The Overlap of Depression and Anxiety Symptoms in a Community Sample of Romanian Young Adults

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Abstract: This paper is the result of a research that examined, analyzed and interpreted the overlap of depression and anxiety symptoms in a community sample of Romanian adults never seeking for psychiatric help. The study utilized two self-administered questionnaires: Patient Health Questionnaire 9, designed to assess depressive symptoms, and Anxiety Sensitivity Index - Revised 36, developed to assess the anxiety symptoms. The data was analyzed by using statistical elements. The findings show a significant overlap of depression and anxiety symptoms even at persons without a distinct psychiatric condition

Key-Words: - Overlap; Co-morbidity; Depression; Anxiety; Community Settings

1 Introduction
The depression and anxiety symptoms, by definition, show the same overlap [1], perhaps particularly in children [2]. From a practical perspective, however, there is a pervasive phenomenological evidence of co-morbidity of the depression and anxiety disorders, but also of differences between the two. Similarly, at a psychobiological level, it is likely to have some degree of both continuity and discontinuity between depression and the anxiety disorders. Data in which symptoms and disorders are most likely to co-occur can be used to develop and test different hypothesis about the pathogenesis of psychiatric disorders.

2 Co-morbidity as a key concept
One concept that highlights both the strengths and the weaknesses of current diagnostic systems is that of co-morbidity [3].

Co-morbidity is defined as the presence of more than one disorder in a person over a lifetime, or in a certain period of time. It appears to be the norm rather than the exception in the case of anxiety and depression [6]. Co-morbidity is a construct that reflects the strengths (increasing reliability) and weaknesses (incomplete validity) of the current diagnostic systems in psychiatry.

2.1 The co-morbidity between depression and anxiety in psychiatric disorders
The high prevalence of co-morbidity in psychiatric patients indicates that psychiatric disorders are not non-overlapping constructs, each associated with mutually exclusive psychobiological dysfunctions. Anxiety and depression show not only an extensive co-morbidity between them, but also with other psychopathology [4].

Methodological issues significantly affect the degree in which the co-morbidity is found; the increased prevalence of co-morbidity in the clinical rather than the community setting is known as Berkson’s bias [15], and the use of structured interviews results in apparently higher co-morbidity [8].

Although psychiatric nosologies have traditionally differentiated depression at anxiety disorders, some authors have used such data to argue that these conditions represent a single underlying dimension, or that they can be subsumed on an affective spectrum of disorders [4].

An alternative proposal from other authors has been to argue for a new diagnostic category (mixed anxiety- depressive disorder- [5]). This diagnosis is listed in the appendix of the Diagnostic and Statistical Manual of Mental Disorders, 4th edition (American Psychiatric Association, 1994), on disorders requiring further study, and is also included in the International Classification of mental and Behavioral Disorders, 10th revision (WHO, 1992).

2.2 The models of depression and anxiety disorders comorbidity
According to Frances et al, 1992, Wittchen, 1996, Stahl, 1997, the following models of depression and anxiety disorder comorbidity might
occur, for instance in the panic disorder:

→ Comorbidity is an artifact of overlapping diagnostic criteria;
→ Panic and depression are separate disease entities;
→ True comorbidity: two disorders occurring at the same time;
→ The mixed depression and anxiety syndrome is a separate entity;
→ Panic predisposes to depression;
→ One entity, with common etiology, is expressed in two different phenotypes.

In the psychological literature, a useful distinction has been made between two basic dimension of affect: positive and negative [12]. A two-factor model has been proposed, in which negative affect is a non-specific dimension, common to both depression and anxiety, whereas positive affect is a specific factor related (inversely) to depression.

Three-factor models have also been proposed, in which physiological hyper-arousal is included as being specific to anxiety [13], or to panic [14].

Indeed, three-factor models have obtained empirical support in a number of studies. Reviewing this literature, Mineka et al (1998) propose that the negative affect is a high order dimension, shared by both depressions and anxiety. The absence of positive affect is seen in depression, the anxious arousal or somatic anxiety is associated with panic, while other components are responsible in other anxiety disorders.

Generally, the comorbidity appears to be the rule among persons with depression, with about two-thirds having at least one comorbid anxiety disorder [11]. The prevalence of anxiety disorders in persons with depression has been estimated at 57% in one meta-analysis [1], although rates do vary from one disorder to another.

