

Quality of Life and Psychological Well Being among Post COVID-19 Patients in Jordan

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Abstract

Little is known about the direct psychological impacts of the COVID-19 epidemic, especially for patients after recovering from this virus, although these psychological impacts play an important and effective role in the quality of life and psychological well-being of individuals in Jordan. Therefore, the main objective of this study was to highlight on the psychological impacts that affect the quality of life and psychological well-being of patients after COVID-19 and to identify those impacts and their prevalence within Jordanian society. The design and use of the descriptive analysis method and the Kessler Psychological Distress Scale (K10) were conducted using an online questionnaire to collect data on the participants. This study included 220 participants. Findings of this work indicated that 30% of participants suffer from psychological impacts, 57% had minor psychological impacts, and 66% of the participants had anxiety related to the socio-economic aspect, while 30% of the participants have a feeling of fear of infection and stigma associated with quarantine. The conclusion indicated some demographic characteristics of the participants contribute to determining the psychological impacts and some of those recovering from the Coronavirus suffer from a high rate of psychological impacts thus this affects their lives and psychological stability among the population in Jordan. This work contributes to finding effective solutions aimed at improving the quality of life and psychological well-being in order to maintain a stable life free of mental illness for the Jordanian community after the end of the Corona pandemic.

Keywords: Psychological impacts • Well-being • Quality of life • Patients • COVID-19

Introduction

In the past three years, the Coronavirus (COVID-19) epidemic has swept the world which is one of the most dangerous and rapidly spreading epidemics and led to the death of many of the world's population, in addition to causing universal economic crises [1,2]. In addition to that, a psychological crisis for most societies [2]. The Corona pandemic has affected the individuals of societies in general and Jordanian society in particular, especially among individuals who have been affected by this viral disease. Among the most important effects that led to individuals feeling psychological disturbances such as insecurity, anxiety, confusion, depression, emotional isolation, stress, panic, loneliness, fear, and sleep problems [1-4] which are the closure of (workplaces, schools, and recreational places), economic losses, lack of medical care resources and a lack of distribution of necessities [1-5]. Furthermore, the use of measures and restrictions related to the Corona pandemic, such as social distancing, closure, isolation, and quarantine in Jordan, led to the emergence of negative psychological effects in patients [4,6]. Individuals who have been infected with the Coronavirus differ in the level of psychological disorders as the elderly and people who suffer from chronic diseases or suffer immunodeficiency are more affected, even after recovering from this virus [3,7], and the Jordanian society, like other societies, individuals were affected the viral infections which led to the emergence of psychologically disorders to varying degrees and these negative effects had severity and results, it affects their lives even after the Corona pandemic. One of the

most important things that caused the psychological effects on community members to arise is the national lockdowns that were implemented during the Corona pandemic in most countries of the world, as well as in Jordan. Where the Jordanian government has implemented complete closures and applied preventive measures such as quarantine rules, social distancing, and non-mixing on occasions and others, with the aim of preventing the spread of the coronavirus and the spread of disease, as well as protecting the Jordanian people [1,8]. All of these measures affected the psychological responses and lives of the Jordanian people. Thus, during this study, we highlight the importance of the psychological impacts on Corona patients and the general population, and how they affected their psychological well-being even after COVID-19. Moreover, the importance of developing psychological measures to control these psychological impacts, maintain and improve psychological well-being stability and prevent mental illnesses such as depression and the inability to adapt to life again. Thus, we focus in our study on that investigation of quality of life and psychological well-being among post-COVID-19 patients in Jordan should be of interest to researchers, public health officials, economics, and policymakers. Thus, this study is one of the first studies that focused on evaluating the impact of COVID-19 on the quality of life and psychological well-being of patients after recovering from Corona for a group Jordanian society. As the results that we will obtain, it will open the way for researchers to delve deeper in this direction. As well as helping decision-makers in the country to take care of individuals who suffer from psychological problems that affect their lives. Thus contributing to finding effective solutions aimed at improving the

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quality of life and psychological well-being in order to maintain a stable life free of mental illnesses for the Jordanian community after the end of the Corona pandemic.

Psychological impacts that affect the quality of life and psychological well-being of patients post COVID-19

There are many psychological effects that play an important role in determining the quality of life and psychological well-being of the population of Jordan in general and on individuals who have suffered from infection with the Coronavirus even after the pandemic. The most prominent of these psychological impacts are fear, psychological distress, tension, anxiety, depression, suicidal desire, loneliness, sleep problems in the elderly, despair, anger, irritability, insomnia, confusion, frustration, boredom, fear of contagion, and stigma associated with quarantine [1-8]. Meanwhile, many studies have confirmed that the most important psychological effects are anxiety, depression, and fear of contagion [9-11].

