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## IMPACT OF STIGMA ON THE QUALITY OF LIFE OF ADULTS WITH HIV/AIDS: A SYSTEMATIC REVIEW

**Carolina Lombó Fragueiro**  
Universidad Europea del Atlántico (Spain)  
[carolina.l-f@hotmail.com](mailto:carolina.l-f@hotmail.com)

**Abstract.** Introduction: This work was made in order to find out if there was a worsening of the consequences of HIV because of the perception of stigma. Methodology: Inclusion criteria were (1) that the articles deal with HIV/AIDS; (2) that they were scientific articles; (3) that the language of publication were Spanish or English. The exclusion criteria applied were (1) that the articles include child and adolescent population; (2) that they were single-case articles. Results: The total sample was made up of 18267 participants, most of them were women (65%), with an average age of 39'3, came from Africa or Asia, married or in a stable relationship and with an educational and socioeconomic low level. Stigma was analyzed through test administration in 55% of the articles and quality of life in 44%. Psychological and social repercussions (53%) were found, among which depressive disorder and the reduction of the social support, labor and economic (21%), physical (18%) and sexual (15%) stood out. Discussion: Most of the results showed that stigma generated repercussions that affected, above all, the mental health and social network of this population, which reflected the need to promote support and psychological treatment. Similarly, a possible relationship was found between sex, region and level of education, and the risk of contracting HIV.

**Keywords:** HIV, AIDS, stigma, quality of life, adults.

## REPERCUSIONES DEL ESTIGMA EN LA CALIDAD DE VIDA DE LOS ADULTOS CON VIH/SIDA: UNA REVISIÓN SISTEMÁTICA

**Resumen.** Introducción: Este trabajo se llevó a cabo con la finalidad de averiguar si existía un agravamiento de las consecuencias del VIH tras la percepción de estigma. Metodología: Se realizó una revisión sistemática cuyos criterios de inclusión fueron (1) que los trabajos versaran sobre VIH/SIDA; (2) que se tratara de artículos científicos; (3) que el idioma de publicación fuera español o inglés. Los criterios de exclusión aplicados fueron (1) que los artículos incluyeran población infantojuvenil; (2) que se trataran de artículos de caso único. Resultados: La muestra total estuvo compuesta por 18267 participantes, la mayoría de ellos mujeres (65%), con una media de edad de 39'3 años, procedentes de África y Asia, casados o con pareja estable y con un nivel educativo y socioeconómico bajo. El estigma se analizó a través de

administración de pruebas en el 55% de los artículos y la calidad de vida, en el 44%. Se encontraron repercusiones psicológicas y sociales (53%) entre las que destacó el trastorno depresivo y la reducción de la red de apoyo; laborales y económicas (21%); físicas (18%) y sexuales (15%). Discusión: La mayoría de los resultados mostraron que el estigma sí que generaba repercusiones, las cuales afectaban, sobre todo, a la salud mental y a la red social de esta población, lo que reflejó la necesidad de fomentar el apoyo y el tratamiento psicológico. De igual manera, se encontró una posible relación entre el sexo, la región y el nivel de educación y el riesgo de contraer VIH.

**Palabras clave:** VIH, SIDA, estigma, calidad de vida, adultos.

## Introduction

Human Immunodeficiency Virus, commonly known by the acronym HIV consists of an infectious disease that causes progressive weakening of the immune system by destroying the white blood cells that protect the body from infection or disease (WHO, 2017).

Three stages can be distinguished in this disease. First, the acute retroviral infection phase that takes place two to six weeks after infection, at which time the immune system can still act against the virus despite the fact that it occurs at high rates (Rodríguez & Moreno.II, 2017). Second, the chronic phase in which the patient may show symptoms such as fever, dry cough, diarrhea, sweating... (Iglesias Villarán et al., 2015; Rodríguez & Moreno.II, 2017; Sandí & Chan, 2016; Valle et al., 2018). Finally, in case the disease is not adequately treated, it can lead to Acquired Immune Deficiency Syndrome or AIDS characterized by presenting cancers or opportunistic infections such as pneumonia, salmonellosis, candidiasis, or tuberculosis (Bizuayehu et al., 2015; WHO, 2017).

