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Individual attitudes and perceived social norms: Reports on HIV/AIDS-related stigma among service providers in China

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This study examined HIV/AIDS-related stigma among Chinese service providers by comparing their personal attitudes toward people living with HIV/AIDS with their perception of social norms related to people living with HIV/AIDS. We randomly selected three provincial hospitals, four city/prefecture hospitals, 10 county hospitals, 18 township health clinics, and 54 village clinics from Yunnan, China. Doctors and nurses were randomly sampled proportionally to the doctor–nurse ratio of each hospital or clinic. Lab technicians were over-sampled in order to include an adequate representation in the analysis. A total of 1,101 service providers participated in a voluntary, anonymous survey where demographic characteristics, individual attitude and perceived social norms toward people living with HIV/AIDS, discrimination intent at work, general prejudicial attitude and knowledge on HIV/AIDS were measured. A majority of the sample demonstrated a similarity between their personal views and what they thought most people in society believe. Multiple logistic regressions revealed that participants who were younger or reported personal contact with people living with HIV/AIDS were significantly more likely to report personal attitudes toward the population that were more liberal than their perceived social norms. Holding a more liberal personal attitude toward people living with HIV/AIDS than perceived social norms was significantly and negatively related to the level of discrimination intent at work, perceived discrimination at interpersonal level and the level of general prejudicial attitude toward people living with HIV/AIDS. Results underscored the importance of understanding social norms and personal attitudes in studying HIV-related stigma and called for the incorporation of existing human capital into future HIV stigma reduction programs.

Cette étude a examiné le VIH/SIDA lié à la stigmatisation parmi les agences chinoises fournissant des soins en comparant leurs attitudes personnelles envers les personnes atteintes du VIH/SIDA avec leur perception des normes sociales liées aux personnes atteintes du VIH/SIDA. Nous avons sélectionné au hasard trois hôpitaux provinciaux, quatre hôpitaux de ville/préfecture, dix hôpitaux ruraux, 18 centres hospitaliers de cantons et 54 cliniques de village au Yunnan en Chine. Les médecins et les infirmières étaient échantillonnés au hasard de manière proportionnelle au ratio médecin-infirmière de chaque hôpital ou clinique. Les techniciens de laboratoire ont été sur-échantillonnés afin d'inclure une représentation adéquate dans l'analyse. Un total de 1, 101 fournisseurs de soins ont participé à un sondage volontaire et anonyme où les caractéristiques démographiques, l'attitude individuelle et les normes sociales perçues envers les personnes atteintes du VIH/SIDA, l'intention de discrimination au travail, l'attitude générale de préjugé et les connaissances sur le VIH/SIDA ont été mesurées. Une majorité de l'échantillon a démontré une similarité entre leurs opinions personnelles et ce qu'ils pensaient que la plupart des gens dans la société croyaient. Des régressions logistiques multiples ont indiqué que les participants qui étaient plus jeunes ou ceux qui ont rapporté un contact personnel avec les personnes atteintes du VIH/SIDA ont été significativement plus enclines à

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rapporter des attitudes personnelles envers la population qui étaient plus libérales que leurs normes sociales perçues. Avoir une attitude personnelle plus libérale envers les personnes atteintes du VIH/SIDA que les normes sociales perçues était significativement et négativement lié au niveau de l'intention de discrimination au travail, à la discrimination perçue au niveau interpersonnel et au niveau de l'attitude générale de préjugé envers les personnes atteintes du VIH/SIDA. Les résultats soulignent l'importance de comprendre les normes sociales et les attitudes personnelles dans l'étude de la stigmatisation liée au VIH et prônent l'incorporation de l'existence du capital humain dans les futurs programmes de réduction de la stigmatisation du VIH.

