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MENTAL HEALTH, QUALITY OF LIFE, SPIRITUAL DRYNESS AND ACEDIA SYMPTOMS IN PATIENTS SUFFERING FROM CHRONIC DISEASES

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ABSTRACT

The aim of the present study is to examine mental health, quality of life, acedia and spiritual dryness in patients suffering from chronic diseases. **Materials and method**: Data were collected by special design instrument for the needs of the present study. Descriptive statistics and inferential statistics were applied and the analysis was carried out with IBM SPSS 26 and JASP 0.14.01.

Results: From the total of 210 participants, 106 (50.4%) were male, the mean age was 62.9 years, and the majority of them were diagnosed with type 2 diabetes. 50 (23.8%) of the participants suffer from anxiety and 39 (18.6%) from depression. In addition, 17.1% experience phases of spiritual dryness frequently or regularly. Physical quality of life component, was associated with the following variables: live from faith, psychological wellbeing, type of disease and age. This model can predict 31.1% of the variance. In terms of psychological wellbeing, the variables living arrangement, awe/gratitude, anxiety, and spiritual dryness can interpret 41.5% of the variance. When it comes to depression, we found that wellbeing, awe/gratitude are predictors of depressive symptoms, explaining at least 14.1% of the variance. Finally, anxiety can be predicted by wellbeing, awe/gratitude, and the type of the disease, interpreting 17.2% of the variance. **Conclusions**: Patients suffering from chronic diseases are experiencing spiritual dryness and acedia symptoms, and those aspects can be associated with various domains of health and wellbeing.

KEY WORDS: chronic diseases; mental health; quality of life; spiritual dryness; acedia symptoms

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INTRODUCTION

Chronic illness is defined as a condition that lasts a year or more and requires continued medical care and/or limitations of daily activities throughout a person's lifetime [1]. Chronic diseases include communicable diseases (e.g. AIDS,), non-communicable diseases (e.g. kidney failure, cancer, heart disease, diabetes mellitus, chronic lung diseases), chronic mental diseases (e.g. schizophrenia, depression), neurological disorders (e.g. epilepsy) and gradually worsening diseases (e.g. blindness, spinal cord atrophy) [1]. Several of these result in changes of self-image and, depending on the severity of disease, may threaten one's sense of power or competence and possible dependence on others. The decline in strength, fatigue, pain, alopecia, the side effects of the treatment drugs question the functionality of the body of the sufferers [2].

Chronic illness can affect the physical, psychological, social, and spiritual dimensions of a patient's life [3]. Spirituality and mental health are linked, and many people find that their spiritual beliefs and practices have a positive impact on their emotional and mental well-being [4] and these are thus utilized as a resource to cope. Studies have shown that engaging in spiritual practices, such as prayer, meditation, or attending religious services, can help reduce stress, lower blood pressure, and improve overall health. These observations are often found in healthy people, and cannot easily transferred to all patients with different chronic diseases, independently from cultural or religious context. In addition, having a sense of purpose and meaning in life, which is one specific aspect of the multidimensional construct spirituality, may to play a role in mental health and resilience [3]. Some spiritual practices and beliefs can help individuals find this sense of purpose and connect with something greater than themselves, which can lead to greater overall well-being [5].

On the other hand, spiritual distress refers to a state of lack of inner peace and connectedness to loved ones, an inability to accept what is happening, find meaning in life, and hope for the future [3]. Such spiritual struggles are connected with low mental health [6]. Spiritual dryness refers to a feeling of heaviness, emptiness, or disconnectedness towards God or the Sacred that can arise when one's spiritual practice or beliefs are not providing the sense of fulfillment and purpose they once did]. Main predictors are low perception of the Sacred in life and low sense of coherence on the one hand, and depressive symptoms and emotional exhaustion on the other hand [7]. This can be a source of stress and anxiety, which can contribute to poor mental health. In turn, poor mental health can exacerbate spiritual dryness, creating a vicious cycle. For example, depression and anxiety can make it difficult to connect with others and to feel a sense of purpose in life, which in turn can deepen feelings of spiritual emptiness [8,9]. In addition, one more term that is linked to spiritual dryness is acedia [10]. The definition of this term ranges from the lack of care to the lack of care for spiritual matters. Often, the term has been used with depression and described as weariness, listlessness, boredom, ennui, meaninglessness, despair, despondency, and anhedonia, indicating the link to depression [10]. Acedia is considered to be a contribution factor of spiritual dryness, with symptoms of spiritual/emotional fatigue, tiredness or even boredom [11].

