DEPRESSIVE PHENOMENOLOGY IN REGARD TO DEPERSONALIZATION LEVEL

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SUMMARY

Background: It has been found that in patients suffering from unipolar depression, associated depersonalization symptomatology is more intense compared to healthy controls, and also that there is a positive correlation between depression and depersonalization. According to data that may be found in the literature, there is a relatively high prevalence of depersonalization symptomatology in unipolar depressions. Our study was aimed at finding whether the presence of depersonalization was related to a specific phenomenological expression of depressive symptomatology in unipolar depression.

Subjects and methods: The study included 84 subjects suffering from unipolar depression without psychotic features. Based on the Cambridge Depersonalization Scale (CDS) score, the subjects were divided into two groups − a group with associated depersonalization (CDS≥70) (40 subjects) and a group with subsyndromal depersonalization (CDS<70) (44 subjects), the later one being treated as a control group. The groups were compared in regard to the intensity of depressive symptomatology, depressive symptoms frequency and the depressive symptoms duration. The General Socio-Demographic Questionnaire, the Cambridge Depersonalization Scale and The Patient Health Questionnaire − 9 were used.

Results: The depressive patients with depersonalization had predominantly severe episodes, almost all patients had feelings of sadness, insomnia, and decrease of energetic potentials. The biggest difference between the groups, in terms of greater number of manifest symptoms in the patients with depersonalization, was for psychomotor disturbances (agitation or retardation), insomnia, decrease of energetic potentials and concentration. At the same time, 75% of the subjects with associated depersonalization had anhedonia, sadness/dysphoria, insomnia and decrease of energetic potentials continuously present. Unlike this group, the control group subjects experienced sadness, appetite problems, concentration and motor behavior changes almost half as frequently. Particularly significant were the differences regarding suicidal thoughts. It was shown that in the group with depersonalization there was a higher percentage of patients with suicidal thoughts, mostly continuously present, which represent a significant suicidal risk factor.

Conclusion: Unipolar depression, associated with depersonalization is more severe in its intensity. It has a bigger number of manifest symptoms which have a tendency to continuous duration. A special focus is on the negative impact on the occurrence and lasting presence of suicidal thoughts.

Key words: unipolar depression – depersonalization – anhedonia – sleep – suicidality - symptom

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INTRODUCTION

It has been found that in patients suffering from unipolar depression, associated depersonalization symptomatology is more intense compared to healthy controls, and also that there is a positive correlation between being depressed and depersonalization. The subjects suffering from moderate and severe depression have the biggest scores of depersonalization symptomatology (Žikić 2004).

Depersonalization is a psychiatric symptom, considered to be in the third place, in terms of psychiatric morbidity frequency (immediately after anxiety and depression). However, it very often remains unrecognized. Although it may occur in healthy persons (in around 2.3% of general population), it is in most cases related to some mental disorder, so that it may be found in almost 80% of hospitalized psychiatric patients (Sedman 1966).

What indicates the significant relationship between depression and depersonalization syndrome is certainly a high co-occurrence rate, particularly with major depression. According to data that may be found in the literature, there is a relatively high prevalence of depersonalization symptomatology in unipolar depressions (Sedman 1966, Simeon 1997, Baker 2003). Noyes (1977) established that up to 60% of hospitalized patients with unipolar depression had depersonalization symptomatology. It has also been shown that depersonalization symptomatology more expressed in hospitalized patients, compared to outpatients (Hunter 2004).

Among patients with secondary depersonalization, the greatest number of those hospitalized were among the patients with depression as a primary disease (Baker 2003). Certain authors think that there is even a special form of depressive disorder characterized by a high level of depersonalization symptomatology (so called depersonalization depression) (Ilina 1999).

Most up-to-date research discusses the connection of these two psychiatric syndromes, but there are only few data about the impact of their association on the clinical manifestation of depression. For that reason, we wanted to find out if the association of these two syndromes has a negative impact on the clinical manifestation of unipolar depression.

SUBJECTS AND METHODS

Subjects

In our study, the group comprised 84 subjects of both genders, suffering from unipolar depression (inpatients and outpatients). The patients have been randomly selected, their age ranging from 18 to 65 years. There were 20 males and 64 females.

