

Editor

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Conflict of interest

The authors declare they have no conflict of interests.

Received

September 3, 2021

Approved

November 17, 2022

Depression, health status and life satisfaction in voice hearers

Depressão, estado de saúde e satisfação de vida em ouvidores de vozes

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How to cite this article: Kantorski, L. P., Duro, S. M. S., Silva, P. S., & Ramos, C. I. (2023). Depression, health status and life satisfaction in voice hearers. *Estudos de Psicologia* (Campinas), 40, e210156. <https://doi.org/10.1590/1982-0275202340e210156>

Abstract

Objective

The objective of this study was to review the occurrence of depressive episodes and their relationship with the health status and life satisfaction in patients who hear voices.

Method

This is a cross-sectional study carried out between February and March 2019. For data collection, a questionnaire was used on socioeconomic and health conditions as well as the Beck's Depression Inventory and Life Satisfaction Scale. The database was elaborated in the Epidata program and the analysis in Stata 11.

Results

A total of 112 patients participated in the survey; 82 answered all the questions in Beck's inventory. Patients who reported that they considered their health as very bad or bad and those who had high blood pressure experienced depression. Poor life satisfaction was also associated with the presence of depressive symptoms.

Conclusion

It is therefore evident the importance of considering such aspects in the health care of voice-hearers.

Keywords: Depression; Health status; Mental health; Quality of life.

Resumo

Objetivo

O objetivo deste estudo foi analisar a ocorrência de episódios depressivos e sua relação com estado de saúde e satisfação de vida em usuários ouvidores de vozes.

Método

Trata-se de um estudo transversal realizado entre fevereiro e março de 2019. Para coleta de dados utilizou-se um questionário com questões socioeconômicas, condições de saúde, Inventário de Depressão de Beck e Escala de Satisfação com a Vida. O banco de dados foi elaborado no programa Epidata e a análise no Stata 11.

Resultados

Participaram da pesquisa 112 usuários, sendo que 82 responderam todas as questões do inventário de Beck. Os usuários que referiram considerar sua saúde como péssima/ruim e aqueles que possuíam hipertensão arterial apresentaram depressão. Além disso, a baixa satisfação com a vida também foi associada com a presença de sintomas depressivos.

Conclusão

Diante disso, evidencia-se a importância de se considerar esses aspectos no cuidado à saúde de ouvidores de vozes.

Palavras-chave: Depressão; Nível de saúde; Saúde mental; Qualidade de vida.

People who hear voices that others do not hear or who have different types of hallucinations, such as auditory, visual, olfactory and/or sensory, can be labeled as voice hearers (Contini, 2017).

Over the centuries, the experience of hearing voices has been understood in different ways, being associated with spirituality, and currently, in the biomedical model, it is understood as signs and symptoms of psychopathological conditions, especially schizophrenia (Egito & Silva, 2019). In this perspective, voices are considered a problem that should be solved, often without considering the patients' role during their treatment (Corradi-Webster et al., 2018).

The new approaches in mental health have triggered different forms of care around the world, and one of them, the International Hearing Voices Movement, has established a new meaning for hearing voices, seeking to involve the hearer in the treatment. The Movement emerged from the work of Dutch psychiatrist Marius Romme and researcher Sandra Escher who, in partnership with clinical and non-clinical patients who heard voices, gave rise to an approach that advocates accepting and understanding the experience of voices, contributing with strategies to deal with and reestablish relationships with them in everyday life, a fact that tends to improve the autonomy and life of people who hear voices that other people do not hear (Longden et al., 2017).

An increasing number of studies have appeared in the literature regarding the quality of life of users of the mental health network. Regarding schizophrenia and people who hear voices, this interest emerged from deinstitutionalization movements that took place in western developed countries in the 1960s and 1970s (Sousa et al., 2017).

It is known that voices can include positive and/or negative content, which can affect the listener in different ways. Negative content voices, such as those of command, are considered one of the most distressing and disturbing symptoms for those who hear voices, being linked to a greater occurrence of anxiety and depression in these individuals (Ellett et al., 2017). In this connection, the impact of hearing voices can cause and/or worsen symptoms of depression and anxiety in listeners and people diagnosed with schizophrenia (Chiang et al., 2018). In addition, depression may be associated with poor life satisfaction in schizophrenic patients (Tan & Rossell, 2016).

