RESEARCH

ASSESSMENT OF THE QUALITY OF LIFE OF PEOPLE IN POST-COVID-19 REHABILITATION

AVALIAÇÃO DA QUALIDADE DE VIDA DE PESSOAS EM REABILITAÇÃO PÓS-COVID-19

VALUACIÓN DE LA CALIDAD DE VIDA DE PERSONAS EN REHABILITACIÓN POST-COVID-19

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ABSTRACT

Objective: to assess the quality of life of people undergoing post-COVID-19 rehabilitation and its relationship with sociodemographic aspects and the presence of depressive symptoms. **Methods**: quantitative, cross-sectional study. Fifty-five people treated at a specialized service in the interior of Rio Grande do Sul participated in the study between June and August 2022. A sociodemographic and clinical questionnaire, the Medical Outcomes Study 36 – Item Short-Form Health Survey, and the Beck Depression Inventory were used. Results: participants were predominantly female, young adults, white, who worked before COVID-19, and are currently unemployed. They reported feeling anxious and sedentary, with initial symptoms including cough, dyspnea, headache, and body aches. **Discussion:** the overall quality of life score was 39.61 (SD=19.48). Physical health had the worst average score, followed by emotional health. Twenty-one people were found to have depressive symptoms. Regarding the relationships established, there was a statistically significant association between sex and the variables functional capacity, vitality, social and emotional aspects, and mental health; depression with the variable sex; and self-reported previous presence of diabetes mellitus and anxiety with the variable functional capacity. An association was also observed between self-reported depression prior to COVID-19 and social aspects and mental health, as well as the presence of depressive symptoms and sex. Conclusion: quality of life scores tend to decrease, representing a loss in the well-being of people in post-COVID-19 rehabilitation, especially in women whose routine has been modified, affecting various aspects of the biopsychosocial dimension.
Keywords: Coronavirus; COVID-19; Depression; Nursing; Quality of Life; Rehabilitation.

RESUMO

*Objetivo: avaliar a qualidade de vida de pessoas em reabilitação pós-COVID-19 e sua relação com aspectos sociodemográficos e a presença de sintomas depressivos. **Métodos:** estudo quantitativo e transversal. Participaram 55 pessoas atendidas em um serviço especializado no interior do Rio Grande do Sul, no período de junho a agosto de 2022. Utilizou-se um questionário sociodemográfico e clínico, o Medical Outcomes Study 36 – Item Short-Form Health Survey e o Inventário de Depressão de Beck. Resultados: os participantes eram predominantemente do sexo feminino, adultos jovens, de cor branca, que trabalhavam antes da COVID-19, e atualmente estão desempregados. Declaram-se ansiosos e sedentários, apresentando como sintomas iniciais tosse, dispneia, dor de cabeça e dores no corpo. **Discussão:** o escore de qualidade de vida geral foi de 39,61 (DP=19,48). O aspecto físico obteve a pior média, seguido do aspecto emocional. Constatou-se que 21 pessoas apresentaram sintomas depressivos. Quanto às relações estabelecidas, houve associação estatisticamente significativa entre o sexo e as variáveis capacidade funcional, vitalidade, aspectos sociais, emocionais e saúde mental; depressão com a variável sexo; presença prévia autorreferida de diabetes mellitus e ansiedade com a variável capacidade funcional. Também foi observada associação da depressão autorreferida prévia à COVID-19 com aspectos sociais e saúde mental, além de a presença de sintomas depressivos com o sexo. **Conclusão:** os escores de qualidade de vida tendem a diminuir, representando um prejuízo no bem-estar das pessoas em reabilitação pós-COVID-19, principalmente em mulheres cuja rotina foi modificada, afetando diversos aspectos da dimensão biopsicossocial.
Palavras-chave: Coronavírus; COVID-19; Depressão; Enfermagem; Qualidade de Vida; Reabilitação.*

