Revista Brasileira de Enfermagem
REBEn

Factors related to psychological impairment and quality of life in patients with schizophrenia

Fatores relacionados ao comprometimento psíquico e qualidade de vida de portadores de esquizofrenia

Factores relacionados con el deterioro psicológico y la calidad de vida en pacientes con esquizofrenia

Fernanda Pâmela Machado[I]
ORCID: 0000-0002-2446-1341

Marcos Hirata Soares[I]
ORCID: 0000-0002-1391-9978

Patricia Dias Francisquini[I]
ORCID: 0000-0002-8904-1102

Margarita Antonia Villar Luis[II]
ORCID: 0000-0002-9907-5146

Julia Trevisan Martins[I]
ORCID: 0000-0001-6383-7981

[I] *Universidade Estadual de Londrina. Londrina, Paraná, Brazil.*
[II] *Universidade de São Paulo. Ribeirão Preto, São Paulo, Brazil.*

How to cite this article:
Machado FP, Soares MH, Francisquini PD, Luis MAV, Martins JT. Factors related to psychological impairment and quality of life in patients with schizophrenia. Rev Bras Enferm. 2021;74(5):e20190060. https://doi.org/10.1590/0034-7167-2019-0060

Corresponding author:
Fernanda Pâmela Machado
E-mail: fer.machado3@hotmail.com

Submission: 06-28-2019 **Approval:** 11-03-2020

ABSTRACT

Objective: to describe the factors related to psychological impairment and quality of life (QoL) of patients with schizophrenia. **Method:** a cross-sectional, descriptive and correlational study, carried out with 119 schizophrenics. A questionnaire of sociodemographic and clinical variables was applied, plus BPRS-A and QLS-BR scales. Chi-square test and Spearman's correlation were used, **Results:** seventy-seven were male and 44 were using typical medications. The "Number of times they were hospitalized" related to "Time of illness" that patients live with schizophrenia showed significance (p=0.266); 91.7% had a severe occupational level (n=109); 34.5% (n=41) had moderate impairment. **Conclusion:** the greater the degree of psychological impairment, the worse the QoL, this worsening may be related to several factors, as well as disease symptoms. **Descriptors:** Mental Health; Schizophrenia; Quality of Life; Mental Disorder; Psychiatric Rehabilitation.

RESUMO

Objetivo: descrever os fatores relacionados ao comprometimento psíquico e qualidade de vida (QV) de portadores de esquizofrenia. **Método:** estudo transversal, descritivo e correlacional, realizado com 119 esquizofrênicos. Foi aplicado um questionário de variáveis sociodemográficas e clínicas, mais as escalas BPRS-A e QLS-BR. Foram utilizados o Teste Qui-Quadrado e Correlação de Spearman, **Resultados:** 77 eram do sexo masculino e 44 faziam uso de medicações típicas. O "Número de vezes que ficou internado" relacionado com o "Tempo de doença" que o paciente convive com esquizofrenia apresentou significância (p=0,266). 91,7% apresentaram Nível Ocupacional grave (n=109). 34,5% (n=41) apresentavam comprometimento moderado. **Conclusão:** quanto maior o grau de comprometimento psíquico, pior a QV, essa piora pode estar relacionada a diversos fatores, assim como os sintomas da doença.
Descritores: Saúde Mental; Esquizofrenia; Qualidade de Vida; Transtorno Mental; Reabilitação Psiquiátrica.

RESUMEN

Objetivo: describir los factores relacionados con el deterioro psíquico y la calidad de vida (CV) en pacientes con esquizofrenia. **Método:** se aplicó un estudio transversal, descriptivo y correlacional realizado con 119 esquizofrénicos, a un cuestionario de variables sociodemográficas y clínicas, más las escalas BPRS-A y QLS-BR. Se utilizaron la prueba de Chi-cuadrado y la prueba de correlación de Spearman. **Resultados**: 77 eran hombres, (n=44) usando medicamentos típicos. El "Número de veces hospitalizado" relacionado con el "Tiempo de enfermedad" que el paciente vive con esquizofrenia fue significativo (p=0,266). El 91.7% tenía un nivel ocupacional severo (n=109). El 34,5% (n=41) tuvo un deterioro moderado. **Conclusión:** cuanto mayor es el grado de deterioro psíquico, peor es la calidad de vida, este empeoramiento puede estar relacionado con varios factores, así como con los síntomas de la enfermedad.
Descriptores: Salud Mental; Esquizofrenia; Calidad de Vida; Trastorno Mental; Rehabilitación Psiquiátrica.

INTRODUCTION

Schizophrenia is identified as a public health problem, considered one of the most disabling mental illnesses, since its degree of impairment dramatically implies the quality of life (QoL) of these individuals[1]. Currently, the World Health Organization (WHO) defines schizophrenia as a serious mental disorder, characterized by distortion of thinking, perceptions, emotions, language, self-awareness and behavior. Some of the most frequent experiences are delusions and hallucinations[2].

