# Cultural adaptation to Polish conditions as an element of validation of the Berger HIV stigma scale – preliminary report

Katarzyna Van Damme-Ostapowicz [1] ABEF, Marek Sobolewski [2] CD

[1] Department of Integrated Medical Care, Medical University of Białystok, Poland
[2] Chair of Quantitative Methods, University of Technology in Rzeszów, Poland

**Abstract**

The AIDS dynamics shows that the problem of people living with HIV/AIDS is not only medical but also social. The HIV/AIDS-infected continue to suffer from stigmatization and social discrimination. The Berger HIV stigma scale may be a useful research tool to measure the extent of stigmatization of people with HIV/AIDS in Poland.

**Aim**

The aim of the paper is to characterize the Berger HIV stigma scale and to present the initiated validation process of its Polish version.

**Material and method**

Research involved 70 HIV-positive individuals in Poland, members of the *Association of* Volunteers Against AIDS "Be with Us" and was carried out between December 2011 and September 2012. The study was based on a diagnostic survey conducted using the Berger HIV stigma scale. The results were analysed quantitatively and qualitatively as well as using statistical methods.

**Conclusions**

The Berger HIV stigma scale is the first tool allowing to assess the level of stigmatization of people with HIV/AIDS in Poland. Using the $\alpha$-Cronbach`s coefficient, the internal consistency of the scale was assessed. The Berger HIV stigma scale questionnaire is internally consistent when the coefficient value is not lower than 0.70.

The study should be to be continued in a larger group of HIV-positive patients in Poland and a control group included.

**Key words:** HIV/AIDS stigma, Berger HIV stigma scale, validation

## Introduction

According to literature, people living with HIV/AIDS experience stigmatization and social discrimination [1]. They suffer from rejection and isolation by their families, partners and friends. Studies on HIV/AIDS stigma prove that people with HIV/AIDS are stigmatized due to the following: HIV/AIDS is associated with the behaviour that is either stigmatized or considered deviant, especially homosexuality and intravenous use of drugs, and the infected people are believed to be responsible for the infection; HIV/AIDS is a life-threatening disease, people are scared of becoming infected, and religious or moral beliefs lead some of them to consider the infection a result of some kind of a moral offence [1]. The results of studies conducted in Poland and abroad regarding people living with HIV/AIDS constitute the basis for further research for which the Berger HIV stigma scale seems a useful tool.

The process of validation consists of two phases: translation and assessment of psychometric properties of a newly translated instrument [2-6]. Its main purpose is the possibility of comparing the findings cross-culturally (internationally) and to use the test in Poland [7].

There is no one optimal way to adapt the test. Adaptation measures depend on the purpose the test is used for. Agreeing with Drwal [7, 8], it should be stated that in order to create a tool that could most accurately assess certain features in Poland, it has to be constructed anew, taking into consideration the specificity of the country [7, 8].

Having obtained the consent of the scale's authors, a Polish version was prepared. In order to maintain the semantic equivalence in translation of the scale into Polish, transcription and translation were applied in accordance with the guidelines concerning questionnaire translation and validation [9, 10]. Subsequently, the research was carried out using the Polish language version of the scale and a preliminary assessment of psychometric properties of the scale was performed.

**Material and method**

The study involved 70 people living with HIV/AIDS and was carried out in the years 2011-2012. The respondents were members *of the Association of* Volunteers Against AIDS "Be with Us" in Warsaw. The study was based on a diagnostic survey conducted using the Berger HIV stigma scale [11].

The research was conducted as part of a study no. 143-10876P carried out at the Faculty of Health Sciences of the Medical University of Białystok. The study design was approved by the Ethical Committee at the Medical University of Białystok. The Berger HIV stigma scale includes 40 items rated on a 5-point scale from "strongly disagree" to "strongly agree". If a respondent chooses the answer between the two options (e.g. between "I strongly disagree" and "I disagree"), a mean numerical value between the two options is used. Two items are scored reversely: item 8 and 21. After reversing the two, each result of the scale or subscale is calculated by adding the value of the measured item belonging to the scale or subscale. The HIV Stigma Scale total score may fluctuate between 40 and 160 points, where 40 means no stigma sensation and 160 the maximum awareness of disease. The personalized stigma subscale scores may vary from 18 to 72 points and in the case of the disclosure subscale from 10 to 40 points. As for the negative self-image subscale, the score ranges between 13 and 52 points, and for the public attitude subscale between 20 and 80 points [11].

**Validation of the HIV stigma scale**

Below we present the results of the validation of the HIV stigma scale in the Polish language version. Since the research was conducted once in one group of the affected, only the internal consistency of the scale could be assessed. For this purpose, the $\alpha$-Cronbach`s coefficient is used. The questionnaire is assumed to be internally consistent when the coefficient value is not lower than 0.70. Generally, the $\alpha$-Cronbach`s coefficient is calculated based on the idea that the responses to each question should be as correlated with the total measure as possible. The maximum, optimum value of this coefficient is 1.

The table below presents the values of $\alpha$-Cronbach`s coefficient for the total HIV stigma scale and for the individual subscales. The lowest value was found for the Disclosure subscale (0.74) but even in this case the score exceeds the generally accepted level sufficient for scale consistency, which is 0.70. For the total score scale and the remaining three subscales, the $\alpha\alpha$coefficient is very high (Table 1).

**Table 1.** The $\alpha$-Cronbach`s coefficient for the scale and subscales

| Scale (number of questions) | $\alpha$-Cronbach`s coefficient |
|---|---|
| HIV Stigma Scale total score (40) | 0.95 |
| Personalized stigma subscale (18) | 0.93 |
| Disclosure subscale (10) | 0.74 |
| Negative self-image subscale (13) | 0.91 |
| Public attitudes subscale (20) | 0.91 |

Validation is complemented descriptive statistics (mean value and standard deviation) for all the components of the HIV Stigma Scale (Table 2). In this way, it can be assessed which questions from the questionnaire were „responsible for" an increased feeling of stigmatization (items in the table below were arranged staring with those the answers to which had the highest average score).

