

WORK RELATED BURNOUT AMONG PSYCHIATRISTS: A COMPARATIVE STUDY

By

El Hadidy S¹, El-Gilany A², Ibrahim I³, Mashally E⁴, El-Bahnasawy A⁵
and State A⁶

*1Department of Occupational Health and Industrial Medicine, 2 Department of Public Health,
3 Department of Psychiatry, 5 Department of Rheumatology and Rehabilitation, 6 Department of
Dermatology , Andrology and STD, Faculty of Medicine, Mansoura University, Egypt, 4Specialist
of Neuropsychiatry and director of Demirah Hospital, Dakahlia, Egypt.*

Corresponding author : ElHadidy S:samah.elhadidy@mans.edu.eg

Abstract

Introduction: Psychiatry has been consistently shown to be a profession characterized by ‘high-burnout’ due to either workplace stressors or specific patient’s nature and condition, together with personal stresses. The ways of coping strategies to face work-related stressors usually determines the development and even the levels of burnout which is known to be higher among those who adopt maladaptive coping compared to those who adopt adaptive coping strategies. **Aim of work:** To compare the burnout among psychiatrists verses non psychiatrists.

Materials and methods: This comparative cross sectional study included psychiatrists, working in Mansoura University Hospital and Demirah Psychiatry Hospital during the period from September to November, 2017. A group of physicians were taken from the department of Rheumatology and Dermatology , Faculty of Medicine , Mansoura University as a comparative group ; fulfilling the eligibility criteria. Data was collected using a specially designed questionnaire covering sociodemographic data, educational and occupational histories and history of exposure to workplace stresses as physical violence. Maslach Burnout Inventory (MBI) questionnaire and The Ways of Coping Scale questionnaire were also performed. **Results:** The psychiatrists showed statistically significant higher prevalence of moderate and high level of both emotional exhaustion and depersonalization than non psychiatrists (83.6% vs 52.1% and 100.0% vs. 81.7%; respectively). Psychiatrists showed statistically significant high coping scores than non psychiatrists regarding: seeking social support, planful problem-solving and positive reappraisal. Night shift is statistically higher among psychiatrists than the non psychiatrists (50.7% vs. 25.4%; respectively). **Conclusion:** The prevalence of moderate and high level of emotional exhaustion and depolarization is higher among psychiatrists than non psychiatrists and is associated with a significantly higher prevalence of high level of personal achievement among non psychiatrists .The commonest way of coping among psychiatrists is active coping.

Keywords: Burnout syndrome, Ways of coping, Psychiatrists stress, Maslach Burnout Inventory (MBI) Questionnaire and The Ways of Coping Scale Questionnaire.

Introduction

Burnout syndrome results from the excessive workload and the chronic personal exposure to tensions and pressures of occupational nature (Gomes and Cruz, 2004). Burnout is a worrying problem especially in jobs providing direct care to the general population as in the medical professions particularly physicians (Romani and Ashkar, 2014) resulting in poor quality of care delivered to patients, increased medical errors and poor retention, in addition to poorer health outcome (Kumar et al., 2016). It includes emotional exhaustion, depersonalization and low personal accomplishment which, to varying degrees, may have both physical and emotional repercussions (e.g., fatigue, general malaise, symptoms of anxiety and depression) (Romani and Ashkar, 2014).

Psychiatry has been consistently shown to be a profession characterized by 'high-burnout' and psychiatrists as a group are vulnerable to experiencing burnout more than other physicians and surgeons (Kumar, 2007), due to either workplace variables as: organizational blame for patient suicide, time spent on prescribing/monitoring medication, and administrative tasks, or several patient-

level variables as: patient relapse, treatment non-responders, medication non-compliance, threatening patients, assault by patients and patient suicides (Garcia et al., 2015). So, for psychiatrists, significant levels of specific stressors that are generally related to workplace factors and working with demanding families "who may have unrealistic expectations of treatment for their loved ones" (Maslach and Leiter, 2016) together with personal stresses (Fothergill et al., 2004) to produce high-burnout. The latter is presented in the form of detachment from their work, showing negative feelings towards their patients, changes in appearance and behavior, mood symptoms may develop and potentially poorer quality of patient care (Maslach and Leiter, 2016).

The ways of coping strategies to face work-related stressors usually determines the development and even the levels of burnout (Rodrigues and Chaves, 2008; Zander et al., 2010). Two main strategies of coping can be identified: the first is adaptive strategy (positive coping) such as reappraisal which involves challenging the problem with direct changes in behavior, while the second strategy is maladaptive (negative coping) such as avoidance

and denial, which may alleviate stress temporarily without elimination or modification of the source (Folkman and Moskowitz, 2004). Burnout levels were known to be higher among those who adopt maladaptive coping compared to those who adopt adaptive coping strategies (Maslach et al., 2001).

