



Associations Between Quality of Work Life and Depression, Anxiety, and Perceived Fatigue among Teaching Staff of Faculty of Medicine

Amal Mahmoud Goda, MD; Doaa Mahmoud El Hossiney, MD;
Eman Alsayed Ghanem, MD*

Community, Environmental, and Occupational Department, Faculty of Medicine, Ain Shams University, Cairo, Egypt

ABSTRACT

Background: Higher Education institutions in Egypt are currently performing several evaluations by both students and teaching staff as a measure to improve the quality of education provided. Therefore, to retain the best and efficient work force, the Quality of Work Life (QWL) prevailing in these educational institutions needs to be investigated. **Objective:** To measure the level of QWL and its associated factors among teaching staff at faculty of medicine in Ain Shams University and to find out if there is any correlation between total QWL score and psychological distress including anxiety, depression, and perceived fatigue. **Method:** Cross sectional study was conducted using convenience sampling technique to collect data from (210) faculty members from different academic and clinical departments. Three validated questionnaires including Total Quality OF Work Life (TQWL-42), hospital anxiety and depression scale and checklist individual strength questionnaire were used to collect data from participants. **Results:** The study indicated a satisfactory level of QWL among most of the study participants (84.8%), no significant difference in QWL among faculty members based on their personal and job characteristics. However, conducting multiple linear regression revealed that female gender and working in clinical departments were significant predictors for poorer QWL. Finally, there were significant negative correlation between total quality work life score and anxiety, depression, and perceived fatigue. **Conclusions:** Most of the staff members enjoyed a satisfactory quality of work life. Being a female and working in clinical departments were the most important predictors for lower QWL.

Submission Date:

2022-08-05

Revision Date:

2022-10-01

Acceptance Date:

2022-10-08

Key Words:

Quality of work life, psychological wellbeing, Faculty members, and Perceived fatigue.

INTRODUCTION

Quality of work life (QWL) is an important aspect of overall quality of life. QWL defined as a general state of well-being in the workplace that can be explained by variety of factors and indicators developed in accordance with work organization parameters, considering individual differences and workers' strategies for adapting to their jobs.¹ QWL has several components, including fair wages, benefits, workplace

health and safety, and social integration which allows people to use and develop their strengths and capacities.²

Psychological wellbeing has an impact on a person's work, personal life, and general well-being, as well as occupational satisfaction. Psychological wellbeing and health of employees appear to be related to their ability to balance professional and personal duties.³ A study

*Corresponding Author: Eman Alsayed Ahmed Ghanem, Community Medicine Department, Faculty of Medicine, Ain Shams University, Cairo, Egypt. Email: emanghanem81@yahoo.com

conducted in Brazil indicated that 15.4% of primary health care practitioners reported poor quality of life, and that there was a link between it and adverse psychosocial work conditions.⁴ Another study of resident females at Zagazig University hospitals in Egypt found that the 70 % of residents had low QWL, and 86 % had low psychological well-being, with significant correlations between QWL, and psychological well-being.⁵

Teaching profession can be distinguished from other occupations due to its difficulty and the level of physical and mental tiredness that is a part of the daily routine. The process of intensification of work with increasing in the number of students without equal increasing in the number of professors is experienced in many institutions especially in the university environment.⁶ A study implemented in Argentina showed that educational activity is associated with psychological suffering, such as depression, and anxiety, as well as physical suffering, such as fatigue.⁶ Teaching staff in a medical field have a number of responsibilities in their job. They are accountable for making decisions about their patients' treatment in addition to their administrative and teaching duties. There is an abundance of studies about QWL in different educational settings, but there are scarce studies examine QWL among faculty members particularly in Egypt. As teaching staff have an important role in formal education, and because of highly stressful workplace events, they may experience a tremendous emotional strain. The objective of the current study was to measure the level of QWL and its associated factors among teaching staff at faculty of medicine in Ain Shams University, and to find out if there is any correlation between total QWL score and psychological distress including anxiety, depression, and perceived fatigue.

