

Relationship between Resilience, Burnout and Professional Quality of Life among Nurses Working at El-Abbassiya Psychiatric-Mental Health Hospital

Amal Elias Abdel-Aziz & Shimaa Saied Adam

Psychiatric-Mental Health Nursing-Faculty of Nursing-Ain Shams University

Abstract

Background: Resilience confirmed as a key variable influencing levels of burnout and thus, a potentially important variable to target in interventions aimed at improving nurses' professional quality of life. The present study conducted to assess the relationship between resilience, burnout and professional quality of life among nurses working at El-Abbassiya Psychiatric-Mental Health Hospital. The Study carried out at the in-patient departments of El-Abbassiya Governmental Hospital for Psychiatric-Mental Health in Cairo, affiliated to the General Secretariat of Mental Health and Ministry of Health of Egypt. A descriptive correlational design used. A purposive sample of 100 psychiatric nurses was selected. The tools used for data collection were; 1) Demographic questionnaire, 2) Connor-Davidson Resilience scale, 3) Maslach Burnout Inventory, and 4) Professional Quality Of Life scale (ProQOL). The main results showed that, there was a highly statistically significant correlation among resilience, burnout and professional quality of life. The study recommended; continuous evaluation of nurses' resilience, burnout and professional quality of life for regular programs to increase nurses' resilience and compassion satisfaction levels and reduce the experience of burnout and secondary traumatic stress need to be designed and implemented.

Key words: Resilience–Burnout–Professional Quality of Life–nurses.

Introduction:

One of the most popular topics in psychology is resilience. To some, resilience is a sort of "miracle drug" personality trait, something that can heal all wounds and right all wrongs. It can be defined as, the ability and tendency to "bounce back" which means, "what the person do when facing disappointment, defeat and failure" but, instead of wallowing or letting things keep us down, one get back up and continue on with lives (Ackerman, 2020). Working in

healthcare professions is associated with high levels of stress (Sharma, Dhar & Tyagi, 2016) and nursing is one of the important profession who has been identified as one of the most stressful and demanding professions (Chatzigianni, Tsounis, Markopoulos & Sarafis, 2018). Psychiatric nurses are at the great risk for experiencing stress as they work in direct contact with psychiatric patients in a highly stressful environment and the difficult work condition of psychiatric hospitals (Azizi, Ahmadian & Nazemi, 2017). Such stress brings them different physical and mental health problems and behavioral problems such as boredom,

fatigue and burnout. These problems, in turn, affect resilience that involves a process of positive adaptation to stress and adversity (**Foster, Roche, Delgado, Cuzzillo, Giandinoto& Furness, 2019**). The frequent exposure of nurses to the painful conditions of patients, could reduce their professional quality of life thereby; negatively affect patients' outcomes (**Gerami, Hosseini, Mousavi & Ghorbani, 2019**).

Resilience is widely considered an individuals' dynamic capacity to overcome adversity and to adapt successfully to their environment, it is also a personal quality that enables one to overcome tension, thrive in the face of difficulty, preference to resist anxiety, having a positive temperament, protect dignity and maintain emotional stability. It also enables individuals to cope with life and job difficulties without any damage (**McGillivray& Pidgeon, 2015**). Resilience depends on time, age and the immediate socio-cultural context (**Garroway, 2015**), there may also be a genetic component to one's base level of resilience but, persons are always able to improve upon the resilience they have (**Mills& Dombeck, n.d.**). The presence of resilience among nurses can be associated with greater psychological well-being, coping strategies, and work achievement, lower prevalence of burnout and positive patients' outcome (**Kutluturkan, Sozeri, Uysal& Bay, 2016**).

Mental health nurses, in particular, generally considered a group at risk for burnout because they are in constant interaction and frequent interpersonal contact with psychiatric patients and their families. Burnout is a psychological syndrome emerging as a prolonged response to chronic interpersonal

stressors on job (**Dickson& Wright, 2008**). **Schaufeli, Leiter and Maslach (2009)** and **Leiter and Maslach (2005)** explained that, burnout includes losing three things: 1. Burnout is lost energy; 2. Burnout is lost enthusiasm and 3. Burnout is lost confidence. In fact, there is more than one type of burnout. The Maslach Burnout Inventory (MBI), a scale measuring burnout, divided into three components: 1. Emotional exhaustion; it is feeling tired and fatigued at work (it can result in absence from work). It arises as emotional resources are depleted; workers feel that they are no longer able to help themselves at the psychological level, 2. Depersonalization; it is the developing of a callous/uncared negative cynical attitudes and feeling of hostility toward others (either client or colleagues), and 3. Reduced personal accomplishment; it is the feeling of the employees as they are not accomplishing anything worthwhile at work, it is also refers to the tendency to evaluate oneself negatively, particularly in regard to one's work with clients. This can lead to a lack of motivation and poor performance (**Halbert, 2017**).

Burnout leading to lack of attention that can lead to depression, low job satisfaction, criticism, blame and lack of empathy towards patients, as well, decreased job performance, increased interpersonal difficulties, family dysfunction and consequently, affect the level of patients' care (**Gasparino& Guirardello, 2015**).

Professional quality of life is the quality that professionals feel in relation to their work as a helper. Both the positive and negative aspects of doing the work influence one's professional quality of life. Compassion Satisfaction (CS) and Compassion Fatigue (CF) are two aspects

of professional quality of life. They encompass the positive (Compassion Satisfaction) and the negative (Compassion Fatigue) parts of helping others who have suffering experienced. Compassion satisfaction (CS) is the amount of pleasure derived from helping others (**Stamm, 2005**) and correlate positively with resilience that is, the ability to cope, learn and grow from passing difficult experiences (**Burnett& Wahl, 2015**). On the other side of compassion satisfaction can be compassion fatigue which is the negative aspect of helping those who experience traumatic stress and suffering from preoccupation absorbing trauma and emotional stresses (**Hunsaker, Chen, Maughan& Heaston, 2015**).

Compassion fatigue breaks into two parts; the first part concerned with things such as, exhaustion, frustration, anger and depression typical of burnout. Burnout (BO) is about being "worn out" and can affect any profession. The impact of burnout on the professions emerge gradually over time and easily identified to direct links and stressors within the working and personal life. The second part of compassion fatigue called, Secondary Traumatic Stress which is a negative feeling of emotional and psychological effects experienced through indirect exposure to the details of traumatic experience of others, (**Salmond, Salmond, Ames, Kamienski& Holly, 2019**). "Figure, 1".

The prolonged exposure listening to patients' traumatic stories makes nurses or healthcare profession susceptible to compassion fatigue which is not always easily identifiable. It is important to remember that some trauma at work can be direct (primary) trauma. In other cases, work-related trauma is a combination of

both primary and secondary trauma. If working with others' suffering changes the helper so deeply in negative ways that understanding of own self changes, this is vicarious traumatization. Vicarious trauma is the cumulative transformative effect upon the professional who is working with survivors of traumatic events (**Peters, 2018**). The differentiating factor between the two types of stresses (burnout and compassion fatigue) is: burnout emerged over time and compassion fatigue, if identified and managed early; it will have a faster recovery time. Compassion satisfaction, which reflects the rewards of caring for others, has been identified as a possible element that counter balances the risks of compassion fatigue. However, compassion fatigue and compassion satisfaction seem to be negatively correlated, i.e. higher levels of compassion fatigue may overwhelm the professional's sense of efficacy and prevent experiencing compassion satisfaction (**Kim& Lee, 2016**).

Nurses, in particular, are professionals highly likely to experience compassion fatigue which can negatively affect their mental and physical health, as well as, job performance. Compassion fatigue can also cause nurses to lose their objectivity and empathy for patients. Specifically, they may be driven to avoidance as a way of escaping the pain that empathy for patients can cause. Consequently, compassion fatigue and associated avoidance behavior can eventually lower the quality of nurses' clinical performance (**Farjad & Varnous, 2013**).

