The impact of COVID-19 quarantine measures on the mental health of families

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Abstract

Summary: COVID-19 is shaping all aspects of life throughout the world. The unexpected number of people who have been infected with and died from coronavirus disease (COVID-19) is evidence that the pandemic has affected families and societies. The strong shock wave that has resulted in the international response has focused more on medical rather than psychosocial interventions. Little has been written or studied about the impact of COVID-19 on families. This article explores the impact of the COVID-19 quarantine on the mental health of families. We conducted 20 in-depth interviews with Jordanian families through snowball sampling.

Findings: The results show that 20 interviewees described varied and new experiences. Many of the families we interviewed displayed symptoms of mental health problems, including disrupted sleep patterns, changes in eating habits, excessive digital media use, anxiety, depression, excessive smoking, stomach aches, bedwetting among children, and persistent headaches. The study also demonstrated the psychological stress partners felt during the lockdown due to their worries about job security. They also

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communicated their hope that renewed family commitments might bring more stability to their relationships. During the lockdown, family members spent more time together, and it became harder to conceal any issues from each other.

Applications: The findings of this research demonstrate a critical need for social workers, and it is hoped that future legislation will include a role for social workers in various fields of crisis. Moreover, social workers should encourage families to ask for intervention to overcome the long-term effects that may result from COVID-19.

Keywords
Social work, crisis intervention, international social work, mental health, health and social care, counselling

The novel coronavirus disease (COVID-19) was first reported in Wuhan, China on 31 December 2019. On 11 March 2020, the World Health Organization (WHO) declared the presence of the COVID-19 virus to be a pandemic (WHO, 2020a). Sandford (2020) noted that by 2 April 2020, nearly four billion people were living in isolation, having been asked or required to stay at home. That is, nearly 50% of the world’s population in confinement (World Population Review, 2020). By April 28th, there were over three million confirmed cases, and more than 211,000 people had died (Matias et al., 2020). Six weeks later, there were more than eight million cases confirmed and over 400,000 deaths (Center for Systems Science and Engineering at Johns Hopkins University, 2020). In December 2020, it was confirmed that the virus had infected a group of Chilean scientists working in Antarctica (Power & Dewar, 2021). Thus, the virus has reached every area of the globe.

As the world deals with the COVID-19 pandemic, in Jordan, the difficulties are particularly challenging, as it is a small, middle-income country with limited natural resources and high population growth (Al Gharaibeh, 2017); it is located in the Eastern Mediterranean Region bordering Syria, West Bank, Iraq, and Saudi Arabia. One major issue is Jordan’s diverse demographic composition and the high number of refugees it has received in recent years. Another is the great pressure the precautionary measures the country adopted has placed on resources and services, especially in the health sector (Al Gharaibeh, 2020). Although it was expected that these measures would cause temporary economic recession worldwide, increasing economic constraints has made the situation intolerable not only for the private sector but for self-employed and part-time workers and government agencies, as well. There has been widespread disruption to production and possible loss of foreign aid as other countries have reduced their annual budgets. This has led to the implementation of austerity measures by all sectors such as lockdowns, curfews, fines, and other penalties for contributing to the spread of the virus. Quarantine measures resulted in limiting the spread the virus in the beginning of
the pandemic. The number of people who were infected in Jordan with COVID-19 as of 3 August 2020 was 1218, with 1131 persons having recovered. The pandemic situation was classified as moderate risk. However, this number has increased dramatically to 544,724 cases, and with 5958 deaths by 22 March 2021, the Government of Jordan classified the COVID-19 risk as high (Ministry of Health, 2021). This paper focuses on the mental health impacts of these health and economic measures in Jordan—an issue that has received little attention.

This research was guided by the WHO’s conceptualization of mental health, which is characterized as a position of well-being in which each person understands his or her own potential, can cope with the normal stresses of life, can function productively and fruitfully, and can contribute to his or her community. The positive dimension of mental health is stressed in the WHO’s definition of health as contained in its constitution: “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO, 2020b, p. 1).

