

## QUALITY OF LIFE OF PEOPLE LIVING WITH HIV

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## ABSTRACT

The objective was to analyze the quality of life of people living with HIV. Data were collected from March to October 2016 from 281 people living with HIV, attended at four public health services. The data were collected through a socioeconomic and clinical data instrument and the WHOQOL-HIV brief, analyzed by inferential statistics, seeking to establish statistical associations between the domains of quality of life and socioeconomic and clinical variables. The results showed statistically significant differences, with higher quality of life scores for males, age between 39 and 59 years, higher education, employed, with paid activity and income above two minimum wages, longer time for HIV diagnosis (over six years), use ART, asymptomatic and non-ART-related changes, use of a condom, not feeling ill, and have a positive perception of health. It is concluded that some socioeconomic and clinical conditions favor or not the most positive evaluation of the quality of life by people living with HIV.

**Keywords:** Quality of life. HIV. HIV Seropositivity. Health. Nursing.

## INTRODUCTION

In Brazil, from an initial number of 10 cases in 1982, until June 2017, 882,810 cases of AIDS were notified. Regarding HIV infection, 194,217 cases were reported in SINAN from 2007 to June 2017, being 49.7% in the Southeast, 20.7% in the South, 15.6% in the Northeast, 7.4% in the North and 6.7% in the Midwest. In 2016, 37,884 cases of HIV infection were reported, 41.6% in the Southeast region, 20.3% in the Northeast and South, 10.3% in the North and 7.5% in the Midwest region. Also, from 1980 to 2016, a total of 316,088 deaths were recorded, with HIV/AIDS as the basic cause<sup>(1)</sup>.

One of the most important facts generated by public policies in response to HIV in Brazil was the approval of Law 9,313/1996, which guaranteed and still guarantees the free and universal distribution of antiretrovirals for people living with HIV and AIDS, ensuring equal treatment to all. With the reduction of mortality, the importance of antiretroviral therapy (ART) and, above all, access, increasing survival and quality of life of people living with HIV, as well as the reduction of opportunistic infections<sup>(2)</sup>.

In this sense, quality of life, in the analysis of the evolutionary history of the HIV epidemic, can be perceived in two distinct moments, one before and after the ART, highlighting the psychosocial interface with the possibility of living with a chronic condition<sup>(3)</sup>.

However, even recognizing the positive changes in the context of the disease, the difficulties placed on the quality of life of this group remain even today

The understanding of the quality of life of these people is central to know the repercussion of coexistence with the disease in the most diverse domains studied. The studies on quality of life in people living with HIV performed in the last years mainly evaluated the physical and psychosocial dimensions making possible the planning of strategies with the purpose of improving the quality of life. The understanding of the biopsychosocial impacts inherent to the disease allows a wider perception of the damages caused by the infection, as well as the direction of health policies and the adequacy of interdisciplinary support services<sup>(4)</sup>.

Although there are numerous definitions and concepts, for the World Health Organization (WHO), quality of life reflects the individual's perception of their position in life in the context of the culture and value system in which they live and in regarding to their goals, expectations, standards and concerns<sup>(5)</sup>. The evaluation of the quality of life of people living with HIV aims to benefit the monitoring of health care, adherence, the effectiveness of antiretroviral therapy and self-care.

Understanding the quality of life from a broad concept, which incorporates physical and psychological health, level of independence, social relations and the

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environment; this study aimed to analyze the quality of life of people living with HIV.

## METHODOLOGY

In this quantitative study, non-probabilistic, convenience-based sampling was chosen based on information provided by the health services of the number of people in the follow-up in each institution. The total sample consisted of 281 people living with HIV, 101 in the city of Niterói and 180 in the city of Rio de Janeiro.

Individuals were invited to participate in the survey according to the presence in the health services in the periods established for the data collection, until completing the number defined for the sample in each municipality. Whenever there were refusals for participation or abandonment, new individuals were invited to replace, until the sample was totalized, and the first ones were selected to agree to voluntarily participate in the study.

The inclusion criteria of the participants were: to have positive serology for HIV; being in follow-up at the selected service for data collection; waiting for consultation, information or examinations during the period of data collection in the unit; be 18 years of age or older; being in clinical and psychological conditions that would enable participation. As exclusion criteria, individuals who declared themselves to be illiterate, with significant visual impairment or lack of clinical condition were replaced because of the need for reading and interpretation to answer the self-applied questionnaires.