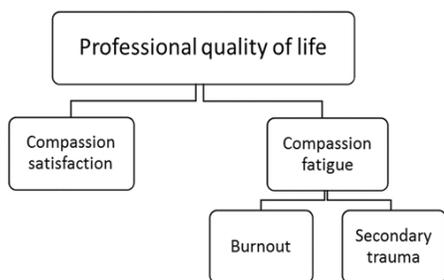


Figure: 1

Significance of the Study:

Psychiatric nurses experience burnout and low satisfaction in professional life for many reasons including; unrealistic professional expectations, insufficient emotional and stress-related coping skills, lack of positive expectations and insufficient support from their colleagues and teams (Tirgari, Forouzi & Ebrahimpour, 2018). Improving quality of working life of staff is as much needed as improving the quality of patients' care. Burnout and resilience are two indicators of nursing that may influence their level of job competence, professional autonomy, leader's behavior, organizational atmosphere and characteristics and job position as length of service strongly influences an individual's overall job performance (Cetrano, Tedeschi, Rabbi, Gosetti, Lora, Lamonaca & Amaddeo, 2017). Studying nurses' resilience, burnout and professional quality of life can be employed in creating policies that can help improve nurses' clinical competence.

Aim of the Study:

The aim of this study was to assess the relationship between resilience,

burnout and professional quality of life among nurses working at El-Abbasiya Psychiatric-Mental Health Hospital.

The aim achieved through:

- Identifying the levels of resilience, burnout and professional quality of life among nurses under study.

- Assessing the relationship between resilience, burnout and professional quality of life among nurses under study.

Research question:

Is there a relationship between resilience, burnout and professional quality of life among nurses under study?

Subject and Methods:

Research Design:

A descriptive correlational design used in this study.

Study Setting:

This study was conducted at the in-patient departments of El-Abbasiya Governmental Hospital for Psychiatric-Mental Health in Cairo affiliated to the General Secretariat of Mental Health and the Ministry of Health of Egypt. It is the oldest and biggest hospital for psychiatric illnesses in Cairo. It provides in-patient services for males

and females patients with about 3800 beds capacity.

Subjects:

Subjects of the study included; 100 staff nurses out of 195 working at the aforementioned setting. A purposive sampling technique used to select the subjects who agreed to participate in this study and fulfilling the following inclusion criteria as; the nurses who are working in psychiatric filed from their graduation until the time of this study and in direct contact with their patients, had years of experience for at least one year, and working at in-patient departments during the first and second period: from 9.00 am to 9.00 pm.

Tools of Data Collection:

Data was collected by using the following tools:

1- Demographic Questionnaire:

It was used by the investigators to assess nurses' age, gender, marital status, level of education, years of experience, residence, type of shift and job position.

2- Connor-Davidson Resilience Scale:

It was originally developed by **Connor and Davidson (2003)** to assess person's ability to cope with stress and diversity. It comprising 25 items, categorized in 5 subscales including; "Personal competence" (8 items),

"Tolerance of negative effects and strengthening against stress" (7 items), "Positive acceptance of change" (5 items), "Self-control" (3 items), and "Spiritual influences" (2 items).

Scoring System:

Each item rated on a 5-point Likert scale as follows; 0 = not at all true, 1 = rarely true, 2 = sometimes true, 3 = often true, and 4 = true nearly all of the time. Total resilience score from 0–100, with higher scores reflecting greater resilience.

Scoring of the nurses' responses:

- <50 low level.
- $50 \leq 75$ moderate level.
- $75 \leq$ high level.

3- Maslach Burnout Inventory (MBI):

It was developed by **Maslach, Jackson and Leiter (1996)** to assess the three dimensions of the burnout experience. It has been considered the standard tool for research in this field. MBI comprises 22 items, regrouped into 3 subscales: Emotional Exhaustion (EE; 7 items), Depersonalization (DP; 7 items) and Personal Accomplishment (PA; 8 items).

Scoring System:

Each item can be answered on a 7-point Likert scale ranging from "never" (= 0) to "every day" (= 6).

The results of the MBI consist of

three separate scores, one for each factor.

A combination of high scores on EE and DP and a low score on PA correspond to a high level of burnout.

Scoring of the nurses' responses:

- <60 low level.
- $60 \leq 75$ moderate level.
- $75 \leq$ high level.

4- Professional Quality OF Life Scale (ProQOL):

It was developed by (Stamm, 2009) to measure the positive and negative effects of working with people who have experienced extremely stressful events. It consists of 30 items, divided into three subscales; Compassion Satisfaction (CS), Burnout (BO) and Secondary Traumatic Stress.

Scoring System:

Each item, rated on five points Likert scale; 1=Never 2=Rarely 3=Sometimes 4=Often and 5=Very Often. While, there was items had negative response directions which had irreversible score.

Scoring of the nurses' responses:

- <60 low level.
- $60 \leq 75$ moderate level.
- $75 \leq$ high level.

Tools Validity and Reliability:

These tools were translated back to back into Arabic language by a language expert to achieve the criteria of

trustworthiness; the tools were tested and evaluated for their face and content validity by jury group. Five experts from faculty members in the nursing field with specialties of Psychiatric-Mental Health had review the study tools to ascertain its relevancy, clarity, and completeness. Experts elicited responses were either agree or disagree for the face and content validity. There is no modification done. The reliability of the tools that was assessed through measuring their internal consistency by determining Cronbach Alpha Coefficient, proved to be high as indicated in the following table.

Tools	Cronbach Alpha Coefficient Scale reliability
Connor-davidson resilience scale	0.80
Maslach burnout inventory	0,88
Professional quality of life scale	0,93

Pilot Study:

The pilot study was conducted to test the applicability, clarity of the language and to estimate the time needed to fill the study tools. It was carried out on 10% of the study sample (10 psychiatric nurses) who were included in the actual study sample as there was no modification done in the study tools depending on to the results of the pilot study.

Field Work and Procedures:

The data collected along three months period, from the beginning of February to the end of April of the year 2019. Subjects were interviewed by the

investigators to explain the aim of the study and to obtain the oral approval for participation. The nurses were assured that the information which will be collected would be treated confidentially and would be used only for the purpose of the study. They were also informed about the time of filling the sheets of the study tools on Saturday and Tuesday for males' departments and on Sunday and Wednesday for females' departments. Each nurse was interviewed individually by the investigators.

Administrative Design:

Official letters were issued from the dean of the Faculty of Nursing-Ain Shams University to the director of El-Abbassiya Psychiatric-Mental Health Hospital, explaining the aim of the study and requesting their permission for data collection and participation of the nurses in the research process.

Ethical Considerations:

After securing the official requirements for carrying out this study, the subjects were informed about choosing to participate or not. The investigators took oral consents from the nurses to participate, nurses were informed about their right to withdraw from the study at any time without giving a reason and they were also informed that the data will be anonymous and will be used only for the purpose of the study.

Statistical Design:

The collected data was analyzed by using several methods then; it was

inputted into a Microsoft Excel worksheet. The collected data was analyzed using the Statistical Package for Social Science (SPSS) version 23. The collected data was organized, categorized, tabulated and figured using actual numbers and percentage. The statistical significance and association were assessed using Mean, T-Test and Pearson correlation coefficient. The observed differences; associations were considered as follows: $P > 0.05$ Not Significant (NS), $P < 0.05$ Significant (S)*, and $P < 0.001$ High Significant (HS)**.

Results:

Table 1: The table shows that, 64% of the nurses were females and 81% were married. The highest percent of the nurses had 40 years old or more, they represent 53%. Regarding to level of education, 74% of the studied nurses had a nursing diploma. Concerning to years of experience, 51% of the nurses had 10 years of experience or more. About the shifts, the table shows that, 68% were working at the morning shift. Finally, the table clarifies that, 76% of the nurses understudy worked as staff nurses.

Figure 2: The figure shows the total resilience levels among the studied nurses, 54% of the nurses had high resilience level. While, 19% of them, had moderate resilience levels.

Table 2: The table shows burnout levels among the studied nurses, 31% of them had high burnout levels regarding emotional exhaustion. While, 47% of them, had low burnout levels regarding personal achievement.