Despite the fact that spirituality and spiritual needs have been thoroughly investigated [12-14], the relationship between spiritual dryness, acedia, mental health, and quality of life of patients suffering from chronic diseases was rarely addressed. One paper addressed these perceptions in the specific group of Seventh-day Adventists [11]. In addition, there is a lack of instruments to assess those concepts in the Greek language.

THE AIM

Thus, the aim of the present study is to assess the validity of the Greek version of instruments addressing of spiritual dryness and acedia on the one hand, and the resources Awe and Gratitude and Transformative Spirituality on the other hand. These indicators of spiritual and mental health were addressed in patients suffering from chronic diseases.

MATERIALS AND METHODS

STUDY PARTICIPANTS

From June 2022 to August 2022, individuals from the Greek region of Larissa took part in an anonymous survey with standardized measures using the convenience sample approach. Participants were recruited during their routine check-up at an outpatient healthcare facility. To be eligible for the study, participants had to be Greek-speaking and at least 18 years old, as well as have been diagnosed with at least one chronic health condition.

ETHICS

The study was approved from the ethics committee of Nursing Department n. ND 806.10.06.2022.

MEASURES

The survey included fundamental sociodemographic inquiries on gender, age, nationality, religious affiliation, and the degree of perceived pressure. The Greek version of the measures used in the survey will be described below. To create the Greek language version, a bilingual researcher translated the original English version, which was then reviewed and adjusted by another bilingual researcher. After back-translating it into English, any inconsistencies were corrected. Seven nursing and medical experts were invited to comment on how well the items fit within the context of Greek culture in order to assess the content validity of the items. Next, the tool's cognitive assessment was conducted utilizing the feedback of ten chronic patients who met the inclusion requirements (those over 18 years old, and fluent in Greek) in order to examine the tool's clarity and readability of the questions.

SPIRITUAL DRYNESS

The Spiritual Dryness Scale (SDS) was developed as a measure to assess a specif form of spiritual struggle [15]. The scale consists of six items that demonstrate good internal consistency (Cronbach's α = 0.87). Specific statements make reference to the perceptions of God's distance, that one's prayers are not heard, as well as the feelings of spiritual emptiness, spiritual exhaustion, and being abandoned by God. The components of the instrument were designed with religious people's everyday experiences in mind. We added one more item (SDS0) to this study to address the question of "deep longing for God". A Likert scale with response options ranging from not at all (1) to regularly (5) was used by

participants to rate their responses. The SDS scores are the mean scores and reflect the perceived frequency of these perceptions [15].

AWE AND GRATITUDE

The seven-item Awe/Gratitude scale (GrAw-7)), which has high psychometric qualities (Cronbach's alpha = 0.82), was used to measure the perceptions of standing still in wondering awe with subsequent feelings of gratitude [16]. It is regarded as an indicator of experienced spirituality. The experiential elements of being affected and touched by specific events and/or places, nature-related reactions to suspending daily tasks, and the ensuing feelings of awe and gratitude are clearly the focus of this measure. The particular statements are, "I stop and then think of so many things for which I'm really grateful,""I stop and am captivated by the beauty of nature,""I pause and stay spellbound at the moment", and "In certain places, I become very quiet and devout." The scoring system for each item was a 4-point scale: 0, never; 1, seldom; 2, often; and 3, regularly [16].

TRANSFORMATORY ASPECTS OF SPIRITUALITY

To address transformatory aspects of spirituality, the 26-item Franciscan Spirituality questionnaire (FraSpir) was used. It differentiates four topics: "Living from the Faith/ Searching for God" as the intentional and experiential aspect of spiritualitzy, and "Peaceful Attitude/Respectful Treatment"; "Commitment to the Disadvantaged and Creation"; and "Attitude of Poverty" as the behavioral consequences of transformation [17]. Their primary version's internal reliability coefficient Cronbach's alpha ranges from 0.79 to 0.97 [14]. Each item was rated on a five-point scale from 0 (does not apply at all) to 4 (applies very much). 11 items from the scale's Living from the Faith/Searching for God subscale were employed in the current study [17].

ACEDIA SYMPTOMS

In order to evaluate Acedia symptoms in a broader context, we used items that had previously been used in a study among religious brothers and sisters. Ten items were utilized, of which two were meant to be informative items ("My prayer life is rich and fulfilling," "In prayer I am focused and present before God"), while the other eight discussed the experiences of challenges in prayer life (in terms of inattentiveness and distance) and overbearing spiritual demands (in terms of perceived overcharging demands referred to

God). Examples of the former topic include: "I am more passive in prayer and without any inner involvement," "My prayer life doesn't excite me so much anymore", "I really enjoy only a little in my spiritual life", "I don't really care whether I find God in prayer or not", while the latter topic was addressed by items such as "What God asks of me is more than I can give", "What God asked of me is just too much", "I really don't know what God wants from me", "Somehow, everything got too much for me". In this paper, a reliability analysis of these items will be provided. On a Likert scale, the possible responses were not at all (1), rarely (2), occasionally (3), fairly often (4) and regularly (5) [18].

