settings requires an examination of each component since the linkages between the system, intervention, patient, and outcomes are dynamic and reciprocal, according to the Quality Health Outcome (QHO) model. **(Mitchell et al., 1998).** The body of research on nurses' burnout and stress at work has grown recently, including multiple systematic reviews**. (Spiers et al., 2022).** gave a thorough rundown of the risk factors and predictors of burnout as well as the detrimental effects that persistent stress and burnout have on one's health. According **(Shanafelt et al., 2022).** revealed that burnout has been linked to patient care outcomes like medical errors, infection rates, and patient satisfaction, and as per the study conducted in this research it has been found that there was statistically significant difference between level of burnout and implemented evidence-based guidelines among ICU.

Aim of the study:

This study aimed to assess nurses' burnout and its effect on implementing evidence-based nursing practice

Research questions:

1. What is the level of burnout among ICU nurses working at assuit University Hospitals?
2. What is the level of implementing evidence-based nursing practice among ICU nurses working at assuit University Hospitals?
3. Is there correlation between level of burnout and implemented evidence-based guidelines among ICU?

Subjects and Method

Study design:
Descriptive correlational research design was utilized in the current study.

Setting:
The data was collected from all intensive care units at Assiut University Hospitals. These units included Coronary ICU (22 beds) and Cardio-Thoracic SICU (12 beds) both in the heart hospital, Trauma ICU (16 beds – 16), Medical ICU (12 beds), General ICU (14 beds), and Critical ICU (18 beds).

Sampling:
The studied sample was used the convenience sampling technique which included all the available nurses from both sex who working in previous

mention setting who were 350 nurses with age groups ranging from 18–55 years and give direct bedside care for the patient

Exclusion criteria:
The nurses less than 1 years' experience in intensive care unit, nurses who were on vacation, who did not respond correctly to the questionnaires.

Data Collection Tools: Two tools used in this study.

Tool (I): Nurses' burnout Assessment Tool

It consisted of three parts as follows:

Part one: Nurses' personal data used **to** assess data related to age, sex, marital status, level of education, occupation, total years of experience the nurse have in nursing field, years of experience the nurse have in critical care areas and training in ICU.

Part two: **Burnout risk factors,** this tool was developed by the researcher after extensive review of the relevant literature **(Weheida et al., 2018).** to assess nurse's risks to burnout among nurses working in ICUs. This part composed of three main dimensions (exhaustion, cynicism, and inefficacy).

Scoring system: All items were scored on a three-point Likert scale. The items were scored " disagree" 3 points, " neutral "2 point and" agree" 1 point. total score of "6 ", The scores were summed and converted to percent **(Low risk less than 50%, Moderate risk** from **50 to 70% and High risk more than 70)**

Part three: The Maslach Burnout Inventory (MBI) Scale:

This self-completion questionnaires were first developed by (**Maslach et al., 1981).** and later revised and adapted by (**Maslach et al., 2001).** to assess characteristics and symptoms of burnout. This part composed of 22 items categorized into three dimensions were emotional exhaustion 8 items), depersonalization (4 items), personal accomplishment (7 items). In addition to three questions are optional items and were not used in the sum score.

Scoring system: All items were scored on a five-point Likert scale ranged from 1(does not happen at all) to 5(almost on daily basis). The total scores were summed up and classified as <50% was considering a low level, 50-75% was considering a moderate level and >75% was considering a high level The reliability of the MBI was tested by correlation coefficient, the value ranged 0.87 for depersonalization and personal accomplishment and 0.83 for emotional exhaustion (**Maslach et al., 2001).**

Tool (II): Evidence Based Guidelines Checklist
This tool was adopted from (**Beshir et al., 2019)** to assess nurse's actual evidence-based practice knowledge for implementing evidence-based practice in ICU. It consisted of checklists; total checklists encompassed a-92 item of EBP step for 7 main clinical procedures in ICU were prevention of central line-associated blood stream infections (16 items),

ventilator associated pneumonia (11 items), catheter associated urinary tract infections (12 items), injuries from falls and immobility (9 items), pressure ulcers 7 items), medication error (18 items), ICU transportation (12 items).

Scoring system: Responses of participants were measured on a three-point Likert scale. The items were scored " Implemented step" 2 points, " Partially implemented step " 1 point and" Did not implement step" Zero point. The total scores of implemented evidence-based practice checklist were 184. The higher scores mean higher EBP level. The scores were summed and converted to percent. poor practice level less than 50%, fair practice level 51% - 75%, and good practice level from76% and above. **(Poghosyan, 2019).**

Method: Technique for data collection: the study was conducted through the following phases.

