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## AIDS stigma combinations in a sample of Puerto Rican health professionals: qualitative and quantitative evidence

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The HIV/AIDS epidemic continues to impact Puerto Rico and the Caribbean region with growing numbers of cases each year. The stigma that surrounds the epidemic has harmful implications on the health of people living with the disease and public health in general, fostering health deterioration and new infections. When this stigma emanates from health professionals it can severely hinder access to health services, which are crucial for those living with the virus. Still, AIDS stigma has been previously explored among this population as a separate phenomenon from other pre-existing stigmas. This has yielded a limited perspective on the complexity of how AIDS stigma is manifested. In light of this limitation, the main objectives of this study were: 1) to document AIDS stigma among a sample of Puerto Rican health professionals

and health professionals in training and 2) to explore the combination of other stigmas (sexism, homophobia, and negative attitudes towards drug users) with that associated to HIV/AIDS. Through an exploratory design, using a mixed method approach (qualitative in-depth interviews and quantitative questionnaires), we explored the objectives in a sample of 501 health professionals and health professionals in training. The results evidenced the combinations of other stigmas with that of HIV/AIDS. Homophobia yielded the strongest correlation and was the best predictor of AIDS stigma. These results evidence the need to develop interventions to reduce AIDS stigma and its combinations among this population.

*Key words: AIDS Stigma, Health Professionals, Puerto Rico, Mixed Methods.*

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The stigma related to HIV/AIDS poses a challenge to the lives of people living with HIV/AIDS (PLWHA) and society in general. It fosters new HIV infections by making testing efforts among people who do not know of their serostatus more difficult and hinders quality of life for those already infected. The consequences of AIDS stigma are worsened when people who are important in the lives of PLWHA manifest it. One example is health professionals who hold stigmatizing attitudes towards PLWHA. Due to the expected increase in HIV cases by 2020 the stigma surrounding the condition is likely to worsen (1). This expectation is currently confirmed by research indicating that people still hold stigmatizing attitudes towards PLWHA (2).

Puerto Rico has more than 29,000 cases of AIDS (3). Men represent 77% of these cases and women 23%. The most common means of infection are sharing unclean needles

during drug use (51%), unprotected heterosexual relations (24%), and unprotected homosexual relations (17%). Along with Haiti, Puerto Rico accounts for the vast majority of AIDS cases in the Caribbean, which in turn is the second highest prevalence area in the world (4, 5). AIDS stigma among Latinos/as must be addressed, particularly, due to the severe impact the epidemic has had on this community. The number of AIDS cases reported by the CDC among Latinos/as is appalling. Even though Latinos/as represent 12% of the U.S. population they accounted for 19% of all reported HIV/AIDS cases by the end of 2000. During the same year the incidence rate for Latinos/as was more than 3 times the rate for whites (6).

### Stigma: Its Definitions and Implications

Although others have recently defined stigma (7, 8), Erving Goffman's (9) conceptualization stands out as the most comprehensive. Goffman defined stigma as a profoundly discreditable attribute that could lead a person to be deemed almost inhuman and identified three types of stigma: abominations of the body, blemishes of individual character, and tribal stigmas. Abominations of the body are associated with physical deformations or deviations such as people with physical challenges, missing limbs, or physical deformities. Blemishes of

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individual character are associated with a person's character, identity, or simply to their particular way of being; such as those attributed to prisoners, drug users, and alcoholics. Tribal stigmas refer to the negative evaluation of persons associated with a particular group such as those assigned to race, ethnicity, and sexual orientation.

PLWHA experience all three types of stigma identified by Goffman. They are perceived as having abominations of the body when they are visibly marked by their condition (e.g., wasting syndrome), they suffer from blemishes of individual character when they are perceived as responsible for their HIV/AIDS status (e.g., drug users), and are victims of tribal stigmas when they are described as part of a "risk group" (e.g., homosexuals). This applicability of the term has led to the coining of the term "AIDS-related stigma" or "AIDS stigma" (10). AIDS stigma has been defined as "all stigma directed at persons perceived to be infected with HIV, regardless of whether they actually are infected and of whether they manifest symptoms of AIDS or an AIDS-related complex" (10).