***E**n este estudio se examinó el estigma hacia el VIH/SIDA entre proveedores de servicios chinos mediante la comparación de sus actitudes hacia las personas que viven con el VIH/SIDA con su percepción de las normas sociales relacionadas a personas que viven con el VIH/SIDA. Se seleccionaron al azar tres hospitales provinciales, cuatro de la ciudad/hospitales de la prefectura, diez hospitales del condado, 18 clínicas de salud municipales, y 54 clínicas de la aldea de Yunnan, China. Los médicos y las enfermeras fueron incluidos en la muestra de manera aleatoria y considerando la relación enfermera-médico de cada hospital o clínica. Una muestra grande de técnicos de laboratorio fue incluida en el estudio con el fin de garantizar su adecuada representación en los análisis. Un total de 1,101 proveedores de servicios participaron de manera voluntaria en una encuesta anónima, en la cual se evaluaron las características demográficas, las actitudes individuales, así como la percepción de las normas sociales hacia personas que viven con el VIH/SIDA, la intención de discriminación laboral, las actitudes globales de prejuicio y los conocimientos sobre el VIH/SIDA. La mayor parte de la muestra presentó similitudes entre sus opiniones personales y lo que ellos pensaban, eran las creencias de la mayoría de las personas de su sociedad. En una regresión logística múltiple se pudo observar que los participantes más jóvenes o que indicaron un contacto personal con personas que viven con el VIH/SIDA, mostraron de manera más significativa respecto de esta población actitudes personales mucho más liberales que las normas sociales percibidas. El presentar una actitud personal más liberal que las normas sociales percibidas, hacia personas que viven con el VIH/SIDA, estaba significativa y negativamente relacionado con el nivel de intención de discriminación laboral, la percepción de discriminación a nivel interpersonal y el nivel general de actitudes prejuiciosas hacia estas personas. Los resultados remarcan la importancia de la comprensión de las normas sociales y de las actitudes personales en el estudio del estigma relacionado con el VIH y propone la incorporación del capital humano existente en programas futuros de reducción del estigma hacia el VIH.*

Keywords: HIV/AIDS; Stigma; Discrimination; Service providers.

Social norms theory has provided a model for understanding human behavior that has implications for health promotion and prevention. It states that behavior is influenced by perceptions of how other individuals in a social group behave. However, these perceptions of others' behaviors and beliefs are often incorrect (Scholly, Katz, Gascoigne, & Holck, 2005). In its application to health promotion and prevention, the theory predicts that if the misperceptions are corrected by providing more accurate messages that reflect the true norms, rates of high-risk behaviors will decline (Perkins, Meilman, Leichter, Cashin, & Presley, 1999; Perkins & Wechsler, 1996). Based on this theory, behavioral interventions have undertaken the task of changing social norms, or correcting misperceptions, as an important component for achieving attitudinal and behavioral change.

Social norms theory was first applied to college students during the 1980s. Perkins and Berkowitz (1986) found that college students' alcohol-drinking behavior was significantly related to the discrepancy between personal attitudes and the perception of the campus norm. If students believed that heavy

alcohol use was the acceptable norm on campus, regardless of the accuracy of the perception, they were more likely to participate in binge drinking (Perkins & Berkowitz, 1986). Haines and Spear (1996) conducted a media campaign to change student perceptions of binge drinking; their intervention resulted in a decrease in the number of students who perceived binge drinking as the norm and subsequently in a corresponding reduction in self-reported binge drinking. Martens and colleagues (2006) compared the perceptions of normative drug use and sexual behavior and actual individual behavior in a large sample of college students. Their study indicated that students had considerable misperceptions of the social norms for drug use and sexual behavior, and the majority of students overestimated the normative levels for these behaviors. They also found a significant relationship between students' perception of behavior norms and their own behaviors (Martens et al., 2006).

In contrast to the abundant works on alcohol, drug use and sexual behaviors among college students, application of social norms theory to other behaviors and populations is sparse. In this study, instead of testing the social norms theory,

we applied its concepts and methodological strategies to further understand HIV-related stigma among service providers in China. As reported by previous studies in China, stigmatizing attitudes and behaviors against people living with HIV/AIDS are prevalent among service providers (Cao, Sullivan, Xu, Wu, & China CIPRA Project 2 Team, 2006; Li et al., 2007). In this study, we surveyed service providers to examine two dimensions of HIV-related stigma: (1) perceived social norms and (2) personal attitudes. In addition to comparing the similarities and discrepancies between reports on the two dimensions, we also identified service providers whose personal views were more accepting and unbiased than their perceived social norms, and contrasted them to those whose personal views were similar to or less accepting than their perceived social norms.

