

Review Article

# INVESTIGATING BURNOUT SYNDROME AMONG NURSES IN ERADAH COMPLEX FOR MENTAL HEALTH AT TABUK – KSA

*Abd El-Mohasan Alamri\**

\*Eradah Complex for Mental Health at Tabuk, Kingdom of Saudi Arabia.

## Abstract

**Purpose:** This research aims to investigate the burnout syndrome among nurses in Eradah complex for mental health at Tabuk-KSA. By employing the Maslach Burnout Inventory (MBI), this research investigates Emotional Exhaustion (EE), Depersonalization (DP), and Personal Accomplishment (PA) and its degree of prevalence and the correlation between them.

**Method:** This research based on a sample of nurses (n=138). Quantitative method applied using questionnaire describing the probability of burnout symptoms associated with MBI subscale scores.

**Results:** The study reveal a moderate high prevalence of burnout syndrome ( $26.19 \pm 13.47$ ) among nurses in Eradah with high symptoms of (EE) (appeared at 48% of participants), moderate symptoms of (DP) (appeared at 57%), and high symptoms of (PA) (appeared at 50%). Overall of sample score ranges with  $>0.70$  reliability. Correlation test shows, there is a weak positive correlation between (EE) and (DP) (0.419) and a weak negative correlation between (PA) and (DP) (-0.305) at significance level of 0.01.

**Conclusion:** This research will assist to investigate more about the causes of the burnout in future researches because of the moderate high degree of burnout prevalence at Eradah Complex ( $26.19 \pm 13.47$ ). The findings can be utilized to learn more about the significance and precision of MBI scores. *ASEAN Journal of Psychiatry, Vol. 24 (S5) May, 2024; 1-8.*

**Keywords:** COVID-19; Burnout; Burnout measurement; Maslach Burnout Inventory (MBI); Eradah complex; Nurses; KSA.

## Introduction

Burnout is a term that seems to describe a typical occurrence in people's lives. It has prompted academics to investigate it further in order to learn more about what it is and why it occurs. It has prompted practitioners to consider new approaches to deal with it, prevent it from happening, or combat it. As a result, burnout has always had a favorable reputation. Scholars and practitioners agree that there is a societal problem that has to be addressed. Because of their emotionally exhausting job demands and lengthy patient interaction, nurses in particular have reported significant levels of burnout [1]. That led to investigate the burnout syndrome among

nurses in Eradah Complex for Mental Health at Tabuk-KSA, and to answer, "How is the degree of burnout among nurses in Eradah complex?"

## Literature review

### *Burnout syndrome*

Herbert Freudenberger, a psychiatrist, and Christina Maslach, a social psychology researcher, started researching burnout 35 years ago. They began publishing about an unknown and unidentified phenomenon that was subsequently described as burnout syndrome in the mid-1970s, independently and in various contexts. Maslach and Jackson created the Maslach Burnout

Inventory (MBI) in 1981 as a research tool to assess burnout [2]. Burnout was initially identified as a problem affecting mostly healthcare workers, such as nurses, physicians, and careers, but it quickly spreaded to other professions.

**Burnout is a condition characterized by three characteristics:** Emotional exhaustion, depersonalization, and a sense of personal accomplishment [3]. The first of these variables, emotional exhaustion, causes workers to lose their vitality, passion, and confidence. They are emotionally numb; they are disconnected, distant, powerless, and defeated. There is nothing else they can contribute; their mental and emotional reserves are exhausted [4]. Workers who are burned out experience physical issues in addition to mental exhaustion.

Workers who are subjected to the second of these causes, depersonalization, become increasingly pessimistic or cynical about their jobs. They may be impatient and furious; while they once valued cooperation and teamwork, they now attempt to isolate themselves from coworkers, bosses, and service users, “presumably as a means of coping with the work overload” [4].