METHOD

A cross sectional study was conducted from start of May to end of July 2022 at the Faculty of Medicine at Ain Shams University.

Population: Different faculty staff who were working during the academic year 2021-2022 and shared in teaching process from different academic and clinical departments in the faculty. Exclusion criteria included any staff member with less than one year of teaching experience was excluded from the study.

Convenience sample was used. Using PASS11 program for sample size calculation, setting confidence level at 95% and two-sided confidence interval width at 0.2, it is estimated that sample size of 105 HCWs would be needed to detect an expected correlation coefficient (r) of 0.7 between QWL, depression, anxiety, and perceived fatigue scores.

Data collection tools: Well-structured English standardized self-administrated Questionnaires was used to collect the data. The questionnaires consisted of four sections. The first Section, gathered information on the respondents' demographic and job characteristics such as age, gender, marital status, postgraduate degree, and department.

The second section is (*TQWL-42 - Total Quality OF Work Life*) that was a standardized measures of quality of work life (it has 42 items divided in five spheres (Biological/Physiological, Psychological/Behavioral, Sociological/Relational, Economic/Political, and Environmental/Organizational). High reliability and validity were revealed from previous studies, and it was validated for use among health professionals. It is a five-item Likert scale (1-5). The total score was determined by adding the all items of TQWL-42 together and calculating the arithmetic mean. Higher score was associated with higher degree of quality of work life. The quality of work life level was classified according to the calculation of the total score, the median level (50) was the neutral level and the values above it reflected the satisfactory levels, and the values below corresponded to the unsatisfactory levels.⁷

The third section is (*The Hospital Anxiety and Depression Scale*) that was used to estimate the emotional disorder of anxiety and depression. It is a standardized, valid, and reliable scale to diagnose and track the progress of the psychological manifestations among the general practice and medical setting. It has 14 questions: seven questions for anxiety and seven for depression. It is four-point Likert scale. Scores of depressions and anxiety were grouped and summed separately. A score of 0-7 is considered as normal, 8-10 as a borderline case, and 11-21 as a case (anxiety or depression) .⁸

The fourth section is checklist individual strength questionnaire (CIS) that was an appropriate valid and reliable instrument for measuring fatigue in the working population and was able to discriminate properly between fatigued and non-fatigued workers

in different occupational groups. It consists of 20 statements for which the person must indicate on a 7-point scale to what extent the particular statement applies to him or her, they refer to aspects of fatigue

Table (1): Prevalence of quality of work life, perceived fatigue, and psychological wellbeing among the studied sample (N=210)

Quality of work life		No.	%
	Unsatisfactory	32	15.2
	Satisfactory	178	84.8
Perceived fatigue			
	No-Fatigue	95	45.2
	Fatigue	115	54.8
Psychological wellbeing			
Anxiety symptoms	Normal	81	38.6
	Borderline	49	23.3
	Abnormal	80	38.1
Depression symptoms	Normal	80	38.1
	Borderline	58	27.6
	Abnormal	72	34.3

experienced during the previous 2 weeks. For the items: 2, 5, 6, 7, 8, 11, 12, 15, 20 the scoring was 1 for true and 7 for false. Regarding the items 1, 3, 4, 9, 10, 13, 14, 16, 17, 18, 19 the scoring was 1 for false and 7 for true then the total score was calculated by summing all items and higher score indicate higher level of fatigue among the working population. The fatigue level was classified according to the calculation of the median as the values above it reflected the non-fatigued group, and the values below it corresponded to the fatigued group.⁹

Statistical analysis: Data were collected, coded, entered on personal computer, and analyzed using SPSS (Statistical Package for Social Science) program version 25 then data were checked for data entry errors. Quantitative data were presented as mean and standard deviation. Qualitative data were presented as number and percentage. Suitable statistical tests were done as independent t test and chi square test. Multiple Linear regression was done to indicate the independent predictors of poor quality of work life. A two-sided p-value ≤ 0.05 was considered statistically significant.

