

Exploring the Empathy-Burnout Connection among Nurses: Working at Teaching Hospitals

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Abstract— A descriptive correlation design was used in the present study during the specified time period. From September 26, 2022, to June 14, 2023, there will be an assessment conducted to determine the levels of empathy and burnout and to discover the connection between empathy and burnout. A purposive (non-probability) sample of 180 nurses was recruited in the current study and selected from four teaching hospitals in Kerbala city according to specific criteria. A pilot study is conducted to assess the reliability of the questionnaires, and a panel of 17 experts is utilized to establish the content validity of the questionnaires. The data was gathered by conducting interviews and using two scales: the Jefferson Scale of Empathy Physician/Health Professions (HP version) and the Maslach Burnout Inventory. Data interpretation and analysis were carried out using the Statistical Package for Social Sciences (SPSS) version (IBM 22). The results of the study show that nurses exhibit low levels of empathy, low levels of emotional exhaustion, high levels of depersonalization, and high levels of personal accomplishment. The study also found a significant relationship between empathy and all dimensions of burnout. The research suggests that nursing colleges and institutions should include research and courses on stress management in nursing because nursing is unavoidably a stressful profession, these courses may be beneficial for future nurses. Also, efforts should be made to provide training programs and promote a culture of empathy within healthcare organizations, it could lead to better patient outcomes and increased patient satisfaction.

Index Terms— Empathy, Burnout, Nurse.

I. INTRODUCTION

Burnout is an increasing issue among medical personnel around the globe. Empathy has been described as a crucial skill for alleviating burnout (Yue et al., 2022). Empathy, work commitment, and job satisfaction are some of the elements that have been studied in the medical literature as potential alleviating factors for medical staff burnout because of the influence it has not just on patients but also on the medical team, empathy is a distinctive psychological resource by establishment of personal relationships and improvement of patient communication (Caro et al., 2017). In health care settings, empathy is crucial because it fosters a positive relationship between health care professionals and patients, this positive interaction acts barrier against burnout in the workplace (Williams et al., 2017). People who work in social and health care have to deal with clients and patients who go through tough emotional situations and show strong negative feelings, experiencing this kind of situation every day can lead make you feel more emotional stress and could potentially increase the chance of burnout (Altmann & Roth, 2021). Numerous studies have looked at empathy as a predictive

variable of burnout (Bogiatzaki et al., 2019 ; Yuguero et al., 2017). For instance, a research conducted in Spain on primary care practitioners discovered that higher levels of empathy a correlation between lower levels of burnout in the workforce (Yuguero et al., 2017). Also a study that showed high degrees of burnout are correlated with low empathy levels, researchers discovered that having high empathy levels may save professionals from getting burnout (Bogiatzaki et al., 2019).

II. MATERIALS AND METHODS

A. Study Design

A correlation study, the researcher used a descriptive-correlation design because it suitability with the study goals to find out the connection between and empathy and burnout among nurses working at teaching hospitals in kerbala city. The study period started from The study will take place from September 26, 2022, to June 14, 2023: Data were collected from academic nurses who worked in four teaching hospitals in kerbala city(Al-Imam Al –Hussian Medical City, Al-Imam Al-Hassan Al- Mujtaba Teaching Hospital, Kerbala Teaching Hospital for Children and Obstetrics and Gynaecology Teaching Hospital).

B. Population

The target population was 335 academic nurses working in four teaching hospitals in kerbala city. the population of academic nurses from each hospital was 142,144,31,and 18 , respectively.

C. Sample size

The sample size was estimated according Soper sample calculator ; the minimum sample size was 128 academic nurses ,considering the possibility of incomplete or non-responses from the participants. The researcher selects a sample of 180 academic nurses to get more representation of sample population and get more accurate results.

