

Quality of Life Assessment in People Living with HIV Treated at a University Hospital in Rio de Janeiro

Avaliação da Qualidade de Vida em Pessoas Vivendo com HIV Atendidas em um Hospital Universitário no Rio de Janeiro
Evaluación de la Calidad de Vida en Personas que Viven con VIH Atendidas en un Hospital Universitario de Río de Janeiro

RESUMO

Objetivos: Avaliar a qualidade de vida de pessoas vivendo com HIV atendidas em um hospital universitário do Rio de Janeiro e sua associação com fatores sociodemográficos e socioeconômicos. **Métodos:** Estudo transversal e observacional, realizado entre julho de 2022 e junho de 2023, com 161 pessoas vivendo com HIV acompanhadas em ambulatório especializado. A qualidade de vida foi avaliada por meio do instrumento WHOQOL-HIV Bref. Os dados foram analisados por estatística descritiva e inferencial, adotando-se nível de significância de 5%. **Resultados:** A maioria dos participantes apresentou qualidade de vida média a alta. Os domínios Relações Sociais e Espiritualidade, Religiosidade e Crenças Pessoais apresentaram os maiores escores, enquanto o domínio Meio Ambiente apresentou o menor. Homens obtiveram melhores escores no domínio Nível de Independência, e indivíduos sem renda apresentaram pior qualidade de vida nos domínios Nível de Independência e Meio Ambiente. **Conclusão:** Embora a qualidade de vida global tenha se mostrado satisfatória, fatores socioeconômicos e de gênero influenciaram negativamente domínios específicos, evidenciando a necessidade de intervenções integradas e direcionadas às vulnerabilidades sociais.

DESCRIPTORES: HIV; Qualidade de Vida; Fatores Socioeconômicos; Questionários.

ABSTRACT

Objectives: To evaluate the quality of life of people living with HIV treated at a university hospital in Rio de Janeiro and its association with sociodemographic and socioeconomic factors. **Methods:** A cross-sectional, observational study conducted between July 2022 and June 2023, including 161 people living with HIV followed at a specialized outpatient clinic. Quality of life was assessed using the WHOQOL-HIV Bref instrument. Data were analyzed using descriptive and inferential statistics, adopting a 5% significance level. **Results:** Most participants reported moderate to high quality of life. The Social Relationships and Spirituality, Religion, and Personal Beliefs domains showed the highest scores, while the Environment domain presented the lowest. Men showed higher scores in the Independence Level domain, and individuals without income demonstrated lower quality of life in the Independence Level and Environment domains. **Conclusion:** Although overall quality of life was satisfactory, socioeconomic and gender-related factors negatively influenced specific domains, highlighting the need for integrated and targeted interventions.

DESCRIPTORS: HIV; Quality of Life; Socioeconomic Factors; Surveys and Questionnaires.

RESUMEN

Objetivos: Evaluar la calidad de vida de personas que viven con VIH atendidas en un hospital universitario de Río de Janeiro y su asociación con factores sociodemográficos y socioeconómicos. **Métodos:** Estudio transversal y observacional realizado entre julio de 2022 y junio de 2023, con la participación de 161 personas que viven con VIH atendidas en un ambulatorio especializado. La calidad de vida fue evaluada mediante el instrumento WHOQOL-HIV Bref. Los datos fueron analizados mediante estadística descriptiva e inferencial, adoptándose un nivel de significación del 5%. **Resultados:** La mayoría de los participantes presentó una calidad de vida de moderada a alta. Los dominios Relaciones Sociales y Espiritualidad, Religión y Creencias Personales obtuvieron los puntajes más altos, mientras que el dominio Medio Ambiente presentó el más bajo. Los hombres mostraron mejores resultados en el dominio

Nível de Independência, y las personas sin ingresos presentaron peor calidad de vida en los dominios Nivel de Independencia y Medio Ambiente. **Conclusión:** Aunque la calidad de vida global fue satisfactoria, factores socioeconómicos y de género influyeron negativamente en dominios específicos, lo que resalta la necesidad de intervenciones integradas y dirigidas.