Preparatory phase:

▪ Official permission of carry out the study taken from the responsible head of Assiut University Hospital intensive care units to conduct the study.

▪ The studied tools designed after extensive literature review.

Ethical considerations

Study proposal approved from Ethical Committee in the Faculty of Nursing with code number {1120240773} on 25 February 2024. There is no risk for studied patients during application of the research. The study followed common ethical principles in clinical research. Oral consent obtained from nurses that was willing to participate in the study, after explaining the nature and purpose of the study. Confidentiality and anonymity assured during this study. Studied nurses were having the right to refuse to participate and or withdraw from the study without any rational any time. Studied nurse' privacy considered during collection of data.

Pilot Study: A pilot study was carried out on (10%) (n=50 nurses) of the subjects under the study was included and chosen from the previously mentioned setting then later included to the sample.

Content validity and Reliability

▪ **validity**: It was established to assure the content validity by a panel of 5 expertise's in critical care area at assuit University (2 Professors from faculty of medicine and 3 Professors from critical care nursing department faculty of nursing) who revised the tools for clarity. relevance, comprehensiveness, understanding, and ease for implementation and according to their opinion miner modification were applied.

▪ **Reliability**: The reliability of the date gathering tool was evaluated by test –retest reliability using Cronbach's Alpha, 0.87 was for tool one and for tool two was 0.910.

Data collections:

The aims of the study explained to nurses and the patients and responsible persons. Data collection for the study conducted over the period of six months from the middle of April until the end of october2024. During data collection the nurses reported their satisfaction toward wording of questionnaires. Data collected through three different shifts according to assuit University Hospital to ensure the accuracy of data.

Data collected through self-administer questionnaires which distributed to the nurses (tool I) and observation of the nurses for implemented evidence-based guidelines in ICU (tool II). Each nurse assessed regarding personal and professional data and burn out risk factors (part one and three of tool I). Gathering data of tool, I required about 15-20 minutes to be answered. The researcher was available in ICU for any explanations and checking each questionnaire after the completion, to be sure that there were no missed items.

The researcher observed the nurses' implementation to applied evidence-based guidelines (tool II) during morning, afternoon shifts until all developed checklist was completed and each nurse's performed action was recorded in the checklist as implemented or partially implemented or did not implement. The nurse's performed action covered the 7 evidence-based guidelines for implementing the evidence-based practice which include prevention of central line-associated blood stream infections performance, catheter associated urinary tract infections performance, ventilator associated pneumonia performance, injuries from falls and immobility performance, pressure ulcers and medication error performance and ICU transportation performance.

Statistical design:

The obtained data was reviewed and prepared for computer entry. The data was coded, categorized, analyzed and tabulated. The researcher used an appropriate statistical method and tests for analysis of the result. The statistical package for **IBM SPSS version (26) software** was used to analyze data. The data was tested for normality by using the Anderson – Darling test and for homogeneity variances prior to further statistical analysis. Descriptive statistics (frequencies and percentages, mean and standard deviation, Pearson correlation coefficients, independent sample T – test, Chi – square) were done by using computer program (SPSS) for quantitative and qualitative data to determine significance. The critical value of the tests " P " was considered statistically significant when P – value less than (0.001)

Result:

Table (1): Frequency Distribution of personal Data among Studied Nurses (N=350)

