Burnout in Egyptian mental health professionals and its relation to their psychosocial and vocational characteristics

Eman Shorub^a, Ahmed Saad^a, Tarek El Sehrawy^a, Mahmoud Monzem^b, Samah Rabei^c

^aNeuro-psychiaty department College of Medicine Ain Shams Uni, ^bGeneral adult psychiatry department Abbacia mental health hosp., Cairo, ^cNeuro-psychiatry department college of medicine Helwan uni., Helwan, Egypt

Correspondence to Samah Rabei asst. prof. Psychiatry Helwan uni. 5 omroo AlKAys 7th district Nasr City Cairo, 11727, Egypt. Tel.: 01003866785, e-mail: samahrabe@yahoo.com

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Background

Worldwide studies showed that mental health professionals have high rates of burnout. To date, no studies have looked at burnout in Egyptian mental health professionals, so investigating burnout in this population would be important as it may affect their performance. A total of 156 mental health professionals from three psychiatric hospitals in Cairo (Ain Shams University Hospitals, Abbassyia Mental Hospital, and Psychological Mental Hospital) were investigated for sociodemographic and vocational data using the Structured Clinical Interview for DSM-IV-Clinician Version (SCID-CV) and burnout assessment tool: the Maslach Burnout Inventory in this study.

Results

Overall, 57.7% of participants had high emotional exhaustion, 21.5% had high depersonalization, and 47.8% had high personal accomplishment on the Maslach Burnout Inventory. The number of working hours/week was positively correlated with emotional exhaustion and depersonalization. The number of night shift/month was positively correlated with depersonalization.

Conclusion

There was high burnout syndrome among mental health professionals in Egypt.

Keywords:

burnout, mental health professionals, satisfaction

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Background

Burnout syndrome is a mental condition, whereby cognitive impairment, emotional, mental, and physical exhaustion occur in previously healthy individuals (Doppia *et al.*, 2011). It includes three aspects: depersonalization, emotional exhaustion, and lack of personal accomplishment. Emotional exhaustion is feeling lack of energy, whereas depersonalization is occurrence of negative attitudes toward clients and work, and lack of personal accomplishment. There is a general feeling of dissatisfaction (Maslach *et al.*, 2001).

Health care professionals usually face stressful situations when they deal directly with patients and their families (Guzmán *et al.*, 2012). According to the American Psychiatric Association, two of five psychiatrists have burnout symptoms (American Psychiatric Association, 2020). There is evidence that psychiatrists have a higher burnout syndrome than other physicians (Bowers *et al.*, 2011). Stressors in the psychiatric setting, also the particular relationship between patients and psychiatrists, can lead to this risk (Rössler, 2012; Fiorillo *et al.*, 2013). Burnout syndrome also affects psychiatric nurses (Sørgaard *et al.*, 2007; Long *et al.*, 2014), social

workers (Rossi *et al.*, 2012), and occupational therapists (Pedrini *et al.*, 2009; Gupta *et al.*, 2012). Burnout syndrome can affect their work, family, and social life (Benbow, 1998); the health institution performance, owing to increasing staff absenteeism; and the quality of patient care, owing to increasing medical errors and diminishing patient safety (Shanafelt *et al.*, 2010).

Several risk factors have been associated with burnout syndrome, such as age, sex, experience, time pressure, and lack of support from supervisors. Female psychiatrists had higher stress levels (Rathod *et al.*, 2000), whereas higher burnout levels were reported in male psychiatry residents (Woodside *et al.*, 2008). Regarding experience, junior psychiatrists have higher stress levels and use more coping strategies than senior psychiatrists (Rathod *et al.*, 2000).

In the Middle East region among physicians in Saudi Arabia, burnout syndrome was reported: 53.3% for

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emotional exhaustion, 38.9% for depersonalization, and 28.5% for personal accomplishment (Selaihem, 2013). In Tunisia, 35% of primary care practitioners had high score of emotional exhaustion, 21% had high depersonalization, and 40% had a low score of personal accomplishment (Oumaya *et al.*, 2009), whereas the prevalence of burnout syndrome in Yemen was 11.7% (Al-Dubai and Rampal, 2010). The magnitude of burnout syndrome in the Middle East mental health professionals has not been previously investigated.

