Chapter 02

Influence of Sociodemographic and Clinical Characteristics on the Frequency of Psychotherapy Sessions

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Abstract

Psychotherapy is the most prevalent ambulatory treatment for mental disorders. However, many patients who initiate a psychotherapeutic intervention do not receive the treatment in an "appropriate dosage", so the probability of obtaining the desired symptomatic relief is reduced. This study aims to understand which sociodemographic variables (age, gender, marital status, education and occupational status) and clinical variables (psychiatric care, psychological counseling history, suicidal ideation, substance use and diagnosis) are associated with adherence to psychotherapy sessions. For this study 493 patients who attended psychotherapy in a private clinic of mental health were involved, aged between 18 and 65 years old (M = 35, SD = 10.17). 319 patients were female, aged between 18 and 65 years old (M = 35.38, SD = 10.37); and 174 patients were male, aged between 18 and 62 years old (M = 34.29, SD = 9.76). Patients between 18 and 34 years, with psychotherapeutic monitoring history in psychiatric care, with suicidal ideation or comorbidity of psychiatric disorders, attended a higher number of psychotherapy sessions. These data are important for a wider understanding of psychotherapeutic adherence, and identification of dropout variables.

Introduction

The annual prevalence of mental disorders in Portugal, according to the National Epidemiological Study of Mental Health, is 22.9%, which implies that one-fifth of the Portuguese population presents a psychiatric disorder [1]. Anxiety disorders are the most prevalent in Portugal (16.6%), followed by mood disorders, with a prevalence of 7.9%. Impulse control disorder and substance abuse disorders have a lower prevalence of 3.5% and 1.6%, respectively. According to the same study, comorbidity of psychiatric disorders in Portugal is significant, with 5.3% of individuals presenting two psychiatric disorders, and 2.3% three or more psychiatric disorders. Compared to the percentages from other countries, published in the World Mental Health

Surveys Initiative (WMHSI), the prevalence of psychiatric disorders in Portugal is the highest in Western European countries and is only surpassed by the United States of America with a prevalence of 47.4% [1]. This prevalence, according to the Portuguese Observatory of Health Systems [2], can be explained, in part, by the economic crisis that has been felt in Portugal in the last years.

To reduce this prevalence, it is known that psychotherapy, particularly cognitive-behavioral therapy (CBT), can be a solution. Most mental disorders seem to benefit from this type of treatment [3]. On diagnoses of depression and anxiety, it is estimated that between 12 to 16 sessions are required to achieve benefits. In personality disorders, and other chronic disorders, to obtain the same benefits, more treatment time is needed, i.e, between one to two years [3]. However, research shows that 35% of individuals drop out psychotherapy after attending a single session [4] and 50% after attending the third session [5,6]. Similar results were found by Fernández, Larrea, and Rodríguez [7], who estimate that 37% of individuals attends just a session, 39.5% attends 2 to 4 sessions, 18.5% attends between 5 to 10 sessions, and just 5% attend more than 10 sessions.

Considering this, it is apparent that many patients who start treatment do not receive an "adequate dose" of psychotherapy, in such a way that the probability of obtaining the desired symptomatic relief is reduced [8]. Lambert, Hansen, and Finch [9] estimate that 50% of individuals achieve improvements after seven sessions of psychotherapy (mainly CBT), and 75% improve after 14 sessions. In the case of severe problems, it is expected that 50% of individuals will obtain clinically significant improvements after 21 sessions, and 75% of individuals achieve these improvements after 42 sessions. In fact, studies of Howard, Kopta, Krause, and Orlinsky [10], and Kopta, Howard, Lowry, and Beutler [11] showed that the dose received, represented by the number of sessions attended, was positively related to treatment outcomes. Patients who attend one or two sessions have worse outcomes than those who attend three or more sessions, or outcomes equivalent to those who have never started psychotherapy [12].

Not attend an appropriate number of sessions of psychotherapy involves several consequences for patients, professionals and institutions [13]. Patients do not obtain the desired outcomes and lose hope of being treated [14]. The mental health professionals feel frustrated, unable and incompetent for not being able to help their patients [15]. Considering that the dropout is manifested by not attending sessions or by successive cancellations, patients who miss sessions occupy the hours of professionals and institutions that could be offered to other people. As a result, the productivity of professionals is reduced [14]. In view of all these consequences, a clear understanding of the factors involved in the frequency psychotherapy sessions is essential. This will enable the identification of treatment failures, the identification of risk cases of abandonment, and the prevention of future abandonment [16].

