

Standardized Survey Tool for Measuring Stigma among Health Facility Staff: Results of Field-testing in Six Countries

Authors: Laura Nyblade¹, Aparna Jain², Manal Benkirane³, Li Li⁴, Anna-Leena Lohiniva³, Roger McLean⁵, Janet M. Turan⁶, Nelson Varas-Díaz⁷, Francheska Cintrón-Bou⁷, Jihui Guan⁸, Zachary Kwena⁹, Wendell Thomas¹⁰

Affiliations: ¹Health Policy Project, RTI International; ²Health Policy Project, Futures Group; ³U.S. Naval Medical Research Unit No. 3, Cairo, Egypt; ⁴University of California, Los Angeles; ⁵University of the West Indies St. Augustine Campus, Port-of-Spain, Trinidad and Tobago; ⁶University of Alabama at Birmingham; ⁷University of Puerto Rico, San Juan, Puerto Rico; ⁸Provincial Center for Disease Control and Prevention, Fuzhou, China; ⁹Kenya Medical Research Institute (KEMRI), Kisumu, Kenya; ¹⁰Caribbean Data Management Systems, Tacarigua, Trinidad and Tobago

Presented at the International Conference on AIDS and STIs in Africa; December 7–11, 2013; Cape Town, South Africa

Introduction

HIV-related stigma within health facilities is a barrier to access to HIV prevention and treatment services, yet there are few efforts to scale-up stigma reduction in routine service delivery. This is partly due to the lack of a brief, simple, standardized tool for measuring stigma among health facility staff that can be used in diverse HIV prevalence, language, and healthcare settings. In response, international program implementing agencies, university and non-university based researchers, the global network of people living with HIV (GNP+), and UNAIDS, collaborated to develop a tool for measuring HIV stigma among all levels of health facility staff. The tool was field-tested to refine it and create a brief questionnaire that can be used as a standalone survey or a module in a broader HIV survey for health facility staff.

Methods

- Development of an item pool
- Review and prioritization of questions at an experts' workshop to determine the content of the pilot questionnaire
- Field-testing of the questionnaire in six countries
- Analysis of the data across sites to examine item performance

Table 1: Background Information on Six Field-testing Sites

	China	Dominica	Egypt	Kenya	Puerto Rico	St. Christopher & Nevis
HIV prevalence	Low	Low	Low	High	Low	Low
Questionnaire language	Chinese	English	Arabic	English, Dholuo, Swahili	Spanish	English
Mode of administration	Self (paper)	Self (paper), Interviewer	Interviewer	Self (paper), Interviewer	Self (iPad and paper)	Self (paper), Interviewer
Date of data collection	April–May 2012	December 2012–January 2013	December 2012	May–June 2012	February–April 2012	November 2012
Type of facilities	Government county-level hospitals	National referral and district hospitals, health centers, clinics	Government infectious disease hospital	Government district and sub-district hospitals, health centers, dispensaries	Government HIV and STD clinics, private hospitals and clinics, religious and community-based organizations	National referral and district hospitals, health centers, clinics
Number of respondents	300	335	300	350	301	307
Type of respondents*	Clinical	Clinical and non-clinical	Clinical and non-clinical	Clinical and non-clinical	Clinical and non-clinical	Clinical and non-clinical
Gender of respondents	Female: 65% Male: 35%	Female: 82.1% Male: 17.9%	Female: 74.7% Male: 25.3%	Female: 56.3% Male: 43.7%	Female: 72.8% Male: 27.2%	Female: 81.9% Male: 18.1%

*Clinical staff includes those who are medically trained, such as doctors, nurses, nurses assistants, dentists, and pharmacists, and non-clinical staff includes those who are not medically trained, such as receptionists, cleaning staff, and ward attendants.

The survey items were assessed through the examination of psychometric properties and consideration of contextual issues. Three aspects of each question were reviewed simultaneously and given equal weight when determining which would be included in the brief questionnaire:

- Variable distributions by country to ascertain reasonable variability in responses
- Each site's experience implementing the question
- Exploratory factor analysis or principle component analysis

Acknowledgments

China: Funded by a grant from the National Institutes of Mental Health (NIMH), (1R01MH081778-04S1); **Dominica:** Funded by USAID (under Cooperative Agreement No. AID-OAA-A-10-00067), which includes support from PEPFAR; **Egypt:** Funded by the Ford Foundation; **Kenya:** Funded by USAID (under Cooperative Agreement No. AID-OAA-A-10-00067), which includes support from PEPFAR; **Puerto Rico:** Funded by a grant from NIMH, (1R01MH080694); **St Christopher & Nevis:** Funded by USAID (under Cooperative Agreement No. AID-OAA-A-10-00067), which includes support from PEPFAR.