Schizophrenia affects about 21 million people worldwide, mainly people in their late teens and early adulthood, uncommon before puberty and atypical after 50. Schizophrenia patients are 2 to 2.5 times more likely to die at a young age than the population as a whole[2].

The main drug treatment is done with the use of typical antipsychotics (1st generation), which act mainly as antagonists of dopamine receptors (DA), being effective in the treatment of positive and/or atypical symptoms (2nd generation), which have more stabilizing and mood-raising properties. This class is antagonistic to both DA receptors and serotonergic receptors, which gives them an advantage over the first generation, being effective in the positive, negative and cognitive symptoms of the syndrome, acting by activating or inhibiting brain activity[3-4].

Atypical medications are considered the best choice for patients, and offer many advantages over the typical ones; however, using first generation medications is still prioritized, as they have lower costs compared to second generation ones. Injectable formulations are the medications chosen when there is any contraindication to the use of typical and atypical ones, which are administered over a longer period of time, on average, every three months. Reduces exposure to medication, ease of administration and greater adherence to treatment[4-5]. Using antipsychotics is necessary because they have several side effects that prevent them from performing activities of daily living that would be essential for a better QoL[6-7].

QoL has several versions of its definition, but there is no one that is widely accepted. The WHO concept is still maintained. QoL is understood as people's perception of their position in life, taking into account the socio-cultural context and values in which they are inserted, meeting their goals, expectations, standards and concerns[8]. It does not only include factors related to health, such as physical, functional, emotional and mental well-being, but also other important elements of life, such as work, family, friends and other everyday circumstances, always keeping in mind that the personal perception of those who intend to investigating is paramount[9].

Studies describe that people with schizophrenia have worse QoL due to disease impairment and, as a consequence of symptoms, a decline in the expected level of cognitive functions, presenting impairment in interpersonal relationships, making approximations and social reinsertion difficult, since this approximation/interaction would be essential gradual improvement of the disease[6,10-12].

Studies describe that people with schizophrenia have worse QoL due to disease impairment and, as a consequence of the symptoms, a decline in the expected level of cognitive functions, presenting impairment in interpersonal relationships, making approximations and social reinsertion difficult, since this approximation/interaction would be essential for the gradual improvement of the disease[13-14]. In addition to these, other studies report that these patients are more prone to metabolic changes and are overweight than the general population. Weight gain was the consequence classified by 61.6% as the one that bothered them the most, in addition to the increase in cholesterol, the presence of diabetes, dyslipidemia, and increased prolactin[5,15].

The QoL of patients with schizophrenia is more impaired due to symptoms that prevent them from performing various functions, as they present daytime sleepiness and discouragement for work activities. These symptoms are more related to patients who use typical medications, as they cause varying amounts of sedation and postural hypotension, making insertion in the social environment and routine activities difficult[5,10,16].

QoL is directly related to social support. The lower the satisfaction with social support, the worse the QoL. Studies have suggested that strengthening the resilience of subjects with schizophrenia through improved social support helped them to have better living conditions, less symptoms and fewer hospitalizations than individuals who lack social support[7,17].

It was hypothesized, in the present study, that there could be a relationship between the degree of functioning or the ability to perform daily activities and to relate, called psychological impairment and QoL. However, there are few studies, mainly in Brazil, that correlate the scores of psychic impairment, measured by the Brief Psychiatric Rating *Scale*, anchored (BPRS-A) with those of the Quality of Life Scale, Brazilian version (QLS-BR).

Thus, the present study is justified because it seeks answers about the relationship between psychological impairment caused by schizophrenia and QoL, since the existence and magnitude of the same had not yet been proven.

OBJECTIVE

To describe the factors related to psychological impairment and quality of life (QoL) of patients with schizophrenia.

METHOD

Ethical aspects

The research was approved by a Research Ethics Committee. Before each interview, Informed Consent Form was applied, and one copy was handed over to the interviewee and the other to the interviewer.

Design, place and period of study

This is a cross-sectional, descriptive and correlational study, carried out in a Psychosocial Care Center (CAPS III - *Centro de Atenção Psicossocial*) located in northern Paraná, South of Brazil. The population projection of this city, in 2017, was 558,439 inhabitants according to data from the Brazilian Institute of Geography and Statistics (IBGE - *Instituto Brasileiro de Geografia e Estatística*). It presents Human Development Index of 0.778.

CAPS III provides services to patients with severe mental disorders, offering 24-hour care in Emergency Care Unit. It assists about 150 people a day and is responsible for day care, activity in the morning, scheduling and conducting medical and psychological consultations

and hospitalization of the most serious cases. In addition to the three services, more than 2,000 people use CAPS III monthly.

Population: inclusion and exclusion criteria

The study population was schizophrenic with schizotypal disorders and delusional disorders according to ICD F 20.0 to F 20.9 assisted in a CAPS III from December 2017 to June 2018.