RESULTS

Table (1) showed that most participating physicians (84.8%) were satisfied with their quality of work life. As regard perceived fatigue, 54.8% of them reported fatigued in their job. Regarding psychological

wellbeing, more than one third of participants (38.1%) were anxious and (34.3%) were depressed.

Demographic information and job characteristic is presented in Table 2. The majorities of participants were females (68.1%), married (74.3%) and have children (84.8%). Respondents' mean age was 34.39 (SD = 6) years. Almost half of them worked in clinical departments (56.2%), while the others worked in academic field (43.8%). Regarding post graduate degree, 38.1% of participants were lecturers, 26.2% were demonstrator, 21.4% were assistant lecturers, 11% were assistant professors and only 3.3% were professors. Most of them were nonsmokers (94.3%) and had no chronic illness (84.8%).

The current study found no statistically significant association between sociodemographic & work-related variables and total quality of work life among the studied group as shown in table (2). However, on conducting multiple linear regression, female gender and working in clinical departments were the most important predictors for poorer quality of work life among the studied group as revealed in table (4).

Table 3 showed that there was a statistically significant negative correlation between total quality of work life and psychological wellbeing including anxiety ($r = -0.47$, $P < 0.001$) and depression ($r = -0.49$, $P < 0.001$). Also, a statistically significant negative correlation was found between total quality of work life and perceived fatigue ($r = -0.32$, $P < 0.001$).

DISCUSSION

A high Quality of Work Life (QWL) among teaching medical staff is crucial for healthcare institutions to attract and retain highly qualified, motivated, and committed health care workers.¹⁰ Regarding the prevalence of QWL, psychological wellbeing and perceived fatigue among the studied group, the current study found that majority of teaching staff (84.8%) were satisfied by their QWL. This study finding is consistence with a study conducted in Jordan which reported that QWL among faculty members was at a moderate level.¹¹ Similarly, Ahmed et al., 2011 clarified that majority of university staff had high QWL and were highly satisfied with nature of their work.¹² In addition, an Indian study reported that 59% of the respondents have high level of quality of work life.¹³ In contrary, a study conducted among faculty members of University of Tehran and Sharif university of Technology reported that professors in the mentioned

universities had unfavorable QWL.¹⁴ This discrepancy in results could be attributed to could be attributed to different faculties and different cultures.

As regard psychological wellbeing of study participants, the current study revealed that more

Table (2): Sociodemographic and work-related characteristics and their relationship with quality of work life of the studied sample (N=210)

Characteristics	No.	%	QWL		χ ²	P value	
			Unsatisfactory No (%)	Satisfactory No (%)			
Gender	Male	67	31.9	7 (10.4)	60 (89.6)	1.75	0.19
	Female	143	68.1	25 (17.5)	118 (82.5)		
Marital status	Single	46	21.4	10 (22.2)	35 (77.8)	7.32	0.06
	Married	156	74.3	19 (12.2)	137 (87.8)		
	Divorced	7	3.3	3 (42.9)	4 (57.1)		
	Widowed	2	1	0	2 (100)		
Having children	No	32	15.2	8 (25)	24 (75)	2.79	0.10
	Yes	178	84.8	24 (13.5)	154 (86.5)		
Postgraduate degree	Demonstrator	55	26.2	7 (12.7)	48 (87.3)	3.63	0.46
	Assistant lecturer	45	21.4	7 (15.6)	38 (84.4)		
	Lecturer	80	38.1	12 (15)	68 (85)		
	Assistant professor	23	11	6 (26.1)	17 (73.9)		
	Professor	7	3.3	0	7 (100)		
Department	Academic	92	43.8	11 (12)	81 (88)	1.37	0.24
	Clinical	118	56.2	21 (17.8)	97 (82.2)		
Smoking Habit	Nonsmoker	198	94.3	29 (14.6)	169 (85.4)	1.58	0.45
	Ex-smoker	6	2.9	2 (33.3)	4 (66.7)		
	Current smoker	6	2.9	1 (16.7)	5 (83.3)		
Having chronic diseases	No	178	84.8	24 (13.5)	154 (86.5)	2.79	0.10
	Yes	32	15.2	8 (25)	24 (75)		
Age in years (mean ± SD)		34.39 ± 6		34.53±5.86	34.35±6.11	0.15*	0.88