**Aim of this research**

This research aims to understand the impact of quarantine measures on the mental health of Jordanians during the COVID-19 pandemic. The question for research concerns the extent that the effects of quarantine are associated with mental health disorders and maladaptive behavior of Jordanians such as family tension, disharmony, intimate partner violence, digital media addiction, depression, anxiety, inappropriate reliance on folk medicine, and fear of visiting hospitals, etc.

**Literature review**

**Social isolation and history of pandemic response**

The world has historical experience in trying to stop the spread of highly contagious diseases. Recent history includes the Severe Acute Respiratory Syndrome (SARS) in China and Canada in 2003, the Middle East Respiratory Syndrome (MERS) on the Arabian Peninsula in 2012, and Ebola in Western African countries in 2014 (Brooks et al., 2020; Shultz et al., 2016). Yet, despite knowledge of the mental health needs that accompany the coping response to deadly viruses, addressing them has largely been inadequate (Xiang et al., 2020). Otu et al. (2020) noted the tremendous psychological impact the virus is having on communities. They found that stress and anxiety affected people infected with the virus, those fearful of contracting the virus, their families, health-care providers, and the general population.

Xiang et al. (2020) reported that after the SARS outbreak, mental health problems included persistent depression, anxiety, panic attacks, agitation, psychotic symptoms, delirium, and suicidality. Holmes et al. (2020) noted a 30% increase in suicides in people aged 65 years and older and that 50% of patients still
experienced anxiety after the resolution of the epidemic. Holmes et al. (2020) also noted that nearly 30% of health-care workers experienced emotional distress after recovery.

Park et al. (2020) investigated the mental health outcomes of survivors of MERS, which directly affected people in South Korea between May and December of 2015. They (Park et al., 2020) found that psychosocial factors present during the acute outbreak period predicted the development of depression later. Psychosocial factors included high prepandemic anxiety levels, perceived stigma, and having a family member who died from MERS; they were predictive of post-traumatic stress disorder (PTSD) symptoms and depression.

Cénat et al. (2020) reported that 10,600 preventable deaths occurred during the Ebola outbreak. Due to fear of contracting Ebola at health-care centers, people opted to isolate themselves at home rather than get treatment for illnesses such as tuberculosis and malaria. This is in contrast to those who preferred to avoid the isolation of quarantine. Because of the stigma of Ebola, people often tried to confine their ill family member secretly at home. Ebola should be treated at a health-care facility and under no circumstances should it be treated in the person’s home due to the danger of contagion (Cénat et al., 2020). Fear and lack of communication of accurate information contributed to the spread of the disease.

Social isolation practices in Jordan

When countries introduce movement restriction policies as part of the attempts to minimize the number of people diagnosed with COVID-19, people make significant changes to everyday routines. The key goal of the lockout and curfew policy is to prevent an exponential rise in the number of people infected and avoid crippling health-care facilities (Lawton, 2020). Although the psychological effect of curfew and lockout is discouraging, the Jordanian public showed high rates of commitment and knowledge, as evidenced by the slow pace of COVID-19 spread throughout the region (Al-Tammemi, 2020). The International Medical Corps (2017) evaluated knowledge of mental health and psychosocial needs and services in Jordan based on qualitative studies; the results confirmed that there was a lack of awareness of the need for mental health services.

In Jordan, it has been stated that only an estimated 305 individuals per 100,000 inhabitants are diagnosed with mental illness, suggesting a current discrepancy in diagnosis and care. Consequently, the levels of psychological distress (39%) and mental illness prevalence (26.3%) are high. The frequency of psychological distress varies from 5% to 27% worldwide (Karnouk et al., 2019).

A study conducted by the Faculty of Medicine at the University of Jordan (2020) using a sample of 5274 people showed that 75% of Jordanians experienced anxiety or felt uncomfortable because of the quarantine. Fifty percent of the respondents indicated that they felt more tense and more stressed during the quarantine period. Jordanians’ use of electronic devices increased significantly, as more than two-thirds of the participants (3561) reported using their electronic devices
for more than four hours per day during the quarantine period. Research findings pointed out that social cohesion plays a key role in alleviating anxiety, tension, and stress during the crisis.