Data collection was carried out from March to October 2016 in four Specialized HIV/AIDS Care Services, one in the city of Niterói and three in the city of Rio de Janeiro. The data were collected through a socio-economic and clinical data instrument and the WHOQOL-HIV brief, translated and validated for the Brazilian context, with 31 questions distributed in six domains: physical, psychological, level of independence, social relations, environment and spirituality, religion and personal beliefs (SRPB)<sup>(5)</sup>.

Data processing was performed using a spreadsheet prepared in Microsoft Excel® 2010 and transferred to SPSS® software. The categorization of continuous variables, such as age and time of HIV diagnosis, was performed using the tercile; the variable education followed the Laws, Guidelines and Bases of National Education<sup>(6)</sup>, which divides into two main groups: basic education and higher education, and the variable income

was categorized in people who received up to two minimum wages and people who received more than two minimum wages, in order to keep groups homogeneous in relation to the number of participants.

The quality of life scores were calculated by means of a simple mean, grouping the questions corresponding to each domain<sup>(7)</sup>. According to the presentation of the instrument's responses on a Likert scale, scores range from one to five, indicating that the higher the average, the more positive is the assessment of the individual's quality of life. Statistical analyzes were performed between the domains of quality of life (dependent variable) and socioeconomic and clinical variables (comparison variables), considering the categorization of the variables to compare the means obtained by the groups, being statistically significant when  $p \leq 0.05$ .

The requirements set in Resolution 466/12 of the National Health Council were respected, and the project was approved through opinions 1,441,788/2016 and 1,341,344/2015. The Term of Free and Informed Consent was made available to all participants, on the first contact, guaranteeing the right to confidentiality and anonymity.

## RESULTS

The socioeconomic and clinical characteristics of the participants are shown in table 1. The sample consisted of men ( $n=193$ , 68.7%); age range between 18 and 59 years ( $n=260$ , 92.5%), mean of 41.1 years and standard deviation of  $\pm 12.7$  years; schooling in basic education ( $n=210$ , 74.7%); living with a partner ( $n=142$ , 50.5%) and living with relatives ( $n=188$ , 66.9%). Yet, most of the participants have jobs ( $n=175$ , 62.3%); income of up to two minimum wages ( $n=159$ , 56.6%); prevalence of Catholics ( $n=88$ , 31.4%); and heterosexual orientation ( $n=144$ , 51.2%).

Regarding clinical data, there was a prevalence of HIV infection by homosexual relationship ( $n=121$ ; 43.1%); most is diagnosed of HIV for over six years ( $n=176$ ; 62.6%), uses ART ( $n=262$ , 94.3%), has no infection-related symptoms ( $n=252$ , 89.7%) and no changes related to the use of antiretroviral medication ( $n=139$ , 52.5%). Still, they have a positive perception of health ( $n=233$ , 82.9%) and are not considered ill ( $n=234$ , 83.3%).

The changes related to the use of antiretroviral medication were investigated according to the following offered options: hyperglycemia, changes in cholesterol, lipodystrophy, neurological symptoms, others, do not have/had alterations; being considered any change indicated for the alternative has or had changes.

**Table 1.** Characterization of people living with HIV. Rio de Janeiro and Niterói, 2016.

Variables (n = 281)		n (%)
Gender	Male	193 (68.7)
	Female	88 (31.3)
Average age (years)	18 to 38	123 (43.8)
	39 to 59	137 (48.7)
	60 and more	21 (7.5)
Education	Basic education	210 (74.7)
	Higher education	71 (25.3)
Marital status	With partner	142 (50.5)
	Without partner	139 (49.5)
People who share housing with	Family	188 (66.9)
	Alone	78 (27.8)
	Friends	15 (5.3)
Employment situation	Employed	175 (62.3)
	Retired/other	56 (19.9)
	Unemployed	50 (17.8)
Income in reais	Up to R\$ 1734 (2 minimum wages)	159 (56.6)
	R\$ 1735 and more	122 (43.4)
Religion	Catholic	88 (31.4)
	None	74 (26.3)
	Evangelicals	65 (23.1)
	Other religions	54 (19.2)
Exposure to HIV	Homosexual relationship	121 (43.1)
	Heterosexual relationship	113 (40.2)
	Blood transmission	45 (16)
	Injectable drugs	2 (0.7)
Sexual orientation	Heterosexual	144 (51.2)
	Homosexual/Bisexual	137 (48.8)
	Up to 24 months (2 years)	28 (10)
HIV diagnosis time	From 25 to 72 months (2 years and 1 months to 6 y)	77 (27.4)
	From 73 to 168 months (6 years and 1 month to 14 y)	88 (31.3)
	169 months and more (14 years and 1 month and +)	88 (31.3)
Use of ART	Yes	265 (94.3)
	No	16 (5.7)
Stage of infection	With symptoms	252 (89.7)
	Without symptoms	29 (10.3)
Changes in relation to the ART (n = 265)	No changes	139 (52.5)
	Has or had changes	126 (47.5)
Perception of health	Positive	233 (82.9)
	Negative	48 (17.1)
Consider him/herself ill	No	234 (83.3)
	Yes	47 (16.7)

