

Resilience and self-compassion among persons with depressive disorders: Prerequisite for a positive mental health approach

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Abstract

Background: Treatment gap for common mental health problems, especially of the depressive disorders is consequential in developing countries like India. Positive mental health domains like resilience and self-compassion have been long hailed as protective factors against depression and viable for use in therapeutic aspects. The objectives were to find an association between resilience, self-compassion, and depression. Methods: The study was conducted using a cross-sectional design among 75 respondents who were seeking treatment for major depressive disorders from a tertiary care center during the second wave of COVID-19. Three scales were administered online, namely Beck's Depression Inventory-II (BDI-II), Connor Davidson Resilience Scale (CD RISC-25), and Self-Compassion Scale-Short Form (SCS-SF). Spearman's rank correlation test, Chi-square with Fisher's exact test, and Kruskal Wallis H test were used to study the relationships and differences in average scores with respect to the severity of depression. Results: Most of the respondents had moderate depressive features along with moderately high levels of resilience (CD RISC 25) and self-compassion (SCS-SF) scores. Resilience and self-compassion were found to have no significant relationship with respect to the severity of depression. There was a weakly positive correlation between resilience and self-compassion among those with moderate and severe depression. Conclusion: Since the individuals with depression had higher scores on resilience and self-compassion, the levels of depression remained at moderate levels of severity despite the devastating impact of the second wave of COVID-19 in the Indian sub-continent. Results are to be interpreted with respect to psychosocial contexts arising during the COVID-19 pandemic. Mental health programs can incorporate the variables of resilience and self-compassion in intervention among individuals with depression which have likely been beneficial in their process of recovery.

Keywords: Depressive disorders, positive psychology, protective factors, resilience, self-compassion

Introduction

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Epidemiological surveys report that major depressive disorders are widely prevalent across races, cultures, and socioeconomic.^[1,2] The cluster of depression, comprising unipolar depressive disorders or major depressive disorders, has significantly contributed to the Global Burden of Diseases since 1990 and reported to

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have co-morbid occurrences with anxiety, substance use, and suicide.^[3-5] The multifaceted nature of this disorder is being extensively studied at neuroscientific and psychopathological levels, leading to advancement of pharmacological, diagnostic, and therapeutic procedures in medicine.^[6,7] Psychosocial factors significantly contribute to depression in terms of early life events, financial costs, interpersonal violence, social deficits in impaired affiliation and attachment, impaired social communication, and social perception.^[8-14] Intervention models in developing countries focus on promoting protective factors like parental care, peer support, emotional acceptance from others,^[15,16] lifestyle changes such as exercise, and developing positive relationships.^[17]

Resilience and self-compassion are widely studied in contexts of depression resulting from stress, illness, and grief, further realized in resilience training or compassion-focused therapy.[18-21] Resilience refers to the ability of an individual to bounce back from a distressing event or experiences and overcome the negative effects,^[18] while self-compassion is the ability to treat oneself with kindness, recognize one's shared humanity, and being mindful while considering negative aspects of self.[22-25] However, levels of resilience and self-compassion have not been studied in the midst of pandemics before, thus there is a need for delineating pre-existing sources of distress with effects of COVID-19.[15,19,23,24] Also, the relationships among the two concepts even in the absence of affective disorders have not been known well established, with consensus growing toward exploring the two for constructing a unified theory of positive mental health.

The current study is intended to understand the relationship between resilience and self-compassion with severity of depression. The variables in the study are deemed to be relevant to the psychopathology of the depressive disorders, have merits in the implementation of psychiatric services rendered to the persons in community settings who are experiencing the disorders and thus, demand greater emphasis on positive psychology as a school of thought for the clinicians to consider in their routine practices.

Materials and Methods

Study setting and design

The study was conducted to find out the sociodemographic details, levels of and relationship between resilience and self-compassion with respect to the severity of the depressive disorders. Based on cross-sectional design, the study was conducted among 75 follow-up patients aged 18–40 years visiting the adult psychiatry OPD of National Institute of Mental Health and Neuro Sciences, Bengaluru a premier mental health tertiary care institution.

Sample size and sampling

Patients who had taken psychiatric consultation from December 2020 to May 2021 or at least six months before the date of

data collection were included. The sample size was calculated anticipating a correlation between resilience and self-compassion of 0.7 for a difference in correlation of 0.2 with 80% power and 5% level of significance (one-tailed) the sample size was determined to be 75. The proposed sample size is also suited for feasibility in the COVID-19 pandemic amidst psychosocial barriers in accessing patients.