Personal data	Number	Percent
Gender		
Male	176	50.3
Female	174	49.7
Age (in years)		
Under 25	144	41.1
25-40	153	43.7
41-55	53	15.2
Marital status		
Single	167	47.7
Married	157	44.9
Divorced	26	7.4
level of education		
Secondary nursing degree	107	30.6
Technical nursing degree	91	26
Bachelor's degree in nursing	81	23.1
Master's degree in nursing	71	20.3
Years of experience in nursing field		
Less than 5 years	153	43.7
5-10 years	115	32.9
10-20 years	49	14
20-30 years	33	9.4
Years of experience in critical care areas and training in ICU		
Less than 5 years	228	65.1
5-10 years	84	24
10-20 years	22	6.3
20-30 years	16	4.6
Occupation		
Nurse	214	61.1
Charge nurse	69	19.7
Head nurse	67	19.2
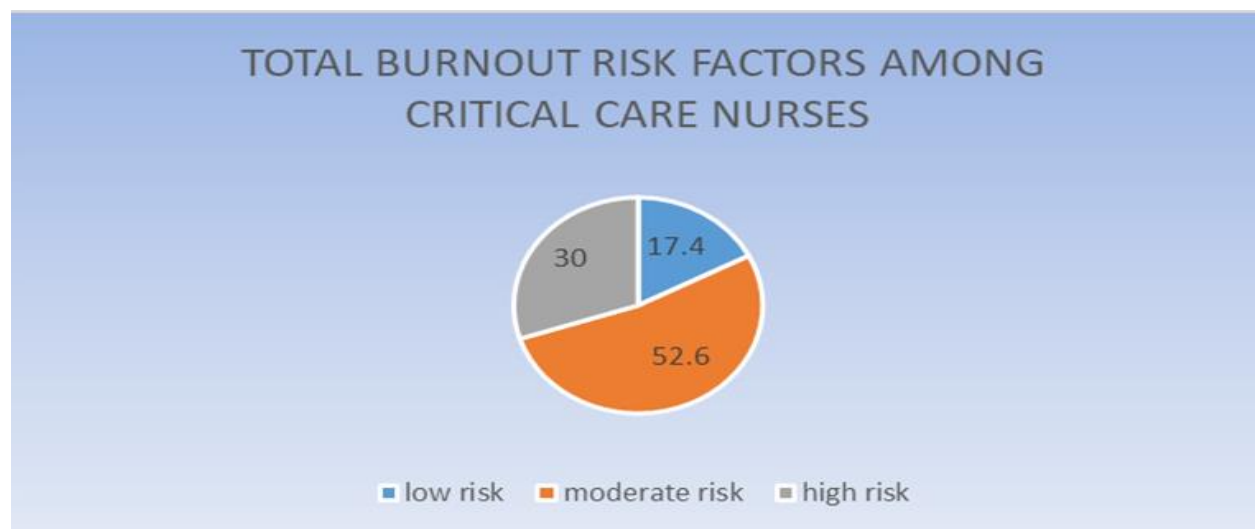
Figure (1): Total Burnout Risk Factors among Critical Care Nurses (N = 350)
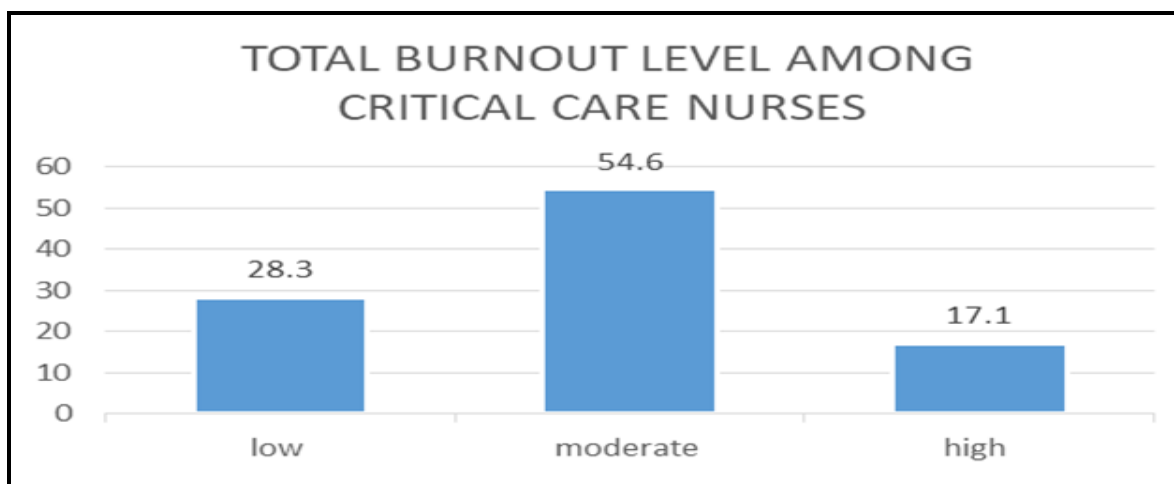
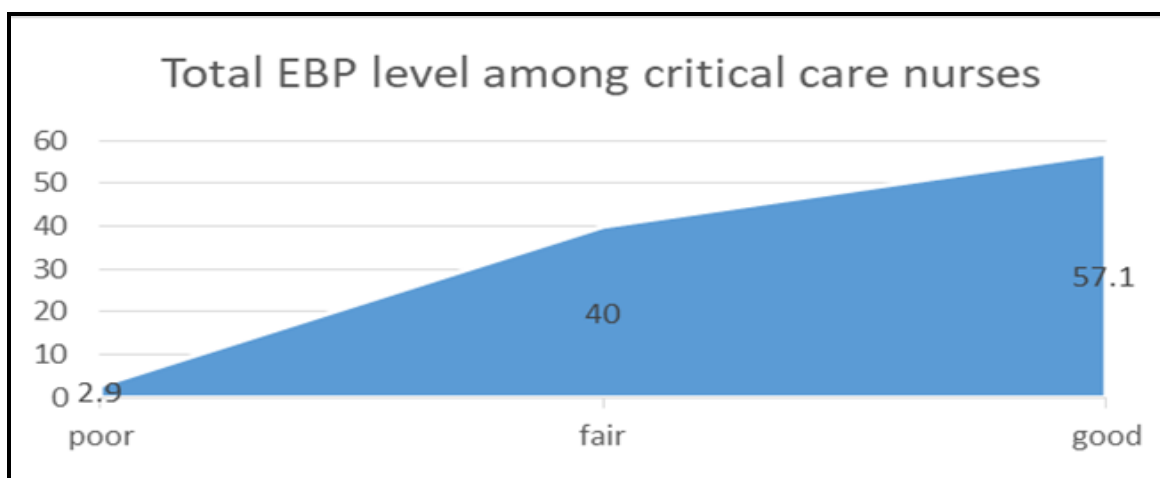**Figure (2): Total Burnout BMI Level among Critical Care Nurses (N = 350)**