At the same time, these once high-achievers experience burnout’s third component, diminished personal accomplishment, in the sense that they no longer feel productive or performing properly at work. When examined objectively, this self-assessment at the start of the illness is often not the case. Workers who are on the verge of burnout are frequently perceived by their coworkers to be performing as well as (if not better than) others, at least at first [5].

#### *Prevalence of burnout*

Burnout is prevalent in western nations among the general working population, ranging from 13% to 27%, and as high as 70% among physicians globally, with 30%–50% of nurses reaching clinical levels of burnout based on self-report assessments [6].

#### *Burnout syndrome among nurses in KSA*

According to a study of international nurses in Saudi Arabia, 45% had high EE (Emotional Exhaustion), 42% had high DP, and 71.5 % had low PA [7]. According to a recent research of primary healthcare nurses in Saudi Arabia, the total incidence of burnout is 89%, with 39%

expressing high EE, 38% reporting high DP, and 89 % reporting low PA [8].

Habadi AI, et al. found in their study in terms of socio-demographic data, 90.7% of the nurses were female, 92.3% were non-Saudi, and 68.7% were unhappy with their pay [9]. Furthermore, and unexpectedly, the prevalence of burnout syndrome was 9.34% in this study. However, emotional fatigue alone accounted for 59.89% of the total.

Almubark RA, et al. found in their study the majority of responders 81%. They worked in a pediatric emergency department, and 40% had worked more than 80 hours in the previous two weeks [10]. 70% of the participants said they were afraid of infecting family members at home with COVID-19, and 68% said they were afraid of becoming infected. Overall, 30% of respondents classed as experiencing moderate burnout, according to the survey while only 11% had high levels of burnout.

Alqahtani R, et al. found in their study on burnout syndrome among nurses in a psychiatric hospital in Dammam, Saudi Arabia that the participants’ average age was 35 years [11]. The majority of the study participants were married (69.1%), Saudi (74.7%) men (68.4%), and had worked at the hospital for an average of 13 years. The majority of the individuals (82.3%) reported burnout, which ranged from mild to severe.

For better understanding of burnout syndrome among nurses in Eradah complex using numbers and statistics. This research follows quantitative method using bi-lingo paper-based questionnaire (English/Arabic) build as Maslach Burnout Inventory (MBI) containing 22 main question plus demographic questions. The questionnaire distributed randomly on employees of nursing sector at Eradah Complex for Mental Health at Tabuk – KSA during the period from October 1, 2021 to December 4, 2021.

#### *Questionnaire*

Burnout levels were determined using the maslach burnout inventory-human services survey for medical personnel. The MBI is a 22-item self-reported seven-point Likert scale. 1 represents never, while 7 represents every day. The following are the 22 questions: There are three different scales that can be grouped together: For Emotional

Exhaustion (EE), there are nine questions to consider. For Depersonalization (DP), there are five questions, while for Personal Accomplishment (PA), there are eight questions. (Maslach Burnout Inventory Instruments and Scoring Guides) cutoff scores were employed [12].

*Sample*

The total number of healthcare employees in Eradah complex is 208. Based on random sampling, 135 is a sample size at 95% confidence. The distributed questionnaire is 138, returned 138, 42 is incomplete, and 96 is complete and ready for analysis.

*Tool*

SPSS version 20 used to do descriptive and inferential data analysis. In descriptive analysis, continuous variables given a mean and Standard Deviation (SD), whereas categorical variables given frequencies and %ages.

**Discussion**

*Participants’ descriptive*

**Using SPSS to analyze the data:** The sample was (n=96). The demographics of the sample as follow: Nationality of participants: The majority of the participants was Saudi citizens (Table 1).

**Table 1. Nationality of participants.**

Nationality		
	Frequency	Percent (%)
Other (Indian)	2	2.1
Saudi	94	97.9
Total	96	100

**Gender of participants:** Approximately 71% of the participants was male (Table 2). Age of participants: the big age range was from 25 years old to 34 years old (80%) (Table 3).

