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Short Communication

Knowledge about HIV/AIDS in older adults using the services of Family Health Strategy

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Abstract

Introduction: This study evaluated knowledge about HIV/AIDS in elders using the services of Family Health Strategy. **Methods:** Cross-sectional, descriptive, and analytical study involving 238 participants. Mini-Mental State Examination and QHIV3I were applied. **Results:** About 30% of participants had active sexual lives and 5.5% used condoms consistently. The question with the highest score of right answers was about transmission through needles (95%) and the lowest (52.5%) was about whether individuals infected with the virus always displayed symptoms. **Conclusions:** It is necessary to train health professionals to develop actions that encourage elders to take preventive measures.

Keywords: Primary health care. Older adult. Knowledge. HIV. Health vulnerability.

The growing number of elders in Brazil and in other countries requires knowledge about the habits and health of this population. Studies on this subject contribute to planning actions and policy development to guarantee a more active and healthier aging process¹.

The aging process is associated with impaired health conditions as well as significant losses related to the roles performed in social and work environments².

In the context of aging, the search for services increases exponentially, especially within the scope of Primary Health Care (PHC), making this an excellent opportunity for the reception, intervention, and monitoring of the elderly population³. In the case of pathologies that evolve aggressively, especially sexually transmitted diseases like HIV/AIDS, patients must be diagnosed and treated early in order to minimize serious consequences⁴.

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Orcid: 0000-0002-5173-5328 Received 24 August 2018 Accepted 8 January 2019 Therefore, it is important to highlight the progression in the number of cases of elders with AIDS during the decades of 1980 and 1990, mainly due to an underestimation of the risk of HIV transmission and lack of condom use. In addition, taboos, prejudices, and preconceptions associated to low educational levels, scarce knowledge about the disease and its transmission, and lack of discussions about sexuality and aging have contributed to the aggravation of this situation^{4,5}. A study that analyzed data from 1980 to 2009 found that 2.5% (13,657) cases of the disease were diagnosed in the elderly population. In addition, it revealed a higher mortality rate (15%) among people 60 years old or older⁶.

Considering the facts mentioned above, this study aimed to evaluate the knowledge about HIV/AIDS among elder users of the health services offered by Family Health Strategy (ESF) in the city of Uberaba, Minas Gerais, Brazil.

This was a descriptive, analytical, and cross-sectional study conducted with elders (60 years old or more) registered with ESF in the urban areas. The sample was calculated considering a determination coefficient in a multiple linear regression model with seven predictors, having 0.01 as type I error and 0.1 as type II error, resulting in an a priori statistical power of

90%. Considering a sample loss of 20%, the final number of interview attempts was n=285. The main dependent variable was knowledge about HIV/AIDS.

Exclusion criteria were the following: elders who did not meet the minimum required score in the cognitive evaluation; lived long term in institutions; and/or who could not be found after three attempts of contact. Data collection was conducted at participants' residence after a random selection of the elderly registered with the ESF.

The first evaluation was comprised of an assessment of participants' cognitive capabilities through the Mini-Mental State Examination. The QHIV317 and a sociodemographic questionnaire designed by the researchers were also administered. Knowledge about HIV was considered as a discrete quantitative variable, whose outcome was the sum of correct answers. A score of one was given to correct answers, while a score of zero was given to incorrect and "does not know" categories.

Data were analyzed using the Statistical Package for Social Sciences (SPSS) software, version 20.0. The categorical variables were presented in absolute and relative frequencies, and the quantitative variables were represented by means, amplitude, and standard deviation. The bivariate analysis included independent samples *t*-test. The simultaneous influence of variables was examined using multiple linear regression analysis. Predictors were only included according to theoretical references.

This research was approved by the Research Ethics Committee (Protocol No 2.041.624).

The final sample included 238 elders. Sociodemographic and clinical variables are shown in **Table 1**. Each participant reported a mean of 5.2 (3.0) morbidities, with a minimum of 0 and a maximum of 16.

