

Original Research

Psychological challenges faced community pharmacists during COVID-19 pandemic: A cross-sectional study

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Abstract

Background: There is an immense impact of the COVID-19 outbreak on the psychological behavior of healthcare providers due to changing of the working load, financial issues, applying the preventative measures during dealing with the patients, etc. This in turn affects their delivery of the health services. Yet, very few studies have assessed these psychological alterations in community pharmacists. **Objective:** We aimed to assess the psychological and mental health changes of community pharmacists during COVID-19 early pandemic. **Methods:** A descriptive cross sectional study questionnaire promoted by both multiple social media platforms and face-to-face interview for community pharmacists in different regions of Alexandria, Egypt between July and September 2021. **Results:** A total of 1054 community pharmacists (males; 59.8% and females; 40.2%) participated. Young and single pharmacists had significantly high feelings of anxiety, insomnia, and suffering from eating disorders compared with elder and married pharmacists ($p < 0.05$). Full-time employed community pharmacists became significantly more nervousness and felt anxious than part-time pharmacists. Female, full-time and less experienced (< 5 -year practice) pharmacists had significantly high reports of crying during their working time, and feeling hopeless and uncertain ($p < 0.05$). **Conclusion:** COVID-19 has high impact on the mental health of community pharmacists. In the future, regulatory bodies should implement proactive pandemic preparedness programs for sensitive categories of community pharmacists in order to ensure delivering of high quality of essential health services to the community.

Keywords: Community pharmacists, COVID-19, mental health, pandemic, psychological stress

INTRODUCTION

World Health Organization (WHO) reported global 627,966,547 confirmed COVID-19 cases and 6,579,502 deaths by the end of October 2022¹. It is difficult to define if the COVID-19 pandemic is over now, or not yet; however, its impact on social,

mental, economic, and political transition has enormous implications². It has produced a stressful working condition, financial problems, precocious communication procedures, etc. In the early pandemic period, there was an immediate global lockdown in many countries for many months, leading to enormous psychological and social ramifications at all levels of society. The first COVID-19 case was reported in Egypt for the first time in February 2020³. The Egyptian Ministry of Health and Population swiftly adopted containment management measures to limit the spread of the pandemic such as promoting hygiene, frequently washing hands, social distancing, curfew during the first wave, quarantine, a ban on all unvaccinated employees from entering their workplaces in all governmental sectors and prohibiting large mass gatherings. Business settings such as restaurants and malls operated at 70 percent of their capacities⁴. Those restriction measurements have caused a great psychological impact on the adult Egyptian population⁵.

Pharmacists played a great role in health promotion during the COVID-19 pandemic^{6,7}. Community pharmacists are the most accessible healthcare providers. They are obliged to continuously provide the community with medication supply and healthcare services remaining adaptable during these hard-confusing times. They help with disease prevention, health promotion, medication dispensing, generics substitution, making an appropriate referral of suspected cases, patient consultations, chronic disease management, home delivery service, as well as providing telehealth and multimedia education using the technology⁸. They work in direct contact with infected patients. Their workload increased nearly five times due to the pandemic

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restrictions and curfew⁹. They had to take extra workload to cover up for medically sick; or even suspected sick, colleagues. Besides, the pharmacy administration reduced the number of staff during a working shift to increase social distancing and to reduce the crowdedness, which increased the workload of the pharmacists. Lack of personal protective equipment such as counter shields in the pharmacies was also reported¹⁰. All of the previously mentioned factors made the community pharmacist occupation one of the extremely high-risk overworked jobs, amid the pandemic⁹.