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Table 2 shows the results of the statistically significant differences ( $p \leq 0.05$ ) between the groups according to the categorization of the variables. For the gender variable, males presented statistically significant averages higher in the psychological, social, environmental and spirituality domains, religion and personal beliefs. People aged 39 to 59 years had a statistically significant higher average for spirituality, religion and personal beliefs, as well as those who live in a large municipality and have a diagnosis time of 6 years and 1 month up to 14 years. People with in higher education have statistically significant averages higher in the domains: physical, psychological, level of independence, social relations and environment.

Even, people with employment, occupation, higher

income, no symptoms, who do not consider themselves ill and with positive perception of health have statistically significant averages higher in all domains evaluated. People seeking information with health professionals have a higher average level of independence; those who used/uses drugs have the lowest statistically significant averages in the domains of independence, social relations and environment. Those who use ART have statistically significant averages higher in physical domains and spirituality, religion and personal beliefs. Those who do not have ARV-related changes have a statistically significant higher average in the physical domain and those who always use condoms in the physical, psychological, independence, environment and spirituality domains, religion and personal beliefs. The variable marital situation, people who share housing, religious orientation, time of use of ART and sexual orientation, did not present significant differences for the domains of quality of life.

## DISCUSSION

The analyzes showed a set of statistical associations between all domains of quality of life and different socioeconomic and clinical variables, indicating the dependence relation of the quality of life scores in relation to the social insertion of the subjects, as well as the clinical profiles demonstrated. Regarding the socioeconomic characteristics, the sample corroborates with national and international data since it is composed mainly by men<sup>(1)</sup>; ages ranging from 25 to 39 years<sup>(1)</sup>, with emphasis on the age group of 30 to 39 years<sup>(8-12)</sup>; income of up to two minimum wages<sup>(10,12)</sup>.

The marital situation was similar among the study participants, however, the majority reported living with a partner, corroborating with other studies<sup>(8,13)</sup>. The unemployment rate found in this study is probably related to the situation of the country at the time of data collection, characterized by an economic crisis with high unemployment rates<sup>(14)</sup>.

Statistical association analysis of socioeconomic and clinical variables and quality of life domains indicated that the gender variable presented a statistically significant difference in the psychological, social, environmental and spirituality domains, religion and personal beliefs, and the averages for the male gender were always higher. These findings are similar to other studies that showed significant differences for males in four domains in Paraíba: physical, psychological, social relations and environment<sup>(12)</sup>; and in three domains in the state of Mato Grosso do Sul<sup>(15)</sup> and Rio Grande do

Sul<sup>(13)</sup>: physical, psychological and spirituality, religion and personal beliefs and in the level of independence in the state of Rio de Janeiro<sup>(16)</sup>. At the international level the findings of a study carried out in Burkina Faso showed statistical difference between the genders for the domains: psychological, level of independence, social relations, environment and spirituality, religion and personal beliefs, with higher averages also for males<sup>(17)</sup>.

The age variable was associated only with the domain of spirituality, religion and personal beliefs, in which the average age of the participants between the ages of 39 and 59 years was higher, being different from that between the ages of 18 and 38 years, pointing out that people with ages between 39 and 59 years evaluate their quality of life better than those aged between 18 and 38 years. These findings are similar to those found in Rio Grande do Sul<sup>(13)</sup>, whose people over 47 years of age presented higher averages in the assessment of quality of life in the psychological, social and spirituality domains, religion and personal beliefs than those with less of 47 years. Furthermore, the results found at the international level in Nigeria point to a better quality of life for people over 40 in the fields of environment and spirituality, religion and personal beliefs<sup>(18)</sup>.

