



## ASSESSMENT OF PSYCHOLOGICAL DISTRESS IN CAREGIVERS OF MAJOR PSYCHIATRIC DISORDERS USING SCL-90R

### Medicine

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### ABSTRACT

**Background:** Caregivers of psychiatric patients undergo psychological stress, symptoms and disorders in rendering the care and resources to the patients.

**Aim:** To screen the caregivers for psychiatric symptoms

**Materials and methods:** Caregivers were administered SCL-90R and their scores were compared with Norm B (SCL-90R scale norms for adult non psychiatric patient)

**Result:** 15%-75% of caregivers suffered from psychiatric distress when compared to Non Psychiatric adult population.

**Conclusion:** Psychiatric screening and services should be offered to caregivers of Psychiatric patients.

### KEYWORDS

Caregivers, Psychiatric patients, Schizophrenia OCD, Dementia, affective disorders, Dementia, SCL-90R

#### Introduction:

Caregiver of patient is involved in addressing health needs of patient at times of ill-health. Caregiving in psychiatry is different psychiatry disorders are chronic and have relapses, residual symptoms, little improvement. Mental illness places great stress on caregivers because of many factors like loss of job of the patient, poverty, stigma, lack of support from relatives and social schemes, the difficulty in accessing mental health facilities<sup>1,2</sup>. Studies have reported 40% of caregivers utilize mental health facilities<sup>2</sup>

#### Objectives:

The objective of study is to study the Psychological distress undergone by caregivers of patients suffering from dementia, alcohol disorders, schizophrenia, affective disorders and OCD.

#### Method and Means

Duration and Place of study: The study has been conducted during the period of January 2017 to September 2017 in Dept. of Psychiatry, RIMS, Kadapa after obtaining ethical committee approval

#### Caregiver:

A Person who take cares of patient without any remuneration.

Patient is any persons suffering psychiatric diseases as per ICD-10 for a period more than 2 years

Selection of Caregiver:

- 1) Caregiver consent to interviewing
- 2) Has sufficient education to understand the questionnaire given

#### Tools used in study:

##### Symptom checklist 90 Revised:<sup>3</sup>

SCL-90R is a reported questionnaire to assess the presence and intensity of Psychiatric symptoms in individuals

#### Scales:

Somatization (SOM), Obsessive-Compulsive (O-C), Interpersonal Sensitivity (I-S), Depression (DEP), Anxiety, (ANX), Hostility, (HOS), Phobic Anxiety (PHOB), Paranoid Ideation (PAR), Psychoticism (PSY), and Additional Items, the Global Severity Index (GSI), The Positive Symptom Distress Index, (PSDI), and the Positive Symptom Total (PST).

#### Description:

The Symptom Checklist-90-Revised (SCL-90-R) is a 90-item self-report symptom inventory. It is a measure of current psychological symptom status with a time reference of "the past 7 days including today."

#### Scoring:

Scores for each of the nine factors are the average rating given to the

symptoms of that factor. The remaining seven items do not measure any particular factor, but are evaluated qualitatively. Three "global" scores are also obtained. The GSI is the average rating given to all 90 items. The PST is the number of symptoms scored above zero. The PSDI is the average rating all items that are not rated zero. Raw scores for each of the primary symptoms are converted into standardized scores.

#### Reliability:

The internal consistency coefficient alphas for the nine symptom dimensions ranged from .77 for Psychoticism, to a high of .90 for Depression<sup>3,4</sup> Test-retest reliability coefficients range between .80 and .90 after one week of therapy.

#### Validity:

Concurrent, convergent, discriminant, and construct validity comparable to other self-report inventories.<sup>3,4</sup>

#### Norms:

Gender specific Norms B<sup>3</sup> (adult non psychiatric population) was used to compare the score.

#### Data compilation:

Microsoft excel 2015 used analyse the data.

#### Results:

**The sample is displayed below is disorder wise male and female caregivers**

**Table 1:**

Psychiatry disorder	Male caregiver	Female caregiver	Total caregiver
Dementia	16	31	49
Alcohol use	43	89	132
Schizophrenia spectrum	65	75	140
Affective disorders	58	75	133
OCD	38	17	55
TOTAL	220	287	507

#### SCL-90R factors of the patient analysis:

The data obtained from the patient self report of SCL-90R has been analysed Microsoft excel The raw score obtained is converted to T-score. T-score above 65 indicates that person is having significant psychological distress. Below are the cut-off raw scores for a T-score of 65.3,4 Raw score is the average score of all items in symptoms in factor with example given below.