RESUMEN

*Objetivo: evaluar la calidad de vida de personas que están en rehabilitación post-COVID-19 y su relación con aspectos sociodemográficos y la presencia de síntomas depresivos. **Métodos:** estudio cuantitativo y transversal. Participaron 55 personas atendidas en un servicio especializado en el interior de Rio Grande do Sul, en el período de junio a agosto de 2022. Se utilizó un cuestionario sociodemográfico y clínico, el Medical Outcomes Study 36 – Item Short-Form Health Survey y el Inventario de Depresión de Beck. Resultados: Los participantes eran predominantemente del sexo femenino, adultos jóvenes, de color blanco, que trabajaban antes de la COVID-19, y, en su mayoría, actualmente están desempleados. Se declararon personas ansiosas y sedentarias, y presentaron como síntomas iniciales tos, disnea, dolor de cabeza y dolores en el cuerpo. **Discusión:** el puntaje de calidad de vida general fue de 39,61 (DP=19,48). El aspecto físico obtuvo la peor media, seguido del aspecto emocional. Se constató que 21 personas presentaron síntomas depresivos. En cuanto a las relaciones establecidas, hubo asociación estadísticamente significativa entre el sexo y las variables capacidad funcional, vitalidad, aspectos sociales, emocionales y salud mental; la depresión con la variable sexo; la presencia previa autorreferida*

de diabetes mellitus y ansiedad con la variable capacidad funcional. También se observó asociación de la depresión autorreferida previa a la COVID-19 con aspectos sociales y salud mental, además de la presencia de síntomas depresivos con el sexo. **Conclusión***: los puntajes de calidad de vida tienden a disminuir, representando un perjuicio en el bienestar de las personas que están en rehabilitación post-COVID-19, principalmente en mujeres cuya rutina fue modificada, con consecuencias en diversos aspectos que involucran la dimensión biopsicosocial.estrategias que favorezcan la autonomía de la mujer y su participación activa como sujeto central en el cuidado de la salud.*
Palabras clave*: Calidad de vida; Coronavirus; COVID-19; Depresión; Enfermería; Rehabilitación.*

INTRODUCTION

COVID-19 emerged in December 2019 and, due to its potential for transmission and geographical distribution, was declared a public health emergency of international concern[1], from early 2020 until the pandemic's end in May 2023, Brazil confirmed more than 37 million cases and over 700,000 deaths. Restrictive measures were implemented to minimize the disease's spread and impact, prompting radical changes in people's routines and urban dynamics[2].

The end of the pandemic did not signal the absence of new cases; the virus continues to circulate in the country and poses a threat, particularly to at-risk groups. The Ministry of Health released data for April 2024 in its monthly epidemiological bulletin. In Brazil, over 52,000 new cases of COVID-19 and more than 650 deaths were reported. The age groups with the highest incidence and mortality from SARS due to COVID-19 were children aged one year or younger and elderly individuals aged 80 years or older. The Brazilian states of São Paulo had the highest incidence of reported cases, followed by Santa Catarina and Mato Grosso do Sul. In terms of mortality, Amazonas recorded the highest rate during the same period, followed by Rio Grande do Sul and Rio Grande do Norte[3].

The pandemic's repercussions have been extensive. Aside from economic and social changes, the fear of the unknown and death, coupled with prolonged confinement, has been clearly linked to psychological harm, manifesting as symptoms of anxiety and depression. Individuals have endured these stressors for extended periods[4,5].

Furthermore, some individuals experienced a deterioration in their clinical condition due to COVID-19 and had to contend with physical impairments caused by the disease. These include loss of physical fitness from prolonged bed rest, peripheral muscle weakness, postural issues, and neurological damage, such as memory alterations. These factors can diminish the likelihood of regaining functional status, thereby affecting quality of life. Consequently, these individuals require rehabilitation to attempt to fully or partially restore the functions impaired by the disease[6,7].

Numerous studies have been conducted on COVID-19, with some revealing a decline in quality of life, notably among the elderly, students, and women, whose routines have been disrupted with repercussions primarily in psychological and physical aspects[8,9]. This underscores the challenges in post-COVID-19 rehabilitation for affected individuals, as the vast majority have comorbidities, greater severity, impairments, permanent sequelae, and life-threatening conditions, necessitating more prolonged rehabilitation. These conditions can affect quality of life[10].

Quality of life is broadly defined and influenced by sociological studies beyond diseases and conditions. It encompasses physical and mental health, independence, social and environmental relationships, and individual values and beliefs. The World Health Organization has defined quality of life as "individuals' perceptions of their position in the context of the cultures and value systems in which they live and in relation to their goals, expectations, standards, and concerns"[11].

