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Article

# Attitudes of teachers in training towards people with HIV/AIDS.

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**Abstract:** Discriminatory attitudes towards people living with HIV/AIDS are prevalent. A Joint United Nations Program on HIV/AIDS report (2019) indicated that more than 50% of the people surveyed in one of the studies spanning 26 countries expressed unfavorable attitudes towards HIV-positive people. The objective of this study was to assess the attitudes of senior Education Studies students at a university in Spain towards people with HIV/AIDS so as to propose specific educational interventions. The study employed a quantitative methodological approach; a questionnaire with a 14-item attitude score served as the analytical instrument. The study sample comprised 613 students from the School of Education at the University of Huelva, Spain. The results showed that more than 50% of the School's senior students had discriminatory attitudes towards HIV-positive people, some of whom were fellow classmates. This study proposes several formative approaches to reducing the stigma suffered by HIV-positive people, while also improving senior students' skills and capabilities in the field of health promotion.

**Keywords:** HIV, AIDS, vulnerable group, young people, trainee teachers, health education

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## 1. Introduction

The first cases of HIV/AIDS were diagnosed almost four decades ago; nonetheless, this disease remains one of the most significant public health problems affecting young people worldwide. UNICEF reported [1] that in 2017 more than one million individuals world-wide aged 15 to 19, three out of five of whom were women, had acquired HIV. Some of the factors that explain the spread of this epidemic among adolescent women are poverty; lack of information; limited access to health services; early sexual relations with older men; non-consensual and forced sexual relations; and the inability to negotiate these relationships.

A Joint United Nations Program on HIV/AIDS (UNAIDS) [2] report has shown that 36.9 million people live with HIV worldwide, two million fewer infected people relative to 2009 because of easier access to antiretroviral treatment. The same report indicates that, although the number of new infections had decreased, UNAIDS has established some goals through the "Getting to Zero: 2011-2015 Strategy" [3].

The number of HIV diagnoses has increased significantly in Spain and worldwide since the first case was reported in 1981 [4]. At the beginning of the pandemic, Spain was one of the European countries with the highest number of new infections and AIDS-related deaths. At present, Spain is above the European average in HIV diagnoses [5].

The UNAIDS Inter-Agency Task Team (IATT) on Education and School Health [6] have expressed concern over the lack of educational programs needed to end the epidemic to end the epidemic and have highlighted education as a key measure in the prevention of new infections of HIV [7]. Educational institutions should strive to develop and implement disease-prevention strategies, while also inculcating values such as co-

existence and tolerance in school children, as part of an overall effort to end discrimination against HIV-positive people. In this context, several studies have investigated students' social representations of and attitudes towards HIV, and have proposed various socio-educational measures that can be adapted to the particularities of each context [8], [9], [10], [11], [12], [13], [14], [15].

The stigma and discrimination that people living with HIV/AIDS are subjected to have been studied using psychoanalyst Serge Moscovici's Theory of Social Representations as a reference. For Moscovici [16], [17], [18], the formation of social representations depends directly on the particular way in which each group internalizes and transmits information. This process entails three elements: information, field of representation, and attitude.

'Information' pertains to knowledge about the social object being represented and is acquired either through verbal exchanges with other people or by direct contact with or experience of the object. According to the theory of social representation, the image is a concrete and limited content that refers to a precise aspect of the object of representation. 'Field of representation'—the most crucial of the three elements—refers to the image that has been created by society and the subject. Attitude includes opinions (both negative and positive perceptions) of the object, which in turn are influenced by prior frames of reference.

Several studies about social representation have sought to understand this phenomenon across multiple, diverse, social and cultural contexts so as to eliminate the stigma associated with HIV [10], [13], [19], [20], [21], [22], [23], [24], [25], [26], [27], [28],[29], [30].

