

The Depression - Happiness Scale and Quality of Life in Patients with Remitted Depression

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ABSTRACT

With the aim of studying validity of Depression-Happiness Scale (D-HS) in the assessment of bipolarity of affect in patients with remitted depression and its impact on quality of life, 31 patients of both genders, aged 17 to 50, fulfilling the ICD-10 criteria for recurrent depressive disorder and bipolar affective disorder, currently severe depression and single episode severe depression were included in the study. Patients were rated on Hamilton Depression Scale (HDRS) on the third day of their admission. After treatment, when patients had remitted (either symptom free or 50% reduction in HDRS scores), D-HS and WHOQOL were administered. Results indicated that the D-HS is valid measure of bipolar affect. Its correlation with final HDRS scores ($r = -.356; P < .05$) and overall quality of life ($r = .46; P < .01$) confirm the convergent and construct validity of D-HS. Implications are discussed along with the possibility of using D-HS for clinical and research purpose.

Key Words : Remitted Depression, Depression-Happiness Scale, Quality of Life

INTRODUCTION

Measurement of assessing single mood states have played prominent role in research. Though there is nothing wrong about it, it unfortunately led to the practice of studying single affect states (Watson & Clark, 1997). Problems with single affect approach is that despite their relatively narrow content, the scales used for their purpose are not pure or unambiguous measures of their target constructs. In essence, it means that absence of particular affect does not necessarily indicate the presence of different mood state. For example, in case of depression, absence of symptoms do not always indicate the promotion of happiness or subjective well being. Hence there is a need for appropriate instrument with which to document the full extent of changes along the depression happiness continuum or a broad range of both positive and negative moods. Depression-Happiness Scale (D-HS) (McGreal & Joseph, 1993) is a 25-item scale. There are

12 positive items and 13 negative items. Each item is scored on a four point scale: never (0), rarely (1), sometimes (2) and often (3). The negative items are reverse scored, so that, possible scores on the scale can range from 0 to 75. Since D-HS contain a mix of affective, cognitive and bodily state items, it can be used to provide a quick and overall assessment of subjective well being. Higher the scores on the scale indicate a high frequency of positive thoughts, feelings, and bodily experiences.

The psychometric properties of D-HS have been well established. Joseph et al. (1996) studied 194 undergraduate students in the age of 18 to 48 years (Mean=21.5 years; S.D. =3.2). Beck Depression Inventory (BDI; Beck et al., 1979), Self Rating Depression Scale (Zung, 1965) and Center for epidemiological studies Depression Scale (Radolf, 1977) were administered. D-HS was found to capture individual's variability within a normal sample than other measures. In addition, low scores on D-HS were associated with higher scores on the measures of depression.

Joseph and Lewis (1998) conducted two studies. In study -I, 100 graduates in the age range of 18 to 48 years, with mean being 21.5 (S.D.=3.2) were included. They found a satisfactory internal reliability (Cronbach alpha=.93). Data also confirmed that D-HS could be used as a statistically bipolar continuum, which does not suffer from floor or ceiling effects. In study-II, 100 university students (M=24.78; SD=7.11)* were given D-HS, BDI and the Oxford Happiness Inventory (OHI: Argyle et al., 1989) and Dysfunctional Attitude scale (DAS: Power et al., 1994). They confirmed the convergent validity of D-HS with BDI ($r = -.75; P < .001$) and OHI ($R = .59; P < .001$) and construct validity of D-HS was established by correlation with certain subscales of DAS. These results were consistent with earlier studies (Cammock et al., 1994; Walsh et al., 1995; Lewis & Joseph, 1995). Therefore, D-HS was recommended in the assessment of course and recovery of depression in clinical population (Joseph et al., 1996).

From the above findings, we hypothesize that since D-HS measures subjective well-being, it would show positive correlation with any measures of quality of life as subjective well-being is the core of quality of life. Since similar studies are lacking in India, the present study was undertaken.

MATERIAL AND METHODS

With the aim of assessing the validity of Depression-Happiness Scale (D-HS) in the assessment of bipolarity of affect in patients with remitted depression and its impact on quality of life, thirty one patients admitted in inpatient wards of Central Institute of Psychiatry, Ranchi fulfilling the criteria of International Classification of Disorders (ICD-10) (World Health Organization, 1992) for recurrent depressive disorder, single episode depression, bipolar affective disorder-currently, severe depression with psychotic features in the age range of 17-50 years were randomly included. Comorbid organic brain disorder, below average intelligence or substance use disorder was excluded.