MENTAL HEALTH

The Patient Health Questionnaire-2 (PHQ-2) and the Generalized Anxiety Disorder-2 (GAD-2) guestionnaires were created as ultra-short depression and anxiety screening tools that might be used in epidemiological studies [16-18. Two questions make up the PHQ-2, which has been shown to be sensitive and specific for identifying depressive disorders. The two-question GAD-2 questionnaire also seems to have acceptable accuracy for identifying post-traumatic stress disorder, generalized anxiety disorder, panic, and social anxiety. Each item in both questionnaires asks respondents to rank on a four-point scale ranging from "0 = not at all" to "3 = nearly every day". PHQ-2 and GAD-2 total scores are determined by summing the results of the two questions, yielding a score for each questionnaire ranging from 0 to 6, with a higher score indicating a more severe mental health condition. On both the PHQ-2 and GAD-2 scales, the optimal cut-point is 3 based on receiver-operating characteristic curve analysis [19-21].

WELLBEING

The 5-item WHO-Five Well-being Index (WHO-5) was used to measure psychological wellbeing (Bech et al., 2003). The representative items are "I have felt cheerful and in good spirits" or "My daily life has been filled with things that interest me." A 6-step grading scale, from at no time (0) to all the time (5), was used to rate the intensity of feelings over the past two weeks (5). The reported WHO-5 total scores here correspond to a 100% level [0-100], where scores under 50 are signs of diminished wellbeing [22].

QUALITY OF LIFE

The 12-question SF-12 health survey questionnaire was used. It was designed as a shorter substitute for

Table I. Demographic characteristics of the sample (n=210)

		Frequency	Percent %
Gender	Male	106	50,4
	Female	104	49,5
Age (Mean±SD)			62.9±12.7
Area Of Residence	Rural	7	3,3
	Semi-Urban	28	13,3
	Urban	175	83,3
Marital Status	Single	6	2,8
	Married	181	86,1
	Divorced	1	0,4
	Widowed	22	10,4
Living Alone	Yes	29	13,8
	No	181	86,1
Educational_Level	Elementary	39	18,5
	Junior_High_School	56	26,6
	High_School	50	23,8
	Student	2	0,9
	University	63	30,0
Occupation	Unemployed	1	0,4
	Household	20	9,5
	Freelancer	26	12,3
	Private	44	20,9
	Public	24	11,4
	Pension	95	45,2
Health_Status	More_Or_Less_Healthy	3	1,4
	Acute	2	0,9
	Chronic	51	24,2
	Mental	18	8,5
	Neurological	5	2,3
	Pain	9	4,2
	Cnacer	14	6,6
	Diabetes_Type_II	108	51,4
Type_Disease	Diabetes	108	51,4
	Other	102	48,5
ration Of Disease (Mean±SD)			20.8±13.2

Translation and validation of Spiritual Dryness, Awe and Gratitude, Franciscan Spirituality Questionnaire (FraSpir) and Acedia scales.

the SF-36 questionnaire, which is utilized in large-scale studies, particularly when the outcomes of interest are general physical and mental health rather than the distinctive diagram comprised of the eight scales of the SF-36 [23]. All 12 questions have previously been employed to assess the total physical and mental components (PCS-12 and MCS-12). The validity of the Greek version was determined in a study using a stratified representative sample (n = 1,005) of a healthy Greek population [24].

STATISTICAL ANALYSIS

Descriptive statistics (frequency, mean values, and standard deviations) and inductive statistics were used to examine the data in order to provide answers to all of the research questions. With the use of SPSS 26.0 and JASP, analyses of variance (ANOVA), independent t-tests, first-order correlations (Spearman rho), regressions, internal consistency (Cronbach's coefficient), and confirmatory factor analyses were performed.