Figure 3: The figure clarifies the total burnout levels among the studied nurses, 39% of them had moderate burnout levels. While, 27% of them, had low burnout levels.

Table 3: The table reveals that, the highest levels of professional quality of life among the studied nurses was related to compassion satisfaction dimensions (49%). While, the lowest levels of professional quality of life among the studied nurses was related to secondary traumatic stress dimension (52%).

Figure 4: The figure shows the total professional quality of life levels among the studied nurses, 35% of them, had moderate professional quality of life levels. While, 32% of them, had low professional quality of life levels.

Table 4: The table reveals that, there was a statistically significant difference between resilience levels among the studied nurses and their age

group, gender and job position.

Table 5: The table reveals that, there was a highly statistically significant difference between burnout levels among the studied nurses and their marital status and job positions while, there was a statistically significant difference between burnout levels among the studied nurses and their gender.

Table 6: The table reveals that, there was a highly statistically significant difference between professional quality of life among the studied nurses and their age group while, there was a statistically significant difference between professional quality of life among the studied nurses and their gender, marital status, and job position.

Table 7: The table indicates that, there was a highly statistically significant correlation among resilience, burnout and professional quality of life of the studied nurses.

Table 1: Demographic Characteristics of the Studied Nurses (n=100).

Items	No	%
Age (in years)		
<30	17	17
30≥40	30	30
40≤	53	53
Mean ± SD = 37.55±4.7		
Gender		
Male	36	36
Female	64	64
Marital status		
Single	17	17
Married	81	81
Divorced	2	2
Level of education		
Nursing Diploma	74	74
Technical Health Institute	20	20
Nursing Bachelor Degree	6	6
Years of experience		
<5	19	19
5≥10	30	30
10≤	51	51
Mean ± SD = 11.4400±3.9		
Residence		
Urban	86	86
Rural	14	14
Type of shift		
Morning	68	68
Afternoon	32	32
Job position		
Staff nurse	76	76
In charge nurse	18	18
Head nurse	6	6

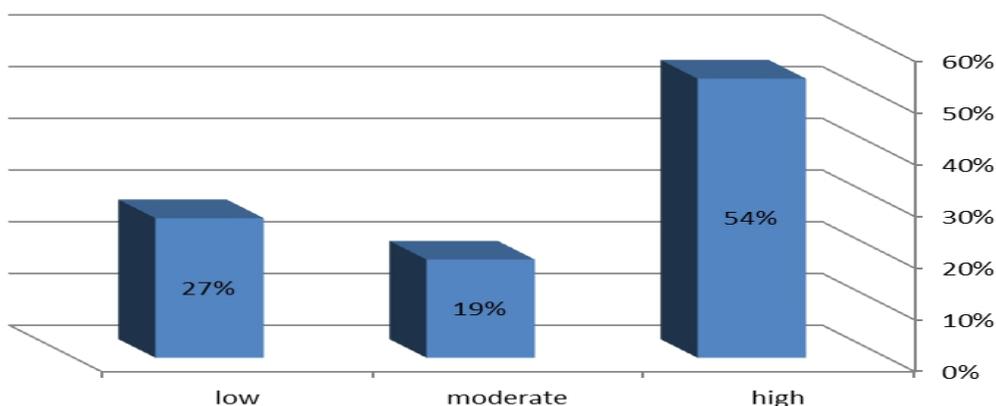
**Figure 2: Total Resilience Levels among the Studied Nurses (n=100).**

Table 2: Burnout Levels among the Studied Nurses (n=100).

Dimension	Low		Moderate		High	
	No	%	No	%	No	%
Emotional Exhaustion	22	22	47	47	31	31
Depersonalization	34	34	40	40	26	26
Personal Achievement	47	47	30	30	23	23

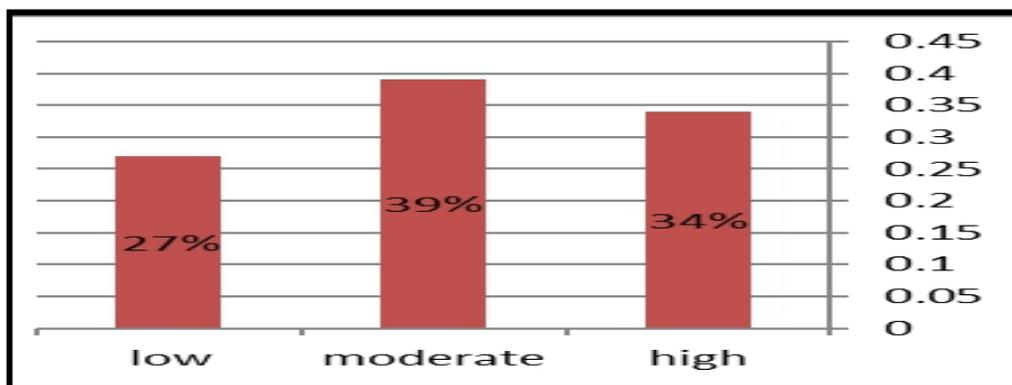


Figure 3: Total Burnout Levels among the Studied Nurses (n=100).

Table 3: Professional Quality of Life Levels among the Studied Nurses (n=100).

Dimension	Low level 50>%		Moderate level (50%to <75%)		High level 75≤%	
	NO.	%	NO.	%	NO.	%
Compassion satisfaction	18	18	33	33	49	49
Burnout	24	24	36	36	40	40
Secondary traumatic stress.	52	52	37	37	11	11

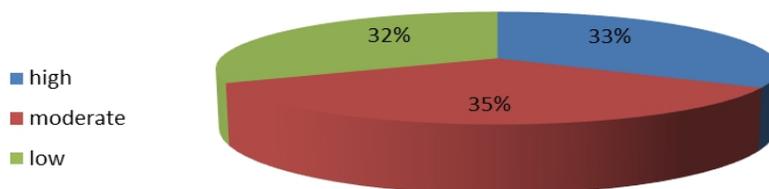


Figure 4: Total Professional Quality of Life Levels among the Studied Nurses

(n=100).

Table 4: Relation between Resilience among the Studied Nurses and their Demographic Characteristics (n=100).

Characteristics	Low		Moderate		High		X2	P value
	No.	%	No.	%	No.	%		
Age								
<30	11	64.7	3	17.6	3	17.7	.211	0.045*
30≥40	14	46.6	6	20	10	33.4		
40+	3	5.6	10	18.8	40	75.6		
Gender								
Male	8	23.8	5	21.4	23	54.8	1.312	0.050*
Female	22	19.6	23	20.5	19	59.8		
Marital status								
Single	6	35.2	4	23.5	7	41.2	.197	0.607
Married	12	14.9	7	8.6	62	76.5		
Divorced	2	100	0	0	0	0		
Level of education								
Nursing Diploma	20	31	14	21.8	30	47.2	.268	0.824
Technical Health Institute	5	25	10	50	5	25		
Nursing Bachelor Degree	2	33.3	2	33.3	2	33.3		
Years of experience								
<5	7	36.8	6	31.6	6	31.6	.439	0.821
5≥10	10	33.3	10	33.3	10	33.3		
10≤	21	41	17	33.3	13	25.7		
Residence								
Urban	42	48.8	21	24.4	23	26.8	.768	0.852
Rural	6	42.8	4	28.6	4	28.6		
Type of shift								
Morning	42	61.7	21	30.8	13	19.1	.812	0.341
Afternoon	4	28.6	4	28.6	6	42.8		
Job position								
Staff nurse	16	21.2	28	36.8	32	42	.465	0.05*
In charge nurse	4	22	6	33	8	45		
Head nurse	4	66.6	1	16.7	1	16.7		

(*) Statistically significant at p<0.05

(**) High statistically significant at p<0.01

Table 5: Relation between Burnout among the Studied Nurses and their Demographic Characteristics (n=100).

