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Research Article

Comorbidity between Obsessive-Compulsive Disorder and Schizophrenia: Is there Evidence for a "Schizo-obsessive" Subtype?

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Abstract

This systematic review displays main findings and research regarding the nosological status of patients diagnosed with OCD and schizophrenia. Particularly, results from psychopathology, psychosocial functioning, neurocognition and treatment are arranged. On the one hand, results obtained indicate that "schizo-obsessive" patients tend to show higher depressed mood, negative symptomatology and psychosocial impairment when compared with "schizophrenia" subjects. On the other hand, no consistent differences between both psychotic groups have been found in positive symptomatology, neurocognitive performance and treatment features. Of interest, some methodological constraints hamper generalization of research findings, especially type of "schizo-obsessive" subjects recruited (OCD vs. OCS comorbidity). Overall, results collected so far do not support that "schizo-obsessive" pathology represents an independent clinical entity.

Keywords: Schizo-obsessive disorder; Schizophrenia; Obsessive-compulsive disorder; Comorbidity, Theoretical study

Abbreviations

ARMS: At-risk Mental State; CPT: Continuous Performance Test; CVLT: California Verbal Learning Test; OCD: Obsessive-compulsive Disorder; OCS: Obsessive-Compulsive Symptoms; TMT: Trail Making Test; WCST: Wisconsin Card Sorting Test; WMS: Wechsler Memory

Introduction

Despite having been a research topic since the 19th century, the relationship between schizophrenia and OCD has only attained increasing recognition in the last 15 years [1-3]. Epidemiological studies have found that OCS are estimated to occur in up to 30% of patients with schizophrenia [4,5]. Likewise, OCD affects roughly 12% of this group, depending on the type of sample (clinical vs. community), setting (outpatient vs. inpatient), design study (cross-sectional vs. prospective), or assessment instruments (clinical interview vs. questionnaires) [6]. Overall, these prevalences are over 5 times higher than expected in subjects without schizophrenia, raising concerns regarding its etiopathogenic mechanisms and nosological status [7].

To date, several explanations have been suggested as ways of understanding this co-occurrence. First, OCD/OCS may be part of early stage of psychotic illness, specifically during the ARMS [2,8,9]. Second, one disorder might cause or increase the risk for the other [2,10,11]. Third, both disorders may share common or underlying risk factors such as neuropsychological and biological domains [12-15]. Finally, some current research postulates that the development of OCS in schizophrenia may be associated with atypical antipsychotic effects [16-18]. Irrespective of these possible theories, whether this subgroup of "schizo-obsessive" patients may pose as a clinical entity with a distinct profile presents a long-standing trouble [19-23]. Accordingly, there is still a lack of recognition of "schizo-obsessive disorder" within current diagnosis reference manuals.

Objective

Within this frame work, these systematic reviews aimed at delineating the clinical profile of "schizo-obsessive" patients and compare them with subjects diagnosed of "schizophrenia" or "OCD" alone. Based on the results obtained, we will elucidate whether subjects with this comorbidity may be posed as a distinct nosological category.

Method

Search strategy

A literature search was carried out through PsycINFO and PubMed databases from 1990 to June2014. Terms employed included indexing terms (e.g. MeSH) and free texts: [(OCDOR obsessive-compulsive) and (schizophrenia OR psychosis)].

Selection criteria

Inclusion criteria included studies comprising subjects diagnosed of OCD and schizophrenia according to DSM-IV criteria, which were assessed for outcome measures related to this comorbidity. Overall, 60 studies fulfilled inclusion criteria and were finally collected, including both original articles and systematic reviews.

Data extraction

Comparative data from socio demographic variables, psychopathology, quality of life and clinical variables, neuro cognitive profile and psycho pharmacological treatment were collected.

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Results

Socio demographic variables

Concerning the socio demographic features, the "schizo-obsessive" subjects have displayed a lower degree of education, lesser rates of employment, and living fewer times with a partner than "schizophrenia" subjects [22,24,25].

