

Anxiety and Depression among Egyptian Working Physicians during COVID-19 Pandemic

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Abstract

Background: COVID-19 has been declared as a pandemic that has compelled health systems to operate around the clock. The increased workload has developed psychiatric problems among frontline physicians where they reached burnout due to the high stress they face. Hence, their ability to work effectively decreased. **Objectives:** Assess the prevalence of anxiety and depression among working physicians during the pandemic, analyze their influencing factors, and evaluate their effect on the productivity of physicians' work. **Method:** A cross-sectional study was carried out among working physicians in Egypt inquiring about their socioeconomic status, anxiety, depression, expected influencing factors, and work productivity. The questionnaire was administered to 400 physicians in contact with the disease. **Results:** A total of 40% of the participating physicians suffered from anxiety and about 35% suffer from depression. Lack of support at work, fear of depletion of certain drugs and PPE during work in hospitals, having higher qualifications, increased workload, and being married were the most influencing factors for developing anxiety. Lack of support at work followed by increased workload, fear of PPE depletion, and working in hospitals were the most influencing factors for developing depression. A significant positive correlation was found between the impaired work productivity, anxiety, and depression. **Conclusion:** Anxiety and depression are prevalent among physicians during COVID-19 pandemic. Socioeconomic and work-related factors significantly affect the development of these diseases which evidently affect their work productivity.

Keywords: Anxiety, COVID-19, Depression, Physicians, Work productivity,

Introduction

In December 2019, China announced the emergence of the new pneumonia coronavirus among Wuhan residents from which it spread around the world. In February, the World Health Organization has declared COVID-19 as a global pandemic.⁽¹⁾ According to the data released from the Egyptian Ministry of Health and Population, there is a rising number recorded for COVID-19 cases.⁽²⁾


Being on the frontlines facing this pandemic, physicians are involved in the diagnosis, management, and prevention of

this emerging disease through long and exhausting work shifts.

They are exposed to severe mental and psychological distress that may exceed their coping skills. Early Egyptian studies highlighted the psychological problems emerged among healthcare providers during the pandemic. Anxiety, depression, sleep disorders, and psychological distress are the most frequently reported psychological problems.⁽³⁾

In the previous studies conducted on physicians during severe acute respiratory syndrome (SARS) pandemic, it was reported

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that anxiety and depression may develop among physicians due to high workload, lack of personal protective equipment (PPE), increasing number of new suspected and diagnosed cases, fear of being infected or being a source of infection to their families, being stigmatized, and lack of adequate support from people and media.⁽⁴⁾

The absenteeism of working physicians, decrease in their productivity, and unacceptable performance are supposed to be more evident during the pandemic.⁽⁵⁾

Physicians' psychological maintenance is a mandatory issue that affects his well-being and ability to cope with the work overload they face during the pandemic. Also, the majority of studies about COVID-19 are concerned with the disease epidemiology and its effect on infected patients, but there is a lack of studies highlighting the occurrence of anxiety and depression among physicians in Egypt.

So, this study aims at assessing the prevalence of anxiety and depression symptoms among working physicians during the pandemic, analyzing their influencing factors, and evaluating their effect on the physicians' work productivity.

Methods:

This cross-sectional study was conducted on the working physicians in different specialties in Menoufia governorate, Egypt, during the period from April 2020 to May

2021. The present study was approved by the ethics committee in the Faculty of Medicine, Menoufia University (5/2020/FAML).

The physicians completed validated questionnaires in 10 to 15 minutes. The physicians who were on a long leave and not working in direct contact with COVID-19 cases were excluded from the study. The questionnaires started with an explanation of the study objectives and data confidentiality.

The physicians' informed consents were taken to complete the questionnaires. The minimum required sample size was calculated to be 343 physicians based on 36% anxiety prevalence⁽⁶⁾, with a 95% confidence level and 10720 total physician population in Menoufia Governorate (based on the Menoufia medical syndicate data).

Sample size was raised by 20% to be 412 physicians to compensate for dropouts due to incomplete questionnaires. A total of 400 complete questionnaires were collected after the exclusion of 12 incomplete questionnaires. The physicians were selected from primary care settings and hospitals by the proportional allocation method.