Thus, this study aims to assess the quality of life of individuals undergoing post-COVID-19 rehabilitation and its relationship with sociodemographic aspects and the presence of depressive symptoms. The rationale for exploring this phenomenon stems from the pandemic occurring amidst significant changes in people's lives, allowing for reflection on the implications for quality of life and the presence of depressive symptoms in those undergoing post-COVID-19 rehabilitation.

METHOD

This quantitative, descriptive, cross-sectional study was primarily conducted at the post-COVID-19 Care Center in a municipality in the interior of Rio Grande do Sul, which is part of the primary care network. The secondary setting was the residences of individuals treated at the aforementioned service. The study included 55 participants, selected through a non-probabilistic convenience sample, meaning all individuals receiving care at the service were invited to participate. Those who agreed were included in the study during the data collection period, which spanned from June to August 2022.

The inclusion criteria required participants to be 18 years of age or older and able to participate. No participants were excluded due to temporal, spatial, or psychological disorientation, and none refused to participate. Interviews were conducted on the ground floor to ensure

accessibility for all participants, including those with mobility difficulties. Initially, 30 interviews took place at the care center; subsequently, an additional 25 interviews were conducted at participants homes to increase the number of participants.

Patient information for home visits was obtained from medical records, accessed with authorization from the person in charge of the service. Collected data included full names, addresses, and telephone numbers. This information was organized in an Excel spreadsheet that also included additional fields: the date of phone contact, whether the contact was successful, participant agreement to participate, and the date of the home visit appointment for the interview. There were no refusals.

Participating in this study did not pose any physical or emotional risks. However, some interview questions elicited feelings of guilt, loss, longing, and emotional recollections of difficult situations during illness, which led some participants to cry. In response to these manifestations, interviewers asked if participants wished to interrupt the interview and suspend participation; none chose to withdraw, although short breaks were sometimes necessary. In these cases, referral to speak with the service psychologist was offered, but interviewees did not find it necessary. The data collection team, composed of a master's' student and scientific initiation scholarship recipients, was previously trained and instructed on data collection and managing situations involving crying and emotional distress.

The interviews lasted an average of 30 minutes. The instruments used for data collection included sociodemographic and clinical questionnaire, the Medical Outcomes Study 36-Item Short-Form Health Survey (SF-36) for assessing quality of life, and the Beck Depression Inventory (BDI) for assessing depressive symptoms. The data were entered into Excel and analyzed using Statistical Package for the Social Sciences version 21 software.

The SF-36 is a generic health assessment instrument, originally created in English, which is easy to administer and understand. It consists of 36 questions covering eight scales or components: functional capacity, physical aspects, physical pain, vitality, social aspects, emotional aspects, and mental health, as well as a question comparing current health conditions with those of a year ago. To evaluate the final results, scores ranging from zero to 100 are considered; the closer to 100, the better the quality of life assessed[12].

The instrument was validated for Portuguese by Ciconelli[12] in 1997. In the cultural adaptation study for the Brazilian population, its measurement properties, specifically reproducibility and validity, were evaluated in Brazilian patients with rheumatoid arthritis. The instrument's reproducibility, demonstrated by Pearson's correlation coefficient, was satisfactory and statistically significant across all domains. Although the SF-36 is a widely used instrument for assessing patients with various clinical impairments, it has been shown to be suitable for application in post-COVID-19 patients. Studies assessing quality of life using the SF-36 found that these patients experienced impairment in at least one of the mental and physical domains, with the most impacted aspects being physical aspects, functional capacity, and social aspects[13-15].

The BDI is widely used to investigate depressive symptoms and is considered valid and reliable in Portuguese-speaking Brazilian populations. It was translated and validated for Brazil in 1982, with a validation review conducted by Gorestein and Andrade in 1996[16]. According to these authors, the instrument demonstrated high reliability and good validity. The internal consistency of the Portuguese version was rated at 0.8, a value similar to those observed in other countries[16].

The scale consists of 21 items that assess depressive symptoms occurring in the last 15 days, classifying the presence of depressive symptoms as minimal, mild, moderate, or severe[16]. The score ranges from zero to three, with zero indicating the absence and three indicating the presence of the most intense depressive symptoms. For the analysis of depressive symptoms, the approach of Beck and Beamesderfer[17] was considered, which defines that a score of 21 points or more indicates clinically depressive symptoms.