There is lack of knowledge about burnout and coping mechanism among psychiatrists in Egypt.

Aim of work

To compare the burnout among psychiatrists verses non psychiatrists.

Materials and methods

Study design: It is a comparative cross sectional study

Place and duration of the study:

The study was done on the psychiatrists working in Mansoura University Hospital and Demirah Psychiatry Hospital during the period from September to November, 2017.

Study sample: The total number of psychiatrists in both hospitals was 76, only 67 completed questionnaires were returned with response rate 88.2%. A group 95 physicians were taken from the department of Rheumatology and Dermatology , Faculty of Medicine ,

Mansoura University as a comparative group ; fulfilling the eligibility criteria. An equal number of 76 of dermatologists and rheumatologists were selected to participate using systematic random sampling (select 3 and drop the 4th) but only 71 completed the questionnaires. Questionnaires were returned completed with response rate 93.4%. Inclusion criteria were one year or more of work duration. -

Study method:

All the studied population was subjected to the following:

1- Pre designed questionnaire covering personal data, socio-demographic data, educational , occupational histories and history of exposure to workplace physical violence.

2-Maslach Burnout Inventory (MBI) Questionnaire (English version) was used (Maslach et al., 1996). It consists of 22 items that are divided into 3 subscales (emotional exhaustion 9 items, depolarization 5 items and personal achievement 8 items). These items are answered in terms of the frequency with which the respondent experiences these feelings on a 7 point scale ranging from 0 (never) to 6 (every day)

then the 3 scores are calculated for each respondent. A higher score indicates greater burnout except for personal achievement score that is rated inversely: Section A Emotional exhaustion: Low (≤ 17), Moderate (18 - 29) and High-level burnout (≥ 30). Section B Depersonalization: Low (≤ 5), Moderate (6 -11) and High-level burnout (≥ 12). Section C Personal Achievement: High-level burnout (≤ 33), Moderate (34 - 39) and Low (≥ 40).

- 3- The Ways of Coping Scale Questionnaire** (English version) (Folkman and Lazarus, 1985) containing 66 questions were used. Scoring: to determine the predominant methods used for coping, through calculating the total score for each of the 8 subscales below by summing the item scores noted for each scale: (Not Used 0, Used Somewhat 1, Used Quite A Bit 2, Used a Great Deal 3). The scale with the highest score points to the most ever used coping method in response to unique situational stressors.

Consent

Informed consent was obtained from each participant sharing in the study after assuring confidentiality.

Ethical approval

Official approvals were obtained from the directors of Demirah Hospital and the target departments in Mansoura University Hospital. Study proposal was approved by IRB : code number: R/17.09.15

Data management

Data were analyzed using SPSS software (version 17.0 for Windows; SPSS Inc., Chicago, IL, USA). Qualitative variables were presented as number and percentages. Chi-square test, Fisher's exact test or Monte-Carlo Exact test was used for significance testing of categorical data; as appropriate. Quantitative variables were tested for normality distribution using Shapiro test. Non-parametric variables were presented as median (minimum-maximum) and Mann-Whitney test was used for comparison between groups. A p value ≤ 0.05 is considered as statistically significant.

Result

Table 1: Socio-demographic and personal characteristics of the studied groups.

	Psychiatrists# No=67 No (%)	Non psychiatrists## No=71 No (%)	Test of significance
Age (years): - 25-40 - 41-60	53(79.1) 14(20.9)	49(69.0) 22(31.0)	$\chi^2=1.82$, p=0.18
Sex: -Male -Female	26(38.8) 41(61.2)	23(32.4) 48(67.6)	$\chi^2=0.62$, p=0.43
Qualification : -Less than master ¹ -Master -Doctorate ²	19(28.4) 25(37.3) 23(34.3)	11(15.5) 31(43.7) 29(40.8)	MCET, p=0.19
Marital status: -Married -Unmarried	45(67.2) 22(32.8)	52(73.2) 19(26.8)	$\chi^2=5.69$, p=0.17
Smoking cigarettes: -Never -Current/ex-smoker	61(91.0) 6(9.0)	65(91.5) 6(8.5)	$\chi^2=0.01$, p=0.92

Psychiatrists: in Mansoura University and Demirah Hospitals

Non psychiatrists: dermatologists and rheumatologists in Mansoura University Hospital

¹ : Bachelor, Diploma

²: MD or Fellowship

χ^2 :Chi Square

test MCET: Monte-Carlo Exact test

Table 1 showed that there is no statistical significant difference between the psychiatrists and non psychiatrists regarding the socio-demographic and personal characteristics.