Three primary care settings and two hospitals were selected to fulfill the calculated sample size by simple random sampling technique. The physicians who were expected to deal directly with the disease were selected for participation by simple random sampling technique.

A pilot study was conducted on 40 physicians to check the questionnaire's feasibility. Data were collected daily for 3 months during the participants' lunch break hour.

The questionnaire consisted of 5 parts. The first part was about the physicians' socioeconomic data determined by Fahmy et al.,⁽⁷⁾ the second part was a Generalized Anxiety Disorder (GAD-7) questionnaire to assess the anxiety level among physicians during the last two weeks before the study⁽⁸⁾ which included questions about feeling nervous or anxious, not being able to stop or control worrying, worrying too much about different things, trouble relaxing, being so restless that it is hard to sit still, becoming easily annoyed or irritable, and feeling afraid as if something awful might happen. A cutoff score of ≥ 5 is considered to have anxiety symptoms or disorder.

The third part of the questionnaire was a Patient Health Questionnaire-9 (PHQ-9) used to measure the depression symptoms during the last two weeks before the study.⁽⁹⁾ It includes questions about having little interest or pleasure in doing things, feeling down, depressed, or hopeless, trouble falling, staying asleep, or sleeping too much, feeling tired or having little energy, having poor appetite or overeating, feeling bad about yourself, trouble concentrating on things such as reading a newspaper or

watching television, and moving or speaking slowly that other people could have noticed, or the opposite of this where you can be so fidgety or restless that you have been moving around a lot more than usual and having thoughts that you would be better off dead or hurting yourself. A cutoff of ≥ 5 was considered to have depression symptoms or disorder.

The answers of both GAD-7 and PHQ-9 questionnaires were categorized into 4 answers; not at all (0), several days (1), more than half days (2), and nearly every day (3).

Work productivity was measured using the Work Productivity and Activity Impairment Questionnaire: General Health, version 2.0 in the fourth part.⁽¹⁰⁾ This questionnaire was used to assess the effect of anxiety and depression on work productivity in the last 7 days prior to the study.

It includes questions about the number of hours that were missed from work as sick leave, going late to work or leaving early because of feeling anxious and/or depressed, number of hours missed due to other reasons as vacation or official holiday, and number of hours spent actually on work. Also, a question was asked about how much feeling anxious and/or depressed affected the participant's ability to do regular daily activities other than working at a job.

This question was answered at a scale from zero (no effect on daily activities) to 10

(completely prevented from daily activities). Higher values indicate greater impairment and lower productivity.

The last part of this questionnaire was designed from the literature review to study the most influencing factors for developing anxiety and depression symptoms. This part included questions about socioeconomic factors such as age, sex, marital status, specialty, workplace, qualifications, and socioeconomic standard.

The participants were asked about personal factors such as having a chronic illness, living with parents and children, and feeling stigmatized to work with infected cases or to get infected and become a source of infection to the surrounding community so they were avoided.

Also, they were asked about work-related factors including fear of PPE or certain drugs depletion, fear of getting infected during work or facing suspected or confirmed cases of COVID-19, increased workload, and lack of administration logistic, physical, financial, and psychological support at work.

Statistical analysis:

All data were collected, tabulated, and statistically analyzed using the Statistical Package of Social Sciences (SPSS) version 20.0 for Windows (SPSS Inc., Chicago, IL, USA) where the following statistics were applied:

Student t-test was used for comparing quantitative variables with independent parametric data, expressed as mean and standard deviation, while Fischer Exact test or Chi-square was applied for qualitative variables, expressed as a percentage. Pearson correlation was used to determine the correlation between quantitative variables.

Binary multivariate logistic regression analysis for binary outcome was used to detect the most evident influencing factors which cause anxiety and depression facing the participants. Statistical significance was determined to be less than 0.05.

Results:

The current study showed that 40% of the studied physicians experienced anxiety and 34.8% had depressive symptoms (Figure 1).

The present study examined the socioeconomic influencing factors of anxiety among the studied physicians, finding that anxiety was more evident among married physicians (68.2%), internists (52.5%), physicians working in hospitals (91.9%), and those who attain postgraduate studies (87.5%) (p value = 0.04, <0.001, 0.005, 0.02, respectively) (Table 1).