SD: standard deviation, QWL: Quality of Work Life,*Independent t-test

Table (3): Correlation between quality of work life and psychological wellbeing and the perceived fatigue among the studied sample (N=210)

Pearson Correlation Coefficient		Psychological wellbeing				Perceived fatigue	
		Anxiety		Depression		r*	P value
		r*	P value	r*	P value		
QWL	Biological and Physiological	-0.38	<0.001	-0.41	<0.001	-0.31	<0.001
	Psychological and Behavioral	-0.36	<0.001	-0.45	<0.001	-0.23	0.001
	Sociological and Relational	-0.46	<0.001	-0.37	<0.001	-0.32	<0.001
	Economic and Political	-0.29	<0.001	-0.29	<0.001	-0.21	0.003
	Environmental and Organizational	-0.32	<0.001	-0.45	<0.001	-0.23	0.001
	Total	-0.47	<0.001	-0.49	<0.001	-0.32	<0.001

QWL: Quality of Work Life, *Pearson Correlation Coefficient

than one third of participants (38.1%) suffered from anxiety and (34.3%) of them reported being depressed as shown in table (1). This is an alarming finding and psychological status of all faculty members should be periodically investigated and managed properly as they are responsible for producing future doctors'

generation and play a significant role in their social, educational, and moral development.¹⁵ Increased psychological stress among faculty members could be attributed to the increase in the complexity of cognitive and emotional demands in academic field with the new communication technologies as pointed

out by Gillespi et al., 2001.¹⁶ This finding is almost similar to a recent study conducted among university medical staff in Ethiopia which found that 19.2% of participants had anxiety and 22.9% of them had depression.¹⁷ In contrary, Ahmed et al., 2011 reported low prevalence level of anxiety (7.8%) and depression (2.2 %) among academic medical staff in United Arab Emirates.¹²

Table (4): Multiple Linear Regression (predictors of quality of work life among the studied sample (N=210))

Variables	Beta (Regression coefficient)	t-test	P-value
Gender (male)*	-0.18	2.67	0.008 †
Department (academic)*	-0.22	3.32	0.001 †

*Reference group, † statistical significance

This discrepancy might be due to stressful academic-related conditions among Egyptian medical staff and socioeconomic differences. Furthermore, the present study revealed that more than half of the teaching staff (54.8%) experienced fatigue as shown in table (1); this finding could be explained as most of studied participants were female, married and have children. So, they may experience job-family role conflicts. A recent study conducted among health care workers concluded that interaction between work and family life directly affects the energy level of participants.¹⁸ In agreement with this study, Malone & Issa, 2014 recommended that organizations should collaborate to provide a supportive work environment for females to ensure appropriate balance of work family roles.¹⁹ Regarding sociodemographic and work-related variables that might affect QWL among the studied group, the present study revealed that no statistically significant association between QWL and age, gender, and marital status. This goes in line with Bharathi et al., 2011 who found no significant difference in QWL among Indian faculty members based on their age, gender, and marital status.¹³ Also, Al-Daibat, 2011 reported same results,¹¹ but contradicts the finding of Kumar & Deo, 2011 and Akram & Amir, 2020 who found that older faculty members and male staff had higher quality of work life.^{20, 21} They justified that older staff had more years of work experience and more familiar with their work demands, also clarified that female workers had role conflicts between work demands and their family needs. Another study was done in Australia pointed out that participants suffer

from marital problems had lower QWL than those satisfied with their marriage.²² In addition, current study found no significant association between QWL and smoking habits, this finding is inconsistent with Cayuela et al., 2017 who reported that smokers showed a higher prevalence of dissatisfaction with QWL compared to nonsmokers, they explained that smokers were generally more anxious, and that anxiety impacted their QWL.²³