Other studies focused on investigating attitudes towards HIV-positive people [31], [32], [33], [34], [35], [36], [37], [38], [39], and reported common characteristics and singularities of the contexts in which these attitudes were developed. A common finding among these studies is that lack of information, especially about HIV transmission routes, is one of the main reasons why people avoid relating to individuals living with HIV/AIDS. High levels of education can promote healthy habits in the classroom and ensure that senior students are knowledgeable enough to avoid such discriminatory behavior [14], [40].

The objective of this study was to determine the attitudes of students with backgrounds in Education (for example, Bachelor's and M.S. degrees in Teaching, Social Education etc.) towards people living with HIV/AIDS, in order to develop and implement socio-educational measures that can prevent stigma and promote the latest research on sexual health & sexually communicable diseases among young students.

## 2. Materials and Methods

This is a quantitative and non-probabilistic research [41], [42], on the conceptions of teachers in initial training about a highly vulnerable group such as people with HIV. Although this topic has been studied in the field of health professionals, there are few precedents that focus research on education professionals.

### 2.1. Participants

The random sample consisted of 613 teachers in initial training at the Faculty of Education of the University of Huelva, Spain. The sampling model was stratified by age and course. Each stratum or age group contained between 110 and 170 people to ensure that all groups were adequately represented. The number of students decreased as the age range increased, as occurs in most universities (Table 1).

**Table 1.** Age of the Study Population.

Age range	Frequency	Percentage	Valid percentage	Accumulated percentage
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	Aged ≤21 years	169	27.6	28.7	28.7
	Aged 21 to 23 years	163	26.6	27.7	56.4
<b>Valid</b>	Aged 23 to 25 years	138	22.5	23.4	79.8
	Aged >25 years	119	19.4	20.2	100.0
	Total	589	96.1	100.0	
<b>Lost</b>	System	24	3.9		
<b>Total</b>		<b>613</b>	<b>100.0</b>		

The average age of the student population was 24 years. The sample was valuable for the purposes of this study because young people are vulnerable to HIV/AIDS worldwide. Moreover, this sample was representative of the role that senior students play in health education among their peers, and in preventing the stigmatization of vulnerable social groups. Women comprised the bulk (80%) of the sample because female students predominate in the field of educational studies (Table 2).

**Table 2.** Level of Education and Gender of The Study Population.

Level of education	Women	Men	Frequency	Percentage
Social	166	27	193	31.5
Primary	56	31	87	14.2
Secondary	113	0	113	18.4
Physical activity and sports sciences	5	21	26	4.2
M.S. degree in Special Education	21	1	22	3.6
M.S. degree in Intercultural Education	10	3	13	2.1
M.S. degree, Bachelor's degree, and Vocational Training	108	24	132	21.5
Did not answer	15	12	27	4.4

## 2.2. Instrument

The instrument used in this investigation consisted of a 14-item attitude score. Data on responses, sociodemographic characteristics (age, gender, level of education, and academic course), level of interest in the subject matter, and the primary sources of information on HIV were collected. The study protocol was approved by a review committee on the protection of human participants.

Validation was based on literature reviews [43], [44], [45], [46], [47], and the indicators thus obtained were assessed by six experts. Once the analysis was complete, a pilot test was carried out with a sample of 36 participants. The analysis of Cronbach's alpha during the pilot test allowed for the elimination of items with little correlation to the dataset and, consequently, increased alpha. Similarly, items that increased the score average (difficult) and decreased the score average (easy) were eliminated. Three different facets of "attitude" as a construct were evaluated:

- Facet 1: Discrimination. This refers to the attitude of people without HIV/AIDS towards HIV-infected individuals. The indicators were fear, rejection and distancing oneself from HIV-positive people.
- Facet 2: Concealment. It refers to the kind of attitude that respondents would have had if they had had HIV/AIDS, including their willingness to inform other people about their seropositivity and the circumstances under which they would do so. Providing information about oneself to other people is essential in interpersonal relationships. The disclosure of personal information, however, could also jeopardize them. A paper presented at the II FIPSE Meeting entitled "The implications of concealment and its possible role as a coping strategy for

HIV-associated stigma” [45] the disclosure of information in interpersonal relationships tends to be reciprocal. By contrast, people who have been stigmatized are at a significant disadvantage; they have difficulty developing interpersonal relationships because they are often forced to conceal relevant information from others. This is the case with many HIV-infected children who have been taught from a young age not to disclose their use of antiretroviral drugs to other people.