A survey conducted by the Centre for Strategic Studies (2020) showed that COVID-19 was associated with anxiety and psychological tension in 66% of Jordanians, and the curfew has caused anxiety and psychological tension for more than a third of Jordanians. Twenty-eight percent of Jordanians felt upset, distressed, and frustrated because their children were not attending schools or universities, and 89% of them felt sad and frustrated as a result of seeing places of worship closed.

**Risks to mental health**

Researchers have discussed the mental health consequences of COVID-19 and the associated social isolation. These include the following:

- A sense of loss (Holmes et al., 2020);
- Anxiety (Gao et al., 2020; Haider et al., 2020; Holmes et al., 2020; Park et al., 2020; Xiang et al., 2020);
- Loneliness (Haider et al., 2020; Holmes et al., 2020);
- Depression (Gao et al., 2020; Haider et al., 2020; Holmes et al., 2020; Park et al., 2020; Xiang et al., 2020);
- PTSD (Haider et al., 2020; Park et al., 2020);
- Exposure to the trauma of death and dying (Holmes et al., 2020);
- Feelings of worry and guilt for using resources (Holmes et al., 2020);
- Worry about getting sick (Gao et al., 2020; Haider et al., 2020);
- Substance use (Haider et al., 2020); and
- Suicidality (Xiang et al., 2020).

Italy identified people who suicided after the isolation and stress of the pandemic (Giuffrida, 2020). There were serious concerns about emotional and economic recovery from the recent outbreak, with 80% of Italians reporting that they needed psychological support (Giuffrida, 2020).

Although the pandemic is not specifically defined as trauma in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) (American Psychiatric Association [APA], 2013), Haider et al. (2020) suggested that based on past pandemics, there could be increased risk of developing PTSD symptoms. Park et al. (2020) found that nearly half of individuals who survived MERS in South Korea experienced PTSD and depression 12 months after recovery. A clinical interview is required to make a diagnosis of major depression or other psychiatric disorder; however, even when people do not meet all of the criteria, it is important to note the relevant symptoms that nonetheless cause distress.

There is a consensus that the mental health effects of this pandemic will adversely affect those with preexisting mental health disorders or vulnerabilities by
worsening their symptoms (Haider et al., 2020). Mucci et al. (2020) predicted that going forward, it seems likely that we should expect a wave emotional disorders related to stress—some serious enough to culminate in suicides.

Other adverse effects of social isolation

Subgroups are affected differently by the pandemic. Holmes et al. (2020) investigated the effects of COVID-19 on people across England, Wales, and Scotland. They identified subpopulations that experienced it differently than the general population: children, young people, and families; older adults; people with preexisting psychiatric disorders; health-care workers; people with learning disorders; people with limited financial resources; and socially excluded groups such as prisoners, people who are homeless, and refugees. Imran et al. (2020) warned that both the disease and the methods used to contain it were likely to have adverse effects on children. Junior et al. (2020) reported risk factors for refugees who were reliant on the host country. These factors included overcrowding, poor sewage conditions, low standards for hygiene, poor nutrition, and lack of access to shelter, health care, public services, and safety. In Pakistan, Imran et al. (2020) described the special vulnerability of children due to being exposed to media coverage of the event, having limited understanding of the information they were exposed to, and being separated from their natural support system of peers and teachers.

Researchers have discussed other adverse effects related to social isolation. They include effects on family relationships, family violence, and other behaviors:

- Intimate partner violence (Haider et al., 2020);
- Child abuse (Al Gharaibeh & Gibson, 2019; Haider et al., 2020);
- Increased social media use/infodemic (Gao et al., 2020); and
- Vigilance about cleanliness and sterilization (Haider et al., 2020).

Social isolation, although necessary to address the illness, has unintended, negative effects on mental health and families. Those with good premorbid functioning seem to be the most resilient and prepared to meet the challenge of social isolation. Those with preexisting mental health conditions, along with vulnerable and often marginalized subpopulations, seem to be the most at risk of exacerbation of those conditions.

