

COMPARISON OF PATIENTS AND PSYCHIATRISTS EXPECTATIONS IN THE TREATMENT OF MAJOR DEPRESSIVE DISORDER – EXPECTA STUDY

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ABSTRACT

Major depressive disorder (MDD) is highly prevalent in Brazil, yet no data exists comparing treatment expectations of Brazilian psychiatrists and patients. This study aims to assess and contrast these expectations while exploring potential sociodemographic and clinical influencers. We conducted a cross-sectional online survey to comprehend the expectations surrounding antidepressant drug treatments for both psychiatrists and patients. Our survey garnered participation from 502 patients and 112 psychiatrists, with the majority being female. Most respondents from both groups were affiliated with private healthcare services. Desvenlafaxine emerged as the most frequently used medication. Comparing expectations between psychiatrists and patients, physician ratings predominately leaned towards 4 (high) and 5 (very high/total), particularly in the domains of core depression symptoms and quality of life and functionality. Among patients, responses in these domains mainly clustered around 3 (average) and 4 (high). In conclusion, psychiatrists demonstrated greater expectations for antidepressant medications in ameliorating MDD, with emphasis on quality of life/functionality and anhedonia.

Keywords: Survey method; Quality of life; Desvenlafaxine.

INTRODUCTION

According to the World Health Organization (WHO), depression affects more than 300 million people worldwide and it is estimated that, by 2030, it will be the most prevalent disease globally, surpassing cancer and other infectious diseases. The prevalence of depression in Brazil is 5.8%, higher than the global average of 4.4%, and Brazil is the country with the highest number of cases in the Americas, behind only the United States which has an average of 5.9% (WHO, 2022).

Major depressive disorder (MDD) covers most of the cases commonly known as "depression", being defined by the presence of 5 central symptoms: being mandatory depressed mood (sadness, discouragement) and/or anhedonia (loss of pleasure and interest in activities) for a minimum period of two weeks. These symptoms should be accompanied by at least four others, including significant weight loss or gain, increased or decreased appetite, altered sleep, psychomotor agitation or retardation, loss of energy, feelings of worthlessness or excessive guilt, diminished ability to think or concentrate, and thoughts of death or suicidal ideation (APA, 2013).

Medicines are among the most studied therapies recommended by international guidelines on the treatment of MDD, and are, therefore, the most widely used in clinical practice since their mechanisms of action, efficacy, and safety data are more established (NCCMH, 2010). The response to antidepressant treatment with medicines usually occurs between the second and fourth week of use, which depends on the mechanisms of action of the different drugs currently available. When a patient does not respond to treatment, it is necessary to investigate the possible factors that contribute to treatment failure. In some cases, dose adjustment or change of medication may be necessary to avoid a possible discontinuation syndrome and mitigate adverse events (FLECK *et al.*, 2009).

In this context, the pharmacological treatment of MDD is challenging, and one of the greatest difficulties faced by patients is adherence to therapy. Patients may find the process exhausting and treatment results do not always meet their expectations (IBANEZ *et al.*, 2014). Therefore, in recent years, several studies have been developed to investigate the expectations of patients regarding the pharmacological treatment of MDD, since identifying more precisely the objectives of therapy increases the chances of success (ZIMMERMAN *et al.*, 2006).

Badger *et al.* (2007) examined how patient's perceptions of their MDD treatment may influence their recovery. The authors concluded that to attain treatment goals, it is important for psychiatrists to delve deeper and understand better patient expectations about the proposed therapy.

Therefore, the expectations of physicians and patients regarding the results of treatment must be aligned (BADGER *et al.*, 2007), but there are still few studies on the subject. In a survey carried out in Belgium, in which the researchers applied a questionnaire containing 51 questions to doctors and patients, it was observed that there are differences between the benefits of the therapy considered most important by patients and their doctors. The physicians attributed greater importance to aspects related to the mitigation of clinical symptoms of the disease, such as feelings of sadness, helplessness, and hopelessness. On the other hand, the improvement of aspects related to quality of life would be the most important for patients (DEMYTTENAERE *et al.*, 2015). Another multicenter survey study conducted online also suggests that patients consider that the improvement of social and functional aspects is the most important for their recovery (BAUNE; CHRISTENSEN, 2019). A Japanese study also found divergent results among physicians and patients regarding the importance of functional improvement, regardless of the disease stage (ISHIGOOKA *et al.*, 2021). However, these studies did not address the possible determinants of these differences, whether sociodemographic or related to the characteristics of the medicines.