The frequency of sessions on psychotherapy can be associated with many factors, such as the patient characteristics, the psychotherapist characteristics, the techniques used and the setting (private clinics or public health centers) [17]. Among these factors, Holdsworth, Bowen, Brown, and Howat [18], in a literature review, found that patient characteristics, especially sociodemographic characteristics, are associated with ambiguous results. Issakidis and Andrews [19] consider that patient's characteristics (sociodemographic and clinical characteristics) can influence the treatment permanence. The authors conclude that the clinical characteristics influence to a greater extent than sociodemographic characteristics.

Regarding sociodemographic characteristics studies show that women, widowers [20], individuals living alone, and individuals with more than 12 years of formal education [21] attend significantly more psychotherapy sessions. Younger, lower-income, unemployed, or ethnic minority individuals attend fewer sessions [22-24]. Contrary to these results, Bados, Balaguer, and Saldana [25] found that patients who attended 14 sessions (or more) of CBT, not differed from patients who completed less than 14 sessions, in terms of age, gender, marital status, and occupational status. Identical results were found by Pow-

ers, Kniesner, and Croghan [26], in a sample of patients with mood disorders, being that age and gender were not significant predictors of the number of sessions attended.

Considering clinical characteristics, studies show that individuals who did not consume substances, who attended a combined treatment (psychotherapy and pharmacotherapy), who were diagnosed and sent to psychotherapy by psychiatrists, or who were referred by a mental health system, attended significantly more psychotherapy sessions. In concern to the diagnosis, the results are not consensual. Figueiredo and colleagues [20] found that the diagnosis of mood disorders was significantly associated with a greater number of sessions attended, and Centorrino and colleagues [21] found that patients with a diagnosis of personality disorder attended significantly more sessions as well. Bados, Balaguer, and Saldana [25] reported that patients diagnosed with an anxiety disorder (or with comorbidity of an anxiety disorder) attend significantly fewer sessions than patients with other diagnoses [22]. In contrast to these results, Fenger and colleagues [23] concluded that the diagnosis, or comorbidity of diagnoses, was not associated with treatment permanence.

Taking into account the investigations previously presented, it was found that the results obtained are inconsistent. Therefore, the main objective of this chapter is to understand which sociodemographic variables (age, gender, marital status, education and occupational status) and clinical variables (psychiatric monitoring, history of psychological counseling, suicidal ideation, substance use and diagnosis) are associated with the attendance of psychotherapy sessions.

Methods

Participants

The data used in this research were collected in a mental health clinic located in Northern Portugal, where a psychotherapist and a psychiatrist work. The total sample of the present study consisted of 493 patients undergoing CBT, aged between 18 and 65 years (M = 35,

SD=10.17). Of these, 319 (64.7%) were female with ages between 18 and 65 years old (M = 35.38, SD = 10.37), and 174 (35.3%) were male with ages between 18 and 62 years old (M = 34.29, SD = 9.76). Table 1 shows the distribution of the sample in terms of sociodemographic characteristics.

Table 1: Sociodemographic characteristics of the sample.

	Frequency	Percentage	
Marital status			
Single	244	49.7%	
Married	206	42%	
Divorced	38	7.7%	
Widow	3	0.6%	
Professional situation			
Student	80	16.4%	
Unemployed	52	10.7%	
Retired	11	2.3%	
Employed	344	70.6%	
Education			
<12 years	49	10.5%	
12 years	157	33.5%	
>12 years	262	55.9%	

Regarding the clinical characteristics of the sample, data analysis showed that the majority of participants (N = 280; 57.5%) had no history of psychological counseling. Considering psychiatric monitoring during psychotherapy sessions, it was found that the majority of participants (N = 356; 72.4%) were in monitoring. In respect to suicidal ideation and consumption of psychotropic substances, 80 participants (16.3%) had ideas of suicide and 39 participants (8%) consumed substances (Table 2).

Table 2: Distribution of the sample by different diagnostic groups.