The sample was made from the calculation with the program IBM Sample Power v.3.0. A sample of 126 subjects was obtained, considering an analysis power of 80%, 10% losses, 5% level of statistical significance and margin of error of 0.02. Patients diagnosed with psychotic disorder (schizophrenia), undergoing intensive and semi-intensive treatment at CAPS III were included. Patients in the non-intensive modality, under 18 years old and individuals unable to answer the questionnaire due to the disease were excluded. There was an exclusion of 7 patients for meeting these criteria, totaling a final sample of 119 subjects.

Study protocol

Data collection occurred in four steps:

1st step – patient list: a data survey was carried out by means of the records (medical records, list of scheduled appointments) of CAPS III of all patients who met the inclusion criteria. Thus, all medical records of patients undergoing treatment at CAPS III, from urban regions, except rural areas, were separated. From these records, it has been quantified, currently, that about 320 patients with schizophrenia are in intensive or semi-intensive treatment at CAPS III.

2nd step - medical record review: a form with sociodemographic variables was prepared to guide an analysis of medical records. Following the list of patients, all medical records were read and assigned randomization codes, which allowed the selection of patients to be included in the research. The variables analyzed were age, sex, length of illness/treatment, number of hospitalizations and type of medication. The phone and address were part of collection for possible contact with participants.

3rd step - scheduling: after collecting data from medical records, a list was drawn up containing a date set for each patients' appointment, name and telephone number, reconciling their visit to CAPS III and an interview. In this way, it was possible to find patients at CAPS III whenever the (scheduled) appointment came so that we could approach them and invite them to participate in the interview. If they did not attend the scheduled appointment, contact would be made by telephone.

4th step - interview: all selected patients were informed about the research and invited to participate in the study. According to the consultation schedule, the interviews were conducted with the patients scheduled. Those who did not show up on the scheduled day, were subsequently contacted for a new appointment. About 80% of patients were interviewed at CAPS III.

Data collection instruments

Quality of Life Scale, Brazilian version: QLS-BR

This American scale was developed by Heinrichs in 1984[18], and in Brazil, it was validated and adapted by Cardoso and collaborators in 2006[16]. The QLS-BR consists of a total of 21 items, divided into three factors that include information about the symptoms and functioning of patients in the last three weeks. Through the scale, the following aspects described in the three factors are evaluated: Factor 1=social network; Factor 2=occupational level; Factor 3=intrapsychic functions and interpersonal relationships.

In social network, the quality and frequency of contact with family and friends are evaluated, including questions about active or passive participation, investigating the decrease in social contact until tendencies to complete withdrawal.

In occupational level, issues related to formal and informal work are taken into account. It includes questions regarding the degree of functioning, degree of use of skills and opportunities, patient satisfaction with their current occupational performance and questions about the use of time.

In interpersonal relationships and intrapsychic functions, aspects ranging from assessment of the amount or frequency of social contact, to more complex judgments such as the capacity for intimacy are considered. Some items refer to cognitive functioning and affectivity, which are aspects considered as the core of schizophrenia. Life goals, curiosity and involvement in common social activities are also assessed.

Each item on the scale includes three parts. First, there is a brief presentation on the item, with the objective of helping the interviewer to understand the parameter to be evaluated. Then, some questions are suggested for the interviewer to use in the interview, seeking to evaluate the item. Finally, there is a 7-point quotation grid, in which the interviewer must orient himself to score the evaluated item.

In this work, only the grids that had descriptions were used. The interviewer should circulate the chosen number in this grid using the final score sheet. This procedure should be used for the 21 items on the scale and interpreted as follows: 0-1, serious damage to the item or factor; 2-4, considerable damage to the item or factor; 5-6, normal or unchanged operation.

Brief Psychiatric Rating Scale***, anchored (BPRS-A)***

Translation and adaptation was carried out by Romano and Elkis in 1996[17], and validation for Portuguese, by Elkis, Alves, and Eizenman in 1999[19], based on the BPRS version by Woerner and collaborators from 1988[20]. This scale has high reliability in the original version, although without validation or reliability studies in the translated version[17]. The BPRS-A, anchored version, was used to measure the disorder severity and assess the improvement with high-cost medication.

The BPRS-A assesses the severity of 18 symptoms that occur in psychoses, particularly in schizophrenia, presented in the following sequence: 1) somatic concern; 2) anxiety; 3) emotional withdrawal; 4) conceptual disorganization; 5) guilt feelings; 6) tension; 7) mannerism and posturing; 8) grandiosity; 9) depressed mood; 10) hostility; 11) suspiciousness; 12) hallucinatory behaviour; 13) motor retardation; 14) uncooperativeness; 15) unusual thought content; 16) blunted affection; 17) excitement; 18) disorientation.

Each item on the scale is preceded by a conceptual definition of the symptom assessed, followed by the description of aspects that should or should not be valued in the score. The BPRS-A has

high reliability in item assessment, such as changes in thinking (intraclass correlation coefficient [ICC]=0.85), hostility and suspiciousness (ICC=0.87) or anxiety and depression (ICC=0.91), but lower reliability for emotional withdrawal or motor retardation (ICC=0.62).