The present study aimed to compare the expectations of psychiatrists and patients regarding drug treatment for MDD in Brazil, investigating whether sociodemographic and clinical factors can influence the differences in expectations between the groups.

METHODS

Ethics statement

This study was submitted to and approved by the Research Ethics Committee of Clementino Fraga Filho University Hospital (HUCFF/UFRJ) under protocol number 4.906.507. The Informed Consent Form (ICF) was included in the questionnaire, and participation in the research was conditioned to the acceptance of the terms presented on the first page, designed for both patient and physician groups.

Study design

This is a cross-sectional study about the expectations of psychiatrists and patients regarding antidepressant drug treatment. An online survey research was conducted.

Research participants

The target population of the study was composed of patients diagnosed with MDD and psychiatrists. Convenience sampling was used, the survey was conducted and participants were recruited over 3 months, from September to December 2021. The following inclusion criteria were considered for participation in the research: patients diagnosed with MDD by their physician, aged 18 years or older, and taking any antidepressant medication during the study period (started at least 1 week ago). Physicians with specialization in psychiatry or performing medical residency in the area. Patients who were not taking antidepressant medicines were excluded from the study. Participants who answered all questions with the same score and/or who did not accept the Informed Consent Form (ICF) were also excluded.

Recruitment of participants

The physicians were recruited through digital invitations, with a link to access the questionnaire, via their professional profiles on Instagram and LinkedIn. Each physician was encouraged to choose at least one patient, if possible, to join the research. In addition to this direct invitation, to expand the sample of patients, dissemination, and convocation were also made through Instagram, LinkedIn, and psychiatry groups on Facebook, containing all the inclusion criteria necessary for participation.

Development of the data collection instrument

For data collection, two self-administered questionnaires were designed using Google Forms and hosted on a Wix platform website. One questionnaire was directed to psychiatrists and another to patients. Both have two sections: In the first, data regarding sociodemographic, clinical, and professional characteristics were collected, depending on the group of participants. The second section of the questionnaire was designed identically for both groups and consisted of

questions related to their expectations regarding the results of MDD drug treatment. The questions in this section were based on 6 scales of assessment and diagnostic aid, validated for the Portuguese language and use in Brazilian patients: Patient Health Questionnaire-Depression subscale - PHQ-9 (SANTOS *et al.*, 2013); Hospital Anxiety and Depression Scale-anxiety subscale - HADS-anxiety (BOTEGA *et al.*, 1995); Patient Health Questionnaire-Somatic Symptoms severity subscale - PHQ somatic (ZORZETTO, 2009); Positive And Negative Affect Schedule-Positive Affect subscale - PANAS-positive (CARVALHO *et al.*, 2013); Sheehan Disability Scale - SDS (SOLANO, 2016) and Abbreviated World Health Organization QoL scale - psychological and social subscales - WHOQOL-BREF (FLECK *et al.*, 1999). 18 questions were selected and grouped into 3 domains: quality of life and functionality, core depression symptoms, and somatic and anxiety symptoms. Participants were instructed to rate each item of the instrument questionnaire according to its significance for their recovery using a 5-point Likert scale, where 1 stands for none or very low importance; 2 corresponds to low importance; 3 represents medium importance; 4 indicates high importance; and 5 denotes very high/total importance. The questionnaire was validated by a group of 5 physicians, who invited 1 patient each.

Statistical analysis

Descriptive analysis was performed, and the data was presented as means and standard deviations for qualitative variables, and as counts and proportions for categorical variables. The agreement between physicians and patients was visually verified using heatmaps generated using Displayr®.