It has been reported that healthcare workers have about three times increased risk for COVID-19 infection¹¹. Countries such as Ireland¹² and Australia¹³ have previously reported the impact of the COVID-19 pandemic on the mental health and well-being of community pharmacists. In addition to the risk of infection, there was a great concern for the stress-induced acute and chronic impact on the mental health of healthcare providers. Meanwhile, very few publications explored the social and psychological impact of the pandemic on community pharmacists. The mental and psychological changes of community pharmacists have a direct influence on the provision of health care services to the community. So, they should be well studied to direct the regulatory bodies for adopting suitable proactive pandemic preparedness programs for community pharmacists. Such programs will avoid a reduction of the provided healthcare services in these urgent stressful times. We aimed to assess the prevalence of mental stress and emotional burden during the first wave of the pandemic among community pharmacists in Egypt and to explore the most susceptible categories of community pharmacists to such stressful conditions.

METHODS

A descriptive cross-sectional study design was performed. The designed questionnaire was a modified form from the validated existing questionnaire by Johnston et al⁹, the collected data from the Centers for Disease Control and Prevention (CDC)¹⁴, the World Health Organization (WHO)¹, the International Pharmaceutical Federation (FIP)¹⁵, the Egyptian ministry of health guidelines¹⁶, as well as the opinion of two pharmacy practice academic bilingual specialists. The draft questionnaire was pilot-tested by a random sample of 50 community pharmacists to evaluate the clarity and context of the questions and their relevance to the study objectives. Cronbach Alpha was measured for the reliability of each scale. Minor modifications were then undertaken accordingly.

Questionnaire

The questionnaire instrument was a modified form of the general Health Questionnaire (GHQ-12): a self-reporting instrument for the detection of mental disorders in the community and in non-psychiatric clinical settings¹⁷. Briefly, it included a total of forty-five questions in five sections. The first section contained seven questions collecting information on community pharmacists' socio-demographic data (age, marital status, gender, and presence of children) and their mental

and general health status before the COVID-19 pandemic. The second section contained 5 questions to include participants' occupational data (years of practice in pharmacy, current employment status, pharmacy ownership, and delivery service provided by the pharmacy during the COVID-19 lockdown). The third section included 8 questions assessing life changes they faced during the first wave of the COVID-19 pandemic in Egypt (Feb 2020-June 2020), such as the impact on finance, the changes in employment status, being infected by COVID-19, and the changes in smoking behavior. The fourth section contained eleven questions assessing changes in the workplace during the COVID-19 pandemic, such as working hours, personal protection equipment in the pharmacy, infection control protocol, masks, medications, sanitizing products supply, caring for COVID-19-positive patients, and the changes in the social engagement with colleagues at work. The last section contained fourteen questions focusing on community pharmacists' mental health change during the COVID-19 pandemic, including feelings of nervousness, anxiety, fear, social withdrawal, eating disorders, sleep disorders, and the impact on physical health.

Sample Size and Sampling Technique

The sample size was calculated using an online calculator; the total number is 79361; the official number of registered community pharmacists in Alexandria, Egypt according to statistics of the Syndicate for Pharmacists in Alexandria, Egypt 2019, and the population proportion is 50%. Thus, the minimum sample size was 383 participants with a margin error of 9.6%¹⁸.

The sampling technique was a probabilistic type of technique which was through both an online questionnaire spread through social media (Facebook, Twitter, etc.) and face-to-face interview in community pharmacies in different regions in Alexandria, Egypt.

Participants

All licensed pharmacists who practiced in a community pharmacy in Alexandria, Egypt were eligible to participate in our study. Only one pharmacist was allowed to be face-to-face interviewed in each pharmacy. The interview was completed in an average of 15 - 20 minutes.

Ethical approval

Approval to conduct the study was obtained from the ethical committee of the faculty of pharmacy, at Pharos University in Alexandria, Egypt (Study number: PUA01202208283040). Participants were required to sign a consent and be given a briefing on the study's scope and objectives before conducting the interview. They have been informed of the voluntary nature of participation in this study.