Characteristics	Low		Moderate		High		X ²	P value
	No.	%	No.	%	No.	%		
Age								
<30	3	17.7	3	17.6	11	64.7	2.26	0.895
30≥40	10	33.4	6	20	14	46.6		
40+	40	75.6	10	18.8	3	5.6		
Gender								
Male	8	23.8	23	54.8	5	21.4	1.412	0.050*
Female	22	19.6	19	59.8	23	20.5		
Marital status								
Single	6	35.2	4	23.5	7	41.2	.651	0.01**
Married	12	14.9	7	8.6	62	76.5		
Divorced	2	100	0	0	0	0		
Level of education								
Nursing Diploma	30	47.2	20	31	14	21.8	.668	0.824
Technical Health Institute	5	25	5	25	10	50		
Nursing Bachelor Degree	2	33.3	2	33.3	2	33.3		
Years of experience								
<5	4	21	4	21	11	58	.412	0.951
5≥10	8	26.6	10	33.3	12	40.1		
10≤	30	58.8	13	25.5	8	15.7		
Residence								
Urban	21	24.4	42	48.8	23	26.8	.817	0.65
Rural	4	28.6	6	42.8	4	28.6		
Type of shift								
Morning	21	30.8	13	19.1	42	61.7	.123	0.32
Afternoon	4	28.6	6	42.8	4	28.6		
Job position								
Staff nurse	40	46.5	30	34.8	16	18.7	.465	0.01**
In charge nurse	8	45	6	33	4	22		
Head nurse	4	66.6	1	16.7	1	16.7		

(*) Statistically significant at p<0.05

(**) High statistically significant at p<0.01

Table 6: Relation between Professional Quality of Life among the Studied Nurses and their Demographic Characteristics (n=100).

Characteristics	Low		Moderate		High		X2	P value
	No.	%	No.	%	No.	%		
Age								
<30	8	47	6	35	3	18	1.34	0.001**
30≥40	14	46.6	10	33.3	6	20.1		
40+	30	56.6	13	24.5	10	18.9		
Gender								
Male	5	23.8	11	21.4	20	54.8	.212	0.050*
Female	15	19.6	20	20.5	29	59.8		
Marital status								
Single	6	23.5	4	35.2	7	41.2	.443	0.057*
Married	7	8.6	12	14.9	62	76.5		
Divorced	2	100	0	0	0	0		
Level of education								
Nursing Diploma	20	31	30	47.2	30	47.2	.112	0.824
Technical Health Institute	5	25	5	25	5	25		
Nursing Bachelor Degree	2	33.3	2	33.3	2	33.3		
Years of experience								
<5	10	52.6	7	36.8	2	10.6	.136	0.810
5≥10	8	26.6	12	40	10	33.4		
10≤	18	35	15	30	18	35		
Residence								
Urban	42	48.8	21	24.4	23	26.8	.217	0.65
Rural	6	42.8	4	28.6	4	28.6		
Type of shift								
Morning	42	61.7	21	30.8	13	19.1	.543	0.32
Afternoon	4	28.6	4	28.6	6	42.8		
Job position								
Staff nurse	16	21.2	28	36.8	32	42	.143	0.05*
In charge nurse	4	22	6	33	8	45		
Head nurse	4	66.6	1	16.7	1	16.7		

(*) Statistically significant at $p < 0.05$ (**) High statistically significant at $p < 0.01$

Table 7: Correlation Matrix between Resilience, Burnout and Professional Quality of Life among the Studied Nurses (n=100).

Variables	Resilience		Burnout		Professional quality of life	
	r	p	r	p	r	p
Resilience						
Burnout	0.9	0.001**				
Professional quality of life	0.3	0.001**	0.5	0.001**		
Total	0.7	0.001**	0.5	0.001**	0.3	0.001**

(**) High statistically significant at $p < 0.01$

Discussion:

The nurse is one of the strongest pillars of the health care delivery system in providing safe, affordable and quality services to the people. Quality of nursing care is considered an important aspect in evaluating the quality of health care. The quality of nursing and health care are directly interlinked to levels of job fulfillment among nurses and on the quality of nurses' work life.

The aim of this study was to assess the relationship between resilience, burnout and professional quality of life among nurses working at El-Abbasiya Psychiatric-Mental Health Hospital.

Demographic Characteristics of the Studied Nurses:

The results of the present study donate that, the highest percentage of the nurses were married females and had been working for 10 or more years of experience. The greatest proportions of them were from urban areas, working in the morning shift as staff nurses. As in this study, the majority of **Ruiz-Fernandez, Perez-Garcia and**

Ortega-Galan's (2020) participants were married females from urban areas, working in the morning shift in their study of the quality of life in nursing professionals. This result was contradicting with **Skitsou, Charalambous and Andrioti (2015)** who assess the job satisfaction level of the nursing staff in Athalassa Psychiatric Hospital of Cyprus, they found that, half of the studied sample were males in the age group of 25-29 years old, nurses had 2-5 years of experience and two third of them were working as nurse officer.

The result disagreed with **Waddell (2015)** who studied the association between the levels of resilience and engagement among nurses working in the specialized area of mental health organizations, **Waddell** found that, the majority of nurses were in the age group of 24-69 years old and had work experience for ≥ 18 years, as regard to nurses' qualifications, near half of nurse had a master degree.

Resilience among the Studied Nurses:

The result of the present study explains that, more than half of the study sample had high levels of resilience as the

nurses were respond that, nursing provide them the ability to control their life, they become more strong beside past successes and gives them the confidence for new challenge. This result is agreed with **Pereira, Matos, Rosario and Costa (2016)** who examined the relationship between resilience and job satisfaction among psychiatric nurses working in in-patient units. They found that, the highest percentage of nurses have a high levels of resilience. In the line with the study carried out by **Dehvan, Kamangar, Baizeedy, Roshani and Ghanei-Gheshlagh (2018)** who examined the relationship of mental health with resilience among psychiatric nurses, they were found that, the participants' mean score of resilience was 63.9 ± 14.05 , indicating that they were resilient. While, This result disagrees with **Begherinia, Yamini, Ilderabadi and Begherinia (2016)** who reported low nurses' resilience in their study of the relationship between personality traits and mental health with resilience medication in nurses. The result of the present study denoting that, the nurses understudy were resilient. This may be due to gaining experience from handling stress in their work and having resilience protective factors (personal, social and professional) help nurses improve their resilience. Furthermore, they have begun practical work immediately after graduation.

Burnout among the Studied Nurses:

The result of the present study clarifies that, the nurses understudy have been prone to burnout. Concerning to emotional exhaustions sub items, all nurses reported that, they were feel like their work was breaking them down and they feel their work too hard at their job.

This result is in the same line with **Willard, Knox, Huang, Hammer, Kivlahan, and Grumbach (2019)** who assess stressors and burnout among nurses working at psychiatric units. They had found that, nurses experienced a higher degree of emotional exhaustion compared to those who were working in non-psychiatric units. In agreement with the current study result, the study of job burnout among psychiatric nurses which carried out by **Ahanchian, Meshkinyazd and Soudmand (2015)** revealed that, the increased workload, dependence, ambiguous responsibilities and roles and insufficient support from nurses were accompanied by burnout. The result of the present study revealed that, the majority of the studied nurses had moderate levels of emotional exhaustion which may be due to many factors such as; work overload (they assumed different tasks besides professional role such as, administrative work, supervision of unit accommodation), as well as, they deal with difficult unpredictable behavior such as; suicide, aggression and food refusal, conflicts with colleagues and supervisors, insufficient rewards such as, low salaries and lack of job promotion, complexity of patients' needs and the burden of caring many patients at the same time.