Figure (3): Total of Studied Nurses' Level Toward EBP (N = 350)

Table (2): Relation Between personal and Risk Factors (N=350)

Personal data	Low N=61		Moderate N= 184		High N= 105		X^2	P
	N	%	N	%	N	%		
Gender								
Male	40	11.4	130	37.2	6	1.7	0.246	.001**
Female	21	6	54	15.4	99	28.3		
Age (in years)								
Under 25	20	5.7	90	25.7	30	8.6	0.634	.014*
25-40	31	8.9	79	22.6	43	12.2		
41-55	10	2.8	15	4.3	35	10		
Marital status								
Single	40	11.4	122	34.9	5	1.4	0.410	.001**
Married	20	5.7	37	10.6	100	28.6		
Divorced	1	0.3	25	7.2	0	0		
Level of education								
Diploma	4	1.1	81	23.1	22	6.3	0.312	.001**
Technical	0	0	30	8.9	61	17.4		
Bachelor's degree in nursing	10	2.9	60	17.1	11	3.1		
Master's degree in nursing	40	11.4	13	3.7	0	0		

Personal data	Low N=61		Moderate N= 184		High N= 105		X²	P
	N	%	N	%	N	%		
Years of experience in nursing field								
Less than 5 years	20	5.7	120	34.3	13	3.7	0.534	**.001****
5-10 years	15	4.3	20	5.7	80	22.9		
10-20 years	19	5.4	30	8.6	0	0		
20-30 years	7	2	14	4	12	3.4		
Years of experience in critical care areas and training in ICU								
Less than 5 years	30	8.6	150	42.9	48	13.7	0.122	**.001****
5-10 years	20	5.7	30	8.6	34	9.7		
10-20 years	10	2.9	4	1.1	8	2.3		
20-30 years	1	0.3	0	0	15	4.3		
Occupation								
Nurse	15	4.3	160	45.7	39	11.1	0.720	**.001****
Charge nurse	30	8.6	20	5.7	19	5.4		
Head nurse	15	4.3	2	0.6	26	7.4		

Table (3): Relation Between personal data and MBI (n=350)

Personal data	Poor N=99		Fair N=191		Good N= 60		X²	P
	N	%	N	%	N	%		
Gender								
Male	49	14	100	28.6	27	7.7	1.233	**.001****
Female	50	14.3	91	26	33	9.4		
Age (in years)								
Under 25	40	11.4	90	25.7	14	4	3.781	**.001****
25-40	29	8.3	94	26.9	30	8.6		
41-55	30	8.6	7	2	16	4.6		
Marital status								
Single	30	8.6	120	34.3	17	4.9	2.299	**.001****
Married	20	5.7	46	13.1	88	25.1		
Divorced	11	3.1	25	7.1	0	0		
Level of education								
Diploma	5	1.4	102	29.1	0	0	1.367	**.001****
Technical	50	14.3	20	5.7	21	6		
Bachelor's degree in nursing	20	5.7	50	14.3	11	3.1		
Master's degree in nursing	24	6.9	19	5.4	28	8		
Years of experience in nursing field								
Less than 5 years	56	16	61	17.4	36	10.3	1.327	**.001****
5-10 years	10	2.9	100	28.6	5	1.4		
10-20 years	30	8.6	10	2.9	9	2.6		
20-30 years	3	0.9	20	5.7	10	2.9		
Years of experience in critical care areas and training in ICU								
Less than 5 years	70	20	110	31.4	41	11.7	1.734	**.001****
5-10 years	10	2.9	60	17.1	14	4		
10-20 years	9	2.6	10	2.9	3	0.9		
20-30 years	10	2.9	4	1.2	2	0.6		
Occupation								
Nurse	50	14.3	130	37.1	34	9.7	9.234	**.001****
Charge nurse	30	8.6	30	8.6	9	2.6		
Head nurse	19	5.5	31	8.9	17	4.9		