D. Sample Method

A purposive (non- probability) sample of 180 nurses are selected according to specific inclusion criteria, the population of academic nurses from each hospital was (Al-Imam Al –Hussian Medical City,Al- Imam Al- Hassan Al- Mujtaba Teaching Hospital, Kerbala Teaching Hospital for Children and Obstetrics and Gynaecology Teaching Hospital) 142,144,31,and 18 .Sample number of each hospitl 78,74,14,14 respectively.

E. Administrative Arrangements

The College of Nursing/University of Karbala has independently examined the study protocol and granted official clearance for the study to be carried out. After receiving the study's title and questionnaire, the College of Nursing's Ethics Committee evaluated the study's instruments (questionnaire) and approved moving on with the study, the survey was conducted with the knowledge and written consent of every respondent.

F. Study Instrument

The questionnaire was designed by researcher according to the previous studies related to variables included in current study; the researcher uses an instrument consist three parts demographic information data, and Jefferson Scale of Empathy Physician/Health Professions (HP – version), and Maslach Burnout Inventory to measure the problem statement include: Part I: Demographic Data: The socio-demographic sheet includes nurse's age, gender, marital status, work shift, job desire, monthly income, hospital, and years of experience.

G. Part II: Jefferson Scale of Empathy Physician/Health Professions (HP – version)

was developed by (Hojat et al., 2002). Used the scale translated into the Arabic language by (Nashawi, 2009) in this study. The JSE is a tool with 20 questions designed to assess empathy in healthcare education and patient care. It is meant for students and professionals in the healthcare field. Responses are given on a 7-point scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). Half of the questions are positive and scored directly, while the other half are negative and scored in reverse (Hojat et al., 2018). The potential score range is from 20 to 140. A higher mean score indicates a higher self-reported empathy level.

H. Part III: Maslach Burnout Inventory

The American researcher Christina Maslach, with the assistance of the researcher Susan Jackson in 1982, built a scale to measure psychological burnout among workers in the fields of human and social services in the American environment (Buhara, 2012). The scale which was used in the current study taken from the study of (Smain & Muhammad, 2020). It contains 22 items, some of the items are positively worded (4, 7, 9, 12, 17, 18, 19, 21) and the other are negatively worded (1, 2, 3, 5, 6, 8, 10, 11, 13, 14, 15, 16, 20, 22). Distributed in three subscales: emotional exhaustion (nine items: 1, 2, 3, 6, 8, 13, 14, 16, and 20), personal accomplishment (eight items: 4, 7, 9, 12, 17, 18, 19, and 21), and depersonalization (five items: 5, 10, 11, 15, and 22). The paragraphs of the scale are built in the form of statements that ask about the individual's feelings about his profession, and the examined is asked to answer once for each paragraph, and the answer depends on the statements on a sliding scale: 0 (never); 1 (once a year); 2 (once a month); 3 (Several times a month), 4 (once a week), 5 (several times a week), and 6 (every day). According to the Maslach Burnout Scale, individuals who score high on both the emotional exhaustion and depersonalization, and low scores on the

personal accomplishment dimension suffer from burnout. According to this scale, the individual is not classified on the basis that he suffers or does not suffer from psychological burnout, but is classified on the basis that his degree of burnout ranged between high, moderate, or low as shown in the following: Emotional Exhaustion (EE) Based on the total score, burnout levels are categorized as follows: Low-level burnout (17 or less), Moderate level burnout (between 18 and 29), High-level burnout (over 30). For Depersonalization (DP), the levels are: Low-level burnout (5 or less), Moderate level burnout (between 6 and 11), High level burnout (12 and greater). Personal Accomplishment (PA) levels are: High-level burnout (33 or less), Moderate level burnout (between 34 and 39), Low-level burnout (greater than 40). The questionnaire's validity was ensured by having it reviewed by a panel of 17 experts with over 10 years of experience in relevant fields related to the study. Based on the experts' suggestions and recommendations, slight changes and modifications were made to ensure the instrument's appropriateness for the nursing sample.