Moreover, the study found no association between QWL and presence of chronic diseases among participants. This contrasts with Suresh, 2016 who found that health status of respondents was the most important predictor which had direct influence on QWL.²⁴ Also, Machado et al., 2019 reported that university teachers with a history of sickness absence and those with self-medication use had lower QWL.²⁵ As regard educational qualification, the current study found no significant association between QWL and job position, this is similar to Bharathi et al., 2011.¹³ However, Suresh, 2016 declared that professors were more satisfied in their working life than other qualification.²⁴ In addition, Akram & Amir, 2020 revealed that assistant professors had better QWL than lecturers. They justified that professor had less workload and more work experience thus enjoying better quality of work life.²¹ This difference in results might be attributed to difference in sample size, study setting and cultural and economic issues.

Lastly, on conducting multiple linear regressions, the study found that female gender and working in clinical departments were the most important predictors for poorer QWL as shown in table 4. The finding of this study is aligned with the findings of Ilgan et al.,2015 who found female participants had lower QWL.²⁶ This could be attributed to the double role conflicts females faced between job responsibilities and their family needs. In addition, a recent study found that health care workers who worked in sectors focused on direct patient care showed higher prevalence of unsatisfactory QWL than those working in the sectors exclusively administrative or indirect assistance service.¹⁸ This could be explained as working in clinical departments specifically in hospitalization units for highly demanding patients, such as the operating room and intensive care unit, is often linked to stressful situations such as accelerated work pace, greater demand for physical exertion in patient care and need for reasoning speed and decision-making

skills, all this can have a negative impact on their quality of working life.

Regarding correlation between QWL and psychological wellbeing and perceived fatigue among the studied group, the finding of the current study clarified that, there was a statistically significant negative correlation between QWL score and psychological wellbeing including anxiety and depression as shown in table 3. This finding indicates that QWL decreases if psychological distress increases, as observed in previous studies.^{27, 28} Similarly, Vilas & Morin, 2013 perceived strong negative correlation between psychological wellbeing and quality of working life among university professors in Brazil.²⁹ Furthermore, there was a negative statistically significant correlation between QWL score and perceived fatigue as revealed in table 3, which was indicating that high level of QWL, was associated with low level of perceived fatigue among teaching staff. This finding is similar to Pedroza et al., 2011 as they found that, a reverse relationship existing between QWL and perceived fatigue among the studied group.³⁰

Study Limitations

The statistical group of this research was limited to faculty of medicine at Ain Shams University and convenient sampling was used. Therefore, obtained results cannot be generalized to all working staff members at Ain Shams university and other Egyptian universities, because every university has its own specific characteristics.

CONCLUSIONS

Quality of work life is one of the most important factors for human motivating and improving of job. The majority of the studied faculty members (84.8%) had satisfactory quality of work life, no significant association was found between QWL and personal & job characteristics, however after applying multiple linear regression; female gender and working in clinical departments were the most important predictors for poorer QWL. Finally, the current study found statistical negative correlation between total QWL score and anxiety, depression, and perceived fatigue.

Ethical Considerations

The ethical committee approval was obtained from ethical committee at faculty medicine, Ain Shams university No. FWA 000017585. Informed consent was obtained from all participants, and confidentiality of data and results was considered as the questionnaire was anonymous.