Instruments

In order to obtain the necessary data the following questionnaires were applied:

- 1. General Questionnaire contains questions about general socio-demographic data, as well as the part referring to the disease course and duration.
- 2. The Patient Health Questionnaire 9 (PHQ -9) - diagnostic and dimension questionnaire for depression assessment (Kroenke 2001). Based on this, a diagnosis of depression may be established according to DSM-IV criteria, but also the intensity of depression can be measured. Nine are assessed: (1) anhedonia, sadness/dysphoria, (3) insomnia, (4) decrease of energetic potentials, (5) appetite, (6) negative selfassessment, (7) concentration, (8) psychomotor retardation/agitation and (9) suicidal thoughts. The items are scored on four levels, based on the symptoms frequency (0 - not at all, 1 - several)days, 2 - more than half the days, 3- nearly every day). When the diagnosis is established, the manifested symptoms are considered as those present ,,more than half the days"or ,,nearly every day". The score is interpreted in order to divide the patients into 3 groups: (a) mild depression (score 5-14), (b) moderate depression (score 15-19), (c) severe depression (score >20).
- 3. Cambridge Depersonalization Scale (CDS) (Sierra & Berrios 2000) a self-questionnaire used to measure the intensity of for depersonalization symptomatology. It is a dimension questionnaire, but the scores higher or equal to 70 indicate that high, pathologic depersonalization levels exist. It consists of 29 items. Symptom frequency and duration are assessed for each item. The final score is obtained by addition of all the answers.

Methods

According to our aim to investigate the impact of depersonalization on occurrence and frequency of depressive correlates, we divided the entire group into two sub-groups, based on the Cambridge Depersonalization Scale score. All subjects with the score 70 or higher were classified in the group with pathologic depersonalization, and those below 70, in the group with low or subsindromal depersonalization, the later group being treated as a control group (Sierra & Berrios 2000). Based on these criteria, the group with

associated depersonalization comprised 40 subjects (8 males, or 20% and 32 females or 80%), while the control group consisted of 44 subjects (12 males or 27.3% and 32 females or 72.7%).

Subsequently, we compared these two groups in regard to intensity of depression, basic depression symptoms frequency and duration. According to the fact that the depressive intensity and categorization had been assessed by means of the PHQ-9 questionnaire based on concrete diagnostic criteria for the diagnosis establishing within DSM-IV classification, we compared the two groups in regard to each diagnostic criteria as given in the questionnaire.

The research work was carried out at the University Clinical Center (UKC) Nis - Klinika za zaštitu mentalnog zdravlja (Clinic for Mental Health Protection) and at Klinika za psihijatriju (Clinic for Psychiatry). The standard statistical procedure has been applied in processing the data. The statistical processing was done using the SPSS 12 Programme.

RESULTS

The groups did not differ in regard to gender, place of residence, years of age, level of education, and partnership status. The biggest number of subjects in both groups came from towns, somewhat more than 50% in both groups. The

average age of subjects in the group with pathologic depersonalization was 44.5 and in the group with low depersonalization – 45.7. Most of the subjects had a standing partner. Both groups were dominated by subjects with an intermediate level of education.

Severity of depressive symptomatology

The average depressive score was 21 for the group with associated depersonalization (which is on the level of severe depressive episode) and 15.95 for the control group (on the level of moderate depressive episode). There is a statistically significant difference between the groups (T-test=5.906, DF=82, P<0.0001).

Subsequent to the classification of depressive episode in regard of the severity of depressive episode (mild, moderate and severe episode), in the group with associated depersonalization, there were 75% subjects with serious depressive episode and a small percentage of moderate (15%) and mild depressions (10%). Within the control group, the lowest percentage of patients were suffering from a severe depressive episode (13.6%) and most had moderate episodes (45.5%) (Fig.1). The difference between the groups in the severity of the depressive episode was statistically significant $(\chi 2=32.330,$ df=2, P=0.000, Contingency Coefficient = 0.527).