5th step – data typing: the data were entered directly into the Google forms online platform. In general, the questionnaire of sociodemographic and clinical variables, the BPRS-A and QLS-BR scales, was tabulated in the Statistical Package for The Social Sciences program (SPSS).

Analysis of results, and statistics

Before proceeding with the analysis itself, the internal consistency analysis was performed by Cronbach's alpha (α), which had a score of 0.97, providing reliability of the scores obtained by QLS-BR and BPRS-A scales.

For data analysis, SPSS, v.25, was used. The initial step was to analyze the normality of the sample distribution, with the Kolmogorov-Smirnov test, whose results were all p <0.001, classifying the sample as non-normal. Based on this information, the chi-square test was performed to assess whether there was an association between medication type variables, with the BPRS-A and the QLS-BR domains and Spearman's correlation to analyze the linear relationship between the scales QLS-BR and BPRS-A. The objective was to seek the existence and the meaning of a significant linear relationship between two ordinal variables, being able to express whether there is a positive relationship (the more one variable increases, the more the other variable increases) or also express a negative relationship (the more a variable increases, the more the other variable decreases). The higher the correlation coefficient, the greater the intensity of this relationship, whose value varies between -1 and +1.

RESULTS

Of the 119 patients interviewed attended by CAPS, 64.7% (n=77) were male and 35.3% (n=42) female. The age range ranged from 20 to 60 years, with a prevalence of 50 to 55 years, 18.6% (n=19). The other data suggest little difference in relation to the older age of all interviewees: 15.7% (n=16) were between 35 and 40 years old and 14.7% were between 30 and 35 years old (n=15). The least frequent ages were> 60 years, 5.9% (n=6), and only 3.9% (n=4) from 20 to 25 years. All patients had at least one person as a caregiver, with 28.7% (n=29) aged 16 to 20 years living with schizophrenia; 56.4% (n=57) were hospitalized 1 to 5 times; 66.7% (n=68) remained hospitalized in psychiatric hospitals from 1 to 3 months.

The most used type of medication was of the typical class (n=41), followed by those who use both categories, typical and atypical (n=24). Atypical medications, despite acting on the negative symptoms of the disease, were less used when compared to other classes (n=23). There are those who take deposit medications (n=17) and also those who need to use all classes of antipsychotics, deposit/typical and atypical (n=8).

Psychological impairment and quality of life

As for the scores of the instruments applied, the Social Network domain had a mean of 1.40 and a standard deviation of 1.19. Occupational level showed a mean of 0.84 and a standard deviation of 1.08, which denotes that the sample values of the social network and occupational level are more distributed in relation to the other variables. Intrapsychic functions and interpersonal relationships showed a mean of 1.81 and a standard deviation of 0.96. The BPRS-A had a mean of 1.45 and a standard deviation of 0.97. The QLS-BR presented a mean of 0.97 and a standard deviation of 1.12.

Intrapsychic functions and interpersonal relations, which comprise affective-sexual relationships, meanings of life goals, curiosity, the use of common objects, capacity for involvement and emotional interaction with the interviewer, when associated with the BPRS-A, a negative correlation was obtained between these two variables (r: -0.477; p <0.001)

Table 1 refers to the QLS-BR items, in which the Serious Loss is equivalent to (0-1); considerable loss to (2-4) and normal/unchanged operation, to (5-6), showing the frequency and percentage of each domain: occupational level; social network; intrapsychic functions and interpersonal relations.

Regarding serious loss, 91.7% had a severe occupational level (n=109), followed by social network 82.3% (n=98) and 70.5% (n=84), this showed that the functions intrapsychic and interpersonal relationships meet with severe QoL. As for considerable damage, 27.8% had intrapsychic functions and considerable interpersonal relationships (n=33), 16.0% considerable social network (n=19) and only 6.7% considerable occupational level (n=8). Regarding normal/unchanged functioning, only 2 patients had occupational level, social network and intrapsychic functions/interpersonal relationships with normal, unchanged functioning, which denotes the majority of respondents had worse QoL.

As for the score obtained by the BPRS-A, which represents the degree of impairment of the interviewed individuals, 34.5% (n=41) had moderate impairment; 26.9% (n=32) presented mild impairment; 16% (n=19) had a serious condition; 6.7% (n=8) had a very mild state of impairment; only 0.8% (n=1) of patients were very severe.

Table 1 - Frequency and percentage of changes in social network, occupational level, intrapsychic functions and interpersonal relations of the Quality of Life Scale, Brazilian version (QLS-BR), Paraná, Brazil

	Occupational level		Impairment and social network		Intrapsychic functions and interpersonal relations	
	nº	%	nº	%	nº	%
Serious loss	109	91.7	98	82.4	84	70.6
Considerable loss	8	6.7	19	16.0	33	27.8
Normal/unchanged operation	2	1.6	2	1.6	2	1.6
TOTAL	119	100%	119	100%	119	100%

DISCUSSION

In the present study, 64.7% of respondents are male and 18.6% are in the 50 to 55 age group. A cross-sectional study carried out in Japan with 144 schizophrenic patients, showed a mean age between 54.9 and 59.1 years; of these, 32.6% were male[21]. Another cross-sectional and analytical study, carried out with 72 schizophrenia patients, showed the same proportion for both sexes (50%), and the mean age was 42.9 years. Studies have a mean age between 40 and 59 years[22].