Table (4): Relation Between personal data and EBP (N=350)

Personal data	Poor N=10		Fair N=140		Good N=200		X²	P
	N	%	N	%	N	%		
Gender								
Male	6	1.7	45	12.9	125	35.7	2.701	**.004****
Female	4	1.2	95	27.1	75	21.4		
Age (in years)								
Under 25	4	1.2	10	2.9	130	37.1		
25-40	3	0.9	100	28.6	50	14.3	3.503	**.000****
41-55	3	0.9	30	8.6	20	5.7		
Marital status								
Single	1	0.3	101	28.9	65	18.6		
Married	6	1.7	29	8.3	122	34.9	2.689	**.001****
Divorced	3	0.9	10	2.9	13	3.7		
Level of education								
Diploma	7	2	100	28.6	0	0		
Technical	3	0.9	5	1.4	83	23.7	5.345	**.000****
Bachelor's degree in nursing	0	0	20	5.7	61	17.4		
Master's degree in nursing	0	0	15	4.3	56	15		
Years of experience in nursing field								
less than 5 years	0	0	80	22.8	73	20.9		
5-10 years	2	0.6	8	2.3	105	30		**.000****
10-20 years	3	0.9	37	10.6	9	2.6		
20-30 years	5	1.4	15	4.3	13	3.7		
Years of experience and training in ICU								
Less than 5 years	7	2	70	20	151	43.1		
5-10 years	2	0.6	50	14.3	32	9.1	2.567	**.003****
10-20 years	0	0	20	5.7	2	0.6		
20-30 years	1	0.3	0	0	15	4.3		
Occupation								
Nurse	8	2.3	80	22.8	126	36		
Charge nurse	2	0.6	40	11.4	27	7.7	1.234	**.002****
Head nurse	0	0	20	5.8	47	13.4		

Table (5): Correlation Burnout Risk Factors and BMI and EBP

Burnout score:	Burnout risk factors	
	R	P
Emotional exhaustion	0.445	0.001*
Personal accomplishment	-0.349	0.001*
Depersonalization	0.377	0.001*
Optional items	-0.367	0.006*
Evidence based practice scores		
Central line associated infection	-0.153	0.135
Ventilation associated pneumonia	0.071	0.492
Catheter associated urinary tract infections	0.178	0.080
Injuries form falls	-0.055	0.594
Pressure ulcers	-0.038	0.711
Medications	-0.160	0.117
ICU transportation	0.004	0.961

Table (6): Correlation Between Burnout Scores and Evidence Practice Implementation of Critical Care Nurses

Evidence based practice	Emotional exhaustion		Personal Accomplishment		Depersonalization	
	R	P	R	P	R	P
Central line associated infection	-0.023	0.805	-0.256	0.723	0.047	0.674
Ventilation associated pneumonia	-0.134	0.174	0.256	0.712	0.127	0.631
Catheter associated urinary tract infections	-0.234	0.183	-0.220	0.612	0.146	0.290
Injuries form falls	-0.256	0.823	0.134	0.514	0.250	0.204
Pressure ulcers	-0.412	0.123	0.734	0.574	0.263	0.013*
Medications	-0.273	0.410	0.234	0.210	0.145	0.222
ICU transportation	-0.023	0.125	0.671	0.666	0.117	0.321

Table (1): Shows percentage distribution of participants nurses according to personal data (n = 350). Out of the total sample, 50.3% of studied nurses were male, with 43.7% of participants had age from 25 to < 40 years. About half (47.7%) of nurses were single, with nearly one third 30.6% of them had secondary nursing degree. The highest percentage 43.7% of studied nurses had experience less than 5 years, but more than half (65.1%) of these participants had experience in critical care unit (ICU). The majority (61.1%) of studied nurses worked as nurse.

Figure (1): Presents that more than half (52.6%) of studied critical care nurse have moderate risk. Followed by nearly one third (30%) of them have low risk, and minority (17.4%) of them had high risk factor of burnout.

Figure (2): Presents that more than half (54.6%) of studied critical care nurse have moderate level. Followed by more than one quarter (28.3%) of them have low level, and minority (17.1%) of them had high level of burnout.

Figure (3): Presents that more than half (57.1%) of studied critical care nurse have good level. Followed by two fifths (40%) of them have fair level, and minority (2.9%) of them had poor level of EBP.

