

Alexithymia, Hostility and Depression in Patients Suffering from Somatic Diseases

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Abstract— Purpose: To investigate the presence of Alexithymia, Hostility and Depression in patients suffering from acute and chronic somatic illnesses.

Methodology: 210 individuals participated: 55 patients with acute somatic illnesses, 47 patients with chronic somatic illnesses and 108 healthy subjects. They were assessed with the Beck Depression Index (BDI-21), the 20-item Toronto Alexithymia Scale (TAS-20) and the Hostility and Direction of Hostility Questionnaire (HDHQ). Data selected and analyzed with the Statistical Package for the Social Science (SPSS).

Results: Chronic somatic patients exhibited higher scores on Depression and Alexithymia, compared to acute somatic patients ($p<.000$), while acute somatic patients exhibited higher Hostility scores, compared to chronic patients ($p<.000$). Both groups exhibited higher Depression, Alexithymia and Hostility scores compared to healthy subjects ($p<.000$).

Conclusions: Psychiatric symptomatology in patients suffering from chronic somatic illnesses differs from psychiatric symptomatology in patients suffering from acute somatic illnesses, when Depression, Alexithymia and Hostility were examined.

Index Terms— Acute/Chronic Somatic Illness, Alexithymia, Depression, Hostility

I. INTRODUCTION

To our knowledge, very few studies have compared psychopathology between acute and chronic somatic patients. Quint et al [1] studied psychological stress of inpatients with acute and chronic lumbar syndrome, using the Symptom Checklist-90-Revised (SCL-90-R). They found that patients with chronic pain had higher scores on the scales for phobias and the global marker of "positive symptom total" (PST) compared to patients with acute back pain. Seventeen years later, Fishbain et al [2], studying acute pain patients and chronic pain patients, discovered that psychiatric symptom prevalence differs between these two groups.

After controlling for age, gender and pain, chronic pain patients were more likely than acute pain patients to affirm numbness/tingling, sudden paralysis or muscle weakness, sleep disturbances, muscle tightness, memory problems, falling because legs give way, and difficulty concentrating, at

a 0.01 level.

The term "alexithymia" is derived from the Greek language and means "no words for feeling". Coined by Sifneos [3-5] it refers to a relative narrowing in emotional functioning. The salient clinical features of alexithymia include difficulties in recognizing and verbalizing feelings, endless description of physical symptoms instead of emotions, concrete speech and thought closely tied to external events, paucity of fantasy life. Alexithymic individuals are prone to both 'functional' somatic symptoms and symptoms of emotional turmoil. Although initially described in the context of psychosomatic illness, alexithymic characteristics may be observed in patients with a wide range of medical and psychiatric disorders, as well as in the general population [6].

The somatic component of alexithymia [7] is an important clinical phenomenon. Alexithymia, by definition, involves difficulties in identifying and describing emotions and has been assumed to be associated with somatization [8], somatosensory amplification [9, 10], tension headache [11] and hypertension [12]. Little is known about the associations between alexithymia and suicidality, as some researchers support that alexithymia may have a role in the causation of suicidal behavior [13-15], while others dispute it [16, 17]. The panic disorder has also been associated with alexithymia [14, 18]. Moreover, an association has been reported between alexithymia and eating disorders [19-22], as well as with the context of addiction [23, 24].

Depressive symptoms in somatic illnesses is quite an interesting issue. Basically, most authors find somatic patients to be more depressive and alexithymic compared to healthy people. So, Angelopoulos et al [25] found out that patients with scleroderma reported significantly increased depression, somatization and feelings of guilt, when compared to healthy subjects. Moreover, somatic patients with various chronic somatic diseases were reported to have exhibited higher alexithymia and depression scores compared to healthy people, such as fibromyalgia patients [26] and rheumatoid arthritis patients [27], migraine patients [28], persons with tension-type headache [11] and patients with alopecia areata [29]. Patients with moderate to severe Graves ophthalmopathy [30] had significant mood disturbance, especially when disfiguring signs were predominant. On the other hand, Kosturek et al [9] claimed that patients with chronic pain had lower scores in depression and alexithymia scales, when compared to healthy subjects. Hostility, one of the most distinctive epiphenomena of frustrating conditions, is valuable in psychiatric research and clinical practise, because, being an attitude rather than a personality trait [31], it is changeable under the influence of external events or

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during the course of symptoms, psychiatric or somatic. Hence, its assessment could contribute to the elucidation of the relationships between personality, psychiatric symptoms and illness in medical and psychiatric patients [25]. To our knowledge, no studies were found to compare hostility between acute and chronic somatic patients.

The aim of the present study was to investigate depression, alexithymia and hostility in somatic patients and try to define whether these features differ between acute and chronic somatic patients.

