ABSTRACT
Objective: to discuss the associated factors of women’s vulnerability to HIV/AIDS through a systematic literature review.
Method: a search was conducted in Scielo and LILACS databases, from January 1990 to June 2011, using the descriptors “vulnerability”, “HIV”, “acquired immunodeficiency syndrome” and “woman”, resulting in 24 articles that were categorized for analysis. Results: the majority, 91.6% of the studies, were conducted in Brazil, regarding the year of publication, much was published in the years 2008 (16.8%) and 2009 (16.8%). There was a lack of research focused exclusively on older women since, in addition to women, aids has faced aging. We identified the following factors that contribute to women’s vulnerability: HIV/AIDS as ‘someone else’s’ disease; gender inequalities; monogamy as a protective factor; low education and poor socioeconomic conditions; sex commercialization; and the elderly as an asexual being. Conclusion: findings indicate the necessity of establishing strategies that cover these issues that strengthen the feminization of the epidemic, especially among the elderly. Descriptors: vulnerability; women’s health; HIV; acquired immunodeficiency syndrome.

RESUMO
Objetivo: discutir os fatores que estão associados à vulnerabilidade da mulher ao HIV/aids através de uma revisão sistemática da literatura. Método: trata-se de revisão sistemática de literatura com busca realizada nas bases de dados Scielo e LILACS, no período de janeiro de 1990 a junho de 2011, utilizando-se como descritores “vulnerabilidade”, “HIV”, “síndrome de imunodeficiência adquirida” e “mulher”, resultaram 24 artigos que foram categorizados para análise. Resultados: a maioria, 91,6% dos estudos, foi realizada no Brasil, com relação ao ano de publicação grande parte foi publicada nos anos de 2008 (16,8%) e 2009(16,8%). Verificou-se uma carência de pesquisas voltadas exclusivamente para as mulheres idosas já que, além da feminização, a aids tem enfrentado o envelhecimento. Foram identificados os seguintes fatores que contribuem para a vulnerabilidade feminina: HIV/aids como doença ‘do outro’; desigualdades de gênero; monogamia como fator de proteção; baixa escolaridade e precárias condições socioeconômicas; comercialização do sexo; e o idoso como ser asexualizado. Conclusão: os achados indicam a necessidade em se estabelecer estratégias que abarquem essas questões que fortalecem a feminização da epidemia, principalmente entre as idosas. Descritores: vulnerabilidade; saúde da mulher; HIV; síndrome de imunodeficiência adquirida.
INTRODUCTION

The epidemiological situation of AIDS has shown significant changes since its discovery in the 1980s. The idea of risk associated with specific groups, used at the beginning of the epidemic in order to guide prevention strategies, is still prevalent, contributing to the vision of AIDS as a disease of “the other”.

This understanding contributed to the feminisation of the epidemic seen from the 1990s. In this period, the ratio of AIDS incidence was 6.8 men for each woman, in contrast to the most current data that show a relationship of 1.5 men for each woman. However, throughout the history of AIDS, it has already been noticed that women’s involvement in the transmission chain became more significant every year, mainly through heterosexual sex, increasingly affecting married women or the ones living with steady partners.

Given this change in the course of the epidemic, the idea of risk groups or behaviour gave away to the discussion on vulnerability to HIV infection, with the purpose of abandoning the vision about people or groups likely to become infected by understanding the conditions that lead people to be exposed to the virus, making them vulnerable.

Vulnerability is related to structural issues that enable the advancement of the infection. It results from a set of individual and collective conditions, which favours exposure to the virus or enables a way to defend oneself from it.

Regarding women, there are several factors that are associated with increased vulnerability to HIV. Besides having biological characteristics that facilitate infection, there is an unequal gender relation that favours asymmetric relationships and makes it difficult for women to ask for safe sex, this way constituting a barrier to control the feminisation of AIDS.

In this sense, considering the current situation of AIDS and all issues that permeate and facilitate women’s exposure to the virus, contributing to their remaining in the transmission chain, the objective of this study is to discuss the factors that are associated with women’s vulnerability to HIV/AIDS through a systematic literature review.

METHODOLOGY

This is a systematic review of the literature on women and HIV/AIDS held in electronic databases in the first half of 2011, seeking to answer the following question: what factors are associated with female vulnerability to HIV/AIDS?