Statistical analysis

Data were analyzed using IBM SPSS software version 27.0. (Armonk, NY: IBM Corp). Data was described by frequency and percentage. The Kolmogorov-Smirnov test was used to verify the normality of distribution. Comparisons between categories for categorical variables were assessed using the Chi-square



test. Monte Carlo correction was used to correct chi-square when more than 20% of the cells had an expected count of less than 5. For abnormally distributed quantitative variables, the Mann-Whitney test and Kruskal Wallis test were applied. The significance level of the obtained results was set at $p \leq 0.05$.

RESULTS

A total of 1054 community pharmacists participated, with a response rate of 93%. Over 50% of the participants were young, ages ranged from 21 to 30 (52%), single (51.9%), and having no children (54.6%). Among them, 59.8% were males and 40.2% were females.

Table 1 provides the demographic data of the participants. The majority (78.6%) of the participants reported no mental health conditions and their health status was very healthy (45.8%) before the COVID-19 pandemic. Moreover, table 1 shows the occupational data of the participants. About 40.7% of pharmacies scheduled two pharmacists per shift during the pandemic and 54.5% were part-time employees. The majority of the pharmacies provided home-delivery service during the COVID-19 pandemic (69.7%). The basic personal protection materials available in the pharmacy for occupational safety included alcohol (89.1%), surgical mask (76.7%), hand sanitizer (65.2%), gloves (61.9%), face shield (45.1), N95 mask (40.6%) and gowns (12.3%). About 0.5% of the pharmacies did not provide

Table 1: Basic socio-demographic and occupational data of the participants. (n = 1054)		
Basic socio demographic and occupational data	No.	Frequency%
Age (years)		
21 – 30	549	52.1
31 – 40	275	26.1
41 – 50	136	12.9
51 – 60	70	6.6
60+	24	2.3
Marital status		
Single	547	51.9
Married	491	46.6
Divorced	16	1.5
Widowed	0	0.0
Gender		
Female	424	40.2
Male	630	59.8
Children		
None	575	54.6
1	93	8.8
2	202	19.2
3	117	11.1
4	42	4.0
4+	25	2.4
Do you have existing mental health conditions before the COVID-19 pandemic?		
Yes	226	21.4
No	828	78.6
Health status before the COVID-19 pandemic		
Very healthy	483	45.8
Fair	347	32.9
Mild health issue	125	11.9
Moderate health issue	97	9.2
Severe health issue	2	0.2
Years of practice in pharmacy		
Less than 5 years	420	39.8

5 – 10 years	331	31.4
11 – 30 years	255	24.2
More than 30 years	48	4.6
How many pharmacists are present per shift		
1	261	24.8
2	429	40.7
3	206	19.5
4	84	8.0
4+	74	7.0
Employment status		
Full-time	480	45.5
Part-time	574	54.5
Pharmacy ownership		
Owner of the pharmacy	470	44.6
Employed pharmacist	584	55.4
Does the pharmacy provide home-delivery service during the COVID-19 lockdown?		
Yes	735	69.7
No	319	30.3
What types of basic personal protection materials were provided by the pharmacy?		
Alcohol	939	89.1
Surgical mask	808	76.7
Hand sanitizer	687	65.2
Gloves	652	61.9
Face shield	475	45.1
N95 mask	428	40.6
Gowns	130	12.3
None	5	0.5
Did the pharmacy implement an infection control protocol to protect employees?		
Yes	810	76.9
No	244	23.1
Was the pharmacy stockpiling masks, medications, and sanitizing products?		
Yes	858	81.4
No	196	18.6

any protection materials for the employees. Overall, most of the pharmacies had an infection control protocol implemented to protect the employees (76.9%) and were stockpiling masks, medications, and sanitizing products (81.4%).