AIDS stigma has negative personal and social implications for PLWHA. Among its negative psychological effects, we find: anxiety, depression, guilt, isolation, disruption of family dynamics, physical and emotional violence, intensification of grief, loss of social support and the deterioration of productive relations with health professionals (11, 12, 13). AIDS stigma has the potential to generate other situations that have negative effects on mental health such as loss of medical insurance, social discrimination, unemployment, and problems accessing health related services (14, 15).

### **Health Professionals Stigmatize PLWHA**

Some manifestations of this stigma are potentially more harmful than others. Such is the case of stigmatization by health professionals (16). Research has reported that people who feel stigmatized by health professionals face problems getting tested for HIV and accessing optimal health services once they have been diagnosed (17, 18, 19, 20). Vulnerable populations such as the chronically ill (including HIV) have problems accessing quality health care (21). This is worsened when they are identified as part of a stigmatized group and fear accessing health services due to other people's negative opinions (22).

AIDS stigma has been documented among health service providers such as physicians, nurses, mental health professionals, social workers and other caregivers (23, 24, 25, 26, 27, 28, 29, 30). These stigmatizing attitudes are unfortunate, especially when it has been documented that PLWHA frequently disclose their status to health professionals (31). AIDS stigma from health professionals has also been documented from the perspective of the

stigmatized, who have experienced discrimination (32).

There are many reasons why health professionals may stigmatize PLWHA. Some have attributed this to their lack of contact with PLWHA (33) or to their fear of being infected by patients (34, 35). Although some studies designed to reduce AIDS stigma among health professionals have had positive outcomes, fear of contagion is still a concern (36). Health professionals tend to pass moral judgment on their clients, even when it has been documented that they are less stigmatizing due to their constant exposure to PLWHA (37). Providers can stigmatize by focusing on the moral dimensions associated with specific conducts, rather than on the social situations that foster them (38). Myths and false notions that surround HIV/AIDS contribute to the stigmatizing process (39). These misconceptions include those regarding modes of transmission and the ownership of the epidemic by particular groups. Among the social meanings attributed to the epidemic we find that PLWHA may be perceived as invasive agents in a "healthy" society (40, 41). This notion fosters the social exclusion of those seen as risk agents because they are perceived as a threat to others, as deviated from what is "normal", and as not contributing to the development of society.

Studies have shown that people with more knowledge of HIV/AIDS exhibit lower levels of stigma and discrimination towards people living with the condition regardless of the affected person's sexual orientation or gender (42, 43), while most people who stigmatize have less information about HIV/AIDS (42). People with more HIV/AIDS knowledge have shown higher levels of tolerance towards homosexuals (44). Thus, correct information regarding HIV/AIDS can contribute to stigma reduction. Still, this information is not generally provided to health professionals in training. This may be one of the reasons why AIDS stigma has been documented amongst health professionals.

The existence of these attitudes in health professionals and the need to address them through research and intervention has not gone unnoticed, particularly the need to develop training on stigma issues (45, 46). Other issues related to AIDS stigma, such as the need to incorporate direct contact with PLWHA and training on communicating with patients on issues such as sexuality, have also been recommended (47, 48).

### **AIDS Stigma is Associated with other Stigmas**

AIDS stigma is a complex phenomenon. It does not exist independently of other pre-existing stigmas. Richard Parker and Peter Aggleton have documented how it is built upon pre-existing social stigmas (49). Stigmatizing discourses in society coexist with other forms of discrimination. For example, HIV has been strongly associated with stigmas towards

homosexuality, drug use, and gender (10, 50, 51). This association of HIV/AIDS with other socially stigmatized constructs is a phenomenon in need of attention that must be addressed. Upon considering this fact, addressing AIDS stigma outside of this context of combinations would yield a limited perspective on the subject.

These stigma associations can be traced to the beginning of the epidemic when infection was believed to be related to four infamous H's; homosexuals, Haitians, hemophiliacs, and heroin users. These stigma associations can still be found today throughout society in general when it is stated that HIV/AIDS is a gay disease or that it only happens to women who are promiscuous and drug users (52). Similar stigmatizing notions can be found in scientific discourses regarding the epidemic. For example, women have been labeled as HIV/AIDS carriers and vectors of infection (32, 53, 54). Drug users have suffered greatly in the epidemic when harm reduction programs that use needle exchange as a means of prevention are not supported (55, 56, 57) or when antiretroviral therapy is denied due to their addiction (58). Homosexual men have been described in epidemiological reports as a "risk group" as if just being homosexual was a risk factor (59). These kind of stigmatizing notions, combined with AIDS stigma strengthen it and its detrimental effects on PLWHA. Evidently, the stigmatization of HIV/AIDS cannot be accounted for solely by stigmatizing notions related to the condition. In order to develop an encompassing understanding of AIDS stigma; its relation to other types of stigma, both, individually and in interaction, must be recognized and understood.

