

Coping Behavior among Caregivers of Patients with Alcohol Dependence

Satyabhama Nayak¹, Sunila Rathee², Vikash Ranjan Sharma³ and Asmita Nayak⁴

ABSTRACT

Background: Caregivers play a crucial role in addressing alcohol dependence symptoms in India, impacting family life and coping strategies. The current study aimed to assess the level of coping strategies among the primary caregivers of alcohol-dependent patients. **Methods:** A study in India assessed 65 alcohol-dependent patients and their caregivers through purposive sampling by using the Stress Coping Behavior Scale (Hindi adaptation). **Results:** Mann Whitney test result revealed that adaptive coping by caregivers was statistically significantly higher with regard to those alcohol dependent persons who belong to the Up to std IX group ($U = 289.500, p = .011$); rural group ($U = 240.000, p = .000$) whereas maladaptive coping strategies by caregivers was statistically significantly higher with regard to those alcohol dependent persons who belong to Middle adulthood = 41 and above ($U = 240.000, p = .004$); those who belong to duration of illness 16ears and above ($U = 51.50, p = .000$); rural group ($U = 361.000, p = .046$). Adaptive coping by caregivers was significantly higher in those caregivers who belonged to the rural group ($U = 342.000, p = .013$) maladaptive coping by caregivers was significantly higher in those who belong to the middle adulthood ($U = 190.000, p = .000$); up to std IX ($U = 377.000, p = .051$); the employed group ($U = 355.000, p = .021$); the 11000/ and above group ($U = 325.000, p = .011$). **Conclusion:** Alcohol dependence adversely affects the patients as well as the coping used by caregivers.

Keywords: Coping, Alcohol Dependence, Caregiver

INTRODUCTION

Numerous life events and long-term stressors are sources of stress, such as microbial roots and overt emotional and behavioral manifestations (Pearlin et al., 1981). How one views a circumstance affects how well one can handle stress (McEwen, 1998). Some persons are more prone to depression than others due to the effects of life events on their health, and they look for specific coping behavior aspects (Pearlin et al., 1981). Being a caregiver is a constant source of stress; thus, managing it requires coping mechanisms. Findings revealed that high load levels are positively correlated with coping mechanisms such as avoidance, denial, and resignation (Rammohan et al., 2002). A study investigated the association between a loss of coping resources and psychological suffering in alcoholic wives. The researchers observed a relationship between alcohol consumption and psychological distress. They also discovered that alcohol-dependent individuals' wives use adaptive and dysfunctional coping techniques (Ravindran & Joseph, 2017). Using the marital coping scale, a comparison study was conducted on the participants to analyze the difference in coping skills between spouses with schizophrenia and alcohol dependence syndrome. The findings demonstrated a significant difference in support-seeking and avoidance coping strategies between the two groups (Shilpa & Vaidyanath, 2020). Another study on alcohol and opioid-dependent males and their wives was undertaken to observe psychiatric

morbidity, social support, and coping among the wives of the alcohol and opioid-dependent individuals. According to the findings, opioid-dependent males and their spouses are younger and have a younger marriage than the alcohol-dependent group. The mental diagnostic rate among wives of alcoholic-dependent individuals is 16%, whereas it is 20% among opioid addicts. Depression and dementia are frequently mentioned. The most commonly utilized coping strategies have been identified as denial and internalization. Psychological morbidity among the wives was also observed to be frequent in both groups (Gupta et al., 2014).

Using convenient sampling, another study explored the coping mechanisms employed by the wives of alcoholic-dependent persons. According to the findings, 98.1% of spouses of alcoholics have a high level of coping. Furthermore, it was discovered that among the couples, withdrawal coping was the most commonly employed way, whereas engaged coping was the least commonly used. They also discovered a substantial link between coping and the duration of alcohol consumption. However, the researchers found no effect on demographic characteristics regarding coping (Pandey & Shrestha, 2020). Another study discovered the association between social support, coping resources, and codependence among spouses of those addicted to alcohol or drugs. One hundred thirty people were chosen for the study, with 65 from each category. A social support scale, a Coping Resources Inventory,

¹ Psychiatric Social Work trainee, Institute of Mental Health, Pt. B.D. Sharma University of Health Sciences, Rohtak

² Associate Professor, State Drug Dependence Treatment Centre, Institute of Mental Health, Pt. B.D. Sharma University of Health Sciences, Rohtak, Haryana, India

³ Psychiatric Social Worker, State Institute of Mental Health, Pt. B.D. Sharma University of Health Sciences, Rohtak, Haryana, India

⁴ Corresponding Author: Clinical Psychologist, Department of Clinical Psychology, National Institute of Mental Health and Neurosciences (NIMHANS), Bangalore

and a codependence assessment questionnaire were used. The results suggest that 49 of the 60 individuals were codependent. Furthermore, codependent wives have fewer coping resources and social support (Bhowmick et al., 2001).

Another prospective study was conducted on 318 urban female caregivers living in low-income communities who were interviewed annually for three waves about community violence exposure, coping behaviors, substance use, and protective factors. Lifetime witnessing of violence, but not victimization, was associated with changes in avoidant coping, but not active coping, one year later; avoidant coping, in turn, was related to changes in and higher levels of problematic drug use the following year, according to path analyses. Because there is no agreement among the researchers, the current study aims to investigate the coping behavior of caregivers of patients with alcoholism. As a result, the current study's goal is to analyze coping behavior among caregivers of patients with alcohol dependence (Kliwer & Zaharakis, 2013).