The internal consistency of the study instruments was verified using Cronbach's Alpha Coefficient, resulting in 0.92 for the SF-36 and 0.91 for the BDI. Descriptive statistics were used for analysis. Categorical variables were presented by absolute and relative frequencies, and continuous variables were described by the mean and standard deviation. To assess the relationship between the participants' profile variables and the domains of quality of life, the normality distribution of the data was initially verified using the Kolmogorov-Smirnov test.

For normally distributed data, the Student's t-test was used to compare two independent samples, while for non-normal data, the nonparametric Mann-Whitney test was applied. Additionally, Student's t-test was used to compare depressive symptoms (clinically depressive symptoms and clinically non-depressive symptoms) in relation to quality of life domains when the data showed normal distribution; for non-normal data, the Mann-Whitney test

was used. Results were considered statistically significant when p < 0.05, with a 95% confidence interval.

The study was approved by the Research Ethics Committee of a university in southern Brazil under opinion no. 5,402,952 and CAAE no. 58332322.1.0000.5346. Participants signed two copies of the free and informed consent form after reading and receiving a prior explanation.

RESULTS

The study sample consisted of 55 participants, 69.1% of whom were female, with a mean age of 53.71 years (±14.07). White skin color was self-reported by 89.1% of participants. Among the self-reported clinical characteristics prior to COVID-19, 40% of the participants had high blood pressure, 25.5% were diabetic, 32.7% reported depression, 67.3% mentioned anxiety, and 58.2% were sedentary.

Regarding COVID-19, all individuals experienced some symptoms, mainly cough and dyspnea (83.6%), headache and body pain (83.6%), and fever (72.7%). Complications were primarily respiratory (89%) and muscular (62%), with sequelae mainly affecting respiratory (80%) and neurological (76%) systems.

The mean overall quality of life score was 39.61 (±19.48), with mental health and physical aspects having the best and worst mean scores, respectively. The domains with the poorest scores were physical aspects (20.45 ± 30.84), followed by emotional aspects (36.97 ± 39.89) and vitality (37.09 ± 20.25), all close to the lower limit.

Table 1 shows statistically significant relationships between sociodemographic and clinical variables and the quality of life domains of the study participants. A statistically significant difference was found between the sex variable and the domains of functional quality of life, vitality, social aspects, emotional aspects, and mental health, with men reporting a better quality of life than women in these domains. Additionally, a significant difference in quality of life was observed when comparing employment status with the domains of functional capacity, physical, social, and emotional aspects, as well as pain and vitality. Employed individuals at the time of data collection reported better health compared to those who were not employed.

Statistical significance was found in the associations between sociodemographic and clinical variables and depressive symptoms, specifically in relation to sex. Additionally, self-reported anxiety, as measured by the BDI, was significantly associated. The data comparing the SF-36 domains with the BDI are presented in Table 2.

A statistical difference was observed between participants with clinically depressive symptoms and those with clinically non-depressive symptoms, as measured by the BDI assessment. This difference was evident across the domains of functional capacity, vitality, social aspects, emotional aspects, and mental health.

DISCUSSION

Concerning the socioeconomic profile of individuals in post-COVID-19 rehabilitation, several studies have described profiles similar to those found in this study: a predominance of females, individuals with partners or married, and individuals in the young adult age group[8,9,14,15].

Preconditions such as anxiety, being overweight, and physical inactivity, self-reported by participants, were also identified in other studies and described as clinical markers of post-COVID-19 severity, potentially influencing quality of life and the intensity of post-illness depressive symptoms. Additionally, individuals with psychological issues, such as anxiety and depression, are more predisposed to pneumonia and severe clinical conditions[18]. Furthermore, in corroboratory studies, the following self-reported comorbidities prevailed: high blood pressure (28.1%), obesity (27.6%), and psychiatric problems (10%). The main symptoms identified were cough, dyspnea, headache, and fever, with most participants reporting more than one symptom. The study highlights the presence of three to four symptoms in the initial phase of the disease, followed by individuals reporting one to two symptoms.

Regarding the economic impact, nearly half of the participants worked before COVID-19 and stopped working mainly due to the limitations imposed by the disease. The biopsychosocial dimensions are also considered, acknowledging all the repercussions generated in the daily lives of individuals. The pandemic and associated illness led people to experience negative feelings resulting from social distancing, uncertainty about the future, and fear of death, exacerbating the emergence or worsening of mental health problems, such as anxiety and depression[20,21].

