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Coping Strategies Of Chronically Ill-People During Covid-19 In Light Of Some Variables

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Abstract

Objective: The study aimed to explore the coping strategies of people with chronic diseases during the spread of Corona virus in the light of some demographic variables. To achieve the goal of the study, a scale (coping strategies) was administered to a sample consisting of (494) individuals selected by snowball method. The scale was verified by using Exploratory Factor Analysis. The results showed that the most common confrontation strategies among people with chronic diseases were the strategies of devoutness and social support. The findings also showed the presence of statistically significant differences in strategies attributable to the gender variable on the denial dimension in favor of females, and humor and satire dimension in favor of males. Differences attributable to education variable (dimensions of social support, positive reassessment, withdrawal, and religiosity) were also found in favor of individuals who have lower than a bachelor's degree, and the presence of differences attributable to the variable of the social status on the dimension of social support in favor of unmarried individuals. As for the two dimensions of social support and focus on solving the problem, the study showed the presence of differences due to the variable of work for the benefit of individuals who are not working, and differences were found in focusing on solving the problem (employed, retired) in favor of working individuals. Differences were found too due to the age variable on the dimension of social support and focusing on solving the problem in favor of individuals from the age of 20 to less than 40. **Conclusion**: The positive coping strategy plays an important role in alleviating the stressful psychological impact of most patients with chronic diseases.

Keywords: Coping Strategies, Chronic Diseases, Corona Pandemic.

Introduction

Globally, the societies witnessed several changes in a new reality that was imposed by the Covid-19 which has brought about great changes and patterns of behavior that were not previously happened. this pandemic created major transformations in all aspects of life, whether social, economic, health, etc., which was reflected in the psychological and behavioral dimension of individuals and groups. this changes can be noticed through adaptive behavioral patterns or a change in those patterns in dealing with personal and life requirements in light of the exceptional and emergency of Covid-19, and the shifts in the lifestyle that everyone needs to adopt strategies that fit the nature of the situation and the nature of the psychological reality, especially for individuals who are most vulnerable to the dangers of this pandemic, and it can be said that the elderly and individuals suffering from chronic diseases are more affected in the case of infection with the virus compared to healthy individuals, and this is due to the weakness of their immune system to resist Coronavirus.

Chronic diseases such as blood pressure, heart disease, diabetes, cancer, kidney failure, asthma and other diseases

are a source of psychological stress, which force individuals to adopt strategies and requirements that need self-regulation to confront these diseases (Martin, 2007). The confrontation and strategy adopted by the infected person might have positive effects not only on mental health and psychological adjustment but also on the management of physical symptoms and immune performance, which might affect long-term risks of mental and physical diseases (Morey, Boggero, Scott, & Segerstrom, 2015), and in this regard (Nowar & Zakrya,2016) indicated that person who has good health or having a disease is related to the organization of the personality, his readiness to deal with sickness, and the methods of dealing with his life problems. The psychological and social pressures that people are subjected to today as a result of their chronic diseases require different ways of thinking and dealing with what they were used to deal with in the previous times, pain feeling, helplessness and the conditions of hospitalization treatment and wakefulness, life complexities maintaining good relations and an acceptable image of oneself with the family and the social environment requires strategies of diverse issues (Saad, 2019).

The method and strategy of affected people in dealing with different life situations that they experienced differ from one person to another depending on their personality, perception, capabilities on the one hand, and the different position and social resources, on the other hand, this requires many personal responses ranging from positive and negative, and this is confirmed by the study (Delavari, Mahdavihazaveh, Norozinejad, & Yarahmadi, 2004), that the psychological aspect of the affected person, positive and negative feelings, his way of thinking, learning, perception, feeling and self-respect, the social aspect concerned with personal relationships, social support that the patient receives, and the role of the environment in which the patient lives play a prominent role in adopting the appropriate strategy for coping with the disease.

Previous studies also varied in their emphasis on the role of coping strategies of chronically ill people, some of these studies dealt with problem-solving strategies, emotional cognitive strategies, and stress management strategies, such as studies of (Barnett, 2004; DeVoogd, Sanderman, Postema, VanSanderen, & Wempe, 2011; Gabriel, Figuerido, Jacomes, Cruz, & Marques, 2014; Hoth et al., 2015), which emphasized on the role of these strategies in adapting to chronic diseases, some proved that the strategy of confrontation focusing on the problem is the most beneficial among the strategies used by patients (Figuerido, et al., 2014). some of these studies focused on the social role in supporting the patient in coping with the disease and the environment such as a study of (Block & Dorstyn, 2015), in a similar vein, some studies pointed to the role of self-efficacy and social support hand in hand, directly and significantly in the aspect of psychological resilience and adaptation to disease (Block & Dorstyn, 2015). Some studies also dealt with the role of demographic variables such as age, gender, the family's social system and social status, and education in coping with chronic diseases and the quality of life for the infected people such as the study of (Iqbal, Haq, Bashir & Bashaar, 2017), the study of (Moasheri, Ahangari, Norozi & Shayesteh, 2017) showed that there is no relationship between coping strategies and demographic variables such as age, duration of diabetes, and marital status.

Bruscino, 2019) conducted a study that aimed to uncover a strategy of dealing with patients who suffer from an alpha-1 antitrypsin deficiency, and to know the extent of psychological pressures of patients' families in their daily dealings with them, the results indicated that psychological stress in the family is great, because of the shock, misdiagnoses, lack of awareness, lengthy medical evaluations, and caregivers' despair in witnessing the struggles of their patients.