Table (2): Reveals that there was statistically significant relation between all personal data and burnout risk factor score

Table (3): Reveals that there was statistically significant relation between all personal data and BMI score.

Table (4): Reveals that there was statistically significant relation between all personal data and EBP score.

Table (5): Illustrates correlation between total risk score of critical care nurses regarding burnout scores and evidence-based practice scores. It can be seen that there were negative and significant correlations regarding total risk score of critical care nurses compared with personal accomplishment and optional items of burnout score r=-0.349 and -0.367 and p=0.001 and 0.006 respectively. On the other hand, positive and significant correlations observed regarding total risk score of critical care nurses compared with emotional exhaustion depersonalization r=0.445 and 0.377 and p=0.001 respectively.

Table (6): Reveals correlation between burnout scores and evidence practice implementation of critical care nurses. It can be seen that there was positive and significant correlation regarding depersonalization of burnout score and pressure ulcers EBP r= 0.263 and p= 0.013*.

Discussion:

Burnout is frequent among critical care nurses and has great effects on daily quality of life and may threaten the critically ill patient care. Indeed, burnout may be considered a marker that hinders EBP in ICU. **(Zuri, 2023).** So, the aim of this study was to examine the relationship between nurses' burnout and implemented evidence-based guidelines in intensive care units

Burnout risk factors among Critical Care Nurses, the data indicate that over half of the studied critical care nurses experience moderate risk of burnout, with more than quarter at low risk and minority at high risk. Factors contributing to burnout include high workload, inadequate staffing, and poor work environment.

This current finding supported with a recent study by **Zuri, (2023).** discovered that a significant percentage of nurses thought they had moderate risk of burnout, even though many acknowledged experiencing moderate levels of emotional exhaustion. This points to a possible safeguard in workplaces that could lower the perceived danger of burnout in spite of job demands.

This current result disagreed with **Papazian, (2023).** According to a systematic study and meta-analysis, almost two-fifths of intensive care unit nurses experience high levels of burnout, with emotional tiredness being significantly higher than that of

physicians in comparable situations. **(Villarante, 2023).** according to a nationwide survey, approximately one-fifth of critical care nurses reported moderate burnout, and half reported mild burnout, highlighting the substantial influence of work-related pressures on this population. First of all, some people may normalize feelings of stress and weariness as a normal part of their job rather than as a contributing factor to burnout due to the high expectations and emotional toll of the nursing profession. Furthermore, nurses may underreport their experiences with burnout due to structural and cultural pressures in the healthcare industry that prevent candid conversations about mental health and wellbeing. **(Roth, 2022)** who reported the discrepancy in replies can also be attributed to differences in organizational support, staffing levels, and resources, which might affect how each person perceives their risk of burnout.

Regarding Maslach Burnout Inventory, the current study indicates that over half of the critical care nurses in the study have a moderate level. More than 25% of them had low levels of burnout, whereas a small percentage had high levels. This study sheds light on a common issue in nursing, where burnout is known to be exacerbated by high emotional demands and stressful work environments.

A similar study conducted by **Smith, (2022).** showed that over half of nurses had moderate levels of burnout, confirming the idea that burnout is common in this group. Additionally, it was discovered that over quarter of their sample had low levels of burnout, which supports the results of our study. Also, **(Wong, 2022).** indicated that just two fifths of the participants had a high level of burnout, indicating that burnout rates among nurses may be lower than the numbers in our study. This disparity may be explained by variable sample numbers, regional variations, or methodological approaches used in various research to measure burnout. According to a study by **(Liu, 2020).** showed that over half of nurses had severe burnout symptoms, indicating that the effects of organizational support and work environment may range greatly between healthcare settings or geographical areas. This implies that a considerable percentage of nurses may not completely follow or successfully use evidence-based practices in transportation contexts, even though nearly equal numbers of participants have good and fair knowledge of the recommendations. The consequence is that educational interventions might be required to close this gap, especially in order to improve nurses' comprehension and application of these standards and ensure that more nurses move from fair to good grades. Similar findings from a study by **(Alshraideh, 2024).** discovered that, when it

came to their understanding of evidence-based practices, over half of nurses had "good" scores, while only 25% went into the "fair" range. Furthermore, the results could also be contrasted with a meta-analysis conducted by **(McCarthy, 2023).** study who showed that almost two-thirds of nurses had "good" to "excellent" understanding of evidence-based guidelines in a range of clinical situations.