Recommendation: It is recommended that higher authorities should take steps to improve the quality of work life of female university teachers and those working in clinical departments; ensuring flexible working hours, providing transportation facility and nearby child-care center, decreasing workload, and working from home if possible are all suggested steps. Further studies are warranted to investigate the root causes of psychological stress among faculty members using more accurate psychological test batteries and larger sample size as the study was limited to relatively smaller sample size (n=210).

Funding source

The authors received no financial support related to this research

Conflict of Interest:

All authors have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Author Contributions

Amal Mahmoud Goda: Idea, and statistical analysis; Doaa Mahmoud ElHussiney: Literature search, critical review, and writing; Eman Alsayed Ghanem: Literature search and writing

REFERENCES

1. Sirgy MJ, Efraty D, Siegel PH, and Lee DJ. A New Measure of Quality of Work Life (QWL) Based on Need Satisfaction and Spillover Theories. *Social Indicators Research*. 2001; 55(3):241-302. doi:10.1023/A:1010986923468
2. Kanten S and Sadullah O. An empirical research on relationship quality of work life and work engagement. *Procedia-Social and Behavioral Sciences*. 2012;62:3606
3. Heijden B, Demerouti E and Bakker AB. Work-home interference among nurses: Reciprocal relationships with job demands and health. *J Adv Nurs*. 2008; 62(5):572-84. doi: 10.1111/j.1365-2648.2008.04630.x