Measures

Sociodemographic Data Sheet: The self-reported questionnaire was developed to gather data pertaining to age, sex, education, income, employment, marital status, religion, place of residence, and number of members in the family. Beck's Depression Inventory-II (BDI-II): Beck's Depression Inventory-II is a 1996 revision of the BDI, developed by Aaron T. Beck.^[26] It is a self-report scale with 21 items rated on a 4-point scale ranging from 0 to 3 based on severity of each item, with a maximum score of 63. The scale has a positive correlation with Hamilton Depression Rating Scale and has high reliability and validity (r = 0.93; $\alpha = 0.91$). It has been used in the Indian setting.^[27] Connor Davidson Resilience Scale (CD-RISC 25): The scale was developed by Connor KM and Davidson JRT in 2003.^[28] The scale is a self-reported measure of 25 items, with each item scored from 0 to 4, that is, from not likely at all to most likely. The full range of the scale is from 0 to 100, with higher scores assumed to be indicative of greater resilience. The scale has good reliability and validity ($\alpha = 0.88$ and 0.89). It has been adapted for use in India.^[29] Self-Compassion Scale-Short Form (SCS-SF): The scale developed by Kristin D. Neff and his team in 2003 measures self-compassion, theoretically considered to be an aspect of self-compassion.^[30] The scale has 12 items measured on a Likert of 0-5 between "Almost never" to "Almost Always" and six domains of self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification. The total score is obtained through negative scoring for self-judgment, isolation, and over-identification at first, followed by the usual averaging of the scores. Higher scores indicate higher self-compassion levels, and the scale has good reliability and validity scores (α =0.81-0.83). This scale has been adapted for use in India.^[31]

Data collection and ethical issues

Ethical approval was obtained from the Institute Ethics Committee Vide No. NIMH/DO/BEH. Sc. Div./2020-21. The respondents were selected based on the diagnosis of mild, moderate, and severe depressive disorders as their primary diagnosis (including unipolar depressive disorder and recurrent depressive disorder) according to ICD 10 criteria of F33.0–F33.3 (ICD-10, 1992). Participants were asked for verbal consent to administer the scales through telephonic medium due to difficulties in accessing the population of interest in-person during the ongoing COVID-19 pandemic and also in a number of cases due to lack of accessibility of internet or technological devices at their end. Post-interview they were given the option of visiting their treating team on respective days allotted for OPD.

Data analysis

Statistical analysis was carried out using IBM Statistical Package for Social Sciences version 22.0. For descriptive statistics, frequency and percentages were obtained for summarizing various categorical variables, whereas median and quartiles (Q_1, Q_3) for quantitative variables. Test of normality was conducted using Shapiro–Wilk test. Spearman's rank correlation was used for studying the relationship between resilience and self-compassion with respect to the severity of depression. The test of association between the sociodemographic variables and severity of depression categories was analyzed using Chi-square or Fisher's-exact test. Finally, the Kruskal–Wallis 'H' test was used to test the average difference in resilience and self-compassion scores between the depression categories.

Results

Table 1 provides sociodemographic profile of persons with depressive disorder. Majority of the respondents were aged between 28 and 37 years (42.7%) with a mean age of 32 years (SD: 7.89 years). There was a slightly larger representation by males (53.3%) while majority of the respondents were found to be unemployed (58.7%), married (65.3%), Hindu (76%), attained maximum levels of education only in schools (64%), and hailed from lower socioeconomic status (48%). As per the BDI-II scores, the respondents were categorized into mild, moderate, and severe depression categories. Recurrent depressive disorders were found to be the most prevalent psychopathology (69.3%) based on the diagnosis received from the psychiatric consultation.

Most of the respondents experienced moderate depression (n = 42) and had moderately high levels of resilience 66 (60.75, 69) and self-compassion 37.5 (35, 42). [Table 2]. Among those who experienced severe depression, both the scores of resilience 60 (52, 75.5) and self-compassion 36 (32, 48.5) were noted to be in the lower ranges of the four categories of depression. Respondents with mild depression experienced moderately high levels of resilience 66 (62.75, 74.25) and self-compassion 36 (34.25, 40).