This study was carried out in light of past research and the need to understand AIDS stigma and its combinations among health professionals. Its main objectives were: 1) to document AIDS stigma among a sample of health professionals and health professionals in training and 2) to explore the combination of other stigmas (sexism, homophobia, and negative attitudes towards drug users) with that attached to HIV/AIDS.

## Methods

In order to achieve the proposed objective of the study we developed and implemented an exploratory and sequential mixed method approach using qualitative and quantitative techniques (60). This was done through the implementation of two stages. In the first stage, we carried out qualitative in-depth interviews with health professionals and health professionals in training. In the second stage, we developed and administered a quantitative questionnaire addressing several stigmas. These included HIV/AIDS stigma, sexism, homophobia,

and negative attitudes towards drug use. The questionnaire was administered to a sample of health professionals in training.

## Participants

The total sample of the study was composed of 501 participants. In the qualitative stage we interviewed 80 participants (40 health professionals and 40 health professionals in training) equally divided among the following disciplines: medicine (n=20), nursing (n=20), psychology (n=20), and social work (n=20). In the quantitative stage, we administered the questionnaire to a sample of 421 health professionals in training from the same four disciplines.

The inclusion criteria for the health professionals were: 1) that they were older than 21 years of age; 2) that they voluntarily participated in the study; 3) being active practitioners of their profession at the moment of the interview; and 4) that they work in health institutions in which PLWHA could receive services (e.g. public hospitals, community based organizations, etc). We developed these inclusion criteria in order to ensure that the professionals could legally consent to participate, that they did so without being coerced, that they could talk about their past and recent work experiences, and that these experiences were in scenarios in which PLWHA receive or could receive health services.

The inclusion criteria for the health professionals in training were: 1) that they were older than 21 years of age; 2) that they voluntarily participated in the study; 3) that they were health professionals in training at the moment of the interview; and 4) they had completed at least one practice in a health care institution at the moment of the interview as part of their training. These inclusion criteria ensured that health professionals in training could legally consent to participate, that they did so without being coerced, and that they could talk about their past and recent training experiences. Health professionals in training from the fields of medicine and psychology were recruited at a graduate level (MA, PhD or PsyD) since these degrees are required in Puerto Rico to practicum each profession. Health professionals in training from social work and nursing were recruited from both graduate and undergraduate levels since both professions can practice with such degrees.

The demographic data from participants in each stage can be seen in Table 1. Most of the sample was composed of females as in most of these health professions (psychology, nursing and social work) they outnumber men. Most had received some kind of HIV related training, and half of the sample had provided services to PLWHA at some time. Seventy-five percent of participants in Stage 1 knew someone living with HIV/AIDS, while only 43%

reported the same in Stage 2. The mean age was 32 for the sample in Stage 1 and 25 for those in Stage 2. The most common income range in Stage 1 was \$20,000-\$30,000 n=47 (59%) and \$10,000-\$30,000 n=168 (42%) in Stage 2.

**Table 1.** Demographic Data

Variable	Stage 1 (Qualitative interviews)		Stage 2 (Quantitative questionnaire)	
	F	%	F	%
N	80	100	421	100
Gender				
Male	24	30	101	24
Female	56	70	319	76
HIV training	41	51	164	39
Services to PLWHA	39	49	103*	45
Knew PLWHA	60	75	171	43

\*Only 228 participants answered this question.

### Selection and Screening

The research team recruited participants in several scenarios which included the following: government agencies, public housing projects, public hospitals, public schools, and public and private universities. The initial steps in the recruitment process were telephone calls to the directors of these institutions to explain the purpose of the study and to request permission to invite employees and health professionals in training to participate in the study. After we obtained permission, the research team personally identified potential participants in order to ensure that they did not feel obliged by supervisors or teachers to participate in the study.