Moreover, examining the personal influencing factors demonstrated no statistically significant difference among physicians who experienced anxiety and

those who did not in terms of having a chronic illness, living with parents and/or children, and feeling stigmatized by the community and social media on experiencing anxiety (Table 2).

Studying the work-related influencing factors showed that the physicians who feared depletion of personal protective equipment (PPE) (93.8%) or certain drugs (90%), faced suspected or confirmed cases of COVID-19 (55%), experienced increased workload (31.9%), felt lack of support at work (49.3%) suffered more from anxiety (p-value <0.001, <0.001, <0.001, 0.01, <0.001 respectively) (Table 2).

On performing the logistic regression for these influencing factors, it was found that feeling lack of support at work, followed by fears of certain drug depletion, fear of PPE depletion, working in hospitals, having qualifications higher than MBChB, increased workload, and being married (OR 24.9, 9.1, 6.9, 6.1, 3.2, 2.1 and 1.25 respectively) were the most influencing factors for developing anxiety among the studied physicians (Table 3).

On studying the socioeconomic influencing factors of depression among the studied physicians, it was found that depression was more evident among physicians working in hospitals (P-value 0.02) (Table 2).

On studying the personal influencing factors, it was found that there was a non-statistically significant effect of having a chronic illness, living with parents and/or children, and feeling stigmatized by the community and social media on experiencing depression (Table 2).

On studying the work-related influencing factors, physicians who feared PPE depletion (95.7%), experienced increased workload (36.7%), and felt a lack of support at work (42.4%) suffered more from depression (p-value <0.001) (Table 2).

On performing the logistic regression for these influencing factors, it was found that feeling lack of support at work, followed by increased workload, fear of PPE depletion, and working in hospitals (OR= 5.8, 3.9, 2.8, and 2.1, respectively) were the most influencing factors for developing depression among the studied physicians (Table 3).

On studying the correlation between anxiety and depression as well as the work productivity of the studied physicians, it was found that there was a statistically significant positive correlation between the impaired work productivity, anxiety, and depression (p-value <0.001) (Figure 2).

Discussion:

In the current study, the prevalence of anxiety symptoms was 40% among

participants, while the prevalence of depressive symptoms was 34.8%. This is similar to the online cross-sectional study conducted on 1257 healthcare workers in China by Lai et al. ⁽¹¹⁾ which used the same questionnaires. Lai et al. reported that about 51% of physicians suffered from depression and 44.7% suffered from anxiety. This high prevalence is due to the stressors they face during their work.

A cross-sectional study conducted on 79 doctors and 86 nurses in Gansu, China by Zhu et al. ⁽¹²⁾ which used self-rating anxiety scale (SAS) and self-rating depression scale (SDS) reported that only 11.4% of the doctors suffered from anxiety and more than half of the frontline physicians suffered from depression during the COVID-19 pandemic. This difference may be due to the difference in data collection tools.

On studying the socioeconomic influencing factors of anxiety and depression among the participating physicians, anxiety was more evident among married physicians.

This is similar to a cross-sectional study conducted in Turkey on 442 physicians ⁽¹³⁾ which used the Depression, Anxiety, and Stress (DAS) scale for defining the influencing factors for developing these psychiatric problems, showing that being married is an important factor for developing

anxiety among frontline physicians. The participants were concerned about their families for fear of infection transmission and disabilities or death they may face if they got infected and long working hours that affected their relationships. Also, anxiety score was higher among internist physicians rather than surgeons and primary care physicians.

This result is consistent with the results of a cross-sectional study conducted in a teaching hospital that has 332 residents in Istanbul, Turkey ⁽¹⁴⁾ using Beck depression inventory (BDI) where the researchers reported more anxiety and depression among internist physicians due to being more exposed to the patients in advanced stages of the disease with high viral load.

It was found that anxiety and depression were more evident among physicians working in hospitals than those working in primary care settings; this is similar to the online cross-sectional study of Florin et al., ⁽¹⁵⁾ which was conducted on 1515 radiologists working in both primary and tertiary care facilities using Hospital Anxiety and Depression Scale for data collection where the researchers reported that physicians working in public hospitals suffered more from anxiety as they were more in a direct contact with the advanced stages of the disease.

