Development And Validation of Bengali Depression Stigma Assessmement Questionnaire

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Abstract:

Background: Depression is the common mental disorder in India as well as in world. Among all diseases people with depression faced prejudice and discrimination from a number of sources including employability and social acceptability. In local language; available questionnaire are either too exhaustive or inadequate to assess stigma among the patient with depression.

Objective: To develop a valid Stigma Assessment Questionnaire in Bengali for different group of population aged 18-50 years in local population.

Study design: Descriptive study – Development of questionnaire

Materials and Methods- instrument that reflected individuals concern about stigma related to depression which include some areas: cause, burden, marriage, treatment, segregation from society etc planned. After integrated and rigorous review of literature initially 200 items were collected. With the help of subject experts gradually 19 English items were listed after deleting redundant, duplicated vague or culturally and linguistically complex item. Bengali version of this instrument was developed by The World Health Organization's translation back- translation method.

Result: The final Bengali version scale has 19 items with 7 factors. Internal consistency reliability was 0.81. **Conclusion:** The self- reported BENGALI DEPRESSION STIGMA ASSESSMEMENT QUESTIONNAIRE is a reliable measure of the stigma among depressed patients in the local population.

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I. Introduction

Among mental disorders presenting most frequently in primiary care worldwide and in India, depression is the most common; it accounts for about 20-33% patients in general practice^{1,2}. Estimates from the WHO Global Burden of Disease studies indicate that unipolar depression was ranked 5th in 1997 among all diseases and related conditions worldwide, and that its rank is projected to increase to 2nd by the year 2020³. Morbidity leading to physical, social, and occupational disability from depression may exceed that of other common medical conditions, such as hypertension, arthritis, diabetes, and chronic lung diseases; the impact of depression matches that of coronary heart disease⁴. The overall economic impact of depression in India and the world is also enormous; the association between depression and suicide and loss of life further increases the overall impact and the burden of depression. Stigma about mental illness, both among patients and common people is one of the major impediments in tackling mental health problems. This is because⁵-

- 1) Stigma about mental illness in the community makes it likely that patients and their relatives will try to deny or at least minimize the mental health problems out of fear being socially shamed and ostracized. Thus people requiring treatment for mental health problems problems will not seek treatment at the right time.
- 2) Mental illness itself carries with it its share of morbidity along with the social and emotion burden due to illness. Stigma adds to the social and emotional burden of ilness hence makes the situation worse.

Understanding the importance of stigma in mental disorder has caused international agencies like WHO, WPA to make stigma reduction a major focus of activity. Considering the major mental problem likely to exist in India, lack of proper health care facilities, lack of knowledge about health issues makes it very likely that stigma is a major issue in India as well. Since any goal of reducing stigma will need proper understanding of stigma, it becomes necessary to undertake such studies in India. While a few studies have been done (Raghuram et al, 1996)⁶ they were either small or based on clinician determined questionnaires. However, it is clear that local cultural meaning of disease varies across regions. While in India possession is often culturally accepted, it is likely to be considered an illness in a Western Society. A mental disease not considered to be an

illness locally is less likely to be stigmatizing and vice versa. Nature and experience of stigma is also likely to be influence by local cultural meaning, as seen even for an infectious illness like leprosy (Duggal et al, 1988)⁷. Stigmatizing aspects of mental illness is also likely to vary across cultures. While being jobless may be the most stigmatizing aspect of mental illness in developed countries, concerns about not being able to marry may be the most stigmatizing specially for female patients in India. Hence, in order to understand stigma better, study of stigma using these local concerns and meanings into consideration becomes necessary.

There is no uniform standardized stigma assessment scale for the depression patients in Indian population especially for West Bengal people. A study using locally adapted EMIC (Chowdhury et al.2000)⁸ was developed and used in West Bengal. based on Goffman's(1963)⁹ conception of Spoiled identity'. However, further study of stigma involving other concepts like Stafford and Scott¹⁰ defing characteristic of persons that is contrary to a norm of a social unit" needs to be pursued as well.