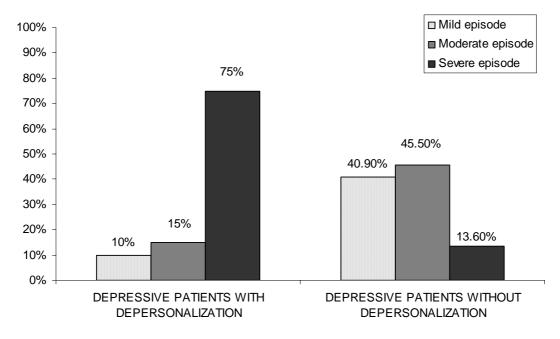


Figure 1. Severity of depressive episodes in regard of depersonalization

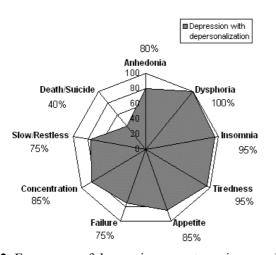
Frequency of depressive symptomatology

Firstly, we wanted to find out if there was any difference between the studied groups in terms of presence / absence of certain depressive symptoms. The results point out the fact that in depressive patients with associated depersonalization all depressive symptoms were more frequent (t=2.232, DF=16, P=0.0403, 95% CI: -36.9158 to - 0.9509) (Fig 2).

In the group with depersonalization all patients had the feeling of sadness (100%), while insomnia and tiredness were present in 95% subjects. The significant percentage of subjects had

both concentration and appetite problems (85%). Anhedonia was present in 80% of patients. In the group without associated depersonalization the biggest percentage of subjects were also feeling sad (86%), but evidently less than in the previous group. In this group, the further symptoms, regarding frequency were the feeling of tiredness (72.7%) and insomnia (72.7%) followed by anhedonia (69%).

It is very important to mention that in patients with depersonalization, suicidal thoughts were present in even 40% of subjects, while in the control group it was the case in almost half the number of subjects (22.7%).



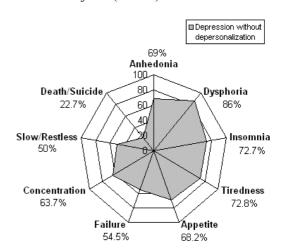


Figure 2. Frequency of depressive symptoms in regard of depersonalization

Duration of depressive symptomatology

Regarding depressive symptomatology duration, almost all symptoms differed between groups at a statistically significant level. The only symptom that did not reach statistical significance during statistical evaluation was psychomotor agitation / retardation.

Association coefficients for suicidal thoughts, sadness and anhedonia indicate that there is a strong relation between their duration and the presence of depersonalization symptomatology, particularly yn the case of suicidal thoughts (Table 1).

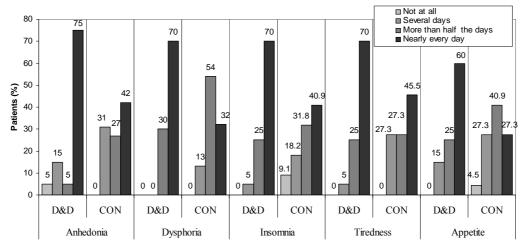
Table 1. Differences between groups in term of duration of depressive symptomatology

	Chi-	DF	P	Phi	Cramer' V	Contingency
	square					Coefficient
Anhedonia	15.187	3	0.0017**	0.425**	0.425**	0.391**
Dysphoria	14.509	2	0.0007***	0.416**	0.416**	0.384**
Insomnia	10.273	3	0.0164*	0.350*	0.350*	0.330*
Tiredness	8.487	2	0.0144*	0.318*	0.318*	0.303*
Appetite	10.118	3	0.0176*	0.347*	0.347*	0.328*
Failure	9.117	3	0.0278*	0.234*	0.234*	0.313*
Concentration	10.607	3	0.0141*	0.355*	0.355*	0.335*
Slow/Restless	6.682	3	0.0828	0.282	0.282	0.271
Death/Suicide	21.032	3	0.0001***	0.500***	0.500***	0.447***

^{*} p<0.05; **p<0.01; ***p<0.001;

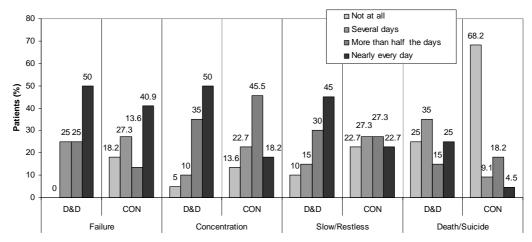
Our results indicate that depersonalization has influence both on the persistency and continuity of depressive symptoms. In the group with depersonalization, almost all symptoms tended to continuous, nearly everyday presence. This was particularly the case with anhedonia, sadness, and insomnia and appetite problems. Almost ³/₄ of depressive patients with associated depersonalization had there symptoms continuously i.e., nearly every day, while in the control group there was less than half the subjects with such a duration of symptoms (Fig 3a).

