

Research paper

What is the nonverbal communication of depression? Assessing expressive differences between depressive patients and healthy volunteers during clinical interviews



Juliana Teixeira Fiquer^{a,*}, Ricardo Alberto Moreno^b, Andre R. Brunoni^{c,d},
Vivian Boschesi Barros^e, Fernando Fernandes^b, Clarice Gorenstein^{a,f}

^a Laboratory of Medical Investigation (LIM 23), Department and Institute of Psychiatry, University of São Paulo Medical School, São Paulo, Brazil

^b Mood Disorders Unit (GRUDA), Department and Institute of Psychiatry, University of São Paulo Medical School, São Paulo, Brazil

^c Service of Interdisciplinary Neuromodulation, Laboratory of Neurosciences (LIM-27) and National Institute of Biomarkers in Psychiatry (INBioN), Department and Institute of Psychiatry, University of São Paulo Medical School, São Paulo, Brazil

^d Department of Psychiatry and Psychotherapy, Ludwig-Maximilians-University, Munich, Germany

^e University of São Paulo School of Public Health, University of São Paulo, São Paulo, Brazil

^f Department of Pharmacology, Institute of Biomedical Sciences, University of São Paulo, São Paulo, Brazil

ARTICLE INFO

KeyWords:

Nonverbal communication
Depression
Depressive disorder
Transcranial direct current stimulation
Antidepressive agents
Ethology

ABSTRACT

Background: It is unclear if individuals with Major Depressive Disorder (MDD) present different nonverbal behavior (NVB) compared with healthy individuals, and also if depression treatments affect NVB. In this study, we compared the NVB of MDD subjects and healthy controls. We also verified how MDD subjects' NVB is affected by depression severity and acute treatments.

Methods: We evaluated 100 MDD outpatients and 83 controls. We used a 21-category ethogram to assess the frequency of positive and negative NVB at baseline. MDD subjects were also assessed after eight weeks of treatment (pharmacotherapy or neuromodulation). We used the Wilcoxon signed-rank test to compare the NVB of MDD subjects and controls; beta regression models to verify associations between MDD severity and NVB; the Shapiro-Wilk test to verify changes in NVB after treatment; and logistic regression models to verify NVB associated with treatment response according to the Hamilton depression rating scale.

Results: Compared with controls, MDD subjects presented higher levels of six negative NVB (shrug, head and lips down, adaptive hand gestures, frown and cry) and lower levels of two positive NVB (eye contact and smile). MDD subjects' NVB was not associated with depression severity, and did not significantly change after depression treatment. Treatment responders showed more interpersonal proximity at baseline than non-responders.

Limitations: Our ethogram had no measure of behavior duration, and we had a short follow-up period.

Conclusions: MDD subjects have more negative and less positive social NVB than controls. Their nonverbal behavior remained stable after clinical response to acute depression treatments.

1. Introduction

Nonverbal behavior comprises a broad range of expressive body positions and actions, such as posture, gestures, facial expressions, and paralanguage. These behaviors rely on reflex responses, being under little conscious control (Andersen, 1999; DePaulo, 1992; Vrij et al., 2000). They communicate genuine emotional states and interests during interpersonal interactions, contributing to the development of relationships and social adaptation (Andersen et al., 2006; Philippot et al., 2003). Measures of expressive behavior have been used in

psychology and psychiatry research to assess quality of therapeutic relationships (Brugel et al., 2015; Mast, 2007; Roter et al., 2006), psychopathological conditions (Fiquer et al., 2017; Troisi, 1999), among others (Lavelle et al., 2015; Pegoraro et al., 2014).

Major depressive disorder (MDD) is a serious, prevalent and recurrent health problem, and it is expected to become the first cause of disability in the next decade (Lépine and Briley, 2011; Mathers and Loncar, 2006; Whiteford et al., 2013). According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) (American Psychiatric et al., 2013), MDD encompasses a complex variety of symptoms such as

* Corresponding author.

E-mail addresses: jufiquer@yahoo.com.br (J.T. Fiquer), cgorenst@usp.br (C. Gorenstein).