METHODS

Participants and procedures

This study was conducted in three sites of Yunnan Province, China between January and August 2005. In order to obtain a representative sample, we gathered staffing information from local hospitals and clinics before sampling. For two of the sites, we randomly selected in each site one provincial hospital, one city hospital, three county hospitals, six township hospitals and 18 village clinics. Since the third site is the capital city of Yunnan Province, which has more city- and county-level hospitals, we gave more weight to the city and county hospitals; accordingly, two city hospitals and four county hospitals were randomly selected for the capital city. As a result of the sampling process, three out of nine provincial hospitals, four out of seven city/prefecture hospitals, 10 out of 35 county hospitals, 18 out of 90 township hospitals, and 54 out of 573 village clinics were randomly selected by using a random number table. A staff roster of each facility was obtained, and doctors and nurses were sampled proportionally to the doctor–nurse ratio of that hospital or clinic. Lab technicians were over-sampled in order to include an adequate representation in the analysis.

A total of 1,101 participants were randomly recruited from 3,579 eligible health care providers. They voluntarily participated in an anonymous survey; the refusal rate was less than 8%. Before the survey, project researchers introduced the purpose of the study, procedures, potential risks, and benefits. Informed consent was obtained from

each participant before the study. To ensure anonymity, respondents were instructed not to place any personal identifiers on the questionnaire, which took, on average, one hour to complete. No monetary incentive was offered at the completion of the survey.

The study sample was primarily female (74.4%) and of Han ethnicity (72.7%). Approximately 25.7% of the participants were younger than 30 years old, and 28.8% were 41 or older. More than 40% were from provincial or city hospitals; 50.6% were doctors, 39.9% were nurses, and nearly 9.5% were lab technicians. At the time of the survey, only about 28.5% of the participants had received four years of medical education or higher, and 45.1% reported having personal contact with patients living with HIV/AIDS at work.

Measures

Individual attitudes towards people living with HIV/AIDS were measured by asking service providers about their level of agreement/disagreement with five statements: (1) People living with HIV/AIDS should be legally separate from others to protect public health; (2) The names of people living with HIV/AIDS should be made public so others can avoid them; (3) People who got infected with HIV through sex or drug use get what they deserve; (4) People who got infected with HIV/AIDS through commercial sex activities deserve good-quality medical care; and (5) People who got infected with HIV/AIDS through drug use deserve good quality medical care. The original responses to each item ranged from 1 (strongly agree) to 5 (strongly disagree). The response categories for the first three items were reversed. Since relatively few respondents had selected the extreme answers (“strongly agree” or “strongly disagree”), all responses were regrouped into three categories instead of the original five-point Likert scale, with a higher score indicating a higher level of stigma (Cronbach’s $\alpha = .72$).

Perceived social norms towards people living with HIV/AIDS were measured by asking participants about their level of agreement/disagreement with a similar set of statements as above, but modified to begin with “Most people in society think that....” For example, the first item measuring a perceived societal norm was: “Most people in society think that people living with HIV/AIDS should be legally separate from others to protect public health.” Higher scores indicated a perception of more discriminatory social norms (Cronbach’s $\alpha = .73$).

Discrimination intent at work was constructed based on a four-item scale to assess the level of discrimination intent toward people living with HIV/AIDS when participants performed their daily medical work. The items were: (1) You would be willing to work with HIV-positive patients; (2) If you worked with HIV-positive patients, you would provide the same quality of care to them that you provide to other patients; (3) If the superior in your hospital asked you to do a physical examination of a known HIV-positive patient, you would be willing to do so; and (4) If you worked with HIV-positive patients, you would interact with them just like other patients. Responses to each item ranged from 1 (strongly agree) to 5 (strongly disagree). This measure was constructed by averaging scores across all the items, with a higher number indicating a higher level of discrimination intent at work (Cronbach's alpha = .83).

General prejudicial attitude was measured by the 12-item priority stigma indicator defined in the *HIV/AIDS-related Stigma and Discrimination Indicators Development Workshop Report* (USAID Inter-Agency Working Group on Stigma and Discrimination, 2004). We adapted nine items from the original scale, ranging from 1 (strongly agree) to 5 (strongly disagree). Exemplary statements in this scale are: AIDS is a punishment for bad behavior; People living with HIV/AIDS should have the right to marry; You would not share eating utensils with a person living with HIV because you are afraid of HIV infection; People who behave promiscuously should be blamed for AIDS. Some items were reverse-scored so that a higher score indicates a higher degree of general prejudicial attitude. Acceptable reliability was supported by an alpha value of .71.

Knowledge of HIV/AIDS was ascertained using 10 questions such as: Is AIDS curable?; Can HIV be transmitted through pregnancy, childbirth, breast-feeding, or daily contact (such as sharing a public bathroom)?; Can mosquitoes transmit HIV?; Can HIV transmission be stopped by more nutrient intake or physical exercise?; Is an HIV vaccine already available?; Are patients with sexually transmitted diseases more likely to get HIV? The score for *knowledge of HIV/AIDS* was calculated by summing all correct responses to the 10 items.

