POLYTECHNIC
JOURNAL
EPU

RESEARCH ARTICLE

Relationship between death anxiety and using social media among chronic disease patients in the time of COVID 19 in Erbil City the Capital of Iraqi Kurdistan region

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ABSTRACT

The dangers of the fear of death have become a large part and an important aura of life in the human experience and this anxiety is more understandable for the persons who affected by chronic disorders. Death anxiety and the influence of social and electronic media on it, during COVID – 19 exposure was studied in some other countries, but it don't studied in our country well. A descriptive correlational study was conducted at primary health care centers / chronic disease units in Erbil city. Data were collected from12[th] December 2020 to 10th June 2021. A random sample consists of 400 participants who had at least one chronic disorder taken to participate in this study after taking written permission. A questionnaire was offered to the participants including demographic data and two independent questionnaires which measure death anxiety and social media among participants. Data analyzed by the SPSS program (version 25) and results show that participant's levels of using social media and death anxiety were significant and there was a moderate positive relationship between these variables (r = 0.41). Although using social media might negatively affect the population's mind and death anxiety by promoting fake and incorrect news giving a great deal to the fear of death about COVID-19, it could be a worthy source for spreading real and positive information, which could positively affect the general population.

Keywords

Death anxiety, social media, COVID – 19, chronic disorders

1. INTRODUCTION

At the end of 2019, the new corona virus first appeared in Wuhan, China. It is now called COVID-19, after which it became the station of the world's attention and made the headlines of the international press (Menzies and Menzies, 2020).During the period between January and March of the same year, the virus took its wide range as an incurable disease and got out of control in more than 110 countries outside China 13 times according to statistics (WHO, 2020). Thus, the organization declared it a global pandemic, specifically on March 11, 2020,Which necessitated strict measures with the increase in cases, The fastest precautionary measure taken by endemic countries was to close borders with other countries to prevent the spread of the disease, impose restrictions on social distancing and closure orders in an attempt to prevent the spread

of the virus and reduce infections to a minimum, and ban decisions included travel, roaming, and education (Menzies and Menzies, 2020).

The method of social communication with different platforms is one of the easiest, fastest, and most widely used social media in the world. Social media platforms are among the most used sources of information in the world, and the easy and inexpensive access to the Internet and a large number of registered users in these platforms makes it one of the easiest and most effective ways to spread information, be careful because there is a downside to it, which is spreading false information that causes pessimism to people that combined

with quarantine situations may lead to anxiety, depression and in

some extreme cases, suicide. (Gonzalez Padilla and Tortolero Blanco, 2020).

This is what the recently published Lancet Psychiatric organization highlighted the need to collect high-quality data on the mental health effects of the COVID-19 pandemic across the entire population as a top priority (Holmes et al., 2020).

Because the elderly and those with pre-existing chronic diseases including cardiovascular disease, cancer, high blood pressure, respiratory disease, and diabetes appear to be at increased risk of complications and are more likely to die, as do underlying chronic medical conditions that make them more susceptible (Khademi et al., 2020), they may die not from the disease itself but anxiety, was one of the most common psychological problems among them.

Fear and anxiety about death exist in human nature despite the development of technology and medical sciences, but ancient history witnessed disasters of death due to previous epidemics such as the plague until the vaccine was discovered, and the situation was also reflected in the media and globally on the current epidemic (Menzies and Menzies, 2020).

Currently, the level of anxiety resulting from exposure to social and electronic media during the COVID-19 epidemic is unknown in Iraq, while some other countries have addressed this issue with drastic decisions (Roy et al., 2020, Gao et al., 2020). Therefore, the purpose of the current study was to fill the void in exploring the presence of anxiety in patients with chronic diseases in Erbil city the capital of the Kurdistan Region of Iraq during the COVID-19 epidemic.

The aims of this study include the following:

1. To assess the anxiety of people with chronic diseases about death concerning COVID-19

2. To evaluate the use of social media among patients with chronic diseases

3. To assess the relationship between death anxiety concerning COVID-19 and social media use

4. To assess some demographic data that may influence death anxiety concerning COVID-19.

2. Materials and Methods

A Descriptive correlational study was used to assess the relationship between death anxiety and using social media among chronic disease patients during the COVID- 19 pandemic in Erbil city in Kurdistan region of Iraq. Data were collected rom12ᵗʰDecember 2020 to 10ᵗʰJune 2021. Convenient random sampling technique was used to choose 400 participants who visited primary health care centers / chronic disease units. The sample size for this study was calculated according to the statistical methods, Cochran method was used (Chuan and Penyelidikan, 2006).

The chronic disease patients, who had at least one chronic disease, were living in Erbil city, used social media and agreed to participate was included in the study. The chronic disease patients, who had at least one chronic disease, were living in Erbil city, used social media and agreed to participate was included in the study.