DESCRIPTORES: VIH; Calidad de Vida; Factores Socioeconómicos; Cuestionarios.

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INTRODUCTION

Understanding the theoretical principles underlying the definition of Quality of Life (QoL) is crucial to ensuring the validity of research on the subject. This is because QoL is a complex and subjective measure, composed of various dimensions that affect a person's life, particularly that of individuals with chronic diseases. By understanding the different models and theories that address it, research methods have been developed to gain a deeper understanding of the factors that influence QoL and, consequently, the most effective policies and interventions to improve it^[1].

People living with HIV/AIDS (PLWHA) face various difficulties in trying to achieve a satisfactory QoL due

to the impacts of changes in their daily lives, the breakdown of interpersonal and occupational relationships, which often leads to social isolation. Problems with sexuality can compromise their mental and physical health. Adapting to these changes can be challenging, requiring an approach that reconciles HIV-related particularities with the individual's perception within their biopsychosocial context^[2].

Consequently, the impact of living with an infection that still carries significant stigma and prejudice is the greatest obstacle between PLHIV and their QoL, directly interfering with their coping ability. In addition, important factors such as poverty, unemployment, food insecurity, housing needs, isolation and loneliness, lack of social support, social and institutional stigma, depres-

sion, and substance abuse—which interact and increase the risk of illness, particularly as they relate to age—have an even greater impact on QoL^[3,4].

Recognizing the importance of this issue, analyzing QoL in PLHIV has contributed to a better understanding of a complex and multifaceted phenomenon.

METHODS

A cross-sectional, observational, qualitative, and quantitative study was conducted using consecutive non-probabilistic sampling^[5] of patients receiving care at the Immunology and AIDS Outpatient Clinic of the Gaffrée e Guinle University Hospital from July 2022 to June 2023 who agreed to participate in the study. Based on previous

statistics from the hospital pharmacy, it is estimated that approximately 2,500 PLWHA are receiving outpatient care at HUGG-UNIRIO/Ebserh.

The researcher administered the World Health Organization Quality of Life HIV questionnaire—in its brief version (WHOQOL-HIV Bref)—in the form of an interview.

Patients were recruited while waiting for their regular outpatient appointments. The average duration of the interviews was approximately 30 minutes. It is worth noting that all interviews were conducted in a private room within the HUGG Immunology and AIDS outpatient clinic itself, in order to ensure the privacy of each participant.

To calculate the sample size, a total of 143 individuals was established, considering this number representative of a population of 2,500 PLHIV treated at the HUGG Immunology and AIDS outpatient clinic. For calculation purposes, the prevalence of low quality of life (QoL) among these individuals was estimated at 3.7%, with an acceptable margin of error of 3.0%, a design effect of 1.0, and clusters of 1. The calculation was performed using EpiInfo 7.2 software (CDC, Atlanta, USA), via the StatCalc- Sample Size and Power.

A clinical and sociodemographic data collection form was used, containing: name, date of birth, age, sex, marital status, self-declared race/ethnicity, pregnancy, breastfeeding, educational level, paid employment, wage income, health indicators, ART, comorbidities, medications used, and habits regarding drug, alcohol, and cigarette use.

To verify normality, the Kolmog-

orov-Smirnov and Shapiro-Wilk tests were used, as well as graphical analysis of the histogram for all continuous data, and descriptive analysis of the continuous data was performed according to whether the distribution was normal or not.

To assess the reliability and internal consistency of the results obtained from the scores of the quality of life assessment instrument used in the study, the WHOQOL-HIV BREF questionnaire, Cronbach's alpha coefficient was used [6].

The Kruskal-Wallis H test was used to compare three or more groups (education level, race and ethnicity, income, frequency of alcohol, tobacco, and drug use), with Bonferroni correction [7, 8] to adjust the alpha in two-by-two comparisons for analyses showing significant differences.