Diagnosis	Frequency	Percentage
A disorder axis I	304	62.2%
More than one disorder axis I	25	5.1%
More than one disorder axis I belonging to different groups	115	23.3%
A disorder axis I and a disorder axis II	4	0.8%
More than one disorder axis I belonging different groups and more than one disorders axis II	3	0.6%
Without diagnosis	38	7.7%

Note. Axis I (clinical disorders); Axis II (personality disorders); Groups (disorders that usually appear in $1^{\rm st}$ and $2^{\rm nd}$ childhood or adolescence; delirium, dementia, memory disorders and other cognitive disorders; substance use disorders; mood disorders, anxiety disorders, somatoform disorders, dissociative disorders, sexual and gender identity; eating disorders, sleep disturbances, adaptive disorders and personality disorders).

Materials

The data for this study were obtained through the consultation of the clinical files and records of the patients' clinical history. In these records, it was possible to find sociodemographic characteristics (age, gender, marital status, education and occupational situation) and clinical characteristics (psychiatric monitoring, history of psychological counseling, suicidal ideation, substance use and diagnosis). Concerning the sociodemographic characteristics, the following variables were codified in 2 levels: gender (male, female); marital status (with a partner, without a partner). The remaining variables were coded in 3 levels: occupational status (students, with an occupation, without occupation - unemployed and retired); age (18-34, 35-49, 50-65); and education (<12 years, 12 years and > 12 years). Regarding the clinical characteristics, the variable "psychiatric monitoring" allowed us to know if, at the time of the first CBT session, the patient was monitored by a psychiatrist. According to the mental health professionals of the clinic, in practically all situations, being in psychiatric monitoring means taking psychotropic medication. The variable "psychological counseling history" does not take into account the number or type of contact. Participants who had contact with a psychologist were classified in the clinical file as "having historical". The variables "suicidal ideation" and "substance use" were related to the situation in which the patient was in the moment of the first session. In this study, these clinical variables were coded in two levels (yes, no), with the exception of the "diagnostic" variable that was coded in 3 levels (single psychiatric diagnosis, comorbid psychiatric diagnoses, and without a psychiatric diagnosis). Finally, considering that in the clinical files were included the date and some records of each session, it was possible to determine the dependent variable "number of sessions", to which each patient attended.

Procedure

At the beginning of the psychotherapeutic process, patients provided informed consent. This requested authorization for the use of the information collected in the sessions only for research purposes, ensured the confidentiality and anonymity of this same information. Data collection/consultation of clinical files began on November 16, 2015, and ended on July 1, 2016. The analyzed processes were referred to the period between March 2013 and December 2015. When doubts arose about the information contained in the procedures, these were clarified with the psychologist or the clinic administrative team. The present study excluded patients who could depend on other people to attend psychotherapy sessions. Thus, individuals under the age of 18 years, or over 65 years of age, with learning difficulties, diagnosis of dementia, and all patients in couple therapy, were excluded. The date of the last session was also used as the exclusion criterion. The dependent variable (number of sessions) was extracted from the clinical files on the last day of the data collection. The maximum interval between follow-up sessions, counseled by the psychotherapist, was six months, thus excluding all participants who had sessions in the period between January 1, 2016, and July 1, 2016. For the patients who had not attended sessions during this period, the agenda was consulted to see if they had any scheduled sessions. People who had a scheduled session were also excluded. So, it was intended to exclude the patients who were still in treatment or to attend follow-up sessions.

Data Analysis

The Statistical Package for the Social Sciences (SPSS, version 20) was used to analyze the data. Descriptive statistics were initially used (frequencies, means, medians and standard deviations). Then normality tests were carried out to ascertain the normality of the distributions. Taking into account the sample size, the Kolmogorov-Smirnov test was used. In the absence of normality, we choose to use non-parametric statistic, namely the Mann-Whitney and the Kruskal-Wallis tests. In order to verify if the groups differed, Games-Howell post-hoc tests were used.

Results

The analysis of the results showed that, on average, each patient attended 3.5 psychotherapy sessions [min = 1; max = 21; SD = 3.25]. Regarding the median, it was found that patients attended two sessions. Table 3 shows that, of the 493 sample patients, 144 (29.2%) attended only 1 psychotherapy session. At the end of the second session, approximately half of the sample (51.7%) gave up attending psychotherapy sessions, 82.6% of the patients stopped attending after the fifth session and 95.5% stopped attending after the tenth session.