As regard to depersonalization sub items, most of the psychiatric nurses had moderate levels, as they were reported that they really do not care about what happens to some of their patients/clients. This result is similar to the study of **Ashtari, Farhady, and Khodae (2009)** who assess the relationship between work performance and job burnout among staff at a psychiatric hospital. They found that, more half of nurses experienced depersonalization. Also, in a study of the association between social capital and burnout in nurses of a trauma referral

teaching hospital **Farahbod, Chegini, Eramadati, and Mohtasham-Amiri (2015)** showed that, nurses had moderate burnout levels in depersonalization sub items. While, this result is incongruent with **Metwaly, Ahmed, and Ahmed (2018)** who study the impact of psychiatric nurses' capital on their burnout and coping style. They were found that, nurses had low burnout levels in depersonalization. The finding of the present study may be due to aggressive behavior either verbally or physically from the patients, inadequate educational preparation, conflict with physicians or criticism from other colleagues. Additionally, nurses do not follow objectivity while interacting with their patients.

The result of the present study shows that, most of the nurses had low burnout levels regarding personal achievement, they were able to understand what their patients feel; this may be due to their interaction with many patients with different diagnosis. The result also explains that, high proportion of the nurses able to handle emotional problems very calmly, this may be due their long time of experience in psychiatric field and the usual exposure to stressful situations and bizzar behaviors during their daily work. In a similar study carried out by **Canadas-De la Fuente, Ortega, Ramirez-Baena, De la Fuente-Solana, Vargas, and Gomez-Urquiza (2018)**, they clarify that, mental health nurses had low burnout levels related to personal achievement in their study of gender, marital status, and children as risk factors for burnout in nurses. This result is contradicting with the study of **Lopez-Lopez, Gomez-Urquiza, Canadas, De la Fuente, Albendin-Garcia, and Canadas-De la Fuente (2019)** about the

prevalence of burnout in mental health nurses and related factors. They reported that, most of mental health nurses in their study had moderate levels of burnout regarding personal achievement diminsion.

The findings of this study denote that, the highest percent of the nurse have moderate levels of emotional exhaustions and depersonalization and low levels of personal achievement. This result is parallel to the study of **Hoff, Carabetta, and Collinson (2019)** who assess job satisfaction and burnout among Palestinian nurses. They found that, more than thirty percent of nurses had moderate levels of emotional exhaustion and low burnout levels of personal achievement. The result is also goes with the study of **Azeem, Nazir, Zaidi and Akhtar (2014)** who explore the levels of role-related stress and burnout among nurses working in the private hospitals. They found that, the mean scores for emotional exhaustion and depersonalization were moderate among nurses. While, this result is appear to be contradicting with **Anwar and Elareed (2017)** who assess the levels of burnout among the staff nurses at the Mathari Psychiatric Hospital at Kenyan. They found that, more than half of the studied sample reported high levels of emotional exhaustions, depersonalization and low levels personal achievement. This result is also disagrees with **Ismail, Al Faisal, Hussein, Wasfy, Al Shaali and El Sawaf (2015)** who explore levels and determinants of job satisfaction and burnout among nurses working in Primary Health Care facilities in Emirates, they clarify that, nurses have low levels of emotional exhaustion, depersonalization and average level of personal achievement. The findings of the current study indicate that, psychiatric nurses experience burnout which may be

due to many factors such as; hospital environmental condition, large numbers of patients, unpredictable patients' condition, lack of job incentive, under staffing, conflict with the organization, unsupported attitude from colleagues and fewer opportunities for continuing education, as well as, personal factors such as; young age and ineffective personal coping behavior.

Professional Quality of Life among the Studied Nurses:

Concerning to compassion satisfaction, the present study explains that, only half of the nurses are proud of what they can do to help and they are happy that they chose to do this work, as well as, they had high levels of compassion satisfaction. This result is similar to the study of **Elsayed and Elsherif (2017)** who assess psychiatric nurses' empathy, burnout and its relation with professional quality of life. They found that, most of the studied sample had high levels of compassion satisfaction. Conversely, **Jialin, Okoli, Huijuan, FenJunwen, Linli, and Min, (2020)** concluded in their study of the factors associated with compassion satisfaction, burnout and secondary traumatic stress among Chinese nurses in tertiary hospitals that, Chinese nurses had got poor professional quality of life with low compassion satisfaction. The result of the present study may be due to multiple factors such as; poor work condition, conflict with organization systems, interference between work and home duties, low salary, inability to take decisions regarding patients' care and poor roster condition.

As regard to burnout sub-items, more than half of the study sample

perceives themselves as caring persons and they are worn out because their work as nurses, this may be due to their personal enthusiasm to change routine work condition regardless of poor patients' prognosis, lack of opportunity to take independent action in their work and long duration of contact with their psychiatric patients furthermore, they prone to sarcasm attitude from colleagues. **Zhang, Han, Qin, Yin, Zhang, Kong, and Wang (2018)** in their study of the extent of compassion satisfaction, compassion fatigue and burnout in nursing clarified that, nurses had high levels of burnout. This result is contradicting with **Kim, Han and Kim (2015)** who investigate possible differences in professional burnout subscales between health workers in medical and mental health sector. They found that, over fifty of workers in mental health sector have low burnout.

About secondary traumatic stress, the result explains that, more than one-third of the nurses often experiencing the trauma of someone they have helped and never avoid certain activities or situations because they remind them of frightening experiences of the people they help. This may be related to their constant interaction with psychiatric patients, there was an imbalance between nurses' roles and job requirements and lack of professional counseling within hospital services. The result also reveals that, most of the nurses understudy suffered from low levels of secondary traumatic stress; they have intrusive, frightening thoughts and jump or they startled by unexpected sounds. This result goes with the study of secondary traumatic stress, mental state and work ability in nurses at a university hospital carried out by **Bock, Heitland, Zimmermann, Winter and Kahl (2020)**. They illustrated that, 25% of their study

participants had experienced high levels of secondary traumatic stress. While, this result is contradicting with **Adeyemo, Omoaregba, Aroyewun, Modebe, James, Uteh and Ezemokwe (2015)** who examined the factors influencing the professional quality of life of professionals in a mental health facility in Nigeria. They clarified that, most of mental health careers that had experienced violence in the facility, were more susceptible to the characteristics feature of secondary traumatic stress. The result of the current study may be due nurses' usual exposure to workload, conflict with organization and sudden change in patients' behaviors they face such as; suicide, aggression, confusion, and medications' side effects. While, nurses' sympathized attitude in interacting with their patients may precipitating them to stress, anxiety or depression.

The result explains that, the highest percent of nurses have a moderate total levels of professional quality of life. This may be due to work overload, conflict with the organization and doctors, poor work environment, interference between work and home demands, and lack of in-services training, job promotion and incentives for nurses. This result is parallel with the study of **Sacco, Czurzynski, Harvey and Ingersoll (2015)**. They had study the prevalence of compassion satisfaction and compassion fatigue in adult, pediatric, and neonatal critical care nurses. They found that, female nurses reported moderate levels of compassion satisfaction, burnout and compassion fatigue. Conversely, **Ariapooran (2014)** studied the prevalence of the symptoms of CF and BO (Professional Quality of Life scale) and the role of perceived social support in predicting these symptoms in Iranian nurses. **Ariapooran** founds that,

emergency nurses have a higher levels of compassion fatigue and lower levels of burnout than a general nurse. The result also contradicts with **Said, Nave, Matos, Hunt, Nooriafshar, Krishnamurti and Subbotina (2015)** who measured the quality of working life among nurses in pediatric departments; they found that, nurses have low professional quality of life.

Relation between Resilience among the Studied Nurses and their Demographic Characteristics:

The present study revealed that, most of the studied nurses who were at the age of 40 years old and more, had high levels of resilience while, the nurses less than 30 years old had low levels. The study also clarified that, married nurses were more resilient than singles and divorced. These study results are contrasted with **Ang, Uthaman, Ayre, Mordiffi, and Lopez, (2018)** who study the association between demographics and resilience among nurses in Singapore. They found that, the experience of life (as exemplified by marital status, age and working experience) was associated with higher resilience levels. They added that, one would expect that individuals who are married would be more resilient than those who are single or divorced. The result is also similar to the study of **Silva, Baptista, Silva, Almeida, and Soares, (2020)** who carried out the study of resilience factors in nursing workers in hospital context; they explained that, there was a statistically significant correlation between age and resilience as the higher the age, the higher the resilience score. While the result of the present study is incongruent with **Rushton, Batcheller, Schroeder, and Donohue (2015)** who stated that, among nurses working in high intensity settings

in the United State, resilience levels were not significantly associated with years of experience. More time in the profession, is a factor associated with resilience, that may explain the result of the current study as resilience develops over time in personal and environmental interactions, clinical experience, knowledge of inside information about people and workplace processes are also contributing factors for nurses' positive and healthy adaptation, making them able to cope with the adversities of the workplace and perceiving oneself as being able to cope.