RESULTS

Sociodemographic characteristics of the study population

A total of 715 volunteers answered the questionnaires; of these, 117 were psychiatrists and 598 were patients under treatment. Among the physicians, 5 did not sign the ICF and were excluded from the study. In the patient group, 96 responses were invalidated for the following reasons: lack of consent to the ICF, not currently using antidepressant medicine, or provision of identical responses to all items in the questionnaire. Thus, 614

participants, 112 psychiatrists, and 502 patients were included in the study. Most participants in both groups were female, with an average age of 41 years for

physicians and 30 years for patients. The characteristics of the participants are summarized in Table 1.

Table 1. Sociodemographic characteristics of participants.

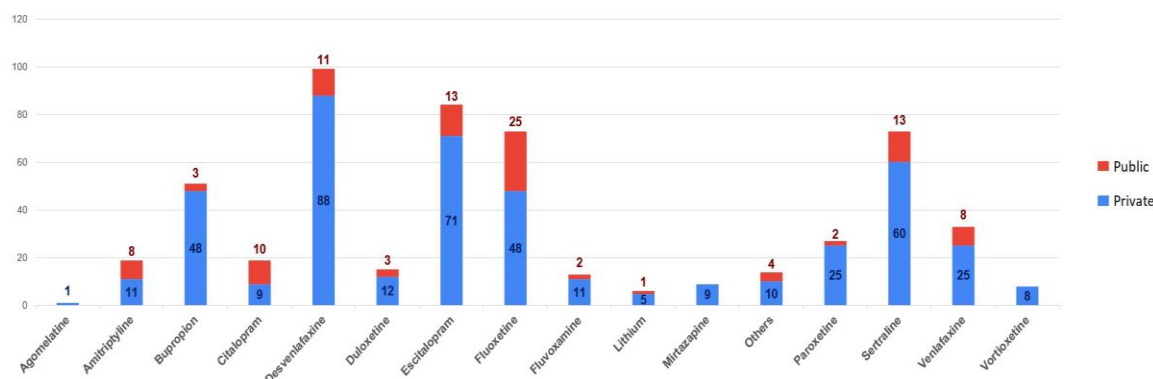
	Psychiatrists (n = 112)	Patients (n = 502)
Male, n (%)	41 (37)	96 (19)
Female, n (%)	71 (63)	399 (81)
Mean age (years)	41	30
18–30 years, n (%)	18 (16)	339 (68)
31–50 years, n (%)	73 (65)	135 (27)
≥ 51 years, n (%)	21 (19)	28 (5)
Country regions		
Southeast, n (%)	75 (67)	465 (93)
South, n (%)	15 (13)	15 (3)
North-Northeast, n (%)	13 (12)	15 (3)
Central-West, n (%)	9 (8)	7 (1)
Care profile		
Public, n (%)	33 (29)	85 (17)
Private, n (%)	79 (71)	417 (83)

Regarding the level of specialization, 27 physicians have only specialization in Psychiatry (24%), 31 are residents (28%) and 54 have postgraduate degrees (48%). In the patient group, regarding their educational background, 281 participants have completed only high school (56%), 100 have completed undergraduate studies (20%) and 121 have a postgraduate degree (24%). 110 patients reported not having monthly income (22%), 95 had income between US\$ 200.00 and 400.00 (19%), 85 between US\$ 401.00 and 800.00 (17%), and 212 above US\$ 801.00 (42%).

Profile of medicines used

In the global analysis of the medicines used by the patients, 99 reported using desvenlafaxine, which is the most representative drug in the total sample (adding together the patients treated in the private and public systems). In the analysis of the profile of medicines used by patients treated in the private health system, 88 (20%) were using desvenlafaxine, the most common substance in this type of care. In patients treated in the public health system, desvenlafaxine was reported by only 11 patients (10.7%), being the 4th most used drug within public care. In this care profile, fluoxetine was the most representative, with 25 patients (24.3%) using this medication. The percentages of medication use in the two care profiles, public and private, are described in Figure 1.