It was in 1981 when several cases of pneumonia and Kaposi's sarcoma were diagnosed simultaneously in the United States. A year later, these diagnoses were defined as AIDS and were mostly among homosexual men, which gave rise to the stigma that HIV/AIDS was a disease that belonged to this group. However, with the passage of time, new cases were presented in people with drug addiction, prostitutes, and in those who had sex with HIV-positive people (Bran Piedrahita et al., 2017).

In 1984 the search for HIV treatment began and 12 years later the first antiretroviral therapy (ART) began to be developed, which allowed it to stop being a fatal disease (Rodríguez & Moreno.II, 2017), since it maintains the level of virus in the blood in an undetectable amount, preventing its reproduction and thus allowing the correct functioning of the immune system. In addition, this drug reduces the risk of contagion to others by 96% and has allowed 47% of people with HIV/AIDS to have an undetectable viral load (UNAIDS, 2017; WHO, 2017).

HIV/AIDS is a communicable disease, which can be transmitted through sexual contact of any kind (oral, vaginal, or anal) with a person who has HIV and does not take medication to treat the disease or does not use a condom. This route accounts for the majority of infections. Second, HIV can be transmitted via blood, for example, by sharing needles or syringes, transfusions or transplants, among others. Finally, the vertical route is the maternal-filial route in which the mother transmits the disease to her child during pregnancy, childbirth, or breastfeeding (Bartolome-García & Losa-García, 2017; Fuster et al., 2013; Rodríguez & Moreno.II, 2017; Sandí & Chan, 2016; Valle et al., 2018; WHO, 2017).

Regarding the impact of this disease, it is estimated that, globally, HIV has affected 77.3 million people and has caused the death of 35.4 million. Specifically, in

2017, almost 37 million people had HIV and 25% of them were unaware of their diagnosis (UNAIDS, 2017; Santiesteban Díaz et al., 2017).

The at-risk population is adolescents between the ages of 15 and 19 years. In 2017, a new HIV infection was recorded every 3 minutes in this population (UNICEF, 2017). Moreover, it is in Africa where most infections are concentrated (UNAIDS, 2017).

In 2017, more than 3 thousand new cases of HIV and 406 cases of AIDS were registered in Spain (Ministerio de Sanidad, Consumo y Bienestar Social, 2019).

Stigma represents one of the main challenges faced by people with this disease. Having an attribute that is not accepted by society generates external or social stigma that leads to discrimination and exclusion of the individual. This can lead to the formation of internalized stigma, which is related to the deterioration of self-concept and self-esteem and is based on the inferences that the individual makes from the negative social behavior he or she receives (Conde Higuera et al., 2016; Guevara-Sotelo & Hoyos-Hernández, 2018; Infante et al., 2006; Monteiro et al., 2016; Radosky et al., 2017).

Despite the increasing advances in HIV treatment, this disease continues to represent a global public health problem that can seriously affect hosts at different levels. Likewise, stigma plays an important role in terms of coping and acceptance of this disease, as it represents a barrier to HIV prevention and treatment generating serious health consequences and favoring transmission (Conde Higuera et al., 2016; Monteiro et al., 2016; Radosky et al., 2017; Tamayo-Zuluaga et al., 2015). For these reasons, the main objective of the present work is presented as to define the existence and characteristics of the repercussions that stigma can generate on the quality of life of adults with HIV disease. Likewise, the secondary objectives are to specify which stigma is most frequently perceived by the HIV-positive population and to specify which factors, after knowledge of the diagnosis, the HIV-positive population perceives as positive for the maintenance or improvement of the quality of life or, on the contrary, which factors promote its deterioration.

## **Method**

The methodology followed to obtain the information was based on the search for articles that related stigma with the consequences it generates on the quality of life of the HIV-positive population in adulthood.

To do this, a systematic search was carried out in the Pubmed and Psycinfo databases by crossing the English terms "HIV," "AIDS," "stigma," "quality of life," and "adults" and using the Boolean operator "AND." In addition, as a temporal criterion, articles published between 2015 and 2020 were included.