Correlations were calculated using Spearman's rho (r_s) between the continuous variable age and the domain scores obtained from the WHOQOL-HIV BREF instrument.

The statistical software SPSS version 27 (IBM Company, Armonk, NY) was used for the calculations reported above. The minimum level of significance used was 5% ($p < 0.05$).

This study is part of a research project titled "VIRAL LOAD, LYMPHOCYTES, STRESS, AND QUALITY OF LIFE OF PEOPLE LIVING WITH HIV, WITH DIFFERENT LEVELS OF REGULAR PHYSICAL ACTIVITY, TREATED AT A

" that has been conducted since 2022. The aforementioned research complied with all ethical principles of resolutions

No. 466/12 and No. 510/16 and was approved by the

Research Ethics Committee of the Gaffrée e Guinle University Hospital (CEP-HUGG) under opinion No. 54523521.2.0000.5258 (APPENDIX 10.1).

Individuals treated at the HUGG immunology and AIDS outpatient clinic between July 2022 and June 2023 were invited and recruited to participate in the study. Those who agreed to participate were presented with the Informed Consent Form (ICF), which was signed by both the participants and the researcher.

Participants underwent an interview, during which they completed a medical history questionnaire consisting of questions regarding personal identification, as well as others pertaining to criteria used for inclusion or exclusion from the study.

They were informed in detail about the study protocol in order to provide all necessary clarifications regarding Resolution 466/2012.

RESULTS

A total of 161 individuals participated in the study, including 83 women and 78 men, with a mean age of 46.7 years ($SD \pm 9.1$ years; minimum age 19 and maximum age 62). Among women, the mean age was 47.0 years ($SD \pm 9.4$ years); among men, the mean was 46.5 years ($SD \pm 8.9$ years). Table 1 presents the characteristics of the sample profile, including sociodemographic and socioeconomic variables and health perceptions.

Table 1. SOCIODEMOGRAPHIC, ECONOMIC, AND HEALTH PERCEPTION CHARACTERISTICS

VARIABLE	N (%)
SEX	
FEMALE	83 (51.6%)
MALE	78 (48.4%)

MARITAL STATUS	
SINGLE	106 (65.8%)
MARRIED	29 (18%)
DIVORCED	16 (9.9%)
WIDOWED	8 (5%)
STABLE UNION	2 (1.2%)
SELF-DECLARED RACE/COLOR	
WHITE	41 (25.5%)
BLACK	39 (24.2%)
BROWN (MIXED-RACE)	74 (46%)
INDIGENOUS PEOPLES	4 (2.5%)
YELLOW (ASIAN)	3 (1.9%)
EDUCATION LEVEL	
1 TO 3 YEARS	8 (5%)
4 TO 7 YEARS	27 (16.8%)
8 TO 11 YEARS	88 (54.7%)
12 YEARS OR MORE	37 (23%)
MISSING	1 (0.6%)
PAID EMPLOYMENT	
YES	78 (48.4%)
NO	65 (40.4%)
RETIRED	18 (11.2%)
INCOME	
NO INCOME	18 (11.2%)
UP TO 1 MINIMUM WAGE	49 (30.4%)
1 TO 3 MINIMUM WAGES	77 (47.8%)
3 TO 5 MINIMUM WAGES	9 (5.6%)
5 MINIMUM WAGES	7 (4.3%)
MISSING	1 (0.6%)
ANTIRETROVIRAL THERAPY	
YES	156 (96.9%)
NO	3 (1.9%)
MISSING	2 (1.2%)
SMOKING	
YES	32 (19.9%)
NO	129 (80.1%)
ALCOHOL CONSUMPTION	
YES	103 (64%)
NO	58 (36%)
SELF-PERCEIVED HEALTH	
VERY POOR	4 (2.5%)
POOR	9 (5.6%)
GOOD	92 (57.1%)
VERY GOOD	32 (20.5%)

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EXCELLENT	22 (13.7%)
MISSING	1 (0.6%)
DEPRESSION AND ANXIETY	
YES	94 (58.8%)
NO	66 (41.3%)
MISSING	1 (0.6%)
COMORBIDITY	
YES	101 (62.7%)
NO	60 (37.2%)

Based on the data obtained from the medical history questionnaire, it is evident that, among the patients interviewed, the majority were single, accounting for 106 (65.8%) of the total. Regarding self-reported ethnic and racial background, 41 (25.5%) individuals identified as white, and as non-white: 39 (24.2%) Black, 74 (46%) mixed-race, 4 (2.5%) indigenous, and 3 (1.9%) Asian.