Theory and transactional model of stress and coping

Lazarus and Folkman’s transactional model of stress and coping is a person-in-environment approach, which explains that when people are confronted with a potentially stressful situation, they engage in an interactive process with their environment in an effort to mitigate and cope with that stress (Lazarus, as cited in Quine & Pahl, 1991). Lazarus and Folkman defined coping as “constantly changing cognitive and behavioral efforts to manage specific external and/or internal
demands that are appraised as taxing or exceeding the resources of the person” (Lazarus, as cited in Laubmeier et al., 2004, p. 49). Stress is defined as “the psychological state which derives from peoples’ appraisals of their adaptation to the demands which are made of them” (Lazarus, as cited in Quine & Pahl, 1991, p. 59).

According to this model, in response to potential stressors, individuals first engage in primary appraisal to determine the extent to which that situation is likely to affect them. Through primary appraisal, they assess the demands the situation places upon them. They then engage in secondary appraisal, evaluating the resources available to them that could eliminate or mitigate the stressful situation. If they continue to experience the stressor, they draw upon their resources and engage in coping strategies intended to reduce their stress and strive for a positive outcome.

The assumptions of the Transactional Model of Stress and Coping are that it is a cognitive-behavioral approach and seemingly amenable to cognitive-behavioral interventions. It is not a physiological understanding of stress. The model is dynamic in that individuals are continually reassessing their situation and changing their responses to the extent that their resources allow. This model also appreciates individual cultural differences in that it does not interpret an event as a qualifying stressor (as does the DSM-5). Instead, it is flexible enough to accommodate the different cultural understandings of potential stressors as they are experienced.

Some researchers have used a cognitive model to explain why symptoms of PTSD sometimes persist for years after the initial trauma due to negative appraisal of the event in a way that it is experienced as a current threat (Ehlers & Clark, 2000). Applying this model, Liang et al. (2020) explained how public health emergencies are often processed in such a way as to lead to psychological problems such as PTSD and depression. In their study, individuals who had negative coping styles such as substance use or avoidance developed depression (Liang et al., 2020). Individuals with more positive coping styles were less likely to experience psychological problems (Liang et al., 2020).

Significance of research

Many of the effects of COVID-19 on families are short-term. Long-term effects need to be carefully studied and monitored. This crisis has shown that the underprivileged sectors of the society including women, children, people with disabilities, elder adults, people who are unemployed, refugees, and casual employees have been the most affected. Internationally, there is inadequate research concentrated on the mental health consequences on the family. In Jordan, the mental health issues during the quarantine have not received enough attention. For example, prevalence of domestic violence, suicide attempts, depression, and substance abuse have not been observed or recorded by any agency in Jordan (Al Gharaibeh, 2020).
**Methodology**

**Design**

This study used a qualitative methodology. The data used consisted of 20 in-depth interviews.

**Participants**

Twenty participants, 12 males and 8 females, were interviewed. Before we reached this saturation point, 15 individuals did not agree to be interviewed (didn’t agree to have their interviews recorded; were busy with family [no time]; were unwilling to provide much information; felt unfamiliar because never did before; were not interested).

All participants were between 30 and 51 years. They represented 20 families having both male and female children. The number of children in the family was between three and eight; all families had at least one school-aged child.

**Sampling**

A sample was chosen using exponential nondiscriminative snowball sampling. This means the first participant recruited to the sample group provided multiple referrals. The first researcher received many calls from acquaintances who wanted to talk about the experiences of their families during the quarantine because of COVID-19. Subsequent to the development of the study design, an acquaintance of the first researcher served as the first participant. That participant provided several referrals, with each referral providing additional referrals. Each new referral was explored until the point of saturation.

The researchers found that data collected from 20 interviews were sufficient and addressed the objectives of the research. More data were not likely to provide new information. Parker et al. (2019) assured that sampling normally ends once either a target sample size or a saturation point is reached. The researchers found that the size and quality of data received from 20 interviews covered the scope of study; moreover, the nature of the topic in this pandemic made additional recruitment difficult.

Snowball sampling is used when samples with target characteristics are difficult to access (Naderifar et al., 2017). The sample was selected from Irbid City in the north of Jordan because the highest number of cases started from there and the government started the first comprehensive quarantine from Irbid City.