Studies that investigate depression and life satisfaction in voice hearers are scarce in the literature, especially within this other perspective on voice hearing, without the emphasis on diagnosis, signs and symptoms that the biomedical model gives to people who hear voices, especially in the Brazilian context. Therefore, this study's rationale is based on the importance of investigating these issues in people who hear voices, thus contributing to new forms of care and therapeutic initiatives for this population. Therefore, this study aimed to describe the occurrence of depressive episodes and their relationship with the health status and life satisfaction in voice-hearing individuals of a *Centro de Atenção Psicossocial* (CAPS, Psychosocial Care Center) in the south of Rio Grande do Sul State, Brazil.

Method

This cross-sectional study is part of a larger investigation entitled: Voice Hearers - New Approaches to Mental Health. For data collection, a questionnaire with closed questions was used, applied in an interview with selected patients.

Participants

The review of all medical records of active users of the CAPS ($n = 400$), yielded 172 individuals who had a record of hearing voices. From this total, 46 patients diagnosed with mental retardation and/or who were no longer attending the service at the time of the interview, were excluded.

Instruments

To compose the socioeconomic profile of the service users, the socioeconomic levels were categorized using the Economic Classification of the *Associação Brasileira de Empresas de Pesquisa* (Brazilian Association of Research Companies), and categorized into A/B (A1/A2 and B1/B2), C (C1 and C2), D/E (*Associação Brasileira de Empresas de Pesquisa*, 2008).

In addition, the following variables were reviewed: gender (Male; Female), age range (21 to 31; 32 to 42; 43 to 53; 54 to 64; 65 to 75), skin color (White; Black; Brown; Yellow; Indigenous), educational level – know how to read and write (No; Yes), marital status (Single; Married; Separated/divorced; Widowed), work status (No; No, but I am retired; No, but I receive public benefits; Yes).

For the diagnosis of depression, the Beck scale or inventory was used. To interpret the scale, the patients were categorized into: (a) those with no depressive episodes (without depression) and who scored up to 13 points; and (b) with the presence of a depressive episode and who scored 14 points or more (with depression) (Beck et al., 1996).

To measure health conditions, the following variables were used: how do you consider your health? (very bad; bad; regular; good; great); this variable was categorized into: very bad and bad; regular; good and great; Has a doctor told you that you have hypertension (high blood pressure)? (no; yes); Has a doctor told you that you have diabetes (high blood sugar)? (no; yes); Has a doctor told you that you have a mental health problem? (no; yes); Since <THREE MONTHS AGO>, have you been seen by a doctor in any health service? (no; yes); Where were you attended? Basic Health Unit/Health Unit (no; yes); Hospital outpatient clinic (no; yes); University outpatient clinic (no; yes); Specialty center (no; yes); Labor Union or company / Neighborhood association (no; yes); *Sistema Único de Saúde* (SUS, Unified Health System) Emergency Department (no; yes); Emergency service of the Medical Insurance or Health Plan (no; yes); Doctor's office of a Medical Insurance or Health Plan (no; yes); Private practice (no; yes); CAPS (no; yes); *Unidade de Pronto Atendimento* (Emergency Care Unit) (no; yes); General hospital (no; yes); Spiritist Hospital (no; yes); Since <MONTH> of last year until now, have you been admitted to a hospital? (no; yes, in a general hospital; yes, in a psychiatric hospital).

Satisfaction with life was verified using the Satisfaction With Life Scale (Diener et al., 1985; Neto, 1993, 1999), whose analysis was performed from the sum of responses and categorization of the patients' responses into three options: agree; neither agree nor disagree; I disagree.

In addition, it was verified through the variable: do you hear voices that other people don't? (no, yes) if the patient continued to hear voices at the time of the interview.

Procedures

The interviews were conducted by interviewers trained for this purpose and took place at the CAPS or at the patient's home during the period between February and March 2019.

After collection, a database was set up and double typing was performed in the Epidata program. Bivariate analysis was performed using the chi-square test and a significance level of 5% was used in the Stata 11 program.

The investigation was submitted and approved by the Research Ethics Committee of the School of Medicine of the Federal University of Pelotas, under the opinion nº 2.201.138 on August 3, 2017.

Results

The study included 112 patients out of 126 service users who met the inclusion criteria; approximately 11% ($n = 14$) refused to participate in the investigation.