The study of (Yusuf & Hanif (2019)) aimed to find out the relationship between coping strategies and quality of life among individuals suffered from type 2 diabetes in light of demographic variables, and the results indicated that there is a significant negative correlation

between active dispersion and avoidance that focuses on quality of life. While there is a positive correlation to adaptation and active confrontation focused on the religious side with the quality of life. The duration of the disease is also negatively related to the quality of life, coping strategies, reversing the disease. The results revealed a negative relationship with active distraction, avoidance of problem-focused strategies, and a positive relationship to coping strategies and psychological performance with problem-focused coping and confrontation.

Mackey's (2019) study revealed an effective parental strategy in managing the disease of children suffering from sickle cell disease by using a single interview. the results indicated a diversity in the participants' coping strategies according to their situations.

Al-Zahra (2019) conducted a study which aimed to find the sources of psychological stress and strategies for coping with the psychological stress. The sample of his study was chronically ill people. She followed the descriptive approach. the findings revealed that the most common coping strategies amongst the chronically ill people were reverting to religion, psychological issues, acceptance, insulting and the use of emotional social support. the finding indicated that there is no statistically significant correlation between the sources of psychological stress and coping strategies of chronically ill people.

While the study of Saed (2019) aimed to reveal the nature of coping strategies and the source of health control among patients who consult health hospitals in Biskra, the sample was the people who suffer from psychosocial diseases (cardiovascular disease, diabetes, gastrointestinal ulcers, and asthma). The results showed that patients follow various coping strategies, which were represented firstly in behavioral withdrawal, then acceptance, and in the second level, strategies for spiritual coping, self-control, and the search for social support, there were no differences between males and females in all coping strategies and the source of health control.

The study of (Kristofferzon, Engström & Nilsson, 2018) aimed to identify the relationship between sense of solidarity and coping strategies (focus on emotion strategy, problem-focus strategy, competency strategy) and mental quality of life, chronically ill people. they use a model based on Lazarus' theory And Folkmann, the results showed that there is a significant direct and indirect effect of a sense of solidarity on the mental quality of life through the three coping strategies.

Brahima (2015) conducted a study concerned with knowing the most used coping strategies of elderly individuals suffering from cancer, and the relation of coping strategies with some demographic variables. the results indicated that there are statistically significant differences between elderly individuals infected with cancer to use of coping strategies according to their gender and the use of coping strategies according to their civil status. the stress management strategies most used in elderly people infected with cancer are the social support-centered strategy and the least used are the problem and emotion-centered strategies.

As for Gharib's study (2014), who aimed to identify strategies for confronting psychological stress according to the type and gender of the patient. The results showed that the strategies used by people infected y type 1 diabetics follow negative strategies, while the second type, the strategies used are positive in confronting psychological stress.

Statement of the Problem

The literature review indicates that the infection of chronic diseases leads to an increase in psychological stress in most of the patients, which makes life with this disease more difficult by threatening their lives, future, causes physical and moral harm to them, and this effect extends to the family in which the patient lives, as many chronic diseases such as cancer, kidney failure and diseases of the heart and other more serious diseases require a great role on the part of patients to take care of all psychological, behavioral and social aspects of organizing their lives by adopting coping strategies to confront these diseases and adapt to them. to alleviate and

control the psychological pressures resulting from them (Al-Sabwah, 2004). The most potential affected people of Covid-19 infection are the elderly and chronically ill people, according to the report of the World Health Organization (WHO), considering their weak immune system. The main interest of this study has emerged to reveal the prevailing coping strategies they have that help them to cope and adapt to the spread of the Corona pandemic.

The strategies adopted by the patient to confront the disease are necessary to alleviate the burden of psychological and health pressures, the difficult journey of life with the disease, which makes the patient seek to develop strategies to confront the disease according to the development of experiences, environmental conditions and psychological and health responses, so the patient's awareness of the need to adopt one or more strategies in dealing with the disease. These strategies help to reassess the stress resulting from the disease and try to control it, to raise the level of positive feelings and a sense of self-efficacy that help him in adapting to chronic diseases. the study problem is determined by answering the following research questions:

1- What is the prevailing level of coping strategy of the chronically ill people?
2- What are the differences between the averages of the coping strategy according to gender, educational qualification, nature of work, age, and marital status?

Study Objectives

This study aims to identify the prevailing confrontation strategy of chronically ill people and to know the differences between the levels of demographic variables in the study.

Importance of the Study

The importance of this study lies in the extent of the desired benefit from identifying the role of coping strategies of chronically ill people in adapting and coping with the disease and alleviating the psychological burdens imposed by the disease in light of Covid-19 so that patients have sufficient awareness about the most effective and appropriate coping strategies for them. In addition to revealing the role of demographic variables that play the mediating role in patients' choice of coping strategies and their psychological and physical repercussions on them and those around them. this study can also add information to researchers and those who are interested in studying this type of issues. it is very important to conduct many studies to develop plans and programs that help patients to overcome disease crises.

Basic definitions: Coping strategies: the set of methods used by the individual in dealing with stressful situations and events, to alleviate the stress of the stressful situation and reduce the negative emotions that were caused by the disease, and it is defined procedurally: the total sum of the raw scores that the respondent gets in each dimension of the scale of coping strategies, and in the total degree of the scale.

Methodology

Study Population and Sample

The study population consisted of all chronically ill people in Saudi Arabia and Jordan, and the study sample consisted of (494) chronically ill people, in which there were 300 respondents from Jordan and 194 respondents from Saudi Arabia, and the percentage of males was 62.3% and females was 37.7%, The percentage of those with a bachelor's degree or postgraduate degrees 72.1%, and less than a bachelor's degree was 27.9%. They were chosen by the snowball method, as an electronic questionnaire was designed and sent to some people working in the health sector and known chronically ill people to researchers to facilitate communicating and sending the questionnaire to known people.

