Social support among persons with depressive disorders during COVID-19 pandemic

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Abstract

Context: The extent of depressive disorders is wide in the Indian population as reported by epidemiological studies, warranting a necessary area of intervention to cover the rampant treatment gap. Social support is known to vary as per the community-level changes, which may be attributed to events kickstarted by COVID-19. **Objectives:** This study aimed to assess the social support among persons with depressive disorders. **Methods:** This was a cross-sectional study conducted among 75 individuals of age ranging from 18 to 46 years from multi-ethnic communities across India. We used the Beck Depression Inventory-II and Multidimensional Scale of Perceived Social Support. **Results:** This sample had a mean age of 32 years (SD: 7.88 years), and recurrent depressive disorder was the larger prevalent psychopathology diagnosed during their routine clinical consultation in the hospital (69.3%). The majority of the respondents experienced moderate depression (n = 42), followed by mild depression (n = 14) and severe depression (n = 5). Social support and resilience were found to be mildly correlated with each other for persons with mild depression (r = 0.620; $P = 0.018$). **Conclusion:** Persons with mild depressive features may benefit from low-cost and community-based interventions directed to enhance social support and thus impact resilience. Psychosocial interventions must address the impact of moderate depression and recurrent depressive disorder and include social support at all spousal, family, and societal levels.

Keywords: Community mental health, depressive disorder, family care, psychosocial intervention, social support

Introduction

Social support denotes the existence or availability of people on whom one can rely and people who let us know that they care about, value, and love.[1] In its various forms, social support acts as a buffer for many mental illnesses, especially common mental disorders such as depressive disorders, where it becomes a factor of good prognosis and therapeutic outcome.[2-4] As they are symptomatically mediated by environmental factors and social determinants of health, depressive disorders have globally affected 264 million people across all age groups,[5,6] associated with suicide

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deaths, and have contributed significantly to the disability-adjusted life-years (DALY) of persons with mental illness.[7,8] The COVID-19 pandemic added to the significant burden on those already affected with mental illness across the world.[9-11] Direct consequences and associated social phenomena of the phenomena increasingly placed the general population at a higher risk of developing depression. Families found themselves at the center of emerging family dynamics such as grief, loss, unemployment, changing parental patterns, and social isolation, wherein these factors are known to also exacerbate the preexisting risk factors to which persons with mental illness are susceptible.[12,13] While becoming one of the top ten global health risk factors in 2021,[14,15] the COVID-19 pandemic eventually affected multiple forms of social support by aggravating psychosocial issues for persons with depressive disorders, projected as the major contributor to global disease burden by 2030.[6]

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In India, the prevalence rate of depressive disorders is calculated at 2.7%,[7] while the treatment gap for mental illness is nearly 80% and 150 million people require access to therapy.[8] Though psychiatric features of depression such as loneliness, sadness of mood and affect, lethargy, and weight loss have not been subjected to much change,[16] pathbreaking constructs have proposed the mediational role of external environment in communicability of affect and susceptibility of mood.[17,18] Studies across communities often become niche to account for variations in ages, as seen among elderly and adolescents.[19,20] The prevalence rate among young adults in India seems to drastically vary, once observed to be 18.5% of college students from Ranchi aged 18–21 years.[21] Schools of thought and evidence-based treatments proposing the causative factors, theoretical extent, and impact on individual lives have been extensively progressive in multi-disciplinary approaches in community-based primary care for mental health.[16,18,22,23] Cross-cultural and cross-ethnic differences in the prevalence and the psychopathological relevance are extremely crucial in understanding its presentation in the population, bound to be affected by other socio-economic changes such as migration as well.[24]

Social support has been linked to depression through life-stage approaches in various studies in the last three decades.[25-28] This form of support is highly dynamic and subject to changes with respect to the individual health and mental health states of every member whom we rely upon, especially during times of crisis affecting the society collectively. An important systematic review indicated that adults rely more on their spouses for social support than family members and friends, colleagues, or acquaintances, while also reporting variations in measurement of type, source, and aspect.[29] However, Indian studies have addressed depression among the elderly more than in young adults.[30,31] The current study was taken to fulfill this lacuna.

The objectives of the current study were to find out the socio-demographic details of persons with depressive disorders to assess the levels of social support of persons with depressive disorders, and finally to find out the relationship between social support and resilience with respect to the severity of the depressive disorders.