I. Pilot Study

A pilot study is done before data collecting to determine the study instrument's reliability. It was applied on (20) Academic nurses working in hospitals such as Al-Imam Al-Hussain Medical City and Kerbala Teaching Hospital for Children, it took an average of 15-20 minutes to fill out forms before starting a full-scale study. This time frame was considered acceptable. The pilot study was carried out from December 21st to December 25th, 2022, with the sample from this pilot study being separate from the main study. To test the reliability of the study instrument, Cronbach's alpha coefficients were used. The test results indicated that the instrument was reliable and demonstrated construct validity. Cronbach's alpha 0.70 for Jefferson Scale of Empathy, and Cronbach's alpha 0.73 for Maslach Burnout Inventory.

J. Data collection

The self-administer scheme was utilized by asking the applicants to fill the format of the inquiry form and fulfill the requests. The data collection process has been performed from December 26th, 2022, to January 8th, 2023, after obtaining permission from Kerbala Health Directorate to conduct the questionnaire in its hospitals and institutions. Then the researcher explaining the purpose of the study in simple way to nurse. An agreement of participation was obtained from academic nurse prior to the interview, the average time required for each respondent of the nurses has taken approximately 15-20 minutes to filling out the questionnaire form.

K. Data Analysis

The data were analyzed and interpreted with the SPSS version 22 software version (IBM 22).

III. RESULTS

TABLE (1) STUDY SAMPLE DEMOGRAPHIC DATA.

Demographic data	Rating and Intervals	Frequency	Percent
Age / Years	<= 25	68	37.8
	26 – 30	90	50.0
	31 – 35	12	6.7
	36 – 40	7	3.9
	41+	3	1.7
	Total	180	100.0
Gender	Male	85	47.2
	Female	95	52.8
	Total	180	100.0
Marital Status	Single	94	52.2
	Married	83	46.1
	Divorced	2	1.1
	Widowed	1	.6
	Total	180	100.0
Work Shifts	Morning	134	74.4
	Evening	46	25.6
	Total	180	100.0
Job Desire	Yes	161	89.4
	No	19	10.6
	Total	180	100.0
Monthly Income	Sufficient	116	64.4
	Insufficient	16	8.9
	Barely sufficient	48	26.7
	Total	180	100.0
Hospital	Al-Imam Al –Hussian Medical City	78	43.3
	Al-Imam Al- Hassan Al-Mujtaba Teaching Hospital	74	41.1
	Kerbala Teaching Hospital for Children	14	7.8
	Obstetrics and Gynaecology Teaching Hospital	14	7.8
	Total	180	100.0
Years of experience	<= 5	146	81.1
	6 – 10	21	11.7
	11 – 15	6	3.3
	16 – 20	7	3.9
	Total	180	100.0

The table (1) shows that the highest percentage is seen with age group of “26-30 year” among 50.0% of nurses followed by age group of “<= 25year” among 37.8%.The gender refers to Female as represented by 52.8% participant nurses. Regarding Marital Status , the majority of study sample reported single represented (52.2%) followed by married represented (46.1%).Concerning the work shifts the highest percentage indicates that morning as reported by 74.4% of participants, while other participants from evening represented only (25.6%).In relation to the job desire the highest percentage indicates (Yes) represented (89.4%) , while other participants indicates (No) represented only (10.6%) . Regarding monthly income , The majority of the study sample had enough resources represented (64.4%).Regarding hospital highest percentage of Al- Imam Al –Hussian Medical City represented (43.3%).Concerning years of experience highest percentage indicates (<= 5) represented (81.1%).

TABLE (2) ASSESSMENT OF EMPATHY
LOW (SCORE 20-60), MODERATE (SCORE 61-100), HIGH (SCORE 101-140)

Empathy Levels	Frequency	Percent	Mean	Overall Assessment
Low	108	60.0	59.167	Low
Moderate	69	38.3		
High	3	1.7		
Total	180	100.0		

Table (2) illustrates the assessment of Empathy among nurses, the results indicate that (60%) of nurses have a low level of

empathy. Additionally, the average total means also indicate that nurses have low level of empathy (Mean = 59.167).