Perceived discrimination at the interpersonal level was measured with a five-item scale to assess the extent to which the participant personally knew someone who had been unfairly treated because of HIV/AIDS. This measurement was adapted from

a USAID HIV/AIDS-related stigma report (USAID, 2004) in which these indicators were described as being most valid to measure the discriminatory behavior at the population or community level based on "direct observation" as opposed to hearsay. The questions are: (1) Do you personally know someone who has lost or been denied a job because of HIV/AIDS? (2) Do you personally know someone who has lost or been denied education because of HIV/AIDS? (3) Do you personally know someone who has lost or been denied health care services because of HIV/AIDS? (4) Do you personally know someone who has been excluded at a social gathering because of HIV/AIDS? (5) Do you personally know someone who is no longer visited at home or by others because of HIV/AIDS? This measure was calculated by summing the positive (yes) responses, with a higher number indicating a higher level of perceived discrimination at an interpersonal level (alpha = .85).

Data analysis

We constructed a composite measure based on the comparison of *individual attitudes* and *perceived social norms* for each of the five items. We defined the difference between the two measures by subtracting the response value for each of the five items in the *individual attitudes scale* from the response to the corresponding item in the *perceived social norms scale*. A positive score for a particular item indicates that the participant reported a more liberal individual attitude than what he/she perceived to be the social norm regarding that item. For example, if a participant personally agreed that people who got infected with HIV/AIDS through commercial sex activities deserve good-quality medical care, and he or she reported that most people in society would not agree with such a statement, then the comparison score would be positive. The positive score indicates that this participant is more open-minded, or is an *early adopter* of the attitude of acceptance that has been increasingly diffusing through current social norms. A zero on the comparison score indicates a match of personal attitudes and perceived social norms (*majority*), while a negative score indicates that the participant reported a higher level of stigma in their individual attitudes than in their perceived social norms (*laggards*) (Rogers, 2003).

We further dichotomized the comparison scores to facilitate multivariate analyses. This was done by giving a score of "1" if a participant has at least

one positive comparison score, and the rest of the four scores are non-negative. The score "0" was assigned to a participant if all of his/her comparison scores were zero, or if any one of them was negative. Participants with a score of "1" were designated as *early adopters*. To study the relationship between the status of *early adopters* and its predicting factors, we conducted multiple logistic regression with age group (≤ 35 versus older than 35 years), sex, medical education (lower than associated medical degree versus associated medical degree or higher), medical profession (doctor versus non-doctor), and whether the participant had any contact with people living with HIV/AIDS inside or outside of his/her institution. The odds ratios and 95% confidence intervals were estimated for each predictor. To validate our newly developed comparison measure, we used *t*-tests to examine its relationships with the following measures: level of discrimination intent at work, general prejudicial attitudes, perceived discrimination at the interpersonal level, and HIV knowledge.

RESULTS

The distribution of the three clusters based on the comparison score for each item is presented in Table 1. As expected, a majority of the participants (>60%) personally agreed with what they perceived most people in society think, except for the third item, which had more discrepancies than agreements. For the item assessing attitudes regarding whether people who got HIV/AIDS through sex or drugs got what they deserved, more than 50% of the participants had a positive comparison score, indicating that their views are

more liberal than their perceived societal norms. Over 26% of the participants reported more accepting personal opinions than perceived social norms regarding the question of whether people living with HIV/AIDS should be separate from others to protect public health. The proportion of participants who reported more accepting individual attitudes than their perceived social norms ranged from 15% to 18% for the remaining three items (whether the names of people living with HIV/AIDS should be made public [item 2]; whether people who got infected through commercial sex activities [item 4] or drug use [item 5] deserve good quality medical care).

Overall, a range of 5% to 14% of participants scored negatively in the comparison measure across all items, which means that they reported more discriminatory personal opinions toward people living with HIV/AIDS than the views they believed most people in society held. This might imply that they thought the society has too much tolerance of people living with HIV/AIDS.