Table II. Scales of the study descriptive statistics

	Mean	SD	Min	Max
Under pressure	55.11	15.64	10.00	90.00
SF-12 physical component scale 12 (PCS12)	50.01	8.15	22.98	60.66
SF-12 mental component scale 12 (MCS12)	51.11	7.95	27.34	62.85
wellbeing	60.70	14.42	8.00	100.00
Depression	2.33	1.00	0.00	4.00
Anxiety	2.29	0.99	0.00	4.00
Awe Gratitude	75.77	16.79	28.54	99.90
Live from the Faith	1.93	0.69	0.40	4.00
Spiritual Dryness	2.75	0.77	1.00	4.83
Acedia	2.76	0.66	1.00	4.25
Acedia Subscale Excessive Spiritual Demands	2.705	0.732	1.000	4.750
Acedia Subscale Difficulties Prayer Life	2.819	0.683	1.000	4.250

Table III. Differences between T2D and other chronic conditions

	Group	Mean	SD	t-test	р
Under_pressure	Diabetes	58.05	13.68	2.847	0.005
	other	52.01	16.99		
PCS12	Diabetes	51.32	6.09	2.195	0.029
	other	48.79	9.56		
MCS12	Diabetes	51.55	6.55	0.744	0.458
	other	50.70	9.09		
wellbeing	Diabetes	59.18	12.51	-1.577	0.116
	other	62.31	16.10		
Depression	Diabetes	2.39	1.05	1.220	0.224
	other	2.19	0.86		
Anxiety	Diabetes	2.38	1.04	1.756	0.081
	other	2.09	0.86		
Awe_Gratitude	Diabetes	74.39	14.15	-1.225	0.222
	other	77.23	19.16		
LivefromtheFaith	Diabetes	1.87	0.56	-1.286	0.200
	other	2.00	0.79	'	
Spiritual Dryness	Diabetes	2.95	0.46	3.988	<0.001
	other	2.53	0.96		
Acedia	Diabetes	2.94	0.31	4.306	< 0.001
	other	2.56	0.85		
AcediaSubscale_ExcessiveSpiritualDemands	Diabetes	2.91	0.30	4.513	< 0.001
	other	2.48	0.95		
AcediaSubscale_DifficultiesPrayerLife	Diabetes	2.97	0.43	3.482	< 0.001
	other	2.65	0.84		

RESULTS

From the total of 210 participants, 106 (50.4%) were male, the mean age was 62.9 years, and the majority of them were diagnosed with type 2 diabetes. Detailed demographic and health related characteristics are presented in table I.

Forward and backward translation procedure was performed in order to obtain the Greek version of the instruments. Test – retest reliability was performed to examine the stability of the instruments overtime. High and strong correlation was observed between two administrations (p<0.001) indicating the stability

Table IV. Pearson's Correlations between quality of life, mental health and spirituality measures

			. ,			•	•					
Variable		Under_ pressure	PCS12	MCS12	wellbeing	Depression	Anxiety	Awe Gratitude	Live from the Faith	Spiritual Dryness	Acedia	Excessive Spiritual Demands
PCS12	Pearson's r	-0.120	_									
	p-value	0.093	_									
MCS12	Pearson's r	-0.159	0.283	_								
	p-value	0.026	< .001	_								
wellbeing	Pearson's r	-0.228	0.500	0.597	_							
	p-value	< .001	< .001	< .001	_							
Depression	Pearson's r	0.112	-0.076	-0.299	-0.334	-						
	p-value	0.158	0.360	< .001	< .001	-						
Anxiety	Pearson's r	0.179	-0.065	-0.376	-0.348	0.811	-					
	p-value	0.024	0.435	< .001	< .001	< .001	-					
Awe_Gratitude	Pearson's r	-0.002	0.016	0.224	0.119	0.216	0.218	-				
	p-value	0.977	0.829	0.002	0.084	0.006	0.006	-				
LivefromtheFaith	Pearson's r	-0.137	-0.189	-0.068	0.056	0.151	0.121	0.245	-			
	p-value	0.047	0.008	0.343	0.421	0.057	0.128	< .001	-			
SpiritualDryness	Pearson's r	0.261	0.008	0.042	-0.288	-0.013	-0.014	-0.103	-0.557	-		
	p-value	< .001	0.915	0.560	< .001	0.871	0.862	0.138	< .001	-		
Acedia	Pearson's r	0.428	-0.103	0.057	-0.207	-0.022	0.052	0.023	-0.375	0.710	-	
	p-value	< .001	0.152	0.431	0.003	0.785	0.516	0.736	< .001	< .001	-	
.Excessive Spiritual Demands	Pearson's r	0.433	-0.081	0.068	-0.165	-0.077	-0.009	0.012	-0.354	0.679	0.940	
	p-value	< .001	0.257	0.343	0.017	0.331	0.907	0.866	< .001	< .001	< .001	-
Difficulties Prayer Life	Pearson's r	0.366	-0.112	0.037	-0.225	0.024	0.083	0.033	-0.348	0.649	0.931	0.752
	p-value	< .001	0.119	0.610	0.001	0.760	0.298	0.637	< .001	< .001	< .001	< .001