Relation between Burnout among the Studied Nurses and their Demographic Characteristics:

The finding of this study denote that, older age nurses (40 years old and more) had low burnout levels than nurses less than 30 years old. In congruent with this result, a study on burnout and psychosocial care among Australian nurses carried out by **Mcmillan, Butow, Turner, Yates, White, Lambert, et al. (2016)** and a study of **Metwaly, et al. (2018)** about the impact of psychiatric nurses' capital on their burnout and coping style, they found that, burnout was low among nurses who had been worked as a nurse for more than 5 years. This result is also in agreement with **Wu, Liu, Sun, Zhao, Wang, and Wang, (2014)** who conducted a study on the factors related to burnout among Chinese nurses. They explored that, lower levels of experience correlated with burnout. This result is contradicting with the study carried out by **Ruiz-Fernandez, et al. (2020)**, they clarified that, burnout was not influence nurses' age in their study of quality of life in nursing professionals. In psychiatric hospital, patients' aggression, violent behaviors or death during nurses' shifts can cause significant stress and

multiple psychological problems for young nurses with few years of experience that can contribute to higher levels of burnout which may be the causes of the current study.

The present study denotes that, married nurses had high levels of burnout than single and divorced. **Alqahtani, Al-Otaibi, and Zafar (2020)** carried out a study of burnout syndrome among nurses in a psychiatric hospital in Dammam, Saudi Arabia. They found the same result as married nurses experienced higher levels of burnout than single nurses. Conversely, **Abu Zied, Fekry, Mohsen, Morsy, El Serafy, & Salah's (2020)** study of burnout syndrome among psychiatrists in Egyptian mental hospital. They revealed that, marriage and sleeping in home has protective effect against burnout. However, the study by **Yu, Jiang and Shen (2016)** didn't report statistically significant value for this variable in their study of the prevalence and predictors of compassion fatigue, burnout and compassion satisfaction among oncology nurses. This result may be due to leaving nurses' homes and children at night can cause emotional distress to children, a lack of adequate time for their families and high levels of fatigue. Nurses' salaries may also be an important cause of this result, as insufficient income for their families' requirements regarding the future needs of their children and how they can afford enough money for them are always increase their sense of tension and burnout regarding the future needs of their children and how they can afford enough money for them.

Relation between Professional Quality of Life among the Studied Nurses and their Demographic Characteristics:

The present study revealed that, there was a highly statistically significant difference between professional quality of life among the studied nurses and their age. This result is agreed with the result of **Keshavarz, Gorji, Houshyar, Tamajani, and Martin (2019)** who assess the professional quality of life among health-care providers and its related factors. They found that, an increase of age, led to higher scores in the health-care providers' professional quality of life. Conversely, the study result of the relationship between professional quality of life and general health in trauma hospital staff revealed that, the professional quality of life among the participants was not associated with their age **Yadollahi, Razmjooei, Jamali, Niakan, and Ghahramani (2016)**. The result of this study may be due to the repetitive and direct contact of nursing professionals with patients' suffering and who have psychological and emotional pain regardless their age or workload.

Being married was significantly associated with higher levels of nurses' professional quality of life in the current study. In parallel with this result, **Yilmaz and Ustun (2019)** explained that, the majority of participating nurses were married and had high levels of professional quality of life in their study of sociodemographic and professional factors influencing the professional quality of life and post-traumatic growth of oncology nurses. This result is disagreed with the study of **Yadollahi, et al. (2016)** who were assess the relationship between professional quality of life and general health in trauma hospital staff. Their finding revealed that, marital status didn't affect professional quality of life.

Burnout and Professional Quality of Life among the Studied Nurses:

The present study explained that, there was a highly statistically significant correlation among the study variables. The significant correlation between burnout and professional quality of life may be related to nurses' long time spent in providing care for psychiatric patients, shortage in nursing staff, the administrative policy and ward atmosphere not supporting nursing staff performance. This result is similar to **Cieslak, Shoji, Douglas, Melville, Luszczynska and Benight (2014)** who review the empirical evidence for associations between job burnout and secondary traumatic stress (STS) among professionals working with trauma survivors. They have found that, there were significantly stronger relationships between job burnout and professional quality of life sub items (compassion fatigue and satisfaction). While this result is contradicting with **Mansouri, Zahiri, Zadeh, Jafari, Latifi and Mahdinejad (2013)** who examine the correlation between staff burnout and quality of working life in rehabilitation centers in Ahvaz. They found an inverse correlation between emotional exhaustion, depersonalization and quality of working life.

The result of the present study reveals that, there was a highly significant difference between resilience and burnout. This result is in the same line with **Rushton, et al., (2015)** who address the dimension of creating a healthy work environment and enhance resilience among nurses. They found that, there was a strong correlation between burnout and resilience and resilience work as moderator. While this result is disagreed with **Hegney, Rees, Eley,**

Osseiran-Moisson and Francis (2015)

who determine the relative contribution trait negative effect and psychological resilience in explaining the professional quality of life among nurses; they found that, there was a negative correlation between resilience and burnout. The result of the current study may be due to starting clinical practice early, having job commitment, gaining psychological support from their peer, facing many job difficulties since recruitment in hospital moreover, there was a significant change in administrative policy regarding patients' admission.

The result clarifies that, there was a significant correlation between resilience and professional quality of life. This result is similar to **Salimi, Pakpour, Feizollahzadeh and Rahmani (2017)** who assess the relationship between resilience among military employment and explore difference among provider. They found that, there was a highly statistically difference between resilience and professional quality of life sub items (compassion satisfaction- burnout-compassion fatigue). This result is contradicting with **Søndenaa, Lauvrud, Sandvik, Nonstad and Whittington (2013)** who assess resilience and professional quality of life among staff working with intellectual disabled patients and offending behavior. They found that, there was no significant difference for any professional quality of life subscale and resilience subscale. In the present study, this result may be due to facing different stressors in their work and gaining experience in managing work stressors as well as, they have the enthusiasm to change the work environment additionally, the staff nurses supporting each other to overcoming the work problems.

Conclusion:

From the present study results, it can be concluded that:

- High proportion of the nurses had moderate levels of resilience.
- The highest percent of the nurses have a moderate levels of emotional exhaustions and depersonalization and low levels of personal achievement.
- The highest percent of the nurses have a moderate levels on the three sub-items of professional quality of life scale.
- There was a highly statistically significant correlation among resilience, burnout and professional quality of life.

Recommendation:

The present study recommended; resilience development and burnout prevention training should be included in the academic curricular. Continuous evaluation of nurses' resilience, burnout and professional quality of life for regular programs to increase nurses' resilience and compassion satisfaction levels and reduce the experience of burnout and secondary traumatic stress need to be designed and implemented. Developing measures such as; improving nurses' communication skills, providing educational classes on stress management and coping strategies and using social resources that provide psychological support are important for healthcare

providers. In addition, paying attention to improve work conditions as creating policies that can help improve nurses' clinical competence, providing satisfied monthly salaries, work shift arrangements and motivations can improve nurses' professional quality of life and quality of patients' care.

