DEPRESSIVE SYMPTOMS IN SCHIZOPHRENIA AMONG OLDER ADULTS

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ABSTRACT

OBJECTIVE: The authors assessed the presence and severity of depressive symptoms, as well as their associations with other clinical measures, in a group of mid- to late-life patients with schizophrenia who were not in a major depressive episode or diagnosed with schizo-affective disorder. METHOD: Sixty outpatients with schizophrenia between the ages of 45 and 79 years and 60 normal comparison subjects without major neuropsychiatric disorders, proportionately matched for age and gender, were studied. Depressive symptoms were rated primarily with the Back Depression Inventory. Standardized instruments were also used to measure global psychopathology, positive and negative symptoms, abnormalities of movement, and global cognitive status. RESULTS: Depressive symptoms were more frequent and more severe in schizophrenic patients than in normal comparison subjects; 20% of the women with schizophrenia had a Back Depression scale score of 21 or more. Severity of depressive symptoms correlated with that of positive symptoms but not with age, gender, negative symptoms, extrapyramidal symptoms, or neuroleptic dose. CONCLUSIONS: Depressive symptoms are common in older patients with schizophrenia. They may be an independent, core component of the disorder or, alternatively, may be a by-product of severe psychotic symptoms.

Key Words: depression, positive symptoms of the schizophrenia, negative symptoms of the schizophrenia

INTRODUCTION

According to data of American Psychiatric Association (APA) during the last 30 years the number of patients above 54 years old suffering from schizophrenia has risen by a factor of 2. That generation spends less time in the psychiatric institutions compared to the younger patients and has specific medical and social needs. MEDLINE and PsychInfo claim that only 1% of the articles on schizophrenia focuses on the older adults. Moreover, more than 85% of the patients with schizophrenia develop the disorder before their 45th year and age with it.
Psychopathology

Schizophrenia turns out to be plastic during the life cycle (1). As a whole the tendency is to reduce the positive symptoms. The researchers, however, do not agree on the rising profile of the negative symptoms. Some think that the negative symptoms dominate the picture of the disease in the late stages of the life cycle while others believe these symptoms diminish. Often, there is a correlation between the negative symptoms and the cognitive deficiency (2).

The level of depressiveness is high in the older patients with schizophrenia (3, 4). The depression correlates with the positive symptoms, the bad somatic health, low income and weak social support (3, 4). The men and the women are equally predisposed to developing schizophrenia but onset is earlier in the men. Something more, the schizophrenia in the women is milder in its early stages but its symptoms grow with the advancement of the disorder while in the men the symptoms diminish as a whole. The difference between men and women in the early stages of the disorder is connected to a number of biological and social factors. For example, with the advancement of age the advantage of women over men’s characteristic for the onset of the disorder diminishes. However, that is more often connected with loss of family ties and emotional support rather than with changes in the hormonal status of the woman (5).

Neuropsychological Functioning

The old people with schizophrenia face double risk: the majority of them demonstrate neuropsychological deficiency earlier in the development of the disorder. Together with that, as a consequence of the aging and other limitations such as insufficient education, unemployment and institutionalisation, their cognitive functioning is impaired even more in the advanced age. That deficiency is not that strong and progressive as it is in the Alzheimer’s disease. However, it has a significant influence on their social functioning and adaptation (6).

Social Functioning

The research on social functioning shows contradictory results. Some research shows improvement in the social functioning during the lifetime cycle while others find social degradation (7). However, when the researchers focus on the specific components of the social functioning, the tendency towards improvement is obvious. For example, the coping strategies seem to develop with age and the individual may become a more active participant in the process of his or her treatment and re-socialization (8).

Just like it is in the younger people suffering from schizophrenia, the social network of elderly people with the same disorder has a tendency to diminish compared to their peers. Moreover, when the elderly are exposed to situations that evoke strong emotions, their reactions are not in accordance with, or contradict the outer stimuli. The social support which they have is one of the most reliable predictors of a successful functioning (9). Quite a lot of researches show that a majority of the elderly suffering from schizophrenia are satisfied with their lives but their satisfaction is lower than the one of their peers (3). The high subjective well-being correlates to a greater extent with the subjective factors such as social support and subjective estimate of the overall health condition rather than with objective estimates like presence of real health problems and level of income. The dissonance of the social adaptation significantly correlates with a high level of cognitive deficiency, negative symptoms and with disorders of the bone system (10). Moreover, the age of the elderly with schizophrenia as well as the elderly as a whole is not considered a process of degradation as a whole but is considered in correlation with the adaptation, compensation and plasticity.

Co- morbidity

The level and the consequences of the medical co-morbidity in the elderly suffering from schizophrenia is underestimated as a whole (11). Almost half of the co-morbidity medical conditions are omitted in most of the cases. Some disorders such as cardiovascular diseases and diabetes are often found in patients with schizophrenia (12). Jeste and colleagues show that the elderly with schizophrenia do not suffer from the common somatic disorders compared to their peers but the presence of somatic disorders is more severe (11). They make the conclusion that the patients with schizophrenia rarely receive adequate medical care. Structural barriers in the health system as well as the attitude of the medical doctors may be obstacles to the process. The morbidity of the patients suffering from schizophrenia is estimated at two to four times higher in comparison with the overall population but it is not clear if that
high morbidity is connected mainly with the advancement of the age (13).