The municipality of residence showed a difference in the area of spirituality, religion and personal beliefs, indicating that living in a large municipality is associated with higher quality of life scores in this domain. This finding is justified by the concern about prejudice and the fact that people living with HIV can be identified by acquaintances, even within the health services. The invisibility provided by the big cities causes the non-disclosure of the diagnosis to others, preventing judgment and social stigmatization, favoring a positive evaluation of the quality of life. Thus, health monitoring in a different place and away from home can be understood as a choice that aims to protect the secrecy about seropositivity, since, in general, large municipalities rely on several health care centers and health centers in different neighborhoods and distant from home.

The variable education had an association in the physical, psychological, independence, social relations and environment domains, with the highest averages for higher education, pointing out that people with higher education value their quality of life better in these domains than those with lower education. This result corroborates data in Mato Grosso do Sul<sup>(15)</sup>, which presented lower quality of life scores in these same

domains for people with lower educational levels. In addition, the data in Rio Grande do Sul<sup>(13)</sup> indicated that lower schooling reflected in lower quality of life also in other domains. Similarly, in Burkina Faso<sup>(17)</sup>, it was associated with physical domains, level of independence and social relations; in Nigeria<sup>(18)</sup>, was associated to the

physical, psychological, independence, environment and spirituality domains, religion and personal beliefs; as well as data from another study<sup>(12)</sup>, which revealed a significant difference in the domains of independence, social relations and environment, with the highest averages in the category with ten years or more of study.

**Table 2.** Distribution of domains of quality of life according to socioeconomic and clinical variables. Rio de Janeiro and Niterói, 2016.

Domain WHOQOL-HIV brief	Physical		Psychological		Level of independence		Social relationships		Environment		SRPB	
Variables	Average	p	Average	p	Average	p	Average	p	Average	p	Average	p
Gender		0.083		0.002		0.223		0.017		0.015		0.002
Male	3.73		3.90		3.70		3.82		3.43		3.86	
Female	3.54		3.61		3.58		3.56		3.23		3.49	
Age		0.538		0.206		0.649		0.942		0.505		0.000
18 to 38 years	3.61		3.72		3.64		3.75		3.34		3.48*	
39 to 59 years	3.73		3.88		3.70		3.72		3.38		3.96*	
60 years and more	3.66		3.81		3.55		3.75		3.51		3.85	
City of residence		0.085		0.402		0.109		0.626		0.445		0.046
Small or medium	3.47		3.73		3.50		3.68		3.31		3.50	
Large	3.71		3.82		3.70		3.75		3.39		3.80	
Education		0.000		0.000		0.000		0.021		0.000		0.152
Basic school	3.56		3.72		3.57		3.67		3.26		3.70	
Higher school	3.99		4.06		3.95		3.93		3.70		3.88	
Employment situation		0.000		0.000		0.000		0.000		0.009		0.008
Unemployed	3.42		3.61		3.38		3.50		3.24		3.55	
Employed	3.82		3.93		3.84		3.88		3.45		3.86	
Occupation		0.000		0.000		0.000		0.000		0.002		0.000
without paid activity	3.46		3.65		3.44		3.56		3.26		3.56	
with paid activity	3.90		3.99		3.92		3.93		3.50		3.95	
Income in reais		0.001		0.001		0.000		0.009		0.000		0.001
Up to 2 salaries (up to 1734,00)	3.52		3.68		3.50		3.62		3.19		3.58	
More than 2 salaries (= 1735)	3.86		3.97		3.88		3.88		3.60		3.95	
Source of information		0.010		0.075		0.045		0.362		0.055		0.938
Social environment	3.51*		3.74		3.54*		3.66		3.30		3.76	
Sites in general	3.64		3.74		3.68		3.74		3.32		3.71	
Scientific/professional environment	3.88*		3.94		3.81*		3.83		3.50		3.74	
Exposition to HIV		0.282		0.126		0.004		0.009		0.046		0.182
Injectable drugs	2.62		2.90		1.97**		2.50*		2.43*		3.35	
Homosexual relationship	3.73		3.87		3.75		3.84		3.37		3.78	
Heterosexual relationship	3.63		3.73		3.58		3.58*		3.32		3.62	
Blood transmission	3.67		3.84		3.73		3.89		3.54*		3.96	
Diagnosis time		0.585		0.657		0.947		0.858		0.191		0.024
Up to 6 years	3.61		3.82		3.66		3.76		3.39		3.55*	
From 6 years and 1 month to 14 years	3.74		3.75		3.65		3.70		3.27		3.90*	
Over 14 years and 1 month	3.67		3.85		3.69		3.75		3.45		3.82	
Use of ART		0.043		0.833		0.744		0.232		0.872		0.038
No	3.25		3.77		3.60		3.98		3.35		3.27	
Yes	3.69		3.81		3.67		3.72		3.37		3.77	
Stage of infection		0.000		0.000		0.000		0.001		0.002		0.000
Without symptoms	3.78		3.89		3.76		3.79		3.41		3.85	
With symptoms	2.69		3.11		2.84		3.24		3.03		2.81	
Changes in relation to the ART		0.003		0.223		0.151		0.395		0.097		0.427
No changes	3.85		3.86		3.73		3.76		3.44		3.82	
Has/had changes	3.53		3.75		3.60		3.67		3.30		3.72	
Use of condoms		0.007		0.047		0.041		0.065		0.000		0.003
Never	3.53		3.72		3.57		3.64		3.22		3.57	
Always	3.80		3.89		3.76		3.83		3.52		3.91	
Consider him/herself ill		0.000		0.000		0.000		0.000		0.000		0.000
No	3.82		3.95		3.78		3.85		3.45		3.90	
Yes	2.92		3.09		3.07		3.16		2.99		2.96	
Perception of health		0.000		0.000		0.000		0.000		0.000		0.000
Positive	2.70		3.14		2.85		3.26		3.02		3.23	
Negative	3.87		3.94		3.83		3.83		3.44		3.85	