Once the informed consent was obtained, patients were administered Hamilton Depression Rating Scale (HDRS) (Bech et al.,1986) within the first three days of their admission. The Depression-Happiness Scale (D-HS) (McGreal & Joseph,1993) and WHO-BREF-Quality of Life Scale, Hindi Version (QOL)(Saxena et al.,1998) were administered when the patients were remitted as measured by less than 50% symptoms on HDRS. For the purpose of the study, the Depression-Happiness Scale (D-HS) (McGreal & Joseph,1993) was translated into Hindi by the second author (SEP). Another consultant, who was well versed with both Hindi and English and blind to the original test, did back translation. Thereafter, the second author did finer modifications without losing the content or deviating from the original items.

RESULTS

Twenty six(83.9%) of the sample were males. Majority of the sample were from middle class (71.4%) and married (74.2%) . Mean age was 32.32 (S.D.11.17) years. Years of education ranged from 0 to 15 years, with mean being 9 (S.D. 3.90) years. Seven (22.6%) of them had past history of mania,18 (58%) had one or more episodes of depression and rest had only single episode. There were no significant differences between any of these variables.

Normal distribution was observed in all the measures viz. D-HS , HDRS and all domains of QOL (table 1) . When the sample was divided into three groups as per clinical diagnosis (viz. bipolar, recurrent and single episode depression) no significant differences were noted on any

of the measures including the clinical or demographic variables (F= 90; df=2;P<.42).

The scores on D-HS ranged from 31 to 71 (M=55.58;SD=10.09) . There was significant negative correlation between D-HS and HDRS final scores (r=-.356;P<.005). There was significant correlation between improvement in HDRS scores and D-HS scores (r=.477;P<.01) but no significant correlation was found between HDRS and QOL. However, there was significant correlation between D-HS and item 1(r=.55;P<.01) and 2 (r=.50;P<.01), Physical domain (r=.43; P<.05), Environmental domain (r=.41;P<.05) and Total QOL (r=.46;P<.01), Environmental domain (r=.41;P<.05) and Total QOL (r=.46;P<.01) of BREFQOL (Table-2).

TABLE 1: Scores obtained by the sample

	HDRS-Pre1	HDRS-Post2	D-HS	QOL Items		QOL Domains				QOL Total
				1	2	I	II	III	IV	
Mean	32.48	5.19	55.58	4.03	4.06	25.61	23.45	10.61	26.94	86.65
S.D.	6.12	5.00	10.08	.84	.96	4.51	4.49	2.93	3.83	12.48

1Base line Scores on HDRS

2 Final Scores on HDRS

QOL item 1: This assesses the individual's evaluation of QOL

QOL item 2: This item assesses the individual's satisfaction with own health.

QOL domains: (I). Physical (II). Psychological (III) Social (iv)Environmental.

TABLE 2: Showing the correlation (r) between HDRS difference, D-HS and QOL

	D-HS	QOL						
		Item	Item	Domain	Domain	Domain	Domain	Total
		I	2	I	II	III	IV	
HRDS difference ^a	.477**	.35	.15	.02	.10	.14	.14	.13
D-HS	1.00	.55*	.50**	.43*	.25	.35	.41*	.46**

* Difference between the initial and final HDRS scores

** Correlation is significant at .01 level (2-tailed)

* Correlation is significant at .05 level (2-tailed)

DISCUSSION

The present study indicated that D-HS has convergent and construct validity with HDRS and QOL, and it does not suffer from any floor or ceiling effects. Therefore, it can be used as a reliable measure in the assessment of bipolarity of affect in depression. These findings are consistent with the earlier studies (McGreal & Joseph, 1993; Joseph et al., 1996; Watson & Clark, 1997). These findings have significance because there were separate scales to measure only particular affect but no single scales to measure the bipolarity of the affect. Earlier studies found significant negative correlation between D-HS and measures of depression and positive correlation with happiness scales (Joseph & Lewis, 1998; Joseph et al., 1996). The results are in the expected direction that there was significant correlation between D-HS and improvement in HDRS score, and negative correlation with HDRS final score, which reaffirms the construct and convergent validity of D-HS and that it does not suffer from ceiling and flooring effects (Joseph & Lewis, 1998).

Interestingly, no significant correlation was found between QOL and improvement in depressive symptoms. It might suggest that QOL does not solely depend on the improvement in the depressive symptoms. In future research, it will be useful to investigate under what circumstances QOL improves.

On the other hand, even when D-HS showed significant correlation with total QOL, the correlation between the psychological and social domains was non-significant. There could be several possible explanations. One is that perceived

QOL in psychological and social domains may be beyond just happiness or remission of depressive symptoms and pharmacotherapy alone may not bring changes in them. It has implications for non-pharmacological interventions to improve the quality of life in psychological and social domains in patients with depression.

We conclude that D-HS can be used as a routine tool in clinical and research settings to assess the course and recovery of depression in clinical population. Future research may focus on those aspects that affect the psychological and social domains of QOL, especially when D-HS scores on the positive side.

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