Regarding sexual activity, only 5.5% of participants reported using condoms and, of these, only 1.3% stated to use them in all sexual relations.

Results regarding participants' knowledge about the HIV virus are described in **Table 2**. The average HIV knowledge was 10.21 (2.6) correct answers, with a minimum of one and a maximum of 14 correct answers.

Regarding the bivariate analysis, a significant association was found between HIV/AIDS knowledge and the following variables: age group (0.004), family income (<0.001), educational level (<0.001), type of health service (0.008), and initiative to participate in groups discussing information about sexually transmitted infections (STIs) (0.01).

Using multiple linear regression, predictors of knowledge about HIV/AIDS chosen according to the literature were confirmed such as age group, family income, educational level, type of service, active sexual life, group participation, and gender. Among these correlations, elders who used public and private health services (Beta 0.1; p 0.01) and those with higher educational levels (Beta 0.2; p 0.003) had a significantly higher knowledge of HIV/AIDS.

Most of the participants in this study were women. In literature, such a phenomenon is called "the feminization of aging," which can be explained by the fact that in Brazil women

TABLE 1: Sociodemographic and clinical data of elders using ESF services in the municipality of Uberaba - Uberaba/MG - 2018.

	n	%
Gender		
Female	163	68.5
Male	75	31.5
Age group		
60 to 79 years	208	87.4
80 years or older	30	12.6
Educational level		
Up to 4 years	163	68.5
4 years or more	75	31.5
Family income		
Up to 3 minimum wages	180	75.6
3 minimum wages or more	53	22.3
Smoker		
Yes	37	15.5
No	155	65.1
Used to be a smoker	45	18.9
Alcohol consumption		
Yes	43	18.1
No	176	73.9
Used to consume alcohol	17	7.1
Physical activity		
Yes	97	40.8
No	137	57.6
Morbidities*		
Arterial hypertension	181	76.1
Visual problems	156	65.5
Back problems	115	48.3
Arthritis/arthrosis	100	42.0
Diabetes	99	41.6
Poor circulation	97	40.8
Cardiac problems	86	36.1
Sexually active		
Yes	70	29.4
No	147	61.8
Does not know	10	4.2

^{*}Participants could mark various options in the variable "Morbidities."

TABLE 2: Answers to questions about HIV/AIDS from elders using ESF services in the municipality of Uberaba - Uberaba/MG - 2018.

	True		False		Do not know	
	n	%	n	%	n	%
HIV is the virus that causes AIDS	182	76.5	10	4.2	46	19.3
A person with AIDS always manifests symptoms.	125	52.5	63	26.5	48	20.2
Diagnostic is performed through lab exams.	208	87.4	7	2.9	22	9.2
Virus can be transmitted through soap, towels, and toilet seats.	43	18.1	157	66.0	38	16.0
Virus can be transmitted through hugs, kisses on the face, drinking from the same glass, and chimarrão.	45	18.9	157	66.0	36	15.1
AIDS can be transmitted by mosquito bites.	70	9.4	112	47.1	56	23.5
Condoms prevent AIDS from being transmitted.	205	86.1	18	7.6	14	5.9
There is a condom made specifically for women.	176	73.9	13	6.5	46	20.6
The use of the same syringe and needle by many different people transmits AIDS.	226	95.0	3	1.3	9	3.8
AIDS is a disease that only affects risk groups.	34	14.3	188	79.0	16	6.7
Elders should not be worried about AIDS.	29	12.2	194	81.5	15	6.3
There is a treatment for AIDS.	209	87.8	27	9.7	6	2.5
There is a cure for AIDS.	39	16.4	177	74.4	22	9.2
AIDS is a punishment God sends to sinners.	34	14.3	176	73.9	27	11.3

live on average eight years longer than men, relate differently to the job market and to the use/abuse of alcohol and tobacco, and have a different attitude toward health and disease⁸.