Psychopathological variables

Concerning the psychotic symptomatology and insight into psychosis, studies usually have found higher negative symptomatology among "schizo-obsessive" with OCD patients than "schizophrenia" subjects [4,20,26-30]. Conversely, those studies which collected "schizo-obsessive" subjects with OCS have not shown between-group differences [21,31-34]. Despite these previous results, to date those studies that have already included direct comparative analyses between "schizo-obsessive" patients with OCD vs. OCS have not yet obtained consistent evidences regarding more negative among the "schizo-obsessive" subjects with OCD instead of OCS [18,22,35]. With regard to the obsessive-compulsive features, most studies have not found differences between "schizo-obsessive" patients and "OCD" subjects respecting the severity of the symptomatology [36-39]. Concerning insight into OCD, studies have not yielded consistent findings [36,38,40].

Regarding the depressed mood, most research has obtained higher depressed mood in the "schizo-obsessive" group than in "schizophrenia" and/or "OCD" patients [4,20,25,35,38,41].

Finally, studies have not found statistically significant differences among the 3 groups concerning the global severity of the whole psychopathology [27,42,43].

Quality of life and clinical variables

Regarding the quality of life, most studies have pointed out a lower quality of life among the "schizo-obsessive" subjects than in "schizophrenia" patients [4,32,38,44-47].

In addition, studies which have assessed clinical variables such as "number/length of hospitalizations", "psychiatric emergencies", and "previous suicide attempts" among the both psychotic groups have yielded inconsistent results. On the one hand, some studies have displayed a lack of differences in number of hospitalizations and psychiatric emergencies [4,25,38]. On the other hand, other inquiries have shown greater number/length of hospitalizations and psychiatric emergencies among "schizo-obsessive" patients [11,24,32]. In addition, "schizo-obsessive" subjects usually have committed statistically more suicide attempts than "schizophrenia" patients [4,48].

Neuropsychological profile

Regarding the neuropsychological results, most previous studies that have included an "OCD" group have obtained a better performance in this group when compared with both psychotic groups [46,49,50]. Bearing in mind both psychotic groups, results have been inconsistent, depending on the neuro cognitive domain as well as the tests employed. Findings are described below.

Concerning visual spatial skills, both psychotic groups have shown either no between-group differences [47,49-51] or higher performance among "schizo-obsessive" subjects [2,52]. Regarding working memory, studies have displayed a lack of statistically significant differences between both psychotic groups using the TMT [47,50,53]. However, other studies that assessed this domain using the WCST or the Stroop test yielded divergent findings [32,33,46,49,51,52,54]. With regard to processing speed, there was a lack of statistically significant differences between both psychotic groups [47,50,52,53], with the exception of some studies [51,54]. Concerning cognitive shifting abilities, most studies have yielded no between-group differences using the TMT [47,50,53], with the exception of one study [54]. Not with standing, studies which used other neuropsychological tests (e.g., alternation learning tasks, CPT, go-no go test and WCST) have obtained inconsistent results [32,33,46,49,51,55-57].

Regarding concentration, studies using the digit span subtest have not found statistically significant differences between both psychotic groups [50]. Conversely, research using the Stroop test has not yielded convergent results [47,50,51]. Concerning verbal memory, studies using the FAS have not yielded between-group differences [47,52]. Similarly, research with the same purpose using the WMS or the CVLT have yielded similar results [46,50,52].

Psychopharmacological treatment

Concerning dosage and type of antipsychotic medications, studies that have recorded chlorpromazine equivalent doses [32,52,58] as well as the type of antipsychotics (typical vs. atypical)[22,51] have not displayed differences between both psychotic groups. These findings suggest that antipsychotic medication may not play a role on the psychopathological phenotype of "schizo-obsessive" subjects. Thus, potentially contaminating effects from this variable may be ruled out when interpreted previous findings.

Conclusion

Findings from this systematic review do not overtly support that "schizo-obsessive" subjects were a distinct clinical profile when compared with "schizophrenia" patients. On the one hand, "schizo-obsessive" subjects seem to display higher depressed mood, negative symptomatology and psychosocial dysfunction. However, some methodological constraints affect results, especially type of "schizo-obsessive" subjects (with OCD or with OCS). On the other hand, neuropsychological, treatment and clinical variables have provided inconsistent results [59]. Likewise, some methodological flaws have partially determined these last findings, especially type of neuropsychological tests employed [60]. Overall, we cannot ensure that "schizo-obsessive" pathology represents an independent clinical entity. Further research is warranted for addressing this unresolved topic. By resolving these methodological constraints, findings from next studies may provide reliable evidence that could shed further light on the nosological status of "schizo-obsessive" patients.

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