In assessing the participants' quality of life, the overall average is low, with the physical aspect having the lowest score, followed by the emotional and vitality aspects. It is, therefore, evident that COVID-19 significantly affected physical capacity, particularly related to muscle strength, and mental health, linked to the presence of fear, anxiety, and depression. It also affected vitality, demonstrating a loss of strength, vigor, and enthusiasm for life among participants.

In terms of sex, in relation totality of life domains such as functional capacity, vitality, social aspects, emotional

aspects, and mental health, males have a better quality of life. In this context, women were more affected, which may be related to decreased strength, anxiety, memory loss, and overload. A study conducted during quarantine showed that this group had a lower quality of life in terms of overall health, in addition to worsening physical function and the presence of body pain[22]. This indicates that women were the most impacted during the pandemic and

Table 1 - Sociodemographic and clinical variables with the domains of quality of life for the research participants (2023).

Variables	Functional capacity	Physical aspects	Pain	Vitality	Social aspects	Emotional aspects	Mental health
	Mean (±sd)	Mean (±sd)	Mean (±sd)	Mean (±sd)	Mean (±sd)	Mean (±sd)	Mean (±sd)
Age group							
<60 anos	46,97(25,52)	19,70(31,72)	41,42(17,92)	32,88(20,62)	44,70(28,82)	34,34(41,24)	46,30(26,12)
≥ 60 anos	42,73(21,14)	21,59(30,17)	44,14(14,79)	43,41(18,35)	47,16(23,12)	40,91(38,40)	53,82(22,31)
p-valor	0,521+	0,685*	0,795*	0,058+	0,739+	0,460*	0,274+
Sex							
Female	36,68(20,36)	19,74(30,29)	40,05(16,78)	33,16(18,76)	40,79(25,61)	28,95(36,49)	42,95(21,40)
Male	60,00(24,75)	22,06(32,93)	48,00(15,42)	45,88(21,23)	56,62(25,81)	54,90(42,40)	63,53(26,34
p-value	0,001+	0,927*	0,195*	0,030+	0,043+	0,034*	0,003+
Race							
White	43,47(23,74)	16,84(27,66)	42,02(17,14)	35,41(18,79)	44,39(26,52)	37,41(40,04)	49,55(24,52)
Non-white	60,00(19,75)	50,00(41,83)	46,50(12,34)	50,83(28,00)	56,25(25,92)	33,33(42,16)	47,33(28,78)
p-value	0,108+	0,017*	0,567*	0,078+	0,305+	0,808*	0,838+
Worked before COVID-19							
Yes	44,07(23,00)	19,77(30,65)	42,12(16,84)	34,53(20,78)	45,35(27,95)	36,43(39,05)	47,26(24,35)
No	49,58(26,92)	22,92(32,78)	43,92(16,58)	46,25(15,69)	46,88(21,40)	38,89(44,57)	56,67(25,74)
p-value	0,482+	0,882*	0,493*	0,076+	0,862+	0,957*	0,247+
Currently employed							
Sim	53,86(22,88)	34,09(33,22)	49,32(16,73)	41,82(19,85)	57,39(25,78)	56,06(40,35)	56,36(23,02)
Não	39,55(22,89)	11,36(25,84)	37,97(15,20)	33,94(20,18)	37,88(24,30)	24,24(34,63)	44,61(25,04)
p-valor	0,028+	0,001*	0,003*	0,159+	0,006+	0,005*	0,084+
Hypertension							
Yes	39,55(22,52)	21,59(33,89)	41,41(16,49)	36,36(19,59)	41,48(21,61)	33,33(38,49)	50,36(21,08)
No	49,09(24,12)	19,70(29,15)	43,24(16,97)	37,58(20,96)	48,48(29,27)	39,39(41,21)	48,61(27,19)
p-value	0,141+	0,969*	0,829*	0,830+	0,0341+	0,566*	0,799+
Diabetes							
Yes	31,79(14,49)	16,07(27,05)	40,86(15,52)	31,43(20,14)	35,71(21,85)	26,19(39,61)	42,57(20,85)
No	49,88(24,66)	21,95(32,21)	43,07(17,17)	39,02(20,16)	49,09(27,30)	40,65(39,80)	51,61(25,75)
p-value	0,002+	0,761*	0,718*	0,229+	0,103+	0,186*	0,241+
Depression							
Yes	38,06(23,46)	19,44(29,15)	37,44(17,69)	29,44(19,32)	34,72(22,09)	22,22(30,25)	36,44(18,40)
No	48,78(23,40)	20,95(32,01)	44,97(15,78)	40,81(19,88)	51,01(27,06)	44,14(42,35)	55,57(25,19)
p-value	0,117+	0,944*	0,119*	0,050+	0,031+	0,082*	0,006+
Anxiety							
Yes	40,68(23,19)	18,92(31,41)	38,86(16,56)	33,24(19,23)	36,82(23,00)	29,73(35,82)	41,73(21,92)
No	54,72(22,65)	23,61(30,28)	50,00(14,55)	45,00(20,51)	63,89(24,21)	51,85(44,61)	64,89(23,31)
p-value	0,038+	0,403*	0,024*	0,042+	<0,001+	0,069*	0,001+