Table 2: Occupational characteristics of the studied groups.

	Psychiatrists No=67 No (%)	Non psychiatrists No=71 No (%)	Test of significance
Work duration(years)			
-Median(min-max)	6(1.5-35)	9(2-34)	Z= 1.89, p=0.06
Working days/week			
-Median(min-max)	5(3-7)	4(2-7)	Z=1.39, p=0.16
Working hours/ day			
-Median(min-max)	8(5-24)	8(5-24)	Z=1.834, p=0.067
Night shift			
-Yes	34(50.7)	18(25.4)	$\chi^2=9.46$, p= 0.002*
-NO	33(49.3)	53(74.6)	
Workplace physical violence :			
-Yes	22(32.8)	14(19.7)	$\chi^2=3.07$, p=0.07
-NO	45(67.2)	57(80.3)	

Z: Mann-Whitney test,

 χ^2 : Chi Square test

*: Statistically significant

Table 2 showed that the occupational characteristics of the psychiatrists are matched with those of the non psychiatrists with no statistical significant difference between both groups except for night shift which is statistically higher among psychiatrists (50.7% vs. 25.4%; respectively) .

Table 3: The Maslach Burnout Inventory score among the studied groups.

	Psychiatrists No=67 No (%)	Non psychiatrists No=71 No (%)	Test of significance
Section A: Emotional Exhaustion			
-Low level	16.4))11	34(47.9)	
-Moderate/High	83.6))56	37(52.1)	$\chi^2=15.53$, p= 0.001**
Section B: Depersonalization			
-Low level	0(0.0)	13(18.3)	$\chi^2=13.54$, p= 0.001**
-Moderate/High	67(100.0)	58(81.7)	
Section C: Personal Achievement			
-High level	28(41.8)	51(71.9)	$\chi^2=12.71$, p= 0.001**
-Low/Moderate	39(58.2)	20(28.1)	

 χ^2 : Chi Square test

**: Highly statistically significant

Table 3 showed that the psychiatrists had a significantly higher prevalence of moderate and higher levels of both Emotional Exhaustion and Depersonalization than non psychiatrists (83.6%vs 52.1% and 100.0% vs. 81.7%; respectively). High-level of Personal Achievement is significantly more prevalent among the non-psychiatrists than the psychiatrists (71.9% vs 41.8%, respectively).

Table 4: The Ways of Coping among physicians.

	Psychiatrists No=67 Median(min-max)	Non psychiatrists No=71 Median(min-max)	Test of significance
Confrontive coping	7(0-18)	7(2-18)	Z=1.118, p=0.26
Distancing	6(0-14)	7(3-16)	Z=0.85, p=0.39
Self-controlling	10(0-18)	9(3-18)	Z=0.69, p=0.49
Seeking social support	11(0-18)	8(0-18)	Z=3.22, p≤0.001**
Accepting responsibility	7(0-12)	6(2-12)	Z=1.54, p=0.12
Escape-avoidance	7(0-24)	6(0-21)	Z=0.09, p=0.93
Planful problem-solving	10(0-18)	8(3-18)	Z=2.10, p=0.04*
Positive reappraisal	16(0-21)	11(4-21)	Z=3.08, p=0.002*

Z:Mann-Whitney test

*: Statistically significant **: Highly statistically significant

Table 4 showed that the coping scores were non-significantly higher among the psychiatrists than the non psychiatrists regarding the ways of coping with stress except for seeking social support, planful problem-solving (plan to face the problem) and positive reappraisal which were significant.

Discussion

The higher the emotional exhaustion and depersonalization and the lower the personal accomplishment, the more a physician will suffer from burnout (Kumar et al., 2007). The present study showed that the prevalence of moderate and high level of emotional exhaustion and depersonalization was significantly higher among psychiatrists than non-psychiatrists (83.6% vs 52.1% and 100.0% vs 81.7%; respectively). Whereas, the prevalence of high level of personal achievement was significantly higher among non-psychiatrists (71.9% and 41.8, respectively) (Table 3). These findings showed that the burnout syndrome was generally high among both groups (all participants) which could be attributed to chronic interpersonal workplace stressors the physicians are exposed to. This was in accordance with Sharma et al., (2008) and Katschnig (2010) who reported that the burnout syndrome occurred most frequently in professions that require an intensive direct involvement with people such as physicians. Also, Arigoni et al., (2010); Pejuskovic and Lecic-Tosevski (2011) concluded that the physicians experience high level of stress and so they are more susceptible to burnout syndrome.