In addition, the inclusion criteria used were: (1) that the papers should deal with HIV/AIDS; (2) that they should be scientific articles and academic publications; (3) and that the language should be Spanish or English.

On the other hand, the exclusion criteria adopted were: (1) that the articles used a child and adolescent population (0-18 years); (2) and that they were single case studies.

The first phase comprised the systematic review of the information found based on the keywords mentioned above in the two databases. After applying the time criterion, 197 articles were obtained.

The second phase focuses on a process of applying the inclusion and exclusion criteria, from which a total of 143 articles were obtained.

In the third phase, articles were excluded by reading the abstract, the results and the discussion. On the one hand, those articles that analyzed the effect of stigma in the HIV-positive population that suffered from another priority condition that could explain

the results (for example, being in prison, suffering from postpartum depression, etc.) were discarded; and, on the other hand, articles that defined the existence or not of repercussions on the quality of life of the HIV-positive population, but did not allude to stigma, were eliminated. After applying these two criteria because they did not fit the objectives of this study, 54 articles were selected.

In the fourth phase, duplicate articles were eliminated, reducing the total number of articles to 47.

In the fifth and final phase, the 47 articles were read in full text, those that provided significant results were selected, and those that did not meet the inclusion criteria and objectives were discarded. Finally, 34 articles were selected for the development of this systematic review. Figure 1 shows the scheme of this process.

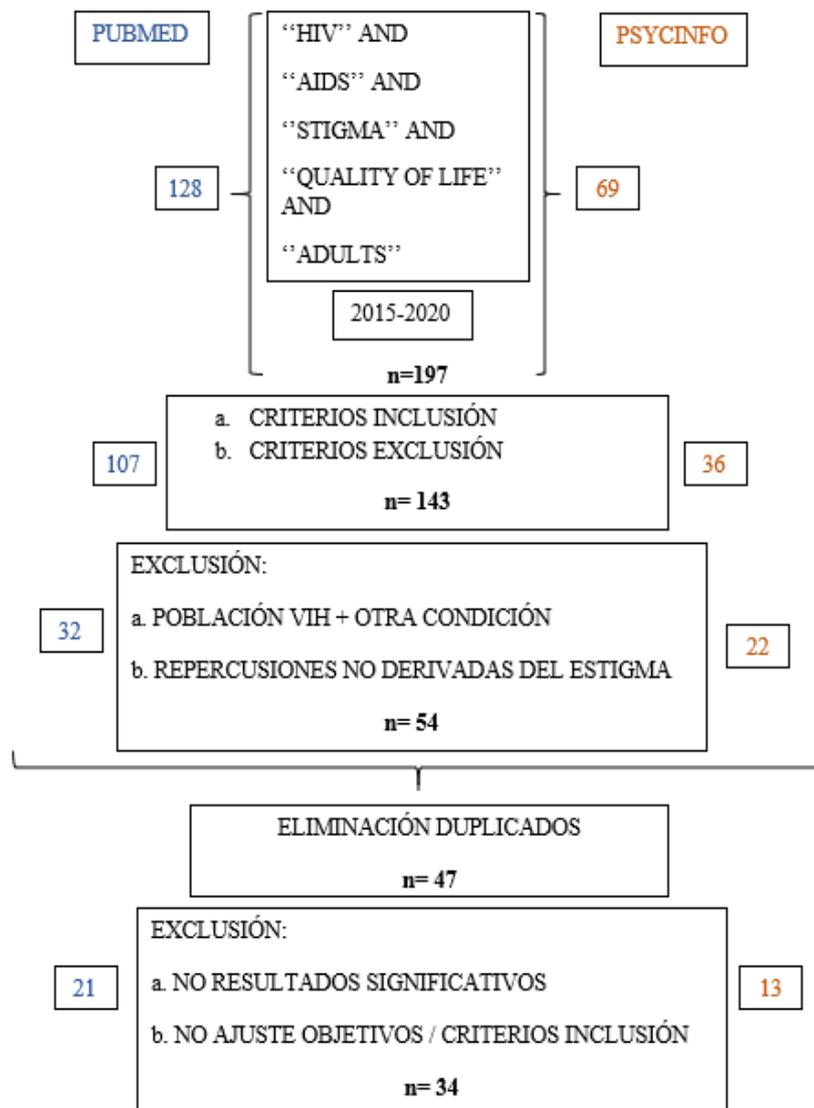


Figure 1. Search process and selection of articles.