Figure 1. Distribution of patient responses regarding the antidepressant medications they were currently using, in absolute numbers. Baseline: medicines reported by patients treated in the private system, n = 441; medicines reported by patients treated in the public system, n = 103.



Comparison of expectations in the pharmacological treatment of Mdd

In the direct comparison between the groups of patients and physicians regarding the expectations in the drug treatment of MDD, some differences in the responses were evidenced. In the majority of items, most of the physician ratings were 4 (high) and 5 (very high/total),

especially in terms of core depression symptoms and quality of life and functionality. Conversely, the patient group ratings were mainly distributed between 3 (average) and 4 (high). Acceptance of appearance and sexual life were the criteria that received the lowest scores concerning the expectations of improvement in face of pharmacological treatment, in the patient group, as can be seen in Figure 2.

Figure 2. Heatmap comparing expectations for recovery on MDD treatment (Likert scale) between patients (A) and psychiatrists (B), according to the 18 items evaluated grouped into 3 domains. Baseline: patients, n = 502; psychiatrists, n = 112. § Quality of life and functionality domain; ¶ Core depression symptoms domain; ¶ Somatic and anxiety symptoms domain.



Comparing the expectations in the treatment of MDD, among psychiatrists, about the care profile, physicians who have a higher volume of care in the private sector, scored the classifications of expectations between 4 (high) and 5 (very high/total) in most items. Conversely,

psychiatrists who have more patients in the public sector had a higher concentration of responses, in general, between 3 and 4 (medium and high, respectively), as shown in Figure 3.

Figure 3. Heatmaps of expectations for recovery on MDD treatment (Likert scale) among physicians with the higher volume of care in the private sector (A) and in the public sector (B), according to the 18 items evaluated grouped into 3 domains. Baseline: physicians with the higher volume of care in the private sector, n = 79; physicians with the higher volume of care in the public sector, n = 33. § Quality of life and functionality domain; ¶ Core depression symptoms domain; ¶ Somatic and anxiety symptoms domain.



Patients who are cared for by professionals in the private system gave higher ratings in expectations regarding the symptoms of the quality of life and

functionality domain when compared to those who perform consultations in the public system, as illustrated in Figure 4.

Figure 4: Heatmap comparing the expectations for recovery on MDD treatment (Likert scale) among patients who are treated by their psychiatrists in the private sector (A) and in the public sector (B), according to the 18 items and their respective domains. Baseline: patients treated in the private sector, n = 417; patients treated in the public sector, n = 85. § Quality of life and functionality domain; ‡ Core depression symptoms domain; ¶ Somatic and anxiety symptoms domain.



DISCUSSION

The EXPECTA study was an independent, unfunded survey with online recruitment. The total number of responses was comparable to other studies of great relevance. Among these, one of the most cited studies on expectations in the treatment of MDD recruited 426 patients and 453 physicians, on site, in Belgium, and was funded by Lundbeck (DEMYTTENAERE *et al.*, 2015). In the survey online performed by Baune *et al.* (2019), responses were collected from 1,046 physicians and 2,008 patients, from 9 different countries, using the enrollment database of Lundbeck's adherence program., of which 128 patients and 258 physicians were from Brazil.

A considerable part of the patients is aged up to 40 years, a generation that is increasingly facing major depressive disorder in the Brazilian population. This disease is considered one of the most disabling from the point of view of quality of life and socioeconomic status, besides the impact caused by the COVID-19 pandemic (TAUSCH *et al.*, 2022). Strikingly regarding the age groups, older patients seem to tend to lower expectations of improvement in the treatment.

As for the level of education, 56% of respondents have only completed high school, followed by 24% of patients with at least one postgraduate degree and 20% who have completed higher education. These figures surpass those published in the latest Organization for Economic Co-operation and Development (OECD, 2019) report. In this document, 49% of people in Brazil have not even completed high school, and the percentage of completion of higher education in the range of 25 to 34 years is only 19.7%, below the world average of 36%.