- Facet 3: Self-discrimination. This refers to how respondents would have perceived themselves if they had been diagnosed with HIV/AIDS, including whether or not they would avoid performing routine activities. This approach simulated the attitude of rejection they might develop towards people living with HIV.

The questionnaire (on attitudes and their corresponding facets and items) is depicted in Table 3.

**Table 3.** Facets and items of the questionnaire entitled “Attitudes towards People HIV/AIDS”.

Facets	Items
Discrimination	1. I would request that I be transferred to another hospital room if the patient I was sharing a room with had HIV/AIDS 2. I would share a student house with a person who has HIV/AIDS 3. If I had a child, I would change my daycare center if I knew it catered to children with HIV/AIDS. 4. I would take strict hygiene measures if I were a teacher in an adult class where there were people with HIV/AIDS 5. I would hire a person with HIV/AIDS in my company 6. If I worked with someone who had HIV/AIDS, I would be afraid of contracting HIV 7. I would end the relationship If I found out that my partner had HIV/AIDS 8. I would have safe sex with a person with HIV/AIDS if I was in love
Concealment	9. Supposing you were infected with HIV/AIDS. You would inform your: Mother; Father; Brother; Grandfather; Best friends; Roommates; All my friends; Current partner; Other people with HIV; Nobody 10. If I had a child infected with HIV/AIDS, I would tell the teachers 11. I would understand if my partner did not tell me that he/she had HIV/AIDS at the beginning of the relationship 12. I have the right to know if there are any children or adolescents with HIV/AIDS attending classes with my child 13. If I worked as a teacher, my students’ parents would have the right to know whether any of their children’s classmates were HIV-positive
Self-discrimination	14. If I had HIV/AIDS, I would: <ul style="list-style-type: none"> <li>- avoid maintaining a romantic relationship;</li> <li>- avoid having sexual relationships;</li> <li>- participate in fewer social activities;</li> <li>- have fewer social relationships;</li> <li>- avoid sharing a house with other students;</li> <li>- avoid traveling with friends;</li> </ul>

- 
- not adopt children;
  - not have children of my own.
- 

The members of the research team applied the instrument. With prior authorization, the scale was applied, during the same period of time, in the classroom and during regular academic hours. All participants were duly informed of the nature of the research, and anonymity and confidentiality of the data collected were guaranteed.

The analysis of the data collected is presented below. The analysis of the quantitative data obtained in the study was performed using SPSS (Statistical Package for the Social Sciences) (version 24, IBM SPSS).

### 3. Results

In the following lines we present the results obtained from the analysis of the data collected in the research carried out. It should be noted that approximately 50% of the respondents expressed discriminatory attitudes towards people with HIV/AIDS.

#### 3.1. Facet 1: Discrimination

The first item that participants had to respond to in this category was: "I would request that I be transferred to another hospital room if the patient I was sharing a room with had HIV/AIDS". 63% of the respondents said they would not request a change of room. However, analysis by age group indicated that while 47% of those younger than 21 years would make this request, only 28% of students older than 25 would make the same request.

With respect to accommodation, 29% of the respondents stated their willingness to share student housing with someone who had HIV/AIDS. Students who expressed a deep reluctance to sharing student quarters with HIV-positive individuals, were all younger than 21 years.

In our sample, 51% of the respondents stated that they would change their day-care centre if they knew that it was attended by children with HIV/AIDS, indicating that this group was misinformed about HIV transmission and had discriminatory attitudes.

Only 30% of the respondents stated that, as teachers, they would be unwilling to take the strict hygiene measures required to integrate HIV+ students into the adult classroom thus indicating that they were likely to discriminate against HIV-positive individuals.