## Results

Sociodemographic characteristics were analyzed in the 34 articles (Table 1).

A total sample of 18,267 persons was obtained, of which 11,957 were women, 6,278 were men, and 32 persons identified with another gender or preferred not to provide

this information, so that, in other words, 65.46% of the sample was composed of the female gender; 34.37%, the male gender, and 0.18%, others.

In terms of age, all participants were over 18 years of age and the mean age was 39.3 years.

Of the 34 articles used in this systematic review, most of them selected African and Asian participants. Specifically, 10 selected African population for the studies, especially population belonging to East African countries (Uganda, Ethiopia, Kenya, and Malawi) and another 10 articles used Asian population, mainly Chinese, as well as Indian, Vietnamese, and Nepalese, representing 58.82% of the sample.

As for marital status, this was analyzed in 28 of the 34 articles selected (82.35%) and, in the majority, the participants were in a stable relationship or married.

Likewise, the educational and socioeconomic level was analyzed in the studies, generally finding a low educational level in which most of the participants did not exceed secondary or intermediate level and, likewise, a low-income level. These data corresponded especially to rural areas or undeveloped countries.

Table 1  
*Sociodemographic characteristics of the participants*

Author/Year	Gender	Aver age	Sample size	Population	Marital status	Socioeconomic/educational level
Brown et al., 2016	118 F	37'8	118	United States	Not specified	Intermediate
Bukenya et al., 2019	12 M 18 F	41'7	30	Uganda	Married	Low
Cantisano et al., 2015	51 M 50 F	39'37	101	Dominican Republic	Partner	Low
(Cressman et al., 2020)	1578 F	55	1578	United States	Not specified	Low
Da et al., 2019	724 M 488 F	38'5	1212	China	Married	Intermediate
Ezeamama et al., 2016	123 M 277 F	35'8	400	Uganda	Married	Low
Garfin et al., 2019	600 F	34'31	600	India	Widowed	Low
Garrido-Hernansaiz & Alonso-Tapia, 2017	116 M 2 F 1 Other	32'37	119	Spain and Latin America	Single	High
Garrido-Hernansaiz et al., 2016	396 M 534 F 31 Other	33'12	961	India	Married	Low

Kamen et al., 2015	59 F	30'3	59	Malawi	Married	Low
Kuznetsova et al., 2016	48 M 32 F	34	80	Russia	Not specified	Low
Lifson et al., 2015	50 M 92 F	33'7	142	Ethiopia	Married	Low
Liu et al., 2018	220 M	36'1	220	China	Single/ Divorced/ Widowed	Intermediate/High
Loutfy et al., 2016	1929 F	41	1929	Varied (Latin America, China, Europe)	Single	Intermediate
Lyons et al., 2016	357 M	54'5	357	Australia	Single	High
Maimaiti et al., 2017	411 M 268 F	39'5	679	China	Single/ Divorced/ Widowed	Low
Mitchell et al., 2017	235 M 148 F	48	383	United States	Not specified	Low
Nevin et al., 2018	7 M 13 F	42'5	20	East Africa	Partner	High
Nyamathi et al., 2018	400 F	33'8	400	India	Married/ Widowed	Low
Nyongesa et al., 2020	94 M 356 F	42'7	450	Kenya	Married	Low
Oliveira et al., 2017	93 M 53 F	38'4	146	Brazil	Single	Intermediate
Parcesepe et al., 2020	336 M 576 F	35	912	Tanzania	Married	Low
Pasipanodya & Heatherington, 2014	22 M 27 F	37'5	49	Uganda	Partner	Low
Pinho et al., 2018	918 F	33'5	918	Brazil	Partner	Low
Reinius et al., 2018	99 M 74 F	48'1	173	Sweden	Not specified	Intermediate
S et al., 2019	305 M 294 F	38	599	Nepal	Married	Low