of the scales over time. Finally, confirmatory factor analysis performed to verify the factor structure of the instruments. Based on the results of the confirmatory factor analysis for the Spiritual Dryness Scale, it was determined that the Greek version of the SDS was appropriate. The comparative fit index (CFI) was 0.957, the goodness of fit index (GFI) was 0.924, and the standardized root mean square residual (SRMR) was 0.028. Confirmatory factor analysis results revealed that the Greek version of Awe and Gratitude scale suited the data fairly well. The comparative fit index (CFI) was 0.807, the goodness of fit index (GFI) was 0.851, and the standardized root mean square residual (SRMR) 0.070. According to the findings of the confirmatory factor analysis for the Franciscan Spirituality Questionnaire (FraSpir), the Greek version had a fair fit. The comparative fit index (CFI) was 0.795, the goodness of fit index (GFI) was 0.805 and the standardized root mean square residual (SRMR) was 0.071. Results of a confirmatory factor analysis of Acedia Scale showed that the Greek version had a satisfactory fit. The comparative fit index (CFI) was 0.958, the goodness of fit index (GFI) was 0.925, and the standardized root mean square residual (SRMR)

was 0.042. Results of a confirmatory factor analysis of Wellbeing scale showed that the Greek version had a satisfactory fit. The comparative fit index (CFI) was 0.950, goodness of fit index (GFI) was 0.927, and the standardized root mean square residual (SRMR) was 0.042.

Regarding the scale's descriptive statistic, we can observe that participants are reporting average quality of life as the mean scores of SF12 are slightly above 50, which is considered to be the mean value of the theoretical range. Similarly, the mean values of the depression and anxiety scales are above the value 2, that is the mean of the theoretical range. While taking into consideration the cut-off value of 3 on those scales 50 (23.8%) of the participants suffer from anxiety and 39 (18.6%) from depression. In addition, 17.1% experience phases of spiritual dryness frequently or regularly. Detailed descriptive statistics of the scales are presented in table II.

Bivariete analysis revealed that type 2 diabetes patients are reporting better physical quality of life compered to other chronic patients, more spiritual dryness, and more acedia symptoms. A Detailed bivariate analysis is presented in table III.

Table V. Predictors of Quality of life and Mental health

Coe	efficients						
Model		Unstandardized	Standard Error	Standardized	t	р	
Physical Quality of life component	(Intercept)	59.200	4.878		12.136	<.001	
	Live from the Faith	-4.363	0.884	-0.360	-4.933	< .001	
	wellbeing	0.151	0.043	0.268	3.512	< .001	
	Type disease -T2D reference category						
	Other chronic conditions	-2.897	1.037	-0.199	-2.794	0.006	
	Age	-0.093	0.045	-0.168	-2.064	0.041	
	F(4,	140)=17.231, adR2=31	I.1%, p<0.001				
Mental Quality of life							
component	(Intercept)	18.983	5.518		3.440	< .001	
	wellbeing	0.252	0.039	0.450	6.397	< .001	
	Living alone yes reference category						
	No	5.125	1.391	0.238	3.686	< .001	
	Anxiety	-1.941	0.480	-0.280	-4.040	< .001	
	Awe Gratitude	0.077	0.031	0.169	2.513	0.013	
	Spiritual Dryness	2.183	0.936	0.157	2.333	0.021	
	F(5,	139)=21.424, adR2=41	1.5%, p<0.001				
Depression	(Intercept)	2.913	0.527		5.528	< .001	
	wellbeing	-0.027	0.006	-0.327	-4.424	< .001	
	Awe_Gratitude	0.013	0.005	0.207	2.792	0.006	
	F(2,	155)=13.920, adR2=14	1.1%, p<0.001				
Anxiety	(Intercept)	3.026	0.515		5.879	< .001	
	wellbeing	-0.026	0.006	-0.321	-4.380	< .001	
	Awe_Gratitude	0.017	0.005	0.264	3.486	< .001	
	Type disease -T2D reference category						
	Other chronic conditions	-0.352	0.164	-0.164	-2.141	0.034	
	F(3,	154)=12.361, adR2=17	7.2%, p<0.001				

In order to examine the relationship between mental health and quality of life and spirituality measures, we performed correlations between the scales. A few significant and moderate correlations were observed. The detailed results of the Pearson correlation test are presented in table IV.

Finally, in order to examine possible predictors of quality of life and mental health, linear regression analysis with the stepwise method was performed. Regarding the physical quality of life component, we observed that live from faith, wellbeing, type of disease, and age can predict 31.1% of the variance. Regarding mental quality of life component wellbeing, living arrangement, awe gratitude, anxiety, and

spiritual dryness can interpret 41.5% of the variance. When it comes to depression, we found that wellbeing, awe and gratitude are predictors of depression, explaining 14.1% of the variance. Finally, anxiety can be predicted by wellbeing, awe, gratitude, and the type of the disease, interpreting 17.2% of the variance (Table V).