With that purpose, searches were carried out in the Scientific Electronic Library Online (SciELO) and Latin American and Caribbean Health Sciences (LILACS) databases using the following descriptors contained in the list of Descriptors in Health Sciences of the Virtual Health Library: “vulnerability”, “HIV”, “acquired immunodeficiency syndrome” and “woman”. The search was made on data between January 1990 and June 2011. The delimitation of the research time frame was the beginning of 1990, as the feminisation of the epidemic began to be noticed from that time on.

As a result, 271 studies were obtained from the union between the descriptors vulnerability and acquired immunodeficiency syndrome. Next, the following combinations were used, with their respective results: 182 HIV and vulnerability results; 80 vulnerability and women results; 40 vulnerability and acquired immunodeficiency syndrome and women results; 29 vulnerability and HIV and women results; and 25 vulnerability and HIV and acquired immunodeficiency syndrome and women results. It was noted that all papers resulting from these combinations were included in the results of the first one.

For selection, a preliminary analysis from the reading of titles and abstracts was carried out in order to verify which ones met the established inclusion criteria: original articles, available in full text; published in journals classified by ‘Quasis’ extract A and B of the Coordination for Improvement in Higher Education (CAPES); and addressing women’s vulnerability to HIV/AIDS through heterosexual contact. Book chapters, theses and dissertations, review papers and studies that addressed the vulnerability of homosexuals or drug users were excluded.

This way, after applying the inclusion and exclusion criteria, the final sample resulted in 24 articles. These were organised into a summary table containing: identification of the study, authors, year and journal of publication, goals, journal’s ‘Quasis’, research subjects, type of study, data collection method/technique and main results, facilitating the studies’ analysis.

Moreover, six thematic groups linked to women’s vulnerability to infection were identified in order to guide the discussion: HIV/AIDS as a disease of ‘the other’; gender inequalities; monogamy as a protective factor; low education and poor socioeconomic conditions; sex commercialisation; and the elderly as asexual.
RESULTS

Table 1 shows the distribution of publications of studies that address women’s vulnerability to HIV/AIDS in the period from January 1990 to June 2011, according to the author, year of publication, study subjects and their age group, method of data collection and research type.

Table 1. Studies with women about vulnerability to HIV/AIDS from January 1990 to June 2011 (N=24)

<table>
<thead>
<tr>
<th>Author</th>
<th>Year of publication</th>
<th>Subjects</th>
<th>Age group</th>
<th>Method/data collection</th>
<th>Research type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Takahashi et al.</td>
<td>1998</td>
<td>100 medical records from HIV+ women</td>
<td>26-35</td>
<td>Documental</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Vemetho et al.</td>
<td>1999</td>
<td>25 HIV+ women</td>
<td>20-69</td>
<td>Interview</td>
<td>Qualitative</td>
</tr>
<tr>
<td>Storck et al.</td>
<td>2001</td>
<td>65 women</td>
<td>&gt;18</td>
<td>Questionnaire</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Paiva et al.</td>
<td>2002</td>
<td>1,068 HIV+ women</td>
<td>&gt;18</td>
<td>Questionnaire</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Silveira et al.</td>
<td>2002</td>
<td>1,500 women</td>
<td>15-49</td>
<td>Questionnaire</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Alves et al.</td>
<td>2002</td>
<td>26 HIV+ women</td>
<td>22-59</td>
<td>Interview</td>
<td>Qualitative</td>
</tr>
<tr>
<td>Nunes</td>
<td>2004</td>
<td>82 women</td>
<td>32 years</td>
<td>Questionnaire</td>
<td>Qualitative</td>
</tr>
<tr>
<td>Canaval et al.</td>
<td>2005</td>
<td>312 women</td>
<td>12-76</td>
<td>Questionnaire</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Nascimento et al.</td>
<td>2005</td>
<td>16 women in a stable conjugal relationship</td>
<td>&gt;18</td>
<td>Interview</td>
<td>Qualitative</td>
</tr>
<tr>
<td>Borba et al.</td>
<td>2006</td>
<td>7 HIV+ women with a history of prostitution</td>
<td>&gt;27</td>
<td>Interview</td>
<td>Qualitative</td>
</tr>
<tr>
<td>Gir et al.</td>
<td>2006</td>
<td>50 HIV+ women</td>
<td>&gt;18</td>
<td>Interview</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Esposito et al.</td>
<td>2006</td>
<td>9 HIV+ women</td>
<td>21-50</td>
<td>Interview</td>
<td>Qualitative</td>
</tr>
<tr>
<td>Maliska et al.</td>
<td>2007</td>
<td>7 HIV+ women</td>
<td>&gt;18</td>
<td>Interview</td>
<td>Qualitative</td>
</tr>
<tr>
<td>Sousa et al.</td>
<td>2008</td>
<td>20 women</td>
<td>20 - 49</td>
<td>Observation, interview and focal group</td>
<td>Qualitative</td>
</tr>
<tr>
<td>Maia et al.</td>
<td>2008</td>
<td>200 heterosexual men and women in a steady relationship</td>
<td>18 - 49</td>
<td>Questionnaire</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Olivi et al.</td>
<td>2008</td>
<td>165 women</td>
<td>50-66</td>
<td>Questionnaire</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Morales et al.</td>
<td>2008</td>
<td>178 women</td>
<td>15-63</td>
<td>Questionnaire</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Silva et al.</td>
<td>2009</td>
<td>12 women</td>
<td>18 - 38</td>
<td>Interview</td>
<td>Qualitative</td>
</tr>
<tr>
<td>Santos et al.</td>
<td>2009</td>
<td>3,822 women from which 1,777 were HIV+</td>
<td>&gt;17</td>
<td>Questionnaire</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Canerio et al.</td>
<td>2009</td>
<td>35 women</td>
<td>15-49</td>
<td>Questionnaire</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Guedes et al.</td>
<td>2009</td>
<td>27 women under HIV/AIDS health care</td>
<td>21-67</td>
<td>Interview</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Oltramari et al.</td>
<td>2010</td>
<td>48 married men and women</td>
<td>18-74</td>
<td>Interview</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Albuquerque et al.</td>
<td>2010</td>
<td>1,464 black women</td>
<td>&gt;18</td>
<td>Interview</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Pascom et al.</td>
<td>2011</td>
<td>8 thousand black men and women</td>
<td>15-64</td>
<td>Questionnaire</td>
<td>Quantitative</td>
</tr>
</tbody>
</table>