Research Instrument

The researchers surveyed previous related studies to the subject of the study, (Gonzalez & Landero, 2007; Az-Zahra, 2019; Mazlouq, 2014; Gharib, 2014) which focused on studying coping strategies of chronically ill people. Accordingly, the parameters from which the scale is

distributed have been determined into seven parameters (social support, focus on solving the problem, positive re-evaluation, denial, amusement and mockery, escaping, religiosity), and the total of the scale's statements reached (31) after taking the judges' recommendation.

To verify the validity of the coping strategies scale, the researchers verified the suitability of the sample size and data to conduct an exploratory factor analysis, using the Kaiser-Meyer-olkin test, which had a value of 0.903, which is greater than 0.50, and the Bartlett test, with a value of 4960.733 and with degree freedom at. 325, which is statistically significant, indicating the suitability of the sample size to perform the factor analysis and the presence of a sufficient correlations degree. The researchers conducted the exploratory factor analysis of the basic components using the orthogonal rotation (varimax) three times by deleting the statements whose saturation is less than 0.40 and deleting the false parameter that consists of two statements or less (Trivial Factor), and the statements saturation is not adopted on two parameters of more than 0.40, as shown in Table 1.

Table (1) The results of the Factor analysis of the statements of the coping strategies scale after deleting the unapproved ones

The dimension	Elementary Eigenvalue			Rotate the sums of squared Loading		
	Total	Interpreted variance%	Cumulative explained variance%	Total	Interpreted variance%	Cumulative explained variance%
1	7.667	29.490	29.490	4.696	18.060	18.060
2	2.312	8.891	38.381	3.327	12.797	30.857
3	1,403	5.395	43.776	2.324	8.937	39.795
4	1.325	5.095	48.871	1.792	6.894	46.689
5	1.151	4.428	53.298	1.315	5.059	51.748
6	1.072	4.124	57.422	1.300	5.001	56.749
7	1.007	3.875	61.297	1.182	4.548	61.297

* Four statements were omitted in the stages of the exploratory factor analysis.

Table (1) show that the results of the third exploratory factor analysis for the paragraphs of the coping strategies scale have achieved one-dimensional, and the saturations of the paragraphs of the scale have been calculated within the dimension that they follow as in Table 2, after deleting four paragraphs over the course of the factor analysis from the first to the third.

Table (2) the values of the Loading of the coping strategies scale and its dimensions in the exploratory factor analysis

Dimension	No	statement	Loading
Social support	1	I speak with close people who can advise me about my health problem	.809
	2	I resort to my relatives or friends to express my feelings	.799
	3	I am trying to get a support from friends and relatives	.735
	4	I ask for help from those who have experienced the same problem.	.733
Focus on solving the problem	5	I analyse the causes of the problem in order to be able to face it.	.812
	6	I set a plan to address the problem and commit to implementing it	.781
	7	I think carefully about the steps to follow to confront the problem	.778

	8	I got several suitable solutions to the problem	.686
Positive re-evaluation	9	I learnt new things from this crisis.	.781
	10	I look at the positive aspects of the problem.	.755
	11	I found that there are good things and people who care about others.	.696
	12	I find myself stronger after this problem.	.532
Denial.	13	I tell myself that this is not true	.775
	14	I refuse to believe the existence of the problem.	.763
	15	I think my disease level is not severe	.699
	16	I act as if this problem did not occur	.672
Humour and mockery	17	I laugh whenever I remember my problem	.709
	18	I bestow to my problems humour and joke	.674
	19	I treat my problem with mockery	.670
	20	I became a clown about health problems	.431
retreatment	21	I'd rather sit alone and think about my self	.670
	22	I avoid mingling and participating in social events	.613
	23	I use daydreaming to escape reality	.535
	24	I go to sleep or do any other alternative activities to escape thinking about the disease	.449
Religiosity	25	I became committed to prayers at mosques and extra prayers, hoping that God would help me through this pandemic	.678
	26	I am sure that God chose me for this pandemic, and He will reward me.	.613
	27	I am satisfied with what God has divided for me	.569

Table (2) show that the statements of the confrontation strategies scale are saturated with saturations exceeding 0.40 in the parameter to which they belong, and thus the scale has become composed of 27 distributed items on seven parameters, and to verify the stability of the scale, the reliability coefficient was calculated using Omega and Cronbach's Alpha for the parameters of the scale, where the value of the Omega stability coefficient for the scale as a whole was 0.864 and ranged between 0.685 and 0.889 for the parameter, and the value of the internal consistency coefficient for the parameters was ranged between 0.676 and 0.882.

Finding What is the prevailing level of coping strategy of the chronically ill people?

To answer the question; the mean and standard deviations of the scores of the study sample responses were calculated for each statement of the coping strategies scale, the statements of each parameter and on the scale, as shown in Table 3.