**Table 2.** Compilation of descriptive statistics for the HIV Stigma Scale components

| Characteristics | $\overline{x}$ | *s* |
|---|---|---|
| h17 | 3.90 | 0.30 |
| h37 | 3.83 | 0.42 |
| h6 | 3.69 | 0.55 |
| h4 | 3.67 | 0.65 |
| h21 | 3.61 | 0.71 |
| h31 | 3.59 | 0.65 |
| h1 | 3.56 | 0.79 |
| h20 | 3.51 | 0.63 |
| h5 | 3.43 | 0.53 |
| h11 | 3.36 | 0.89 |
| h39 | 3.36 | 0.82 |
| h9 | 3.33 | 0.58 |
| h16 | 3.30 | 0.80 |
| h25 | 3.26 | 0.67 |
| h26 | 3.23 | 0.66 |
| h22 | 3.23 | 0.46 |
| h28 | 3.20 | 0.94 |
| h10 | 3.20 | 0.71 |
| h33 | 3.19 | 0.80 |
| h18 | 3.17 | 0.61 |
| h8 | 3.14 | 0.82 |
| h14 | 3.10 | 0.76 |
| h13 | 3.09 | 0.86 |
| h35 | 3.06 | 0.72 |
| h36 | 3.03 | 0.82 |
| h34 | 3.00 | 0.70 |
| h32 | 2.96 | 0.84 |
| h3 | 2.96 | 0.79 |
| h24 | 2.90 | 0.62 |
| h29 | 2.89 | 0.81 |
| h27 | 2.89 | 0.63 |
| h19 | 2.84 | 0.65 |
| h7 | 2.81 | 0.71 |
| h2 | 2.80 | 0.86 |
| h38 | 2.80 | 0.60 |
| h40 | 2.79 | 0.61 |
| h30 | 2.63 | 0.73 |
| h12 | 2.56 | 0.73 |
| h23 | 2.44 | 0.73 |
| h15 | 2.40 | 0.71 |

The table reveals that for the items 17 and 37 (to a lesser extent for 6, 4, 21, 31 and several next ones), the mean value is close to 4, which means that the majority of respondents chose the „I strongly disagree" answer.

## Conclusions

The Berger HIV stigma scale is the first tool to allow the assessment of the level of stigmatization of people living with HIV/AIDS in Poland. Since only one study involving one group of people was carried out, it was possible to assess only the internal consistency of the scale and the assessment was performed using the $\alpha$-Cronbach`s coefficient. The questionnaire for the Berger HIV stigma scale is internally consistent when the coefficient's value is not lower than 0.70.

## Recommendations

The research should be continued in a larger population of HIV-positive individuals in Poland with a control group included.

## References:

1. Wojciechowska J. Stygmat i dyskryminacja osób żyjących z HIV/AIDS. Available from: http://www.ur.edu.pl/pliki/Zeszyt4/35_wojciechowska.pdf

2. Henderson WA, Schlenk EA, Kim KH, Hadigan CM, Martino AC, Sereika SM, Erlen JA. Validation of the MOS-HIV as a measure of health-related quality of life in persons living with HIV and liver disease. AIDS Care. Psychological and Socio-medical Aspects of AIDS/HIV. 2010 ; 22(4): 483-490.

3. Schifano P, Borgia P, Wu AW, Spadea T, Milanese G. Validity and reliability of the Italian translation of the MOS-HIV health survey in persons with AIDS. Quality of Life Research. 2011; 1137-1146.

4. Ichikawa M, Natpratan C. Quality of life among people living with HIV/AIDS in northern Thailand: MOS-HIV Health Survey. Quality of Life Research 2011;13(3): 601-610.

5. Coyne K, Mandalia S, McCullough S, Catalan J, Nöstlinger C, Colebunders R, Asboe D. The international index of erectile function: development of an adapted tool for use in HIV-positive men who have sex with men. J Sex Med. 2010; 7(2): 769-774.

6. Aziato L, Dedey F, Marfo K, Asamani JA, Clegg-Lamptey JNA. Validation of three pain scales among adult postoperative patients in Ghana. BMC Nursing. 2015; 14:42.

7. Gawlik M, Kurpas D. Principles of questionnaires' validation on the example of the Caregiver Quality of Life-Cancer (CQOL-C) questionnaire. Puls Uczelni. 2014;(8)3: 26-29.

8. Drwal R. Adaptacja kwestionariuszy osobowości. Warszawa; PWN: 1995.

9. Parsian N, Dunning D. Developing and Validating a Questionnaire to Measure Spirituality: A Psychometric Process. Global Journal of Health Science. 2009; 4: 2-11.

10. Fornal-Pawłowska M, Wołyńczyk-Gmaj D, Szelenberger W. Validation of the Polish version of the Athens Insomnia Scale. Psychiatria Polska.2011; 2: 211–221.

11. Berger B, Ferrans CE, Lashley FR. Measuring stigma in people with HIV: Psychometric assessment of the HIV stigma scale. Research in Nursing and Health. 2001; 24: 518-529.

**Corresponding author:**

Katarzyna Van Damme-Ostapowicz

Department of Integrated Madical Care

Medical University of Białystok

ul. M. Curie-Skłodowskiej 7a

15-096 Białystok, Poland

Tel/fax +48 85/ 748 55 28

email: katarzyna.ostapowicz@gmail.com