Higher anxiety scores were observed among physicians with higher qualifications than MBBCh. This is similar to the American cross-sectional study of Shanafelt et al.⁽¹⁶⁾ conducted on 206 physicians which used the same tools of investigation as the present study and the researchers found that psychiatric problems, especially anxiety and depression, were of higher incidence among advanced practice clinicians with postgraduate studies being the leaders of responsibility for the patients and the guide for work compared to novice physicians.

There was no significant relationship between the age and gender of physicians and their anxiety and depression scores; this is similar to the study conducted in Wuhan, China⁽¹¹⁾ using the same study tools.

However, this finding differed from a Chinese meta-analysis of 21 studies that used the Structured Clinical Interview for the DSM-IV (SCID) or the Anxiety Disorder Interview Schedule (ADIS). This meta-analysis showed that male physicians were more prone to develop anxiety,⁽¹⁷⁾ while in another Turkish study, female physicians had higher scores.⁽¹⁴⁾

This can be explained by the total involvement of all physicians in Egypt, so the workload was distributed equally regardless of age and gender difference due to the high disease burden.

There was no significant difference found between the physicians who suffer from chronic illness and those who don't in experiencing anxiety and depression. This is in disagreement with the Chinese study of Zhu et al.⁽¹²⁾ which showed that the physicians with a chronic illness suffered more from psychiatric issues.

This can be explained by the fact that some of the physicians with chronic illnesses in our study had fewer work duties which made them feel less anxious and depressed.

Also, no significant difference was found between the physicians living with parents and children and those who don't in suffering from anxiety and depression. This is different from a cross-sectional online study conducted in India on 433 participants⁽¹⁸⁾ that used the same investigation tools which stated that the presence of elderly people and children in the same household represented a stressor in the physicians' lives where they are afraid to transmit the infection to them which was an eminent influencing factor for developing anxiety and depression.

The different findings in our study can be explained that many physicians considered being surrounded by their family as a source of peace and support during their stressful work circumstances.

Moreover, there was no significant difference among the physicians as regards

feeling stigmatized and avoided by the community for fear of infection.

This is different from an online cross-sectional study conducted in Egypt on 509 physicians⁽¹⁹⁾ which showed that there was a high mean score of COVID-19 stigma that the physicians suffered from, especially those working in fever hospitals and this affected their psychological health.

The discrepancy in findings may be because the previously mentioned study was conducted early in the disease course in June 2020, while our data was collected nearly at the end of the first wave in October 2020 when the community had better understood the disease and appreciated the physicians' roles during the pandemic.

On studying the work-related influencing factors in the current study, physicians who feared the depletion of personal protective equipment were more prone to anxiety and depression which was similar to the Turkish cross-sectional study of Elbay et al.⁽¹³⁾ which showed more psychiatric problems among physicians due to the fear of PPE shortage.

Also, the exposure to the circumstances of certain drugs depletion was another influencing factor for experiencing anxiety which is similar to a longitudinal study conducted in China on 30 healthcare workers and 49 non-healthcare workers that used General Health Questionnaire-12

(GHQ-12) to assess anxiety, depression, and stress.

The study was conducted during the severe acute respiratory syndrome (SARS) outbreak which showed more psychologically affected healthcare workers due to fear of ineffective drugs or shortage of appropriate drugs.⁽²⁰⁾

Facing suspected or confirmed cases of COVID-19 was an observed influencing factor for developing anxiety among physicians which was similar to a cross-sectional study conducted in France which showed that fear from exposure to the virus was an important influencing factor for psychiatric symptoms.⁽¹⁵⁾

The increased workload was also an important influencing factor for developing anxiety and depression which is similar to the Turkish online cross-sectional of Hacimusalar et al.⁽²¹⁾ conducted on 1121 healthcare workers and 1035 non-healthcare workers State-Trait Anxiety Inventory (STAI).

The study reported an increase in the severity of anxiety symptoms by increasing the work hours, night shifts, and increased number of patients. Moreover, feeling lack of logistic, physical, psychological, and financial support at work was a significant influencing factor for developing anxiety and depression.