Our study findings showed that the prevalence of moderate and high level of emotional exhaustion was 83.6% (Table 3), which is much higher than what was reported by Bressi et al., (2009) in Italy (49%) and double that was declared by Bargellini et al., (2000) among physicians working in anesthesiology and intensive care .

The current study showed that the percent of the psychiatrists who worked night shifts were significantly higher compared to the non-psychiatrists, (50.7% and 25.4%; respectively) (Table 2). This can explain the higher burnout reported among the psychiatrists (Table 3) and that was in agreement with Poulsen et al., (2011); Stimpfel et al.,(2012) and Wisetborisut et al.,(2014) who found that the prevalence of burnout among shift workers was 25% compared to 15% in non shift workers and concluded that shift work is one of the occupational risks which is associated with frequent burnout among health care workers. In contrast, Garland et al. (2012) found in their study that shift work acts as a protective factor through offering breaks in the usual staffing regime.

The current work detected that the scores were non-significantly higher

among the psychiatrists than the non-psychiatrists regarding the ways of coping with stress except for seeking social support, planful problem-solving and positive reappraisal were significant (Table 4). These results pointed that high level of burnout among psychiatrists can be conditioned by the coping strategies used by them. This is in accordance with Wilkerson (2009) who detected; in a study with 482 psychologists; that occupational stress and the following burnout can be conditioned by the coping strategies.

Also the present study showed that among psychiatrists, the commonest ways of coping were active coping including: positive reappraisal followed by seeking the social support strategy followed by planful problem-solving then self-controlling (Table 4) .These findings agreed with many authors who suggest that social support is the best coping strategy against burning syndrome (Lindblom et al. 2006, Glasberg et al.2007 and Prins et al. 2007). However, Volker et al., (2009) disagreed with our findings and concluded that if active coping was used more as problem solving, personal accomplishment would be higher while emotional exhaustion and

depersonalization would be higher if passive coping (escape) was used.

Conclusion and Recommendations

:The current study showed that the burnout syndrome , the prevalence of moderate and high level of emotional exhaustion and depersonalization were significantly higher among psychiatrists than non-psychiatrists .The prevalence of high level of personal achievement was significantly higher among non psychiatrists. The commonest ways of coping among psychiatrists were active coping. Peer supervision and consultation are recommended to mitigate the work related stress of those providing mental health care.

Study Limitation: This study is conducted in a single locality with relatively small number of participants so the results can't be generalized to all psychiatrists or the physicians working in other specialties.

Conflict of interest

None.

Funding

None.

Acknowledgement

The authors would like to acknowledge Mansoura University Hospital

administrations and Demirah Hospital administrations for their help and support.