Table 3: Frequency and percentage of patients attending each session.

Sessions	Frequency	Percentage	Accumulated Percentage
1	144	29,2	29,2
2	111	22.5	51.7
3	69	14.0	65.7
4	53	10.8	76.5
5	30	6.1	82.6
6	19	3.9	86.4
7	20	4.1	90.5
8	13	2.6	93.1
9	6	1.2	94.3
10	6	1.2	95.5
11	4	.8	96.3
12	4	.8	97.2
13	4	.8	98.0
15	2	.4	98.4
16	2	.4	98.8
17	1	.2	99.0
18	1	.2	99.2
19	3	.6	99.8
21	1	.2	100
Total	493	100	100

Sociodemographic Characteristics and Attended Sessions

Regarding sociodemographic characteristics, the analysis of the results showed that the number of sessions that women attended (n = 319; Mdn = 2) did not differ significantly from the number of sessions that men attended (n = 174; Mdn = 2), U = 27099, z = -44, p = .659, r = 0.02. Among the different age groups (18-34 years, n = 260, Mdn = 3; 35-49 years, n = 185, Mdn = 2; 50-65 years, n = 48, Mdn = ...

2), there were statically significant differences, H (2) = 9.62, p = 0.008. Post-hoc tests showed that patients between 18 and 34 years of age attended significantly more sessions, when compared with patients between 35 and 49 years of age, F(2, 490) = 4.91, p = 0.005, r = 0.02. Considering marital status, it was verified that the number of sessions attended by individuals without a partner (n = 285; Mdn = 2) was equivalent to the number of sessions attended by individuals with a partner [n = 206; Mdn = 2), U = 26627.5, z = -1.80, p = 0.073, r = 0.08.As for education level, the number of sessions did not differ between patients with less than 12 years of formal education (n = 49; Mdn = 2), equal to 12 years of education (n = 157, Mdn = 2) or with over 12 years of formal education (n = 262, Mdn = 2), H (1) = 1.25, p = 0.264. In the variable "occupational situation", no statistically significant differences were found either. The number of sessions attended was similar among students (n = 80, Mdn = 3), patients with an occupation (n = 344, Mdn = 2) and individuals without an occupation (n = 63, Mdn= 2), H (2) = 2.38, p = 0.304.

Clinical Characteristics and Attended Sessions

Regarding clinical characteristics, no statistically significant differences were found in the variable "substance use", i.e., the number of sessions attended by patients who consumed psychotropic drugs (n = 39; Mdn = 3) did not differ from the number of sessions attended by patients who did not consumed (n = 451, Mdn = 2), U = 236, z= -1.88, p = 0.061, r = 0.08. Statistically significant differences were observed in the remaining clinical variables. The results indicated that patients who have psychiatric monitoring, attended significantly more sessions (n = 356, Mdn = 3), compared with patients who were not in monitoring (n = 136, Mdn = 2), U = 18567, z = -4.08, p < .001, r = .18. Concerning the history of psychological counseling, patients with a history of counseling, attended significantly more sessions (n = 207, Mdn = 3) than those without a history (n = 280, Mdn = 2), U = 23391, z = -3.72, p < 0.001, r = 0.17. At the time of the first session, patients with suicidal ideation attended significantly more sessions (n = 80, Mdn = 3) than patients without ideation (n = 410, Mdn = 2), U=12825, z=-3.13, p=0.002, r=0.04. There were also statistically significant differences in the number of sessions among patients with a single disorder (n = 304; Mdn = 2), with a comorbidity of disorders (n = 147; Mdn = 3) and without diagnosis (n = 38; Mdn = 1), H (2) = 21.93, p<0.001. Using post-hoc tests, it was found that patients with a comorbidity of diagnoses showed to attend significantly more sessions than non-diagnostic individuals, F(2,486)=5.32, p=0.011, r=0.02.

Discussion and Conclusions

In order to increase the probability of attendance at psychotherapy sessions and, consequently, the effectiveness of psychotherapy interventions, is seems crucial to early identify the characteristics of patients at risk [16]. Thus, this study aimed to understand the sociodemographic and clinical characteristics of patients that are associated with the frequency of psychotherapy sessions.