DISCUSSION

The aim of this study was to examine the mental health and quality of life of patients suffering from chronic conditions, as well as the possible effect that spiritual aspects can have on those domains. According to our results, to live from the faith, wellbeing, type of disease, age, living alone, anxiety, awe gratitude, and spiritual dryness can have an important impact on physical and mental quality of life of chronic patients. Regarding mental health wellbeing, the type of disease and awe gratitude can impact the mental health of patients.

The chronicity of the disease is a particularly stressful situation and causes fear and uncertainty about the outcome of the disease and the new living conditions. In addition to negative emotions and physical problems, chronic disease causes mainly pain, weakness, and fatigue, as well as limitation and changes in daily habits and side effects from medication. As patients are challenged to cope with the new situation caused by the disease, recovery and adaptation strategies are developed [25]. According to our results, patients are reporting high levels of QoL, and almost one in five patients are reporting poor mental health. This result is in opposition to various studies in the international literature [26]. Although a recent study in Greece among hemodialysis patients also reported good levels of QoL among the patients, the variety of results can be attributed to cultural factors as well as the family structure and enhanced social support that patients can have in other cultures [27]. In the present study, 23.8% of the participants suffered from anxiety and 18.6% from depression. The percentages for the prevalence of depression and anxiety vary among studies on the emotional burden of chronic conditions [28-31]. An explanation that could be given is the different diseases, the different family and social environments, and the support that individuals get from them. Also, one could say that the acceptance of the new lifestyle varies from study to study and from disease to disease. Finally, we must be aware that the amount of information that patients have about their chronic health problem and the perceptions they have about their illness contribute to their better adaptation to it.

According to our results, aspects of spirituality, spiritual dryness, and acedia were found to be related to aspects of mental health and wellbeing. This result is in accordance with recent studies, which conclude that spirituality plays an important role in improving physical and mental health. Researchers argue that maintaining spirituality and religiosity can improve health and wellbeing. In addition, spirituality can help individuals maintain hope, meaning, purpose, and a sense of peace. Patients spiritual/religious practices and beliefs can help them cope with chronic illness [31]. It is worth mentioning, however, that this is a deeply subjective concept, that is mentioned in an

internal system of values and beliefs. Also, it is worth mentioning that the Greek population, as measured, is characterized at a rate of almost too much to be very religious and close to God.

This study revealed that diabetic patients are reporting better QoL and more spiritual dryness and acedia symptoms compared to other chronic conditions. This is a conflicting study that opposes studies in the international literature that report poor QoL in diabetic patients compared to controls [32]. Yet our rest sample is composed of individuals suffering from other health conditions, some of which are serious and life-threatening, such as cancer. Previous studies conclude that diabetes can alter not only physical health but also social, psychological, and spiritual health and wellbeing. As stated above, patients who can maintain a sense of purpose in life, productivity, and reason for living are usually reported to have better health outcomes [33].

Despite the fact that this study provided important information regarding physical, mental, and spiritual aspects of health, it has some limitations. The cross-sectional design of the study doesn't allow a deeper understanding of the effect that spirituality can have on physical and mental health. The sample of the present study was a convenience sample and came from a single center, which was in fact in regional Greece, and therefore the results cannot be generalized to the entire population of Greek patients suffering from chronic diseases. By extension, it remains important to evaluate the association between mental health, spirituality, and QoL in a larger sample of patients in a more representative sample.

CONCLUSIONS

Patients suffering from chronic diseases are experiencing spiritual dryness and acedia symptoms, and those aspects can be associated with various domains of health and wellbeing. Spirituality helps patients cope with symptoms and reduced functioning while still maintaining overall well-being. Finding meaning in life is equally important for mental resilience and developing recovery methods and strategies, and this can be achieved through spirituality. For many people, religion and spirituality are central to their lives. These axes should be considered during its design to provide care to these patients, as there is considerable evidence in the literature to support this. Spiritual orientation can offer a sense of destination in life while providing a multitude of coping strategies for stressor situations and ultimately leading to self-empowerment for dealing with stress, even adapting to disease.