Research indicates that lower educational and income levels have been associated with less knowledge about HIV/AIDS. Educational level has been an important determinant for an individual's health, especially among elders. This is related to people's access to information and their capability for benefiting from newly acquired knowledge. Income represents access to material goods and services, including health services⁹.

Concerning clinical variables, a study conducted with elders who used the services of an ESF in Pará found that a high number of them did not practice physical activity (83.90%), consume alcohol (82.12%), or smoke (86.39%)¹⁰. Regarding physical activity, this study revealed that most elders did not practice any, corroborating the results from another research¹¹.

A study with elders from Belo Horizonte in Minas Gerais found similar results around comorbidities, according to which 19.2% reported having five or more diseases. The most common morbidities were arterial hypertension (95.5%), diabetes (48.8%), and osteoarticular diseases (38.3%)¹.

Regarding sexual activity, nearly one-third of the elders in the sample had an active sexual life. A study involving 614 elders in the Triângulo Mineiro region identified that 47.4% of them had active sexual lives, and 95.7% did not use condoms. Women sought information about sexuality 20 times more than men but feel less pleasure, and 97.9% had had a decline in libido and vaginal dryness within the last year⁵.

Another study found that among elders, 298 females (88.2%) and 62 males (52.1%) did not use condoms¹². A study about STI/AIDS vulnerability in elders from Teresina, Piauí found that most elders regularly had sexual intercourse and knew the importance of using condoms. However, they often disregarded their use⁹. These results suggest that elders might have scarce information about sexuality and STIs, often not knowing that condom use is necessary.

It is important to mention that there is a difference between "hearing about" and having information about a subject. In this regard, the fact that elders "heard about" the disease does not guarantee that they have knowledge or information about it and, thus, being cognizant of themselves as vulnerable individuals that could get infected with HIV. Recognizing one's own vulnerability is a broader concept than that of risk and should be included in individual and social programs. Therefore, it requires considering the social determinants of the disease, demanding the renovation of health practices and focusing on multi-dimensional analysis and interventions¹³.

A study in the city of Uberaba also identified gaps in knowledge which corroborate those found in this study. The questions that obtained the lowest number of correct answers were "People with AIDS always display symptoms" (41.5%) and "AIDS can be transmitted by mosquito bites" (45.7%)¹².

There are still many taboos and beliefs related to the sexuality of elders and HIV transmission, and professional actions to confront risk behaviors and clarify doubts are essential. Many studies have revealed that elders' usually seek information about HIV/AIDS through traditional media such as radio, newspaper, pamphlets and, especially, television. It also stands out that health professionals do not address this subject during consultations with elders^{5,13}.

Some authors have pointed out that HIV information is scarce and there is a critical need to work towards increasing it, especially to help diminish prejudice and promote the internalization of preventive behaviors in the population¹⁴.

The lack of coherence of public policy regarding AIDS awareness may also be aggravating this situation. Family health programs, community health agent programs, and planned parenthood and HIV/AIDS prevention groups are mostly targeted toward young adults and adults. In this regard, focusing on the dissemination of HIV/AIDS information to elders should be extremely important¹⁵. An epidemiological study pointed out the necessity of providing information about the disease and developing public health policies aimed at elders along with measures to raise awareness in professionals about this subject⁶. It can be inferred from the results of this research that the situation found may be related to the lack of politics and material focused to reach this population.

These results may encourage health professionals to consider elders as sexually active individuals and develop actions that can motivate them to take preventive measures. Elders must understand their vulnerability to STI/AIDS, but professionals should also contribute with actions in preventing these infections and detecting them earlier, increasing the survival rate and the quality of life of this population.

The results of this study cannot be generalized as they involved only elders who utilized services of Family Health Strategy in the city of Uberaba, Minas Gerais. However, these results reveal many gaps in the knowledge of the elderly population about HIV/AIDS, which can be explained by the lack of information about the transmission and prevention of the disease.

Conflict of Interest

The authors declare that there is no conflict of interest.

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Erratum

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