We explained to each potential participant the purpose of the study and we invited them to participate. Those that wanted to take part completed a consent form explaining the nature of the study, their participation, and the measures in place to ensure their confidentiality. The consent form also mentioned the following issues: 1) the benefits and risks of their participation, 2) the time that their participation required, 3) the possibility of ending their participation at any time, 4) the possibility of requesting psychological services if they needed them due to their involvement in the study, and 5) the right to receive the results of the study.

### Instruments

We developed several instruments as part of the study: screening form, socio demographic data questionnaire, qualitative in-depth interview guide, and four scales to measure several stigmas (HIV/AIDS Stigma Scale, Sexism Scale, Homophobia Scale, and Negative Attitudes towards Drug Users Scale).

*Screening form* : This screening form served as a guide for recruiters to ensure that all participants met the inclusion criteria previously described. Each form included a question for each of the criteria and contact information (in the case of the qualitative interviews). This form was completed by participants during both the qualitative and quantitative stages.

*Socio demographic data questionnaire*: This self-administered questionnaire included 30 questions addressing variables such as gender, age, sexual orientation, marital status, area of residence, employment status, professional training, and income. The questionnaire version completed by health professionals in training also included questions related to their current training scenario.

*In-depth interview guide* (61): This interview guide served to maintain a minimum level of uniformity in the subjects that were explored during the interviews. This guide was composed of questions addressing seven subject areas: 1) training and work experiences related to HIV/AIDS; 2) definitions of illness; 3) personal perception of the HIV/AIDS epidemic in Puerto Rico; 4) potential contributions of health professionals and health professionals in training in issues related to the lives of PLWHA; 5) perception on society's opinions regarding PLWHA; 6) health professionals' opinions regarding PLWHA; and 7) the bodily dimensions of the HIV/AIDS epidemic. The guide included specific instructions for the interviewer to follow.

The interview guide was evaluated by a panel of six judges that included researchers in the area of HIV/AIDS and a PLWHA in order to ensure the appropriateness of its content. After incorporating their feed back, we carried out a pilot study with eight people (four professionals and four health professionals in training). The results of the pilot study reflected that the participants understood the questions and were able to answer them without difficulties.

*Stigma and HIV/AIDS scale* (62): This scale was developed by the researchers as part of this study. The scale is composed of 46 items addressing the following constructs related to AIDS stigma: fear of infection, emotions associated with HIV/AIDS, closeness to death, PLWHA as vectors of infection, lack of productivity of PLWHA, personal characteristics of PLWHA that foster infection, need to control PLWHA, rights of PLWHA, body signs of HIV/AIDS, responsibility over infection, and PLWHA as obliged to reveal serum status. The items were measured with a 5 point Likert-type scale with values ranging from strongly agree to strongly disagree. The scale has been found to be reliable with an alpha of .93 among health professionals and .91 among health professionals in training.

*Sexism scale (63)* - This scale is a translated and adapted version of Old Fashioned and Modern Sexism Scales that have been widely used in sexism research. The scale measures attitudes towards women labeled as old-fashioned due to their association to traditional gender roles, and more modern or covert manifestations of sexism. The original version of the scale has been documented as reliable with an alpha ranging from .66 to .68 (63, 64). The adapted version of the scale is composed of 9 items addressing subjects in which women have traditionally faced sexism: intelligence, leadership roles, participation in sports, and responsibility for child upbringing. These were measured with a 5 point Likert-type scale with values ranging from strongly agree to strongly disagree.

*Homophobia scale (65)*: This scale was developed in the Puerto Rican context to measure negative attitudes towards homosexual men. It is composed of 14 items measured through a 5 point Likert-type scale with values ranging from strongly agree to strongly disagree. The scale addresses the following constructs towards homosexual men: perceived lack of complete manhood, fear of casual contact, acceptance of public affection, job possibilities, hyper-sexuality, association of homosexuality with immorality, and governmental support for banning homosexual hangouts. The scale has been proven reliable with an alpha of .88 among health professionals (66).

*Attitudes towards drug users scale (67)*: This is a translated and adapted version of the Substance Abuse Attitude Survey. This version is composed of 12 items addressing attitudes towards substance abuse. It encompasses five dimensions: permissiveness towards drug use, characteristics of treatment interventions for abusers, stereotypes surrounding users, optimism regarding the possibility of successful treatment, and moral issues associated with substance abuse. It was answered through a 5 point Likert-type scale, ranging from: strongly agree to strongly disagree. Its reliability has been documented with samples of health professionals with alphas ranging from .63 to .81. The reliability has stayed the same when administered to health professionals in Puerto Rico.