Somatization raw score =  $\frac{\text{SUM of all item scores in Somatization subscale}}{\text{Number of items in that subscale}}$

**T-Score 65 corresponding raw scores of subscale for men and women:3,4**

Factor scales of SCL-90R	Corresponding raw scores for T-Score 65	
	Men	Women
Somatization	1.33	1.92
Obsessive compulsive	1.40	1.91
Interpersonal sensitivity	1.22	1.45
Depression	1.54	2.00
Anxiety	1.20	1.70
Hostility	1.50	1.83
Phobic anxiety	.71	1.29
Paranoid ideation	1.33	1.35
Psychoticism	0.83	.90
Global severity index	1.08	1.47
Positive symptom total	48	59.8
Positive symptom distress index (PSDI)	2.28	2.80

**Analysis of Sub Scales of SCL-90R:**

The T-score for caregivers for each factor of scale has been calculated. The percentage of caregivers with T-score of 65 and above computed and analysed Average number of Caregivers of psychiatric disorders with average score above T-67:

Sub Scale factor SCL-90R	Males caregivers with T-score 65	Female caregivers T-score 65
Somatization	12%-20%	14%-26%
Obsessive Compulsive	5%-7%	5%-12%
Interpersonal sensitivity	10%-15%	12%-25%
Depression subscale	25%-45%	35%-53%
Anxiety Subscale	29%-38%	36%-42%
Hostility subscale	10%-15%	13%-19%
Paranoid ideation	1%-5%	3%-8%
Psychoticism	1%-2%	1%-4%
Positive symptom total	40%-73%	50%-75%
Global severity index	49%-55%	55%-69%
Positive symptom distress index	42%-59%	52%-59%

**Discussion:**

Our study purpose has been identifying the amount psychiatric distress usually seen in caregivers by "Positive symptoms total (PST), Global severity index (GSI) and Positive symptom distress index(PSDI). Individual factor severity was also measured.

The relationship between caregiving and caregiver psychological and physical health is typically described by Pearlin Model<sup>5</sup>. The caregiver stress is dynamically changing phenomenon which evolves parallel to progression of the disease over the period of the time.<sup>5</sup>

The caregiver suffered from symptoms of depression, anxiety, Hostility, interpersonal sensitivity and obsessive compulsive symptoms subscales in decreasing orders of frequency. While paranoid ideation and psychoticism occurred in less than 5% of caregiver population.

Depression and anxiety symptoms are significantly seen the participants. Interpersonal sensitivity indicates the interpersonal relationships, the scores on this factor have been higher in significant group of participants indicating that caregiving takes toll on interpersonal relationship.

The depression subscale symptoms have been significantly higher the scores non psychiatric population in manual for female caregivers ranging 35%-53% and male caregivers 25-40%. The prevalence of

depressive symptoms in caregivers of psychiatric patients has been in concurrence with various studies conducted Rhode island, USA (75%), (9), California, USA(40%)<sup>6</sup>, Srilanka(37.5%)<sup>7</sup> and India (27.5%)<sup>8,9</sup>.

Anxiety subscale in caregivers has been second to depressive symptoms. 14%-40% caregivers scored above the normal scores for non-psychiatric subjects. Mild to moderate anxiety symptoms were seen in 19% and severity psychiatry symptoms were seen in caregivers of psychiatric illness by Bhatia et al.,<sup>13</sup>

Hostility subscale measures qualities of irritability, resentment, anger and rage. 11-19% of caregivers suffered symptoms of Hostility.

Interpersonal sensitivity measures uneasiness, discomfort and self-deprecation in interpersonal relationships. Higher scores indicate poor interpersonal relationships. The scores in care giver population above the normal ranged in 10%-25% across various disorders of the study.

The global severity index is average of all items and is best indicator of current level of the disease 3.4. The GSI ranged from above normal 49%-69% of caregivers indicating their current psychiatric distress.11

The Positive symptom total indicate the number questions in questionnaire the caregivers have scored above zero. The PST indicates number symptoms each patient is suffering from irrespective of symptom severity. As per study 40-75% of caregivers have PST score above the normal as per manual of normal scores<sup>12</sup>

The Positive symptoms distress index is the average of all items scored above zero. Positive symptoms distress index pure intensity measure of symptoms. This is also indicating whether the subject is accentuating or attenuating symptoms. In our study 34-59% of caregivers' positive symptom distress index have significantly above the normal values.

**Conclusions:**

Majority of caregivers suffered from significant distress in one or more factors of the SCL-90R. High Global severity index indicator current distress of symptoms is high indicating the caregivers of psychiatry patients need psychiatrist attention to fill the unmet gap. Depression, anxiety, interpersonal sensitivity and hostility subscales are scored at pathological levels. Addressing the psychiatric symptoms, disorders and disorders effectively with pharmacotherapy and psychotherapy form Holistic treatment plan of Psychiatric patient 16,17

**Limitations of study:**

- 1) This is a hospital based study results cannot be extrapolated to community
- 2) Hospital psychiatry cases are chronic and resistant and hence the perceived burden may be more the acute and remitting cases
- 3) Our hospital case caregivers also have financial burden and other social factors which may be contributing psychological distress among the caregiver and it is not easy to separate them and study.
- 4) Our study used screening questionnaire which are sensitive sacrificing the specificity of findings
- 5) The SCL-90R is Likert scale carrying its disadvantages in assessing the findings qualitatively

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**Conflicts of interest**

There are no conflicts of interest.

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