Regarding the profile of the interviewees, 60% were classified according to their purchasing power at economic level C ($n = 51$); over 60% were women ($n = 69$); white skin color prevailed 62% ($n = 70$). Most of the respondents knew how to read and write (90%, $n = 101$), were between 54 and 64 years old, were single (52%, $n = 58$) and did not have a job at the time of the interview (61%, $n = 68$) (Table 1).

Table 1
Sociodemographic profile of health service users with a record of hearing voices

Variables	<i>n</i>	%
Economic Rating / Associação Brasileira de Empresas de Pesquisa		
Class A/B	11	13
Class C (C1/C2)	51	60
Class D/E	23	27
Gender		
Male	43	38
Female	69	62
Age		
21 to 31	11	10
32 to 42	29	26
43 to 53	30	27
54 to 64	35	31
65 to 75	7	6
Skin color		
White	70	62
Black	16	14
Brown	19	17
Yellow	4	4
Indigenous	3	3
Education (read and write)		
No	11	10
Yes	101	90
Marital Status		
Single	58	52
Married	27	24
Separated / divorced	19	17
Widower	8	7

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Table 1*Sociodemographic profile of health service users with a record of hearing voices*

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Variables	<i>n</i>	%
Work		
No	68	61
No, but I'm retired	20	18
No, but I receive public benefits	14	13
Yes	9	8

The majority of respondents (59%, $n = 66$) reported still hearing voices at the time of the interview.

Among the 112 respondents, only 82 answered all the questions in the Beck inventory. Among these, 90% of the women and almost 80% of the men were classified as having depression. Depressive episodes occurred in more than 80% patients in all age groups, with little variation between them. As to skin color, the same occurred with 92% among black skin patients. The depressive state occurred among all those who reported being illiterate, in more than 90% of those separated or divorced and among 100% of those who had a job.

All patients ($n = 30$) who reported considering their health as very bad or bad had depression; this prevalence decreased with the improvement in the perception of their health condition (regular $n = 27/84\%$; good/excellent $n = 13/65\%$), showing a statistically significant association between the variable and the outcome. Hypertension also proved to be a factor that increases the rate of depressive episodes when compared to those individuals who do not have the pathology. There was no association with diabetes; depressive episodes were present both among patients who did not and those who reported the condition. The same situation occurred in connection with the presence of a mental health problem and having been attended by a doctor.

Regarding the place where they were treated, 85% ($n = 23$) of the patients reported having been treated at a Basic Health Unit and mentioned the presence of depression; 67% of patients reported that they were treated at the hospital's outpatient clinic; 87% were treated at the university outpatient clinic; 94% were treated at the SUS Emergency Room; 100% were treated in a private health office and 100% were treated at the *Hospital Espírita*. Depressive episodes were present both among those who were not hospitalized and those who were hospitalized in a general or psychiatric hospital, reaching 100% of depressive episodes among those who were admitted in a psychiatric hospital.

With the exception of the variable "in most aspects, my life is close to my ideal", those who disagreed with the other statements associated with life satisfaction presented depression, which did not happen among the patients who agreed with aspects associated with life conditions, being satisfied with life, taking out the important things of life. There was no association between the variable "if I could live a second life, I would change almost nothing in my life" and depressive episodes, which were present among those who agreed with the above statement, did not agree nor disagreed and disagreed.

Finally, patients who reported still hearing voices at the time of the interview had a higher prevalence of depression than those patients who reported not hearing voices at the time of application of the questionnaire (Table 2).

Table 2
Occurrence of depression in health service users with a record of hearing voices

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Variables	Depression				p-value
	No		Yes		
	n	%	n	%	
Gender					
Male	7	23	23	77	
Female	5	10	47	90	
Age					
21 to 31	2	18	9	82	
32 to 42	3	14	18	86	
43 to 53	3	13	20	87	
54 to 64	3	14	19	86	
65 to 75	1	20	4	80	
Skin color					
White	8	16	42	84	
Black	1	8	11	92	
Brown	3	20	12	80	
Yellow	0	0	2	100	
Indigenous	0	0	3	100	
Read and write					
No	0	0	5	100	
Yes	12	16	65	84	
Marital Status					
Single	7	17	34	83	
Married	3	14	19	86	
Separated / divorced	1	7	13	93	
Widower	1	20	4	80	
Work					
No	9	18	42	82	
No, but I'm retired	1	8	12	92	
No, but I receive Government benefits	1	12.5	7	87.5	
Yes	0	0	9	100	
How do you consider health					< 0.00
Vary bad/Bad	0	0	30	100	
Regular	5	16	27	84	
Good/Great	7	35	13	65	
Presence of hypertension					< 0.05
No	10	23	34	77	
Yes	2	5	46	94	
Presence of diabetes					
No	11	15	60	85	
Yes	1	9	10	91	
Presence of mental health problem					
No	2	22	7	78	
Yes	10	14	63	86	
Medical care					
No	3	19	13	81	
Yes	9	14	57	86	
Service where attended					
Basic Health Unit					
No	5	12.5	35	87.5	
Yes	4	15	23	85	
Hospital Outpatient Clinic					
No	2	12.5	56	87.5	
Yes	1	33	2	67	