Subjects and Methods

The study setting consisted of persons with depressive disorders taking treatment in the out-patient department (OPD) and in-patient services of National Institute of Mental Health And Neuro Sciences (NIMHANS) Hospital, Bangalore. The hospital receives patients in OPD from various socio-cultural backgrounds and has state-of-the-art facilities in patient care, database management, and follow-up services in mental health and neurosciences. The cross-sectional study was conducted among adults aged 18–40 attending OPD services in the hospital during July 2020–May 2021 and diagnosed with depressive disorders as per the ICD-10 criteria (F33.0-F33.3).[32] A sample size of 75 adults was chosen as per clinical observations

of health-seeking behavior in OPD, as well as the impact and feasibility of the study, through the purposive sampling technique. Individuals with depressive disorders having severe mental illnesses, active suicidal ideation for the past 3 months, or severe medical problems (acute or chronic) during the period of depressive episodes were excluded.

Institutional Ethics Committee approval and permission to access medical records were obtained from the competent authority of NIMHANS vide NIMH/PSW/DESC/2020-21 and NIMH/DO/BEH. SC. Div./2020-21. Data were collected through telephonic medium in view of the COVID-19 nationwide pandemic and limitations in accessibility of the respondents in OPD. Telephonic medium was used to explain the informed consent form and administer the questions, while a brief note on procedure was recorded in their medical records. Data were obtained in five languages of English, Hindi, Tamil, Telugu, and Kannada until the desired sample size was achieved.

Variables of the study were measured using three instruments. The socio-demographic details of respondents were collected using a self-reported questionnaire covering age, sex, education, income, employment, marital status, religion, place of residence, and number of members in the family. Multidimensional Scale of Perceived Social Support (MSPSS)[33] was used to measure social support among the patients. The 12-item Likert scale has factor groups of family, friends, and significant others based on the sources of support. Each item is scored 0–7 between "Very Strongly Disagree" to "Very Strongly Agree" and summed up for the total score. Higher scores in the scale indicate greater perceived social support. The scale is positively correlated with Rosenberg Self-esteem Scale and has strong reliability and validity (r = 0.33; α = 0.84) while adapted for use in the Indian population.[34] Beck's Depression Inventory-II (BDI-II)[35] was used to measure the severity of depression. This self-reported scale is a 1996 revision of BDI and was developed by Aaron T. Beck and has 21 items rated on a 4-point scale based on the severity of each item, that is, 0–3 range.[36] It has a positive correlation with Hamilton Depression Rating Scale and high reliability and validity (r = 0.93; α = 0.91). It is translated into multiple languages, including Indian languages, and is widely used in clinical practice in India.[37]

The data collected were entered into a Microsoft Excel sheet and exported to IBM-SPSS version 22.0 for analysis. Appropriate descriptive and inferential statistics were carried out for the same. Normality of the data revealed that the sample did not follow a normal distribution and reported the median scores with first and third interquartile ranges Q2 (Q1, Q3). Spearman's rank correlation was used for each of the categories based on the severity of depression to assess the relationship with social support and resilience scores calculated as total scores as per the scoring format suggested by the authors of the scales. Also, Chi-square analysis or Fisher's exact test was used to identify the association between categorical variables. Finally, Kruskal–Wallis test was conducted to check if social support differs significantly

across the four categories of severity of depression. The level of significance for all tests was fixed at 5%.

Results

Table 1 shows the socio-demographic profile of the persons with depressive disorder. The respondents had a mean age of 32 years (SD: 7.9 years) and the majority of the respondents belonged to the 28–37 years age group (42.7%), with a slightly larger representation by males (53.3%). Recurrent depressive disorder was found to be the larger prevalent psychopathology diagnosed previously (69.3%). The majority of the respondents were in the unemployed category (58.7%), inclusive of those not working and housewives. The majority of the respondents were educated in schools (64%), married (65.3%), and belonged to lower SES (48%). Income was categorized into lower, middle, and upper socio-economic status (SES) based on the researcher's criterion of the monthly amount earned by the individual.

Table 2 depicts the levels of social support with respect to the severity of depression. Total scores of MSPSS were used and subscale computation for minimal, mild, moderate, and severe depression categories as per BDI-II instrument. Among the sample, 14 respondents experienced minimal or no depression, while the majority experienced moderate depression (n = 42), followed by mild (n = 14) and severe depression (n = 5). Social support among the respondents with mild depression was reported using Q_2 (Q_1, Q_3) to be 59.5 (39, 73). Those with moderate depression had a social support score of 48 (39, 60), whereas for those with severe depression, the median score of social support was found to be 73 (46, 73.5).

Table 3 indicates the relationship between social support and resilience with respect to the severity of depression. Social support was found to be significantly correlated with resilience among persons with mild depression ($P = 0.620$) at 0.05 level. Among the 14 respondents who experienced minimal or no depression, social support was found to be significantly correlated with resilience.