Relation between personal date and Burnout risk factors the results of this study showed a statistically significant correlation between the scores of burnout risk variables and all biographic data. According to researchers, the notable disparity in how male and female participants perceived burnout raises the possibility that gender norms and expectations influence how people view and react to burnout risk factors. According to earlier research, women may suffer burnout in different ways than men, frequently as a result of various social obligations and work environments. **(Leiter, 2016).** A recent study by **(Zhao, 2023).** investigated burnout among healthcare professionals and discovered that perceptions of burnout were highly influenced by age, gender, marital status, and educational attainment. According to their findings, emotional weariness was more common among female healthcare workers, and burnout was most likely to occur among those aged 41 to 55 because of work-life balance issues and career pressure. The study also found that people with more degrees were more likely to experience burnout, maybe as a result of having more duties and expectations at work. Given that the divorced individuals reported a substantial correlation, the results point to a noteworthy relationship between marital status and the perception of burnout risk factors. This suggests that marital status may have an effect on participants' burnout experiences. Furthermore, the statistics showing that the majority of participants with a Master's degree in nursing agree to some extent that burnout risk factors exist emphasizes the intricacy of the relationship between burnout sentiments and educational attainment. The concept that greater education levels may be associated with heightened awareness or acceptance of burnout risks is supported by the statistically significant difference. A study that was recently published in the Journal of Health Psychology was carried out by **(Smith, 2022).** discovered that, in comparison to their married counterparts, divorced people expressed higher 12 levels of felt exhaustion. The authors emphasized the strong influence of marital status on mental health outcomes by pointing out that the emotional and practical strains of divorce may lead to higher degrees of burnout. The findings showed that over half of participants with the same (20–30 years) of experience agreed somewhat with

burnout risk factors with the same statistically significant difference, regardless of years of experience in the nursing industry, critical care regions, and intensive care unit training. About half of participants in administrative roles disagree with burnout risk factors, according to the data, which showed a statistically significant difference in profession. There is a strong correlation between burnout risk factors and years of nursing experience, especially in critical care settings like the intensive care unit. More than half of the participants in the latest authors' study who had 20 to 30 years of experience acknowledged the risks of burnout and indicated concern about it. This result is consistent with previous research showing that the mental and physical strain of critical care environments frequently presents difficulties for seasoned nurses. Fatigue and a feeling of emotional exhaustion are two main symptoms of burnout that can result from prolonged exposure to high-stress situations. Years of experience and reported burnout risk among critical care personnel appear to be strongly correlated, according to the statistically significant findings. However, there was a significant disparity in the results for individuals in administrative roles; around half of them did not feel that burnout risk factors were a problem. The nature of administrative employment, which frequently has distinct responsibilities that may allow for a more controllable work-life balance than clinical roles, is one of the possible causes of this. Additionally, administrative staff might have more authority over their working environment and the ability to shape institutional rules meant to lessen burnout. **(Johnson, 2023).** Given the different experiences of clinical nurses versus 13 administrative personnel, the statistically significant indicates that there is a notable difference in views of burnout risk factors based on occupational positions, highlighting the significance of addressing these concerns specifically. Relation between personal date and Maslach Burnout Inventory, according to the current findings, all personal data and the MBI scale had a statistically significant relationship with a statistically significant difference. The complicated dynamics underlying burnout are highlighted by recent study, especially when considering workplace setting and personal considerations. **(Astous, 2017).** underline that although women are frequently shown to have higher degrees of burnout, these inequalities may be mitigated in different occupational settings by context-specific factors. Additionally, **(Wang, 2018).** demonstrate how married people's experiences differ from those of single people, and how household duties may be a major factor in the latter's emotional weariness. Complementing these findings, **(Leiter, 2016).** suggest that workplace interventions can

effectively alleviate burnout, highlighting systemic elements as important contributors to burnout experiences across many groups rather than just individual ones. All of these research point to the need for a sophisticated understanding of burnout that takes into account both individual demographics and the contextual influences of work situations. According to researchers, there is a complicated relationship between burnout and years of expertise. Evidence indicates that extended exposure to high-stress workplaces, including critical care units, might exacerbate symptoms of burnout, despite the initial assumption that more experienced nurses would be better able to handle stress. This is particularly true in high-patient-acuity situations, where the emotional toll can build up over time. High patient death rates, close family ties, and the emotional strain of caring for patients in severe condition are just a few of the particular difficulties faced by critical care nurses. 14 According to studies, nurses in these fields have higher degrees of emotional weariness, which is correlated with the number of years they have worked in high-stress positions. Significant burnout symptoms are reported by over two thirds of the nurse participants in the study, according to the findings. This is consistent with previous research that indicates structural elements in healthcare environments, like staffing numbers, leadership, and support networks, have a significant impact on nurses' burnout and general wellbeing**. (Labrague, 2021). (Smith, 2022).** showed that among critical care nurses with five to ten years of experience, a sizable portion reported having burnout symptoms multiple times each month. This suggests that burnout levels and years of experience are strongly correlated. Similar to findings that participants with 5–10 years of experience reported similar degrees of burnout on the MBI scale, the authors pointed out that nurses in critical care settings frequently suffer higher levels of stress due to the nature of their profession and the emotional toll it can take. **Smith, (2022).** According **(Johnson, 2023).** who investigated how occupational factors affected ICU nurses' burnout. In line with the findings that participants in the same experience range reported high degrees of burnout, with a statistically significant frequency, they stated that nurses with 10–20 years of experience reported experiencing burnout symptoms many times each month. According to their findings, a major factor in the higher incidence of burnout among seasoned clinicians is extended exposure to demanding work conditions, especially in critical care. **(Johnson, 2023).** The results of experiencing burnout for years of experience (5–10 years) largely align with those who discovered that giving credence to the influence of work experience on burnout rates**. (Smith, 2022).**