Patients in the present study were hospitalized 1 to 5 times over a period of 1 to 3 months in psychiatric hospitals. A retrospective study, with a sample of 334 patients with schizophrenia, showed that, on average, the number of hospitalizations is 11 times and the time of readmission is 2 months. A study conducted in Japan, on the other hand, describes that patients remained hospitalized between 1.8 and 2.0 years, denoting that all patients had long stays in hospitals[21,23].

Age, sex and hospital stay length in the study carried out in Japan[21] corroborate the current study, suggesting that schizophrenia can affect both men and women, that these individuals lived with the pathology in all stages of life and that the chances of hospitalization recurrences are great throughout its existence, consistent with the retrospective study[23]. In a second study[24] carried out to assess the validity of BPRS-A, with 96 people with schizophrenia, it also presented different sociodemographic characteristics. The mean age of subjects was 33.62 years; 71.9% were male; 91.7% did not perform work activities; 40.6% worked before being affected by the disease.

In the current research, 41 patients use typical medications, but one study[21] indicated that patients who used a typical antipsychotic had a minimum of 2.0 years of hospitalization and 1.8 years in the atypical antipsychotic group, concluding that individuals who used typical medications stayed longer. This same study highlights that patients who used typical antipsychotics had more intense psychiatric symptoms, compared with those who used atypical antipsychotics[21].

The BPRS-A is used worldwide in many clinical trials for drug testing or other types of interventions and comparisons, serving as a criterion validity tool, differentiating groups regarding a particular factor or characteristic. A study conducted with 112 people with schizophrenia in Los Angeles, USA[25], to compare clinical characteristics between patients who worked and those who did not, showed that, among many other characteristics, there were no statistically significant differences in relation to the score presented in the BPRS-A and the type of medication used (most of atypical). Negative symptoms proved to be more impeding in those who did not work than in those who worked. The mean presented by the BPRS-A for those who worked was 7.24, and for those who did not work, it was 6.84.

A study[26] concluded that atypical antipsychotics can contribute to better QoL. Typical ones are more likely to cause extrapyramidal symptoms, while atypical ones are more likely to lead to weight gain and exacerbate metabolic side effects. Both typical and atypical medications can have a negative impact on QoL, treatment adherence, relapse rates and stigma[27]. Supporting the previous study[27], another study also suggested that patients who used typical medications during the course of treatment needed to have their drugs replaced by atypical ones, as the main reason for the conduct was the increase in extrapyramidal symptoms[28].

Both medications are provided by the Ministry of Health, and the State and Municipal Secretariats have a program for dispensing exceptional medications such some second-generation antipsychotics for patients who do not improve or do not tolerate the side effects of first-generation antipsychotics and need to be treated with atypical ones. The costs of atypical medications, however, are much higher than the typical ones, with a limited number of second generation antipsychotics. In addition, patients must be within the program criteria, which includes not showing improvement with conventional treatment, the need for a medical-psychiatric report based on the assessment of psychological impairment made by the BPRS-A; for maintenance of treatment, an improvement of at least 30% after 3 months of treatment so that there is a substitution for atypical medication[4,29].

The current study revealed that 8 patients use all classes of antipsychotics, including deposition. However, some studies report that the main benefit in using atypical ones is the lower probability of occurrence of extrapyramidal symptoms. However, there is a loss in this effect, when associated with a typical, a fact identified in clinical practices. Moreover, the association of two or more antipsychotics can cause cardiotoxicity by increasing the QT interval (electrocardiographic parameter that represents the electrical systole duration)[28-30]. These findings may suggest that patients may be at greater risk of developing cardiotoxicity, as 24 patients are associated with more than one type of typical and atypical antipsychotic, and 8 use deposit medication, typical and atypical.

An analytical research carried out in Peru used the BPRS scale in order to assess whether psychopathological symptoms would be correlated to functioning, using the FAST scale. When correlating it, the data demonstrated that the scores measured by the BPRS-A, were not related to those obtained in the measurement of functionality[31]. However, the present study is not supported by such data, given that the correlation of the QLS-BR with the BPRS-A, showed r: -0.477, referring to the low affective-sexual relationship, curiosity and, mainly, the ability of personal involvement, showing that these functions are deficient in these patients.

A study carried out at the Hospital of Custody and Psychiatric Treatment in Brazil[32] highlighted in its results, that in the categorization of QoL, it found a concentration of scores in the items that indicate QoL impairment and over impairment, in the domains related to social network (m=1.75) and intrapsychic and interpersonal relationships (m=2.57). The Global Scale, which allows for a general assessment of patients' QoL, suggested that 61.1% had very impaired QoL[32]. Corroborating the current study, most of patients in this research showed severe impairment in the three domains. Occupational level: 91.7%, impairment and social network: 82.4%, intrapsychic functions and interpersonal relationships: 70.6%. It was noticed that the majority of respondents, from both surveys, presented QoL impairment in all domains.