Table 2
Occurrence of depression in health service users with a record of hearing voices

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Variables	Depression				p-value
	No		Yes		
	n	%	n	%	
College Outpatient Clinic					
No	7	13	45	67	
Yes	2	13	13	87	
Specialties Center					
No	8	12	58	88	
Yes	1	100	0	0	
Union or company / Neighborhood association					
No	8	12.5	56	87.5	
Yes	1	33	2	67	
SUS Emergency Room					
No	8	16	43	84	
Yes	1	6	14	94	
Office for Health Insurance or Health Plan					
No	9	14	56	86	
Yes	0	0	2	100	
Private practice					
No	9	15	51	85	
Yes	0	0	7	100	
<i>Centro de Atenção Psicossocial</i>					
No	6	20	24	80	
Yes	3	8	34	92	
Emergency Care Unit					
No	8	14	51	86	
Yes	1	12.5	7	87.5	
General Hospital					
No	7	11	55	89	
Yes	2	40	3	60	
Spiritist Hospital					
No	9	15	51	85	
Yes	0	0	7	100	
Have you been admitted to any hospital?					
No	11	18	50	82	
Yes, in a general hospital	1	11	8	89	
Yes, in a psychiatric hospital	0	0	11	100	
Satisfaction with life					
In most respects, my life is close to my ideal					
I agree	7	22	25	78	
Neither agree nor disagree	2	22	7	78	
I disagree	3	7	38	83	
The conditions of my life are excellent					< 0.00
I agree	9	33	18	67	
Neither agree nor disagree	0	0	7	100	
I disagree	3	6	45	94	
I am satisfied with my life					< 0.00
I agree	10	32	21	67	
Neither agree nor disagree	3	33	4	67	
I disagree	0	0	45	100	
As much as possible, I have achieved the important things I want out of life					< 0.00
I agree	9	22	32	78	
Neither agree nor disagree	1	100	0	0	
I disagree	2	5	38	95	

Table 2
Occurrence of depression in health service users with a record of hearing voices

Variables	Depression				p-value
	No		Yes		
	n	%	n	%	
If I could live a second life, I would change almost nothing in my life					
I agree	6	19	26	81	
Neither agree nor disagree	0	0	2	100	
I disagree	5	11	41	89	
Hear voice					< 0.05
No	8	25	26	75	
Yes	4	8	44	92	

Discussion

In this study, it was observed that depressive episodes were more prevalent among women, among black-skin patients, followed by white-skin patients, those that could not read and write, who were divorced and who had a job. In addition, a statistically significant relationship was found between the perception of health status, the presence of hypertension, satisfaction with life and hearing voices at the time of the interview and depression. Those who reported bad and very bad health conditions, with arterial hypertension, who were not satisfied with different aspects of life and who continued to hear voices experienced a higher prevalence of depressive episodes.

The sociodemographic characteristics found in this survey, such as gender and skin color, corroborate other studies that reported depressive symptoms in voice hearers (Rosen et al., 2018; Woods et al., 2015). The research by Woods et al. (2015) showed that 65% of women who heard voices had depression. The study by Rosen et al. (2018) found that more than 50% of women and 77% of self-reported black individuals who heard voices had depressive episodes. However, it should be noted that other studies with voice hearers and people diagnosed with schizophrenia showed a predominance of males in their results (Bornheimer, 2016; Chiang et al., 2018; Wang et al., 2019).