This is similar to the cross-sectional study of Al-Sulais et al.⁽²²⁾, conducted on 529 physicians in Saudi Arabia which used the Impact of Event Scale (IES) to assess the psychological impact of the pandemic on physicians, finding that the more the physicians feel lack of psychological support, the more development of psychological symptoms takes place and accordingly they suffer more from anxiety.

There was a statistically significant positive correlation between the impaired work productivity, anxiety, and depression which is similar to the American cross-sectional study of Erickson et al.⁽²³⁾ conducted on 81 participants in which the data were collected from Beck Anxiety Inventory (BAI) for assessing anxiety, Work Productivity and Activity Impairment Questionnaire (WPAI), and medical records. Erickson et al. observed that experiencing psychiatric problems, especially anxiety and depression, decreased the physicians' productivity at work.

Conclusion:

Anxiety and depression are prevalent among working physicians due to the COVID-19 pandemic. Being married, working in hospitals, having higher qualifications, fearing the shortage of PPE and certain drugs, increased workload, and lack of support from the managers are the

most frequent influencing factors for developing these psychiatric problems.

Limitations for the study: The data collection for this study started in a critical period after three months of the pandemic declaration in Egypt. The time allocated for data collection was so sensitive and the physicians were too busy to collaborate; therefore this obliged the researchers to collect data in one governorate.

This limits the generalization as the healthcare system is not equally supported at the beginning of the pandemic. Some hospitals worked only for COVID-19 cases and received all the medical and financial support compared to the other hospitals which also faced the disease but with lower support. Also, there are social, educational, and cultural factors that vary from one governorate to another which may have an impact on dealing with the pandemic.

So, it is recommended to conduct more studies comparing the psychological problems among physicians at the beginning of the pandemic and this current time and also to conduct it in more governorates.

Conflict of interest: There is no conflict of interest in this study

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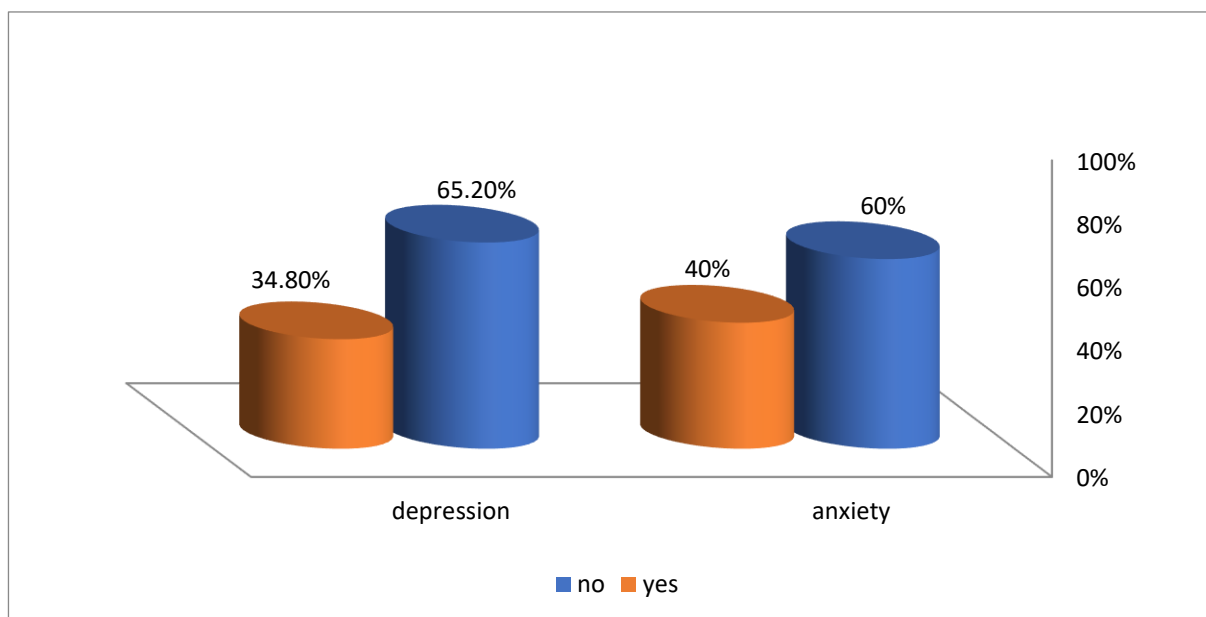