Table (3) The means and standard deviations of the study sample responses on the scale of coping strategies for chronically ill people

Dimension	No	statement	mean	Standard deviation
Social support	1	I speak with close people who can advise me about my health problem	4.02	1.19
	2	I resort to my relatives or friends to express my feelings	3.90	1.38
	3	I am trying to get a support from friends and relatives	4.14	1.08
	4	I ask for help from those who have experienced the same problem.	3.94	1.08

		Total	4.01	4.01
Focus on solving the problem	5	I analyse the causes of the problem in order to be able to face it.	3.24	1.25
	6	I set a plan to address the problem and commit to implementing it	3.55	1.18
	7	I think carefully about the steps to follow to confront the problem	2.93	1.25
	8	I got several suitable solutions to the problem	2.65	1.28
		Total	3.10	3.10
Positive re-evaluation	9	I learnt new things from this crisis.	3.23	1.15
	10	I look at the positive aspects of the problem.	3.03	1.23
	11	I found that there are good things and people who care about others.	3.37	1.18
	12	I find myself stronger after this problem.	3.89	1.18
		Total	3.38	3.38
Denial.	13	I tell myself that this is not true	2.70	1.15
	14	I refuse to believe the existence of the problem.	2.44	1.13
	15	I think my disease level is not severe	2.22	.760
	16	I act as if this problem did not occur	1.65	1.11
		Total	2.25	2.25
Humour and mockery	17	I laugh whenever I remember my problem	2.33	1.21
	18	I bestow to my problems humour and joke	2.15	1.34
	19	I treat my problem with mockery	2.48	1.36
	20	I became a clown about health problems	2.45	1.36
		Total	2.35	2.35
retreatment	21	I'd rather sit alone and think about my self	3.42	1.14
	22	I avoid mingling and participating in social events	2.05	.980
	23	I use daydreaming to escape reality	3.54	1.21
	24	I go to sleep or do any other alternative activities to escape thinking about the disease	3.71	1.14
		Total	3.18.	830.
Religiosity	25	I became committed to prayers at mosques and extra prayers, hoping that God would help me through this pandemic	3.95	1.02
	26	I am sure that God chose me for this pandemic, and He will reward me.	3.90	1.15
	27	I am satisfied with what God has divided for me	4.30	.890
		Total	4.05	770.
		Total	3.19	520

Table 3 shows that the mean of the study sample responses on the coping strategies scale was 3.19 with a standard deviation of 0.52, which indicates that chronically ill people have coping strategies, and the most important dimension of the strategies was the dimension of religiosity with a mean of 4.05 and a standard deviation of 0.76, followed by the dimension of social support with mean of 4.02 and a standard deviation of 1.19. humor and mockery: 2.35, standard deviation of 0.58.

Regarding the fact that chronically ill people developed coping strategies, Lazarus (2000) pointed out that the individual seeks to use many coping strategies to face the psychological stress that was resulted from the disease, in this case, the strategy plays an effective mediator between the impact of stress and the adaptive outcome of the psychological and social aspect and the lifestyle that has

an impact on the health and physical aspect of the infected person. it can be said that patients' possession of coping strategies is one of the necessary indicators of mental and physical health that depends on the patient's competence and effectiveness in being able to adopt an appropriate strategy that achieves psychological balance in facing and challenging the disease to protect himself from exacerbation of the disease. The result of this study is consistency with the study of (Delavari, et al, 2004), that several factors play a prominent role in adopting an appropriate coping strategy for the disease such as the psychological aspect of the infected person, positive and negative feelings, his way of thinking, learning, perception, feeling and self-respect, and the social aspect concerned with personal relationships and social support that the patient receives, and the role of the environment in which the patient lives. also, it is in the same line with the study of (Kristofferzon, Engström & Nilsson, 2018) that showed that the effective self-perceived coping strategies are one of the most important mediating factors between a sense of inner consistency and quality of life of chronically ill people.

As for the dimensions most practised by the members of the study sample for coping strategies were the religious and social dimension. The researchers attribute that when the disease affects the individual, it does not affect the body alone, but goes beyond that it has an effect on the psychological, social and spiritual side of the patient, so the patient lives in a state of physical, and psychological weakness which causes him to declare that life is short and not worth to do all this effort, and his life begins to take an important religious turn that resorting to God Almighty, it can be noticed via his words and action, the patients mostly considered that the disease religious denotation. According to the principle of explanatory models about diseases, the disease is based on the principle of internal or external attribution. The patient believes that the disease is beyond his control, and in this case, the disease is usually ascribed for religious reasons related to destiny and fate(Majdool, 2018), and the religious aspect in Arab and Islamic countries is considered as an effective factor in the nature of human life for individuals and societies in all its aspects. The religious dimension among Muslims indicates that the goal of a person's life is to worship God alone and affliction with the disease is an opportunity to become close to God and win paradise in exchange for enduring hardship and suffering, so the patient's patience with pain erases his sins, and his supplications are answered (Mohammed, 2005).

The rapid spread of the Corona pandemic caused many individuals to be confused. the fear of the spread of Covid-19 among them, especially the elderly and those with chronic diseases, and this is due to the spread of many news and frightening misleading rumors that they are the most vulnerable group to infection with the virus and more affected by it, in addition to the conflicting news about discovering a vaccine or medicine, all these factors increase the psychological impact on chronically ill people, and their need for social support has been increased accordingly. we find that many individuals, specifically chronically ill people interpreted the spread of the Coronavirus due to the worshipers' negligence towards the Creator, this finding is consistent with the finding of the study of (Al, et al, 2011), that positive religious confrontation is associated with positive health outcomes, while negative religious confrontations are associated with negative satisfactory outcomes, this finding is consistent with the study conducted by (Yusuf & Hanif, 2019) in which they focused on the religious aspect of patients in achieving adaptation with disease, and achieve quality of life.