When analyzing the socioeconomic profile in terms of educational attainment, the predominant group had 8 to 11 years of schooling, accounting for 88 (54.7%) of the participants. Regarding occupation, 78 (48.4%) of

the respondents reported having paid employment. With regard to monthly income, 77 (47.8%) of the respondents fell within the monthly income range of 1 to 3 minimum wages.

Regarding subjective health perception, it is interesting to note that 147 (91.3%) of the respondents rated their health status positively. Interestingly, within this same group, 94 (58.8%) of the patients acknowledged experiencing recurrent episodes of depression or anxiety, highlighting a discrepancy between subjective health perception and the manifestation of adverse psychological conditions.

According to the questionnaire

results, the domain most affected in relation to QoL was ERCP, with 23 (14.3%) patients reporting low QoL. Despite some abstentions, it is noted that the majority of patients fall within the medium to high QoL range, with the social relationships domain having the highest number of patients positively impacted (96 / 59.6%), demonstrating how much a good social relationship with friends and relatives can positively impact the lives of PLHIV.

Table 2 summarizes the distribution of the 161 patients according to the scores obtained in each domain.

Table 2. SUMMARY OF QUALITY OF LIFE DOMAINS

DOMAINS	LOWN/%	MEDIUMN/%	HIGHN/%	MISSINGN/%
PHYSICAL	19 / 11.8%	48 / 29.8%	93 / 57.8%	1 / 0.6%
PSYCHOLOGICAL	12 / 7.5%	56 / 34.8%	92 / 57.1%	1 / 0.6%
LEVEL OF INDEPENDENCE	17 / 10.6%	62 / 38.5%	82 / 50.9%	0 / 0%
SOCIAL RELATIONS	10 / 6.2%	52 / 32.3%	96 / 59.6%	3 / 1.9%
ENVIRONMENT	14 / 8.7%	91 / 56.5%	52 / 32.3%	4 / 2.5%
ERCP	23 / 14.3%	45 / 28.0%	93 / 57.8%	0 / 0%
OVERALL QUALITY OF LIFE	6 / 3.7%	56 / 34.8%	99 / 61.5%	-

ERCP - SPIRITUALITY, RELIGIOSITY, AND PERSONAL BELIEFS

As shown in the table above, most patients have a high QoL (99 / 61.5%). Table 3 provides an average of the

scores obtained in each of the QoL domains.

Table 3. DISTRIBUTION OF SCORES FOR QUALITY OF LIFE DOMAINS

DOMAIN	MEAN (SD)	MINIMUM	MAX	Cronbach's α
PHYSICAL	14.83 (3.36)	4	20	0.759
PSYCHOLOGICAL	14.74 (2.81)	7	20	0.759
LEVEL OF INDEPENDENCE	14.48 (3.04)	6	20	0.752
SOCIAL RELATIONSHIPS	14.87 (2.83)	7	20	0.776
ENVIRONMENT	13.66 (2.34)	7	19	0.783
ERCP	15.15 (3.70)	6	20	0.838
QUALIDADE DE VIDA GLOBAL	6 / 3,7%	56 / 34,8%	99 / 61,5%	–

ERCP - Spirituality, Religiosity, and Personal Beliefs.

Analyzing the mean scores obtained by domain among participants, it is noteworthy that the domains of Social Relationships and Spirituality, Religiosity, and Personal Beliefs (ERCP) achieved the highest mean scores, registering 14.87 and 15.15, respectively. On the other hand, the

Environment domain had the lowest score, with a value of 13.66 points.