Figure (1): Prevalence of anxiety and depression among the studied groups

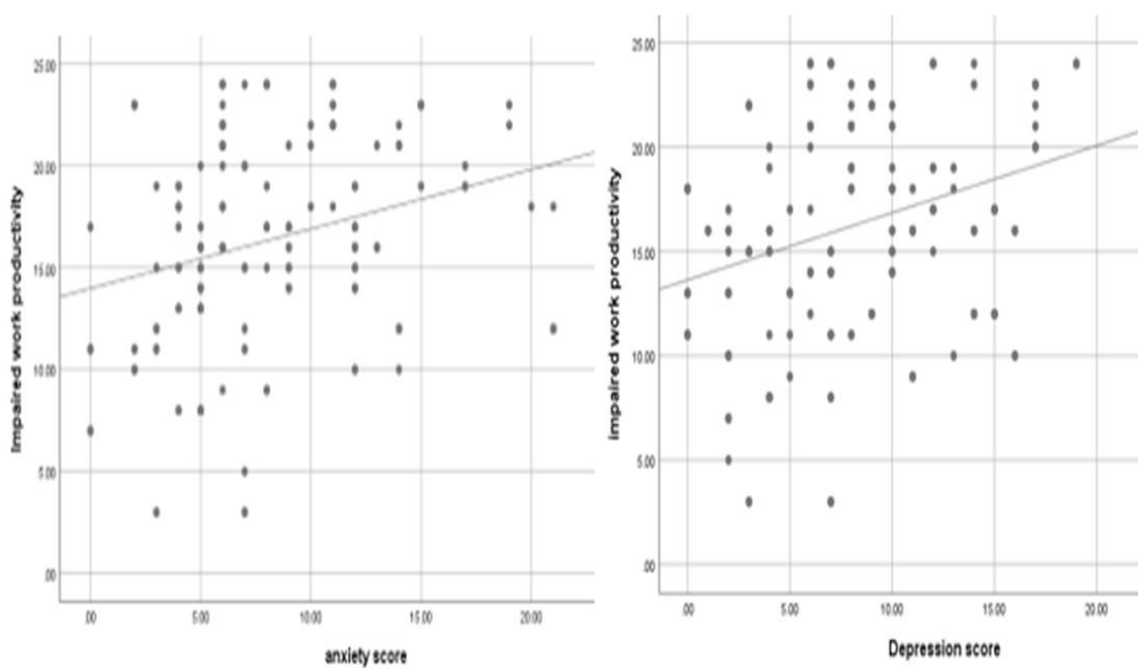


Figure (2): Significant positive correlation (p -value < 0.001) between anxiety and depression scores and impaired work productivity among the studied physicians

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Table (1): Socioeconomic influencing factors of anxiety and depression among the Egyptian physicians