Logistic regressions from *early adopters* on demographic characteristics are presented in Table 2. Over 55% of the participants 35 years old or younger could be identified as early adopters in this study. Forty-five per cent of the total participants had personal contact with people living with HIV/AIDS; more than half of this group was likely to have more liberal personal opinions than their perceived social norms towards people living with HIV/AIDS. Participants who were 35 or younger ($OR = 1.73$, $CI: 1.36, 2.22$) or who had personal contact with people living with HIV/AIDS ($OR = 1.63$, $CI: 1.27, 2.09$) were at least 1.6 times likely to have a more accepting personal attitude toward people living with HIV/AIDS ($p < .001$).

TABLE 1
Distributions of comparison categories based on personal opinion and perceived social norms regarding people living with HIV/AIDS

Statement	Distribution of comparison clusters N (%)		
	Laggards (negative)	Majority (no difference)	Early adopters (positive)
1 PLWHA should be legally separate from others to protect public health.	135 (12.3)	670 (60.9)	295 (26.8)
2 The names of PLWHA should be made public, so others can avoid them.	66 (6.0)	849 (77.3)	184 (16.7)
3 People who got HIV/AIDS through sex or drug use got what they deserved.	55 (5.0)	454 (41.3)	590 (53.7)
4 People who got infected with HIV/AIDS through commercial sex activities deserve good-quality medical care.	129 (11.7)	775 (70.5)	196 (17.8)
5 People who got infected with HIV/AIDS through drug use deserve good-quality medical care.	148 (13.5)	785 (71.6)	164 (14.9)

PLWHA, people living with HIV/AIDS.

TABLE 2
Logistic regression of early adopters

	<i>N (%)</i>	<i>Early adopters</i>	<i>Odds ratio</i>	<i>95% CI</i>
35 or younger**	592 (54.4)	328 (55.4)	1.733	(1.355, 2.216)
Female	818 (74.4)	413 (50.5)	1.081	(0.788, 1.483)
Medical education (at least associated medical degree)	648 (59.0)	342 (52.8)	1.275	(0.985, 1.648)
Medical doctor	557 (50.6)	268 (48.1)	0.901	(0.680, 1.193)
Having personal contact with people living with HIV/AIDS **	497 (45.1)	281 (56.5)	1.628	(1.265, 2.094)

Total number may be less than 1101 because of missing cases. ** $p < .001$.

Most of the participants were female (74.4%). We found that sex had no significant relationship with being liberal or an early adopter in individual attitude toward people living with HIV/AIDS ($OR = 1.1$, $CI: .79, 1.48$). Similarly, one's medical profession (doctor versus non-doctor) did not have a significant effect on the probability of being an early adopter.

Table 3 presents means and standard deviations for discrimination intent at work, general prejudicial attitude, perceived discrimination at interpersonal level, and knowledge of HIV/AIDS by status of early adopter versus non-early adopter. The average level of discrimination intent at work was significantly lower for the participants who reported more liberal personal opinion than perceived social norms ($p < .05$), demonstrating consistency of our classification based on the discrepancies between individual attitudes and perceived social norms with the relevant measure in behavioral intent. Significant differences in mean comparisons were associated with general prejudicial attitude toward people living with HIV/AIDS ($p < .001$) and perceived discrimination at interpersonal level ($p < .05$), with early adopters scoring significantly lower on both variables. HIV/AIDS knowledge ($M = 8.44$, $SD = 1.39$) was found non-significantly related to being more or less liberal in personal opinion, as compared to perceived social norms, toward people living with HIV/AIDS.

DISCUSSION

The purpose of this study was to compare service providers' perception of social norms and their personal opinion regarding people living with HIV/AIDS. We found that for the majority of providers in this study, their reported personal attitudes matched their perceived social norms. This overlap can be explained by symbolic interaction theory, which views humans as active creative participants who construct their social world, not as passive objects of socialization (Blumer, 1969; Mead, 1934). The person and the society should not be understood in isolation because the "self" is a product developed and refined through interaction with other human beings. According to this school of thought, we create social constructs that become part of the overall reality; actually, reality is merely the interpretation we place on the evidence of our senses (Berger & Luckmann, 1963; Robertson, 1987).