SD: Standard deviation; p-value: +Student's t-test, *Mann-Whitney test. Significance level ≤5%.

Table 2 - Comparison of the quality of life domains related to the Beck Depression Inventory for the research participants (2023).

Dimensions of quality of life	IDB		p-value
	SCND Mean (±SD)	SCD Mean (±SD)	
Functional capacity	53,7(22,9)	31,7(18,6)	<0,001+
Physical aspects	22,8(31,0)	16,7(31,0)	0,335*
Pain	45,6(16,0)	37,6(16,8)	0,089+
Vitality	44,3(17,9)	25,5(18,7)	<0,001+
Social aspects	58,5(22,6)	25,0(18,1)	<0,001+
Emotional aspects*	49,0(42,8)	17,5(25,0)	0,007*
Mental health	60,7(20,6)	30,9(19,2)	<0,001+

BDI: Beck Depression Inventory; CNDS: clinically non-depressive symptoms; CDS: clinically depressive symptoms. SD: standard deviation; p-value: +Student's t-test, *Mann-Whitney test. Significance≤5% level. Source: Study data.

also in the post-COVID-19 period, requiring a longer rehabilitation period. In this regard, sex issues also stand out, as they can directly and significantly influence women's domestic routines and demands in our society.

Regarding work at the time of data collection, when associated with the domains of quality of life, functional capacity, physical, social, and emotional aspects, as well as pain and vitality, it was observed that people who work after COVID-19 have better health. Job security, with the consequent maintenance of income, proves to be a marker of quality of life. On the other hand, it is clear that people in better health were able to return to work. In other studies, the sudden change in daily activities, due to the limitations imposed and staying at home during the long period of social isolation, had a negative impact on both the emotional aspects and work activities of the respondents[7,23].

Regarding the participants' self-reported health conditions prior to COVID-19, it was found that the presence of diabetes and overweight interferes with quality of life, especially in the functional capacity domain. The presence of previous depression and anxiety was considered in the social aspects, mental health, functional capacity, pain, and vitality domains. As for the symptoms presented, cough and dyspnea influenced the assessment of quality of life, especially in the physical aspect. Another result of the present study refers to the anxiety self-reported by the participants, which showed a statistically significant association with depressive symptoms assessed by the IDB. Respiratory and neurological complications contributed to clinically depressive symptoms.

A study with a sample of 45,161 Brazilians demonstrated that only 15% of participants lived normally during the pandemic without restrictions, while 15.1% remained strictly at home. Regarding mood, the study revealed that over 40% of Brazilians frequently felt isolated, anxious, and sad or depressed, with a higher prevalence among women compared to men. Additionally, there was an increase in alcohol and tobacco use and a decrease in physical activity. Consumption patterns also shifted during the pandemic; regular vegetable consumption decreased while the intake of unhealthy foods, such as snacks and frozen foods, increased. Consequently, pre-existing conditions were exacerbated, negatively impacting participants' quality of life due to the new patterns and lifestyle habits adopted during isolation[9].

Regarding the sequelae presented after COVID-19, participants with neurological sequelae have a worse health status in the quality of life assessment in relation to the social, emotional, and mental health domains. Furthermore, people with muscular sequelae have a worse health status considering the physical, pain, vitality, social, and emotional domains. Most post-COVID-19 participants have persistent symptoms, with a decrease in quality of life, increased dependence on others for personal care, and impaired performance in routine activities. Among those who had the disease, most have lasting sequelae and report at least one functional sequela, such as memory loss[24].