Another study exposed, within the global assessment of QoL, that 93.7% of assessed patients had some impairment (score <4); 57%, severe impairment (score <2) and only (n=5) patients did not show a reduction in QoL (6.3%)[33]. These data are in line

with the current study, in which 91.7% had serious impairment in relation to the occupational level (n=109); 27.8% presented considerable losses related to intrapsychic functions and interpersonal relationships (n=33); and only 2 patients had normal/unchanged functioning.

Another study reaffirms the findings of this research, consistent with the categorization of QoL by degree of impairment. The domains intrapsychic functions/interpersonal relationships and social network showed greater prominence, but occupational level showed a higher percentage of patients with unchanged functioning (37.5%). Compared to the other dimensions, the category that presented a low percentage of patients was serious injury, with an overall score of 5.6% (n=4)[34]. A survey conducted in Divinópolis – BR with 79 patients showed that, of these, 74 (93.7%) had some impairment in QoL and the area most affected was occupational level[33].

A study conducted in Portugal with 282 patients with schizophrenia showed significant values in relation to the QLS-PT and satisfaction with total social support, with friends, with intimacy, with (p>0.001) and social activities (p=0.008). Statistically significant results were obtained between QLS-PT and satisfaction with the family (p=0.294)[11]. Supporting the findings of the current research, in which QoL is influenced by satisfaction with social support, the greater the satisfaction with social support, the better the QoL[11].

The largest number of patients in the current research is related to occupational level (n=109), indicating impairment of QoL and denoting that individuals, although medicated, have frankness in their family and social relationships, as well as in their mental state. Occupational level being most affected seems to be related to the type of medication used mostly.

A study carried out in a reference hospital in mental health in Divinópolis (BR)[22] assessed the QoL stratified according to sex and in all five items of the occupational domain of the QLS-BR. This assessment involved 74 men, of whom 62% had very impaired QoL, 32% with impaired QoL and only 5% with unchanged QoL or normal functioning, and 49 women, of whom, 57% are in the impaired QoL category, 29% of them with very impaired QoL and 14% had unchanged functioning[15]. It should be noted that the difference in this domain reflected in a better global QoL for women than for men, corroborating the data of this research. Thus, 64.7% (n=77) were male and 35.3% (n=42) were female, showing us that the largest number of patients with schizophrenia is male and, consequently, who have worse QoL.

Study limitations

Few studies have correlated between the BPRS-A and QLS-BR scales, with the BPRS-A being used for other purposes, such as evaluating interventions. Although it is an established tool in clinical practice, it was not part of patients' medical records. No study has shown the relationship between the degree of psychological impairment and its relationship with worsening QoL. It should also be noted that the QLS-BR, as a specific scale for patients with schizophrenia, has been little studied and applied here in Brazil. Studies from more than five years of publication and more current studies were found using other QoL scales.

Contributions to nursing and public health

The relevance of this study for nursing and multidisciplinary team, which deals with schizophrenic patients on a daily basis, stands out in order to improve the QoL of patients with schizophrenia. It is important to focus on proper anamnesis, assessment of mental status and consequent identification of nursing diagnoses that serve as a basis and planning of actions aimed at nursing care.

Nursing diagnoses are related to the QoL of patients' QoL, as insomnia, sedentary lifestyle, deficit in self-care for bathing/intimate hygiene and sensory perceptions related to the disturbances resulting from the symptoms imposed by the disease and, consequently, social isolation these individuals lead to several complications that favor social isolation and loss of QoL. Nurses should pay attention to the proper assessment of mental status, especially the negative symptoms of schizophrenia, which impair their QoL.

In addition to these surveys, the study will subsidize professionals who aim to deepen this theme in favor of improvements in caring for patients with schizophrenia in therapeutic and medication approaches, as well as to outline strategies that better target these individuals' QoL.

CONCLUSION

Typical medication use is emphasized, since in the current study they were the most used, even though it has been scientifically proven that atypical medications act more on the negative symptoms of the disease, with less extrapyramidal symptoms. It is inferred that using antipsychotics needs to be reviewed and that health professionals strive to request these medications, aiming to deprive patients of their symptoms, enabling them to live with a better QoL, to be inserted into the family environment, to be able to carry out work activities and coexist in society.

On average, patients in this study remained hospitalized for one to three months; however, this is a topic that needs further scientific investigation, as it is inferred that the number of times a patient was hospitalized may have to do with the relationship with the use of typical medications or greater psychological impairment and the very impaired QoL.

Schizophrenia is full of stigmas and needs to be further explained to family members and society, making them aware of the subject, in order to help them understand the disease so that they can act as mediators of people with schizophrenia, encouraging them to perform activities that foster better QoL.