Contact Us

Health Policy Project
One Thomas Circle NW, Suite 200
Washington, DC 20005
www.healthpolicyproject.com
policyinfo@futuresgroup.com

The Health Policy Project is a five-year cooperative agreement funded by the U.S. Agency for International Development under Agreement No. AID-OAA-A-10-00067, beginning September 30, 2010. The project's HIV activities are supported by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR). It is implemented by Futures Group, in collaboration with CEDPA (part of Plan International USA), Futures Institute, Partners in Population and Development, Africa Regional Office (PPD ARO), Population Reference Bureau (PRB), RTI International, and the White Ribbon Alliance for Safe Motherhood (WRA).

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Results

The key outcome of the process was a validated, short questionnaire (Table 2). Eighteen core questions measure three programmatically actionable drivers of stigma within health facilities (worry about HIV transmission, attitudes toward people living with HIV, and health facility environment, including policies), and enacted stigma. The questionnaire includes a short scale for attitudes toward people living with HIV (five-item scale, alpha=.78, Table 3). The questionnaires are available on the Health Policy Project (HPP) website in Arabic, Chinese, English, Spanish, and Swahili (<http://www.healthpolicyproject.com/?p=49>).

Table 2: Results of Questionnaire Item Reduction by Question Categories and Totals

Section	Category	Field-tested Questionnaire (number of questions)	Final Brief Questionnaire (number of questions)
Background section	Demographic	6	2
	Job duties and facility-related	9	5
Drivers	Health facility policies and work environment	1 with 6 sub-items	1 with 2 sub-items
	Fear	1 with 9 sub-items	1 with 4 sub-items*
	Attitudes toward PLHIV	1 with 6 sub-items	1 with 5 sub-items 1 about HIV+ women's right to have babies
	Shame	2	0 (included as a sub-item in attitude question)
	Willingness to treat key populations	1 with 6 sub-items, each sub-item had, depending on answer, 4 additional possible questions	3 focused on key populations of men who have sex with men, sex workers, and people who inject drugs; each question has 3 possible sub-items, depending on the answer
Enacted stigma	Observed	1 with 8 sub-items	1 with 3 sub-items
	Extra infection precautions	1 with 6 sub-items	1 with 4 sub-items
	Secondary stigma	1 with 4 sub-items	1 with 3 sub-items*
Module: Stigma toward pregnant women living with HIV among facility staff who care for pregnant women	Fear	1 with 2 sub-items	1
	Opinions	1 with 7 sub-items	1 with 4 sub-items
	Observed	1 with 5 sub-items	1 with 5 sub-items

* These questions are phrased differently in high-prevalence and low-prevalence settings.

Table 3: Attitude Scale: Factor Loadings and Reliability

	China	Dominica	Egypt	Kenya	Puerto Rico	St. Christopher & Nevis
Five-item Attitude Scale						
People living with HIV could have avoided HIV if they had wanted to (Q27a)	-	0.5340	0.6828	0.4588	0.3415	0.5657
HIV is a punishment for bad behavior (Q27b)	0.5950	0.6155	0.8013	0.5152	0.6770	0.5302
Most people living with HIV do not care if they infect other people (Q27c)	0.3501	0.4383	-	0.4586	0.6202	0.6139
People living with HIV should feel ashamed of themselves (Q27d)	0.7047	0.6072	0.7308	0.4159	0.6513	0.4967
Most people living with HIV have had many sexual partners (Q27e)	0.5627	0.6434	0.6862	0.6463	0.6061	0.6759
People get infected with HIV because they engage in irresponsible behaviors (Q27f)	0.7078	0.6307	0.7737	0.6227	0.5869	0.5977
Cronbach's alpha five-item scale of Q27b–Q27f	0.72	0.73	0.77	0.67	0.76	0.73

Conclusions

Stigma-reduction programs in healthcare facilities are urgently needed to improve the quality of care provided, uphold the human right to healthcare, increase access to health services, and maximize investments in HIV prevention and treatment. This brief standardized tool will facilitate the inclusion of stigma measurement in research studies and routine facility data collection, allowing for the monitoring of stigma within healthcare facilities and evaluation of stigma-reduction programs. There is potential for wide use of the tool as a standalone survey or integrated within other studies of health facility staff.

For more information on the process and results, see "A Brief Standardized Tool for Measuring HIV-related Stigma among Health Facility Staff: Results of field-testing in China, Dominica, Egypt, Kenya, Puerto Rico, and St. Christopher & Nevis," in the *Journal of the International AIDS Society* (open-access) at <http://www.jiasociety.org/index.php/jias/article/view/18718>.