\*Statistically significant difference ( $p = 0.05$ ) after multiple comparison of averages. \*\*Category of

drug use infection showed a statistically significant difference of the other categories of infection

The variable employment situation showed a difference in all areas of quality of life, as well as occupation and personal income, whose averages were higher for employed persons, with paid occupation and income higher than two minimum wages. These findings indicate that employed persons, with a paid

occupation and income of more than two minimum wages, evaluate their quality of life better than people in unfavorable situations of life and work, such as unemployment, occupation without pay and lower income, pointing the importance of work as a source of income and survival for the group under study.

However, the work is expressed in two axes: positive, allowing better quality of life, since it provides good financial conditions, credibility and social valorization, stability, besides recognition through the status of being productive; and negative, when associated with the decrease or loss of labor capacity, making the person considered socially incapable of providing financial support<sup>(16)</sup>. The results are similar to the study carried out in Fortaleza, where the employment relationship showed a higher average in the psychological and independence domains, and the lower income, the lower the score in the environmental domain<sup>(9)</sup>. Still, in other studies<sup>(13,15)</sup>, being employed presented higher averages of quality of life in the physical, psychological, independence, social relations and environment domains.

In one study<sup>(12)</sup>, income presented a statistically significant difference in the domains of independence, social relations and environment, whose highest averages were in the group with income above two minimum wages. On the other hand, another study<sup>(15)</sup> found the highest averages in the physical, psychological, independence, social relations and environment domains for people with income between three and four minimum wages and the worst mean in these domains for people with income above four wages revealing the complexity of this analysis.

The variable information source pointed to statistical significance in the physical and independence domains, with differences between the categories of access to information through the social environment and professionals and/or health services, revealing higher averages for access to information through professionals and health services. This points to the recognition of health services and health professionals as privileged informants, as well as to denote positive interpersonal relationships and links between health professionals and people living with HIV and AIDS, impacting on physical care and increasing levels of independence of people living with HIV.

The way of exposure to HIV showed a significant difference in the domains of independence, social relations and environment. In these domains, the category of exposure for drug use differed from the others, always with lower means, pointing out that people who believe that they have become infected with HIV through drug use rate their quality of life worse than others. However, a study in Rio Grande do Sul<sup>(13)</sup> did not show statistical differences among the categories of HIV exposure.

The time of diagnosis of HIV showed a significant

difference in the domain of spirituality, religion and personal beliefs, so that people with a longer diagnosis had higher average quality of life, pointing out that the longer time of HIV diagnosis favors a better evaluation of quality of life in this area. This result is analogous to that found in Mato Grosso do Sul<sup>(15)</sup>. Other studies<sup>(12,13)</sup> showed no statistical difference for this variable.

The use of ART showed a significant difference in the physical domains and spirituality, religion and personal beliefs, with higher average quality of life among people using antiretroviral therapy. Similarly, studies showed that using ART had better means in several domains: psychological and environmental, in Rio Grande do Sul<sup>(13)</sup>; physical, psychological, level of independence and spirituality, religion and personal beliefs in Nigeria<sup>(18)</sup> and physical and psychological in Burkina Faso<sup>(17)</sup>.