**Table 2. Gender of participants.**

Gender		
	Frequency	Percent (%)
Female	28	29.2
Male	68	70.8
Total	96	100

**Table 3. Age of participants.**

Age		
	Frequency	Percent (%)
From 18 years to 24 years	6	6.3
From 25 years to 34 years	76	79.2
From 35 years to 44 years	14	14.6
Total	96	100

**Marital status of participants:** The majority of the participants was married (57%) followed by singles (34%) (Table 4).

**Table 4. Marital status of participants.**

Marital status		
	Frequency	Percent (%)
Single	32	33.3
Married	54	56.3
Married with Childs	4	4.2
Divorced	6	6.3
Total	96	100

**Job of participants:** The majority of the participants working as nursing specialists (61%) followed by (38%) working as nursing technicians (Table 5).

**Table 5. Job of participants.**

Job		
	Frequency	Percent (%)
Senior nursing specialist	2	2.1
Nursing specialist	58	60.4
Nursing technician	36	37.5
Total	96	100

**Working years of participants:** The big working range was from 3 years to 10 years (50%) (Table 6).

**Table 6. Working years of participants.**

Working years in Eradah		
	Frequency	Percent (%)
less than a year	16	16.7
Three to ten years	48	50
One to three years	18	18.8
Ten to twenty years	14	14.6
Total	96	100

**Working days of participants:** All of them working 5 days per week (Table 7).

**Table 7. Working days of participants.**

Working days		
	Frequency	Percent (%)
5 days	96	100

**Working hours of participants:** The majority was working 8 hours per day (88%) (Table 8).

**Table 8. Working hours of participants.**

Working hours		
	Frequency	Percent (%)
10 hours	2	2.1
8 hours	84	87.5
9 hours	10	10.4
Total	96	100

*Burnout prevalence at Eradah*

Using the data of the current sample, the internal reliability of (MBI) using Cronbach's coefficient alpha, which yielded the estimates of the whole scale as 0.79 (Table 9). The internal consistency of all three subscales (EE, DP, and PA) was acceptable as 0.82 for Emotional Exhaustion (EE), 0.74 for Depersonalization (DP), and 0.86 for Personal Accomplishment (PA).

**Table 9. Reliability statistics.**

Reliability Statistics		
Dimensions	Cronbach's alpha	No. of items
Overall	0.791	22

Emotional Exhaustion (EE)	0.823	9
Depersonalization (DP)	0.741	5
Personal Accomplishment (PA)	0.86	8

The analysis (Figure 1) shows a moderate high prevalence of burnout syndrome at Eradah Complex ( $26.19 \pm 13.47$ ). As shown in Figure 1, Most of the nurses had a high and moderate degree of Emotional Exhaustion (EE); 46 nurses with a %age of 47.92% and 42 with a %age of 43.75% respectively. Eight nurses who had a low degree of emotional exhaustion with a %age of 8.33%.