Although the most reported medicine used by patients was desvenlafaxine (Figure 2), the most used pharmacological class was selective serotonin reuptake inhibitors (SSRIs), corresponding to 53.1% of the total sample, with escitalopram, fluoxetine, and sertraline being the most used. When analyzing the share of patients treated in the public system, alone, there is a greater use of medicines such as amitriptyline (15.4%), citalopram (13.4%), and fluoxetine (13.3%), available for dispensing in public health units. In a study carried out in different primary care units of the National Health System (SUS), a greater use of fluoxetine and amitriptyline was also observed among service users in the 5 different country regions (TORRES, 2020). No patient in the public system

reported being using agomelatine, mirtazapine, and vortioxetine (Figure 2).

When comparing expectations regarding the drug treatment of MDD between the physician and patient groups, it was observed that psychiatrists, in general, provided higher ratings (Figure 3). Observing the quality of life and functionality, in the items about enjoying life, performing activities, work/study capacity, and personal relationships, most of the physician expectations are in the range between 4 (high) and 5 (very high/total) while patient responses are more concentrated between 3 (medium) and 4 (high). In the study conducted by Demyttenaere (2015), a different result was found, the item "How much do you enjoy life?" was ranked among the three most important for patients concerning the cure of depression, while doctors ranked it as the seventh most relevant. Other studies also evidenced more favorable responses from patients, giving greater importance to aspects of cognitive improvement, greater ability to perform daily and intellectual activities, and social relationships (BAUNE; CHRISTENSEN, 2019; MCNAUGHTON *et al.*, 2019). A Japanese e-survey with more than 1,000 volunteers compared the expectations of these two groups and did not show many differences between them; however, patients demonstrated greater importance to functionality issues than physicians (ISHIGOOKA *et al.*, 2021).

Other interesting results are observed in the domain of core depression symptoms. For psychiatrists, about 80% of the classifications are between 4 (high) and 5 (very high/total), in relation to the improvement of anhedonia (interest and pleasure) and depressed mood, corroborating the findings of Demyttenaere (2015), where these items are among the 3 most important for physicians. To patients, regarding the core depression symptoms, there is a greater expectation of improvement in depressed mood than interest and pleasure, which contrasts with findings from other studies that examined patient expectations. (DEMYTTENAERE *et al.*, 2015; BAUNE; CHRISTENSEN, 2019; MCNAUGHTON *et al.*, 2019).

In the domain of somatic symptoms, the item anxiety achieved similar relevance in both groups, with classifications between 4 (high) and 5 (very high/total) in more than 80% of physicians and 50% of patients. This point contrasts with the findings in the Demyttenaere

(2015) study, where anxiety (classified as a negative emotion) was the most important item for psychiatrists and ranked fifth by patients. In the work of Baune *et al.* (2021) patients also chose anxiety as one of the symptoms that most bother in coping with depression and, therefore, should be the target of improvement in treatment.

Although most participants live in the Southeast region, especially in Rio de Janeiro, there were no relevant differences in the answers, from the geographical point of view. However, the type of care (public or private) proved to be one of the most relevant factors for the difference found between the groups. Both physicians and patients in public care have expectations of lower classifications in most of the items, especially in terms of quality of life and functionality.

Some limitations can be inferred about the study: first, a possible selection bias by the online recruitment model. Secondly, despite questions about having MDD and being on depressive medication, the information reported by patients was not individually verified. Third, the presence of associated symptoms or psychiatric comorbidities or of another etiology was not taken into consideration. And lastly, the fact that the survey was conducted during the Covid-19 pandemic.

CONCLUSION

In conclusion, by comparing the expectations of treatment between physicians and patients, psychiatrists report a higher expectation of antidepressant medications in improving the disease. Additionally, they give greater importance to most items in the quality of life/functionality domain and anhedonia, different from the findings reported in the literature. This suggests that there is a need for Brazilian physicians to establish better communication and bond with their patients, explaining the benefits of treatment, time for the onset of drug action, and adverse events, among others. Therefore, a greater alignment between the expectations of each of the groups is needed to achieve more promising results and to minimize the socioeconomic issues that hinder access, adherence, and therapeutic efficacy. Further investigations in this regard may be useful for a better understanding and success in the treatment of MDD in Brazil.

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