References

1. Arigoni F, Bovier PA and Sappino AP (2010): Trend of burnout among Swiss doctors. *Swiss Med Wkly*; 140: 13070.
2. Bargellini A, Barbieri A, Rovesti S, Vivoli R, Roncaglia R , et al. (2000): Relation between immune variables and burnout in a sample of physicians. *Occup Env Med*; 57:453-57.
3. Bressi C, Porcellana M, Gambini O, Madia L, Muffatti R, et al (2009) : Burnout among psychiatrists in Milan: a multicenter survey. *Psychiatr Serv*; 60(7):985-88. doi: 10.1176/appi.ps.60.7.985.
4. Folkman S and Moskowitz JT (2004): Coping: pitfalls and promise. *Ann Rev Psychol*; 55:745-74.
5. Folkman S and Lazarus RS (1985): If it changes; it must be a process: study of emotion and coping during three stages of a college examination. *Journal of personality and social psychology*; 48(1):150.
6. Fothergill A, Edwards D and Burnard P (2004): Stress, Burnout, Coping and Stress Management in Psychiatrists: A Systematic Review. *International Journal of Social Psychiatry*; 50:54.
7. Garcia HA, McGeary CA, Finley EP, Ketchum NS, McGeary DD, et al (2015): Burnout among psychiatrists in the Veterans Health Administration. *Burnout Research*; 2(4): 108-14.
8. Garland A, Roberts D and Graff L (2012): Twenty-four-hour intensivist presence: a pilot study of effects on intensive care unit patients, families, doctors, and nurses. *Am J Respir Crit Care Med*; 185:738-43.
9. Glasberg AL, Eriksson S and Norberg A (2007): Burnout and stress of conscience among healthcare personnel. *J Adv Nurs*; 13: 392-403.
10. Gomes AR and Cruz JF (2004): A experiência de estresse e burnout em psicólogos portugueses: um estudo sobre as diferenças de género, Teoria, Investigação e Prática; 9 (2):193-212.
11. Heponiemi T, Aalto AM, Puttonen S, Vanska J and Elovainio M (2014): Work-related stress, job resources and well-being among psychiatrists and other medical specialists in Finland Psychiatric Services; 65(6): 796-801.
12. Katschnig H (2010): Are psychiatrists an endangered species? Observations on internal and external challenges to the profession. *World Psychiatry*; 9: 21-8.
13. Korkeila JA, Töyrä S, Kumpulainen K, Toivola JM, Räsänen K , et al. (2003): Burnout and self-perceived health among Finnish psychiatrists and child psychiatrists: a national survey. *Scand J Pub Hlth*; 31(2):85-91.
14. Kumar S, Leggat P and Smith D (2016): Burnout and Doctors: Prevalence, Prevention and Intervention. *Healthcare (Basel)*; 4(3): 37. Published online 2016 Jun 30. doi: 10.3390/healthcare4030037
15. Kumar S, Hatcher S, Dutu G, Fischer J and Ma'u G (2011): Stresses experienced by psychiatrists and their role in burnout: A national follow up study .*The International Journal of Social Psychiatry*; 57: 166.
16. Kumar S, Fischer J, Robinson E, Hatcher S and Bhagat RN (2007): Burnout and job satisfaction in New Zealand psychiatrists: a national study . *Int J Soc Psychiatry*; 53(4):306-16.
17. Kumar S (2007): Burnout in psychiatrists. *World Psychiatry*; 6:186-89.
18. Lindblom KM, Linton SJ, Fedeli C and Bryngelsson IL (2006): Burnout in the working population: Relations to psychosocialwork factors. *Int J Behav Med*; 9: 51-9.
19. Maslach C and Leiter MP (2016): Understanding the burnout experience: recent research and its implications for psychiatry. *World Psychiatry*; 15:103-11.
20. Maslach C, Schaufeli WB and Leiter MP (2001): Job burnout. *Annu Rev Psychol*; 52(1):397-22.
21. Pejuskovic B and Lecic-Tosevski D (2011):

- Burnout in psychiatrists, general practitioners and surgeons. *World Psychiatry*; 10: 78.
22. Pejušković B, Lečić-Toševski D, Priebe S and Tošković O (2011): Burnout syndrome among physicians – the role of personality dimensions and coping strategies. *Psychiatria Danubina*; 23(4): 389-95.
23. Poulsen MG, Poulsen AA, Khan A, Poulsen EE and Khan SR (2011): Work engagement in cancer workers in Queensland: the flip side of burnout. *J Med Imaging Radiat Oncol* ; 55:425-32.
24. Prins JT, Hoekstra-Weebers JEHM and Gzedendam-D (2007): The role of social support in burnout among Dutch medical residents. *Psychol Hlth Med*; 12: 1-6.
25. Renzi C, Tabolli S, Ianni A, Di Pietro C and Puddu P(2005): Burnout and job satisfaction comparing healthcare staff of a dermatological hospital and a general hospital. *J Eur Acad Dermatol Venereol* ; 19(2):153-7.
26. Rodrigues AB and Chaves EC(2008): Stressing factors and coping strategies used by oncology nurses. *Rev Lat Am Enfermagem*; 16(1):24-8.
27. Romani M and Ashkar K(2014): Burnout among physicians. *Libyan J Med*; 9:23556. doi: 10.3402/ljm.v9.23556. eCollection 2014
28. Sharma A, Sharp DM, Walker LG and Monson JRT (2008): Stress and burnout among colorectal nurse specialists working in the National Health Service. *Colorectal Dis*; 10:397-06.
29. Stimpfel AW, Sloane DM and Aiken LH (2012): The longer the shifts for hospital nurses, the higher the levels of burn-out and patient dissatisfaction. *Health Aff (Millwood)*; 31:2501-9.
30. Vićentić S, Jovanović A, Dunjić B, Pavlović Z , Nenadović M , et al (2010): [Professional stress in general practitioners and psychiatrists--the level of psycologic distress and burnout risk]. *Vojnosanit Pregl* ; 67(9):741-6.
31. Wilkerson K (2009): An examination of burnout among school counselors guided by stress-strain-coping theory. *Journal of Counseling and Development*; 87:428-37.
32. Wisetborisut A, Angkurawaranon C, Jiraporncharoen W, Uaphanthasath R and Wiwatanaadate P (2014): Shift work and burnout among health care workers. *Occup Med (Lond)* ; 64(4):279-86.
33. Zander M, Hutton A and King L (2010): Coping and resilience factors in pediatric oncology nurses. *J Pediatr Oncol Nurs*; 27(2):94-108.