Life changes during the pandemic

Table 2 represents the life changes of participating community pharmacists during the pandemic. More than half of the participants experienced isolation from family or friends (58%) and they spent more time on household chores than before. Worth noting that 30.3% of the participants reported a reduction in their emotional relationships and 12% of them lost their loved one. The pandemic also impacted their financial situation with 42.7% of them facing new health expenses and 33.6% of them losing their income. On the other hand, 16.5%

of the participants, mainly owners of the pharmacy indicated that their income was increased, compared to pharmacists who didn't own the pharmacy ($p < 0.05$). There were also changes in employment status with 47.6% of full-time pharmacists changing to part-time during the pandemic and 38.8% of part-time pharmacists changing to full-time employment. During the first wave of the pandemic, 78% of the participants reported they felt their health safety was threatened by working in the pharmacy.

Changes in the workplace during the pandemic

Table 3 represents changes in the workplace reported by participants. During the pandemic majority of the participants worked longer hours (60%), and had more patients (62.5%) than before. However, most of them considered the precautionary



measures related to COVID-19 in the pharmacy sufficient (79.4%), and 70% of the participants had cared for COVID-19-positive patients. They spent more time counseling patients during the pandemic (91.1%) but felt patients have become ruder or aggressive (51.8%). They reported that their social engagement with their colleagues at work was significantly reduced (67.8%).

Mental health changes during the pandemic

Table 4 presents the mental health changes of participating

community pharmacists during the pandemic. Young (21-30 years old) and single pharmacists experienced significantly greater anxiety and suffering from eating disorders compared with older and married pharmacists during the pandemic ($p < 0.05$). Pharmacists who worked in the pharmacy that provided delivery services or had a family member diagnosed with COVID-19 felt their health safety had been threatened and were significantly more nervous and anxious ($p < 0.05$). On the other hand, male and part-time pharmacists were less nervous and anxious ($p < 0.05$).

Table (2): Distribution of the studied cases according to life changes during COVID-19 pandemic (February-June 2020) (n = 1054)		
Life changes during COVID-19 pandemic (February-June 2020)	No.	%
How did your life change during the pandemic?		
Isolation from family or friends	618	58.6
Reduction in emotional relationships	319	30.3
Loss of loved one	127	12.0
Spend more time taking care of children e.g.	294	27.9
Homeschooling	158	15.0
Spend more time on household chores	492	46.7
Spend more time working at home	155	14.7
Others		
How did the pandemic impact your finance?		
Faced with new health expenses	450	42.7
Struggled to provide the same quality and quantity of the food as before	265	25.1
Reduced food consumption due to the uncertainty	129	12.2
Loss of income	354	33.6
Increase of income	174	16.5
How did the pandemic change your employment status?		
Full-time before the pandemic and part-time during the pandemic	502	47.6
Part-time before the pandemic and full-time during the pandemic	409	38.8
Do not work during the pandemic	143	13.6
Did you participate in any pandemic-related service outside the pharmacy?		
Yes	70	6.6
No	984	93.4
Have you been diagnosed with COVID-19?		
Yes	384	36.4
No	670	63.6
Has your family been diagnosed with COVID-19?		
Yes	600	56.9
No	454	43.1
Did you smoke more than before during the pandemic?		
Yes	99	9.4
No	130	12.3
I'm not a smoker	825	78.3
Did you feel your health safety is threatened by working in the pharmacy		
Yes	822	78.0
No	232	22.0