Item	Anxiety (160)		No anxiety (240)		X ² (P-value)	OR (CI 95%)	Depression (139)	No depression (261)	X ² (P-value)	OR (CI 95%)	Total (%) (400)
Socioeconomic influencing factors											
Age (mean ± SD)	33.3±4.1	32.4±4.2	1.1(0.07)	-----			33.5±3.8	32.4±4.3	1.04 (0.3)	-----	32.8±4.16
Gender:											
▪ Male	31(19.4)	60(25.0)	1.7 (0.22)	1.4(0.9-2.3)			26(18.7)	65(24.9)	1.9 (0.09)	1.4(0.8-2.4)	91(22.8)
▪ Female	129(80.6)	180(75.0)					113(81.3)	196(75.1)			309(77.3)
Marital status:											
▪ Unmarried	51(31.8)	57(23.7)	3.2 (0.04)	0.67(0.4-0.97)			37(26.6)	71(28.4)	0.02 (0.5)	1.03(0.6-1.6)	108(27.0)
▪ Married	109(68.2)	183(76.3)					102(73.4)	190(71.6)			292(73.0)
Specialty:											
▪ Primary care physician	56(35.0)	67(27.9)		1			48 (34.5)	75(28.7)		1	123(30.8)
▪ Internist	84(52.5)	97(40.4)	19.3 (<0.001)	1.5 (1.1-2.7)			67 (48.2)	114(43.7)	5.4 (0.06)	0.7 (0.3-1.01)	181(45.3)
▪ Surgeon	20(12.5)	76(31.7)		2.1 (1.9-5.2)			24 (17.3)	72(27.6)		1.2 (0.8-3.7)	96(24.0)
Workplace:											
▪ Primary care settings	13(8.1)	43(17.9)	7.6 (0.005)	2.5 (1.28-4.76)			12(8.6)	44(16.9)	5.1 (0.02)	2.1(1.1-4.2)	56(14.0)
▪ Hospitals	147(91.9)	197(82.1)					127(91.4)	217(83.1)			344(86.0)
Qualifications:											
▪ No postgraduate studies	20(12.5)	50(20.8)	4.6 (0.02)	1.84(1.05-3.23)			20(14.4)	50(19.2)	1.4 (0.1)	1.4(0.8-2.5)	70(17.5)
▪ Postgraduate studies	140(87.5)	190(79.2)					119(85.6)	211(80.8)			330(82.5)
Socioeconomic standard:											
▪ Low	18(11.3)	33(13.8)					12(8.6)	39(14.9)			51(12.8)
▪ Moderate	106(66.3)	145(60.4)	1.4 (0.49)	-----			96(69.1)	155(59.4)	4.6 (0.9)	-----	251(62.7)
▪ High	36(22.5)	62(25.8)					31(22.3)	67(25.7)			98(24.5)

Table (2): Personal and work-related influencing factors of anxiety and depression among the Egyptian physicians

Item	Anxiety (160)	No anxiety (240)	X ² (P-value)	OR (CI 95%)	Depression (139)	No depression (261)	X ² (P-value)	OR (CI 95%)
Personal influencing factors								
▪ Having chronic illness	22(13.8)	19(7.9)	3.6(0.06)	1.9(1.1-3.6)	27(19.4)	24(9.2)	0.9(0.2)	1.4(0.7-2.7)
▪ Living with parents and/or children	153(95.6)	231 (96.3)	0.6 (0.09)	2.1(0.8-5.1)	132(94.9)	240(91.9)	1.3(0.3)	1.7(0.7-3.9)
▪ Feeling Stigmatized from community	89(55.6)	63 (26.3)	0.2(0.3)	1.1(0.7-1.7)	100(71.9)	52(19.9)	0.03(0.9)	0.9(0.6-1.5)
Work-related influencing factors								
▪ Fear of PPE depletion	150(93.8)	75(31.3)	38.2(<0.001)	11.5(4.5-29.3)	133 (95.7)	97(37.2)	25.6(<0.001)	7.2(3.1-17.1)
▪ Fear of certain drugs depletion	144(90.0)	107(44.6)	18.9(<0.001)	2.03(1.4-2.9)	138 (99.3)	211(80.8)	0.09(0.4)	0.9(0.6-1.5)
▪ Fear getting infected during work	136(85)	130(54.2)	0.05 (0.8)	1.07(0.6-1.9)	115 (82.7)	223(85.4)	0.5(0.3)	0.8(0.5-1.4)
▪ Facing suspected or confirmed cases of COVID-19	88(55.0)	86(35.8)	14.3(<0.001)	2.2(1.5-3.3)	68(48.9)	106(40.6)	2.5(0.07)	1.4(0.9-2.1)
▪ Increased workload	51(31.9)	50(20.8)	6.2(0.01)	1.7 (1.06-2.7)	51(36.7)	50(19.2)	14.8(<0.001)	2.4(1.5-3.9)
▪ Lack support at work	79(49.3)	28(11.7)	69.7 (<0.001)	7.4(4.4-12.2)	59(42.4)	48(18.4)	26.8(<0.001)	3.3(2.1-5.2)

Table (3): Logistic regression analysis of significant influencing factors of anxiety and depression among working physicians in Egypt