Studies that have been applied to individuals from all governorates of Jordan have shown that psychological impacts differ according to age groups, economic status, and those who suffer from chronic diseases [1,2,12]. This means that the Corona pandemic affected the quality of life and psychological well-being of all residents, especially those who have contracted the Coronavirus. According to the mechanism of studies in this aspect, we found that even after the end of the pandemic people in the world still suffer from its psychological effects. In addition to that, Jordan is one of the Arab countries in which life and psychological well-being have been affected, and individuals still suffer from psychological effects albeit in varying proportions [1,2,12,13]. In addition, recent studies have emerged on the suicide of individuals associated with the COVID-19 pandemic [12,14-16], which is considered one of the most dangerous psychological effects of the COVID-19 epidemic on the general population in various countries of the world.

Many studies that were conducted during the Corona epidemic and after the end of the pandemic found that quarantine is one of the most important factors that generate psychological impacts for the individuals to whom the quarantine has been applied. These studies concluded that people who were not subjected to quarantine do not suffer from psychological disorders, while those who were quarantined suffered from psychological impacts that led to the emergence of severe symptoms of depression, anxiety, and psychological stress [5,17-19].

Materials and Methods

Study design

In this research, the descriptive analytical method was adopted using the descriptive design, and the research tool was a questionnaire that was conducted online from July 1 to August 30, 2022. The questionnaire consisted of two axes and included (20) paragraphs, which related to the main for the study. Where the main axis dealt with psychological impacts that affect the quality of life and psychological well-being of patients post COVID-19. The reliability of this tool (for the questionnaire paragraphs) was verified by calculating the value of alpha (α), where the data were analysed using SPSS program version 26 (Statistical Package for Social Sciences, by IBM incorporated), and Alpha was calculated from the Cronbach's scale [20], where the results showed good reliability ($\alpha \geq 0.70$) and the value was significant ($p < 0.05$).

Participant's procedure

The sample included 220 participants and is proportionate random samples between the ages of 18 and 52 years. Where the number of women ($n=130$, 59%) and the number of men ($n=90$, 41%), most of the participants had an academic degree, and sociodemographic data were collected for them (age, gender, financial status, marital and educational status, type of health insurance, living area and income). The online questionnaire was disseminated via various social media where all participants provided informed consent.

Data collection procedure

The Internet was used to obtain the data and to advertise the study by sending it through social media accounts (WhatsApp and Facebook). The announcement included information clarifying the purpose of the study, procedures, and participants' rights. Thus, the people who responded expressed their interest, and participated, and contacted the researchers who submitted the online questionnaire (Google Forms) through WhatsApp. Then all participants completed the survey questionnaire.

Data analysis

The IBM Statistical Package for SPSS program version 26 and the alpha calculation of the Cronbach's scale was used for the purpose of analysing the obtained data. The descriptive analytical approach was used to identify and describe both the characteristics of the demographic sample and the variables that focused on them the study as main axes, including (1) suffering from psychological impacts after recovering from the coronavirus, (2) suffering from minor psychological impacts, (3) anxiety related to on the social and economic side, and (4) the feeling of fear of infection and the stigma associated with quarantine. The questionnaire was distributed via the Internet and an attempt was made to select the qualified participants randomly from different regions in Jordan and to ensure that they were given the option to complete the questionnaire and assure them that the survey was under confidential conditions. Therefore, we obtained approval from the eligible participants. Data were entered into SPSS software. Data that gave good reliability were obtained with an alpha value (≥ 0.70) and the value was significant for statistical significance ($p < 0.05$). The Kessler Psychological Distress Scale (K10) was used to determine the participants' psychological impacts indicators and obtain the results as percentages, the most important of which is that 66% of the participants experienced worry concerning the social and economic, 45% of participants were satisfied with their quality of life and health, and 30% of participants were experiencing fear of infection and stigma associated with quarantine.

Results

In Table 1, we show the demographic characteristics of the participants in this study (220) individuals. More than half of the included participants were female 59% (130/220), and their ages ranged between 18-52, and the number of male participants was 41% (90/220) and their ages ranged between 25-49. While in terms of educational level nearly half of the participants 50% (110/220) of the respondents hold a university diploma or a bachelor's degree and 29% (63/220) hold postgraduate MA/PhD qualifications, while 12% (27/220) hold a high school diploma. Moreover, we found that most of the participants had a monthly income of 84% (185/220). In addition, the most important characteristic owned by participants is health insurance, where we obtained through this study that the majority of them have health insurance 95% (210/220). As this played an important role in the psychological impacts that affect the quality of life and psychological well-being of patients after COVID-19. The results showed clear discrepancies in the demographic characteristics of the participants, meaning that there were statistically significant differences in these characteristics ($p < 0.05$) as shown in Table 1.