Table (3): Distribution of the studied cases according to changes in the workplace during the COVID-19 pandemic compared to before (n = 1054)		
Changes in the workplace during the COVID-19 pandemic compared to before	No.	%
Did you work longer hours than before?		
Yes	632	60.0
No	422	40.0
Did you have more or fewer patients than before?		
More	659	62.5
Same	269	25.5
Less	126	12.0
What types of basic personal protection equipment (PPE) are provided by the pharmacy?		
Surgical mask	808	76.7
N95 mask	428	40.6
Gloves	652	61.9
Gowns	130	12.3
Face shield	475	45.1
Alcohol	939	89.1
Hand sanitizer	687	65.2
None	5	0.5
Did the pharmacy implement an infection control protocol to protect employees?		
Yes	810	76.9
No	244	23.1
Was the pharmacy stock piling masks, medications and sanitizing products?		
Yes	858	81.4
No	196	18.6
In your opinion, the precautionary measures related to COVID-19 in the pharmacy you are working at are		
Sufficient	837	79.4
Insufficient	217	20.6
Have you cared for COVID-19 positive patients?		
Yes	731	69.4
No	141	13.4
Not sure	182	17.3
Was time spent providing advice to patients increased during the pandemic?		
Yes	960	91.1
No	94	8.9
Patients have become more rude or aggressive during the pandemic		
Strongly agree	127	12.0
Agree	420	39.8
Undecided	272	25.8
Disagree	198	18.8
Strongly disagree	37	3.5
You have been treated differently because working at the pharmacy during the pandemic.		
Yes	717	68.0
No	337	32.0
Your social engagement with your colleagues at work was obviously reduced during the pandemic		
Yes	715	67.8
No	339	32.2

Table (4): Distribution of the studied cases according to mental health change (n = 1054)

Mental health change	Strongly disagree		Disagree		Undecided		Agree		Strongly agree	
	No.	%	No.	%	No.	%	No.	%	No.	%
Feeling nervous and anxious most of the time	96	9.1	311	29.5	206	19.5	340	32.3	101	9.6
Fears about being the source of spreading COVID-19	52	4.9	118	11.2	115	10.9	458	43.5	311	29.5
Afraid of talking to suspected or confirmed COVID-19 patients in the pharmacy	71	6.7	228	21.6	167	15.8	426	40.4	162	15.4
Social withdraw	71	6.7	239	22.7	264	25.0	364	34.5	116	11.0
Eating disorder (too much or too less)	119	11.3	265	25.1	251	23.8	313	29.7	106	10.1
Cry while working in the pharmacy or after shift	471	44.7	375	35.6	79	7.5	87	8.3	42	4.0
Fear the death of yourself or your family members due to COVID-19 infection	63	6.0	90	8.5	71	6.7	409	38.8	421	39.9
Fears about being infected while working in the pharmacy	47	4.5	93	8.8	82	7.8	508	48.2	324	30.7
Afraid of kissing and hugging your family	60	5.7	120	11.4	85	8.1	442	41.9	347	32.9
Difficulty in sleep	138	13.1	371	35.2	209	19.8	257	24.4	79	7.5
Feeling hopeless and uncertainty	129	12.2	384	36.4	210	19.9	272	25.8	59	5.6
Feeling exhausted due to the heavy workload	54	5.1	120	11.4	103	9.8	508	48.2	269	25.5
Constant worry about your family	34	3.2	53	5.0	46	4.4	448	42.5	473	44.9
Afraid to watch the images of TV news reporting COVID-19 ICU cases	133	12.6	362	34.3	149	14.1	304	28.8	106	10.1

Community pharmacists who had significant fears about being the source spreading COVID-19 infection were non-smokers, had family members diagnosed with COVID-19, and felt that their health safety was threatened during the pandemic ($p < 0.05$). Less experienced (< 5 -year practice), female, full-time, and not yet infected by COVID-19 pharmacists reported crying while working in the pharmacy, and feeling hopeless and uncertain, ($p < 0.05$). They were also afraid to watch the images of TV news reporting COVID-19 in ICU cases.

Suffering from social withdrawal was encountered more significantly in pharmacists who worked part-time, were isolated from family or friends during the pandemic, and had a family member diagnosed with COVID-19 ($p < 0.05$). Also, pharmacists who wore only surgical masks in the pharmacy and had a family member diagnosed with COVID-19 infection had a greater fear of the possibility of death of themselves or their family members ($p < 0.05$). Insomnia was reported significantly more in single, young, those who lost their income, and pharmacists who had health issues before the pandemic ($p < 0.05$). On the other hand, full-time employees felt exhausted due to the heavy workload ($p < 0.05$).