To this end, it is necessary to plan training for health teams in order to address topics that involve antipsychotics and the importance of therapeutic projects for these patients. Thus, these professionals will be able to carry out health education, improve treatment adherence and the QoL of patients with schizophrenia.

Considering the negative impact on QoL, schizophrenia needs to be further studied on this topic so that numerous existing factors, which were little addressed in the present study, can benefit patients, aiming at improvements in treatment adherence and, consequently, shorter hospital stay and better QoL.

REFERENCES

1. Silva AM, Santos CA, Miron FM, Miguel PN, Furtado CC, Bellemo AIS. Esquizofrenia: uma revisão bibliográfica. Rev UNILUS Ens Pesqui [Internet]. 2016 [cited 2018 Oct 15];13(30). Available from: http://revista.unilus.edu.br/index.php/ruep/article/view/688
2. World Health Organization (WHO). Esquizofrênia[Internet]. WHO: Genebra. 2018 [cited 2018 Sep 10]. Available from: http://www.who.int/es/news-room/fact-sheets/detail/schizophrenia
3. Lindenmayer JP, Khan A. Psicopatologia. In: Lieberman, JA, Stroup TS, Perkins DO. Fundamentos da esquizofrenia. Porto Alegre: Artmed; 2013. p.27- 71.
4. Schatzberg FA, Battista C. Manual de Farmacologia Clínica. 8ªEd. Porto Alegre: Artmed; 2017.
5. Agostinho FR, Nardi AE, Quevedo J, Silva A. Tratamento farmacológico da esquizofrenia: antipsicóticos de primeira geração. Esquizofrenia: teoria e clínica. Porto Alegre: Artmed; 2015. P. 129-46.
6. Arango C, Baeza I, Bernardo M, Cañas F, Dios C, Díaz-Marsá M, et al. Long-acting injectable antipsychotics for the treatment of schizophrenia in Spain. Rev Psiquiatr Salud Mental. 2018;S1888-9891. https://doi.org/10.1016/j.rpsm.2018.03.006
7. Chou CY, Ma MC, Yang TT. Determinants of subjective health-related quality of life (HRQoL) for patients with schizophrenia. Schizophrenia Res. 2014;154(1-3):83-8. https://doi.org/10.1016/j.schres.2014.02.011
8. WHOQOL Group. The World Health Organization Quality of Life Assessment (WHOQOL): Position paper from the World Health Organization. Social Science e Medicine. 1995;41(10), 1403-1409. https://doi.org/10.1016/0277-9536(95)00112-K
9. Gill TM, Feinstein AR. A critical appraisal of the quality of quality-of-life measurements. JAMA. 1994;272(8):619-26. https://doi.org/10.1001/jama.1994.03520080061045
10. American Psychiatric Association. DSM 5: Diagnostic and statistical manual of mental disorders. 5th. ed. Washington: American Psychiatric Association; 2014.
11. Suttajit S, Pilakanta S. Predictors of quality of life among individuals with schizophrenia. Neuropsychiatr Dis Treatment. 2015;28(11):1371-9. https://doi.org/10.2147/NDT.S81024
12. Pinho LG, Pereira A, Chaves C, Rocha ML. Satisfação com o Suporte Social e Qualidade de Vida dos doentes com Esquizofrenia. Rev Port Enferm Saúde Mental. 2017;(spe5):33-8. https://doi.org/ 10.19131/rpesm.0164
13. Medici CR, Vestergaard CH, Hjorth P, Hansen MV, Shanmuganathan JW, Viuff AG, et al. Quality of life and clinical characteristics in a nonselected sample of patients with schizophrenia. Int J Soc Psychiatr. 2015;62(1):12-20. https://doi.org/10.1177/0020764015585330
14. Ishida S, Takechi K, Bando H, Imanishi M, Zamami Y, Chuma M, et al. Development and pharmacist-mediated use of tools for monitoring atypical antipsychotic-induced side effects related to blood glucose levels. Pharmacoepidemiol Drug Saf [Internet]. 2018 [cited 2018 Sep 26];27(12):1379-84. Available from: https://onlinelibrary.wiley.com/doi/full/10.1002/pds.4656
15. Hamaideh S, Al-Magaireh D, Abu-Farsakh B, Al-Omari H. Quality of life, social support, and severity of psychiatric symptoms in Jordanian patients with schizophrenia. J Psychiatr Mental Health Nurs[Internet]. 2014 [cited 2018 Nov 16];21(5):455-65. Available from: https://onlinelibrary.wiley.com/doi/full/10.1111/jpm.12112.
16. Cardoso CS, Caiaffa WT, Bandeira M, Siqueira AL, Abreu MNS, Fonseca JOP. Qualidade de vida e dimensão ocupacional na esquizofrenia: uma comparação por sexo. Cad Saúde Pública. 2006;22(6):1303-14. Available from: https://doi.org/10.1590/S0102-311X2006000600019
17. Romano F, Elkis H. Tradução e adaptação de um instrumento de avaliação psicopatológica das psicoses: a escala breve de avaliação psiquiátrica, versão ancorada (BPRS-A). J Bras Psiquiatr. 1996;5(1):43-9.
18. Heinrichs DW, Hanlon TE, Carpenter WT. The quality of life scale: an instrument for rating the schizophrenic deficit syndrome. Schizophrenia Bulletin. 1984. 10:388-398. https://doi.org/10.1093/schbul/10.3.388
19. Elkis H, Alves T, Eizenman I. Reliability and validity of the Brazilian version of the BPRS Anchored. Schizophr Res. 1999;36(7).
20. Woerner MG. Mannuza S, Kane J. Anchoring the BPRS: an aid to improve schizophrenia and affective disordens. J Clin Psychtr. 1998;59(12):41-5.
21. Fujimaki K, Takahashi T, Morinobu S. Association of typical versus atypical antipsychotics with symptoms and quality of life in schizophrenia. PloS One [Internet]. 2012 [cited 208 Oct 13];7(5):370–87. Available from: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0037087
22. Freitas PHB, Pinto JAF, Nunes FDD, Silva SAR, Machado RM. Esquizofrenia refratária: qualidade de vida e fatores associados. Acta Paul Enferm. 2016;29(1):60-8. https://doi.org/10.1590/19820194201600009
23. Clezar EM, Bianchi GN, Brandão LS. Análise da readmissão hospitalar do paciente com diagnóstico de esquizofrenia em um hospital psiquiátrico de referência no sul catarinense. Arqu Catarinense Med [Internet]. 2018[cited 208 Oct 13];47(3):133-45. Available from: http://www.acm.org.br/acm/seer/index.php/arquivos/article/view/460
24. Alves TM, Pereira JCR, Elkis H. The psychopathological factors of refractory schizophrenia. Rev Bras Psiquiatr. 2005;27(2):108-12. https://doi.org/10.1590/S1516-44462005000200007
25. Oliveira IR. Antipsicóticos atípicos: farmacologia e uso clínico. Rev Bras Psiquiatr. 2000;22(1):38-40. https://doi.org/10.1590/S1516-44462000000500013