Secor et al., 2015	112 M	26	112	Kenya	Single	Intermediate
Shah et al., 2015	317 M	47'65	317	New York	Single	Intermediate
Siegel et al., 2018	44 M 36 F	41'6	100	New York	Married	Low
Suleiman et al., 2020	114 M 239 F	39'1	353	Nigeria	Married	Intermediate
Tran et al., 2018	1133 F	32'5	1133	Vietnam	Married	Low/Intermediate
Travaglini et al., 2018	220 F	43'4	220	United States	Single	Intermediate
Zeluf- Andersson et al., 2019	762 M 320 F	47'6	1096	Sweden	Partner	Intermediate
Zhang et al., 2016	1882 M 1105 F	42'9	2987	China	Not specified	Low

The 34 articles also alluded to the stigma and/or the impact of HIV/AIDS disease on their overall quality of life or satisfaction.

On the one hand, stigma was assessed in 18 of the 34 articles (52.94%) directly through the administration of tests. In particular, the most commonly used test was Berger's HIV Stigma Scale ( $\alpha = .957$ ), which is a psychometric test aimed at the adult population over 18 years of age and consists of 30 articles divided into 4 dimensions: enacted stigma, disclosure concerns, negative self-image, and concern about public attitudes. It was used in 10 of the 18 articles (55.56%) in which stigma was assessed.

On the other hand, quality of life was assessed through the administration of questionnaires in 15 of the 34 articles (44'11%). Specifically, the most commonly used test was "The WHO Quality of Life Scale" (WHO-QoL) ( $\alpha = .895$ ), a questionnaire that provides a profile of the quality of life of the individual giving a global view of the areas and facets that compose it. The WHO-QoL is composed of 100 Likert-type items divided into 6 areas: physical health, psychological health, level of independence, social relationships, personal environment and beliefs, and spirituality. This test is aimed at the general population and patients with any disease and its application is based on self-administration. However, in patients who cannot read or write for reasons of education, culture, or health, it could be performed by means of an interview. This test was used in 7 of the 15 articles (46.67%) that evaluated quality of life.

In addition to tests such as those mentioned above, in other articles both stigma and quality of life were assessed through personalized interviews or self-reported questionnaires.

The different repercussions that have been described in the articles selected for this systematic review are presented below.

First, in terms of physical repercussions, 6 articles (17.65%) defined aggravation or increase in HIV/AIDS symptomatology following the perception of stigma. Participants reported pain, weight loss, fatigue, nausea, vomiting, headaches, reduced appetite, decreased energy, fever, and problems with falling asleep and insomnia. In

addition, viral load and the previously mentioned symptomatology correlated negatively with physical health and, therefore, with quality of life.

Second, the population of 4 articles (11.76%) reported a series of changes in habits after diagnosis or perception of stigma such as decreased physical activity or sedentary lifestyle, smoking, alcoholism, or consumption of other substances.

Third, the population of 18 articles (52.94%) commonly reflected the presence of stress, anguish, anxiety, depression, or a deterioration of self-esteem following the perception of stigma producing a deterioration of mental health. In addition, they related their presence and the severity of mental symptomatology with a lower availability of personal and socioeconomic resources.

As for personal resources, 3 articles (8.82%) alluded to the importance of active coping and problem-focused coping (rather than emotion-focused coping) in maintaining or improving self-esteem and favoring improved functioning in general and, therefore, improved quality of life in the face of the harmful effects of stigma.

The presence of stigma, especially internalized stigma, which was the most frequent in the studies analyzed (specifically in 8 articles, representing 23.52%) and the one that presented the highest correlation with physical and emotional burdens, was related to poorer psychological functioning and general health, and to lower self-esteem, well-being, resilience, and reactance. In addition, stigma was also related to negative thoughts such as concern about how others would act towards them, fear of rejection, discomfort about not feeling understood by others, guilt, desire for privacy, hopelessness, contempt, vulnerability, shame, discouragement, sadness, health concerns, hostility, irritability... Guests defined stigma as a factor that distanced them from society, intruded on their privacy, slowed their ability to recover, and increased their worry about the disease or transmission to others.