DISCUSSION

Community pharmacists play a crucial role as the frontline and most accessible members of the healthcare team, especially in developing countries^{10,19}. However, their contribution has often been underestimated in society. The COVID-19 pandemic has brought out the importance of community pharmacists in providing healthcare services. As far as we know, this is the first

study to explore the mental stress and emotional burden during the first wave of the pandemic among community pharmacists in Egypt. The study found that community pharmacists were at high risk and experienced significant psychological stress during the global COVID-19 pandemic. Single, female, and young pharmacists were extremely vulnerable and suffered personal, mental, and physical changes, which might impact patient care outcomes. This was consistent with a published research paper from Spain showing high scores on the Impact of Event Scale-Revised (IES-R), a scale that measures the subjective stress response to a traumatic event in the previous seven days, in the same population group.

Job stress was another significant factor addressed in this study. During the pandemic, many community pharmacists had extended working hours and increased workloads. Studies have reported the psychosocial and work-related impacts of the global COVID-19 pandemic on pharmacists, highlighting this issue^{12,20}. Work-related burnout can adversely impact patient care and exert long-term negative effects on society. To protect community pharmacists against burnout and allow them to adjust their personal lives and self-care, work hours need to be carefully planned. Arranging the work schedule of the pharmacists to focus on one activity versus multitasking at a time may lower their cognitive and emotional load, leading to fewer medication errors and improved healthcare outcomes²¹.

Lack of safety precautions for community pharmacists can lead to mental stress

Healthcare workers on the front lines faced the most challenges in COVID-19²². Community pharmacy staff had multiple points of



potential infection, such as interacting with patients, answering their questions, handling printed prescriptions, and receiving payments by physical contact. To prevent the spread of the virus during the pandemic, community pharmacies implemented preventive measures, such as regular decontamination of the pharmacy premises and cleaning shelves, counters, and door handles with disinfectants. Some pharmacies even used a certified cleaning company to disinfect the premises²³. Other measures that can be beneficial include reducing customer contact time and reporting suspected cases promptly. Quota restrictions on the number of patients allowed in the pharmacy according to space area can prevent overcrowding and require individuals to wait outside and take turns. Marking the floor to indicate a safe distance between the customers can also help with social distancing²⁴.

When healthcare professionals get infected at work, such incidents should be considered as work-related injuries and a support system for this kind of injury should be established²⁵. Only 20.6% of the participants in this study reported that the precautionary measures in the pharmacy were inadequate and only 23.1% of them reported that the pharmacy did not follow a standard infection control protocol to protect employees. This result was in line with a previous study showing that most community pharmacists were satisfied with the COVID-19 safety measures and that the majority of recommended precautionary behaviors against COVID-19 spread were adopted²⁶.

Adjustments to home delivery and other services during a pandemic

The COVID-19 pandemic required population-wide lockdowns and targeted quarantines. Home delivery of medication can minimize viral infection spread. Delivering medicines to vulnerable patients such as the elderly or remotely located patients should be provided during the pandemic²⁷. It was reported by a previous Egyptian study that home delivery service was available in about one-half of pharmacies²⁶. In this study, about 69.7% of participants reported that their pharmacies provided medications home delivery services during the pandemic. Delivery drivers need to be educated about COVID-19 preventive measures and have access to necessary personal protective equipment and hygiene products.

Only 6.6% of the community pharmacists interviewed in this study (n=70) reported that they participated in pandemic-related services outside the pharmacy such as visiting patients' homes to measure blood pressure or give consultations, which might have increased their stress. A limitation of home delivery can be that patients might not receive counseling about medication-related problems. Thus, pharmacists can provide counseling via remote patient education such as telemedicine. Using these virtual consultation methods can help in managing demand surges¹⁹.

Isolation and emotional dissonance

The COVID pandemic had a profound psychological impact that was previously explored²⁸. About 78% of the participants

reported that their health safety was compromised by working in the pharmacy. Community pharmacists faced a dilemma between their sense of responsibility and work ethics versus the fear they felt for themselves and their family/loved ones, especially after witnessing pain and death. This dilemma may have caused conflict and dissonance, negatively affecting the emotional and general well-being of community pharmacists.