REFERENCES

- 1. Martin CM. Chronic disease and illness care: adding principles of family medicine to address ongoing health system redesign. Can Fam Physician. 2007 Dec;53(12):2086-91. PMID: 18077734; PMCID: PMC2231531.
- 2. Van Wilder, L., Pype, P., Mertens, F. et al. Living with a chronic disease: insights from patients with a low socioeconomic status. BMC Fam Pract 22, 233 (2021). https://doi.org/10.1186/s12875-021-01578-7
- 3. Klimasiński M, Baum E, Praczyk J, Ziemkiewicz M, Springer D, Cofta S, Wieczorowska-Tobis K. Spiritual Distress and Spiritual Needs of Chronically III Patients in Poland: A Cross-Sectional Study. Int J Environ Res Public Health. 2022 May 1;19(9):5512. doi: 10.3390/ijerph19095512. PMID: 35564907; PMCID: PMC9101665.
- 4. Fradelos EC, Tzavella F, Koukia E, Papathanasiou IV, Alikari V, Stathoulis J, Panoutsopoulos G, Zyga S. INTEGRATING CHRONIC KIDNEY DISEASE PATIENT'S SPIRITUALITY IN THEIR CARE: HEALTH BENEFITS AND RESEARCH PERSPECTIVES. Mater Sociomed. 2015 Oct;27(5):354-8. doi: 10.5455/msm.2015.27.354-358. Epub 2015 Oct 5. PMID: 26622206; PMCID: PMC4639341.
- 5. Brown DR, Carney JS, Parrish MS, Klem JL. Assessing spirituality: The relationship between spirituality and mental health. Journal of spirituality in mental health. 2013 Apr 1;15(2):107-22.
- 6. Büssing A, Kerdar SH, Akbari ME, Rassouli M. Perceptions of Spiritual Dryness in Iran During the COVID-19 Pandemic. J Relig Health. 2021 Oct;60(5):3347-3371. doi: 10.1007/s10943-021-01360-0. Epub 2021 Jul 29. PMID: 34327572; PMCID: PMC8321505.
- 7. Wilt JA, Exline JJ, Pargament KI. Daily measures of religious/spiritual struggles: Relations to depression, anxiety, satisfaction with life, and meaning. Psychology of Religion and Spirituality. 2022 Aug;14(3):312.
- 8. Büssing A, Baumann K, Jacobs C, Frick E. Spiritual dryness in Catholic priests: Internal resources as possible buffers. Psychology of Religion and Spirituality. 2017 Feb;9(1):46.
- 9. Farahani AS, Kerdar SH, Ashrafizadeh H, Büssing A, Mehrnoush N, Akbari ME, Karami M, Tajalli S, Mojen LK, Rassouli M. The predictors of spiritual dryness among Iranian cancer patients during the COVID-19 pandemic. Front Psychol. 2023 Jan 20;13:1024009. doi: 10.3389/fpsyg.2022.1024009. PMID: 36743631; PMCID: PMC9895950.
- 10. Irving TD. Acedia and the Evagrian Antidotes to Pastoral Burnout. https://scholar.smu.edu/cgi/viewcontent.cgi?article=1005&context=theology_ministry_etds
- 11. Büssing A, Starck L, van Treeck K. Experience of Spiritual Dryness and Acedia Symptoms in Seventh-Day Adventists. J Relig Health. 2021 Apr;60(2):1261-1280. doi: 10.1007/s10943-020-01092-7. Epub 2020 Nov 2. PMID: 33136232; PMCID: PMC7997817.
- 12. Büssing, A.; Koenig, H.G. Spiritual Needs of Patients with Chronic Diseases. Religions 2010, 1, 18-27. https://doi.org/10.3390/rel1010018
- 13. Drutchas A, Anandarajah G. Spirituality and coping with chronic disease in pediatrics. R I Med J (2013). 2014 Mar 3;97(3):26-30. PMID: 24596927.
- 14. Unantenne N, Warren N, Canaway R, Manderson L. The strength to cope: spirituality and faith in chronic disease. J Relig Health. 2013 Dec;52(4):1147-61. doi: 10.1007/s10943-011-9554-9. PMID: 22083464.
- 15. Büssing, A., Günther, A., Baumann, K., Frick, E., & Jacobs, C. (2013). Spiritual dryness as a measure of a specific spiritual crisis in catholic priests: Associations with symptoms of burnout and distress. Evidence-Based Complementary and Alternative Medicine, 2013, 246797. https://doi.org/10.1155/2013/246797
- 16. Büssing, A., Recchia, D. R., & Baumann, K. (2018). Validation of the gratitude/awe questionnaire and its association with disposition of gratefulness. Religions, 9, 117. https://doi.org/10.3390/rel9040117
- 17. Büssing, A., Recchia, D. R., & Dienberg, T. (2018b). Attitudes and behaviors related to Franciscan-inspired spirituality and their associations with compassion and altruism in Franciscan brothers and sisters. Religions, 9, 324. https://doi.org/10.3390/rel9100324
- 18. Büssing, A. (2019). Geistliche Trockenheit bei Seelsorgern und Ordens-Christen. In A. Büssing & T. Dienberg (Eds.), Geistliche Trockenheit empirisch, theologisch, in der Begleitung (pp. 79–103). Münster: Aschendorff.
- 19. Kroenke K, Spitzer RL, Williams JB, Monahan PO, Löwe B. Anxiety disorders in primary care: prevalence, impairment, comorbidity, and detection. Ann Intern Med. 2007 Mar 6;146(5):317-25. doi: 10.7326/0003-4819-146-5-200703060-00004. PMID: 17339617.
- 20. Kroenke K, Spitzer RL, Williams JB. The Patient Health Questionnaire-2: validity of a two-item depression screener. Med Care. 2003 Nov;41(11):1284-92. doi: 10.1097/01.MLR.0000093487.78664.3C. PMID: 14583691.
- 21. Tsaras K, Papathanasiou IV, Mitsi D, Veneti A, Kelesi M, Zyga S, Fradelos EC. Assessment of Depression and Anxiety in Breast Cancer Patients: Prevalence and Associated Factors. Asian Pac J Cancer Prev. 2018 Jun 25;19(6):1661-1669. doi: 10.22034/APJCP.2018.19.6.1661. PMID: 29938451; PMCID: PMC6103579.
- 22. Bech, P., Olsen, L. R., Kjoller, M., & Rasmussen, N. K. (2003). Measuring well-being rather than the absence of distress symptoms: A comparison of the SF-36 Mental Health subscale and the WHO-Five well-being scale. International Journal of Methods in Psychiatric Research, 12(2), 85–91. https://doi.org/10.1002/mpr.145
- 23. Ware JE Jr, Sherbourne CD. The MOS 36-item short-form health survey (SF-36). I. Conceptual framework and item selection. Med Care. 1992;30(6):473–483. doi: 10.1097/00005650-199206000-00002.
- 24. Kontodimopoulos N, Pappa E, Niakas D, Tountas Y. Validity of SF-12 summary scores in a Greek general population. Health Qual Life Outcomes. 2007;5:55. doi: 10.1186/1477-7525-5-55.