## Procedure

In the first stage we carried out the qualitative in-depth interviews. As an initial step for the implementation of the interviews, interviewers participated in formal training sessions on the following subjects: 1) AIDS stigma definitions; 2) the role of stigma in the HIV/AIDS epidemic; 3) ways in which stigma is manifested among health professionals; 4) ethical dimensions of the study; 4) adequate forms of recruitment; and 5) implementation of the interview, specifically the phrasing of the questions

and the use of follow up questions when needed.

When the participants were recruited, a date for the interview was scheduled in a place of the participant's preference. That place needed to meet the following requirements: 1) be a private place; 2) without interruptions; and 3) in which the interviewee felt comfortable. At the moment of the interview, the interviewer explained once again the purpose of the study and the nature of their participation. After the person agreed to participate, they signed the consent form, completed the socio demographic data questionnaire, and proceeded to participate in the interview. The interviews lasted an average of an hour and a half. When the interviews were completed, they were transcribed by trained personnel and submitted to a qualitative analysis.

After this stage was completed, we developed the quantitative AIDS stigma measure with the data from the qualitative stage. The measures addressing sexism and negative attitudes towards drug users were subjected to a process of back translation to ensure their content validity. The homophobia measure had previously been determined reliable and valid with similar samples in Puerto Rico. All four scales were reviewed by a panel of 7 experts in HIV research to ensure its cultural appropriateness for our setting. Afterwards, we pilot tested the questionnaire and deemed it reliable with Alpha Cronbach's scores for all scales ranging from .63 to .91.

After this process was completed, we engaged in the second stage of the study in which we administered the quantitative questionnaire to health professionals in training. These were recruited throughout academic programs in several universities in Puerto Rico. The participants were recruited with the collaboration of academic training programs. Members of the research team visited classrooms and explained the nature of the study to all potential participants. Those who wished to participate completed the questionnaire in the classroom. All professors were asked to leave in order to avoid participant coercion in the study. They completed the consent form, the demographic data questionnaire, and the stigma questionnaire addressing AIDS stigma, sexism, homophobia, and negative attitudes towards drug users.

## Analysis

The information gathered through the in-depth interviews from Stage 1 was subjected to a qualitative analysis. It was our interest to understand how the participating health professionals and health professionals in training perceived PLWHA and the emotions related to them. In order to achieve this goal, the interviews were transcribed through a supervised process to ensure fidelity (68). The research team met on a weekly basis to identify

themes or patterns in the data related to our objectives. Once those themes were identified, the research team searched for texts that evidenced them. All selected texts were discussed to ensure that they were representative of the themes they were associated to (69). Once these texts were selected, they were coded with the use of qualitative analysis computer software (Nudist Nvivo V.1.). All themes were finally discussed by the research team and descriptions of each were generated.

The quantitative data gathered through the questionnaire from Stage 2 was analyzed with the use of the Statistical Package for the Social Sciences software (SPSS V.14). Descriptive analyses were carried out with the demographic data and the scores from each stigma sub-scale. Correlation analyses were carried out to document the relation between all stigmas. Furthermore, regression analyses were developed to document the role of pre-existing stigmas on AIDS stigma.

## Results

### Qualitative results

Through the qualitative interviews it became evident that participants expressed combinations of stigmas surrounding HIV/AIDS. These combinations were expressed when describing the attitudes of other professionals, society in general, and their own perceptions regarding PLWHA. These results reflect a lack of tolerance towards the different marginalized groups that have been impacted by the epidemic, particularly people who engage in homosexual acts and drug use.

When asked to identify the group that had been most affected by HIV/AIDS in Puerto Rico, participants were able to correctly identify intravenous drug users (IDU). However, when they explained the reasons why this group had been severely affected, their answers reflected stigmatizing notions towards its members. Other participants mentioned homosexuals as the most affected group, demonstrating ignorance of current epidemiological trends and stigmatization of such sexual preference.

I: Which group do you believe has been the most affected by HIV/AIDS in Puerto Rico?