**Procedures**

Data were collected by the first author; one research assistant helped organize the time of interviews between the first author and participants. All interviews were conducted online (e.g. Skype, Botim, and Messengers). Each interview took
between 60 and 75 minutes. The language of the interviews was Arabic. All procedures were approved by the Ethics Committee of the University. All participants gave their consent for the interview to be audio recorded. Video recording was not used so as to protect the confidentiality of participants. Participation was voluntary, and participants were free to withdraw their consent and leave the study at any time. Audio files and transcripts were stored on a password-protected file system, and the names of participants were removed.

The Arabic recordings were transcribed then analyzed, after which the analysis was translated into English by a professional translator from the Translation Center at the Language Institute at the University. The data were analyzed using the content analysis method to find relevant themes (Bengtsson, 2016). In the early stages of analysis, transcripts were coded to identify preliminary themes and group themes by type of issue. Particular attention was paid to rich and enthusiastic responses, as opposed to those comprising only a few words. Themes and concepts were identified and compared within and across the data for all participants.

Findings

Mental health symptoms

The majority of the families interviewed displayed symptoms of mental health problems including disrupted sleep patterns, changes in eating habits, excessive digital media use, anxiety, depression, excessive smoking, stomach aches, bedwetting among children, and persistent headaches. Some of these symptoms may have been worsened by lack of exercise and efforts to self-treat with herbal and over-the-counter medications.

What I struggle with now is boredom and depression and stress. My mother, who lives with us, is 78 and has diabetes and hypertension. Recently, she started to stay up all night and sleep during the day, which has affected me as I’ve changed my sleep pattern to look after her. But then I also have my kids to look after and help with their lessons. (Interview 2)

The lockdown has resulted in widespread anxiety in Jordan. Wurtman and Wurtman (1995) observed that anxiety increased cortisol levels in the blood, which stimulated appetite. One result of increased cortisol levels is craving food rich in carbohydrates such as chocolate, crisps (potato chips), and dessert, which give the body bursts of energy. This stimulates the release of serotonin, which regulates sleep, pain sensation, blood pressure, and mood. Consequently, the majority of participants who experienced anxiety, stress, and related disorders tended to increase their intake of carbohydrates.

The change in the regular daily routine and lack of socialization and exercise may have contributed to spread of various health issues among members of the
Jordanian society. These included eye problems, back and neck pains, headaches, digestive pain, irritability, and bedwetting among children.

My kids get distressed by the lockdown warning sirens. (Interview 19)

Since the beginning of the lockdown, my four-year-old son started suffering from involuntary night urination. (Interview 8)

Worry, anxiety, and depression. It is perhaps expected that people would feel anxious about their future and the well-being of their loved ones. The majority of participants were worried about the health and safety of their family and friends, the education of their children, and their own job security.

My husband and I suffer from anxiety and stress. He feels very isolated and depressed and hardly talks to us. We both work in the private sector and have bank loans. How will we cope if we lose our jobs? (Interview 13)

Changes to family dynamics

For some, the psychological stress that partners felt during the lockdown due to their worries about job security and family commitments brought more stability to their relationships. For others, the stress exacerbated family tensions. During the lockdown, family members spent more time together, and it became harder to conceal any issues from each other. This strengthened family relations or led to an increase in incidents of psychological and physical abuse. Family relations fell into one of the two following patterns: harmonious relationships or family violence.

Harmonious relationships. In many cases (13 out of 20 participants), although the husband may have been aware of the requirements of his role in the family, he did not always perform these duties diligently. The lockdown offered a great opportunity for such husbands to build closer relations with their spouses and children. This idea was expressed by several respondents:

Staying at home with my family has improved my relationship with my wife and kids. I can now see the kids growing up and my interaction with my wife has become much better. Before the lockdown, I used to work long hours and I was too tired to spend time and care for the kids. Now, I play with the kids, especially the youngest. Of course, this doesn’t mean my wife and I don’t have any disagreements, but we generally have a very good relationship. (Interview 7)
In addition, a number of husbands started to appreciate the huge responsibility shouldered by their wives. As a result, they showed more respect to their partners and tried to share some of their responsibilities.