Anxiety	B	Exp. (B)	95% CI*	P-value
Married physicians	1.4	1.25	1.1-4.6	<0.001
Primary care physicians	0.4	0.6	0.3-2.1	0.13
Working in hospitals	1.8	6.1	2.2-16.2	<0.001
Higher qualifications than MBBCh	1.2	3.2	1.3-7.6	0.009
Fear of PPE depletion	1.9	6.9	2.4-20.1	<0.001
Fear of certain drugs depletion	2.4	9.1	3.7-24.9	<0.001
Facing suspected or confirmed cases of COVID-19	0.4	1.4	0.8-2.4	0.19
Increased workload	0.7	2.1	1.2-3.8	0.01
Lack support at work	3.2	24.9	11.1-55.9	<0.001
Depression				
Working in hospitals	0.8	2.1	1.1-4.5	0.04
Fear of PPE depletion	1.8	2.8	2.4-4.3	< 0.001
Increased workload	1.1	3.9	1.7-4.6	< 0.001
Lack support at work	1.4	5.8	2.4-6.5	< 0.001

*Confidence interval p-value significant at <0.05
 For anxiety: model chi square= 8.1, Hosmer and Lemeshow test= 2.7, p-value=0.09, % correctly predicted = 94.2
 For depression: model chi square= 7.3, Hosmer and Lemeshow test= 3.2, p-value=0.2, % correctly predicted = 90.0

الملخص العربي

القلق والاكتئاب بين الاطباء المصريين العاملين خلال جائحة كوفيد-19

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الخلفية: أعلنت الصين في ديسمبر 2019 ظهور فيروس كورونا الجديد الذي يسبب الالتهاب الرئوي والذي انتشر الي جميع أنحاء العالم وفي فبراير، أعلنت منظمة الصحة العالمية جائحة كوفيد-19. يتعرض الأطباء العاملون الي للقلق والاكتئاب بسبب عبء العمل الكبير، ونقص معدات الحماية الشخصية، والعدد المتزايد من الحالات المشتبه بها والتشخيص حديثاً، والخوف من الإصابة أو أن يكونوا مصدرًا للعدوى لأسرهم وعدم وجود ما يكفي من دعم المجتمع ووسائل الإعلام وقد يؤثر ذلك على إنتاجيتهم وأدائهم غير المقبول في هذا الوباء وقد اهتمت معظم الدراسات بوبائيات المرض وتأثيره على المرضى ، ولكن هناك نقص في الدراسات حول القلق والاكتئاب بين الأطباء في مصر. **الهدف:** تهدف الدراسة الي تقييم انتشار وعوامل خطورة القلق والاكتئاب بين الأطباء العاملين المصريين خلال جائحة كوفيد-19 وتحديد ارتباطها بإنتاجية عملهم. **طرق البحث:** تمت الدراسة على الأطباء العاملين في مصر خلال الجائحة من خلال دراسة مقطعية علي 400 طبيب يعمل في الخطوط الامامية لمواجهة الجائحة من مختلف التخصصات عن طريق استبيان من ابريل 2020 الي مايو 2021 و يتضمن أسئلة خاصة بالمستوي الاجتماعي للأطباء و أسئلة لتحديد القلق و الاكتئاب و أسئلة لقياس إنتاجية العمل و أسئلة خاصة بالعوامل المؤثرة علي القلق و الاكتئاب. **النتائج:** يعاني 40% من عينة الأطباء من القلق و 34.8% منهم من الاكتئاب وظهر ذلك أكثر بين الأطباء المتزوجين و الأطباء في التخصصات الباطنية و الذين يعملون بالمستشفيات و من لديهم دراسات عليا. يظهر القلق والاكتئاب بشكل أكبر بين الأطباء الذين يخافون من نقص معدات الحماية الشخصية و نقص الادوية و الذين يخافون من العدوي خلال العمل و الذين يعانون من زيادة عبء العمل و الذين يشعرون بنقص الدعم وظهر ارتباط طردي وثيق بين حدوث القلق والاكتئاب و نقص إنتاجية العمل لدي الاطباء. **الخلاصة:** يظهر القلق والاكتئاب بين الاطباء في مواجهة جائحة كوفيد نتيجة لأسباب اجتماعية وأسباب تتعلق بطبيعة العمل . **التوصيات:** يجب ادراج برامج الدعم النفسي ومراعاة أسباب القلق والاكتئاب بين الأطباء لزيادة معدل إنتاجيتهم.