P: Addicts, right... and homosexuals. Because, first of all, addicts need drugs and they do not take the necessary precautions, they only care about injecting what they need (drugs) that's all; and the homosexual in certain aspects because there are some of them that respect themselves, but there are others that just don't care.

I: Can you give an example in which you consider negative opinions are manifested (in society) towards them?

P: Yes, sometimes you see it because they are your own. Sometimes when you use public transportation and you see that you are in Río Piedras, you can see everything from addicts to prostitutes in that area. You see the deterioration of the people that live there and just to look at them is like... how can I tell you? They live there. You see the group of people with the same condition or the same social level. I haven't taken public transportation for a long time and when I arrived there, I couldn't believe what I was seeing. I mean... I thought, "where am I? what's this?".  
**(Nurse, F)**

I: Which group do you believe has been the most affected by HIV/AIDS in Puerto Rico?

P: Ok. I think that it has been the homosexual community and the addicts to controlled substances. I think those two are the most affected communities.

I: Could you give an example in which you understand negative opinions towards them are shown?

P: Well, definitely when HIV/AIDS first started people referred to the 3 H's: the Haitians, the homosexuals and the hemophiliacs. Since then it has opened a space for discrimination because of the stereotypes attached to the condition since the beginning of the illness. Since then, well obviously because of the great increase of IDU's, the stereotype has been added to that group also.

I: Do you think that those opinions vary according to the method of infection of each person?

P: I do think so. Well, definitely if it is a heterosexual person that was infected, obviously they will not be blamed as a person who was infected from sharing needles. Unfortunately that is the way it is. They will not suffer the same stereotyping, what can I say? I mean... Unfortunately that's the way it is, the method of infection completely marks the person. It's like part of the label that (society) will put on you for having HIV.  
**(Physician, M)**

When asked to comment on society's attitudes toward PLWHA in Puerto Rico, most of the participants did not hesitate to respond that people in general have negative opinions of PLWHA, not only because of being infected, but also due to the means of infection. The means by

which people are infected with HIV are highly associated to behaviors that are mostly socially unaccepted in the Puerto Rican context. When mentioning social opinions, their personal perspectives were also used to justify their descriptions.

I: What do you think is society's general opinion about PLWHA in Puerto Rico?

P: Well, that they are junkies. That they are homosexuals or that you have 80 sexual partners.

I: And why do you think those opinions are like that?

P: Because that is the most evident thing we can see. The addicts are HIV positive, the homosexuals also. Those were the first persons that got... that were discovered to have HIV. **(Nurse, M)**

P: I believe, personally that homosexuals are treated worse than horses. The addicts reach a point that... they make you feel pity. Homosexuals, drug addicts, the sin, the immorality and those things. So, there could be many health professionals that cannot accept homosexuality. Like many religious people with their values. **(Social Worker in Training, F)**

Participants also made distinctions between acceptable and unacceptable behaviors associated with HIV infection, establishing the difference between those responsible for their infection and the victims of the epidemic. People who were described as victims benefit from an apparent social acceptance; they are not attributed responsibility by society for their infection. Although those considered "victims" didn't acquire the virus through intentional behaviors or activities linked to stigmatized groups in society, they still suffer from AIDS stigma. On the other hand, those whom attributed responsibility over their infection suffer a more intense stigma for previously belonging to socially marginalized groups and also enduring AIDS stigma.

I: Do you believe that those negative opinions are different because of the mean of infection of the person?

P: They are more negative, yes... because for example if a woman that gets infected by her husband, a heterosexual couple, and the husband had another woman on the side and he got her (his wife) infected, that poor woman is a victim. But the IDU and the homosexual... people say "they looked for it, by doing what they shouldn't be doing". **(Social Worker, F)**

I: Do you believe that those negative opinions are different because of the mean of infection of the person?

P: I believe so, in general terms, yes. Because of what we said earlier, I think that, to put it simply, I think that a woman who gets infected by her husband, well that woman is a victim, really. A man who gets infected in a homosexual relationship, that man is a deviant in the eyes of the world, and they say "that happened to him because he was looking for it (he deserved it), because he had a homosexual relationship, he put himself at risk and got infected". You know what society says... "You deserved it for because you looked for trouble". I think that it has always been like that, it has diminished a little, but there has always been a... to say it in a way that the society thinks... if he would have acquired HIV through a heterosexual relationship is not that bad. If it was due to a homosexual relationship, well it's a punishment from God. If it was due to drug addiction, "why do you get in that garbage? Well, those are the consequences. I told you". **(Psychologist, F)**

Some of these stigma combinations were evident in participants' answers regarding their own description of the epidemic and PLWHA. For example, they described that their own perceptions of people who belonged to certain marginalized groups in society caused them to think that they are HIV/AIDS positive, even if they were not.