TABLE (3) ASSESSMENT OF BURNOUT

Dimensions Burnout	Levels	Frequency	Percent	Mean	Assessment
Emotional Exhaustion	Low Level Burnout	94	52.2	16.70	Low -level Burnout
	Moderate Burnout	84	46.7		
	High Level Burnout	2	1.1		
	Total	180	100.0		
Depersonalization	Low Level Burnout	15	8.3	14.56	High-level burnout
	Moderate Burnout	52	28.9		
	High Level Burnout	113	62.8		
	Total	180	100.0		
Personal Accomplishment	High Level Burnout	179	99.4	13.68	High-level burnout
	Moderate Burnout	1	.6		
	Total	180	100.0		

Emotional Exhaustion (If your total score is 17 or less, you are experiencing low-level burnout. If your total score is between 18 and 29, you are experiencing moderate burnout. If your total score is over 30, you are experiencing high-level burnout. For depersonalization, if your total score is 5 or less, you are experiencing low-level burnout. If your total score is between 6 and 11, you are experiencing moderate burnout. If your total score is 12 or greater, you are experiencing high-level burnout. In terms of personal accomplishment, if your total score is 33 or less, you are experiencing high-level burnout. If your total score is between 34 and 39, you are experiencing moderate burnout. If your total score is greater than 40, you are experiencing low-level burnout. Table (3) depicts the assessment of burnout among the study sample. The average total means indicate that nurses have low The participants reported a high level of emotional exhaustion (average of 16.70), a high level of depersonalization (average of 14.56), and a high level of personal accomplishment. (mean 13.68).

TABLE (4) CORRELATION BETWEEN THE EMPATHY AND BURNOUT

** . Correlation is significant at the 0.01 level (2-tailed).

Empathy	Spearman's	Burnout		
	Correlation Parameters	Emotional Exhaustion	Emotional Exhaustion	Emotional Exhaustion
	Correlation Coefficient	.285**	.324**	.427**
	Sig. (2-tailed)	.000	.000	.000
	N	180	180	180

Table (4) reveals that there is significant correlation between empathy and all dimensions of burnout.

IV. DISCUSSION

The current study found that nurses generally have a low level of empathy based on the average total means. These results are consistent with a previous study. Pitanupong et al. (2023) the

outcomes of study revealed that most participants reported a below-average level of empathy. In addition, the study of Kesbakh & Rohani (2019) demonstrated that the level of empathy decreases with increasing students' academic year. Also a study done by Williams et al. (2014) showed that Paramedic students scored statistically lower on an empathy findings compared to their counterparts in other medical fields (with the exception of nursing students). The present study findings disagree with study Williams et al. (2014) that examined levels of empathy among undergraduate students majoring in emergency health, nursing, and midwifery which indicated that midwifery students have greater empathy than nursing and emergency health students. Also a study conducted by Matalinares-Calvet et al. (2019) showed that the level of empathy among nursing students is higher than that of medical and psychology students. In addition, a Study at Spanish university that tested Empathy in occupational therapy In a study conducted by Serrada-Tejada et al. (2022), it was found that occupational therapy students demonstrated a high level of empathy. This contrasts with a study by Taleghani et al. (2017) which showed that most nurses had moderate levels of empathy. Another study by Bogiatzaki et al. (2019) indicated that healthcare professionals generally scored at a relatively high level of empathy. The disparity in findings may be attributable to the various study instruments, study samples, or populations. Many authors noted a variety of issues that hindered nurses from showing empathetic behavior, including a lack of time, work shifts, conflicting relationships with patients, coworkers, and care-givers, workload, time pressures, and competitiveness (Ferri et al., 2015). Also lack of empathy is also linked to emotional, physical, and job-related problems such as depression, burnout, sleep disorders, and difficulty concentrating, all of which have the potential to adversely affect patient care (Yu et al., 2022). Concerning assessment of burnout the study found that nurses have low The level of emotional exhaustion, depersonalization, and personal accomplishment among nurses is high. Abukhader et al. (2020) found that nurses exhibit high levels of depersonalization and personal achievement. Mansour & Hussein (2020) also discovered that nurses have high scores of personal achievement, which aligns with current research. Similarly, a study by Güler et al. (2022) on 140 nurses in Turkey revealed high levels of depersonalization and personal achievement. McNeely et al. (2022) showed that emergency department staff working for over 10 years scored higher in depersonalization and lack of personal achievement compared to their counterparts. Ling et al. (2020) also found high levels of depersonalization in their study. Merces et al. (2020) investigated job burnout among nurses in Primary Health Care and found high levels of depersonalization and personal achievement, consistent with other studies. Al-Omari et al. (2020) studied burnout risk factors among healthcare professionals and found that nurses have high levels of personal achievement and depersonalization. Additionally, a meta-analytic study in Spain by Molina-Praena et al. (2018) concluded that nurses experience high levels of depersonalization, this result agree with the results of current study. In a follow-up study done by Bešević-Ćomić et al. (2014) showed nurses have a high level of personal accomplishment. Also a study done by Moya-Salazar et al. (2023); Yue et al. (2022) researchers who found