The Cronbach's Alpha analysis demonstrated the questionnaire's reliability, with values greater than 0.75, thus confirming the study's high reliability and that each domain is independent of the others.

The assessment of QoL, consider-

ing sociodemographic and economic data, is presented in Table 4. This table shows the mean and standard deviation of each data point related to each domain of the questionnaire used.

Table 4. QUALITY OF LIFE AND SOCIO-DEMOGRAPHIC DATA

VARIABLES	Mean quality of life score (SD)					
	PHYSICAL	PSYCHOLOGICAL	LEVEL OF INDEP.	SOCIAL	ENVIRONMENT	ERCP
GENDER						
FEMALE	14.53 / 3.39	14.41 / 2.78	13.96 / 3.40	14.48 / 3.09	13.40 / 2.30	15.03 / 3.72
MALE	15.13 / 3.32	15.08 / 2.81	15.00 / 2.55	15.26 / 2.51	13.92 / 2.38	15.28 / 3.69
P VALUE	P = 0.258	P = 0.055	P = 0.041*	P = 0.104	P = 0.081	P = 0.479
MARITAL STATUS						
SINGLE	14.75 / 3.52	14.83 / 2.87	14.39 / 2.96	14.79 / 2.97	13.67 / 2.35	15.09 / 3.60
MARRIED	15.27 / 2.34	14.61 / 2.37	14.38 / 3.13	15.00 / 2.20	13.98 / 2.65	15.15 / 3.69
DIVORCED	14.87 / 3.52	15.14 / 3.17	15.33 / 2.89	15.60 / 3.20	13.23 / 2.07	16.47 / 3.90
WIDOWER	14.13 / 4.45	13.60 / 3.11	14.25 / 4.55	14.25 / 2.71	13.31 / 2.06	13.88 / 4.58
CIVIL UNION	15.50 / 2.12	13.60 / 1.13	14.50 / 2.12	14.00 / 1.41	13.50 / 2.12	13.50 / 4.95
P VALUE	P = 0.901	P = 0.637	P = 0.828	P = 0.669	P = 0.774	P = 0.527
SELF-IDENTIFIED RACE						
WHITE	15.08 / 3.45	14.85 / 2.88	14.62 / 3.15	15.21 / 2.56	14.12 / 2.05	15.49 / 3.78
BLACK	14.74 / 3.68	14.80 / 2.75	14.89 / 2.99	14.74 / 2.94	13.90 / 2.00	14.76 / 3.73
BROWN	14.52 / 3.21	14.71 / 2.91	14.16 / 2.90	14.77 / 2.99	13.25 / 2.63	15.16 / 3.72
INDIGENOUS PEOPLES	18.00 / 1.41	14.60 / 1.64	16.25 / 0.95	14.25 / 2.21	13.12 / 2.95	13.50 / 2.64
YELLOW	15.67 / 1.52	13.60 / 2.88	12.33 / 6.50	15.33 / 3.05	14.66 / 1.44	17.67 / 3.21
P VALUE	P = 0.229	P = 0.916	P = 0.492	P = 0.924	P = 0.225	P = 0.526
EDUCATIONAL LEVEL						
1 to 3	14.86 / 4.37	14.51 / 3.21	14.00 / 4.08	15.57 / 2.93	14.00 / 3.61	13.86 / 4.37
4 to 7	14.58 / 3.73	14.24 / 3.02	13.96 / 3.83	14.31 / 3.62	13.34 / 2.67	14.92 / 3.46