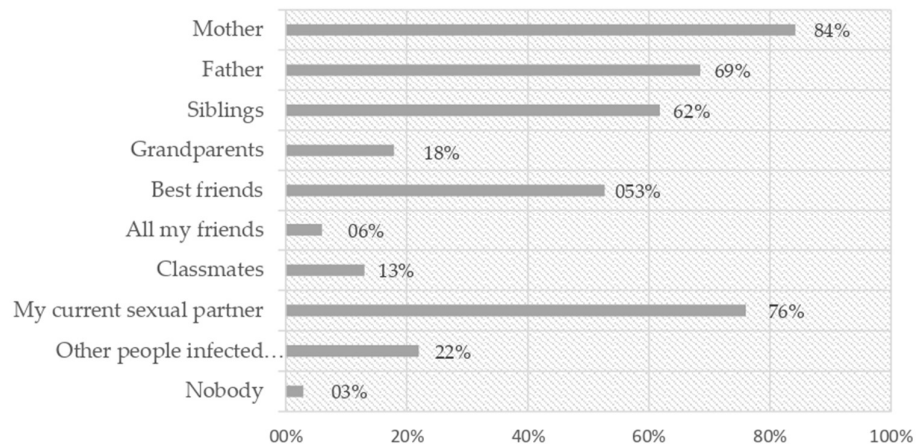
56% of the participants would hire a person with HIV to join their company. The remaining participants were either not sure they would hire HIV-positive people or were certain that they would not. Only 38% of the participants were not afraid of becoming infected if they worked with a colleague with HIV/AIDS.

50% of the respondents would not end a relationship if they found out that their partner had HIV/AIDS. The other 50% would either end the relationship or were not sure if they would. A question regarding participants' willingness to have safe sex with an HIV-infected person yielded the same results.

#### 3.2. Facet 2: Concealment

Gil de Montes et al. [45] hypothesized that, when choosing to reveal their disease status, people with HIV weighed all the personal and social benefits first. The decision to deliberately conceal their infection status is forced on them, and takes a significant cognitive and emotional toll on the afflicted individual. The seropositive people interviewed by Gil de Montes et al. [45] used descriptive words such as lying, hiding, feeling overwhelmed, living a double life, feeling like a criminal, and living with lies. The authors concluded that these individuals consistently used strategies to hide information, including discretion (avoiding revealing information openly), concealment (omitting information), or invention (deliberately sharing false information). Therefore, respondents

were asked if they would conceal their serological status if they had HIV/AIDS, from whom, and under what circumstances. The most relevant results are shown in Figure 1.



**Figure 1.** People That the Study Participants Would Inform if They Were HIV seropositive.

When it came to the likelihood of sharing their HIV-positive status with others, a majority of the participants said they would inform their mothers (84%), sexual partners (76%), fathers (68%), teachers (64%), siblings (61%), and closest friends (52%); in the minority were those who were willing to inform other people with HIV/AIDS (22%), their grandparents (17%), their classmates (13%), and all their friends (6%). Moreover, 42% of the respondents indicated that if they were parents, they would have the right to know whether there were HIV-positive children in their children's classrooms, while 41% believed that even students' relatives needed to be informed about the presence of HIV-positive children in the classroom. These results raised the following question: if the chances of transmitting HIV to a classmate by virtue of sharing the same classroom are nonexistent, why is this information needed? The disclosure of this information could encourage a discriminatory response that would hinder the successful integration of HIV-positive students into the school ecosystem and antagonize parents who were not adequately informed.

### 3.3. Facet 3: Self-discrimination

The participants were asked to imagine that they had HIV and to speculate about how a HIV-positive status would affect different aspects of their daily lives, including socializing, relationships, and traveling. Self-discrimination is common among people who know that they are seropositive. One case study in the 2005 FIPSE Report, dealt with how HIV-positive subjects reported a reluctance to engage in specific workplace activities, because they feared being discriminated against if their work colleagues were to discover their disease status.