that participants reported low levels of emotional exhaustion, this result is in same line with current findings. The present study findings inconsistent with study Rezaei et al. (2019), the findings showed that depersonalization and personal achievement at low level and emotional exhaustion at high level. According to relationship between nurses' empathy and burnout, our results found there is a high significant relationship between empathy and all dimensions of burnout. The present study findings agree with the study conducted by Turan et al. (2019) Which results indicate that there is a significant correlation between the nursing students' empathic skill score and the depersonalization sub dimension score on the Maslach Burnout Inventory. Also The results present study are consistent with study conducted by Altmann & Roth (2021) which shows that significant correlations between empathy and burnout. The study done by Sulaiman et al. (2023) also showed that burnout was positively associated with empathy, these results consistent with current results. Additional support was found in a study conducted by Rodriguez-Nogueira et al. (2022) the outcomes of study revealed that there was current study's results do not align with a previous study by Yuguero et al. (2017) which found a strong connection between high empathy and low burnout. This connection was particularly notable in two areas of the Maslach Burnout Inventory (MBI): depersonalization and personal accomplishment was conducted by Yue et al. (2022) they found empathy was significantly, and negatively, correlated with job burnout. Additional a study done by Taleghani et al. (2017) showed that there was an inverse correlation between empathy score with domains of depersonalization and lack of personal accomplishment. Finally study done by Pitanupong et al. (2023) the findings showed that no relationship between burnout and the level of empathy, this results disagree with current results.

CONCLUSION

The study concludes most nurses experienced low Feeling emotionally drained, detached from others, and lacking personal fulfillment can lead to high levels of depersonalization and reduced personal accomplishment detached from their work, but they still found it meaningful and satisfying. Also the study highlights a significant positive relationship between empathy levels and dimensions of burnout among nurses. Nurses with higher levels of empathy tend to experience high burnout rates, while those with lower empathy levels have low level of burnout.

RECOMMENDATIONS

- 1-The study recommends that nursing colleges and institution should include researches and courses on stress management in nursing, because nursing is unavoidably a stressful profession, these courses may be beneficial for future nurses
- 2- Efforts should be made to provide training programs and promote a culture of empathy within healthcare organizations, it could lead to better patient outcomes and increased patient satisfaction.
- 3- Providing support and resources for managing stress and promoting self-care practices between nurses. Additionally,

promoting a positive work environment and culture may help to prevent burnout among nurses and improve their overall well-being.

4. The results of this study have practical implications for nursing education, training, and workplace interventions. It emphasizes the importance of providing support and resources to nurses who may have experienced adverse parenting styles. Implementing programs that promote empathy training can potentially reduce burnout rates among nursing professionals.

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