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8 to 11	14.85 / 3.34	15.11 / 2.81	14.61 / 2.89	14.89 / 2.75	13.43 / 2.25	15.29 / 3.77
12 AND ABOVE	15.03 / 3.08	14.33 / 2.60	14.65 / 2.65	15.03 / 2.43	14.28 / 1.99	15.43 / 3.51
P VALUE	P = 0.070	P = 0.063	P = 0.786	P = 0.644	P = 0.132	P = 0.969
INCOME						
NO INCOME	13.59 / 3.55	13.50 / 2.91	12.24 / 3.27	14.65 / 2.78	12.26 / 1.84	15.35 / 3.08
UP TO 1 SAL	14.67 / 3.66	14.52 / 2.93	14.40 / 3.26	14.22 / 3.03	13.35 / 2.39	14.33 / 3.92
>1 to 3 SAL	14.84 / 3.25	15.00 / 2.76	14.63 / 2.76	15.04 / 2.85	13.87 / 2.33	15.44 / 3.76
>3 to 5 SAL	16.78 / 1.92	14.66 / 2.46	15.78 / 2.04	16.00 / 1.80	14.55 / 1.94	16.11 / 2.89
>5 SAL	15.67 / 2.16	16.13 / 1.78	16.67 / 1.36	16.33 / 1.96	15.16 / 1.57	15.00 / 3.89
P-VALUE	P = 0.099	P = 0.213	P = 0.003*	P = 0.305	P = 0.007*	P = 0.403

ERCP - Spirituality, Religiosity, and Personal Beliefs; SAL - Minimum Wage

Compared to men, it was noted that the level of independence domain was significantly higher in QOL for women than for men ($p = 0.041$).

Patients with no income showed statistical significance compared to patients with an income greater than 5 minimum wages in the independence domain ($p = 0.01$) and the environment domain ($p = 0.26$).

DISCUSSION

Regarding the socioeconomic profile of the participants, the present study identified a prevalence of females, as also found in other studies [9, 10]. The sample selection was convenience-based and not random, as it involved an interview conducted with patients available at the outpatient clinic on the day of their appointment. However, there was no selection by the interviewers that could imply any selection bias.

Even though the majority of the sample consisted of women, the difference in distributions between the sexes was small. According to [2], in recent years, the number of women affected by the virus has increased, especially among heterosexual women in stable relationships, the vast majority of whom are infected by their partners.

As in [11], men reported higher QoL levels than women, consistent with

the present study in the physical, psychological, independence, and social domains.

Age is a major determinant of mortality in various diseases, including HIV infection. The data obtained in this study revealed that the participants were aged between 19 and 62 years. Studies conducted by [12] and [13] identified that the age group with the highest survival rate for people living with HIV is 30 to 59 years, demonstrating that the participants in this study have a predisposition toward longer survival.

Regarding marital status, the majority of study participants were single, as in the study by [14]. Regarding self-reported race/ethnicity, a prevalence of mixed-race individuals was identified, corroborating the data presented in the 2022 Epidemiological Bulletin [15], which reports a prevalence of mixed-race individuals among people living with HIV in Brazil.

The connection between educational attainment and HIV infection can be influenced by a range of variables, including the local context, as well as social and economic factors. In addition to educational attainment, factors such as access to health services, social and economic disparities, HIV-related stigma, and cultural issues play a crucial role in the spread and management of the infection. These variables significantly impact the QoL of PLHIV and can influence

various aspects.

Financial stability plays a crucial role in the overall well-being of PLHIV. Ensuring continuous access to treatment and healthcare, as well as promoting equity in the workplace and combating all forms of discrimination, are fundamental pillars for improving security.

CONCLUSION

QOL among PLHIV is a complex and multifaceted phenomenon influenced by sociodemographic, economic, and clinical factors. The results of this study indicate that most participants have high QOL, particularly in the domains of Social Relationships and Spirituality, Religiosity, and Personal Beliefs (SRR). However, QoL is significantly lower among women in the Level of Independence domain and among patients with no income in the Level of Independence and Environment domains. These findings reinforce the need for targeted interventions that consider gender-specific factors and socioeconomic status to improve the QoL of PLHIV.