Infection with the disease goes beyond health aspects, reaching other dimensions such as social. Having chronic diseases might change the relationship of the afflicted person with himself and his relationship with his surroundings, so the patient's need for social support to maintain his psychological and physical health increases. He needs close people who can refer to them, and trust them for supporting him and reducing the psychological impact on him due to the illness. As the

psychological and social support that the patient receives from his friends, colleagues or family contributes to alleviating pain and reducing the negative effects of stressful events on the patient. social support plays an important role between stress and life events on one hand, and physical health and disease on the other hand. Social support is an important source of psychological security that the patient needs, so when the patient feels that there is something threatens his/her health and life, then s/he is in a dire need of support and assistance from others. social support comes in many different forms, including moral support, counselling, providing information, fulfilling their needs, or provide material or other assistance that the patient needs from close people (Askar, 2003; Al-Damer, 2014) this finding is consistent with what was found by (Saad, 2019) that the most common coping strategies among those chronically ill people are: returning to religion and social support, this finding is consistent with the results of a study (Block & Dorstyn, 2015) that focused on the social role in supporting the patient to cope with the disease and the environment.

What are the differences between the averages of the coping strategy according to gender, educational qualification, nature of work, age, and marital status?

To answer the question, two independent samples were tested on coping strategies for variables (gender, education, and marital status) on each dimension of the scale, and one-way analysis of variance (ANOVA)was run for the two variables (work and age) on each dimension of the scale, and before starting t- test and ANOVA, it was verified that the data were distributed in a normal distribution using the Kolmogrov-Smirnov test, in which the data were distributed normally, and the assumption of the homogeneity of the variance was verified by the Levin test and the results indicated that this assumption is fulfilled, table 4 is shows that sample t-test of the gender factor.

Table (4) A t-test to test the differences between the mean scores of the responses of the sample members on the scale of coping strategies by gender

Dimension	Males			Females			T	DF	Sig	EF
	No.	mean	SD.	No.	mean	SD.				
Social support	308	3.97	.810	186	4.06	.740	-1.16	492	.250	0.11
Focus on solving the problem	308	3.05	1.06	186	3.17	1.05	-1.22	492	.220	0.11
Positive re-evaluation	308	3.44	.860	186	3.29	.880	1.88	492	.060	0.17
Denial.	308	2.20	.570	186	2.34	.590	-2.64	492	.010	0.24
Humour and mockery	308	2.40	.570	186	2.28	.590	2.11	492	.040	0.12
retreatment	308	3.17	.870	186	3.20	.760	-.43	492	.670	0.04
Religiosity	308	4.04	.760	186	4.07	.780	-.34	492	.740	0.03
Total	308	3.18.	.530	186	3.20	.50	-.41	492	.680	0.04

Table (4) shows that is statistically significant difference at the level p ≥0.05) in the coping strategies, which indicates that the gender variable in the denial parameter was for females and the dimension of humor and sarcasm was for males, but on the qualitative scale there are no statistically significant differences.

The researchers attribute the differences in coping strategies for the gender variable for the denial factor for females and the dimension of humor and mockery for males, to the difference in abilities, personality traits, and cognitive features of both sexes, so we find males more independent and able to suppress emotions and have high self-efficacy. This

makes them able to joke and ridicule during the disease more than females, while we find females more susceptible to submission and susceptible to psychological pressures resulting from the disease, and the difference between the sexes in facing stress that was resulted from the disease can be explained according to the theory of role restriction, that the role of infected female makes her prefer to use avoidance strategies and focusing on feelings, unlike males who resort to acting directly when faced with pressures, as the media and social media platforms played a significant role during the Corona pandemic by posting and disseminating many photos and videos using the virus as a material for ridicule and joke. several epidemiology specialists and journalists were on two various opinions a supporter of the existence of the virus and a warning of the risk of being infected by it, exaggerating its impact on the elderly and the infected with chronic diseases, and those who consider it as a big lie. Amit these various opinions we tried to identify the impact of these varied reactions in choosing the coping strategy to confront diseases in general (Aladdin, 2009).

For the other dimensions, there were no significant differences for the the overall scale, this is due to the process of assessing the patient for a disease, which requires him to choose the appropriate strategy, as it differs from one patient to another, whether positive or negative, regardless of gender, in order to reduce the pain resulting from the disease. The process of choosing the appropriate strategy to confront the disease takes place through an assessment of the conditions of chronic disease, whether these conditions are harmful or threatening the patient's life, or if these conditions challenge his health and psychological status, and through this vision, the patient evaluates his abilities and skills and then decides to choose the appropriate strategy to protect him from the disease and stress without regard to gender, (Aldwin & Werner, 2007) this finding is consistent with what was found by Brahmia's study (2015), whose results indicated that there are statistically significant differences between individuals infected with cancer in the use of coping strategies attributed to the gender factor.

Table (5) A t-test to test the differences between the mean scores of the responses of the sample members on the scale of coping strategies by level of education

Dimension	Less than Bachelor			Bachelor's degree or higher			T	DF	Sig	EF
	No.	mean	SD.	No.	mean	SD.				
Social support	138	4.21	.750	356	3.92	.78071	3.69	492	.000	0.37
Focus on solving the problem	138	3.20	1.13	356	3.05	1.02593	1.37	492	.170	0.14
Positive re-evaluation	138	3.52	.930	356	3.33	.84149	2.15	492	.030	0.21
Denial.	138	2.23	.630	356	2.26	.56515	-.57	492	.570	0.06
Humour and mockery	138	2.43	0.60	356	2.32	.57291	1.80	492	.070	0.18
retreatment	138	3.30	0.83	356	3.13	.82401	1.99	492	.050	0.20
Religiosity	138	4.18	.680	356	4.00	.79000	2.32	492	.020	0.24
Total	138	3.29	.530	356	3.15	.50904	2.85	492	.010	0.28

Table (5) shows that there are statistically significant differences at the level of ($p \geq 0.05$) in coping strategies due to the educational level variable on the dimension of social support, the dimension of positive re-evaluation dimension of retreating, and the dimension of religiosity was for the individuals whose level of

education is less than a BA, as well as on the overall scale it was for Individuals whose level of education was less than a BA.