II. METHODS

An observational case control study was carried out, in order to assess depression, alexithymia and hostility in patients with somatic illnesses compared to healthy people. During a period of 13 months, we enrolled 110 somatic patients along with 110 healthy subjects. People with somatic illnesses belonged to two categories: 55 with acute medical illnesses (group A) and 55 with chronic illnesses (group B). Patients of group A suffered from pneumonia, influenza and gastroenteritis and were admitted to the General Hospital of Karditsa, Greece. Group B patients suffered from cancer, hypertension, diabetes, anemia and hepatitis B and were outpatients in the same hospital. None of the patients with somatic illnesses was on cortisone or psychotropic drugs nor were alcohol abusers. Medical illness did not impair cognitive functions in any of the patients. Group C consisted from 108 healthy people, workers in the General Hospital of Karditsa. They were randomly selected from the hospital's staff-list and they were matched for gender. They were not manifesting problems requiring medical or psychiatric intervention and were free of any medication at the time of investigation, nor had they a history of psychiatric illness, current alcohol or/and drug abuse or dementia. All but two healthy people agreed to participate in the study while eight patients with chronic medical illnesses declined to participate in the study. All participants gave informed consent and the study protocol was approved by the Ethics Committee of our Institute.

Tools. The 210 participants were assessed with the following questionnaires: 1) The Beck Depression Index (BDI-21), in order to estimate their depression. 2) The Toronto Alexithymia Scale (TAS-20), to measure alexithymia. 3) The Hostility and Direction of Hostility Questionnaire (HDHQ), so that hostility of the sample was estimated.

A. Beck Depression Index (BDI-21)

The Beck Depression Index [32,33] estimates the cognitive, emotional, behavioral and somatic signs of depression during the last week. It comprises of 21 questions, each of which is graded from 0 to 3, according to its gravity. The themes mentioned concern grief, pessimism, feeling failed, anhedonia, guilt, waiting to be punished, self-disgust, self-reproof, suicidal thoughts, crying, hyperexcitability, social retraction, indecision, body image, work capacity, weight loss, lost of libido. The total score comes as the sum of the scores of each one of the 21 questions. The Beck Depression Index was translated and adjusted in Greek [34,

35].

B. Toronto Alexithymia Scale (TAS-20).

The TAS was created in order to measure alexithymia [36-40]. It is a self-report questionnaire, consisting of 20 questions divided in 3 subscales: i)TAS-A. It estimates the difficulty in identifying feelings. ii)TAS-B. It measures the difficulty in describing feelings. iii)TAS-C. It studies externally oriented thinking. Each question is scored from 1 to 5 and the total score TAS-S is the sum of the 3 subscale scores. High scores indicate an inability to identify and describe one's emotions, as well as an impairment in mentalizing emotional experience.

TAS has been proven to be reliable and valid with a Cronbach's α for subscale A of 0.78, for subscale B 0.68, for subscale C 0.60, while Cronbach's α for the total scale is 0.80. The Greek version of the scale, adjusted in Greek by Anagnostopoulou and G. Kioseoglou, has been validated in a cohort of Greek students by Tsaousis et al [41].

C. Hostility and Direction of Hostility Questionnaire (HDHQ).

HDHQ [42] estimates hostility more as an attitude, rather than a physical reaction. It is a measure for a wide range of hostility manifestations, minimally reflecting physically expressed aggressive behavior. Two dimensions underlie hostility as it is measured by the HDHQ: a readiness to respond with aggressive behavior and a tendency to evaluate persons, including the self, in negative terms. It consists of 5 subscales of 52 items. Three subscales, Acting out Hostility AH, Criticism of Others CO and Paranoid Hostility PH, are measures of Extraverted Hostility or Extrapunitiveness TE. Two subscales, Self Criticism SC and Guilt G, are measures of Introverted Hostility or Intropunitiveness TI. Total Hostility TH comes as the sum of TE and TI. Direction of Hostility Score DHS indicates the way total hostility is directed; inside oneself (positive scores) and outside oneself (negative scores) and is calculated by the form: $AH+CO+PH-2SC-G$. The accepted score norms for total hostility in normal populations are between 12-14, but higher norms have also been suggested [43]. The HDHQ has not yet been standardized in Greek populations, but it has been used in Greek normals [44] and psychiatric [45] or somatic patients [46].

Data were collected from the questionnaires and processed with the Statistical Package for the Social Science (SPSS). We used the Kruskal -Wallis H test to compare the scores of the 3 groups in each scale: this is a non-parametric method for several non correlated variables.

III. RESULTS

Group A (patients with acute medical illnesses) consisted of 27 male (49.1 %) and 28 female (50.9%) and their mean age was 41.93 years (sd= 13.879, min= 18, max= 60). 51% were single, 47% married and 2% divorced. Group B (patients suffering from chronic medical illnesses) consisted of 27 male (57.4 %) and 20 female (42.6%) and their mean

age was 45.04 years (sd= 12.190, min= 18, max= 60). 19% were single and 81% married. Group C (healthy people) consisted of 45 male (41.7 %) and 63 female (58.3%) and their mean age was 34.79 years (sd= 10.869, min= 18, max= 55). 75% were single, 24% married and 1% widow.