2.3 Implications of the depression and anxiety disorders comorbidity

The study of comorbidity may have important implications for the psychiatric nosology, but its significance extends beyond this theoretical point of view. The interface of anxiety and depression affects the course and treatment outcome of these conditions. Patients with coexisting symptoms tend to be more impaired in their psychosocial functioning. According to some reports, they show a slower and lower response to treatment and, overall, have poorer prognosis compared with patients that have only one condition. Suicide and self-harming are more common in this group than in the group with either syndrome alone [9, 10]. Autonomic arousal is increased in the mixed group, as indicated by the higher diastolic and systolic blood pressures and higher cardiac load, compared with patients with only one condition.

3 Research Method and Design

The study collected information about depression and anxiety symptoms using two self-administered questionnaires:

Patient Health Questionnaire 9 (PHQ-9), a 9-item self-report scale designed to assess depressive symptoms as defined by the DSM-IV over the previous two weeks, which contains one question concerning functional impairment. Items 1 to 9 are scored on a 0-3 scale; item 10 (functional status) is scored on a 4 points scale, ranging from “not difficult at all” through “extremely difficult”. Scores ranging from 1 to 4 indicate minimal depression; 5 to 9 mild depression, 10 to 14 moderate depression, 15 to 19 moderately severe depression, and 20 to 27 indicate severe depression [16].

Anxiety Sensitivity Index- Revised 36 (ASI-R 36), a 36-item self-report instrument, designed to assess the somatic, cognitive and social dimension of anxiety sensitivity. The scale possesses six sub-scales assessing fear of cardio-vascular symptoms, respiratory symptoms, gastro-intestinal symptoms, publicly observable anxiety reactions, dissociative and neurological symptoms, and fear of cognitive dyscontrol. Items are rated on a 5 points scale, ranging from 0 (very little) to 4 (very much); a total score (range 0-144) for the scale is obtained by summing all items [17].

The participation in the study was voluntary and the consent to participate was considered given by the subjects when they completed the questionnaires. Sample groups comprised 64 subjects from community settings who completed both self-questionnaires in 5 minutes each.

4 Research Findings

The study adopts the following hypothesis: comorbidity of depression and anxiety is a construct that applies not only in the case of categorical approach to psychiatric diagnosis, but also at the symptomatic level.

The subject target group comprise 64 subjects with mean age 32.84 years (range 21-43 years, Std. Deviation 6.09), balanced for gender (51.6% males and 48.4 % females).
The samples have the following depressive and anxiety symptomatology levels:

**Fig. 1 Depressive symptoms level (histogram and normal distribution plot)**

**Fig. 2 Anxiety symptoms level (histogram and normal distribution plot)**

<table>
<thead>
<tr>
<th>Score</th>
<th>Correlation</th>
<th>Z score PHQ-9</th>
<th>Z score ASI-R 36</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z score PHQ-9 Pearson Correlation Sig. (2-tailed)</td>
<td>1</td>
<td>.363**</td>
<td>.003</td>
</tr>
<tr>
<td>Z score ASI-R 36 Pearson Correlation Sig. (2-tailed)</td>
<td>.363**</td>
<td>1</td>
<td>.003</td>
</tr>
<tr>
<td>N</td>
<td>64</td>
<td>64</td>
<td></td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).**

Table 1. Correlations between depression and anxiety symptomatology levels

5 Discussions and Conclusions
The greatest part of the sample (68%) expressed minimal depression, 28% mild depression and 3% moderate depression on PHQ-9 questionnaire.

On ASI-R-36 questionnaire the score range between 0 and 100 with an average score 24.89 and median 23.5. The greatest part of the sample (89.1%) expressed low levels of anxiety (between 0 and 47), 9.3% expressed moderate anxiety (between 48 and 95) and only 1.6% expressed a high anxiety (between 96 and 144).

Analysis of the sample (Pearson's r) show that there is correlation between depressive and anxiety levels significant at 0.01 level (2 – tailed).

If the categorical approach to psychiatric diagnosis could result in an extensive comorbidity of anxiety and depressive disorder our more dimensional approach, in which the severity of individual symptoms and signs is described, might possibly be more relevant to clinical practice. The study demonstrated a consistent association between depression and anxiety at the symptomatic level.

References
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