As to the stage of infection, the group that did not present symptoms had higher mean values in all domains with statistically significant differences, showing that being asymptomatic in terms of infection provides a better assessment of quality of life in all domains. This variable had divergent results among the studies: it presented a statistically significant difference in the level of independence, with a better mean for those who reported being symptomatic<sup>(18)</sup>; in another study<sup>(17)</sup>, for the physical domain, the highest mean was for people without symptoms and for the domain level of independence for people with AIDS. The group that presented ARV-related changes presented statistical difference only in the physical domain, confirming that having no side effects or physical changes due to medication contributes to better quality of life scores in this domain. In the study conducted in Macaé<sup>(8)</sup> not having changes related to ART favored better scores in the physical and psychological domains.

The use of condom showed a significant difference in the physical, psychological, independence, environment and spirituality domains, religion and personal beliefs, so that the highest scores were related to condom use category. This finding highlights a general positive effect of condom use in almost all domains of quality of life, pointing out that the people who use it always evaluate their quality of life better. It is observed that in condom prevention and use campaigns, condom use is commonly associated with ideal practices and behaviors, because the positive concept of sexual rights is incorporated, which, besides protection, promotes the right to pleasure, to life satisfactory sexual response<sup>(19)</sup>.

The variables feeling ill and perception of health

presented significant differences for all domains, indicating the highest averages of quality of life associated to the group of people who do not consider themselves ill and have a positive perception of health. This finding indicates that not feeling ill and perceiving health positively favor better quality of life scores in all domains. One study<sup>(20)</sup> identified a statistical difference for the variable feeling ill for all domains of quality of life, analogous to the study in Burkina Faso<sup>(17)</sup>, whose best means were those who did not consider themselves to be ill; Likewise, the study in Nigeria<sup>(18)</sup> found differences in all domains, except in the social relations domain. In these studies, the positive perception of health also presented significant differences in all domains<sup>(17,18)</sup>.

## CONCLUSION

It was observed in the analyzes between the groups that, when there is difference between them, some conditions favor the better evaluation of the quality of life. Among these conditions are: male, 39 to 59 years of age, living in a large city, higher education, being employed, with paid activity and personal income above

two minimum wages. Also, counting on professionals and health services as a source of information, not using or having used drugs, longer HIV diagnosis time, use ART, have no infection-related symptoms, and no changes associated with antiretroviral medication also provide better scores of quality of life. In addition, using condoms, not feeling ill and having a positive perception of health are factors that allow us to better evaluate the quality of life.

It is observed that more positive social and clinical conditions favor a better perception of the quality of life, and may or may not express better living conditions, since the perception partially expresses the reality experienced by the subjects. This is a limitation that can be pointed out in this study. It is recognized as limitation of the study its accomplishment with convenience sample, which restricts the generalization of the results, but does not invalidate the results for the group under study of people living with HIV, attended in public services in cities with medium and large sociodemographic characteristics, which guaranteed the social, economic and educational level variability in the sample.

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## QUALIDADE DE VIDA DE PESSOAS VIVENDO COM HIV

### RESUMO

O objetivo foi analisar a qualidade de vida de pessoas vivendo com HIV. Os dados foram coletados de março a outubro de 2016 com 281 pessoas vivendo com HIV, atendidas em quatro serviços públicos de saúde. Os dados foram coletados por meio de instrumento de dados socioeconômicos e clínicos e do WHOQOL-HIV bref, analisados por estatística inferencial buscando estabelecer as associações estatísticas entre os domínios da qualidade de vida e as variáveis socioeconômicas e clínicas. Os resultados apontaram diferenças estatísticas significantes, com maiores escores de qualidade de vida para o sexo masculino, idade entre 39 e 59 anos, educação superior, pessoas empregadas, com atividade remunerada e renda acima de dois salários mínimos, maior tempo de diagnóstico do HIV (acima de seis anos), usar TARV, estágio assintomático e sem alterações relacionadas à TARV, usar preservativo, não sentir-se doente e percepção positiva da saúde. Conclui-se que algumas condições socioeconômicas e clínicas favorecem ou não a avaliação mais positiva da qualidade de vida pelas pessoas vivendo com HIV.