There was no correlation between resilience and self-compassion among individuals with mild severity of depression, while a weakly negative correlation was noted among the variables for those without depression [Table 3]. There was a weakly positive correlation between resilience and self-compassion among those with moderate and severe depression. However, there was no significant relationship between resilience and self-compassion with respect to the severity of depression. Moreover, the test of association revealed that there was no significant association between the various categories of age, sex, occupation, education, income, marital status, and religion with respect to the severity of depression [Table 4]. Furthermore, there was no statistically significant difference in

Table 1: Sociodemographic profile of persons with depressive disorder (n=75)					
Variables	Categories	Frequency (n)	Percentage (%)		
Age (years)	18–27	23	30.7		
	28–37	32	42.7		
	38–47	20	26.7		
Sex	Male	40	53.3		
	Female	35	46.7		
Diagnosis	Depressive episode	23	30.7		
	Recurrent depressive disorder	52	69.3		
Occupation	Employed	31	41.3		
	Unemployed	44	58.7		
Education	Illiterate	8	10.7		
	Primary-Higher Secondary	48	64.0		
	Bachelor's, Master's, and any	19	25.3		
	other degree/course				
Income	Lower SES	36	48.0		
(per month)	Middle SES	28	37.3		
	Upper SES	11	14.7		
Marital	Married	49	65.3		
Status	Unmarried	26	34.7		
Religion	Hindu	57	76.0		
	Others	18	24.0		

Table 2: Distribution of resilience and self-compassion with respect to severity of depression

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п	Resilience Md (Q ₁ , Q ₃)*	Self-compassion Md (Q ₁ , Q ₃)*
14	66.5 (63, 70.25)	39 (36, 41)
14	66 (62.75, 74.25)	36 (34.25, 40)
42	66 (60.75, 69)	37.5 (35,42)
5	60 (52, 75.5)	36 (32, 48.5)
	n 14 14 42 5	n Resilience Md (Q ₁ , Q ₃)* 14 66.5 (63, 70.25) 14 66 (62.75, 74.25) 42 66 (60.75, 69) 5 60 (52, 75.5)

*Md: Median; Q1: First quartile; Q3: Third quartile

Table 3: Relationship between resilience andself-compassion with respect to severity of depression				
Severity of depression	Spearman's Rank Correlation, ρ (P)			
Minimal depression	0.41 (0.41)			
Mild depression	0.11 (0.74)			
Moderate depression	0.24 (0.12)			
Severe depression	0.65 (0.24)			

average resilience and self-compassion scores with respect to the severity of depression [Table 5].

Discussion

In the context of COVID-19, patients with a history suggestive of affective disorders were reported to experience sustained symptoms; however, the levels were maintained at moderation. The higher levels of resilience and self-compassion is a unique finding as it goes against the findings of some studies outside the effects of the pandemic. Though the experiences of each of the individuals and contexts would be different, the homogeneity to the extent of the sample collected compels

Table 4: Association between sociodemographic variables and severity of depression							
	Variables		Severity of Depression			Chi-square/	Р
		Minimal (n=14)	Mild (<i>n</i> =14)	Moderate (<i>n</i> =42) 11 (47.8)	Severe (<i>n</i>=5) 3 (13)	Fisher's exact test 6.28*	0.384
Age (years)	18–27	6 (26.1)	3 (13)				
	28–37	3 (9.4)	8 (25)	20 (62.5)	1 (3.1)		
	38–47	5 (25)	3 (15)	11 (55)	1 (5)		
Sex	Male	5 (12.5)	8 (20)	24 (60)	3 (7.5)	2.21*	0.569
	Female	9 (25.7)	6 (17.1)	18 (51.4)	2 (5.7)		
Occupation	Employed	3 (9.7)	9 (29)	18 (58.1)	1 (3.2)	5.99*	0.101
	Unemployed	11 (25)	5 (11.4)	24 (54.5)	4 (9.1)		
Education	Illiterate	2 (25)	1 (12.5)	5 (62.5)	0 (0)	2.48*	0.914
	Primary-Higher	9 (18.8)	8 (16.7)	28 (58.3)	3 (6.3)		
	Secondary School						
	Bachelor's, Master's and above	3 (15.8)	5 (26.3)	9 (47.4)	2 (10.5)		
Income	Lower SES	9 (25)	7 (19.4)	18 (50)	2 (5.6)	4.74*	0.573
	Middle SES	5 (17.9)	4 (14.3)	17 (60.7)	2 (7.1)		
	Upper SES	0 (0)	3 (27.3)	7 (63.6)	1 (9.1)		
Marital Status	Married	7 (14.3)	10 (20.4)	30 (61.2)	2 (4.1)	3.80*	0.305
	Unmarried	7 (26.9)	4 (15.4)	12 (46.2)	3 (11.5)		
Religion	Hindu	9 (15.8)	10 (17.5)	34 (59.6)	4 (7)	2.07*	0.574
	Others	5 (27.8)	4 (22.2)	8 (44.4)	1 (5.6)		
Diagnosis	RDD	10 (19.2)	11 (21.2)	28 (53.8)	3 (5.8)	1.07*	0.857
	Depressive episode	4 (17.4)	3 (13)	14 (60.9)	2 (8.7)		
*Ficher's exact test							

