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Stigma Scale Revised: Reliability and Validity of a Brief Measure of Stigma For HIV + Youth

Kathryn Wright, D.O.,
The Carmen and Ann Adams Department of Pediatrics, Wayne State University Medical School.

Sylvie Naar-King, Ph.D.,
The Carmen and Ann Adams Department of Pediatrics and Department of Psychiatry, Wayne State University.

Phebe Lam, M.A.,
The Carmen and Ann Adams Department of Pediatrics.

Thomas Templin, Ph.D., and
Wayne State University, School of Nursing.

Maureen Frey, Ph.D.
The Carmen and Ann Adams Department of Pediatrics, Department of Nursing.

Abstract

The purpose of this study was to shorten an HIV stigma scale to make it less burdensome for HIV + youth without compromising psychometric properties. The shortened questionnaire showed good internal consistency and validity; suggesting that a 10 item measure of stigma has promise for assessing this important construct in HIV + youth.

Stigma is a discrediting social label which changes the way the individual looks at him/her self and disqualifies them from full social acceptance[1]. HIV has a particular, insidious stigmatization since it is associated with factors which imbue judgment and criticism such as sexual behavior and substance use[2]. This “blaming the victim” increases the isolation and shame that the individual internalizes[3] which leads to fear of accessing services[4, 5] as well as psychosocial consequences. In a study in an urban clinic of adult HIV patients, HIV stigma using the Berger scale of stigma, was associated with depressive symptomatology and a lower quality of life[6].

The stigma felt by HIV+ youth and the consequences of this stigma have not been studied. The first step is to ensure adequate measurement of stigma in this population. Berger developed a 40-item measure for HIV+ adults (predominantly Caucasian and male).[7] The purpose of the present study was to reduce instrument burden by shortening the HIV Stigma Scale to 10 items and to test its psychometric properties in a sample of predominantly African American youth (16–25) with HIV. We hypothesized that the shortened measure would have good internal

For further information and reprints, please contact Kathryn Wright at Children’s Hospital of Michigan, the Carmen and Ann Adams Department of Pediatrics, 3901 Beaubien Blvd. Detroit, MI. 48201. Phone number 313-745-4817. Fax number 313-993-7124. Electronic mail may be sent to kwright@med.wayne.edu.

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consistency, would be positively associated with emotional distress and substance use and would be negatively associated with social support.

Methods

Participants

Youth infected with HIV were participants in a clinical trial investigating the efficacy of a motivational intervention to improve condom use and prevent or decrease substance use. Youth were recruited from an adolescent HIV clinic within a tertiary care children's hospital located in a major metropolitan area. Inclusion criteria included HIV+ status, ages 16–25 and English speaking. The sample for the larger study consisted of 64 participants. We added the stigma questionnaire later in the study and had 48 clients complete this measure. The sample was 88% African American; 52% male, 46% female, and 2% male to female transgender. 64% of the males self-identified as gay or bisexual. The majority (86%) of the youth were infected through sexual contact.

Procedures

Youth were referred by their HIV clinical care team. The protocol was approved by the university's Institutional Review Board, and a certificate of confidentiality was obtained from the National Institutes of Health. Informed consent was obtained from all participants, and a waiver of parental consent was permitted for youth under age 18.

Measures

Stigma Scale—Youth completed Berger's[7] stigma scale, which includes 40 items rated on a 5-point scale from "Strongly Disagree" to "Strongly Agree". An exploratory factor analysis, at the time of subscale development, using a common factor method of alpha extraction resulted in 4 factors defined as the following subscales: 1) Personalized Stigma: consequences of other people knowing their status. 2) Disclosure Concerns 3) Negative Self Image: not as good as others, shame, guilt 4) Public Attitudes: what people think about HIV.

Social Support—Youth reported how much they agreed with 12 items from a shortened Social Provision Scale[8] regarding their relationship/support with people in their lives. The scale was shortened during previous pilot work and showed good internal consistency within the current sample (alpha= .86).

Brief Symptom Inventory (BSI)—Analyses in the present study utilized the Global Symptom Index of the Brief Symptom Inventory. The measure showed excellent internal consistency in the present sample (alpha=.97).