Of the 24 studies selected, 91.6% (n=22) were performed in Brazil and 8.4% (n=2) in countries like Chile and Colombia. Most publications were concentrated in the years 2008 (16.8%, n=4) and 2009 (16.8%, n=4).

As for the research subjects, the majority (87.4%, n=21) was composed only of women, and the others (12%, n=3) were carried out with people of both sexes. In these cases, the studies sought to focus the discussion of the results on behaviour that would justify the increasing number of women infected with HIV.

Regarding the type of study, 54.4% (n=13) were classified as a quantitative approach, 33.4% (n=8) qualitative and 12.6% (n=3) quanti-qualitative. The interview was the most widely used method for data collection, present in 50% (n=12) of articles, followed by questionnaire 46% (n=11) and documentary research 4.2% (n=1).
DISCUSSION

Although most studies were conducted in Brazil, it was noted that issues relating to vulnerability to HIV/AIDS are the same among women in Brazil and the other two countries surveyed. There were no differences with regard to the factors that favour exposure to HIV among women in Brazil, Chile and Colombia.

As for the year of publication, it was found that, despite the fact that the feminisation of AIDS had been felt from the 90s, the original Brazilian studies that addressed the issue of women’s vulnerability to infection only began to be published from 1998. This demonstrates a lack of research for this public since the beginning of the epidemic.

The age of participants ranged from 12 to 76 years, with a prevalence of the young age group. There was also a lack of studies devoted exclusively to elderly women, as besides the feminisation, the epidemic has also faced aging, and this is related both to women who acquired the infection as adults and aged and those who were infected already in old age.

The interview was the most used data collection method. Only one study carried out an association between the methods, evaluating the vulnerability of women from an outlying neighbourhood of Teresina (PI) and preventive actions aimed at these women. The collection began with the observation of the work developed by the Family Health Team, where a lack of collective educational activities aimed at women living in the catchment area of the unit could be observed, which was restricted only to individual assistance. Later, individual interviews and focus groups were established, which helped the comprehension of the factors related to vulnerability to HIV/AIDS among these women.3

Regarding the type of study, the majority were classified as a quantitative approach. This kind of research relates to a set of procedures orderly arranged, which are used in order to acquire information by the deductive thinking, generating ideas that are tested in the real world. However, this approach is limited by the difficulty of addressing ethical or moral issues and, in general, has a narrow focus, which makes in-depth understanding of factors related to women’s vulnerability to HIV more difficult.10

The need for more research to address qualitatively the issue of women’s vulnerability to the virus can be perceived, in an attempt to unravel the phenomena present in this public context, enabling a closer relationship with the subjects. Additionally, this type of research facilitates the understanding of the phenomena that make women more vulnerable to AIDS, for an approach more directed towards factors involving the universe of meanings, motives, aspirations, beliefs, values and attitudes, which corresponds to a deeper understanding of relationships.11

The quantitative approach associated with the qualitative one, however, allows detailed understanding of the meanings and characteristics presented by the interviewees, as it emphasises the understanding of human experience tied to measurable aspects such as frequency, percentage, average and standard deviation, among others. The combined use of both approaches makes it possible to obtain more detailed and enriching results, as one approach can help to overcome the limitations of the other, taking a complementing position.10,1

Six categories of factors on women’s vulnerability to HIV/AIDS emerged from the studies’ results, which are discussed below.