I: What criteria do you use to identify that a person is HIV positive?

P: Well, if you know that they are addicts, they appear thin, you see certain conditions which are characteristic of HIV patients, because of one's experience, one can see and label them.

I: When you have seen a person in your professional setting that you think is HIV positive, what did you think?

P: Well, sometimes I think that he's an addict, a homosexual. Most of the time one thinks these things. **(Nurse, F)**

P: I share the idea that [anybody] who wants to be sick, is sick because he or she wants to be. I mean, those who have been doing drugs it's because they can't help it, they're sick. They're on a vice, uncontrollable to the point that getting better is not considerable to them. With me there is no "ay bendito" [term used to refer to pity] because if they

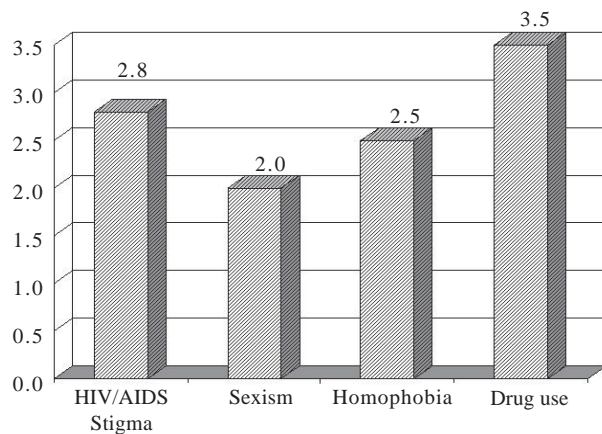
want to be in that situation is because they want to, or because they cannot get out of the vice. Therefore, those who have interest... well it's noticeable. One will observe their willingness to receive treatment. **(Physician, F)**

I: In that setting, did you get to attend some of those patients?

P: Every one of them! Well, the dynamic basically was... explaining the process of dying, about the illness, how they felt about their illness. I am a little bit radical and I wasn't condescending with them. At the beginning, when I first started there, a patient "slapped me in the face" [figuratively]. [An HIV/AIDS patient] was talking to another person and said "we are here because we did something wrong in our lives". Truthfully, well, the people who were there were addicts, homeless, paraplegics, and a quadriplegic who was shot in his neck. Basically, all the people who were there were to some degree there because they chose a lifestyle that was not productive. The shelter was created for the people who had that condition (HIV/AIDS) and who found themselves in the terminal phase, so they could die respectfully. **(Psychologist in Training, M)**

**Quantitative Results**

The first step in our quantitative analysis included calculating mean scores for each of the stigma scales included in the questionnaire used in Stage 2. As it can be seen in Figure 1, stigma towards drug use yielded the highest mean score, followed by AIDS stigma, homophobia, and sexism.



**Figure 1.** Mean scores for all types of stigmas

In order to explore stigma combinations among the participants in the quantitative stage of the study, we carried

out a correlation analysis. In this analysis, we correlated all measured stigmas to see how these were related. These included: AIDS stigma, sexism, homophobia, and stigma towards drug users. As Table 2 shows, all of the different types of stigmas were positively and moderately correlated to AIDS stigma. The highest correlation was between AIDS stigma and homophobia (.52;  $p \leq .001$ ), followed by stigma towards drug use (.37;  $p \leq .001$ ), and sexism (.36;  $p \leq .001$ ).

**Table 2.** Correlations between AIDS Stigma and Other Types of Stigmas

	AIDS Stigma	Sexism	Homophobia	Drug Use
AIDS Stigma	—			
Sexism	.36***	—		
Homophobia	.52***	.41***	—	
Drug Use	.37***	.13*	.36***	—

Notes: N = 421 \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

Further evidence of the relationship between AIDS stigma and the other stigmas emerged from the regression analysis carried out with AIDS stigma and the other types of stigmas. A glance at the standardized regression coefficients in Table 3 indicates that sexism, homophobia, and drug use can serve to understand and better explain AIDS stigma. Homophobia in particular was the best predictor for AIDS stigma among the three types of stigma.