Treatment and Rehabilitation

The research shows that almost half of the investigated patients have ceased their intake of medications (14). On the other hand, some other researches show that the neuroleptics have a significant and continuous effect on the symptoms (15). As far as the frequency of the extra-pyramidal symptoms and the dyskinesia get augmented greatly in the elderly, the clinicians are prone to reduce the dosage of the neuroleptics in the elderly patients undergoing ambulatory treatment with stable chronic symptoms. That is due to the fact that the extra-pyramidal symptoms can in many cases influence more the functioning of the patients compared to the negative or the positive symptoms of the disease.

The use of the psycho-social approaches, especially of the group activities in the process of treatment of the elderly suffering from schizophrenia, is mentioned by some researchers (1).

Cohler and Beeler (1996) point out that the most adequate therapeutic objective in the elderly suffering from schizophrenia is not that much in the direction of recovery and rehabilitation but in the aspiration for providing more satisfying life of the patient and his or her relatives.

Concerns of the caregivers

Most of the relatives of the people suffering from schizophrenia are also aging, above 65, and in many cases above 75 years and it seems that the older caregivers feel more burdened by this responsibility and the consequences should they themselves are no more. Some authors find that the elderly caregivers sometimes are so burdened by their engagements that they rely on the very patient for physical and emotional support.

METHODS

Investigated people

Sixty outpatients with schizophrenia between the ages of 45 and 79 years and 60 normal comparison subjects without major neuro-psychiatric disorders, proportionately matched for age and gender, were studied. The investigated people were divided in groups as follows; 47 women and 73 men. According to age the investigated people were divided as follows: 54 aging up to 55 and 66 above 55 years.

Measuring scales and questionnaires

Scale measuring depressiveness - Beck depression inventory (16) was used and consisted as follows:

- The Positive and Negative Syndrome Scale (PANS S) for schizophrenia (17).
- Questions estimating the social status.

RESULTS AND DISCUSSION

When comparing the group of elderly patients with schizophrenia and the group of investigated people without significant psycho-neurological disorders according to their level of depressiveness there were found significant differences (T= 2.59; p<0.01) (Table 1).

Table 1. Level of depressiveness among elderly patients with schizophrenia and control group.

<table>
<thead>
<tr>
<th>Group</th>
<th>X</th>
<th>St. Dev.</th>
<th>T</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elderly patients suffering from schizophrenia n=60</td>
<td>24.46</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investigated people without any significant disorders n=60</td>
<td>20.78</td>
<td>3.10</td>
<td>2.59</td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>

When comparing between the groups according to age on their level of depressiveness there were found significant differences (T= 1.99; p<0.05) (Table 2). That result testifies to the data of already cited authors for the rising levels of depression in elderly patients suffering from schizophrenia.

Regarding the positive and negative symptoms of schizophrenia there were also differences found between the patients from different age periods. In the group above 55 years the negative symptoms (Figure 1) diminish according to intensity, which testifies to the opinion of many authors that these symptoms get milder with age. The positive symptoms (Figure 2) however mildly
raise their levels in the age above 50 years and correlate significantly and positively with the depressiveness ($r = 0.49$; $p < 0.05$).

**Table 2.** Level of depressiveness according to age.

<table>
<thead>
<tr>
<th>Age</th>
<th>X</th>
<th>St. dev.</th>
<th>T</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 55</td>
<td>23.0</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Above 55</td>
<td>25.3</td>
<td>3.10</td>
<td>1.9</td>
<td>&lt;0.0</td>
</tr>
</tbody>
</table>

**Figure 1.** Levels of negative symptoms of schizophrenia in the groups up to and above 50 years

**Figure 2.** Levels of the positive symptoms of schizophrenia in the groups up to and above 50 years

It is found that there was a positive correlation between the levels of depressiveness and the precautions for somatic health (Figure 3) ($r = 0.58$; $p < 0.05$) and the sense of guilt (Figure 4) ($r = 0.46$; $p < 0.05$) and a negative correlation between the depressiveness and the level of expressed disorientation (Figure 5) ($r = -0.53$; $p < 0.05$). The first two symptoms are with significantly higher levels in the group above 50 years (Figure 3, 4).

There were found some differences in the groups according to gender. The men in the investigated group of patients with schizophrenia were with higher levels of depression ($t = 1.98$; $p < 0.05$) compared to the women (Figure 6) as well as with higher level of expressed positive symptoms of schizophrenia ($t = 3.05$; $p < 0.01$) (Figure 7). There was a higher expression of the negative symptoms ($t = 4.60$; $p < 0.01$) (Figure 8).

**CONCLUSIONS**

The level of depressiveness significantly correlates positively with the level of the expression of positive symptoms of schizophrenia as well as the precautions for somatic health and with the sense of guilt and negatively with the level of expression of the negative symptoms and the disorientation.

The age of the patients with schizophrenia was a significant predictor of the depressive symptoms.

In the investigated group the strongest depressive levels were found in men above 50.
**Figure 6.** Level of expressed depressiveness in the groups according to gender

**Figure 7.** Level of expressed positive symptoms in the groups according to gender

**Figure 8.** Level of expressed negative symptoms in the groups according to gender

**REFERENCES**