- HIV/AIDS as a ‘someone else’s’ disease

It was evident in the analysis that the idea of AIDS as a specific groups’ disease still pervades the social imagination, which has favoured the change in its epidemiological profile. In the specific case of women, it was found that most considered themselves invulnerable to the virus and many discover the infection casually, through prenatal or childbirth, or illness/death of a partner or child.12,15

In a survey of 1,500 women, which evaluated the prevalence of risk behaviours for STD/AIDS related to the self-perception of vulnerability, viewing HIV as a disease of ‘the other’ proved evident. The results showed that most of them, 64%, reported it impossible or nearly impossible to get an STD or AIDS, and 59% of those classified as in higher risk believed they would never acquire the infection.16

Consequently, many deny the risk of becoming infected, and even among those who believe the virus threatens all people alike, they often exclude this possibility, a denial that is related to the fantasy of omnipotence.8,15,17

Others see AIDS far from their reality and from the people they live with, associating it with famous people and specific groups such as homosexuals, sex workers and injecting drug users and, because they don’t belong to these groups, consider the possibility of contamination unlikely, thus justifying the
failure to adopt preventive practices.8,12,14,15,18,24

As a consequence of this behaviour, an interview with 1,068 women, conducted the moment before the test that would give them the HIV positive diagnosis, revealed that almost two thirds of respondents had never imagined they could be infected by the virus, and only 23% were doing the examination due to suspicion of infection or on account of illness of relatives.25

Another study of 3,822 women, of which 1,777 were diagnosed positive for HIV, found that those living with HIV/AIDS had no statistically significant difference with respect to the median number of lifetime sexual partners compared to the rest of the sample. This demonstrates that the concept of AIDS as a disease associated with people with certain behavioural characteristics makes women easy victims of the virus, due to lack of understanding of the factors associated with infection, which ultimately exposes them to vulnerabilities.13

- Gender inequalities

One of the factors that significantly contribute to the exposure of women to the virus is linked to issues that have historical roots and socio-cultural differences related to gender, which provides various forms of domination. As a result of a macho culture, many women are subjected to the wishes of their partners and, even knowing they have extramarital relationships, have difficulty negotiating the use of condoms, so as not to arouse suspicion.21,24,26,8

This demonstrates the emotional dependency and fear that women have in losing a partner, which leads to an attitude of submission in relation to the decision of safe sex, not having autonomy over the use of condoms. Many simply do not use condoms because their partner does not like or do not agree, which was evident in one study conducted with 25 HIV positive women.8,15,21

Another study of seropositive women revealed that many blame themselves for their infection, because they had already known, before becoming infected, about their partners’ infidelity. The acceptance of men’s extramarital behaviour and the difficulty in negotiating use of condoms, in most cases, are justified by the fear of generating suspicions that result in the breaking of the union or violence.12,15,21,22

Therefore, it is necessary for health care professionals to invest in women’s empowerment as a strategy to reduce gender inequality. However, it appears that in health programs the focus is given only to women’s reproductive health, and AIDS prevention focuses only on the reduction of vertical transmission, with no actions directed to the factors that favour the feminisation of the epidemic.17,27

- Monogamy as a protective factor

Most studies brought the realisation that women believe in monogamy as a factor that protects against HIV, ignoring all other issues that are associated with virus transmission. The main justification provided by the participants who assess themselves as having no risk of infection is related to marriage or a stable monogamous relationship; this way, the condom would go against the monogamous model, which hinders its use in relationships.8,12,13,17-20,23-4,26,28-30

The use of condoms in marriage is associated in most cases to the contraception method, rather than to a barrier against sexually transmitted diseases. Thus, many do not see the need for condoms due to the use of hormonal contraceptives, or because they are sterilised or postmenopausal.19,31 However, research conducted with women infected with HIV shows that the majority of them reported having been infected by their steady partners, in stable and monogamist relationships.12,5,24

Furthermore, it was found in one study that the drug use by their partners is underestimated by women, showing that they do not perceive it as a risk factor that expose them to AIDS.14

