THE BRIEF NEGATIVE SYMPTOMS SCALE: RELATION TO NEUROLOGICAL SOFT SINGS

A. Toll [1,2,3], A. Mané [1,2,3], D. Bergé [1,2,3], A. Palma [1,2], V. Pérez-Solà [1,2,3]
1. Institut de Neuropsiquiatria i Addiccions (INAD), Parc de Salut Mar, Barcelona
2. Institut Hospital del Mar d'Investigacions Médiques (IMIM), Barcelona
3. Centro de Investigación Biomédica en Red de Salud Mental (CIBERSAM), Barcelona

INTRODUCTION

Negative symptoms have long been recognized as core symptoms of schizophrenia and are associated with poor outcome [1]. To date, no current pharmacological treatment has the indication for treating negative symptoms. In order to advance treatments of schizophrenia, the National Institute of Mental Health (NIMH), an agency of the United States government responsible for mental health related research, organized the NIMH-MATRICS Consensus Development Conference on Negative Symptoms [2]. Five domains of negative symptoms were defined, including blunted affect, alogia, asociality, anhedonia and avolition. Crucially, the need for developing new instruments was highlighted, as the first step to identify new treatments that would target negative symptoms. The Brief Negative Symptoms Scale (BNSS) is one of two scales derived from this initiative, along with the Clinical Assessment Interview for Negative Symptoms (CAINS). Both measures have shown strong interrater, test–retest and internal consistency properties in English and in its validation to Spanish [3, 4].
However, there are still many unknown aspects of this scale, such as primary–secondary negative symptoms distinction, correlation with cognitive symptoms or biological markers as neurological soft sings. So, the neurological soft sings had previously been associated to negative symptoms, anthropometric measures and sedentary life [5].

AIMS

With this study we want to know if there are a significant correlation between negative symptoms (evaluated by BNSS scale) and neurological soft sings (evaluated by NES scale) in schizophrenia patients.

METHODS

Twenty patients with a diagnosis of schizophrenia (Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition; DSM-5) from outpatient units of Parc de Salut Mar Barcelona were recruited. Patients with IQ below 80, neurological disorders or substance dependence except tobacco and cannabis, were excluded. All subjects gave written informed consent in accordance with the respective clinical ethical committees. The evaluation included: sociodemographic data, physical evaluation, treatment, substance use (ASI scale), BNSS scale and Neurological Evaluation Scale (NES).
We studied the correlation between BNSS (and subscales) and NES using Pearson Correlation.

RESULTS

In our sample, the mean age was 36,5 ± 10,35 and most of the subjects were male (65%). The most used antipsychotic was clozapine (35%) and the medium equivalent chlorpromazine dose was 486,55 ± 244,32 mg/day. Regarding substance use, the 95% were tobacco users, the 90% were alcohol users, the 70% were cannabis users and the 25% were cocaine users.

The median BNSS scores was 31,65 ± 12,08.

We didn't find significant correlation between BNSS total scores and Neurological Evaluation Scale scores.

Table 1. Correlation between BNSS total score and NES total score

	NES total score
BNSS total score	r = 0,083 p = 0,728
Anhedonia subscale	r = 0,154 p = 0,518
Distress subscale	r = 0,239 p = 0,310
Asociality subscale	r = 0,088 p = 0,713
Avolition sub cale	r = 0,042 p = 0,861
Blunted affcet subscale	r = 0,128 p = 0,591
Alogia subscale	r = 0,273 p = 0,244

CONCLUSIONS

We did not find any association between NES and BNSS as a biological marker of cerebral dysfunction. But the small sample size could influence the lack of findings. So, more studies should be done to confirm these results. Nevertheless, BNSS could be a useful instrument to evaluate negative symptoms of schizophrenia more specifically.

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**The authors declare thay do not have any conflict of interest.*