Specifically, depressive disorder was the most frequently reported. The population of 9 of the 34 articles (26.47%) reported suffering or having suffered from depressive symptoms or a depressive disorder. The instrument most commonly used to assess this was the "*Center for Epidemiological Studies Depression Scale*" (CES-D), a questionnaire used to detect cases of depression based on the presence of symptoms in the last week. It is self-administered, is aimed at the general population and has 20 articles that assess different components such as mood, feelings of worthlessness, hopelessness... It has good internal consistency (0.85-0.90) and a test-retest reliability of 0.51-0.67. The CES-D was used in 4 articles (11.76%).

Fourth, another impact identified in 5 of the selected articles (14.71%) is the impact of HIV/AIDS on partnerships and sexual relationships. The challenges faced by the HIV-positive population with regard to these types of relationships are mainly fear of disclosure and stigmatizing behaviors, irrational fear of transmission, changes in sexual intimacy and in physical and social functioning, relationship breakdown, and loss of trust. Following diagnosis, lower relationship satisfaction led to deterioration in mental health with problems such as stress, anxiety, or depression resulting in poorer quality of life.

Satisfaction within the couple correlated positively with couple identity and negatively with the presence of physical and mental symptomatology. In addition, perceived caregiver burden and overall host health also influenced partner health (Pasipanodya & Heatherington, 2014).

Those who disclosed HIV status reported stigmatizing attitudes such as distancing, contempt, violation of privacy, and accusations by their partner and their closest social circle. In the face of this, different ways of managing the disease within the couple were shown, such as breaking up, seeking external social support, and educating family and friends about the disease (Siegel et al., 2018).

Three couple-related scales were administered: "*Relationship Evaluation Scale*" measuring marital satisfaction ( $\alpha=.66$ ), "*Couple Identity Scale*" (which presented good validity) and "*Self-perceived burden scale*" ( $\alpha=.75$ ) according to the primary caregiver. In addition to this, one of the articles also evaluated sexual stigma and concluded that its impact may be greater if it acts on a population facing other types of stigma or discrimination. This type of stigma is related to the presence of depressive symptomatology and, therefore, to a lower quality of life (Secor et al., 2015).

Two articles (5.88%) showed that HIV-positive status has a considerable impact on sexuality, especially affecting frequency, sexual desire and number of sexual partners.

Fifth, social consequences due to stigma such as isolation, exclusion, rejection, devaluation, and reduction of support network were found (Nevin et al., 2018). The population of 52'94% of the articles referred these types of repercussions derived from stigma.

It was found that these impacts could be exacerbated at lower educational levels, as this implied lower awareness of the disease, care services and treatment (Lifson et al., 2015).

8 articles (23.52%) showed the reduction of the support network after diagnosis. Social support was defined as an essential factor in overcoming stigma, improving overall health, and preventing mental health-related problems (stress, distress, and depressive symptoms). Social support improved global functioning and favored active coping with the disease, protecting or favoring self-esteem. This is why participants who had a support network, a stable partner, or the support of health care providers reported less stigma affectation. Social support was evaluated in 8 articles among which the use of "*The Social Relationship Scale: Quality of Life Social Support Questionnaire*" ( $\alpha=0.85-0.93$ ) stood out.

Another of the consequences found was the loss of social position. In one of the articles, perceived social position was measured and the results revealed that the higher the stigma, lower the age, lower the social support and lower the income level, the lower the social position (Ezeamama et al., 2016).

These social consequences generate, in turn, fears of disclosure of HIV status that make the population, on some occasions, choose to hide their disease as a way to protect their social integrity and self-concept and maintain privacy. Disclosure is more frequent in intimate relationships, as it is promoted by support, which reduces symptomatology and fears (Cantisano et al., 2015; Loutfy et al., 2016).

In 4 articles (11.76%) a positive correlation was shown between perception of support and social network and quality of life and a negative correlation between internalized and enacted stigma and quality of life.

In 8 articles (23.53%), HIV stigma was added to other stigma already existing in a certain population, enhancing the effects of discrimination. The population of these studies coincided with groups already socially devalued for different reasons such as gender, drug addiction, immigration, socioeconomic level and/or disability. An example of this would be sexual stigma, which became more important in the homosexual population because they suffered greater social censure and received less support. In this case, HIV stigma would be added to the discrimination and exclusion they suffer because of their sexual condition. However, in one of the articles, the participants did not reflect an influence of stigma on their quality of life, since most of them did not perceive either HIV disease or discrimination or having to undergo treatment as factors that interfered with their lives (Cressman et al., 2020).

