

The Configuration of Life Satisfaction and Psychological Well – Being in Functional GI Disorders

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Abstract: The clarification between satisfaction with life, psychological well-being and pain in patients with Functional Gastrointestinal Diseases (FGIDs). Participants the Satisfaction with Life Scale (SWLS) and the Psychological Well-Being Scale (PWBS) and the Numeric Pain Rating Scale for their related pain. There were found negative correlations between pain and well - being characteristics. Education level was found to affect the psychological well – being and job status affected the satisfaction with life. Emotions of Eudaimonia can help in stressor situations. Dealings of pain expressed and other features such, satisfaction with life and autonomy

Keywords: Psychological well – being, pain, FGIDs, satisfaction with life.

1. INTRODUCTION

Worldwide, the highly developing research activity in recent decades, exaggerates the multidimensional perspective in the field of health promotion and prevention, which creates new standards in the organization of health interventions.

The literature, which refers to a set of pathophysiological conditions and in the mind – body interaction, has garnered notable success. The connection between gastrointestinal symptomatology and psychological factors, is a prime example of the continued psychosomatic research, because symptoms such as diarrhea and abdominal pain could be characterized as a close universal experience with a high effect in the psychosocial functioning of a person (Levenstein, S., 2002).

Functional gastrointestinal disorders (FGIDs) have a high prevalence, a significant impact on the welfare of patients and are particularly costly for the health system (De Palma, Collins & Bercik, 2014). Patients report a significant impact on their quality of life and general functionality (Kearney and Brown-Chang, 2008). Their pathophysiology is unclear. Current knowledge mentioned the involvement of factors such as abnormal motor function of the intestine, increased visceral perception, abnormalities of the pain processing center, the disorder of the gut microflora, as well as genetic and psychological factors (De Palma et al., 2014). Most of the FGIDs, such as irritable bowel syndrome, functional abdominal pain and functional esophageal disorders, represent burdens in many fields, like health care services, medication, quality of life and economic implications (Halder, Locke, Fett, Zinsmeister and Melton, 2004).

In FGIDs, psychological factors seem to have an especially important role. Not only the psychiatric comorbidity is very relevant in these medical conditions, but there is also a wide variety of psychological aspects, whose approach can help specialists prevent and manage these pathological disorders (Mikocka-Walus, Turnbull, Andrews, Moulding, Wilson, and Holtmann, 2009). Stress is a significant factor which can explain why psychological and psychiatric symptoms can frequently coexist with gastrointestinal diseases. Stress can be a triggering factor correlating with the individual's personality, can influence major biological mechanisms such as the immunological system, intestinal permeability and CNS (Mawdsley, & Rampton, 2005; Kiank, Taché, & Larauche, 2010). Stressors also seem to interact with GI symptomatology (Tougas, 2000).

During recent decades, there has been even more consideration about the involution of mental health specialists in the cure of GI pathology. Based on patient studies after diagnosis, it is likely that psychological factors could play much of a role in the origin and evolution of gastrointestinal diseases. The contemporary psychological research has revealed psychological factors, known as positive ones, which can play a reductive role in Gi vulnerability and also may predict the presence of a negative effect (Sturgeon and Zautra, 2010). These factors include resilience, satisfaction with life, well – being, autonomy and others. Generally, resilience can be characterized as a person's dynamic capacity to adapt successfully to any disturbances that threaten the viability, function and development, sustaining alongside the persons well – being (Southwick et al., 2014).

Mechanisms like self - emotional regulation and autonomy, are essential and they seem to have a strong connection with health functioning (Ryan and Deci, 2006). The importance of these mechanisms urged the mind – body medicine in a range of therapies which can enhance the mind's capacity to improve bodily function and symptoms.

The aim of the present study was to investigate the different expression of the positive characteristics, in a sample of patients with functional gastrointestinal disorders and how they can affect the pain level an individual can feel.

2. METHODOLOGY

The sample consisted of 57 adult patients who attended the outpatients' gastroenterology clinic of a general hospital in Thessaloniki, Greece. The mean age was 41 years (S.D. = 11.1) with a range from 19 to 70 years. 29 individuals had a diagnosis of gastroesophageal reflux (GERD) and 28 irritable bowel syndrome (IBS). Patients who came in with symptoms requiring initial investigation having undiagnosed in the past were excluded from the study. Also patients, who were unable to cope with the psychometric evaluation, were excluded.

At first, a clinical patients history was recorded along with some basic demographic data, medical history, disease and psychiatric history. In the second part, the psychometric evaluation was carried out, after adequate instructions by the researcher.

3. MATERIALS

Socio – demographic data included the following variables: Demographic data, age, gender, education, working status, type and year of disease diagnosis, medication, psychiatric comorbidity smoking and other substance use habits.

The Satisfaction with Life Scale (SWLS) (Diener, Emmons, Larsen & Griffin, 1985): This 5 – item - scale designed to measure global cognitive judgments of one's life satisfaction. This is a 7 - point - scale that ranges from 7 (strongly agree) to 1 (strongly disagree).

The Psychological Well-Being Scale (PWBS), (Ryff & Keyes, 1989): The scale consists of a series of statements reflecting the six areas of psychological well-being: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. Respondents rate statements on a scale of 1 to 6, from strong disagreement to strong agreement. For each category, a high score indicates that the respondent has a mastery of that area in his or her life. (Seifert, 2005).