REFERENCES

1. Sosnowski R, Zegarski J, Stachowicz-Stencel T, Haczkowski J, Adamowicz J, Hryhorowicz M, et al. Basic issues concerning health-related quality of life. *Cent European J Urol*. 2017;70(2):206-11.
2. Oliveira LB. Fatores sociodemográficos, clínicos, comportamentais e afetivos sexuais associados com parceria sexual sorodiscordante de pessoas vivendo com HIV/Aids [Dissertação]. Ribeirão Preto: Escola de Enfermagem de Ribeirão Preto, Universidade de São Paulo; 2018.
3. Hessol NA, Schwarcz S, Frick PA, Weber KM, Cohen MH, Anastos K, et al. All-cause mortality and mortality related to AIDS, non-AIDS cancer, and liver disease in women with human immunodeficiency virus in the United States: 1994-2008. *Am J Epidemiol*. 2017;185(10):924-33.
4. Venturini G, Carenzi L, Cogliati C, Rizzardini G, Castagna A, Lazzarin A, et al. Quality of life in an Italian cohort of people living with HIV in the era of combined antiretroviral therapy. *AIDS Care*. 2017;29(11):1373-7.
5. Santos ECM, França Junior I, Lopes F. Qualidade de vida de pessoas vivendo com HIV/Aids em São Paulo. *Rev Saúde Pública*. 2007;41(S2):64-71.
6. Cronbach LJ. Coefficient alpha and the internal structure of test. *Psychometrika*. 1951;16(3):297-334.
7. Bonferroni CE. Teoria statistica delle classi e calcolo delle probabilità. *Pubblicazioni del R Istituto Superiore di Scienze Economiche e Commerciali di Firenze*. 1935;8:3-62.
8. Bonferroni CE. Il calcolo delle probabilità. *Pubblicazioni del R Istituto Superiore di Scienze Economiche e Commerciali di Firenze*. 1936;10:1-64.
9. Cruz ML, Guerra C, Mussi-Pinhata MM, de Souza CB, de Lima F, de Oliveira RH, et al. Viral suppression and adherence among HIV-infected children and adolescents on antiretroviral therapy: results of a multicenter study. *J Pediatr (Rio J)*. 2014;90(6):563-73.
10. Villela WV, Barbosa RM. Trajetórias de mulheres vivendo com HIV/Aids no Brasil: avanços e permanências da resposta à epidemia. *Ciênc Saúde Coletiva*. 2017;22(1):87-96.
11. Ferreira G, Oliveira M, Paniago AM. Qualidade de vida de pessoas vivendo com HIV/AIDS em um centro de referência. *Rev Bras Enferm*. 2012;65(1):111-7.
12. Sousa KM, Cerqueira MBR. Entre prazeres e dores: um retrato da epidemia de HIV/AIDS em mulheres de 30 a 59 anos de idade. *Rev Eletrônica Acervo Saúde*. 2021;13(2):1-16.
13. Gonçalves C, Silva M, Santos A, Souza M, Santos E. Fatores associados à sobrevivência de pessoas vivendo com HIV/AIDS no Brasil. *Rev Bras Epidemiol*. 2020;23:e200001.
14. Rebolças M, Dourado I, Maciel M, Brito AM, Silva LA, Silva M, et al. Mortalidade precoce em pessoas vivendo com HIV/AIDS admitidos no centro de referência em Salvador, Brasil em 2017. *Braz J Infect Dis*. 2022;26(1):1-8.
15. Brasil. Ministério da Saúde. Secretaria de Vigilância em Saúde. Departamento de Doenças de Condições Crônicas e Infecções Sexualmente Transmissíveis. Boletim Epidemiológico HIV/Aids. Brasília: Ministério da Saúde; 2022.
16. World Health Organization. WHOQOL-HIV instrument: scoring and coding for the WHO-QOL-HIV instruments: user's manual, 2012 revision. Geneva: World Health Organization; 2002.
17. WHOQOL-HIV Group. Preliminary development of the World Health Organization's Quality of Life HIV instrument (WHOQOL-HIV): analysis of the pilot version. *Soc Sci Med*. 2003;57(7):1259-75.