**Palavras-chave:** Qualidade de vida. HIV. Soropositividade para HIV. Saúde. Enfermagem.

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## CALIDAD DE VIDA DE PERSONAS VIVIENDO CON VIH

### RESUMEN

El objetivo fue analizar la calidad de vida de personas viviendo con VIH. Los datos fueron recolectados de marzo a octubre de 2016 con 281 personas viviendo con VIH, atendidas en cuatro servicios públicos de salud. Los datos fueron recolectados por medio de instrumento de datos socioeconómicos y clínicos y del WHOQOL-HIV bref, analizados por estadística inferencial buscando establecer las asociaciones estadísticas entre los dominios de la calidad de vida y las variables socioeconómicas y clínicas. Los resultados señalaron diferencias estadísticas significantes, con mayores puntuaciones de calidad de vida para el sexo masculino, edad entre 39 y 59 años, educación superior, personas empleadas, con actividad remunerada y renta superior a dos sueldos mínimos, mayor tiempo de diagnóstico del VIH (superior a seis años), usar TARV, fase asintomática y sin alteraciones relacionadas a la TARV, usar condón, no sentirse enfermo y percepción positiva de la salud. Se concluye que algunas condiciones socioeconómicas y clínicas favorecen o no la evaluación más positiva de la calidad de vida por las personas viviendo con VIH.

**Palabras clave:** Calidad de vida. VIH. Seropositividad para VIH. Salud. Enfermería.

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## REFERENCES

1. Brasil. Ministério da Saúde. Secretaria de Vigilância e Departamento de

Vigilância, Prevenção e Controle das Infecções Sexualmente Transmissíveis, do HIV/AIDS e das Hepatites Virais. Boletim epidemiológico HIV AIDS [on-line]. 2017 [citado em 2018 Set]. Disponível em: <http://www.AIDS.gov.br/pt->

br/pub/2017/boletim-epidemiologico-hivAIDS-2017.

2. Cezar VM, Draganov PB. A história e as políticas públicas do HIV no Brasil sob uma visão bioética. *Ensaios Cienc., Cienc. Biol. Agrar. Saúde* [on-line]. 2014 [citado em 2018 Set]; 18(3):151-6. Disponível em:

<https://www.redalyc.org/articulo.oa?id=26042165006>.

3. Gil NLM, Souza LR. Qualidade de vida de indivíduos infectados pelo HIV relacionada com as características sociodemográficas e clínicas. *Cienc. Cuid. Saude* [on-line]. 2010 [citado em 2018 Set]; 9(4):697-703. doi:

<http://dx.doi.org/10.4025/ciencucuidsaude.v9i4.13817>.

4. Oliveira JF, Oliveira KF, Zago GP, Weffort VRS, Simões ALA. Quality of life of children and adolescents infected with HIV. *Cienc. Cuid. Saude* [on-line]. 2015 [citado em 2018 Dez]; 14(1):879-884. doi:

<http://dx.doi.org/10.4025/ciencucuidsaude.v14i1.19265>.

5. Fleck MPA, Leal OF, Louzada S, Xavier M, Chachamovich E, Vieira G, Santos L, Pinzon V. Desenvolvimento da versão em português do instrumento de avaliação de qualidade de vida da OMS (WHOQOL-100). *Rev. Bras. Psiquiatr* [on-line]. 1999 [citado em 2018 Set]; 21(1):19-28. doi:

<http://dx.doi.org/10.1590/S1516-44461999000100006>.

6. Lei de diretrizes e bases da educação nacional. Brasília: Senado Federal, Coordenação de Edições Técnicas [on-line]. 2017 [citado em 2018 Set]. Disponível em:

[http://www2.senado.leg.br/bdsf/bitstream/handle/id/529732/lei\\_de\\_diretrizes\\_e\\_bases\\_1ed.pdf](http://www2.senado.leg.br/bdsf/bitstream/handle/id/529732/lei_de_diretrizes_e_bases_1ed.pdf).

7. Organização Mundial da Saúde. Departamento de Saúde Mental e Dependência Química. Instrumento WHOQOL-HIV: sintaxe. Genebra: OMS [on-line]. 2002 [citado em 2018 Set]. Disponível em:

<https://www.ufrijs.br/qualidep/images/whoqol-hiv/sintaxe/sintaxe-hiv.pdf>.

8. Costa TL, Oliveira DC, Gomes AMT, Formozo GA. Quality of life and people living with AIDS: relationship with sociodemographic and health aspects. *Rev. Latino-Am. Enfermagem* [on-line]. 2014 [citado em 2018 Set]; 22(4):582-590. doi: <http://dx.doi.org/10.1590/0104-1169.3350.2455>.