The finding in this study that participants experienced burnout over years of experience (10–20 years) is consistent with. **Johnson, (2023).** who discovered that increased burnout rates were significantly correlated with 15 extended exposures to high-stress situations. Relation personal data and EBP, the present findings demonstrated a statistically significant correlation between the EBP score and the personal variables. Concurrently with **(Banda, 2020).** Clinical experience has been found to be a significant factor in the adoption of EBP, and a study conducted among nurse-midwives in Malawi revealed that those with Master's degrees scored higher in nursing practice, knowledge levels, and overall EBP than their counterparts with Bachelor's degrees or diplomas. Nurse-midwives having less than five years of clinical experience reported higher nursing attitude scores than those with greater experience, according to the same Malawian study. This implies that professionals in their early careers might be more open to implementing new procedures. Similarly, **(Alshraideh, 2024).** With higher educational attainment, Palestinian nurses working in intensive care units demonstrated better EBP knowledge, attitudes, and practices. There are gender disparities in the adoption of EBP, with **(Abuadas, 2017).** suggesting that opinions about EBP may be less favorable among female healthcare workers. For instance, compared to male nurses, female nurses in Jordan practiced research less and had less favorable opinions of EBP. However, some research disagreed with **Albarqouni, (2020).** discovered that older healthcare workers have fewer positive attitudes toward EBP, whereas other studies show that being older is associated with increased EBP knowledge, attitudes, and behaviors. For example, regarding correlation between total risk score of critical care nurses regarding burnout scores and evidence-based practice scores. It is evident that the total risk score of critical care nurses was negatively and significantly correlated with both personal accomplishment and optional burnout items. However, when comparing the emotional tiredness depersonalization to the 16 critical care nurses' overall risk score, positive and significant relationships were found. In a study conducted by **Johnson , (2023).** The goal of the study was to find out how much burnout occurs among medical professionals and how closely they follow evidence-based therapeutic guidelines. A varied sample of three hundred participants from a range of healthcare settings participated in the study. A significant portion of participants disagreed with experiencing burnout risk factors on a monthly basis, according to the data. The majority, on the other hand, expressed a moderate level of agreement, reporting that they came across burnout risk factors

multiple times per month. Interestingly, every participant reported having at least one burnout risk factor every week, and these results were statistically significant. Additionally, the investigation showed a positive relationship between burnout levels and following those rules. Additionally, the positive relationship found between perceptions of burnout risk and following evidence-based recommendations implies that putting these strategies into practice may lessen some of the negative effects of burnout. This result is consistent with recent studies by **(West , 2020).** This shows that applying evidence-based methods consistently lowers stress levels and may have a preventative effect on burnout. In order to combat burnout and eventually improve the mental health and job happiness of healthcare professionals, the data suggests that healthcare systems must incorporate standardized recommendations. were shown to be associated with a higher probability of patient death, and when comparing groups of patients who died and those who survived, this difference was statistically significant.

Conclusion:
It can be inferred that there is a statistically significant difference between the degree of burnout and the application of evidence-based guidelines among intensive care unit nurses.

Recommendations:
1. Develop all-encompassing plan for improving EBP abilities via suitable training. Additionally, nursing education programs must actively assist nurses in acquiring sufficient information literacy skills in order to lower nurse burnout.
2. Use a sizable probability sample drawn from various regions of Egypt, repeat this study.
3. Establishe continuous psychological support services for intensive care unit nurses was advised in order to lower burnout rates and improve mental health.
4. Screen burnout to be included in routine evaluations utilizing a burnout assessment tool in order to identify early signs of emotional exhaustion and initiate prompt intervention.

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