Reference:

- Abu Zied, M., Fekry, M., Mohsen, N., Morsy, M., El Serafy, D. & Salah, M. (2020).** Burnout Syndrome among Psychiatrists in Egyptian Mental Hospital. *Middle East Current Psychiatry*. 27(25)
- Ackerman, C. (2020).** What is Resilience and Why is it Important to Bounce Back?.
<https://www.PositivePsychology.com>.
- Adeyemo, S., Omoaregba, J., Aroyewun, B., Modebe, V., James, B., Uteh, B., & Ezemokwe, C. (2015).** Experiences of violence, compassion fatigue and compassion satisfaction on the professional quality of life of mental health professionals at a tertiary psychiatric facility in Nigeria. *Open Science Journal of Clinical Medicine*, 3(2), 69-73.
- Ahanchian, MR., Meshkinyazd, A., & Soudmand, P. (2015).** Nurses burnout in psychiatric Wards. *Journal of Fundamentals of Mental Health*, 17(5), 260-264.
- Alqahtani, R., Al-Otaibi, S., and Zafar, M., (2020).** Burnout Syndrome among Nurses in a Psychiatric Hospital in Dammam, Saudi Arabia. *Nursing and Midwifery Studies*, 9(2): 110-115.
- Ang, S.A., Uthaman, T., Ayre, T. C., Mordiffi, S. Z., & Lopez, V. (2018).** Association between Demographics and Resilience- A Cross- Sectional Study among Nurses in Singapore. *International Nursing Review*, 65(3): 124-141.
- Anwar, M. M., & Elareed, H. R. (2017).** Burnout among Egyptian nurses. *Journal of Public Health*, 25(6), 693-697.
- Ariapooran, S. (2014).** Compassion fatigue and burnout in Iranian nurses: The role of perceived social support. *Iranian journal of Nursing and Midwifery Research*, 19(3), 279.
- Ashtari, Z., Farhady, Y., & Khodaei, M. R. (2009).** Relationship between job burnout and work performance in a sample of Iranian mental health staff. *African journal of psychiatry*, 12(1), 71-74.
- Azeem, S. M., Nazir, N. A., Zaidi, Z. B. A., & Akhtar, N. (2014).** Role of stress and burnout among nurses in the private hospitals. *International Journal of Academic Research in Business and Social Sciences*, 4(3), 420.
- Azizi, k., Ahmadian, H., Nazemi, AR. (2017).** Comparison of resilience, procrastination , stress and burnout among nurses in psychiatric and non-psychiatric wards. *Quarterly Journal of Nursing Management*, 5(3):80-91.

- Begherinia, H., Yamini, M., Ilderabadi, E., & Begherinia, F., (2016).** Relationship between Personality Traits and Mental Health with Resilience Medication in Nurses. *Journal of Sabzevar University of Medical Sciences*, 22(6), 1063-1070.
- Bock, C., Heitland, I., Zimmermann, T., Winter, L. and Kahl, K. G. (2020).** Secondary Traumatic Stress, Mental State and Work Ability in Nurses-Result of a Psychological Risk Assessment at a University Hospital. *Frontiers Psychiatry*, 11:398.
- Burnett Jr, H. J., & Wahl, K. (2015).** The Compassion Fatigue and Resilience Connection: A Survey of Resilience, Compassion Fatigue, Burnout, and Compassion Satisfaction among Trauma Responders.
- Canadas-De la Fuente, G. A., Ortega, E., Ramirez-Baena, L., De la Fuente-Solana, E. I., Vargas, C. & Gomez-Urquiza, J. L. (2018).** Gender, Marital Status, and Children as Risk Factors for Burnout in Nurses: A Meta- Analytic Study. *International Journal of Environmental Research and Public Health*, 15, E2102.
- Cetrano, G., Tedeschi, F., Rabbi, L., Gosetti, G., Lora, A., Lamonaca, D., ... & Amaddeo, F. (2017).** How are compassion fatigue, burnout, and compassion satisfaction affected by quality of working life? Findings from a survey of mental health staff in Italy. *BMC health services research*, 17(1), 755.
- Chatzigianni, D., Tsounis, A., Markopoulos, N.,& Sarafis, P., (2018).** Occupational Stress Experienced by Nurses Working in a Greek Regional Hospital: A Cross-Sectional Study. *Iranian journal of Nursing and Midwifery Research*, 23(6), 450-457.
- Cieslak, R., Shoji, K., Douglas, A., Melville, E., Luszczynska, A., & Benight, C. C. (2014).** A meta-analysis of the relationship between job burnout and secondary traumatic stress among workers with indirect exposure to trauma. *Psychological services*, 11(1), 75.
- Connor, K. M., & Davidson, J. R. (2003).** Development of a New Resilience Scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, 18(2), 76-82.
- Dehvan, F., Kamangar, P., Baiczeedy, S., Roshani, D.,& Ghanei-Gheshlagh, R., (2018).** The Relationship of Mental Health with Resilience among Psychiatric Nurses. *Journal of Nursing Practice Today*, 5(4):368-374.
- Dickson, T.,& Wright, K. M. (2008).** Stress and burnout in forensic mental health nursing: A literature review. *British Journal of Nursing*, 17(2), 82-87.
- Elsayes, HA., and Elsherif, ZA. (2017).** Psychiatric Nurses' Empathy, Burnout and its Relation with Professional Quality of Life. *Tanta Scientific Nursing Journal*, 12(1): 162-181.

- Farahbod, F., Chegini, MG., Eramsadati, LK., & Mohtasham-Amiri, Z., (2015).** The Association between Social Capital and Burnout in Nurses of a Trauma Referral Teaching Hospital. *Acta Medica Iranica*, 53: 214-219.
- Farjad, H. R. & Varnous, S., (2013).** Study of Relationship of Quality of Work Life (OWL) and Organizational commitment. *International Journal of Contemporary Research in Business*, 4(9) 449-456
- Foster, K., Roche, M., Delgado, C., Cuzzillo, C., Giandinoto, J. A., & Furness, T. (2019).** Resilience and mental health nursing: An integrative review of international literature. *International journal of mental health nursing*, 28(1), 71-85.
- Garroway, AM.(2015).** Resilience in Parkinson's Disease: An Empirical Examination of Age-Related Component of The Construct: Virginia Commonwealth University.
- Gasparino, R. C.,& Guirardello, E. D. B. (2015).** Ambiente da prática profissional e burnout em enfermeiros. *Revista Rene- UFC* 2015 Jan-Fev; 16(1): 90-96.
- Gerami Nejad, N., Hosseini, M., Mousavi Mirzaei, S. M., & Ghorbani Moghaddam, Z. (2019).** Association between Resilience and Professional Quality of Life among Nurses Working in Intensive Care Units. *Iran Journal of Nursing*, 31(116), 49-60
- Halbert, J. D. (2017).** Exploring if Inter-Professional Collaboration Can Predict Burnout in Health Care (Doctoral dissertation, Capella University).
- Hegney, D. G., Rees, C. S., Eley, R., Osseiran-Moisson, R., & Francis, K. (2015).** The contribution of individual psychological resilience in determining the professional quality of life of Australian nurses. *Frontiers in psychology*, 6, 1613.
- Hoff, T., Carabetta, S., & Collinson, G. E. (2019).** Satisfaction, burnout, and turnover among nurse practitioners and physician assistants: a review of the empirical literature. *Medical Care Research and Review*, 76(1), 3-31
- Hunsaker, S., Chen, H. C., Maughan, D., & Heaston, S. (2015).** Factors that influence the development of compassion fatigue, burnout, and compassion satisfaction in emergency department nurses. *Journal of Nursing Scholarship*, 47(2), 186-194.
- Ismail, L. S., Al Faisal, W., Hussein, H., Wasfy, A., Al Shaali, M., & El Sawaf, E. (2015).** Job satisfaction, burnout and associated factors among nurses in health facilities, Dubai, United Arab Emirates, 2013. *American Journal of Psychology and Cognitive Science*, 1(3), 89-96.
- Jialin, W., Okoli, C. T., Huijuan, H., Fen, F., Junwen, L., Linli, Z. and Min, L. (2020).** Factors Associated with Compassion Satisfaction, Burnout and Secondary Traumatic