The lockdown has given me a great opportunity to improve my relationship with my family and kids. It’s a rare chance to get to know the kids better. It has also had a very positive effect on my relationship with my wife as it’s only now that I realized how much she toiled at home. In neglecting my duties towards my children, I was like an employee with a serious absenteeism problem. (Interview 2)

Some husbands used the lockdown in pursuing useful hobbies that helped create family harmony, cement family relations, and teach the children acceptable social and religious habits.

This has been a very positive experience for us all. My presence at home and the efforts of my wife have had a great impact on the children. Now we get to know them better and help them improve their weak points and behaviour. We can even educate them better. (Interview 1)

**Marital discord.** Another consequence of the lockdown was the development of marital discord displayed in such behaviors as increasing tension, arguing, being watchful of the spouse’s behavior and actions, and interfering in the spouse’s private matters.

My relationship with my wife and kids has become so tense that arguments would flare up for the simplest of reasons. (Interview 5)

**Family violence.** During the lockdown, there have been various (7 out of 20) incidents of intimate partner violence including directing blame at the children or spouse, physical abuse, and curtailment of the movement of the wife. These were mentioned by a number of respondents as follows:

Of course, the kids are active and play around the house. But the house is small and so we tell them off [speak to them angrily] and order them to stop playing. This has caused many arguments with the kids and even with my husband. (Interview 11)

A serious consequence of the lockdown is how some parents tended to overlook some negative habits that their children developed such as digital media addiction. Most of these parents found their children’s obsession with computer games and social media a welcome antidote to constant sibling squabbles and an easy way to prevent the children from rebelling against the lockdown by leaving the house and consuming alcohol or drugs.

I let the kids run and play around the house even though it’s very disturbing. But I do this to help them release the stress and to protect them from engaging in even more
negative behaviour like drinking alcohol, smoking, or breaking the lockdown laws. My kids are teenagers, and I worry that they’d resort to these bad habits if I put pressure on them and limited their freedom. (Interview 6)

A number of women stated that they could appreciate the changes in their husbands’ behavior due to the lockdown and the worry about job security and family finances: “I understand why he’s feeling this way. He’s used to being out all the time for work but now he’s stuck at home with me and the kids. Naturally, there will be tension between us” (Interview 12).

Other adverse effects

Sadness and social deprivation. It is perhaps expected that many Jordanians would experience great sadness due to being deprived of the opportunity to visit places of worship that also served as places for social gathering and emotional healing. This feeling of sadness was expressed by a number of interviewees as follows: “Not being able to pray in the mosque made me feel that I was failing in my religious duties and greatly saddened me” (Interview 9).

Excessive cleaning. Cleanliness is a normal behavior to maintain general hygiene and prevent infection. However, the COVID-19 pandemic has triggered new types of behavior among Jordanian families related to shopping and socializing. This was apparent in the following statements: “This is a whole new culture. There has been a significant change in levels of hygiene and even sterilization. We rarely receive family or friends at home anymore. Many have appreciated this” (Interview 18).

Although most seemed to agree that cleaning is important to prevent the spread of the COVID-19 virus, several families (5 out of 20 participants) could not afford cleaning products.

There have been numerous awareness campaigns about the importance of using sanitizers and other cleaning products but, to be honest, we don’t buy any of these products as they’re quite expensive and, with my low income, we cannot afford them. (Interview 3)

Folk medicine and fear of hospital visits. Many avoided visiting hospitals because of a common misconception that they would be more likely to contract the COVID-19 virus there as well as the difficulty getting there due to the lockdown. As a result, many families started to rely more on folk medicine as the following interviewees stated:

We prefer not to visit the hospital because they have many cases of COVID-19 there and because it’s difficult to get there during the lockdown. So, people have started to use herbal medicine, which not only cures many ailments but also boosts your immune system. Prevention is better than cure. (Interview 1)
Folk medicine has been around for a long time but people have started using it more often recently. Personally, I won’t go to the hospital any more even when sick. Instead, I’d ask one of my friends in the medical profession for advice. (Interview 8)

Discussion

Mental health and social isolation

The participants (16 out of 20) reported many of the symptoms of major depressive disorder, according to the DSM-5 (APA, 2013), regarding themselves or someone in their family. This is consistent with what other researchers have found in instances where extended periods of quarantine have been required (Haider et al., 2020). The DSM-5 states that responses to intense loss such as losses from a natural disaster, financial disaster, or bereavement may include symptoms of depression.