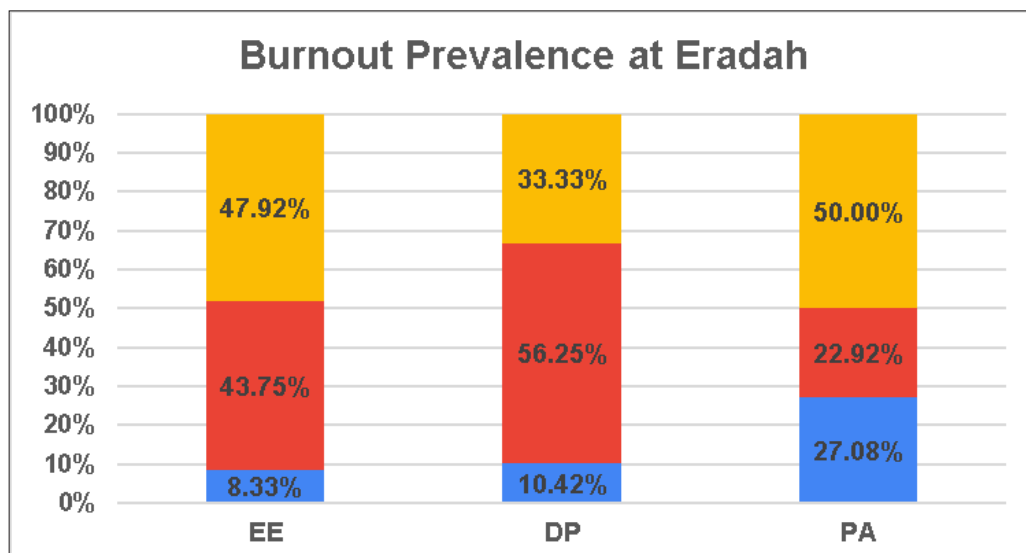
Most of the nurses had a moderate degree of depersonalization was 54 with a %age of 56.25% then 32 nurses with a %age of 33.33% had a high degree of Depersonalization (DP); While 10 nurses who had a low degree of Depersonalization with a %age of 10.42%.

Half of the nurses had a high degree of Personal Accomplishment (PA); 48 nurses with a %age of 50 %. While the number of nurses who had a moderate degree of Personal Accomplishment was 26 with a %age of 27.08% and 8 nurses who had a low degree of personal accomplishment with a %age of 8.33%. When look at burnout prevalence based on respondent's jobs. For senior nursing specialist (Figure 2), all of them have moderate level of EE and PA with low level of DP.

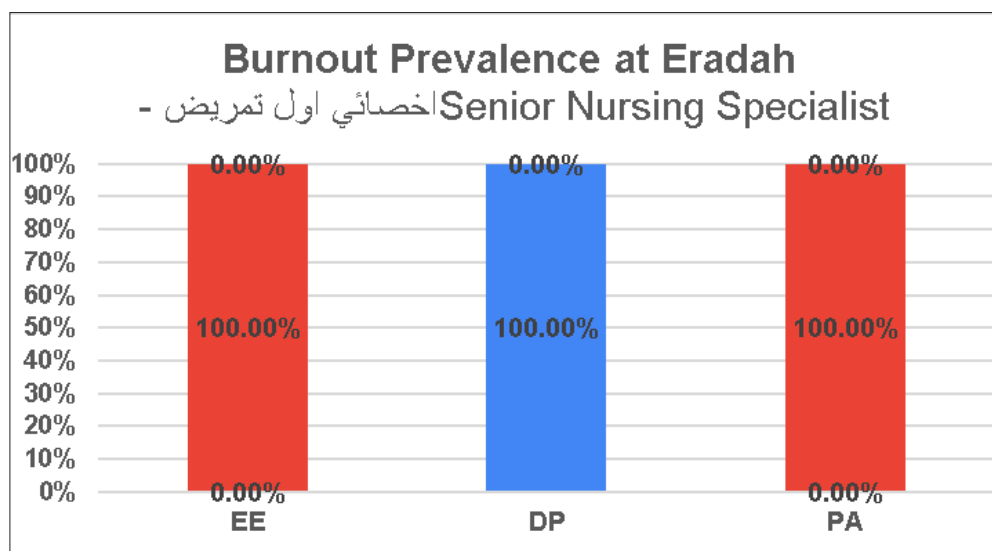
For nursing specialist (Figure 3), most of them have high and moderate level of EE and DP, 41.38% and 44.83% respectively. Almost half of them (48.28%) have high level of PA, third of them (31.03 %) have low level of PA and 20.69% of them have moderate level of PA. For nursing technician (Figure 4), 61.11% of them have high level of EE, 38.89% of them have moderate level of EE. 22.22% of them have high level of DP, 77.78% of them have moderate level of DP. Almost half of them (55.56%) have high level of PA, almost a quarter of them (22.22%) have moderate level of PA and last quarter (22.22%) have low level of PA. As shown in table 10, there is a weak positive correlation between Emotional Exhaustion (EE) and Depersonalization (DP) (0.419) at significance level of 0.01. While there is a weak negative correlation between Personal Accomplishment (PA) and Depersonalization (DP) (-0.305) at significance level of 0.01.