According to 47% of the respondents, if they had HIV/AIDS they would avoid having a sexual relationship; 45% would participate in fewer social activities; 46% would not have biological children; 94% would adopt a child; and 89% would have no difficulty living in student housing (while only 38.7% of the respondents said they would be willing to share living quarters with someone who had HIV/AIDS); 7% would participate in a limited number of social activities; and 4% would avoid traveling.

## 4. Discussion



This research builds on the contributions of previous studies [27], [45]. The present results corroborate the data from UNAIDS [5], which revealed that 50% of the sample population had a negative attitude towards people living with HIV/AIDS. These attitudes differed according to the level of education, with M.S. students being less discriminatory. Students younger than 21 years were more likely to have a dismissive attitude, demonstrating that being older and having a higher level of education decreased respondents' propensity to stigmatize people with HIV/AIDS, and resulted in increased levels of sensitivity and empathy [22], [28], [29].

Of particular concern is the fact that these senior students will soon become teachers. Therefore, there is an urgent need for socio-educational measures that can put a stop to the kinds of discriminatory attitudes that a lack of access to scientifically sound information often fosters. Furthermore, the fact that 50% of students would take strict hygiene measures if they had seropositive classmates and would reveal their classmates' seropositive status to their parents, is a cause for concern.

These results demonstrate that there is an urgent need for innovative methodologies and improved educational interventions. Almost all participants in this study indicated that their knowledge of HIV came from seminars and conferences organized by the school. Regardless, their exposure to information on this topic had not produced the desired changes.

## 5. Conclusions

It is necessary to use pedagogical methodologies in which more and better information is provided, carrying out more educational actions that strengthen information about HIV and avoid stigma towards people living with HIV. For truly effective prevention, education in these aspects must come earlier and continue over time, offering more and better information that promotes healthy sexual behavior and habits.

Interventions in which young people participate in HIV prevention activities are essential – they teach them the importance of teamwork and encourage commitment, responsibility, and tolerance.

This approach includes teaching young people how to care for themselves as well as for others, while preparing them for careers in teaching where they can serve as dissemination agents and managers committed to change.

The study has some limitations and it should be borne in mind that a convenience sample has been used, so it cannot be guaranteed that it is representative of future teachers in Spain. Although its results are generalizable insofar as a validated instrument has been used, it would be advisable to carry out complementary qualitative studies. Complementing this with a qualitative study will allow for a more in-depth identification of the conceptions that prospective teachers have about HIV/AIDS.

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## References

1. UNICEF (25 July 2018). Press release. <https://www.unicef.org/es/comunicados-prensa/cada-tres-minutos-una-adolescente-contrae-el-vih> (accessed on 18 December 2020).
2. UNAIDS (16 July 2019). Press release. <https://www.unaids.org/es/keywords/data-0> (accessed on 18 December 2020).