The study was approved by the Scientific and Ethical Committee at Research Centre, Erbil Polytechnic University, Shaqlawa technical college. Before data collection, official permissions were obtained which involved Layla Qasem and Malafandi Health care center, Directorate of General Health Erbil city. And written informed consent was obtained from each sample for participating in the study, after explaining the aim of the study.

In this study to collect data about the anxiety of death and using social media regarding chronic disease patients, a questionnaire was developed after an extensive review of relevant literature. We prepared this questionnaire according to the anxiety of death provided by (Shakir, 2016) and using social media provided by (Khalid, 2014).

This questionnaire was composed of three parts:

1. The first part is composed of some questions which provide some information about demographic data (age and gender) which may affect their anxiety of death regarding COVID-19

2. The second part consists of some questions which measures the chronic disease patient's anxiety of death regarding COVID-19. The death anxiety questionnaire was consisted of 27 questions and each question had three options participants could choose one of these options, so the participant could take 1-3 scores from each question, and the scores of death anxiety for each participant could range from 27 to 81.

3. The Third part consists of some questions which measures using of social media among chronic disease patient during the time of COVID-19. The social media questionnaire was consisted of 30 questions and each question had three options, which participant could choose one of these options, so the participant could take 1-3 scores from each question and scores of social media for each participant could range from 30 to 90.

Questions were categorized as multiple choice questions. With some modification, the primary questionnaire was reviewed by 10 experts from various specialties. Afterward, the researcher adjusted the questionnaire according to experts' comments.

After finishing administrative arrangements we referred to the primary health care centers / chronic disease unit. We took oral and written permission from those who participated in this study, translated the questionnaire into the Kurdish language and the researchers filled the questionnaire by interview.

In addition a pilot study was conducted for making sure of

reliability of the study questionnaire. Data were entered and analyzed using a statistical package for the social sciences (version 25.0). One sample T test was used to assess significance level of death anxiety and using social media among participants. Independent sample T test was used to assess level of death anxiety and social media according to gender. One way ANOVA reveal the difference between means of death anxiety and social media variables according to age and kind of disease in the participants and Scheffe test was used to determine the specific age group and disease which their mean were significantly more than other groups. Finally Pearson correlation coefficient test was used to determine relationship between death anxiety and using social media among participants. A *p* value was considered significant when it was less than 0.05 and highly significant when it was equal to or less than 0.01.3

3. Results

400 samples were chosen to participate in the study. Their genders were equally distributed (200 male and 200 female). All the participants had at least one chronic disorder and the majority of them were more than 50 years old.

Table 1 shows the level of death anxiety among participants. According to this table level of death anxiety among participants was significantly higher than in the normal population (t (399) = 26.23, p = 0.001). This finding was anticipated by the researchers because participants' ages were higher than the normal population and they suffer from chronic disorders which may have an impact on their death anxiety level. The common anxiety among COVID -19 patients appears to be largely due to the unknown nature and ambiguities of the virus (Khademi et al., 2020).

Table (1) one – sample t-test for death anxiety

N	MEAN	Std Deviation	df	Test Value	t.test T.calculate	Value T.table Value	Sig .
400	65.84	9.023	399	54	26.238	3.291	0.001

Table 2 shows the level of using social media among participants which is more than the normal population (t (399) = 10.56, p = 0.001). According to the results of some studies

Looking forward to following up on misleading and fake news and amplifying the aura of fear led to an increase in cases of mental disorders(Hossain et al., 2020).

Table (2) one – sample t-test for social Media

N	MEAN	Std.Deviation	df	Test value	t.test T. calculate	Value T.table Value	Sig.
400	65.13	9.717	399	60	10.564	3.291	0.001

According to the results of table 3, death anxiety and using social media were significantly different between males and females. Female patients had more death = 0.001, T= 14.89) in comparison to males anxiety (P. This finding was

supported by research that was done in the year2020 (Karim et al., 2020), inversely male participants had more desire to use social media in comparison to females (P= 0.001, T=5.30).

Table (3) Independent sample test for death anxiety and social Media according to gender

variables	gender	N	mean	Std. deviation	Df	t.test value		Sig.
						T calculate	t.table value	
Death Anxiety	Male	200	60.45	9.068	398	14.899	3.29	0.001
	female	200	71.23	4.751	398			
Social Media	Male	200	67.63	8.153	398	5.301	3.291	0.001
	Female	200	62.64	10.506				

Table 4 shows, that there was a significant relationship between death anxiety and participant's age (P = 0.001). According to the results showed by the Scheffe test the age group which influenced more by death anxiety was the age group 41- 50 years old (mean = 68.21). Also, there was a significant relationship between using social media and participants' age (p= 0.001). Scheffe test showed that the age group of 21 – 30 years old, use social media more than other age groups (mean = 71.85). This finding is relatively logical because it seems with the increase in age, older populations less frequently use social media (which may be due to illiteracy, decrease visual acuity, and other factors) in comparison with younger age groups.