Holmes et al. (2020) found loneliness was reported among their studied population. Loneliness was not reported by participants in this study. However, it should be noted that everyone interviewed was part of a larger household so may not have experienced loneliness.

Holmes et al. (2020) found a sense of loss in their participants. In these participants, too, there was an expression of loss related to friends, family, and the ability to pray at places of worship. No one reported the loss of a loved one due to COVID-19, but one participant reported worry about her mother’s potential loss of health due to her current fears of traditional medicine provided at hospitals.

The DSM-5 (APA, 2013) requires the presence of four or more of the following additional symptoms for a diagnosis of major depression: significant weight loss or gain, insomnia or hypersomnia, psychomotor agitation or retardation, fatigue or loss of energy, feeling worthless or having excessive guilt, diminished ability to concentrate, or recurrent thoughts of death (APA, 2013). Many participants (12 out of 20) reported weight gain, hypersomnia, and loss of energy.

Anxiety often accompanies depression; however, we did not find reports of anxiety as other researchers have found (Gao et al., 2020; Haider et al., 2020; Holmes et al., 2020; Park et al., 2020; Xiang et al., 2020). This is an important departure from what has been found in the literature.

Unlike Haider et al. (2020) and Park et al. (2020), we did not find symptoms of PTSD. Symptoms of PTSD include exposure to actual or threatened death through a traumatic event and presence of one or more of the following: intrusive memories, distressing dreams, flashbacks, psychological distress, or physiological reactions to cues. In addition, individuals try to avoid stimuli associated with the trauma, they have altered cognitions and mood associated with the trauma, and they have marked alterations in arousal. The DSM-5 notes that the duration of the symptoms must be more than one month. Although we did not see symptoms of PTSD, it may be too soon for them to manifest.
Gao et al. (2020) and Haider et al. (2020) found their participants worried about getting sick, and participants in this study expressed this either implicitly or explicitly. Some participants were willing to forgo medical treatment to avoid hospital settings, which they associated with increased risk of contracting COVID-19. Participants also worried about getting sick, which prompted some to explore folk medicines in the belief that this could protect them from infection.

No participants reported using mood altering substances to cope with their situations, in contrast to Haider et al. (2020). However, there may be a cultural explanation for this. Jordan is a socially and religiously conservative society (Al Gharaibeh, 2016). There is less substance use in Jordan than might be found in other cultures. It is also possible that substance use was not reported for fear of eliciting disapproval from the first author.

Although Xiang et al. (2020) found suicidality amongst participants, we did not. Czeisler et al. (2020) found that suicidal ideation, defined as serious consideration of suicide, was more likely to occur in employed respondents and essential workers. Souza (2020) indicated that the pandemic may exacerbate suicide risk factors such as depression, substance abuse, and feelings of loss. It is possible that participants were not suicidal, although it could also be that they were not specifically asked about thoughts of suicide and were reluctant to offer them.

Family dynamics

Haider et al. (2020) reported an increased incidence of intimate partner violence. We did find not only increased family conflict in some instances but also instances of increased family closeness. This increased closeness has not been seen in prior literature. When premorbid functioning was fraught with tension and conflict, forced togetherness tended to exacerbate the tension and erupt into conflict. Paradoxically, however, some men reported spending a great deal of time away from home before the advent of COVID-19. Being quarantined and forced to spend more time together had the effect of bringing them closer to their families and strengthening their commitment to their spouse and children. Haider et al. (2020) suspected that child abuse might increase due to parents and children being in close confinement and without victimized children having a way to escape. One participant in this research reported hitting the children out of frustration and anger; however, it did not rise to the level of suspected child abuse.