Table 5: Differences between levels of Resilience and Self-compassion with respect to Severity of Depression							
Variable	Severity of depression Md (Q ₁ , Q ₃)*				Test statistic [#]	Р	
	Minimal (n=14)	Mild (<i>n</i> =14)	Moderate (n=42)	Severe (<i>n</i> =5)			
Resilience	66.5 (63, 70.25)	66 (62.75, 74.25)	66 (60.75, 69)	60 (52, 75.5)	3.05	0.38	
Self-compassion	39 (36, 41)	36 (34.25, 40)	37.5 (35,42)	36 (32, 48.5)	1.73	0.63	

*Md: Median; Q1: First quartile; Q3: Third quartile. #Kruskal–Wallis H test

deeper exploration into the relationship between resilience and self-compassion.

Data collected from OPD sample were dependent on the help-seeking behavior of patient population as seen in various studies.^[14,32,33] In the emergency department of tertiary care centers, significant reductions in the number of patient visits were reported due to changes in the lockdown restrictions.^[34] Apart from an increase in the stress, anxiety, and depression,^[35] a surge in suspected child abuse cases, suicide attempts, and interpersonal violence indicates higher risks of untreated common mental disorders, primarily of depressive nature, further contributing to vulnerability and inability to seek professional help through in-person visits and consultations.^[36-38] Mental health needs of the patients have been addressed by various psychosocial services especially through telepsychiatry wherein technology has been used efficiently with the rigorous online service delivery of therapies.^[39-41]

Resilience and self-compassion in the current population

As reported by global and national epidemiological studies,^[4,5,8] women had higher prevalence rate of depressive disorders and

highest contribution of total disability adjusted life years (DALYs) among mental disorders due to major depressive disorders. Higher prevalence of mild, moderate, and severe depression among males as seen in our study [Table 4] have been observed in studies before as well,^[42,43] further indicating the impact of complex psychosocial factors associated with unemployment, income, and marital status reported spuriously in India during the first and second wave of COVID-19 pandemic.^[44,47] However, as positive domains of mental health maintained with the help of psychiatric services offered through offline and tele-consultation, the respondents experienced lower grades of depressive features than usual.

In the current study, target population consisted of patients received by the tertiary care center from the South Indian states of Tamil Nadu, Kerala, Karnataka, Telangana, Goa, and Andhra Pradesh which have been repeatedly observed to account for high Socio-Demographic Index (SDI) of depressive disorders.^[4,5,48] The higher prevalence of moderate and severe depression in our study was observed in other studies as well using DASS-21 and PHQ during COVID-19,^[43,45,46,49] even reaching up to 62%-point prevalence among psychiatric population and 1.2% among the general population overall. Studies conducted among general population in pre-COVID times, that is, from 2009 to

2019 have also shown variable rates of severity of depression along with prevalence.^[50-52] Further, complex and specific challenges encountered in impact assessment of the disorder consist of prevalence of these disorders among children^[53,54] and persons in enclosed wards with comorbidity of severe mental illness.^[55] The current study consisted of patients who had a past history suggestive of depressive disorders; however, resilience and self-compassion seem to have been acted in unison as protective factors.

Resilience:- An essential component of mediation

Protective factors like resilience and self-compassion have been shown to be better predictors of recovery in persons with depressive disorders, eliciting practice of positive psychology all over the world.^[56] The current study also indicates that despite the devastating impact of COVID-19 pandemic in India during the second wave, persons with depressive disorders who had higher scores on resilience and self-compassion mostly experienced moderate or mild levels of severity. A similar finding by a US population-based study revealed that resilience is a buffering factor for mild, moderate, or severe depressive symptoms with suicidal ideations and has direct association with self-compassion.^[57] The buffering hypothesis of resilience and depression and the current restricted levels of depression strongly indicate the role of protective factors such as self-compassion and resilience, necessary as promotive aspects within therapy which to enhance the skills in managing the experience of depression.

The moderately high levels of resilience and self-compassion is reported among the patients who have been actively engaging in health-seeking behavior, through medications and routine follow-up visits. Among the various forms of resilience, family resilience was seen in a study to be negatively associated with depression.^[58] Family support caregiving role might be responsible for the restraining depression severity to consecutively lesser levels.^[9-12] Therapeutic services by Psychiatric Social Workers in India have been shown to prevent mental illness among the population;^[59-61] however, specialized services with high-intensity therapeutic factors need to be considered for further enhancement of the positive mental health domains. This can be achieved by including theoretical frameworks and incorporation of these elements into the clinical and community interventions, requiring replication in efficacy studies.