A study conducted in the five regions of Brazil with 8,000 people reveals that men have sexual relations with casual and paid partners in a larger proportion when compared to women. Among those with casual partners, condom use was higher among men who do not live with stable mates, since among those with stable relationships, as seen in the study, the use of condoms in extramarital relationships is lower, thus exposing their steady partners to the virus. This data can be proven by the current trend of the epidemic, revealing an increase of infected women with monogamous partnerships and heterosexual relationships.32

- Low level of education and poor socioeconomic conditions

There was an association between low education and poor socioeconomic conditions with AIDS, indicating its pauperisation. Women who have fewer years of education usually have more difficulty in negotiating safe sex. Many do not understand the true mechanisms and forms of transmission, contributing to the vulnerability to the infection.18,19,21,26

However, research conducted with women...
in Manaus found no relationship between more education and regular condom use, in contrast to results of another study showing that women with 12-14 years of schooling have a greater awareness about the transmission of the virus and thereby most frequently used condoms. Another documentary study performed on 100 notification records of HIV positive women showed that half of these women had little education and were stay-at-homes. 17, 27,30

For that reason, an impaired socioeconomic condition is a factor that hinders access to health services, by exposing women to poverty and relating to low education. This situation often becomes an obstacle to early detection of the virus, with the consequences of an increase in transmission and spread of infection between casual and steady partners. 14,29-4

In addition, gender issues still favour the exclusion of women in the labour market, subjugating them to informal services with reduced income, or favouring their entry into prostitution as a need for survival. 14,25-6

**Sex Commercialisation**

Two studies chose as research subjects female sex workers with a history of prostitution, thus analysing individual and social factors surrounding these women’s vulnerability to HIV/AIDS. 22,33

It was found that they had sexual behaviour vulnerable to the virus since adolescence, because of their early start in sexual activity. In these studies, the unequal gender relationship, discrimination and prejudice stigmas are more evident due to the existence of a power relationship between sex client and sex worker, causing many of these women to be seen as a commodity. As a result, the power of bargaining for safe sex ends up being further reduced, increasing the vulnerability of this group to HIV. 22,33

Several factors contribute to unsafe sex among sex workers. The study reveals the existence of a higher demand and better remuneration paid to young people, causing many to intensify their gains in a short period, and also the value paid for sex without condom is higher, making its use not a priority. 31

It was found that the condom is not accepted by all men and, often, the requirement of its use may cost both the client and the loss of money. It was also found that some women, even being aware of their HIV positive diagnosis, accept to have relations without a condom, exposing their customers and themselves to the virus and other STDs. 22,33

- **The elderly as an asexual being**

Associated with the process of feminisation of AIDS, an increase in people over 50 years of age infected with HIV can be observed. Women in this age group are neglected in relation to their vulnerability, as they already have a family, their inability to become pregnant or because they have undergone a salpingectomy. 29,31

Many health professionals do not consider the HIV risk in women who are at an advanced age or those with older partners. This may be the result of preconceptions that permeate society, related to the elderly as being asexual or as incapable of awakening desires in others, placing this population at increased vulnerability to the virus. 29

This view does not consider that currently, with the pharmacological advances, the elderly have more actively exercising their sexuality. Because of this, many seek paid unprotected extramarital sex, enabling HIV exposure not only to them but also their wives, who in most cases are also elderly. Research shows that increasing age corresponds to decreasing use of condoms, due to the fear that the elderly have that condoms interfere with their sexual performance. 32

**CONCLUSION**

As seen in the studies, women are subjected to several factors that contribute to their vulnerability to HIV/AIDS. However, it was found that since the beginning of the epidemic, studies that address the vulnerability of women were only considered by the end of the 90s, years after the discovery of the changing on epidemiological profile that revealed the feminisation of AIDS.

Despite the advances of the feminist movement, women still suffer the consequences of gender differentiation, which contributes to the emotional and financial dependence, making it difficult to negotiate safe sex. This is more evident among those who have stable, monogamous relationships, based on trust and loyalty, where they believe there is no need to use condoms.

Many of the research participants associated the infection to specific groups, a concept that prevailed in the early 1980s and still persists and contributes to the increase and change in the disease's epidemiological profile. Other observed factors that favour the feminisation of AIDS are prostitution, poor education and poor socioeconomic conditions, which expose women to infection in different degrees.

Women's vulnerability to HIV/AIDS...

English/Portuguese

Cunha JKP, Moreira MASP, Lôbo MP.

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