II. Materials And Methods

Study setting:

- OPD patients of selected Medical College.
- **Rational for selecting place:**
- Availability of adequate number of sample

Inclusion criteria:

- Age group-18-50 years
- With no history of chronic medical illness.
- Can read & write Bengali.
- Only willing patients.
- Only Bengali speaking people.

Exclusion criteria:

- Age more than 50yrs & less than 18 yrs.
- Patients with chronic diseases.
- Patients who are unable to speak in Bengali.
- Patients who can not read & write.

Sampling-

A pilot study was conducted among diagnosed depressed patients (aged 18- 50 yrs.) at dept. of Ppsychiatry, Burdwan and Calcutta National Medical College, West Bengal. All the patients with a clinical diagnosis of depressive disorder attending the psychiatric outpatient services were approached. They were explained about the nature of the study. Patients who agreed to participate and provided informed consent were assessed on selection criteria. Those who met the selection criteria were recruited. The sociodemographic and the clinical profile sheets were completed from the information provided by the patient, the caregiver, and the medical records The requirements of ethical approval constrained any collection of data about potential participants who refused. 70 patients were finally included.

Bengali Depression Stigma Assessmement Questionnaire Development -

We intended develop a instrument that reflected individuals concern about stigma related to depression which include some areas: cause, burden, marriage, treatment, segregation from society etc. .After integrated and rigorous review of literature initially 200 items were collected. With the help of subject experts gradually 19 English items were listed after deleting redundant, duplicated vague or culturally and linguistically complex item.

Along with questionnaire we also develop a coding system ranging from strongly agree (0) to strongly disagree (4), to manage the information obtained from patients. Total score ranging from 0-76.

The translation of BENGALI DEPRESSION STIGMA ASSESSMEMENT QUESTIONNAIRE(BDSA)

An English draft was translated into Bengali, back-translated and discussed with inputs from senior academicians specializing in the Bengali language and cultural anthropology. During translation we used the sequence of steps suggested by World Health Organization (WHO)¹⁰

The steps are -

- 1. establishment of a bilingual group of experts.
- 2. examination of the conceptual structure of the instruments by the experts.
- 3. translation
- 4. examination of translation by the experts.

- 5. examination of the translation by a monolingual group of experts.
- 6. blind back translation.
- 7. examination of the blind back-translation by the experts.

During evaluation the experts were requested to compare each translated item with original in terms of the various forms of equivalence as suggested by Flaherty et al¹¹.---

- Content equivalence- the content of each items of the instruments is relevant to the phenomena of each culture being studied.
- Semantic equivalence- the meaning of each item is the same in each culture after translation into the language and idiom(written or oral) of each culture (both denotative and connotative meaning was taken into consideration).
- Technical equivalence- the method of assessment (e.g. paper and pencil, interview) is comparable in each culture with respect to the data that it yields.
- Criterion equivalence- the interpretation of the measurement of the variable remains the same when compared with the norm of each cultural studies.
- Conceptual equivalence- the instrument is measuring the same theoretical construct in each culture.

Apart from these issues the experts were requested to keep in mind issues pertaining to translated items being comprehensible, acceptable and relevant and complete as suggested by Manson. Of the 70 patients, 20 bilingual patients were asked to complete the Bengali version of the BDSA Scale followed by English version within a gap of 4–7 days. Remaining 40 patients completed the Bengali version of the BDSA alone.

Result

The study patients comprised of 43 females (mean age 38.65 ± 9.3 , median 40) and 27 males(mean 41 ± 9.7 , median 45). Strong concordance between the scores of Bengali and English version(kappa value of all items more than 0.9) was noted.

Internal consistency (Cornbach's alpha) for these 19 items was 0.81. The analysis was undertaken by means of SPSS, version 15. Item scoring pattern (table 1) shows all items yieled varied response pattern.An exploratory factor analysis was used to evaluate the structure of the scale, using Principal Axis Factoring(PAF) followed by varimax rotation method. Principal component factor analysis was done to extract the initial factors. An orthogonal rotation of the initial factor structure was done by varimax method(Table 2 and 3)..Analysis yielded7 factors, though scree plot indicate need for lesser number of factors. After collection of final data further analysis will be done and take decision for final factor structure.