Implications for social work practice in Jordan

The notion of social work in Jordan as a profession was started in 1965 by the Ministry of Social Development by establishing a Diploma in Social Work. Baccalaureate and master’s programs were established by other universities after 1997. The main scope of social work practice is in the government sector in addition to nongovernmental organizations because of Jordan hosting millions of refugees from Syria, Iraq, and Palestine. Recently, the private sector has started
becoming involved by serving clients experiencing family conflicts, child abuse, and divorce. The high rate of poverty and unemployment in Jordan has made it a priority for Jordan to mitigate these issues and look for financial assistance rather than looking for mental health intervention. This ultimately affects the policy of social work in the Jordanian institutions.

Al Gharaibeh (2020) concluded that the social work profession was seriously unsuccessful in responding to the psychological and social effects of the pandemic in Jordan. For example, social workers failed to address or document the rates of domestic violence, suicide, depression, and substance abuse. Jordan did support voluntary efforts to address social needs; however, interventions were not organized in a way that avoided gaps in service. The Ministry of Social Development and the social work profession missed an important opportunity to coordinate joint initiatives with public and private actors and to provide substantive social and psychological support. In the absence of social work, the government’s activities were limited to providing material aid.

Individual and community programs to support and alleviate the impact of the COVID-19 crisis need to be launched (Al Gharaibeh, 2020). The findings of this research are important to social work practice in that they could strengthen the support of the Jordanians to social work and accountability and might also drive the government to enact legislation incorporating social workers in various fields of crisis such as education, mental health hospitals, clinics, etc. The findings also could encourage the governments and other agencies to pay attention to increasing the number of Social and Mental Health Centres in all cities. Moreover, social workers should encourage people to visit these centers to overcome the long-term effects that may result from COVID-19.

Limitations

A transactional model of stress was used to understand the results. A limitation of this model is that, to the researchers’ knowledge, it has not been used with a Middle East population, nor has it been used to understand the effects of a pandemic as a stressor. However, as was noted before, the model seems flexible enough to adapt to other populations because it does not define the stressor or have an expectation as to how people should respond to it. It also does not cast judgment about coping abilities. It highlights any discrepancy between the effects of the stressor and the resources available to cope with it. As a person-in-environment model, it is sensitive to the coping strategies of different populations. It is clear the participants coped with the pandemic to the extent of their internal and external resources.

Second, although an in-depth, structured interview was used, it was not specifically a clinical interview. It is not possible, nor ethical, to make diagnostic assessments based on a short interview. We have identified behaviors or emotions as possible symptoms of depression based on the DSM-5 but cannot conclude that those individuals met the diagnostic criteria. Conversely, if participants had gone
through a clinical interview, it is possible that more definitive criteria would have been identified of depression, anxiety, and/or PTSD.

Lastly, this snowball sample was not representative of Jordan and results cannot be generalized. However, because we found significant mental health issues, it seems prudent to conduct additional research in this area, especially specific to cognitive-behavioral interventions with a larger, representative sample.

**Conclusions**

This crisis has revealed a need to reorganize civic, voluntary, and social work efforts in Jordan and to better prepare social workers to cope with emergent situations and their social and psychological aftermaths. To achieve this, the government will need to pass legislation that integrates social workers into different sectors such as mental health, education, child protection, etc. (Al Gharaibeh, 2020).

Through a needs assessment, social workers could have engaged in both primary and secondary appraisal, consistent with Lazarus and Folkman’s transactional model of stress and coping. Through primary appraisal, social workers could have determined the extent to which social isolation was likely to affect people. Review of the literature provides evidence that social isolation has a negative effect on mental health. Through secondary appraisal, they could have evaluated the resources available to meet this need.

Since the first case in Jordan was diagnosed on 2 March 2020, most Jordanians started suffering from mental health symptoms and the consequences of online work and education. This become their daily talk in social media. The findings of this research will assist social workers to better understand the mental health situations of Jordanians and to develop an intervention model to assist clients; moreover, it is a strong support to the social work institutions to move to more concentration on the strategies used in mental health interventions.

**Ethics**

This study was reviewed and approved by University of Sharjah Research Ethics Committee (Reference Number REC-20-07-04-01).

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