- 25. Petrie, K. J., & Jones, A. S. K. (2019). Coping with chronic illness. In C. D. Llewellyn, S. Ayers, C. McManus, S. Newman, K. J. Petrie, T. A. Revenson, & J. Weinman (Eds.), The Cambridge handbook of psychology, health and medicine (pp. 110–114). Cambridge University Press.
- 26. Megari K. Quality of Life in Chronic Disease Patients. Health Psychol Res. 2013 Sep 23;1(3):e27. doi: 10.4081/hpr.2013.e27.
- 27. Fradelos E. Predictors of quality of life in chronic kidney disease: The contribution of spirituality. Archives of Hellenic Medicine. 2020;37(2):227-36.
- 28. Uhlenbusch N, Löwe B, Härter M, Schramm C, Weiler-Normann C, Depping MK. Depression and anxiety in patients with different rare chronic diseases: A cross-sectional study. PloS one. 2019 Feb 20;14(2):e0211343.
- 29. Tarar ZI, Zafar MU, Farooq U, Ghous G, Aslam A, Inayat F, Ghouri YA. Burden of depression and anxiety among patients with inflammatory bowel disease: results of a nationwide analysis. International Journal of Colorectal Disease. 2022 Feb 1:1-9.
- 30. Smith KJ, Peterson MD, O'Connell NE, Victor C, Liverani S, Anokye N, Ryan JM. Risk of depression and anxiety in adults with cerebral palsy. JAMA neurology. 2019 Mar 1;76(3):294-300.
- 31. Lucette A, Ironson G, Pargament KI, Krause N. Spirituality and Religiousness are Associated With Fewer Depressive Symptoms in Individuals With Medical Conditions. Psychosomatics. 2016 Sep-Oct;57(5):505-13. doi: 10.1016/j.psym.2016.03.005.
- 32. Al-Shehri AH, Taha AZ, Bahnassy AA, Salah M. Health-related quality of life in type 2 diabetic patients. Ann Saudi Med. 2008 Sep-Oct;28(5):352-60. doi: 10.5144/0256-4947.2008.352.
- 33. Jafari N, Farajzadegan Z, Loghmani A, Majlesi M, Jafari N. Spiritual well-being and quality of life of Iranian adults with type 2 diabetes. Evid Based Complement Alternat Med. 2014;2014:619028. doi: 10.1155/2014/619028.

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