4. Teles M , Barbosa M , Vargas A , Gomes V , Ferreira E , Martins A et al. Psychosocial work conditions and quality of life among primary health care employees: a cross sectional study. *Health and Quality of Life Outcomes*. 2014;12:72 <http://www.hqlo.com/content/12/1/72>
5. Nofal HA and EL Maghawry HA. Effect of quality of working life on psychological well-being and marital satisfaction among married resident females at faculty of medicine-Zagazig university. *Egyptian Journal of Occupational Medicine*. 2019; 43 (2) : 269-282
6. Martinez D, Collazo M and Liss M. Dimensions of teachers' work. A proposal to approach teachers' discomfort and psychic suffering in Argentina. *Educação & Sociedade*. 2009;30(107):389-408. doi: 10.1590/S0101-73302009000200005
7. Pedroso B, Pilatti LA, Gutierrez GL and Picinin CT. Development and Psychometric Properties of TQWL-42 to Measure the Quality of Work Life. *Brazilian Archives of Biology and Technology*. 2019; 62: e191800372
8. Zigmond AS, Snaith RP. The hospital anxiety and depression scale. *Acta Psychiatr Scand*. 1983;67:361-70
9. Beurskens AJ, Bültmann U, Kant I, Vercoulen JH, Bleijenberg G, Swaen GM. Fatigue among working people: validity of a questionnaire measure. *Occup Environ Med*. 2000; 57(5):353-7
10. Hermawati A, and Mas N. Mediation effect of quality of worklife, job involvement, and organizational citizenship behavior in relationship between transglobal leadership to employee performance. *International Journal of Law and Management*. 2017; 59(6), 1143-1158.
11. Al-Daibat B. A STUDY ON QUALITY OF WORK LIFE (QWL) IN JORDANIAN UNIVERSITIES. *International Journal of Business and Management Review*. 2018; 6,(11),66-74
12. Ahmed HB, Al-Fageer R, and Al-Suwaidi R. Cognitive emotions: Depression and anxiety in medical students and staff. *Journal of Critical Care*. 2011; 24(3), e1-e7. <https://doi.org/10.1016/j.jcrr.2009.06.003>
13. Bharathi PS, Umasevi M, and Kumar NS. Quality of work life: Perception of college teachers. *Indian Journal of Commerce and Management Studies*. 2011; 2 (1),47-65
14. Mirkamalia SM and Thanib FN. A Study on the Quality of Work Life (QWL) among faculty members of University of Tehran (UT) and Sharif university of Technology (SUT). *Procedia - Social and Behavioral Sciences*. 2011; 29, 179 – 187. doi:10.1016/j.sbspro.2011.11.223
15. Pandey A and Jha B. Review and redefine quality of work life for higher education. *Global journal of management and business research: an administration and management*. 2014; 14(11).
16. Gillespie NA, Walsh M, Winefield AH, Dua J, and Stough C. Occupational stress in universities: Staff perceptions of the causes, consequences, and moderators of stress. *Work & Stress*. 2001; 15(1):53-72. doi: 10.1080/02678370117944
17. Yeshaw Y and Mossie A. Depression, anxiety, stress, and their associated factors among Jimma University staff, Jimma, Southwest Ethiopia. *Neuropsychiatr Dis Treat*. 2017; 13: 2803–2812.
18. Azevedo B, Nery A, and Jefferson. Occupational Stress and Dissatisfaction With Quality of Work Life in Nursing. *Texto Contexto Enferm*. 2017; 26(1):e3940015. <https://doi.org/10.1590/0104-07072017003940015>
19. Malone E K, and Issa R A. Work-Life Balance and Organizational Commitment of Women in the U.S. Construction Industry, *Journal of Construction Engineering and Management*. 2014; 140(3).
20. Kumar D, and Deo JM. Stress and work life of college teachers. *Journal of The Indian Academy of Applied Psychology*. 2011; 37(1), 78-85.
21. Akram M and Amir M. Comparing the Quality of Work Life among University Teachers in Punjab. *Bulletin of Education and Research*. 2020; 42(2), 219-234.
22. Bell AS, Rajendran D, and Theiler S. Job Stress, Wellbeing, Work-Life Balance and Work Life Conflict Among Australian Academics. *Electronic Journal of Applied Psychology*. 2012; 8(1):25-37.
23. Cayuela A, Rodríguez-Domínguez S, Otero R. Deteriorated Health-Related Quality of Life in Healthy Male Smokers. *Arch Bronconeumol*.2017; 43:59-63.
24. Suresh D. Quality of nursing work life among nurse working in selected government and private hospitals in Thiruvananthapuram. *J Nurs Care*. 2016; 5(4). <http://dx.doi.org/10.4172/2167-1168.C1.020>
25. Machado H, SanchezEliane G, Sanche D, and Alves B. Impact of health on quality of life and quality of working life of university teachers from different areas of knowledge. *Ciênc. saúde coletiva*. 2019; 24 (11) <https://doi.org/10.1590/1413-812320182411.28712017>
26. Ilgan A, Ozu-Cengiz O, Ata A, & Akram M. The relationship between teachers' psychological well-being and their quality of school work life. *The Journal of Happiness & Well-Being*. 2015; 3(2), 159-181.
27. Neerpal R. Relationship of Quality of Work Life with Employees' Psychological Well-Being. *International Journal of Business Insights & Transformation*. 2009; 3(1), 52-60.
28. Boas AA, and Morin EM. Psychological well-being and psychological distress for professors in Brazil and Canada. *RAM - Revista de Administração Mackenzie*. 2014; 15(6):201-219. doi: 10.1590/1678-69712014/administracao.v15n6p201-219
29. Vilas AA , and Morin E. Quality of working life in public higher education institutions: The perception of Brazilian and

Canadian professors. *International Journal of Business and Social Science*. 2013; 4(12):67-77.

30. Pedroza V, Fischer F, Alberto O, and Advincula R. Factors associated with work ability and perception of fatigue among nursing personnel from Amazonia. *Rev. bras. epidemiol.* 2011; 14 (4).

Cite this article as: Amal Mahmoud Goda, et al. Associations Between Quality of Work Life and Depression, Anxiety, and Perceived Fatigue among Teaching Staff of Faculty of Medicine. *Egyptian Journal of Community Medicine*, 2023;41(2):93-100.

DOI: 10.21608/ejcm.2022.154602.1230