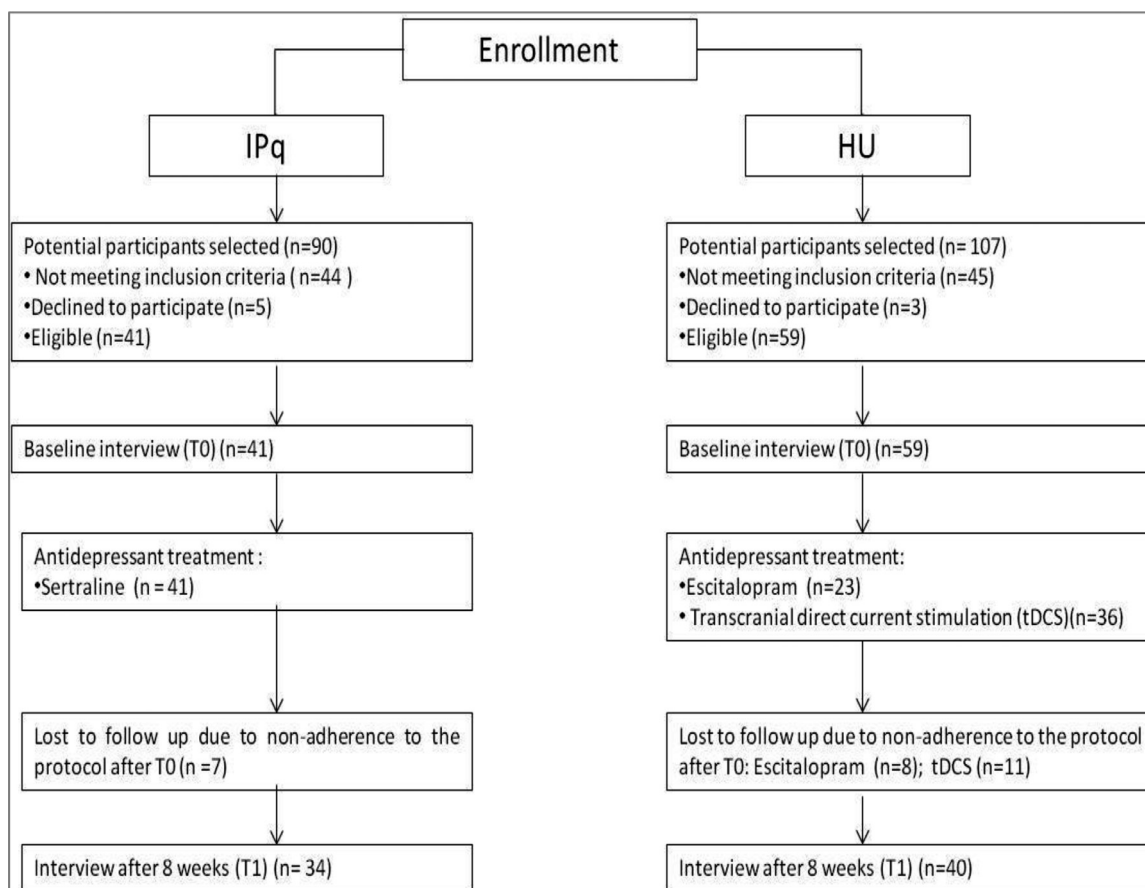


Fig. 1. Flow of the patients from both hospitals (Institute of Psychiatry: IPq; University Hospital: HU) through the stages of the study.

mood alterations, somatic symptoms, cognitive impairment, and social functioning disability. Additionally, MDD presents a set of nonverbal manifestations, including subtle changes in vocal acoustic (Alpert et al., 2001; Mundt et al., 2007; Nilsson, 1987), psychomotor retardation (Hausdorff et al., 2004; Lemke et al., 2000; Michalak et al., 2009), and postural misalignment (Canales et al., 2010; Canales et al., 2017; Rosario et al., 2014).

Ethological studies have reported links between nonverbal manifestations of depression and impaired social functioning (Bouhuys, 2003; Fossi et al., 1984; Troisi, 1999). Moreover, depressed patients have demonstrated lower levels of social behaviors (e.g. short eye contact, few hand gestures and facial movements) than non-depressed psychiatric subjects, such as bipolar and schizophrenic individuals (Annen et al., 2012; Fossi et al., 1984).

However, studies have shown heterogeneous findings on the association between nonverbal behavioral changes and depression improvement. Some have reported that depression improvement was associated to an increase in frequency and speed of general body movements (Fisch et al., 1983), as well as in positive facial behaviors (Fossi et al., 1984; Schelde and Hertz, 1994). Others have reported no association between an improved depressive condition and nonverbal behavioral changes (e.g. Fiquer et al., 2017). These controversial results may be due to methodological aspects, such as combined samples of unipolar and bipolar subjects, as well as of inpatients and outpatients; and different behavioral assessment instruments. A previous study by our group showed that MDD subjects treated for two weeks had a decrease in negative behaviors and an increase in some positive behaviors (Fiquer et al., 2013). These findings corroborate the idea that depressed subjects become more socially expressive after treatment. However, this study was based on average scores of depression before and after treatment, not considering clinical improvement criteria. Additionally,

few correlations were found between reduced MDD scores and behavioral changes after treatment. This raises the question of whether behavioral changes are independent of depression severity. Indeed, previous studies have not established consistent associations between MDD severity and nonverbal behaviors (Fiquer et al., 2017; Troisi et al., 1990).

One of the most striking aspects of previous ethological studies on depression is the lack of comparisons with healthy individuals. To the best of our knowledge, only one study in the literature has performed this comparison (Jones and Pansa, 1979). Nevertheless, this study investigated no more than a few nonverbal behaviors (head movements, smile and look) in a small sample of 13 depressed subjects. In its results, depressive subjects had a lower frequency of non-verbal behaviors. At discharge, depressive subjects and controls had similar levels of smiling, but improvement criteria were not adopted. The authors emphasized that this study used very simple behavioral categories, which was an important limitation. They also did not evaluate behaviors associated with negative affects, despite their role in social withdraw and depressive states (Troisi, 1999).

Hence, previous literature indicates that MDD leads to changes in nonverbal behavior, but little is known about its specific expressive alterations and about the impact of depression treatments on nonverbal behavior.

In order to better explore the link between nonverbal behavior and depression, in this study we investigate: the differences in nonverbal behavior between MDD subjects and healthy controls at baseline; the association between MDD subjects' nonverbal behavior and depression severity; and the changes in MDD subjects' nonverbal behavior after acute depression treatments response.

Download English Version:

<https://daneshyari.com/en/article/8815388>

Download Persian Version:

<https://daneshyari.com/article/8815388>

[Daneshyari.com](https://daneshyari.com)