Within the control group, continuous symptomatology was present in most of the patients, regarding anhedonia, insomnia, fatigue, and negative evaluation of the self. However, sadness, appetite problems, concentration and changes in motor behavior were present in most patients "more than half the days", which means that their presence was for a shorter time compared to the group with associated depersonalization (Fig 3a and Fig 3b).



LEGEND: D&D = depression with depersonalization; CON = control group

Figure 3a. Duration of depressive symptomatology in regard of depersonalization – part 1



LEGEND: D&D = depression with depersonalization; CON = control group

Figure 3b. Duration of depressive symptomatology in regard of depersonalization – part 2

The data about suicidal thoughts should be particularly noted. Depressive patients without associated depersonalization (control group) did not have suicidal thoughts in up to 68.2% cases, while only 25% of subjects were without suicidal thoughts in the group with associated depersonalization. The groups also differed in terms of the

number of patients who had suicidal thoughts almost every day. In depressive patients with associated depersonalization continuous suicidal thoughts were present in 25% cases while in the control group this was the case only in 4.5% of subjects (Fig 3b).

DISCUSSION

These results indicate that there is a significant relationship between depersonalization and depressive symptomatology. This is, in the first place, shown by the fact that depersonalization symptomatology was predominantly associated with high depressive scores and a severe depressive episode. Seventy five percents of patients who had associated depersonalization had a severe depressive episode.

All symptoms of an actual depressive episode were more frequent in subjects with associated depersonalization. In this group all patients had sadness, and almost each of them had insomnia and decrease of energetic potentials with consequential feeling of fatigue (95%).

The feeling of sadness negatively impacted on social functioning, often resulting in social withdrawal, and it is also considered to decrease emotional reactivity (Buckner 2008). Chronic insomnia has a negative impact on daily functioning. More serious forms of insomnia in depression are related to suicidality and poor response to antidepressive therapy. (Jindal 2004, Salin-Pascual 2006). Swindle pointed out the significant role of low energetic potentials within the context of depression in the reduction of work productivity (Swindle 2001). If we take into consideration this data, it may be said that depressive patients with high depersonalization are at risk in terms of the development of additional symptoms and a further decrease of functionality.

symptoms The greatest difference in frequency between the two groups was found in motor activity (retardation/agitation). In the group with associated depersonalization, there were 25% more patients who has changes in motor expression. The percentage of depressive patients with depersonalization who had insomnia as well as a decrease of energetic potentials is more than 22% higher than in the control group. Similar results were obtained in regard to concentration (21.3%). All the symptoms mentioned are considered as socalled biological symptoms (Mathew 1979), and their higher concomitancy with depersonalization may possibly direct us to new etiological factors when considering the genesis of depersonalization.

It is thought that both when considering the patient and the negative impact of the disease, it is quite important to have not only the symptoms actually present, but also to know how persistent they are in expression. It is not the same thing if some symptoms appear occasionally or last continuously. In the case of the depersonalization and depression association, the results indicate that most of the depressive symptoms tend to be continuously present. A significant number (over 70%) of depressive patients with associated depersonalization had continuously present anhedonia, sadness, insomnia, and decrease of energy The differences between potentials. investigated groups in view of symptomatology persistency have been particularly expressed on the level of sadness, appetite, concentration and change in motor behavior. Most of patients within the control group (without associated depersonalization), did not have these symptoms continuously present.

It is particularly important to outline the results regarding suicidal thoughts. It has been found that in order to assess suicidality, it is very important to establish not only if such thoughts exist, but also to determine their intensity, duration and frequency. The risk is considered higher if suicidal thoughts have been present for a longer time and occurred more frequently (Vannoy & Unutzer 2005). In our study, suicidal thoughts have been much more frequent in subjects with depersonalization (40% vs. 22.7%), and 25% of patients had almost continuously present suicidal thoughts, this being considered as a prominent suicidal risk factor.