Regarding the sociodemographic characteristics, only age was associated with the number of sessions attended. Patients between 18 and 34 years of age attended significantly more sessions than individuals between 35 and 49 years of age. Previous studies have shown the opposite, i.e., younger people tend to attend significantly fewer sessions [22-24]. The results obtained can be explained taking into account family and professional status that may be less active and demanding of young people between 18 and 34 years of age. It is presumed that many of the individuals included in this age group still study and live in their parents' homes; of those who already have families, many will still not have children, thus hypothetically having greater financial availability and time to attend the sessions, when compared with individuals between 35 and 49 years of age.

As mentioned, the remaining sociodemographic variables (gender, education, marital status and occupational status) were not associated with the number of sessions attended. Although these results are not surprising, they are in accordance with the studies carried out by Bados and colleagues [25], and by Powers and colleagues [26], so

some explanations can be advanced. In the clinical context where the data were collected and in the period of time referred women where those who most sought psychotherapeutic counseling (64.7%). However, women attended about the same number of sessions as men. It is believed that these results are due to the fact that the male patients presented a higher level of education. In this way, it can be understood that the prejudice of men seeking for help and attending psychotherapy sessions was not prevalent in the present sample. With regard to education level, it is known from the study of Fenger and colleagues [23] that individuals with less than 11 years of formal education, dropout of psychotherapy sessions earlier. As most participants in the present sample (90%) were patients with 12 or more years of formal education, the effect of individuals with less than 12 years of formal education may not have been revealed. The same explanation may be used concerning professional status, i.e., the impact of unoccupied individuals (13% unemployed and retired) may not have been felt since most of the sample (87%) had an occupation (study or work). Regarding marital status, Centorrino and colleagues [21] found that individuals, who live alone, tend to stay longer periods in treatment. The authors consider that personal interactions can represent significant positive social support, leading people to feel less in need to remain in psychotherapy. We may assume that the participants in this research who did not have a partner, that had other social relationships providing the social support they needed, may justify the fact that no statistically significant differences were found between individuals with partners and without partners.

Similarly to the study of Issakidis and Andrews [19], clinical characteristics were more associated with the frequency of psychotherapy sessions, compared to sociodemographic characteristics. From the five clinical characteristics studied, only the variable "substance use" was not associated with the number of sessions attended. Taking into account the study of Arnow and colleagues [22] patients with a history of substance use were expected to attend significantly fewer sessions. However, within our sample, there were no significant

differences between consumers and non-consumers of psychotropic substances. We assume that these results may be due to the fact that the evaluation of substance use during the clinical interview was made early (at 1st contact), so the therapist have perceived and adapted all the intervention to this vulnerability. In respect to the clinical variable "diagnosis", it was not possible to establish comparisons between different disorders. In the data collection, a great diversity of diagnoses and comorbidities was obtained. An attempt was made to group the different diagnoses, according to the groups showed in Table 2. However, as can be seen, the distribution of patients by different groups was very heterogeneous, not allowing statistical analyzes of reliability. Thus, it was decided to verify if there were differences in the number of sessions attended by patients with a single diagnosis, comorbid diagnoses and without diagnosis. Similarly to the study of Fenger and colleagues [23], patients with a single diagnosis did not differ in terms of the number of sessions attended, when compared to patients with comorbidity. However, patients with comorbidity attended significantly more sessions than patients without a diagnosis. Normally, undiagnosed patients seek psychotherapy to solve specific problems that do not affect their functioning, and when the goal is achieved, they stop attending sessions. The comorbidity of psychiatric disorders may be associated with greater psychological distress and, consequently, a greater awareness of the limitations, leading to the need to attend more sessions. A similar explanation can be used to justify the fact that patients with suicidal ideation have attended significantly more sessions. These patients may feel more at risk and therefore need more help. The variable "psychiatric monitoring" was one of the most interesting when this investigation was initiated. The aim was to understand if the teamwork could increase attendance to psychotherapy sessions. In this study, similarly to the reports by Mc-Farland and Klein [24] and Arnow and colleagues [22], it was found that patients in psychiatric monitoring (pharmacotherapy) and psychotherapy, attended significantly more sessions than individuals who were only in psychotherapy. According to Fenger and colleagues [23], patients may feel more motivated to attend psychotherapy sessions because they perceive that the effects of medication are insufficient.