The magnitude of burnout syndrome in Egyptian mental health professionals has not been previously investigated as well. Therefore, this study was conducted to assess the prevalence of burnout syndrome among an Egyptian sample of mental health professionals and to study the potentially related factors.

Patients and methods Participants

Sample selection

A convenience sample targeting mental health professionals in three psychiatric hospitals in Cairo (Ain Shams University Hospitals, Abbassyia Mental Hospital, and Psychological Mental Hospital) was recruited.

Inclusion of all mental health professionals working in these hospitals for at least 6 months occurred. Exclusion of mental health professionals with psychiatric morbidity and mental health personnel not offering psychosocial therapeutic services (pharmacists and hygiene workers) was done. Participants were mental health professionals, including psychiatrists, mental health nurses, psychologists, and social workers.

Sample size

It was calculated using Epi-Info program, version 6 (Epi info program version 6. 1998; Centers for disease control and prevention in Atlanta, Georgia, USA), assuming 95% confidence interval and 80% power of test; accordingly, the following equation was used:

$n = (z/e) \times 2(p)(1-p).$

n: the sample size, *p*: the expected prevalence, *z*: the critical value 1.96, and *e*: the margin of sample error tolerated 0.05.

The expected prevalence according to Edwards *et al.* (2006) is 12%. Therefore, the sample size was calculated to be 156 participants.

Tools

Participants were asked to complete the sociodemographic and vocational data sheet [age, sex, marital status, years qualified as a doctor, years in current workplace, earning, working conditions (working hours per week, patients per week, night shifts, and weekends worked), intention of changing job, sick leave utilization, and sleep satisfaction].

The participants were interviewed by a psychiatrist through the Structured Clinical Interview for DSM-IV-Clinician Version (SCID-CV) to determine DSM-IV Axis 1 disorders (major mental disorder) (First *et al.*, 1996).

Burnout assessment tool

The Maslach Burnout Inventory (MBI) was used to evaluate the levels of burnout. This is a self-reported, validated questionnaire that consists of 22 questions, scored on a seven-point scale (ranging from '0'/never to '6'/daily). The questions are grouped into three dimensions: emotional exhaustion, depersonalization, and lack of personal accomplishment. They should not be combined in a total score. Score ranges are low, moderate, and high. High emotional exhaustion is more than 27, moderate is from 17 to 26, and low is from 0 to 16. High depersonalization is more than 14, moderate is from 9 to 13, and low is from 0 to 8. High lack of personal accomplishment is more than 37, moderate is from 31 to 36, and low is from 0 to 30 (Maslach *et al.*, 1986).

Procedures

Study design

A cross-sectional design was used for the study. Ethical approval: approval from the local ethical committee of Institute of Psychiatry in Faculty of Medicine, Ain Shams University was obtained. Written informed consent was provided by all the participants.

Data collection

Timetable: data collection lasted for 4 months beginning from the 1st of April 2017 till the 30th of August 2017. Settings: governmental hospitals (Ain Shams University Hospitals and Abbasyia Mental Hospital) and another private hospital (Psychological Mental Hospital) were the sites for performance of the study.

Statistical analyses

All analyses were performed on the Statistical Package for Social Sciences (SPSS, version 20.0; IBM, Armonk, New York, USA). Descriptive statistics (means and SDs or frequency and percentages) were calculated for the collected variables. Student *t* test and analysis of variance were used to compare means of psychosocial and vocational subgroups regarding MBI subscales scores. Pearson's correlation was used test to correlate burnout with social and vocational variables.