Applying this perspective to this study, we find it interesting and logical that the similarity between perceived social norms and personal attitudes parallels the interrelationship of society and the self. Service providers are a part of society, and their prejudicial attitudes are part of the social construct of HIV stigma in society. Their perception of social norms is built on their interpretations of their observations in their personal and professional communities; the similarity to their personal attitudes may result from a blend of

TABLE 3
Differences between early adopters and non-early adopters

<i>Measure</i>	<i>Early adopters (n = 550)</i>		<i>Non-early adopters (n = 551)</i>		<i>Mean difference (95% CI)</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Discrimination intent at work*	1.86	0.48	1.93	0.54	0.07 (0.02, 0.14)
General prejudicial attitudes**	2.72	0.53	2.85	0.61	0.12 (0.06, 0.19)
Perceived discrimination at interpersonal level*	0.67	0.48	0.73	0.45	0.07 (0.01, 0.12)
HIV knowledge	8.43	1.39	8.27	1.53	- 0.16 (- 0.34, 0.01)

t-test was used. * $p < .05$; ** $p < .001$.

social reality and personal interpretation. The current findings imply that for a stigma reduction intervention to be effective, it needs to address both personal stigmatizing attitudes and perceptions of societal prejudice and stereotypes.

Our findings also provide methodological implications. The overlap of personal attitudes and perceived social norms suggests that an individual's perception of societal norms could, to some degree, reflect his or her personal beliefs and attitudes. This is especially relevant in surveying sensitive topics such as HIV/AIDS-related discrimination or risky sexual behaviors. People might be reluctant to report their true opinions or behaviors in these areas; however, these sensitive areas can potentially be measured through people's reports on their social circles or community norms, as proxies for a direct measurement.

Although the majority of providers exhibited similarities between their personal views and their perception of the social norms, about 15% of participants reported a more liberal or accepting personal attitude towards people living with HIV/AIDS than their perceived social norms. These "early adopters" also reported a significantly lower level of discrimination intent at work and general prejudicial attitude toward people living with HIV/AIDS. Although actual discriminating behavior is not the same as discrimination intent, measuring discrimination intent can serve as a proxy to actual discriminating behavior. Actual discriminating behavior is determined not only by the intention of behavior but also by a combination and balance of multiple determinants, such as: personal attitude toward the behavior and the subjective norm (in reasoned action theory; Azjen & Fishbein, 1980), or threat perception, behavioral evaluation, cues to action and health motivation (in the health belief model; Sheeran & Abraham, 2005; Strecher, Champion, & Rosenstock, 1997). Therefore, the "early adopters", having low levels of discrimination intent, have the potential to behave ahead of the social norm's establishment, and, as a population, they have the potential to change social norms in a positive way. Therefore, the identification of these "early adopters" has important implications for stigma reduction interventions, and a viable strategy would be to introduce and diffuse more accepting attitudes and non-discriminating behaviors into social trends.

Diffusion of innovation theory posits that innovations are often propagated by a subset of population members who are popular opinion leaders (POLs). They are the trusted trend-setters whose actions, attitudes, and views influence those of other members (Rogers, 2003). The theory suggests that

new behavioral trends are most efficiently established when a "critical mass" of opinion leaders and early adopters have endorsed the new trend (Rogers, 2003). This model has been applied to HIV prevention in a series of community-level trials, in which identifying POLs in a target population is a vital step for the success of the intervention program (Kelly, 2004; Kelly et al., 1997; Sikkema et al., 2000). Our study provides evidence that there is great potential to adapt the POL model to address stigma reduction among service providers. The early adopters, as identified in this study, can play the role of POLs and diffuse non-discriminatory messages to their coworkers and social network.

It is not surprising to see that service providers who had personal contact with people living with HIV/AIDS were more likely to hold a more liberal attitude toward people living with HIV/AIDS than what they perceived were the social norms. This is consistent with Angermeyer, Matschinger, and Corrigan's study (2004), which showed that members of the majority who have engaged with minority group members are less likely to stigmatize against the minority members. In our study sample, it is likely that personal contact with people living with HIV/AIDS could demystify and dispel misinformation, generate empathy, and, in turn, reduce prejudice and stigma. In other words, such experience acts as a trigger to attitude change. According to the health belief model, the construct of "cues to action" was defined as a variety of persuasive experiences that can influence or trigger actions (Mattson, 1999; Sheeran & Abraham, 2005). As a powerful trigger, contact with people living with HIV/AIDS, from face-to-face conversations to hearing testimonials from such people, can be an important strategy in stigma reduction interventions for service providers.

In summary, this study not only revealed the general alignment of people's individual attitudes with perceived social norms regarding people living with HIV/AIDS, but also highlighted the presence of discrepancies in the two dimensions as manifested by the "early adopters" of more accepting and unprejudiced attitudes. These findings have multiple implications for designing interventions to reduce stigma and discrimination towards people living with HIV/AIDS in health care settings.

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