The Kruskal -Wallis H test was used to compare the scores of each group in depression, alexithymia and hostility scales (Table 1).

Table 1: The scores of acute, chronic somatic patients and healthy subjects in BDI, TAS and HDHQ.

	Group A (acute medical patients)		Group B (chronic medical patients)		Group C (healthy subjects)		p
	Media n	IQR	Med ian	IQR	Med ian	IQR	
BDI	8	3-14	9	5-14	4	2-6	.001
TAS.S	52	43-65	53	42-66	42	35-49	.001
TAS.A	16	11-27	18	11-26	12	9-17	.001
TAS.B	12	9-19	13	9-19	11	8-14	.226
TAS.C	24	19-25	22	19-25	18	14-21	.001
AH	6	4-8	5	3-6	4	3-6	.001
CO	8	6-9	7	5-8	5	4-7	.001
PH	3	2-5	3	1-5	1	0-3	.001
SC	5	2-6	4	2-6	3	1-4	.001
G	3	1-4	2	1-4	1	1-2	.001
TE	18	12-21	15	10-20	11	7-15	.001
TI	8	3-11	7	3-10	4	2-6	.001
TH	26	17-32	20	15-30	15	10-21	.001

- **Depression scores.** Chronic somatic patients exhibited higher depression scores, compared to acute somatic patients. Groups A and B exhibited both higher scores compared to healthy subjects.
- **Alexithymia scores.** Chronic somatic patients exhibited higher alexithymia scores, than acute somatic patients, with an inability to identify their own emotions (TAS-A subscale), while acute somatic patients exhibited higher scores in external orientation (TAS-C subscale). Groups A and B exhibited both higher scores compared to healthy subjects in all three TAS subscales. No statistically significant difference was found, when expressing feelings were compared.
- **Hostility scores.** Acute compared to chronic somatic patients exhibited higher hostility scores in all eight HDHQ subscales. Groups A and B exhibited both higher hostility scores compared to healthy subjects.

IV. DISCUSSION

According to the conclusions of the present study, acute somatic patients are more hostile compared to chronic somatic patients, whereas the latter are more depressive and alexithymic compared to the former. Both groups exhibit more depressive, alexithymic and hostile characteristics, when compared to healthy subjects.

The co-morbidity of psychiatric symptoms and somatic illnesses is a status that health carers (both doctors and nurses) experience in their everyday practice. Not rarely,

somatic patients become rude, inpatient, demanding, provocative, irritable or emotional, and they may express negative feelings towards the people that look after them. Sometimes, they even refuse to accept help and they deny following doctors' orders. Difficult as it may be, being supportive and understanding is the most effective way to deal with these attitudes, since patients are not always patient.

As we try to explain these psychopathological features and comprehend the way a person deals with an illness, we meet the stages of mourning. When a person gets sick, he/she experiences the loss of his/her health, his/her strength. In Greek language, disease means lack of strength (asthenia). Once a human loses "an object of love", an object of value and importance, a certain perception of reality, he/she has to cope with this loss. During this process, going through mourning, the person first denies this loss ever happened. After that he/she experiences anger and becomes hostile. Then the person negotiates and finally he/she accepts it, in a depressive state. So denial, anger, negotiation and finally depression are the four stages of mourning [47]. Patients suffering from acute disease get angry and hostile, since the acute disease has not lasted much, and they are in the first mourning stages. Whereas patients suffering from chronic diseases have gone through the stages of mourning and they are less angry/hostile and more depressive.

We think it is essential to comment on the somatic groups composition. At a first glance, the two groups consist of patients with heterogeneous diseases and this is probably a confounding factor. Our aim was to investigate the patients' suffering, due to a somatic disease. Chronic somatic patients suffering from all kind of illnesses face a potentially life threatening situation and they have to adjust their lives to the limitations this. Acute somatic patients experience acute somatic distress and are forced to enter a hospital. The common basis of all these patients is suffering; suffering that involves the body. Their body gets sick and raises requests. It demands attention, it imposes changes in everyday habits, it requires pharmaceutical involvement. Each time the body suffers, a person suffers, not only bodily, but also psychologically. Basically the phenomenology of suffering is the aim of the present study.

V. LIMITATIONS

In our study, the groups were not controlled for age, no personality traits were tested among the participants (except probably HDHQ), nor were scales used to examine chronic pain, fatigue or general functioning. These parameters could interfere with the psychometric features we investigated.

VI. CONCLUSIONS

Acute somatic patients were more hostile compared to chronic somatic patients, whereas the latter were more depressive and alexithymic compared to the former. Both groups exhibited higher depressive, alexithymic and hostile characteristics, when compared to healthy subjects.

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