3. UNAIDS. *Getting to Zero: 2011-2015 Strategy*. World Health Organization. Joint United Nations Programme on HIV/AIDS, 2010.
4. Ministry of Health and Consumer Affairs. Plan Multisectorial frente a la infección por VIH y el SIDA. Madrid: Gobierno de España [Multisectorial Plan against HIV infection and AIDS. Madrid: Government of Spain]. 2008.  
[https://www.msssi.gob.es/ciudadanos/enfLesiones/enfTransmisibles/sida/docs/PMS2008\\_12.pdf](https://www.msssi.gob.es/ciudadanos/enfLesiones/enfTransmisibles/sida/docs/PMS2008_12.pdf) (accessed on 10 December 2020).
5. UNAIDS (2018). Fact Sheet. Geneva: Joint United Nations Programme on HIV/AIDS.  
[http://www.unaids.org/sites/default/files/media\\_asset/UNAIDS\\_FactSheet\\_es.pdf](http://www.unaids.org/sites/default/files/media_asset/UNAIDS_FactSheet_es.pdf) (accessed on 10 December 2020).
6. UNAIDS Inter-Agency Task Team (IATT) on Education and School Health. (2013). *UNAIDS Inter-Agency Task Team (IATT) on Education. Bi-Annual Report (January 2012 – December 2013)*.  
<https://www.cedol.org/wp-content/uploads/2013/09/UNAIDS-Inter-Agency-Task-Team-Malinga-et-al.pdf> (accessed on 18 January 2021)
7. UNESCO (2012). *UNESCO Strategy on HIV/AIDS. Paris: United Nations Educational, Scientific and Cultural Organization*.  
<http://unesdoc.unesco.org/images/0019/001931/193118s.pdf> (accessed on 12 December 2020)
8. Cai, Y.; Hong, H.; Shi, R.; Ye, X.; Xu, G.; Li, S.; Shen, L. Long-term follow-up study on peer-led school-based HIV/AIDS prevention among youths in Shanghai. *International Journal of STD & AIDS* 2008, 19(12), 848-850.
9. Cejudo-Cortés, C. M. A.; Corchuelo-Fernández, C. HIV/AIDS Prevention in the university training of future educators. *Revista de Humanidades* 2019, 37, 127-150.
10. García, F. Actitud de docentes orientadores en prevención de VIH/SIDA: Escuelas básicas del municipio Mario Briceño Iragorry [Attitude of teacher counsellors in HIV/AIDS prevention: Basic schools in the Mario Briceño Iragorry municipality]. *Comunidad y Salud* 2010, 8(2), 61-70.
11. Li, S.; Huang, H.; Xu, G.; Cai, Y.; Shi, R.; Shen, X. HIV/AIDS-related knowledge, sources and perceived need among senior high school students: a cross-sectional study in China. *International Journal of STD & AIDS* 2009, 20(8), 561-565.
12. Li, S.; Huang, H.; Cai, Y.; Ye, X.; Shen, X.; Shi, R.; Xu, G. Evaluation of a school-based HIV/AIDS peer-led prevention programme: the first intervention trial for children of migrant workers in China. *International Journal of STD & AIDS* 2010, 21(2), 82-86.
13. Lohrmann, C.; Välimäki, M.; Suominen, T.; Muinonen, U.; Dassen, T.; Peate, I. German nursing students' knowledge of and attitudes to HIV and AIDS: two decades after the first AIDS cases. *Journal of Advanced Nursing* 2000, 31(3), 696-703.
14. Pérez, A. M.; Murgiondo, J. E. Claves para atender la diversidad afectivo-sexual en el contexto educativo desde un enfoque global escolar [Keys to dealing with affective-sexual diversity in the educational context from a global school approach]. *Revista Española de Orientación y Psicopedagogía* 2014, 25(3), 121-128.