26. Pakpoor J, Agius M. A review of the adverse side effects associated. Psychiatr Danub [Internet]. 2014[cited 208 Oct 13];26(1):273-84. Available from: https://pubmed.ncbi.nlm.nih.gov/25413553/

27. Eloff I, Esterhuysen W, Odayar K. Antipsychotic use in a resource-limited setting: findings in an Eastern Cape psychiatric hospital. South African J Psychiatr [Internet]. 2017 [cited 2018 Sep 03];23(1):1-6. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6138101/pdf/SAJPsy-23-1093.pdf

28. Ministério da Saúde (BR). Secretaria de Atenção à Saúde. Protocolo Clínico e Diretrizes Terapêuticas para Esquizofrenia: Portaria SAS/MS nº 364 [Internet]. 9 de abril de 2013[cited 2018 Sep 03]. Available from: https://bvsms.saude.gov.br/bvs/saudelegis/sas/2013/prt0364_09_04_2013.html

29. Falkai P, Wobrock T, Lieberman J, Glenthoj B, Gattaz WF, Möller H-J. Diretrizes da Federação Mundial das Sociedades de Psiquiatria Biológica para o tratamento biológico da esquizofrenia. Parte 2: tratamento de longo prazo. Rev Psiquiatr Clín. 2006;33(Suppl 1):65-100. https://doi.org/10.1590/S0101-60832006000700004

30. Ministério da Saúde (BR). Secretaria de Ciência, Tecnologia e Insumos Estratégicos. Departamento de Assistência Farmacêutica e Insumos Estratégicos. Formulário Terapêutico Nacional 2010 [Internet]. 2 ed. Brasília, Ministério da Saúde. 2011[cited 2018 Oct 05];(14):235-6. Available from: http:/livroaberto.ibict.br/handle/1/560

31. Osorio-Martinez ML. Esquizofrenia y funcionamiento: medición con la escala breve de evaluación del funcionamiento y correlación con los años de enfermedad. An Fac Med Lima. [Internet]. 2017 [cited 2018 Oct 05];78(1):17-22. Available from: http://revistasinvestigacion.unmsm.edu.pe/index.php/anales/article/view/13016

32. Santana AFFA, Chianca TCM, Cardoso CS. Qualidade de vida de pacientes com esquizofrenia internados em hospital de Custódia. J Bras Psiquiatr. 2009;58(3):187-94. Available from: https://doi.org/10.1590/S0047-20852009000300008

33. Silva TFC, Mason V, Abelha L, Lovisi GM, Cavalcanti MT. Quality of life assessment of patients with schizophrenic spectrum disorders from Psychosocial Care Centers. J Bras Psiquiatr. 2011;60(2):91-8.: https://doi.org/10.1590/S0047-20852011000200004

34. Cesari L, Bandeira M. Avaliação da qualidade de vida e percepção de mudança em pacientes com esquizofrenia. J Bras Psiquiatr. 2010;59(4):293-301. https://doi.org/10.1590/S0047-20852010000400005