The researchers believe that this is due to the size of the burdens and responsibilities on the shoulders of those who hold bachelor degrees or less. The job nature of individuals with a bachelor's degree or less usually differs from the job of those with higher degrees, as the job degree is affected by the academic qualification, in terms of making more physical effort, and lower salaries if It is compared to the salaries of the higher degree holders, which makes them more vulnerable to psychological, social and economic pressures that directly affect their psychological and physical health, especially for the chronically ill people, as it is evident that holding higher degrees enable them to increase their immunization and psychological adjustment, it also enables them to benefit from the experiences of other people, other cultures and languages, This increases their chances of success in choosing the most appropriate strategy for coping with chronic disease from those less educated individuals. In view of the psychological, social and economic effects of the Covid-19 on individuals, represented by social isolation, loneliness, anxiety, tension, and poverty, which are considered as the most challenging problems that have affected the mental health of individuals, making them in dire need of support than ever before, and the demand to considering of the problem that they experiencing, especially chronically ill people. The way the infected person and his strategy in dealing with different life situations he lives differ from one person to another according to his/her personalities, perceptions, and abilities on the one hand, and the different position and social resources on the other hand. This requires many personal responses, and this result is consistent with the study of (Delavari, et al, 2004), that the psychological aspect of the infected person, positive and negative feelings, his/her way of thinking, learning and perception, the social aspect, and the role of the environment in which the patient lives play a prominent role in adopting the appropriate strategy to adapt to the disease.

Table (6) A t-test to test the differences between the mean scores of the responses of the sample members on the scale of coping strategies according to social status variable

Dimension	Single			Married			T	DF	Sig	EF
	No.	mean	SD.	No.	mean	SD.				
Social support	62	4.22	.670	432	3.97	.790	2.33	492	020	0.34
Focus on solving the problem	62	3.15	1.08	432	3.09	1.05	.470	492	640.	0.06
Positive re-evaluation	62	3.35	.970	432	3.38	.860	-0.32	492	750.	0.04
Denial.	62	2.34	.670	432	2.24	.570	1.24	492	220.	0.16
Humour and mockery	62	2.33	.680	432	2.35	.570	-0.34	492	730	0.04
retreatment	62	3.25	.820	432	3.17	.830	.690	492	490|	0.09
Religiosity	62	4.08	.800	432	4.05	.760	.320	492	740	0.04
Total	62	3.24	.540	432	3.18.	.520	.930	492	.350	0.120

Table (6) shows that there are statistically significant differences at the level of ($p \geq 0.05$) in coping strategies due to the variable of social status on the dimension of social support was for unmarried individuals, and there are no differences on the overall scale according to different marital status, and the researchers attributed this result that marriage is an important source of psychological and social support that the individual needs, as the husband and the wife help each other to cope with stressful daily events, satisfy the needs of

psychological security, and provide positive energy, through love, respect, concern, sympathy, and understanding between themselves, as well as the motive of love, common interests and commitment, the family, moral and legal necessities for the two partners to provide positive social support to each other when needed. So that marriage provides a safe life, marriage helps patient to feel the sense of value and self-confidence that helps her/him to resist the pressures of life, including the pressures of chronic diseases. This sense helps them to enhance the physical capacities to cope with the disease.

Receiving social support for a partner is directly related to physical and psychological health. During Corona pandemic and the increase of anxiety about the infection, and imposing social distancing from the relevant institutions, which made the patient in need of social support from the family members, the results of this study is consistent with a study Iqbal, et al, 2017) which showed that the marital status has a role in coping with chronic diseases and the quality of life of the patient, while this study is in inconsistent with the study of (Moasheri, et al, 2017), in that there is no relationship between coping strategies, including social support and demographic factors such as age and marital status.

Table (7) An analysis of One-Way ANOVA of the responses of the sample members on the scale of coping strategies according to the different work status variable

Dimension	I work			I do not work			Retired			F	Sig
	No.	mean	SD.	No.	mean	SD.	No.	mean	SD.		
Social support	320	3.95	.800	70	4.33	.690	104	3.94	.7470	7.45	.00
Focus on solving the problem	320	3.19	1.05	70	3.03	1.19	104	2.85	.950	4.10	.02
Positive re-evaluation	320	3.38	.880	70	3.41	.990	104	3.35	.760	10.	.90
Denial.	320	2.22	.540	70	2.33	.780	104	2.29	.570	1.20	.30
Humor and mockery	320	2.39	.580	70	2.33	.690	104	2.26	.510	2.01	.14
retreatment	320	3.22	.860	70	3.24	.810	104	3.02	.740	2.46	.09
Religiosity	320	4.05	.800	70	4.13	.800	104	4.00	.630	67	.51
Total	320	3.20	.540	70	3.26	.540	104	3.10	.430	2.23	.11

Table (7) shows that there are statistically significant differences at the level ($0.05 \geq \alpha$) in coping strategies due to the work variable on the dimension of social support and the dimension of focus on solving the problem, and there are no differences on the overall scale according to the different status of the work, and when making dimensional comparisons to find out the significant differences between the averages, it was found that there are differences in the dimension of social support between (working, not working) in favor of individuals who are not working and (retired, not working) for the individuals who are not working, and also found differences in focusing on solving the problem dimension between (working, retired) for the individuals who work.