The Numeric Pain Rating Scale (McCaffery, et al., 1989) is an 11–point scale for patient self-reporting of pain. According to pain levels, ratings from 1 -3 refer to mild pain, 4-6 to moderate and 7-10 to severe pain (Williamson & Hoggart, 2005).

4. RESULT

Descriptive statistics for baseline characteristics were used, and cross tabulations to compare percentages between categorical variables. A regularity audit of the quantitative variables was held, in order to check if they followed the normal distribution.

The majority of the samples were married. According to occupational status, 40% had a full - time job and 17% were unemployed. Regarding educational status, 53 % had a bachelor degree, only 3 % had a master and the rest a high school certificate. The majority of sample patients, according to their religion status, were Greek Christian orthodox (82%), and the rest were atheist or agnostics (18%).

A one – way between groups ANOVA was conducted to compare Functional GI disorders and the psychological characteristics. Groups did not differ on the basic scales and subscales (on SWLS: [F (4, 95) = .661, p = .620], on PWBS: [F (4, 95) = .031, p = .998]. One – way ANOVAs were also conducted in order to compare the effect of educational level and job status on the various positive characteristics. According to results, education level was found to affect the psychological well – being [F (5, 94) = 2,903, p = .018] and job status affected the total satisfaction with life scores [F (6, 93) = 2,265, p = .044], [F (6, 93) = 3,943, p = .001].

Pearson correlations were applied between pain and psychological characteristics. Negative correlations were found between pain and satisfaction with life (SWLS, r = -.333, p = .001). Pain was also negatively correlated with all six areas of the psychological well – being.

Table 1. Means and S.D.s of variables by group

	GERD		IBS	
	Mean	S.D.	Mean	S.D.
SWLS tot	21,30	3,879	22,17	5,44
PWBS tot	308,73	28,82	310,04	17,27
Autonomy	48,27	6,405	51,42	5,40
Environmental mastery	52,13	6,016	53,38	6,92
Personal growth	54,20	6,672	56,25	6,47
Positive relations	53,67	6,619	55,63	12,95
Purpose	53,43	6,862	55,25	7,01
Self - acceptance	51,83	5,596	52,54	6,97
Pain Scale	5,60	1,303	5,63	1,58

Table 2. Means and S.D.s of the variable scales per education level

	SWLS		PWBS	
	Mean	S.D.	Mean	S.D.
Junior high school	19,1	5,09	308,64	22,49
High school	22,21	3,74	310,50	19,19
Technological Institute	20,10	4,94	309,95	14,43
University	22,67	5,04	311,17	15,95
Msc/ Phd	21,50	2,51	317,00	24,45
Άλλο	21,00	1,00	267,67	55,94

Table 3. Correlations between main psychometric factors

	PAIN	SWLS total	PWBS total
PAIN	-		
SWLS total	-,333**	-	
PWBS total	-,190	,290*	-

Table 4. Correlations between pain and sub – scales of PWBS

	Pain	Autonomy	Environmental Mastery	Personal growth	Positive relations	Purpose in life	Self - acceptance
Pain	-						
Autonomy	-,317**	-					
Environmental mastery	-,256*	,627**	-				
Personal growth	-,259**	,318**	,501**	-			
Positive relations	-,221*	,499**	,626**	,576**	-		
Purpose in life	-,261**	,273**	,477**	,613**	,420**	-	
Self - acceptance	-,267**	,508**	,676**	,681**	,545**	,477**	-

5. CONCLUSION

Understanding the particular pathophysiological conditions of gastrointestinal disorders is the precondition to realize that patients are experiencing particular constraints and notably burdens caused by their health status. Therefore a basic issue in modern biopsychosocial approach on these diseases, and not only, is the understanding of those mechanisms that help either in preventing relapse or in the best possible management of the patient's perspective. Understanding thus the contribution of positive characteristics and interventions aimed at their empowerment, is an important field of modern research which seems to have considerable contribution.

Positive emotions as coping strategies can help in a great stressor situation like a GI symptomatology. It seems that higher levels of personal satisfaction and well – being features may affect tumor growth through stress dysregulation (Antoni and Lutgendorf, 2007). The experience of a stressful event such as pain can lead to the activation of coping strategies that help the individual manage his state.

The analysis of the sample has highlighted dealings of pain expression and satisfaction with life but also with the dimension of autonomy of the psychological well-being. Negative correlations of pain with these dimensions were also supported. The importance of well – being is that, it can play a protective role by reversing or preventing any effects caused by negative experience (Fredrickson, 2004). Ryff (2013) suggests that better well-being states may promote the psychological and biological welfare, even if there is a chronic health condition such as a GI disorder and related pain (Ryff, 2013).

The socio – economic status such as job found to be associated with personal satisfaction and the general psychological well-being. Satisfaction with life was found to correlate mainly with job status than educational background. Recent research has maintained the influence of work and education in a person's general well – being. In her review, Ryff (2013), commented the importance of job, education and their influence on an individual's eudaimonia. Better job conditions are associated with higher self – control, self – acceptance and better health.

In conclusion, our findings focus on the effects of the psychological factors in gastrointestinal disorders. Equally important is the impact of comorbid pain. Pain levels in all types of diseases are being affected by satisfaction and well – being dimensions. Socio – economic status also translates to positive dimensions.

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