Table 4 shows the association of socio-demographic variables with depressive disorder. The association between age and the respective categories of minimal, mild, moderate, and severe depression were found to be not significant as per the criterion ($P = 0.38$). The association between sex and the severity of depression was also found to be not significant ($P = 0.57$). Occupation ($P = 0.10$) and education ($P = 0.91$) were also found to have no significant association with the respective categories of minimal, mild, moderate, and severe depression. Further, income also had no significant association with respect to the severity of depression ($P = 0.57$). There was no significant association between two categories of marital status ($P = 0.31$) and two categories of religion ($P = 0.57$) for the severity of depression. Further, the diagnosis given prior to data collection was found to have no significant association with respect to the current severity of depression as per the BDI-II scale administration ($P = 0.86$).

Table 5 shows the differences in social support among severity of depression. The test revealed that as per the P value, null hypothesis was retained for social support ($P = 0.41$). Thus, social support was deemed to not differ significantly with respect to the severity of depression.

Discussion

Findings of the current study present important factors for consideration by family medicine and primary care professionals. The mean age of respondents was collaborated in the

Table 1: Socio-demographic profile of persons with depressive disorder (*n*=75)			
Variables	**Categories**	**Frequency (*n*)**	**Percentage**
Age	18-27 years	23	30.7
	28-37 years	32	42.7
	38-47 years	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
	Bachelors, Masters, and any other degree/course	19	25.3
Income (per month)	Lower SES	36	48.0
	Middle SES	28	37.3
	Upper SES	11	14.7
Marital Status	Married	49	65.3
	Unmarried	26	34.7
Religion	Hindu	57	76.0
	Others	18	24.0

categorization of 28–37 years (42.7%). Although higher levels of representation by males (53.3%) were not preconceived and can be attributed to the response and consent of the participants. Higher levels of respondents from the recurrent depressive disorders category can be understood in the context of regularity in clinical consultations in this hospital. This is chiefly guided by various other factors such as accessibility, availability, affordability, and choice of therapy or professional due to other factors as

traditionally seen in developing countries.[16,17] Due to reduced barriers in accessibility and the quality of services offered, persons experiencing a single depressive episode have also taken consultations for pharmacological and non-pharmacological interventions, thus ensuring preventive measures even for the subsequent episodes. Persons experiencing minimal or no depression may be experiencing remission of depressive symptoms; exploration of various factors leading to this may be considered for qualitative research in the future.[19,21,38]

Socio-economic status and educational attainment among the patient are reflective of the inclusive practices and models for community mental health approach, which envisages mental health for all, further allowing follow-ups through a community approach.[6-8,39] The rate of unemployment can be attributed to the current socio-economic atmosphere of the country as reported in the wake of the COVID-19 pandemic, further causing a decline in mental health status and depressive symptoms.[40,41] This indicates a need for ensuring promotive mental health practices in the community, which may serve as a protective environment as well as resonate with the therapeutic factors in clinical settings. These indicators present a strong demand for primary care approaches in mental health to be cost-effective and include caregivers, most often the family members, to effectively deal with the burden caused by depression on individuals.[42-44]

Table 2: Distribution of social support with respect to the severity of depression

Categories	*n*	Median (Q1, Q3)
Minimal Depression	14	48 (41, 55.50)
Mild Depression	14	59.5 (39, 73)
Moderate Depression	42	48 (39, 60)
Severe Depression	5	73 (46, 73.5)

Table 3: Relationship between social support and resilience among the severity of depression groups:

Severity of Depression	Spearman's Rank Correlation, ϱ (*P*)
Minimal Depression	0.582* (0.029)
Mild Depression	0.620* (0.018)
Moderate Depression	0.299 (0.054)
Severe Depression	0.108 (0.863)

Table 4: Association between socio-demographic variables and the severity of depression

Variables	Severity of Depression				Chi square/ Fisher's exact test	*P*
	Minimal (*n*=14)	Mild (*n*=14)	Moderate (*n*=42)	Severe (*n*=5)		
Age						
18-27 years	6 (26.1)	3 (13)	11 (47.8)	3 (13)		
28-37 years	3 (9.4)	8 (25)	20 (62.5)	1 (3.1)	6.28*	0.384
38-47 years	5 (25)	3 (15)	11 (55)	1 (5)		
Sex						
Male	5 (12.5)	8 (20)	24 (60)	3 (7.5)		
Female	9 (25.7)	6 (17.1)	18 (51.4)	2 (5.7)	2.21*	0.569
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 Secondary School	9 (18.8)	8 (16.7)	28 (58.3)	3 (6.3)		
Bachelors, Masters, 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)		

*Fisher's exact test

Table 5: Differences between levels of social support and severity of depression						
Variable	Severity of Depression Median (Q1, Q3)*				Test statistic	*P*
	Minimal (*n*=14)	Mild (*n*=14)	Moderate (*n*=42)	Severe (*n*=5)		
Social Support	48 (41, 55.50)	59.5 (39, 73)	48 (39, 60)	73 (46, 73.5)	2.895	0.408