9. Cunha GH, Fiuzu MLT, Gir E, Aquino OS, Pinheiro AKB, Galvão MTG. Quality of life of men with AIDS and the model of social determinants of health. *Rev. latinoam. enferm* [on-line]. 2015 [citado em 2018 Set]; 23(2):183-91. doi: <http://dx.doi.org/10.1590/0104-1169.0120.2541>.

10. Hipólito RL. Qualidade de vida das pessoas que vivem com o HIV/AIDS no município de Rio das Ostras. 2015. [tese]. Rio de Janeiro: Universidade do Estado do Rio de Janeiro – UERJ. 2015. Disponível em:

<http://bases.bireme.br/cgi-bin/wxislnd.exe/iah/online/?IsisScript=iah/iah.xis&src=google&base=LILACS&lang=p&nextAction=lnk&exprSearch=758240&indexSearch=ID>.

11. Oliveira FBM, Moura MEB, Araújo TME, Andrade EMLR. Quality of

life and associated factors in people living with HIV/AIDS. *Acta Paul. Enferm* [on-line]. 2015 [citado em 2018 Set]; 28(6):510-6. doi: <http://dx.doi.org/10.1590/1982-0194201500086>.

12. Silva ACO. Qualidade de vida de pessoas vivendo com HIV/AIDS e sua associação com aspectos sócio-demográficos, clínicos, psicoemocionais e adesão ao tratamento. 2013. [tese] Ribeirão Preto; Universidade de São Paulo – USP. 2013. doi: <http://dx.doi.org/10.11606/T.22.2013.tde-22012014-105332>.

13. Passos SMK, Souza LDM. An evaluation of quality of life and its determinants among people living with HIV/AIDS from Southern Brazil. *Cad. Saúde Pública* [on-line]. 2015 [citado em 2018 Set]; 31(4):800-14. doi: <http://dx.doi.org/10.1590/0102-311X00000514>.

14. Cardoso Junior JC. O Brasil na encruzilhada: apontamentos para uma reforma do Estado de natureza republicana, democrática e desenvolvimentista. *Cadernos do Desenvolvimento*. 2017 [citado em 2018 Set]; 12(20):99-133. Disponível em: <http://www.cadernosdodesenvolvimento.org.br/ojs-2.4.8/index.php/cdes/article/viewFile/31/pdf>.

15. Ferreira BE, Oliveira IM, Paniago AMM. Qualidade de vida de portadores de HIV/AIDS e sua relação com linfócitos CD4 +, carga viral e tempo de diagnóstico. *Rev. bras. Epidemiol* [on-line]. 2012 [citado em 2018 Set]; 15(1):75-84. doi: <http://dx.doi.org/10.1590/S1415-790X2012000100007>.

16. Hipólito RL, Oliveira DC, Costa TL, Marques SC, Pereira ER, Gomes AMT. Quality of life of people living with HIV/AIDS: temporal, socio-demographic and perceived health relationship. *Rev. Latino-Am. Enfermagem* [on-line]. 2017 [citado em 2018 Set]; 25:e2874. doi: <http://dx.doi.org/10.1590/1518-8345.1258.2874>.

17. Bakiono F, Ouédraogo L, Sanou M, Samadoulougou S, Guigemé PWL, Kirakoya-Samadoulougou F, Robert A. Quality of life in people living with HIV: a cross-sectional study in Ouagadougou, Burkina Faso. *Springerplus* [on-line]. 2014 [citado em 2018 Set]; 3(372). doi: <http://dx.doi.org/10.1186/2193-1801-3-372>.

18. Akinboro AO, Akinyemi SO, Olaitan PB, Raji AA, Popoola AA, Awoyemi OR, Ayodele OE. Quality of life of Nigerians living with human immunodeficiency virus. *Pan Afr Med J* [on-line]. 2014 [citado em 2018 Set]; 18(234). doi: <http://dx.doi.org/10.11604/panj.2014.18.234.2816>.

19. Pinheiro TF, Calazans GJ, Ayres JRCM. Uso de Camisinha no Brasil: um olhar sobre a produção acadêmica acerca da prevenção de HIV/AIDS (2007-2011). *Temas psicol* [on-line]. 2013 [citado em 2018 Set]; 21(3):815-36. doi: <http://dx.doi.org/10.9788/TP2013.3-EE07PT>.

20. Silva J, Bunn K, Bertoni RF, Neves OA, Traebert J. Quality of life of people living with HIV. *AIDS Care* [on-line]. 2013 [citado em 2018 Set]; 25(1):71-6. doi: <http://dx.doi.org/10.1080/09540121.2012.686594>.

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