Results

Psychosocial and vocational characteristics

They are tabulated in Tables 1 and 2. More than half of the respondents (52.6%) were married, males represented 51. 3%, and psychiatrists represented 66.7%. Their mean age was 32.5 years old, whose average working hours were 47.7 h/week.

Burn out

More than half of respondents (57.7%) had emotional exhaustion, more than a quarter of them (28.8%) had lack of personal accomplishment, and more than a fifth of them (21.5%) had depersonalization.

Maslach Burnout Inventory scores

They are tabulated in Table 2.

Comparing and correlating Maslach Burnout Inventory subscales with psychosocial and vocational variables There are no significant differences between sex and marital state subgroups regarding MBI subscale scores.

Table 1 Psychosocial and vocational characteristics

Characteristic	n (%)			
Sex				
Male	80 (51.3)			
Females	76 (48.7)			
Marital state	82 (52.6)			
Role				
Psychiatrists	104 (66.7)			
Nurses	23 (14.7)			
Psychologist	14 (9)			
Social workers	15 (9.6)			
ER workers	22 (14.1)			
Night shift workers	70 (44.87)			
Satisfied with senior	9 (5.77)			
Characteristics ranges	Mean (SD)	Range		
Age	32.5 (10)	21–55		
Experience years:	7.7 (9.3)	0.5–33		
Travel time to work	61 (42)	15–240		
Number of patients/day	13 (9.02)	2–50		
Working hours/week	47.7(23.7)	5–120		

ER, emergency room.

Table 2 Burnout dimension score ranges in Maslach Burnout Inventory

Burnout dimensions	High	Moderate	Low
	(%)	(%)	(%)
Emotional exhaustion	57.7	33.9	8.9
	21.5	31 4	47 7
Lack of personal accomplishment	28.8	31.4	39.7

Personal accomplishment varies among vocational roles and with satisfaction with senior. Depersonalization and emotional exhaustion vary with emergency room work and satisfaction with senior (Table 3).

The number of working hours per week is correlated with emotional exhaustion and depersonalization. The number of night shifts is correlated with depersonalization (Table 4).

Discussion

Burnout is a mental condition that occurs as a result of continuous and long-term stress exposure, especially related to psychosocial factors at work. Our study assessed the prevalence of burnout syndrome and its potential risk factors among Egyptian mental health professionals. The results showed high levels of burnout syndrome in a considerable percentage of participating professionals. Overall, 57.7% of participants had higher levels for emotional exhaustion, more than a quarter of them (28.8%) had lack of personal accomplishment, and 21.5% had higher levels for depersonalization. The prevalence of high burnout levels in this study was high, compared with other countries and medical specialties in the region, such as primary care doctors in Tunisia (33%) (Oumaya et al., 2009) and Yemen (11.7%) (Al-Dubai and Rampal, 2010).

Table 3 Comparing Maslach Burnout Inventory subscales
scores regarding social and vocational subgroups (t, Studen
t test)

,					
	Emotional	exhaustion			
	t	P value			
Sex	-1.076	0.284			
Marital state (married)	1.545	0.192			
Vocational role	11.134	0.084			
ER work	-2.441	0.016*			
Dissatisfaction with senior	2.601	0.01*			
	Deperso	Depersonalization			
	t	P value			
Sex	0.777	0.451			
Marital state (married)	0.971	0.425			
Vocational role	11.576	0.072			
ER work	-3.707	0.001*			
Dissatisfaction with senior	2.099	0.037*			
	Personal accomplishment				
	t	P value			
Sex	-0.256	0.798			
Marital state (married)	1.432	0.226			
Vocational role	14.411	0.025*			
ER work	1.690	0.093			
Dissatisfaction with senior	-2.760	0.006*			

ER, emergency room. *Means statistically significant.

