

**A study on diagnostic value of the Beck's Depression Inventory
in Iran.**

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Depression is considered to be of the most prevalent affective disorders. Superficially depression appears to be an exaggeration of normal sadness. Environmentalists take this similarity as evidence that pathological depression and normal sadness are two extremes on a continuum of mood reactions in a susceptible individual, in contrast the somatogenic school in the traditions of Kraepelin considers depression a discrete entity that will eventually be traced a basic biological disorder. In the symptomatology of depression the key word is change. a depressed patient often seems to resemble other depressed patients more than premorbid personality. The changes that occur during depression involve emotion, motivation physical symptoms, behavior, thinking and particularly change in expressive ability, and sleep. In a sample of 466 psychiatric patients studied by the Beck depression inventory, the following symptoms were found to be the best indicator of depression, occurring from two to ten times more frequently among depressed than among nondepressed patients (Beck 1967).

Sad face, stooped posture, crying in interview, slow speech, low mood, suicidal wishes, indecisiveness, hopelessness, inadequacy, conscious guilt, Lack of interest, lose of motivation, fatigability, sleep disturbance, logs of appetite and constipation.

It should be metioned that the symptoms manifested by the patient for expressing his depressive state are utterly different in various groups of patients. Some patients are immensely preoccupied with somatic camplains while in a different group we might expect psychological and mental manifestations.

The early diagnosis of depression could be regarded as the most vitally important factor helping, a practitioner to prevent the improvement and complication of the case especially when suicidal tendency is observed in clinical picture. One to the domplexity of the symptoms, usually unexplored in traditional psychistric interview, a need for a diagnostic instrument assisting the practiotioner in a valid and reliable diagnoses is felt.

There are many scales designed and constructed for diagnosis of depression. To name a few Jasper depression questionnaire, Eamilton mood scale and Beck Depression Inventory may be mentioned here. These questionnaires are widely used and usually more useful and reliable than psychiatric interview they are standarized, they are not time consuming and they do not require especial training for their administration. Furthermore they are based on some consensually known and valid criterion proventing disagreements usually observed in psychiatric diagnosis.

The purpose of this study was to determine thediagnostic value of one of the above mentioned questionnaires in Iran. Among Valiable scales mentioned, it appeared the Beck depression inventory is suitable measure to be used in this study. We thought that the Beck's pattern out a more comprehensive picture of a depressed in respect to the symptoms, we pointed out earlier in this paper—constructing the inventory in 1961. Beck confirmed that the scale can reliably differentiate. Depressed from other psychiatric cases. Metacalfe & Goldman (1963), have used the inventory in England supporting its discrimina-

bility, application of the inventory by schwab, further supports its diagnostic value in differentiating depressed from non depressed.

Description of the inventory

(BDI) Beck Depression Inventory was described by A.T. Beck et al (1961), on the basis of selection a group of symptoms specific to depressed patients among clinical symptoms and consists of a list of 21 aspects of depressive illness. For each characteristic symptom there are four or five statements in the first person ranging from a mild or natural statement to one indicating a severe form of that particular symptom. Each statement is assigned a score of 0 to 3 to indicate the degree of severity of the symptoms. In some categories, 2 statements are given the same score. An example will show how the inventory is constructed and scored.

Category A	Mood	Score
I do not feel sad		0
I feel blue or sad		1
I am blue or sad all the time and can't scap out it		2
I am so sad or unhappy it is very pain-ful		2
I am so sad or unhappy that I can't stand it		3

Method

Subjects:

A sample of 35 male and 25 female patients classified and diagnosed as having depression were selected. The average age of the patients comprising the sample was 31.9. a comparable group of same were also selected and given the inventory. The selection of the sample was

based on Psychiatric interview depending on criterion such as insomnia loss of weight, constipation, easy fatigability, weakness, dizziness, fainting somatic complaints irritability, guilt feeling and some other traditional criterion used in diagnosis. It should be mentioned that aforementioned criterion are mostly used in diagnosis of depression in Iran. The patients, on the basis of severity of the symptoms observed were rated as mildly depressed (+). Moderately depressed (++) and severely depressed (+++) by the visiting psychiatrist.

Procedure:

A translated version of the Beck's depression inventory was administered to the patients by a psychiatrist other than the one made diagnosis of the time of admission. In the case of the illiterate members of the sample, the items were read by a psychiatrist and the responses were recorded.

Results and discussion

Table 1 shows the raw score obtained by the patients and control group. Doctors rating with the corresponding mean values.

Upon inspection of this table one could conclude that the total score obtained by the same group is between 0-20 with the highest being between 8 to 12. A comparison of the score obtained by the same group with the score obtained by patients diagnosed as depressed, a significant difference could be concluded, the score for the depressed patients are as follow

Mild depression 11-25

Moderate depression 16-44

severe depression 34-54

Table I - BDI Scores and Doctor's ratings

Groups	N	Score	Total Score	Mean Score
Sane group	60	0-20	542	9,03
	13)	11-25	234	18
depressed	26	16-44	801	30,8
Patient Group	21 ↙	34-54	927	44.1
	Severe			

Table II - Results obtained from t- test bet ween sane and patient group.

N I	N II	N III	N IV	N V	N VI
sane with mild dep	sane with moderate dep	sane with severe dep	mild with moderate dep	mild with severe dep	moderate with severe dep.
T=4,69 df=69 P<0,001	t=13,9 df=84 P<0,001	t=22,25 df=79 P<0,001	t=6,16 df=37 P<0,001	t=15,75 df=32 P<0,001	t=7,45 df=45 P<0,001

Table 2 shows the comparison between scores obtained from the inventory and the clinical diagnosis made by the psychiatrist. A statistically significant difference in the mean values is attained at 0.001 level of cinfidences.

Table III- Doctor's ratings and scores of BDI and comparison between studies in U.K. and U.S.A.

Table III

Doctor's ratings	Sane	Mild dep.	Moderate Dep.	Severe Dep.
	N. Mean S.D.	N. Mean S,D.	N. Mean S,D.	N. Mean S.D.
Present study	60 9.03 6.59	13 18 4.16	26 30.8 6.86	21 44.14 4.99
Iran				
U.K. Study (metcalfe)	32 5.37 5.85	44 14.27 8.35	24 24.21 10.84	20 29.5 6.51
U.S.A. study (beck)	114 10.9 8.1	127 18.7 10.2	134 25.4 9.6	33 30. 10.6

Table III shows that firstly scores obtained in our study are not much different from the english and american studies indicating that Beck Depression inventory could be used with the iranian population when carefully translated into persian language. Admittedly in translation of the scale into persian, care must be exercised in selection of symbols and proper stating of the symptoms in difference category of the inventory.

Conclusion: In our experience the BDI has proved to be a simple and satisfactorily tasting method of assessing the level of depression in patients suffering from depression illness, differentiating non depressed from depressed individuals. The results obtained from our study is in accord with studies carried out in other culture.

In regard to distribution of scores in every group and the concordance of scores with doctor's ratings and the level of validity which has been proved by statistical accounts ($P = 0.001$), can conclude that BDI is a useful instrument in researchful studies and though the work on this inventory are few but the results obtained in many countries have proved its validity and reliability.

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