The researchers attribute this to the fact that unemployment in itself is a psychological and social event that creates pressures on the patient, which has negative direct repercussions on his/her psychological and social life. The work guarantees the patient psychological compatibility and social integration and makes him a positive and effective individual in society. thus the patient considered himself/herself as a successful person in which it transmits him/her from the state of being a dependent person to that of responsible, independent and contributing person in the building and developing his/her society,

and depriving him/her from work leads to an imbalance of his/her psychological and social stability, and thus s/he needs social support (Baker, 2004), As the work is important in achieving material sufficiency and social, a status which contribute effectively to maintaining the balance and psychological stability of the patient by achieving his/her goals, developing his/her skills, forming broad social relationships, and obtaining a social role that develops self-confidence and raises self-esteem, to help /her/him reduce the psychological pressures resulting from the disease and the ability to adapt and confronting the chronic disease more positively. As the followers of economic news related to the Corona announcing that there would be decrease in employment opportunities during the pandemic and predictions of the spread of unemployment after the pandemic, the need to reconsider many jobs and the emergence of remote work in an unprecedented way, and the merging many jobs, the anxiety and fear of the unemployed, especially those with chronic diseases, these factors increased the intensity of psychological stress. These new developments made them in need of social support and re-evaluation of the problem. through reviewing the theoretical literature and previous studies related to the topic of this study, the current study was unique with this result within the limits of researchers' knowledge.

Table (8) An analysis of One-Way ANOVA of the responses of the sample members on the scale of coping strategies according to the different age variable

Dimension	From 20 years old to less than 40			From 40 years old to less than 60			Over 60			F	Sig
	No.	mean	SD.	No.	mean	SD.	No.	mean	SD.		
Social support	98	4.19	.68	328	3.95	.87	68	4.00	.65	3.82	.022
Focus on solving the problem	98	3.40	1.08	328	3.06	1.04	68	2.81	1.00	6.74	.001
Positive re-evaluation	98	3.33	1.06	328	3.40	.82	68	3.37	.80	.25	.78
Denial.	98	2.35	.63	328	2.24	.57	68	2.18	.57	1.94	.15
Humour and mockery	98	2.32	.65	328	2.35	.58	68	2.41	.50	.49	.61
retreatment	98	3.28	.84	328	3.19	.83	68	2.99	.82	2.62	.07
Religiosity	98	4.08	.94	328	4.06	.74	68	3.93	.58	.98	.38
Total	98	3.28	.57	328	3.18.	.51	68	3.10	.44	2.57	.08

Table (8) shows there is statistically significant difference at the level of (p=0.05) in the coping strategies due to the age variable on the dimension of social support and the dimension of focus on solving the problem, and there are no differences on the overall scale according to age. We operated dimensional comparisons to find the significant differences between the averages, it was found that there are differences in the dimension of social support between the ages of individuals from 20 to less than 40 and from 40 to less than 60 which was for 20 to less than 40, and differences were found in the dimension of focusing on solving the problem between Individuals from the age of 20 to less than 40 and from 40 to less than 60 in which it was for the individuals whose age ranged from of 20 to less than 40, as well as among individuals from the age of 20 to less than 40 and the age of 60 years and over in which it was for those who aged from 20 years to less than 40 years.

The existence of statistical differences in coping strategies was attributed to the variable of age on the dimension of social support and the dimension of focus on solving the problem, was because age is one of the factors that affect the type of confrontation, the

experience that the individual acquires is considered as an outstanding factor in determining the competence of individuals in dealing with life problems, as the confrontation strategy is not considered as a fixed phenomenon but changing feature that is subjected to the processes of exchanging experiences. the older individual increases their tendency to active confrontation strategies through their quest to develop their skills, abilities and knowledge. The age has a great role in reducing tension and controversy and remembering previous similar situations and experiences, by giving themselves more time to think slowly and rationally, and explaining what they feel. Age gives them greater ability to choose the appropriate strategy to get rid of the psychological stress caused by the disease (Lazarus, 2000), The conditions imposed by the curfews due to Covid-19, social distancing and movement restrictions, had a clear impact on all groups of individuals, especially chronically ill people, and the lesser aged people were more affected emotionally , so they were more in need of social support from close people, to reveal thoughts, ideas and expectations, and to rethink about the problem and evaluate it in terms of its impact on themselves from the psychological and physical point of view. Iqbal, et al, 2017), So age has a role in the adaptation and facing chronic diseases and the quality of life of the patient, while it was not inconsistent with the study of (Moasheri, et al, 2017), which indicated that there is no relationship between coping strategies and age.

Recommendations

- Taking care of chronically ill people by providing them with social and religious support by organizing specialized workshops and training courses.
- Providing sufficient guidance and information for workers in clinics, hospitals and patients' families who deal with chronically ill people on the most important strategies in dealing with patients that increase the patient's ability to confront and adapt to the disease, and to assess the impact of those strategies.
- Using the results of this study as a starting point for other studies such as surveying the psychological needs of chronically ill people.

References

1. Al, A., Seymour, M., Kronfol, Z. & Bolling, S. (2011). Mood state, coping factors, and interleukin-6 are related to psychiatric symptoms following cardiac surgery. Biological Psychiatry and Psychopharmacology, 13(1), 3-9.
2. Aladdin, J. (2009). Gender differences in coping strategies during university life: The role of personality dimensions. Studies, Educational Sciences, 36(2), 190-220.
3. Al-Damer, N. (2014). Psychological hardness and its relationship to social support among women with breast cancer in Riyadh city. Unpublished Master Thesis. Prince Naif University, Saudi Arabia.
4. Aldwin, C. & Werner, E. (2007). Theoretical Approaches to Coping. En C, Aldwiny E, Werner (2 Ed). Stress, Coping, and Development: An Integrative Perspective (98-126). Estados Unidos de America: Guilford Press.
5. Al-Sabwah, M. (2004). The coping strategies employed by bladder carcinoma patients to reduce the psychological distress caused by the sickness. Journal of Arab Studies in Psychology, 3(1).
6. Al-Zahra. R. (2019). Sources of psychological stress and strategies to face it: A comparative study on a sample of chronically ill people. Unpublished PhD Dissertation, Muhammad Khaider University, Algeria.
7. Askar, A. (2003). Life pressures and methods of coping with mental and physical health in an era of stress. Cairo: Dar Al-Kitab Al-Hadith.
8. Baker, M. (2004). The effect of unemployment on social construction: An analytical study of unemployment and its impact in the Kingdom of Saudi Arabia. Journal of Social Sciences of Kuwait University, 32(2)1-20.