15. Ye, X. X.; Huang, H.; Li, S. H.; Xu, G.; Cai, Y.; Chen, T.; Shi, R. HIV/AIDS education effects on behaviour among senior high school students in a medium-sized city in China. *International Journal of STD & AIDS* 2009, 20(8), 549-552.
16. Moscovici, S. Attitudes and opinions. *Annual Review of Psychology* 1963, 14(1), 231-260.
17. Moscovici, S. Notes towards a description of social representations. *European Journal of Social Psychology* 1988, 18(3), 211-250.
18. Moscovici, S. The origin of social representations: a response to Michael. *New Ideas in Psychology* 1990, 8(3), 383-388.
19. Amirkhanian, Y. A.; Kelly, J. A.; Issayev, D. D. AIDS knowledge, attitudes, and behaviour in Russia: results of a population-based, random-digit telephone survey in St Petersburg. *International Journal of STD & AIDS* 2001, 12(1), 50-57.
20. Cejudo-Cortés, C. M. A.; Corchuelo-Fernández, C.; Tirado-Morueta, R. Uso de la teoría de las representaciones sociales para comprender las actitudes discriminatorias hacia el VIH/SIDA [Using social representations theory to understand discriminatory attitudes towards HIV/AIDS]. *Revista Española de Salud Pública* 2018, 92.
21. DiClemente, R. J.; Zorn, J.; Temoshok, L. Adolescents and AIDS: a survey of knowledge, attitudes and beliefs about AIDS in San Francisco. *American Journal of Public Health* 1986, 76(12), 1443-1445.
22. Gaymard, S.; Cazenave, C. Thirty years on... the social representation of AIDS among French teenagers. *Children and Youth Services Review* 2018, 84, 48-54.
23. Goodwin, R.; Kozlova, A.; Kwiatkowska, A.; Luu, L. A. N.; Nizharadze, G.; Realo, A.; Rämmer, A. Social representations of HIV/AIDS in Central and Eastern Europe. *Social Science & Medicine* 2003, 56(7), 1373-1384.
24. Haroun, D.; El Saleh, O.; Wood, L.; Mechli, R.; Al Marzouqi, N.; Anouti, S. assessing knowledge of, and attitudes to, HIV/AIDS among university students in the United Arab Emirates. *PLoS One* 2016, 11(2), e0149920.
25. Huang, J.; Bova, C.; Fennie, K. P.; Rogers, A.; Williams, A. B. Knowledge, attitudes, behaviors, and perceptions of risk related to HIV/AIDS among Chinese university students in Hunan, China. *AIDS Patient Care & STDs* 2005, 19(11), 769-777.
26. Janahi, E. M.; Mustafa, S.; Alsari, S.; Al-Mannai, M.; Farhat, G. N. Public knowledge, perceptions, and attitudes towards HIV/AIDS in Bahrain: a cross-sectional study. *The Journal of Infection in Developing Countries* 2016, 10(9), 1003-1011.
27. Luévano-Flores, P. A.; Moral-De la Rubia, J. An exploratory qualitative study on the social representation of HIV/AIDS in young men who have sex with men. *Medicina Universitaria* 2017, 19(77), 170-177.
28. Riley, G. A.; Baah-Odoom, D. Do stigma, blame and stereotyping contribute to unsafe sexual behaviour? A test of claims about the spread of HIV/AIDS arising from social representation theory and the AIDS risk reduction model. *Social Science & Medicine* 2010, 71(3), 600-607.
29. Rodrigues, F. R. A.; Monteiro, P. V.; Pereira, M. L. D. Social representations of AIDS: An analysis using the technique of free evocations. *International Journal of Infectious Diseases* 2014, 21, 126.