In addition, the response to treatment appears more slowly for psychotherapy than for pharmacotherapy, or combined therapies (psychotherapy and pharmacotherapy), leading patients to feel discouraged, abandoning treatment earlier considering the lack of significant improvements [24]. The fact that patients receiving only one type of treatment (psychotherapy or pharmacotherapy) feel disappointed and attribute this to the treatment they are receiving, may also contribute to non-attendance to monotreatment [22]. Finally, the variable "history of psychological counseling" was also associated with higher rates of attendance to psychotherapy sessions. These results are consistent with the study by Fenger and colleagues [23], considering the authors that previous experiences decrease resistance to requesting and participating in a new treatment.

In the course of the present investigation, in addition to the interest in perceiving which variables were associated with the number of sessions attended, there was also the interest to perceive at the end, how many sessions the patients stopped attending psychotherapy. Thus, after the first session, 29.2% of the patients stopped attending, 50% of the patients attended a maximum of two sessions, and 80% of the patients stopped attending psychotherapy after the fifth session. These dropout rates per session did not differ much from those found previously, but in different clinical settings. For example, Fernández and colleagues [7], in a study conducted in three public health centers, found an abandon rate after the first session of 37%; Affeleck and Medwick (1996) found that 50% of patients attend, on average, only three sessions; and Silverman [27], in an investigation conducted at a community health center, also found that 80% of patients fail to attend after the fifth session. Taking into account these results, it is possible to verify that the attendance rates to the psychotherapy sessions in the clinic where the data were collected are identical to others found in public health centers. This suggests that the type of institution where treatment is performed (public or private) does not seem to influence the number of sessions in which each patient attends therapy. However, these frequency rates are still very low. Half of the patients from the present sample attended only two sessions. Nevertheless, these results may also be related to variables of personal nature, such as financial difficulties, emigration/relocation, or lack of time.

Before a possible generalization of the results found in this investigation, it is necessary to take into account some of the study limitations. Firstly, as the sample was collected in a private clinic frequented mainly by individuals belonging to a medium/high socioeconomic status it may not be representative of the Portuguese population. In fact, by not being represented different socioeconomic status, it was not possible to assess the influence on the number of sessions attended. Secondly, the sociodemographic and clinical variables used in this research were extracted from the clinical processes, i.e., there was no direct questioning to participants. So it was not always possible to obtain all the information needed because, in some cases, the files were not complete. Thirdly, the study was carried out taking into account only the sessions at the clinic where the data was collected and it was considered that the patients who attended the clinic in the defined period (January 1 to July 1) and that they had appointments on the agenda sessions, had finished or abandoned the psychotherapeutic process. However, they may simply have looked for another therapist, for some reason (financial difficulties, transportation difficulties, change of address, etc.). It is also not guaranteed that patients who did not attend in this period and who had no scheduled sessions, could not come in the future. Finally, it is important to highlight the difficulty in finding literature that relates the patient's characteristics to the number of sessions attended. Most of the scientific papers found, reported essentially to the characteristics of patients, but with more comprehensive and different concepts, such as 'adherence' and 'dropout' of the psychotherapeutic process. In future studies, for example, these investigations could be replicated, however including the variable "emotional intelligence". To our knowledge, there are no studies that relate emotional intelligence to adherence to the psychotherapeutic process.

Within the limitations presented, the results found in this research are relevant to similar treatment settings (private clinics), with similar team patterns (psychiatrist and psychologist) and similar target populations. Being aware of these results, therapists will identify patients at risk earlier and may develop strategies to maintain them in therapy. However, they should be aware that other simple strategies are also very effective, both for patients at risk as well as for the generality of patients. Depending on the target group, different technologies may be used. For example, although studies reveal that telephone calls [28] and letters [29] increase attendance rates for younger patients [30], the Short Message Service (SMS; Downer, Meara, Da Costa, & Sethuraman, [31]), and even social networks may be more useful for reminding and informing patients. In addition, prior to initiating psychotherapy, patients may participate in motivation groups and psychoeducational sessions to be informed about the risks of not attending a sufficient number of sessions [23] as a way to promote higher rates of adherence to therapy.

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