From all depressive symptoms, and based on association coefficients, a special relationship with depersonalization was observed for suicidal thoughts (p<0.0001), anhedonia (p<0.001) and sadness (p<0.001).

Depersonalization is generally associated with anxiety and it is considered as a unique protection factor from too high an intensity of this emotion. However, the results of our study open new issues, such as whether our result is the consequence of possible associated anxiety or a direct relationship of depressiveness and depersonalization. depersonalization a probable protective factor only with intensive anxiety or generally with intense emotions? Maybe the most acceptable view will be that depersonalization is connected not with emotion per se but with the high level of stress which intensive anxiety and depression brings with them. The answer will be given by future studies, methodologically adjusted to obtain an adequate response to posed questions.

CONCLUSION

Depersonalization very often accompanies unipolar depression. Co-occurrence of depersonalization is associated with more serious forms of depressive disorder, as well as with more frequent and longer lasting depressive symptomatology. A special focus is on the negative impact on the occurrence and lasting presence of suicidal thoughts.

REFERENCES

- 1. Baker D, Hunter E, Lawrence E, Medford N, Patel M, Senior C, Sierra M, Lambert MV, Phillips ML & David AS: Depersonalisation disorder: clinical features of 204 cases. British J Psychiatry 2003; 182: 428-433.
- Buckner JD, Joiner Jr. TE, Pettit JW, Lewinsohn PM & Schmidt NB: Implications of the DSM's emphasis on sadness and anhedonia in major depressive disorder. Psychiatry Res 2008; 159:25-30.
- 3. Hunter EC, Sierra M & David AS: The epidemiology of depersonalisation and derealisation. A systematic review. Soc Psychiatry Psychiatr Epidemiol 2004; 39:9-18.
- 4. Ilina NA: The psychopathology of depersonalization depression. Zh Nevrol Psikhiatr Im S S Korsakova 1999; 99:21-6.
- 5. Jindal RD & Thase ME: Treatment of insomnia associated with clinical depression. Sleep Med Rev 2004; 8:19-30.
- 6. Kroenke K, Spitzer RL & Williams JBW: The PHQ-9 Validity of a Brief Depression Severity Measure. J Gen Intern Med 2001; 16:606-09.

- 7. Mathew RJ, Largen J & Claghorn JL: Biological symptoms of depression. Psychosom Med 1979; 41:439-43.
- 8. Noyes R, Hoenk PR, Kuperman S & Slymen DJ: Depersonalization in accident victims and psychiatric patients. J Nerv Ment Dis 1977; 164: 410-407.
- Salin-Pascual RJ: Major depressive disorder and insomnia: Neurobiological and clinical interface, CME, NV Organon, 2006. URL: http://www. psychiatrymatters.md/ images/salin_tcm754-196806.pdf.
- 10. Sedman G: Depersonalisation in a group of normal subjects. British Journal of Psychiatry 1966; 112: 907-912.
- 11. Sierra M & Berrios GE: The Cambridge Depersonalisation Scale: a new instrument for the measurement of depersonalisation. Psychiatry Research 2000; 93:153-164.
- 12. Simeon D, Gross S, Guralnik O, Stein DJ, Schmeidler J & Hollander E: Feeling unreal: 30 cases of DSM-III-R depersonalisation disorder. Am J Psychiatry 1997; 154: 1107–1113.
- 13. Swindle R, Kroenke K & Braun LA: Energy and improved workplace productivity in depression. In: Sorkin A, Summers K & Farquhar I (eds): Investing in Health: The Social and Economic Benefits of Health Care Innovation, 323–341. Elsevier Science Ltd, Greenwich, CT, USA, 2001.
- 14. Vannoy SD & Unutzer J: Detection of suicide risk in patients with depression. WPA buletin on Depression 2005; 10: 6-8.
- 15. Žikić O, Ignjatović M, Stevanović M & Djordjević V: Depersonalizaciona simptomatologija kod depresivnih pacijenata. XIII kongres psihijatara Srbije i Crne Gore, Herceg Novi, 2004.

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