Burnout syndrome has been linked to demographic factors such as gender and age, as well as work-related stresses (job characteristics and risk exposures) among healthcare employees [13-17]. As shown at Table 11, there are high level of EE between male more than female that have moderate level. Both male and female have moderate level of DP and PA. All participants with different marital status have high level of EE and moderate level of DP. While single and divorced participants have high level of PA, the married and the married with children have moderate level. Participants with ages ranging from 25 to 44 years old have high level of EE while others from 18 to 24 years old have moderate level. All participants' ages have moderate level of DP. Participants with

ages from 18 to 34 years old have moderate level of PA while participants with ages from 35 to 44 years old have high level of it. Participants with experience from 3 to 20 years work at Eradah complex have high level of EE and same for new workers with less than 1 year. Moderate level of EE was at participants with 1 to 3 working years. While all participants with different working years have a moderate level of DP. Participants with experience from 3 to 20 years work at Eradah complex have high level of PA and Moderate level of PA was at participants with 0 to 3 working years. Participants, working 10 hours per day have high level of EE and DP rather than others working less and low PA.



**Figure 1. Burnout prevalence at Eradah.**



**Figure 2. Burnout prevalence at Eradah- senior nursing.**

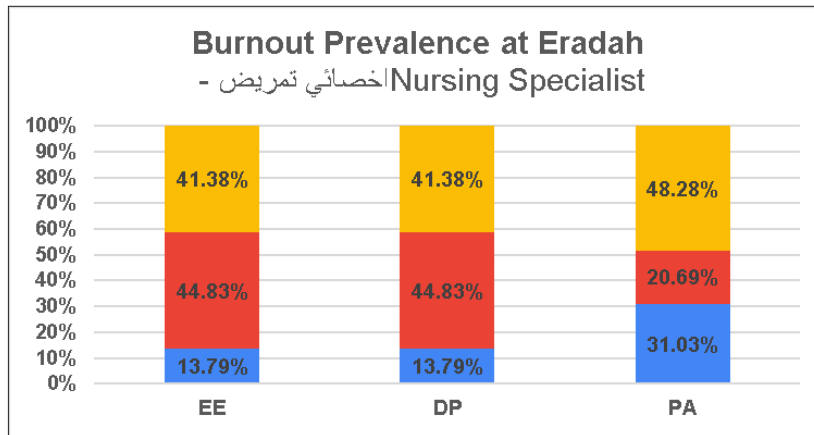


Figure 3. Burnout prevalence at Eradah- nursing.

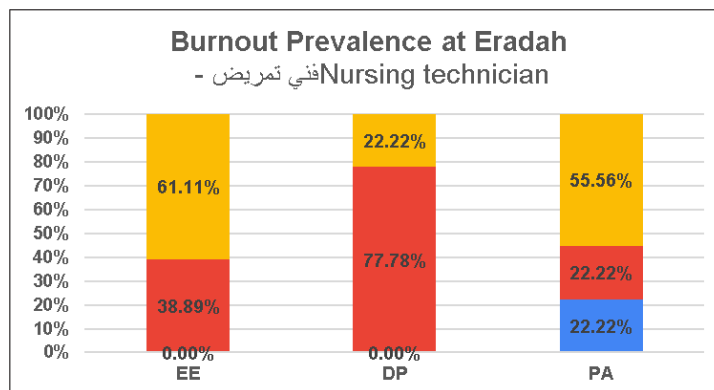


Figure 4. Burnout prevalence at Eradah – nursing technician.

Table 10. Burnout correlations.