To study and examine psychological impacts affecting the quality of life and psychological well-being of patients after COVID-19. We used the Kessler Psychological Distress Scale (K10) [21]. This is done through the application of a 10-paragraph questionnaire, which aims to obtain results that clarify the quality of life and psychological well-being among post-COVID-19 patients in Jordan based on questions about the psychological impacts experienced by patients after COVID-19. The Kessler scale used options that included the five-value answer to each question (all the time, most of the time, some of the time, a little bit of the time, and none at any time). Then the results were calculated and recorded from five to one.

Table 1. Represents the demographic characteristics of the participants in this study.

Demographics	Level	Total Number (n = 220)	Percentage (n, %)
Age (years)	18-30	153	69%
	31-52	67	31%
Gender	Male	90	41%
	Female	130	59%
Educational level	They do not have an education level	20	9%
	High school	27	12%
	College (BSc or diploma)	110	50%
	Postgraduate (MSc or PhD)	63	29%
Financial status	They do not have a monthly income	35	16%
	Monthly income	185	84%
Health insurance	They have a health insurance	210	95%
	They do not have a health insurance	10	5%

We obtained the results of the Kessler scale related to the participants in this study, which are as follows: Individuals represent 9% (20/220) feel fear and tension, individuals who complained of unexplained chronic fatigue 3% (7/220), 1% (3/220) feel constantly hopeless, 14% (31/220) suffer from psychological distress most of the time, 2% (5/220) suffer from severe depression, 39% (85/220) suffer from loneliness and sleep problems, 18% (40/220) feel depressed frustration and boredom, 66% (146/220) were experiencing worry concerning the social and economic, 45% (98/220) were satisfied with their quality of life and health, and 30% (65/220) were experiencing fear of infection and stigma associated with quarantine.

Through the results of our study, we found that 30% (66/220) of the participants suffer from psychological impacts that significantly affected their quality of life and psychological well-being after COVID-19, and this is clear in their psychological state, which was explained by their answers to the questionnaire items. While the severity of psychological impacts decreases, we found that more than half of the participants 57% (125/220) had minor psychological impacts that did not significantly affect the quality of life and psychological well-being. In addition, we found that 66% of the participants have anxiety related to the socio-economic aspect, such as the financial condition of the family, the living situation, the marital status between married people, and other matters related to the economic aspect, in addition to that 30% of the participants have a feeling of fear of infection and stigma associated with quarantine.

We illustrate these final results in Figure 1. The results we obtained indicated that less than half of the patients recovering from Corona suffer from somewhat high psychological impacts, and therefore may affect the quality of life and psychological well-being. This gives an important indication of the need for specialists in the country to provide psychological and social support to those suffering from these psychological disorders. In addition to the need to develop psychological measures to ensure that psychological effects are controlled and thus improved, as well as psychological well-being, which makes these individuals live a stable life free of problems and also prevent the spread of mental diseases. Moreover, more than half of the participants suffered anxiety and fear related to the economic and social aspects, and this important information was obtained because the officials and the competent authorities in the state must pay attention to this aspect and work to solve the economic problems of the population. As well as paying attention to social matters in order to preserve members of society who have psychological disorders that may develop with time and lead to suicide or the emergence of crime.

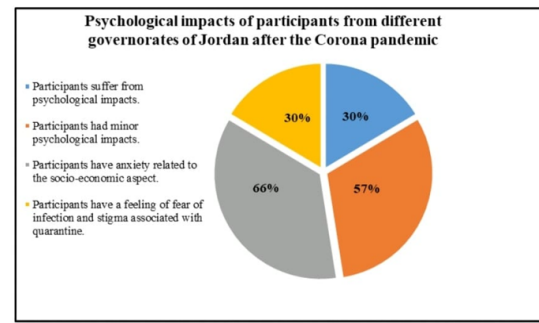


Figure 1. Illustrate the psychological impacts on the quality of life and psychological well-being of participants.