30. Uribe, A. F.; Valderrama, L.; Sanabria, A. M.; Orcasita, L.; Vergara, T. Descripción de los conocimientos, actitudes, susceptibilidad y autoeficacia frente al VIH/SIDA en un grupo de adolescentes colombianos [Description of knowledge, attitudes, susceptibility and self-efficacy towards HIV/AIDS in a group of Colombian adolescents]. *Pensamiento Psicológico* 2010, 5(12).
31. Acosta de Velásquez, B. L.; Pérez-Then, E.; Mueses Marín, H. F.; Pinzón Gómez, E. M.; Shor-Posner, G. Actitud de los estudiantes en tres facultades de odontología en Santiago de Cali, Colombia, frente a pacientes con VIH [Attitude of students in three dental schools in Santiago de Cali, Colombia, towards HIV-positive patients]. *Acta Bioethica* 2011, 17(2), 265-271.
32. Chamorro, F.; Díaz, F. R.; Richardson, R. D. L. Factores relacionados con actitudes discriminatorias hacia personas que viven con VIH en Panamá [Factors related to discriminatory attitudes towards people living with HIV in Panama]. *Revista Médica de Panamá* 2018, 1(38).
33. Dávila, M. E.; Gil, M. Nivel de conocimiento y actitud de los odontólogos hacia portadores de VIH/SIDA [Level of knowledge and attitude of dentists towards HIV/AIDS carriers]. *Acta Odontológica Venezolana* 2007, 45(2), 234-239.
34. Dávila, M. E.; Gil, M. Actitud de los odontólogos hacia las personas que viven con VIH/SIDA [Attitude of dentists towards people living with HIV/AIDS.]. *Odontol Prev* 2008, 1(2), 90-96.
35. Garbin, C. A. S.; Wakayama, B.; Saliba, T. A.; Saliba, O.; Garbin, A. J. I. Discriminación y prejuicio. La influencia del VIH/SIDA y la Hepatitis B en la actitud de los académicos en odontología [Discrimination and prejudice. The influence of HIV/AIDS and Hepatitis B on the attitude of academics in dentistry]. *Revista Ciencias de la Salud* 2018, 16(2), 279-293.
36. Iliyasu, Z.; Abubakar, I. S.; Kabir, M.; Aliyu, M. H. Knowledge of HIV/AIDS and attitude towards voluntary counseling and testing among adults. *Journal of the National Medical Association* 2006, 98(12), 1917.
37. Rivera, A. J. B., Chan, A. G. P.; Huerta, L. J. Actitud del médico familiar ante el paciente con VIH/SIDA. Factores relacionados [Attitude of the family physician to the patient with HIV/AIDS. Related factors]. *Revista Médica del Instituto Mexicano del Seguro Social. (Mex)* 2000, 38(3), 203-209.
38. Tavoosi, A.; Zaferani, A.; Enzevaei, A.; Tajik, P.; Ahmadinezhad, Z. Knowledge and attitude towards HIV/AIDS among Iranian students. *BMC Public Health* 2004, 4(1), 1-17.
39. Walusimbi, M.; Okonsky, J. G. Knowledge and attitude of nurses caring for patients with HIV/AIDS in Uganda. *Applied Nursing Research* 2004, 17(2), 92-99.
40. Pedrero-García, E. Health education at the university: needs and current challenges. *Procedia-Social and Behavioral Sciences* 2017, 237, 348-353.
41. Canales, M. *Metodologías de la investigación social* [Social research methodologies]. Santiago: LOM Ediciones, 2006.
42. Hernández, R.; Fernández, C.; Baptista, P. *Metodologías de la Investigación* [Research Methodologies]. México: Mcgraw-Hill, 2006.

- 
43. Agirrezabal, A.; Fuster, M. J.; Garate, J. V. (Eds.). *Integración laboral de las personas con VIH: estudio sobre la identificación de las necesidades laborales y la actitud empresarial* [Labour market integration of people with HIV: a study on the identification of labour needs and entrepreneurial attitudes]. Fundación para la Investigación y la Prevención del Sida en España, 2009.
44. Comas, D. (Coord.). *Jóvenes y estilos de vida. Valores y riesgos en los jóvenes urbanos* [Young people and lifestyles. Values and risks in urban youth]. Madrid: Fundación de Ayuda Contra la Drogadicción (FAD) e Instituto de la Juventud (INJUVE), 2003.
45. Gil de Montes, L.; Fuster, M. J.; Molero, F.; Ubillos, S.; Agirrezabal, A. *Las implicaciones de la ocultación y su posible papel como estrategia de afrontamiento del estigma asociado al VIH* [Implications of concealment and its possible role as a coping strategy for HIV-related stigma]. A. Agirrezabal (comp). II Encuentro FIPSE Sobre Investigación Social en Vih/Sida. San Sebastián, 2009.
46. Miric, M. Escala para la evaluación del estigma sentido entre las personas VIH positivas en la República Dominicana. *Paradigmas* 2004, 4, 70-101.
47. Moreno, M. C.; Muñoz, M. V.; Pérez, P. J. *El estudio HBSC (Health Behaviour in School-aged Children) en España. Los adolescentes españoles y su salud. Un análisis en chicos y chicas de 11-17 años* [The HBSC study (Health Behaviour in School-aged Children) in Spain. Spanish adolescents and their health. An analysis in boys and girls aged 11-17 years]. Madrid: Ministerio de Sanidad y Consumo, 2002.