- Stress among Chinese Nurses in Tertiary Hospitals: A Cross- Sectional Study. *International Journal of Nursing Studies*, 102:103472.
- Keshavarz, Z., Gorji, M., Houshyar, Z., Tamajani, Z. T., and Martin, J (2019).** The Professional Quality of Life among Health-care Providers and its Related Factors. *Social Health and Behavior Journal*, 2(1): 32-38.
- Kim, J., & Lee, T. W. (2016).** The influence of nursing practice environment, compassion fatigue and compassion satisfaction on burnout among clinical nurses. *Journal of Korean Clinical Nursing Research*, 22(2), 109-117.
- Kim, K., Han, Y., & Kim, J. S. (2015).** Korean nurses' ethical dilemmas, professional values and professional quality of life. *Nursing ethics*, 22(4), 467-478.
- Kutluturkan, S., Sozeri, E., Uysal, N., & Bay, F. (2016).** Resilience and Burnout status among Nurses Working in Oncology . *Annals of General Psychiatry*, 15:33.
- Leiter, M. P., & Maslach, C. (2005).** Banishing burnout: Six strategies for improving your relationship with work. John Wiley & Sons.
- Lopez-Lopez, I. M., Gomez-Urquiza, J. L., Canadas, G. R., De la Fuente, E. I., Albendin- Garcia, L and Canadas-De la Fuente, G. A. (2019).** prevalence of burnout in mental health nurses and related factors: A Systematic Review and Meta-Analysis. *International Journal of Mental Health Nursing*. 28, 1032-1041.
- Mansouri, N., Zahiri, M., Zadeh, R. G., Jafari, G. A., Latifi, M., & Mahdinejad, L. (2013).** Evaluating the correlation between quality of work Life and staff burnout in Rehabilitation and Welfare centers in Ahvaz city. *Jentashapir J Health Res*, 4(5), 345-53.
- Maslach, C., Jackson, S. E., & Leiter, M. P., (1996).** Maslach Burnout inventory manual (3rd Edition). Palo Alto, CA: Consulting Psychologists Press.
- McGillivray, C. J., & Pidgeon, A. M. (2015).** Resilience attributes among university students: a comparative study of psychological distress, sleep disturbances and mindfulness. *European Scientific Journal*, 11(5).
- Mcmillan, K., Butow, P., Turner, J., Yates, P., White, K., Lambert, S., et al. (2016).** Burnout and The Provision of Psychosocial care amongst Australian cancer nurses. *Eur J Oncol Nurs*. 22:37-45.
- Metwaly, S., Ahmed, H., & Ahmed, A. K. (2018).** The Impact of Psychiatric Nurses' Capital on their Burnout and Coping Style. *Egyptian Nursing Journal*, 15(3):302-313.
- Mills, H., & Dombeck, M. (n.d.).**

- Resilience: Physical Health Benefits. Recovery Brands LLC. Retrieved from <https://www.mentalhelp.net/articles/resilience-physical-health-benefits>.
- Pereira, L., Matos, A. P., Rosario, M. D. P., & Costa, J. J. (2016).** Resilience and depressive symptomatology in adolescents: The moderator effect of psychosocial functioning.
- Peters, E. (2018).** Compassion fatigue in nursing: A concept analysis. In *Nursing forum* (Vol. 53, No. 4, pp. 466-480).
- Ruiz-Fernandez, M. D., Perez-Garcia, E., & Ortega-Galan, A. M. (2020).** Quality of Life in Nursing Professionals: Burnout, Fatigue and Compassion Satisfaction. *International Journal of Environmental Research and Public Health*, 17(1253): 1-12.
- Rushton, C. H., Batcheller, J., Schroeder, K., & Donohue, P. (2015).** Burnout and resilience among nurses practicing in high-intensity settings. *American Journal of Critical Care*, 24(5), 412-420.
- Sacco, T. L., Ciurzynski, S. M., Harvey, M. E., & Ingersoll, G. L. (2015).** Compassion satisfaction and compassion fatigue among critical care nurses. *Critical care nurse*, 35(4), 32-42.
- Said, N. B., Nave, F., Matos, F., Hunt, L., Nooriafshar, M., Krishnamurti, C., ... & Subbotina, V. (2015).** The quality of working life among nurses in pediatric setting. *The European Proceedings of Social & Behavioural Sciences*.
- Salimi S, Pakpour V, Feizollahzadeh H, Rahmani A. (2017).** Resilience and Professional quality of life among Military Health Care Providers. *Journal of hayat*. 2017; 23(3):254-65.
- Salmond, E., Salmond, S., Ames, M., Kamienski, M., & Holly, C. (2019).** Experiences of compassion fatigue in direct care nurses: a qualitative systematic review. *JBIC Evidence Synthesis*, 17(5), 682-753.
- Schaufeli, W. B., Leiter, M. P., & Maslach, C. (2009).** Burnout: 35 years of research and practice. *Career development international*.
- Sharma, J., Dhar, RL., & Tyagi, A., (2016).** Stress as a mediator between work-family conflict and psychological health among the nursing staff: Moderating role of emotional intelligence. *Applied Nursing Research*, 30, 268-275
- Silva, S. M., Baptista, P. C., Silva, F. J., Almeida, M. C. and Soares, R. A. (2020).** Resilience Factors in Nursing Workers in Hospital Context. *Revista da Escola de Enfermagem da USP*, 54.
- Skitsou, A., Charalambous, G., & Andrioti, D. (2015).** Job Satisfaction of Nurses in a Psychiatric Hospital, in Cyprus. *International Journal of caring sciences*, 8(3), 683.

- Sõndenaa, E., Lauvrud, C., Sandvik, M., Nonstad, K., & Whittington, R. (2013).** Resilience and professional quality of life in staff working with people with intellectual disabilities and offending behavior in community based and institutional settings. *Health psychology research*, 1(1).
- Stamm, B. H. (2005).** The ProQOL manual: The professional quality of life scale: Compassion satisfaction, burnout & compassion fatigue/secondary trauma scales. Baltimore, MD: Sidran.
- Stamm, B. H. (2009).** Professional Quality of Life (ProQOL). www.proqol.org.
- Tirgari, B., Forouzi, M. A., & Ebrahimpour, M. (2018).** Relationship between posttraumatic stress disorder and compassion satisfaction, compassion fatigue, and burnout in Iranian psychiatric nurses. *Journal of Psychosocial Nursing and Mental Health Services*, 57(3), 39-47.
- Waddell, W. J. (2015).** Resilience and engagement in mental health nurses (Doctoral dissertation, Capella University).
- Willard-Grace, R. Knox, M. Huang ,B. Hammer, H. Kivlahan, C. and Grumbach, K.(2019)** "Burnout and health care workforce turnover," *The Annals of Family Medicine*, vol. 17, no. 1, pp. 36–41.
- Wu, H., Liu, L., Sun, W., Zhao, X., Wang, J., & Wang, L. (2014).** Factors Related to Burnout among Chinese Female Hospital Nurses: Cross Sectional Survey in Liaoning Province of China. *J Nurs. Manag.*, 22:621-629.
- Yadollahi, M., Razmjooei, A., Jamali, K., Niakan, M. H. and Ghahramani, Z. (2016).** The Relationship between Professional Quality of Life and General Health in Rajae Trauma Hospital Staff of Shiraz, Iran. *Shiraz E-Medical Journal*, 17(9): e39253.
- Yilmaz, G. and Ustun , B (2019).** Sociodemographic and Professional Factors Influencing The Professional Quality of Life and Post-Traumatic Growth of Oncology Nurses. *Journal of Psychiatric Nursing*, 10(4): 241-250.
- Yu, H., Jiang, A., & Shen, J. (2016).** Prevalence and Predictors of Compassion Fatigue, Burnout and Compassion Satisfaction among Oncology Nurses: A Cross- Sectional Survey. *International Journal of Nursing Studies*, 57, 28-38.
- Zhang, Y., Han, W., Qin, W., Yin, H., Zhang, C., Kong, C. and Wang, Y. (2018).** Extent of Compassion Satisfaction, Compassion Fatigue and Burnout in Nursing: A Meta-Analysis. *Journal of Nursing Management*, 26(7): 810-819.