III. Discussion

This study yields a locally validate scale for study of stigma of depressed patients. A major strength of our study is that the context of this stigma scale arose directly from earlier qualitative and research into patient's experiences of mental illness. We do not suggest that this approach is superior to or distinct from one based on theoretical conception of current theory about stigma. However, our instrument directly reflects the lived experience of stigma. There are a number of limitations to our study. First the instrument has been tested in patient in contact with mental health services, a population that may have different perceptions of stigma than those who have no contact with services. Second th questionnaire was validated in a relatively middle aged population that had been in contact with community services but not had experience of long stay hospital care.

Conclusion-

Based on analysis of the psychometric properties, it can be concluded that the 19 items Stigma Assessment Questionnaire I Bengali version is reliable and valid for use among depressed patient, aged 18 to 50 years Bengali speaking population of West Bengal.

Conclusion-

The self- reported Stigma Assessment Questionnaire in Bengali is a reliable measure of the stigma among depressed patients in the local population. This questionnaire ,which can be completed in 5-10 min may help us understand more about the role of stigma of psychiatric illness in research and clinical setting.

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 Table 1 Item Statistics Of Bengali Depression Stigma Assessmement Questionnaire Item Statistics

Item Statistics	Statistics		
	Mean	Std. Deviation	Ν
saq1	1.70	1.756	70
saq2	2.21	1.641	70
saq3	1.81	1.867	70
saq4	.71	1.206	70
saq5	1.83	1.833	70
saq6	1.24	1.646	70
saq7	1.83	1.793	70
saq8	1.51	1.759	70
saq9	1.49	1.863	70
saq10	1.11	1.690	70
saq11	1.40	1.536	70
saq12	1.46	1.708	70
saq13	1.76	1.789	70
saq14	1.59	1.814	70
sq15	1.51	1.855	70
saq16	1.79	1.719	70
saq17	2.00	1.703	70
saq18	.71	1.264	70
saq19	2.50	1.631	70

Figure 1 Scree Plot



Compon ent	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulativ e %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.869	15.103	15.103	2.869	15.103	15.103	2.129	11.205	11.205
2	2.370	12.474	27.577	2.370	12.474	27.577	2.098	11.041	22.245
3	1.800	9.474	37.051	1.800	9.474	37.051	1.799	9.470	31.715
4	1.618	8.514	45.565	1.618	8.514	45.565	1.780	9.368	41.082
5	1.364	7.181	52.746	1.364	7.181	52.746	1.751	9.215	50.297
6	1.245	6.551	59.297	1.245	6.551	59.297	1.432	7.536	57.834
7	1.079	5.679	64.976	1.079	5.679	64.976	1.357	7.142	64.976
8	.980	5.160	70.136						
9	.902	4.745	74.882						
10	.797	4.193	79.075						
11	.695	3.657	82.731						
12	.629	3.311	86.042						
13	.553	2.911	88.953						
14	.487	2.563	91.516						
15	.449	2.363	93.879						
16	.365	1.922	95.802						
17	.308	1.619	97.420						
18	.258	1.358	98.779						
19	.232	1.221	100.000						

Table 2 Principal Component Analysis Of Bengali Depression Stigma Assessmement Questionnaire Total Variance Explained

Extraction Method: Principal Component Analysis.

Table 3 The Principal Component Analysis With Varimax Rotation Bengali Depression Stigma Assessmement
Questionnaire

	Component						
	1	2	3	4	5	6	7
aq1							.722
aq2	.550						.543
aq3						.802	
aq4			.425		.477		.345
aq5			.599				
aq6			.565	.354			
aq7	488						
aq8		.541			337	444	
aq9		.696					
aq10					.732		
aq11	.414	.540				.347	
aq12	.698			.352			
aq13	621			.381		.393	
aq14		.438		.502			
q15			.820				
aq16				.852			
aq17	.599			.487			
aq18					.758		
aq19		.733					.366

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 15 iterations.

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