Substance Use—Illicit drug and alcohol use was measured using the timeline follow-back (TLFB) procedure. TLFB procedure has demonstrated excellent psychometric properties in a number of studies when used for alcohol recall.[9]

Results

To create the abbreviated stigma scale, we chose the items that loaded highest on each scale in Berger's original factor analysis using a minimum of 2 items per subscale for a total of 10 items for the 4 subscales. Table I demonstrates Cronbach's alpha for each revised subscale, and the correlation with the longer version of that subscale. Validity was demonstrated using bivariate correlations between the abbreviated stigma scores and social support, BSI, and substance use. In our study population, 50% scored above the clinical cut-off for the General Severity Index, 42% for Depression, and 42% for Anxiety. Bivariate correlations for stigma

and psychosocial variables are shown in Table 2 and demonstrate preliminary validity of the measure.

Discussion

HIV stigma is a multidimensional construct which adds complexity to its effect on the mental health and perspective of the individual which may interface with health behaviors. This study assessed the reliability and validity of an abbreviated measure of HIV stigma in a sample of minority HIV+ youth with diverse gender and sexual orientation.

Results demonstrated good reliability and validity for the total 10-item stigma scale as well as for the subscales. The differing correlations between the subscales and other psychosocial variables suggest the importance of maintaining subscales to reflect the complexity of the stigma construct. While studies with larger samples can test the different relationships between types of stigma and psychosocial outcomes, this study provides preliminary evidence for the differences between types of stigma. While general emotional distress was associated with total stigma, specific symptoms were associated with certain types of stigma. Depression and anxiety positively correlated with the more personal effects of stigma as opposed to concerns about public attitudes or disclosure. It seems that the fear of rejection and negative self image are more intrinsic to the mental health dimension. Total social support showed a similar pattern.

Total stigma and personalized stigma were positively associated with alcohol use but not marijuana use. Alcohol use was more prevalent than marijuana use, and there may not have been sufficient sample to test relationships between stigma and other drug use. It is interesting to note, that stigma was the only psychosocial variable to be associated with substance use. Other studies of youth have also not found mental health symptoms to be associated with substance use. It is possible that in this population with high rates of mental health symptoms overall stigma is more relevant to other psychosocial outcomes such as substance abuse than mental health symptoms per se.[10]

The limitation to this study is that it is a small sample of urban, primarily African American youth which must be substantiated with larger and more diverse samples, particularly international populations. It is possible that a larger sample size would reveal differences based on gender and sexual orientation, though there were clearly no major differences in stigma sufficient to be detected within this small sample size.

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Table 1

Revised Stigma Scale: Items of Subscales

Items (number from original scale)	Subscale	Alpha	Correlation with Original Subscale
24. I have been hurt by how people reacted to learning I have HIV. 35. I have stopped socializing with some people because of their reactions of my having HIV. 36. I have lost friends by telling them I have HIV.	Personalized stigma	.75	.90, p<.01
17. I am very careful who I tell that I have HIV. 25. I worry that people who know I have HIV will tell others.	Disclosure	.73	.74, p<.01
7. I feel that I am not as good a person as others because I have HIV. 12. Having HIV makes me feel unclean. 15. Having HIV makes me feel that I'm a bad person.	Negative Self-image	.84	.85, p<.01
14. Most people think that a person with HIV is disgusting. 16. Most people with HIV are rejected when others find out.	Public Attitudes	.72	.71, p<.01

Table 2

Correlations Between Revised Stigma Scale and Psychosocial Variables

Stigma scales (Revised) and Psychological. Variables	2 PS	3 NSI	4 BSI (GS)	5 BSI (D)	6 BSI (A)	7 TSS	8 Alcohol	9 MJ
1. Total stigma (TS)	.779**	.762**	.314*	.351*	.241	−.198	.348*	−.089
2. Personalized stigma (PS)		.503**	.393**	.414**	.315*	−.351*	.322*	.086
3. Negative self image (NSI)			.361*	.414**	.315*	−.259	.242	−.215
4. BSI Global Severity (BSI GS)				.924**	.956**	−.108	.057	.154
5. BSI Depression (BSI D)					..852**	−.135	.076	.069
6. BSI Anxiety (BSI A)						−.112	.095	.137
7. Total Social support (TSS)							−.004	−.076
8. Alcohol in last 30 days (Alcohol)								.065
9. Marijuana use in the last 30 days (MJ)								