Sixth, and in relation to and as a consequence of social problems, 7 articles (20.59%) were found that reflected negative consequences for the economy and less job

opportunities due to the stigma, discrimination, and exclusion suffered by the HIV-positive population.

Ten articles (29'41%) showed that physical and mental health problems (or conversely the perception of health and lack of symptomatology), stigma by family and friends, dissatisfaction with caregivers, lack of psychological support, the side effects of ART such as nausea and vomiting and their duration, lack of information or education about the disease, and low economic resources were a barrier to disease prevention and care, as well as worsening disease management and limiting daily activities. All this had repercussions on quality of life and worsened it. On the other hand, a relationship was also established between adherence and marital status, education and income level, since having a partner; having received education and being employed were positively related to adherence.

On the other hand, the population of 3 articles (8'82%) reported that stigma was a barrier to accessing services and/or continuation and consistency of care, so interventions aimed at reducing stigma showed positive results in the population, provided an opportunity for early diagnosis and treatment, and increased psychological functioning by reducing morbidity, HIV transmission and mortality, and generating an improvement in the quality of life.

Similarly, 4 articles (11.76%) showed that social support promoted early diagnosis and increased adherence. In addition, it was a reminder and reinforcement for taking medication, reduced guilt for contagion, and decreased the perception of rejection and exclusion. In addition, perceived deterioration of health, the desire to care for oneself and protect one's family, good experiences with physicians, and cessation of substance use were also associated with increased adherence.

### **Discussion and conclusions**

More than 65% of the participants were women and, in addition, most of the sample came from Africa and Asia and had low educational or socioeconomic status. Taking these data together, a relationship between region, gender, and HIV risk could be found. A higher prevalence in women could be related to gender-based violence, violence against girls, forced sexual experiences, and forced marriages. In addition, poor education and limited information on safe sex, HIV, and other sexually transmitted infections could also be explanatory factors for this prevalence. In the face of all this, it would be necessary to end the subordinate status of women and promote equality while promoting education and access to information.

All 34 articles alluded to stigma and/or the impact of HIV/AIDS disease on their overall quality of life or satisfaction. Specifically, it was internalized stigma that participants reported experiencing most frequently, which derived from discriminatory attitudes and acts of exclusion (Conde Higuera et al., 2016; Guevara-Sotelo & Hoyos-Hernández, 2018; Infante et al., 2006; Monteiro et al., 2016; Radusky et al., 2017). The prevalence of this type of stigma highlights the need, on the one hand, to implement education programs aimed at the general population to increase knowledge about the disease, foster tolerance, and respect towards the population with HIV and, on the other hand, the need for greater guidance and intervention aimed at hosts with the aim of favoring acceptance of themselves and their condition and reducing negative thoughts and feelings such as guilt or shame.

In relation to the prevalence of internalized stigma and as a possible cause of this, psychological and social repercussions were predominant. Participants in more than 50% of the articles reported suffering from symptoms of stress, anxiety or depression, and/or self-esteem problems (Brown et al., 2016; Cressman et al., 2020; Da et al., 2019; Garfin et al., 2019; Garrido-Hernansaiz & Alonso-Tapia, 2017; Kamen et al., 2015; Lyons et al., 2016), highlighting the need to give greater prominence to psychological treatment and facilitate access to it.

As part of the solution in the face of mental health-related problems and furthermore, as a preventive factor of these, social support should be encouraged (Kuznetsova et al., 2016; Nyamathi et al., 2018; Siegel et al., 2018; Tran et al., 2018) which could contribute to the minimization of consequences, improvement of the person's overall functioning, and the promotion of active coping.

Perception of support was associated with earlier diagnosis and increased adherence which could reduce morbidity and virus transmission (Kuznetsova et al., 2016; Nyamathi et al., 2018; Siegel et al., 2018; Tran et al., 2018).