9. Barnett, M. (2004). Chronic obstructive pulmonary disease: A phenomenological study of patients' experiences. Issues in Clinical Nursing, 14, 805-81.
10. Block, R. & Dorstyn, D. (2015). A biopsychosocial model of resilience for multiple sclerosis**.** Journal of Health and Psychology, 20(11), 1434-1445.
11. Brahima, S. (2015). Strategies for coping the stress of elderly people with cancer, Science Magazine Humanity, 43(2), 497-509.
12. Bruscino, N. (2019). The Coping Strategies of Alpha-1 Deficient Patients and their Family Caregivers. Unpublished PhD Dissertation, Walden University, USA.
13. Delavari, R., Mahdavihazaveh, R., Norozinejad, A. & Yarahmadi, H. (2004). Country programme of prevention and control of diabetes. (2nd ed) Tehran: Seda Publication.
14. DeVoogd, J., Sanderman, R., Postema, K., VanSanderen, E. & Wempe, B. J. (2011). Relationship between anxiety and dyspnea on exertion in patients with chronic obstructive pulmonary disease. Anxiety Stress and Coping, 24(4), 439-449.
15. DiNicola, G., Jilian, L., Gregorich, S., Blanc, P. & Katz, P. (2013). The role of social support in anxiety for persons with COPD. Journal of Psychosomatic Research 74(2), 110-115.
16. Gabriel, R., Figuerido, D., Jacome, C., Cruz, J. & Marques, A. (2014). Day to day living with severe chronic obstructive pulmonary disease: Towards a family-based approach to the illness impacts. Psychology and Health, 29(8), 967-983.
17. Gharib, N. (2014). Strategies to face psychological stress in diabetics, Tishreen University Journal for Research and Scientific Studies - Arts and Humanities Series, 36(3), 305-324.
18. Gonzalez, T., & Landero, R. (2007). Cuestionario De Afrontamiento Del Estrés (Cae): Validación en Una Muestra Mexicana**.** Revista de Psicopatologia y Psicologia Clinica, 12(3), 189–198.
19. Hoth, K., Wamboldt, F., Ford, D., Sandhaus, R., Strange, C., Beckelman, D., & Holm, K. (2015). The social environment and illness uncertainty in chronic obstructive pulmonary disease. International Journal Behavior Medicine, 22, 223-232.
20. Iqbal, Q., UlHaq, N., Bashir, S., & Bashaar, M. (2017). Profile and predictors of health-related quality of life among type II diabetes mellitus patients in Quetta city, Pakistan. Health and quality of life outcomes, 15(142), 1-9.
21. Kristofferzon, L., Engström, M., & Nilsson, A. (2018). Coping mediates the relationship between sense of coherence and mental quality of life in patients with chronic illness: a cross-sectional study. Quality of Life Research, 27(7), 1855–1863.
22. Lazarus, R. (2000). Toward Better Research on Stress and Coping. American Psychologist, 55(6), 665-673.
23. Leuopoldt, V., Fritzsche, A., Truebu, F., Meuret, E. & Ritz, T. (2012). Behavioral medicine approaches to chronic obstructive pulmonary disease. Annual Behavioral Medicine, 44, 52-65.
24. Mackey, M. (2019). Understanding Parents' Disease-Managing Strategies for Children with Sickle Cell. Unpublished PhD Dissertation, Walden University, United States.
25. Majdool, B. (2018). Disease, ideology, youth, and pathways for living with AIDS in Morocco. Morocco: Souss for Printing and Publishing.
26. Martin, M. (2007). Chronic disease and illness care: Adding principles of family medicine to address ongoing health system redesign. Canadian Family Physician, 53, 2086–2091.
27. Mazlouq, W. (2014). Strategies to face the psychological stress of cancer patients. Unpublished Master Thesis, Al-Hidab University.
28. Moasheri, B., Ahangari, H., Norozi, E. & Shayesteh, M. (2017). An Exploration of Coping Styles in Type 2 Diabetic Patients and their Association with Demographic Factors. Health Education & Health Promotion, 5(4), 55-63.

29. Mohammed, M. (2005) Entertainment people of calamities. Beirut: Scientific Books House.
30. Morey, N., Boggero, A., Scott, B., & Segerstrom, C. (2015). Current directions in stress and human immune function. Current Opinion in Psychology, 5, 13–17.
31. Nowar, S. & Zakrya, N. (2016). Psychological hardness and its relationship to healthy behaviour of diabetic patients: A field study in Ouargla. Journal of Psychological and Educational Sciences, 2(2), 85-108.
32. Saad, S. (2019). The source of health control and stress management strategies chronically ill people - a study on four groups of patients attending a hospital in Biskra. Unpublished PhD Dissertation. Mohamed Khider University, Algeria.
33. Yusuf, S. & Hanif, R. (2019). Coping Strategies and Quality of Life among Individuals with Type-2 Diabetes: Role of Demographic Variables. Bahria Journal of Professional Psychology, 18(1), 35–50.