Resilience has been shown to be highly potent in predicting transdiagnostic vulnerability and protective factors in daily life.^[62] The current study might be extended to follow-up with the patients and measure the changes in their mood states, psychosocial functioning, and overall well-being in routine healthcare and community practice. Although the sensitivity to the primary pandemic variant or strain may reduce the illness perceptions, events related to morbidity and mortality along with the severity of the consequences would inevitably guide the progression of mental health effects in the post-pandemic era.

Resilience and self-compassion in special populations

Integration of resilience with respect to the abilities of coping with stress amidst adversity and maintaining the equilibrium of physical and psychological functioning has been proven in global studies for two decades.^[57] The importance of resilience as a protective factor in COVID-19 pandemic has been adequately highlighted through research wherein symptoms of anxiety, depression, and post-traumatic stress have known to be caused by insecure attachment styles, and community resilience is shown to contribute to lower the risks of these disorders.^[58] Resilience is also proposed as an inevitable ingredient in therapeutic measures and activities envisaged in tele mental health, especially in countries with limited resources, where efficacy and effectiveness of the treatment approaches could be enhanced with stress -resilience training.^[59-62]

Having merits in promoting salutogenesis and paving way for realization of creative personalized therapy regimen, resilience has shown to be a crucial domain in achieving higher satisfaction in life even during times of adversity.^[61] Resilience is shown to improve quality of life of patients with breast and colon cancer, where significant correlation between WHOQOL-BREF and CD-RISC-25 scores had shown significant statistical link.^[62] An online study conducted among 518 individuals in Turkey found that resilience has a medium and negative correlation with depression, wherein males were having higher resilience and females were reported to have higher depression with average cut-off rate of 17 in BDI.^[63]

Interestingly, resilience has also shown to be accommodative of gender differences and offer opportunities for integration in specialized populations or disorders such as maternity blues and post-partum depression in a population of 227 mothers in Croatia.^[64] Resilience was also proven to be low along with Emotional Ability and Social Readjustment to stressful events as shown in 277 students from general population having lifetime and partially four-week-long suicidal ideation.^[65] This mediating effect of resilience on intrapersonal phenomena is also observed in stigma associated with depression among 200 persons with physical disability, where resilience was reported to have a negative correlation with depression in the presence of a positive correlation between stigma and depression.^[66]

Scope and limitations

The study reported no significant difference between resilience and self-compassion with respect to the severity of depression, thus indicating that those individuals who have higher resilience will likely have higher self-compassion. As observed in studies with mediation analyses, resilience tends to operate in a manner like other positive psychology domains (e.g., self-compassion) and inversely correlates with symptoms of depression and anxiety.^[67] Thus, psychological interventions may target either self-compassion or resilience for enhancement among those who have levels lower than the average person in community. This may be adopted in the international frameworks of service deliveries, effectively and efficiently reducing the severity of depression and ultimately the burden of diseases.^[1-6] Healthcare workers around the world have faced compassion fatigue, burnout, and hopelessness due to the heavy workload and subsequently deteriorating crisis at the peak of the COVID-19 waves.^[68] Management of psychological distress caused by the pandemic has proposed to counter the effects of compassion fatigue with phenomena that are more intrinsic and promotive in nature, such as self-compassion, developing positive attitudes, and acts of loving and caring for one's own self.

The study was limited in sample size due to challenges in scale administration during COVID-19 restrictions in India. The arrival of the second wave and further reduction in footfalls of patients in psychiatric settings was also unprecedented, as reported in studies throughout the world. The study specifically excluded individuals who had faced loss of a significant other during the pandemic to account for the effect of prolonged and atypical grief cycles on resilience, self-compassion, and severity of depression.

Conclusion

The resilience, self-compassion, and severity of depression scores can be attributed to psychosocial and environmental changes. In individuals with depressive disorders having higher scores on resilience and self-compassion, moderate levels of severity were reported. Lack of significant difference among resilience and self-compassion scores indicates that an increase in scores of self-compassion will likely lead to an increase in resilience within the individual. The study warrants further exploration of clinical factors and sociocultural realities responsible for governing resilience and self-compassion among persons with depressive disorders. Further studies may adopt digital methods of data collection as and when facing difficulties in accessing sample and measure changes in levels of resilience and self-compassion with respect to the course of intervention programs in telepsychiatry.

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Conflicts of interest

There are no conflicts of interest.

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