Discussion

To our knowledge, this research work is one of the first research studies concerned with evaluating the psychological impacts that affect the quality of life and psychological well-being of patients after COVID-19 in Jordan on a sample of Jordanian recovered patients. Many types of research have emerged indicating psychological disorders and the spread of depression during the emergence of the COVID-19 epidemic, as these psychological disorders suffered by people, especially women and youth, had a negative impact on their lives [3,22,23]. Through the results of our study, we found that there are psychological impacts that make the lives of individuals unstable, and a number of them suffer from depression and fear of infection again with the coronavirus even after the end of the epidemic. Therefore, this virus is considered a health crisis with long-term effects [24,25]. Therefore, it was necessary to conduct studies such as this study focusing on the size of the psychological and social impact of COVID-19 on people recovering from it to obtain information in a broader and clearer picture of these psychological effects. It was clear from the results that we obtained that the number of those suffering from psychological impacts that affect their lives was few compared to the size of the study sample, if we measure this on all those recovering from the coronavirus among the residents of Jordan, most of them do not suffer from these negative psychological impacts. The reason for this may be that 71.8% of the Jordanian population has health insurance and most of them have government health insurance [1,26].

The demographic characteristics of the participants were relied on as a sample for a study, where we found that the majority of the participants are females and the majority of the participants are young, and most of them are educated and have a high educational level. In addition, the majority of the participants had a fixed monthly income. Thus, the results obtained are in line with previous research studies on the psychological impacts of epidemics that negatively affect the lives of the population depending on the demographic characteristics represented by gender (female and male), age (younger individuals), or previous diagnosis [27-30].

Our current study was characterized by modernity, as the Internet was used by the participants to obtain the questionnaire and interact with the study questions, which helped us by covering most of the cities of Jordan, despite the small number of participants, but they are from different cities. As well as the use of the Kessler scale, which is one of the most important research tools that have been widely used to examine and study various problems related to mental health [2,31]. The results obtained by relying on the Kessler scale indicated that there are other aspects that play an important role in influencing the lives of people emotionally and mentally in Jordan. Among these are the social, economic, and political aspects. Maybe this is due to that Jordan is a small country with a population of no more than 10 million people [32], so it faces economic problems and the increase in the number of immigrants and refugees causes social and economic problems. Although the State of Jordan is one of the regular countries that have enacted regulations and laws that give priority to work and employment to the original inhabitants of Jordan, the level of poverty is relatively high in this country [33].

Conclusion

In conclusion, this study clarified the prevalence of psychological impacts that affect the quality of life and psychological well-being and the extent of psychological responses experienced by Jordanian patients after COVID-19. The results indicated some of the demographic factors of the participants that contribute to determining the psychological impacts that affect psychological well-being among the population after COVID-19. The results also confirmed that some of those recovering from the Coronavirus suffer from a high rate of psychological impacts, and thus this affects their lives and psychological stability in particular, and among the population in Jordan in general. Most of them have suffered from anxiety and fear related to economic and social aspects, fear of infection, and stigma associated with quarantine. Through the responses that we obtained, we found the quality and depth of psychological impacts in the participating individuals, and we have a clear perception of the psychological well-being they live even after COVID-19 and the quality of life for patients in Jordan.

The results showed that fear and levels of psychological stress associated with COVID-19, which includes aspects of physical and social life, affect the coping skills and quality of life of patients from the Jordanian population. Thus, the results of this study can be used by specialists and public health workers in order to carry out psychological campaigns and develop awareness and prevention programs targeting these patients in order to treat their psychological disorders and to lead a problem-free life. In this regard, this study recommends that decision-makers, leaders, and health care institutions carry out psychological and economic interventions and implement national programs that focus on mental health care in order to improve the quality of life and psychological well-being of the community in Jordan.

Limitations

While conducting this study we found that it has some limitations. The most important of these limitations is that we used the online survey and this allowed only a certain number of participants who have the ability to use the Internet and have a link to this study. Which made the number of participants few, while there may be people who missed the opportunity to participate in answering the questionnaire, which affects the results of the research in terms of comprehensiveness and accuracy? In addition, perhaps the collection of data within a short period of time directly affected the size of the study sample. In this research work, there are few studies similar to it in some respects, and therefore it is not possible to measure the physiological impacts actual of patients recovering from coronavirus for the population of Jordan with more reliability and accuracy. However, we have prepared questionnaire questions focusing on recovering patients from COVID-19 about psychological impacts and their relationship to their demographic characteristics to investigate how these psychological impacts affect the quality of life and psychological well-being of patients after COVID-19.

One of the limitations is also that the current research results are linked to a specific time period and therefore lack longitudinal follow-up, which makes our understanding of the psychological states of patients after COVID-19 in particular and Jordanians, in general, limited. There may be other aspects that were not addressed or evaluated in this research work, which may be among the factors affecting the psychological state of the participants, such as chronic diseases, living conditions, bad habits, lack of access to the Internet, and fear of infection again with the coronavirus.

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