Although to a lesser extent compared to the other impacts, approximately 15% population of the articles alluded to the impact of stigma on relationships and sexual relationships finding after diagnosis lower satisfaction, decreased frequency, and lower sexual desire (Bukenya et al., 2019; Da et al., 2019; Garfin et al., 2019; Kuznetsova et al., 2016; Liu et al., 2018; Loutfy et al., 2016; Nevin et al., 2018; Oliveira et al., 2017; Pasipanodya & Heatherington, 2014; Pinho et al., 2018; Reinius et al., 2018; Secor et al., 2015; Siegel et al., 2018; Zhang et al., 2016). Regarding this, the cultural component, religion, values, and morality could exert a great influence on this aspect as well as age and stigma. Catholics, for example, are per se less likely to have sex because they are more conservative, do not practice sex before marriage, or due to abstinence.

Regarding the repercussions just mentioned and as shown in the results and in previous literature (Chong Villarreal et al., 2012; Oskouie et al., 2017; Radusky et al., 2017; Tamayo-Zuluaga et al., 2015; Verma & Lata, 2016), the affectation of HIV stigma is exacerbated in marginalized communities, at risk of exclusion or minorities, which are already subject to discrimination on other grounds (Loutfy et al., 2016; Mitchell et al., 2017; Nevin et al., 2018; Oliveira et al., 2017; Parcesepe et al., 2020; Secor et al., 2015; Travaglini et al., 2018). There was only one article in which the population did not refer consequences for perceived HIV stigma, which could be due to the fact that they already suffered discrimination before having the disease (Cressman et al., 2020). The clear example of this empowering impact is the effect of HIV stigma on the homosexual community. Currently, there is still a social prejudice that HIV is a disease exclusive to homosexual men, which can generate an emotional burden and discouragement in those who suffer from it, delaying the detection of the disease by generating a refusal to be tested because of the social repercussions of having the disease. All this highlights once again the need to implement means to promote respect, tolerance, and de-stigmatization, as well as the education and interest necessary to break down the taboos surrounding HIV/AIDS.

All the consequences defined so far could explain a reduction in access to health services and adherence to treatment by posing a barrier in the face of advances (Conde Higuera et al., 2016; Monteiro et al., 2016; Radusky et al., 2017; Tamayo-Zuluaga et al., 2015).

In response to the main objective of this study, which was to define the existence and repercussions of stigma on the quality of life of adults with HIV disease, the results

found allowed to define mainly mental repercussions, including depressive symptoms, anxiety, and negative self-image; and social repercussions, such as discrimination, isolation, and exclusion, which, in turn, were related to a decrease in economic status and job opportunities. Followed by these, participants reported physical consequences and, finally and to a lesser extent, relationship and sexual problems.

Regarding the first secondary objective, internalized stigma was the one that the population reported having suffered most frequently. On the other hand, in response to the second secondary objective, active coping and socioeconomic power were mainly defined as positive factors for the maintenance of quality of life, as opposed to physical symptoms, poor mental health, and low socioeconomic and educational level, which were described as factors that negatively affect the quality of life.

As for the limitations of this study, it should be mentioned that only the adult population over 18 years of age has been addressed. For this reason, it would be interesting to conduct future research focusing on the juvenile population, such as adolescents between 15 and 19 years of age, who are the population at risk. It would also be interesting to conduct new studies analyzing the effect of stigma exclusively on the homosexual population, to whom the HIV/AIDS disease has been attributed throughout history. In this way, the level of impact on the group could be analyzed more broadly.

On the other hand, this systematic review was based on studies that were carried out mostly in rural areas or countries with a low socioeconomic level, thus highlighting the need for studies in developed countries or countries with better health and/or socioeconomic conditions. For example, it would be useful to carry out more studies with a European population, since research is scarce and conditions are very different. In this way, it would be possible to find out whether the conclusions drawn in this work can be extrapolated to the entire world population or to know to what extent sociocultural factors influence the stigmatization process, thus discovering whether stigma constitutes a factor of vulnerability in certain regions or at the global level.

Finally, the literature search was conducted only in the databases mentioned above, and the selection of articles was limited to those published in Spanish and/or English; therefore, if a larger number of databases and more languages were included, more evidence could be provided to the research.

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