Table (4) One way ANOVA for death Anxiety and Social Media according to age

Variables	Groups	Sum Of squares	df	Mean square	f.test value		Sig.
					F Calculate	t. table value	
Death	Between groups	1749.435	3	583.145	7.513	5.42	0.001
Anxiety	Within groups	30737.002	396	77.619			
	Total	32486.437	399				
Social	Between groups	2922.831	3	974.277	11.102	5.42	0.001
Media	Within groups	34753.147	396	87.760			
	Total	37675.978	399				

Table 5 evaluates the relationship between death anxiety and participants' kind of diseases. According to the results, there was a significant relationship between death anxiety and participants' kind of disease (P=0.001). Participants of our study suffer from chronic disorders like diabetes mellitus, ischemic heart disease, hypertension, and sometimes two or more chronic disorders at the same time. Scheffe test reveal that participants who had heart disease had more levels of death anxiety (mean = 71.67) in comparison to other groups. A significant relationship was found between social media and participants 'kinds of disorders too (P = 0.01). According to the results of the Scheffe test, those participants who were affected by heart disorders used social media more than other groups.

Table (5) One way Anova for death Anxiety and Social Media according to kinds of disease

Variables	Groups	Sum Of squares	df	Mean square	f.test value		Sig.
					F Calculate	t. table value	
Death	Between groups	1929.011	3	643.004	8.333	5.42	0.001
Anxiety	Within groups	30557.426	396	77.165			
	Total	32486.438	396				
Social	Between groups	1389.088	3	463.029	5.053	3.32	0.01
Media		36286.890	396	91.634			
		37675.977	399				
	Within groups						
	Total						

Table 6 shows the association between social communication and anxious news through the pain with an increase in death cases Pearson correlation coefficient test was used to analyze the relationship between these two variables and according to the results, there was a moderate positive relationship between using social media and level of death anxiety in the participants (r = 0.41). In general, the results suggest that, as the using social media increased, the death anxiety level increased moderately among participants. The online survey which was done in Russia in the year, 2020 found that excessive media consumption will increase state anxiety(Nekliudov et al., 2020)

Table (6) Pearson correlation coefficient test to show the relationship between death anxiety and social media variables

variable	Death anxiety	Social media
Death anxiety	1	0.41
Social media	0.41	1

4. Discussion

In this study, we collected data at only one point in time, so cross-sectional data limit causal inferences. The majority of participants were older adults who had at least one chronic disorder and this data justifies their higher level of death anxiety.

The mean of score of participant in this study for death anxiety was 65.84 which were significantly higher than the normal population. It seems that the older age of participants and suffering from chronic disorders favor increasing their level of death anxiety. Also, death anxiety has lots of negative effects, especially in the mental health field. Fear of death has also been shown to play a causal role in several mental health conditions(Menzies et al., 2020).

The mean score of participant in this study for social media was 65.13 which was significantly higher than the normal population. As a result of a similar study which was done on 2020 by Games et al. showed thatsocial media had a significant impact on spreading fear and panic related to the COVID-19 outbreak in Iraqi Kurdistan, with a potential negative influence on people's mental health and psychological well-being (Games et al., 2020).

Scheffe method shows that participants who had heart disease had more levels of death anxiety and used social media in comparison to other participants with other types of chronic disorders. Although this finding is logical it's not reliable, because the sample size of this group of participants was not enough to infer this idea (only 3 participants out of 400 participants belong to this group).

There was a moderately positive relationship between using social media and the level of death anxiety in the participants. Because of the high influence of social media on the population's mind, the existence of this relationship was anticipated between these variables but with more strength. It seems that because a majority of participants in our study had old age and older adults generally use social media less than the younger population, the relationship between these variables existed, but with less strength than, we anticipate.

5. Conclusion

Although using social media might negatively affect the population's mind and death spread of fake news and misinformation about COVID-19, it could be a worthy source for spreading real and positive information, which could positively affect the general population. The general acceptance of social media by the population and specifically older adults who have chronic disorders, encourage us to emphasize more on educating people, through social media. Purposeful education of the population (specifically older adults who have chronic disorders) about COVID – 19 with emphasis on the optimistic findings could enhance their knowledge and at the same time decrease their death anxiety.

It is recommended more studies of these kind with larger sample size and continuously measure outcomes in order to obtain more reliable findings.

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