	EE		DP	PA
EE	Pearson Correlation	1	.419**	0.167
	Sig. (2-tailed)		0	0.103
	N	96	96	96
DP	Pearson Correlation	.419**	1	-.305-**
	Sig. (2-tailed)	0		0.003
	N	96	96	96
PA	Pearson Correlation	0.167	-.305-**	1
	Sig. (2-tailed)	0.103	0.003	
	N	96	96	96

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



**Table 11. Burnout and socio-demographic characteristics.**

		EE		DP		PA	
	% of Participants	Mean	SD	Mean	SD	Mean	SD
<b>Gender</b>							
Male	70.83%	31.79	12.31	12.44	5.34	38.32	11.02
Female	29.17%	23.07	6.97	9.07	3.07	36.79	8.6
<b>Marital Status</b>							
Single	33.33%	28.38	11.94	11.75	4.26	39.31	9.23
Married	56.25%	28.56	11.35	11.04	5.32	37.04	10.94
Married with childs	4.17%	27.5	0.58	9.5	0.58	35.5	6.35
Divorced	6.25%	41.33	12.53	15	6.75	39.33	13.69
<b>Age</b>							
18-24	6.25%	19.33	3.39	11.33	2.25	37	1.55
25-34	79.17%	29.45	11.13	11.5	5.56	36.53	10.91
35-44	14.58%	32.43	14.92	11.29	1.98	45.57	4.5
<b>Years worked at Eradah</b>							
less than a year	16.67%	29.88	12.64	12.38	5.32	33.13	5.94
One to three years	18.75%	25.67	13.55	12.44	7.91	36.44	12.03
Three to ten years	50.00%	30.67	10.72	11.21	4.07	39.42	11.13
Ten to twenty years	14.58%	28.29	11.45	10	2.15	39.86	7.81
<b>Work hours / day</b>							
8 hours	87.50%	29.57	11.69	11.4	5.22	38.02	10.38
9 hours	10.42%	22.2	4.18	11.2	3.29	38.2	11.1
10 hours	2.08%	51	0	15	0	30	0

## Conclusion

Nurses play an important part in today’s healthcare system. This research will assist to investigate more about the causes of the burnout in future researches because of the moderate high degree of overall burnout prevalence at Eradah Complex (26.19 ± 13.47). Burnout prevailed more between nursing technicians (27.40%) than nursing specialists (25.67%) and senior nursing specialists (19.33%). The high level of Emotional Exhaustion (EE) between nurses-especially nursing specialists and technicians who are experienced more than 3 years and working more than 8 hours per day - needs from the management of Eradah complex for mental health at Tabuk – KSA to keep support this kind of researches to investigate more and develop policies to enhance nurses working environment and improve quality of health care system.

## Limitations

There are some limitations for this research due to constant response for most of the participants about working days and hours so it was impossible to make a correlation test on those variables and burnout syndrome to understand more about the causes of it. This opened the door for the future research to expand this research among many mental hospitals in KSA to investigate more variables that could affect burnout and to investigate more about more causes of burnout at Eradah complex and to introduce solutions for it.

## Ethical considerations

Participants ensured that the data collected would be kept confidential. Participants have the option to leave the research at any time. Prior to data

collection, the researcher obtained institutional approval from research accreditation committee in Tabuk in September 2021.

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**Corresponding author:** *Abd El-Mohasan Alamri, Eradah complex for Mental Health at Tabuk, Kingdom of Saudi Arabia*

**E-mail:** *abdulmohsensa@moh.gov.sa*

**Received:** 07 May 2024, Manuscript No. AJOPY-24-127212; **Editor assigned:** 20 May 2024, PreQC No. AJOPY-24-127212 (PQ); **Reviewed:** 03 June 2024, QC No AJOPY-24-127212; **Revised:** 10 June 2024, Manuscript No. AJOPY-24-127212 (R); **Published:** 17 June 2024, DOI: 10.54615/2231-7805.S5.005.