In our study, 70.9% of participants exhibited depressive symptoms, with the majority experiencing mild to moderate symptoms, and clinically depressive symptoms were more prevalent among women. Similarly, another study found high prevalence of depression and anxiety during the pandemic with higher rates among females[25].

Comparing the domains assessed by the SF-36 with the IDB in this study, a statistically significant association was found between functional capacity, vitality, social and

emotional aspects, mental health, and clinically depressive symptoms. It was evident that several aspects of participants' quality of life were impaired. Besides the social impact imposed by the COVID-19 pandemic, most patients, after discharge, showed impaired functionality, quality of life, and physical performance, corroborating the presence of depressive symptoms. Social distancing negatively affected mental health and lifestyles, leading to increased feelings of anxiety, isolation, sadness, or depression. There were several psychological implications: the fear of being infected by a potentially fatal virus was compounded by concerns about financial losses, reduced income, tighter budgets, and situations that led to decreased availability and physical strength, affecting participants' quality of life[9].

The post-COVID-19 outcomes and impacts are linked to poorer quality of life and depressive symptoms in this study's patients due to physiological, cognitive, emotional, and motor changes, highlighting the significant negative impact on functionality, health, and return to work. Supporting this, a study conducted in 2021 also demonstrated that several aspects of individuals' quality of life were affected. Social isolation significantly impacts the social, economic, cultural, and historical aspects during pandemics. These negative impacts result in a low quality of life, which can be attributed to increased susceptibility to infection, higher mortality risks among patients with chronic diseases, delays, and inaccessibility to medical care, services, and treatment, as well as poor handling of information, often lacking veracity or scientific proof[8].

The negative repercussions particularly affect vulnerable groups infected with the virus, with impaired control of clinical comorbidities due to physical, cognitive, and mental disabilities associated with fear of the disease[6,7]. Addressing the mental illnesses and psychological disorders brought on by the pandemic opens the door for the creation of public policies for psychosocial care that promote well-being in individuals experiencing social isolation. In this context, rehabilitation strategies developed by an interdisciplinary health team, based on a holistic view and care that extends beyond physical health, become essential[8].

The limitations of this investigation include the bias of temporality, as it is a cross-sectional study. The sample size, although representative, was relatively small considering the number of individuals affected by COVID-19. Nevertheless, the study's findings provide valuable information and contribute to supporting practices aimed at the rehabilitation of post-COVID-19 individuals, given that symptoms and sequelae can persist in the medium and long term, causing significant disruptions to daily routines

CONCLUSION

The study achieved its primary objective of assessing the quality of life in individuals undergoing post-COVID-19 rehabilitation and its relation to sociodemographic factors and depressive symptoms. The overall quality of life score was found to be 39.6. Among the domains measured, the physical aspect scored the lowest, followed by the emotional aspect. The domains of functional capacity, physical aspects, pain, vitality, social aspects, emotional aspects, and mental health, assessed using the SF-36, approached the lower boundary, signifying poorer health status among participants in these areas.

Regarding depression, evaluated through the IDB, 70.9% of participants exhibited depressive symptoms. The majority displayed mild depression, followed by moderate and severe cases. According to the reclassification of the IDB, 21 participants were identified as having clinically significant depression. There was a notable association between sex and the domains of functional capacity, vitality, social aspects, emotional aspects, and mental health, indicating that women experienced poorer health in these domains.

Furthermore, depression was also linked to sex, with women showing a higher association with clinically significant depression. A significant correlation existed between anxiety prior to COVID-19 and clinically significant depression scores. The presence of diabetes mellitus and prior anxiety was significantly related to functional capacity. Other significant relationships were noted, including self-reported previous depression correlating with social aspects and mental health.

It is crucial to propose strategies to promote mental health and psychosocial care over the short, medium, and long term. Such initiatives aim to alleviate mental distress and prevent or mitigate psychiatric disorders. This study's findings can enhance nursing care by elucidating the characteristics of the post-COVID rehabilitation population and variables potentially linked with quality of life and depressive symptoms, thereby guiding targeted care actions. Additionally, it revealed that quality of life scores tend to decline, indicating losses for individuals in rehabilitation, especially women, whose routines have been disrupted, affecting their biopsychosocial well-being. Continuous support in the rehabilitation process, particularly by a multidisciplinary team, is essential due to the

symptoms exhibited that may have long-term impacts on individuals' quality of life.

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