Regarding age, in this investigation, depressive episodes occurred in more than 80% of patients in all age groups. The study by Chiang et al. (2018) found that younger voice hearers are more likely to have depressive symptoms. Similarly, the study by Fang et al. (2019), found an association between depression and 37 years mean age. Compared to the other sociodemographic characteristics observed in our investigation, other studies with individuals diagnosed with schizophrenia and/or people who hear voices found a higher prevalence of depressive symptoms in patients who were single and without employment (Fang et al., 2019; Xu et al., 2018). Xu et al. (2018) found that the majority of individuals with schizophrenia who had depression were unemployed (55%) and single (74%). While the study by Fang et al. (2019) showed that patients with schizophrenia who had depression were mostly single (61%).

Thus, it can be inferred that being female, single, unemployed, and having black skin may be associated with the presence of depressive symptoms in voice hearers. It is important to note that, with the exception of skin color, the other factors are associated with socioeconomic conditions and social inequalities, which points to the need for health professionals to pay attention to factors that go beyond clinical conditions and that interfere in the people's quality of life. Some studies have shown that quality of life may be associated with the treatment received in the mental health services, especially in patients who have seen significant improvements in their lives (Cesari &

Bandeira, 2010). A study carried out in the Netherlands in 2018 with psychotic patients showed that the higher the level of satisfaction with the care offered in the service, the greater the reduction of positive symptoms (which includes hearing voices) in three years (Vermeulen et al., 2018). This could enhance the importance of carrying out an evaluation of the health service users themselves in relation to their treatment, thus respecting their protagonism as a subject.

The results of our investigation regarding the service location and the presence of depression were in line with other studies that evaluated depression in clinical patients (Cardoso et al., 2007; Kavalnienė et al., 2018). Cardoso et al. (2007) found a high prevalence of depression in people diagnosed with schizophrenia who attended health clinics.

Regarding the health conditions, it was found in this study that the worse the perception of health and the presence of hypertension, the greater the prevalence of depression. A survey carried out in the Primary Health Care Units in the State of Minas Gerais, Brazil, which aimed to assess depression and associated factors in women assisted by the Family Health Strategy Program, found a prevalence of depression in 19.7% of the women in the sample and, in addition, positive self-assessment of health was a protective factor against depression (Gonçalves et al., 2018).

Therefore, the results of the present study as well as the literature point to the need to pay attention to the health conditions of patients assisted in the CAPS and also in the Family Health Units, also showing that the health service users' self-perception of health is an important factor to get to know more about the impacts of the disease or psychological suffering on the lives of those individuals (Gonçalves et al., 2018). Depression has a great influence on people's quality of life, and may even reduce functionality and life satisfaction in patients with depressive disorders and comorbidities such as schizophrenia (Tan & Rossell, 2016).

In our investigation we found that the worse or the more reduced the life satisfaction of the listeners, the higher the prevalence of depression. Fervaha et al. (2016) in a study that compared a group of patients with schizophrenia and a healthy control group in relation to happiness and life satisfaction, found that the levels of these two variables were lower in the schizophrenia group than in the control group. A study carried out in Canada in 2012 showed that the highest levels of happiness among people diagnosed with schizophrenia were significantly associated with a lower presence of depression and negative symptoms, in addition to a greater satisfaction with life (Agid et al., 2012).

These findings show the importance of working with voice hearers and quality of life, since low life satisfaction associated with depression can generate a negative psychosocial impact, causing bad feelings, depressed mood, hopelessness and even suicidal ideation and suicide attempt.

Conclusion

Our study achieved the proposed objective by describing the presence of depression and characterizing voice-hearing patients assisted in CAPS. It showed that the health service users who still heard voices at the time of the interview, who had worse perceptions of their health conditions, presence of arterial hypertension and low life satisfaction, had a higher occurrence of depressive episodes. In addition, socioeconomic factors such as education and employment were also associated with depression, which was slightly higher among women and among caucasian individuals.

Thus, it is important to consider such aspects in the health care of voice hearers who have depression, offering comprehensive care. Through comprehensive care, it is possible to expand the view beyond the clinical conditions, without neglecting to consider the individual, but also focusing

on aspects of health and life that can reduce the occurrence of depression and even the coexistence and treatment of patients who hear voices.

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Contributors

L. P. KANTORSKI and S. M. S. DURO was responsible for the ideation, organization, writing of the main text and review of the full article. P. S. SILVA, and C. I. RAMOS was responsible for the writing and reviewing of the main text, applying and adapting the text to the norms.