	Emotional	Emotional exhaustion		Depersonalization		Personal accomplishment	
MBI subscales	r	P value	r	P value	r	P value	
Age	-0.075	0.353	-0.151	0.061	0.101	0.210	
Years of experience	-0.054	0.505	-0.111	0.169	0.112	0.164	
Travel time to work (min)	-0.083	0.302	-0.110	0.170	-0.083	0.301	
Number of patients/day	0.028	0.724	0.059	0.464	0.038	0.635	
Working hours/week	0.175	0.029*	0.164	0.041*	0.097	0.228	
Night shifts/month	0.070	0.385	0.185	0.021*	-0.062	0.440	

Table 4 Correlating	Maslach B	urnout Inventory	subscale sco	es regarding	social and	vocational	variables (r, Po	earson
correlation)								

MBI, Maslach Burnout Inventory. *Significance at P value less than 0.05.

Furthermore, the prevalence of burnout syndrome in female physicians in the Saudi Arabia in Jeddah city was 7.3% (Selaihem, 2013).

Our results remain relatively high, compared with the results from other areas in the world. For example, Volpe et al. (2014) found that burnout is seen in 52% in early career psychiatrist group and 28% among nondoctor mental health professionals. Bressi et al. (2009) indicated a high level of emotional exhaustion in 49% of assessed psychiatrists, as well as a high level of depersonalization in 39%, and a low level of personal accomplishment in 22%. In another study, 36% of social workers had high range of emotional exhaustion (Siebert, 2006). Overall, 54% of forensic mental health workers experienced high burnout levels in the UK (Oddie and Ousley, 2007). The high scores on burnout subscales in our study may be owing to the different work circumstances between mental health professionals in Egypt and other countries.

In our study, males had slightly lower depersonalization levels than females; however, this difference was not statistically significant (Table 4). These results are consistent with those in New Zealand reported by Kumar (2011). In another study, Rupert and Morgan (2005) reported that women develop higher emotional exhaustion in agency, whereas men experienced higher exhaustion.

Our findings showed no significant difference between marital status subgroups regarding burnout dimension levels (Table 3). Moreover, there is no significant correlation between age and burnout dimensions levels (Table 4). Our study showed significant correlations between the number of working hours per week and average shifts per month and burnout syndrome emotional exhaustion and depersonalization dimensions level. These results are consistent with Al-Dubai and Rampal, (2010) findings, which suggested that increased work hours as an important factor in the burnout syndrome by increasing worker's exhaustion levels. In Egypt, mental health professionals have increased work hours. This may be owing to fewer number of mental health professionals. Further studies are essential to investigate this area.

Our results showed no significant association between the years of experience and burnout levels. On the contrary, Rupert and Morgan (2005) found that older respondents tended to report less exhaustion and depersonalization of clients than younger ones. Furthermore, Martini et al. (2004) demostrated that the first year of residency, being single, personal stress, and dissatisfaction with faculty were independent risk factors for burnout. Their results were supported by a recent study, which found that the risk was higher for younger trainees (P<0.001) (Jovanović et al., 2016). This discrepancy may be explained by the differences in supervisory support, challenges faced by young psychiatrists in different countries, or may be owing to the less professional responsibilities on juniors in Egypt.

This study showed that better relationships with seniors were associated with lower levels of emotional exhaustion and depersonalization and higher levels of personal accomplishment. This is consistent with the results obtained by Montgomery *et al.* (2003). These results confirm the role of managers in increasing supervisory skills to prevent burnout among their employees. Such strategies should include training the supervisors to recognize the signs of burnout and providing ways and means of assisting employees in coping with burnout symptoms.

A main limitation of our study was the relatively small sample size, which may limit the generalizability of our findings. Selection procedure is another possible source of bias.

Further multicenter, cross-sectional and longitudinal studies are highly recommended to confirm our results.

Conclusion

Our results showed high levels of burnout in mental health professionals in Egypt. Therefore, coping strategies should be developed and taught during residency and training in mental health practice. Furthermore, psychological support and specific organizational strategies should be provided to mental health professionals within their workplaces to improve their coping strategies with work-related stress, to promote their professional well-being and to prevent depression.

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Conflicts of interest

There are no conflicts of interest.

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