*Q1 - First Quartile; Q2 - Second Quartile

The statistics of moderate depression were deemed to be the highest, with 42 out of 75 respondents experiencing the said levels of symptoms. However, the higher number of persons with moderate depression may indicate toward stress-buffering hypothesis of social support as proposed in various theories.[2-4] The rise of online platforms during COVID-19 has made a large section of the population stay connected and seek support beyond boundaries.[45-48] As the very concept of social support is based upon the perceived notion of individuals, families are able to provide emotional support to the persons with depressive disorders who categorically experience social withdrawal. Evidently, technology has been used in various countries with its limitations as an alternative to the usual necessity for physical presence of the individuals, thus catalyzing social support virtually as a response to social isolation.[49] Access to technology for children and adolescents has precipitated high tendencies for addiction and associated issues.[50,51] Further, depressive symptoms and social support have been seen to vary dynamically with respect to gender as multiple studies across the world have shown the vulnerability of males for common mental disorders.[52,53] Thus, delivery of primary mental health care must cover age- and gender-specific aspects to address the global crisis of COVID-19, especially in a country with 60%–80% treatment gap for mental health.[7,19,54]

The lower number of respondents experiencing mild, moderate, and severe grades of depression is also a reflection of variations observed in the national and global statistics,[2,3,4,30] thus supporting the protective role of social support among stressful life events as stated in many studies over the years.[55-57] This phenomenon has also been replicated in the current study where a pattern of positive and mild correlation was observed between the levels of social support and resilience among persons with mild depression. This association indicates that an increase in social support would also likely indicate an increase in resilience. This strong and interconnected network of positive, protective, and strength-based factors is thus extremely crucial in considering the family and workplace aspects of an individual's life while formulating treatment plans for patients.[58-60] Attempts toward integrating peer support groups for younger adults with technological platforms may result in fostering social support and eventually build resilience and restrain the severity of the depressive symptoms.[61] The reception of such approaches and their merits over the traditional form of in-vivo therapeutic formats are yet to be practiced and studied for niche populations such as pregnant mothers.[62]

Levels of social support among the four categories of depression were seen to be dynamic due to the variations in the socio-economic distribution of the sample. Similar findings observed in studies[59,60,62,63] serve as an indication of developing positive social support from various sources such as spouses, family members, colleagues, and neighbors. The multiplicity of roles performed by persons with mental illness as a parent, sibling, spouse, or offspring of the caregiver gives rise to complexities in relationships.[64,65] The quality of relationship between the spouses is subject to constructs such as cohesiveness, communication, trust, and support, which ultimately contribute to better couple satisfaction and quality of life.[66,67] While indicators of lower metric of couple satisfaction, dynamics, and socio-economic indicators have proven to be risk factors, peaks in intimate partner violence in countries across the world, including India, demand additional social supports and legal machinery to strengthen individuals who are undergoing adversities on a consistent and severe level, leading to their social impairments amidst lack of help.[68,69] Absence of significant differences in social support with respect to the severity of depression may necessitate special attention to be given to respondents with higher emotional needs apart from the usual patterns followed by caregivers. Although homogenization and provision of equal opportunities for all persons with depressive disorders in developing countries is a far-reaching standard,[70] understanding family dynamics in various verticals to prevent the progression of depression and targeting social support in the community and primary care level will prove to be the way forward.

The COVID-19 pandemic in India posed challenges for patients and caregivers in psychiatric settings, leading to low footfalls for in-person consultation and hence difficulty in administering instruments in person. Future studies may focus on controlling the extraneous variables such as complicated grief patterns, rampant changes in the socioeconomic status, and adverse life events caused by global pandemics such as COVID-19. Further studies with cohort designs may be undertaken to monitor the changes in the social events along with the general impact on mood and affective states. The findings of the current study suggest that primary care physicians and family medicine practitioners should inevitably include caregivers in the treatment process and perpetuate the motivation of the caregivers to help persons with depressive disorders. The tenets of early intervention and evaluation for psychological issues faced by the patients must be of prime importance in a developing nation like India to make mental health accessible to all.

Conclusion

The productive life-years of individuals get largely impacted with depressive disorders, accounting for significant socio-occupational dysfunctions and posing major challenges in community mental health. The current study is useful in understanding the socio-demographic distribution of persons with depressive disorders from multi-ethnic communities across the country. Social support is found to vary across the severity of depression

and is mildly correlated to resilience for mild depression. These findings are suggestive of the impacts of social support from family members, friends, colleagues, and neighbors and having greater resilience and minimizes the risk of developing depressive symptoms. Thus, primary care approaches in mental health must include enhancing social support and employing psychosocial interventions for building family strength and support for prevention of depressive disorders among young adults.

Declaration of consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Conflicts of interest

There are no conflicts of interest.

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