**Table 3.** Standardized Regression Coefficients for HIV/AIDS Stigma

	Sexism	Homophobia	Drug Use
AIDS Stigma	.13*	.27*	.14*

Notes: N = 421 \* $p < .001$

**Discussion**

The results from this study evidence a worrisome scenario for PLWHA. AIDS stigma was present in the qualitative and quantitative stages of the study. Qualitative results show how the different types of stigmas explored are intertwined based on incorrect information regarding the epidemiology of the epidemic. Responsibility over infection and moral judgments over their health status were two of the most mentioned concepts through the interviews. Interestingly, since it is socially unacceptable to stigmatize, participants tended to inform that stigma was a problem with other health professionals. Still, personal stigmatizing notions were present throughout the interviews. Finally, the main



concern that stems from the qualitative results is the potential impact of AIDS stigma on services for PLWHA. These stigmatizing notions regarding HIV/AIDS can foster the provision of substandard health related services that can have detrimental effects for PLWHA.

The quantitative results also yield important information to better understand AIDS stigma. It is important to acknowledge that all of the types of explored stigmas were manifested by participants in Stage 2. Interestingly, stigma towards drug users was the most salient among all. This is not surprising considering that drug use in itself is highly stigmatized in Puerto Rico through restrictive policies and systematic criminalization of drug use, considering it a crime and not an illness. Considering the difficulties entailed in exploring stigmatizing attitudes among samples of health professionals, the mean scores obtained for each stigma are worrisome.

The correlation and regression analysis among the different types of stigmas showed how AIDS stigma was significantly and moderately correlated with all. It is interesting to see how homophobia yielded the highest correlation with HIV/AIDS stigma and was its best predictor among all the other stigmas explored. This confirms that the connection between homosexuality and HIV/AIDS has not been undone in Puerto Rico. This data is important since transmission through unprotected homosexual relations has never been the most frequent mode of infection in the island. This is evidence of stigma combinations related to misinformation not supported by actual epidemiological data.

The overall results demonstrate that HIV/AIDS stigma was present among this sample of health professionals. Furthermore, they point out the need to address HIV/AIDS in its combinations with other pre-existing stigmas. Still, the results should not be seen as an impenetrable barrier for stigma-free services for PLWHA. They should be interpreted as a call to action for an agenda that must be implemented in order to improve the lives of PLWHA. It is urgent to develop strategies to reduce AIDS stigma, and its combinations, among health professionals and health professionals in training.

## Resumen

La epidemia del VIH/SIDA continúa impactando a Puerto Rico y al Caribe con números crecientes de casos cada año. El estigma que rodea a la epidemia tiene implicaciones perjudiciales para la salud de quienes viven con la enfermedad y para la salud pública en general, fomentando el deterioro de la salud y nuevas infecciones. Cuando este estigma emana de profesionales de la salud afecta severamente el acceso a los servicios de salud. Aún así, el estigma relacionado al

SIDA se ha explorado previamente en esta población como un fenómeno aislado de otros estigmas preexistentes. Esto ha fomentado perspectivas limitadas sobre la complejidad de cómo se manifiesta el estigma relacionado al SIDA. A la luz de esta limitación, los objetivos principales del estudio fueron: 1) documentar el estigma relacionado al SIDA entre profesionales de la salud y profesionales de la salud en adiestramiento y 2) explorar la combinación de otros estigmas (sexismo, homofobia, y actitudes negativas hacia usuarios de drogas) con aquel relacionado al VIH/SIDA. A través de un diseño exploratorio utilizando métodos mixtos (entrevistas cualitativas a profundidad y cuestionarios cuantitativos), exploramos los objetivos en una muestra de 501 profesionales de la salud y profesionales de la salud en adiestramiento. Los resultados evidenciaron la combinación de otros estigmas con el del VIH/SIDA. La homofobia arrojó la correlación más fuerte y fue el mejor elemento de predicción del estigma relacionado al VIH/SIDA. Estos resultados evidencian la necesidad de desarrollar intervenciones dirigidas a reducir el estigma relacionado al SIDA y sus combinaciones en esta población.

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