A previous study reported that healthcare workers got most of their emotional support during COVID-19 from their family and friends, as well as people from work²². More than half of surveyed community pharmacists in the current study reported they suffered from isolation from family or friends during the pandemic and about 30% of them reported reduction in their emotional relationships.

The added burden of home duties

Community pharmacists spent more time at home during the pandemic due to homeschooling (15%), working from home (14%), or doing household chores (46.7%). A previous study has shown that taking care of children, especially conducted by women, is one of the real-world barriers to working²⁹. Lack of work flexibility during COVID-19 might have increased their likelihood of financial burden, mental stress, and burn-out²².

Financial burden as a cause of mental stress

Financial problems can cause depression³⁰. The pandemic imposed a financial burden on community pharmacists. About 42.7% of surveyed community pharmacists faced new health expenses and 33.6% of them lost their income. This could have a significant negative impact on their psychological well-being²⁸.

Implying adaptability and cultivating resilience: Preparation for what might come next

Resilience is a way of preventing burnout and occupational stress from causing severe psychological consequences by adapting³¹. It is a measure of responsiveness, adaptability, and confidence. It ensures that occupational stress does not cause poor psychological outcomes³². Community pharmacists should have the ability and confidence to adapt and ensure that occupational stress does not develop into more serious mental disorders. In this work, the majority of the participating community pharmacists worked longer hours and had more patients than before, which might lead to significant mental stress²⁸.

Shifting the focus from the individual level to a higher organizational level can help in achieving resilience in the future. It is essential to invest in research and resources that support the psychological well-being of pharmacists and build their resilience by using evidence-based guidance, recommending actions to take, and promoting self-care strategies^{21,33,34}.

To help community pharmacists recharge, reduce their physical exhaustion, and prepare for better care provision, some suggested strategies include shorter workdays, rotating shifts, regular breaks, and annual leaves³⁵. It is also important for managers and senior staff to motivate their teams and offer



ultimate support. Furthermore, staff should receive sufficient training on infection control, which can facilitate adaptive stress response³⁶.

The mental health of pharmacists should be protected. To cope with these challenges, proactive personal strategies such as mindfulness, meditation, and psychotherapy can be applied to avoid burnout and enhance mental resilience³⁷. Community pharmacists should also be counseled that stress and fear reactions are normal in disasters and that psychological ramifications may persist even after the pandemic is over.

The strength of this study is it filled a gap in the literature on the mental health status of community pharmacists in Egypt, especially during the COVID-19 pandemic. It could contribute to the existing knowledge and provide insights for improving the mental health of community pharmacists and their ability to provide optimum quality healthcare. However, this study has some limitations. It was conducted in July and September 2021 to examine the mental health status of pharmacists during the first wave of COVID-19 from February to June 2020. This might have led to a memory bias in recalling what exactly happened. Furthermore, the recruitment method used for this study restricts its generalizability beyond the current work's context, especially as it relies on the experiences of community pharmacists in one geographical context.

CONCLUSION

Community pharmacists are key players and front-line healthcare providers who play significant roles in improving patient treatment outcomes. However, the COVID-19 pandemic has posed unprecedented challenges to their mental health. Therefore, global healthcare policymakers should address this issue and find common ground on the mental health impact of the COVID-19 pandemic with a national psychological intervention plan and provide a stronger continuous support network for healthcare professionals. Moreover, community pharmacy workplaces should promote proactive training on resilience against mental burnout, especially for young pharmacists who are more vulnerable, to prepare them for any work challenge in the future.

AUTHORS' CONTRIBUTIONS

All authors contributed equally to conceptualization; data curation; formal analysis; investigation; methodology; project administration; supervision; visualization; writing, reviewing & editing.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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