METHODS

Study Design

The study was cross-sectional and hospital-based and conducted at a medical college in India. The study was started after getting ethics approval from the institute. Written informed consent was taken from each participant. With the purposive sampling technique, 65 subjects were selected for the study sample. Caregivers of the patients attending Outpatient Services of that medical college and hospital with Alcohol Dependence diagnosed as per the International Classification of Diseases, 10th revision (World Health Organization, 1992) were included in the study. Patients of any gender with mental and behavioral disorders due to Alcohol Dependence Syndrome (F10.2) were included in the study. Age group 18-60 years. However, the presence of any chronic physical/mental illness was used for exclusion criteria. Primary caregivers of any Gender of patients with mental and behavioral disorders due to Alcohol Dependence Syndrome (F10.2) were included. Duration of stay of caregiver with the patient must be \geq 1 year. The presence of any chronic physical/mental illness was used for the exclusion criteria of caregivers.

Instruments

The Stress Coping Behaviour Scale (SCBS) Hindi adaptation (Janghel & Shrivastav, 2017) was developed to assess how Indian adults cope with stress. The brief cope scale was initially developed by Carver (Brief cope, free version) (Cook et al., 1994) to gather information on various adult coping strategies for all diseases. The SCBS consists of 23 items and is scored using a Likert scale. There are two possible responses:

"Yes" and "No." There is a 10- to 20-minute time limit, with a response score of "2" for "Yes" and "1" for "No." Adaptive and maladaptive coping behavior was associated with two factors, with 15 items in factor one and eight in factor two, respectively. SCBS scale Cronbach's Alpha reliability is 0.82. The Stress Coping Behavior Scale's (Hindi version) psychometric characteristics attest to its validity and reliability as an instrument.

Procedure for Data Collection

This study was done at the State Drug Dependence Treatment Centre, Institute of Mental Health, Pt. B.D Sharma University of Health Sciences, Rohtak, Haryana. Caregivers of the patient with mental and behavioral disorder due to the use of Alcohol Dependence Syndrome (F10.2), diagnosed as per International Statistical Classification of Diseases (ICD-10) criteria, was approached to participate in the study after fulfilling the study criteria. Written informed consent was taken from participants. A particular self-designed form for sociodemographics was filled out for subjects. Family burden and stress coping behavior in caregivers were assessed using Family Burden Interview Schedule and Stress Coping Behavior Scale, respectively. The participants were asked to go through the questionnaire and give their responses. The participants' responses were scored according to the scoring key and then tabulated for further analysis.

Statistical analysis

The data were entered; coded, and appropriate statistical method, including mean, stand deviation, and Mann Whitney U test, was used for analysis with the help of the SPSS 20.0 version.

RESULTS

Social demographic details, including age, gender, religion, marital status, educational qualification, occupation, and current living arrangement, were collected for persons with alcohol dependence and their caregivers. However, information about the age of onset, duration of illness, any other family member having a history of substance dependence, and locality were also collected regarding persons with alcohol dependence, whereas relation with patient, family income, and locality was collected regarding caregivers of persons with alcohol dependence. Tables 2 and 3 included the frequency and percentages of these variables regarding the person with alcohol dependence and caregivers of a person with alcohol dependence, including the Mann-Whitney U test. However, as all 65 males and 62 Hindus, and 03 Sikhs were persons with alcohol dependence, this test was not conducted on this variable. In this study, 62 Hindu and 03 Sikh were caregivers of persons with alcohol dependence, and the

frequency offather, mother, brother, sister, wife, son, and daughter relation under the variable relation with the patient were 01, 14, 07, 00, 37, 04, 02. Therefore, the Mann-Whitney U test was not conducted on religion and its relation with patient variables. Table 1 depicts the mean and standard deviation of adaptive and maladaptive dimensions of coping by a caregiver of a person with alcohol dependence.

Table 1: Stress Coping Behavior in the study population in the study sample of the caregiver of a person with alcohol dependence (N= 65)

Coping	Mean ± SD
Adaptive dimension	
Active Coping	3.74 ± .54
Use of emotional support	3.14 ± .75
Use of instrumental support	1.80 ± .40
Positive reframing	3.38 ± .58
Planning	3.62 ± .70
Humour	2.15 ± .47
Acceptance	3.02 ± .72
Religion	3.63 ± .65
Total score on adaptive dimension	24.42 ± 1.74
Maladaptive dimension	
Self-distraction	3.31 ± .68
Denial	1.20 ± .40
Substance use	1.32 ± .47
Behavioral-disengagement	1.54 ± .50
Venting	3.11 ± .56
Self-Blame	1.25 ± .43
Total score on maladaptive dimension	11.69 ± 1.63

Table 2 shows the result of the Mann-Whitney U test, which was performed to know the significant

Table 2: Mann Whitney U test performed on adaptive coping score and coping maladaptive score of behavior questionnaire of caregivers concerning sociodemographic data of person with alcohol dependence

Alcohol depended persons' characteristics				Caregivers' coping							
Variables	Group	Frequency	%	Adaptive Coping				Coping Maladaptive			
				Median	Mann Whitney U	P Value	R ²	Median	Mann Whitney U	P Value	R ²
Age	Early adulthood = up to 40	46	70.77	33.66	406.500	.645	0.003269	28.72	240.000	.004	0.128849
	Middle adulthood = 41 and above	19	29.23	31.39				43.37			
Marital Status	Single	15	23.08	33.30	370.500	.942	8.198461	36.00	330.000	.475	0.007843
	Married	50	76.92	32.91				32.10			
Educational Qualification	Up to std IX	21	32.31	41.21	289.500	.011	0.098709	31.14	423.000	.577	0.004773
	Std X and above	44	67.69	29.08				33.89			
Occupation	Unemployed	21	32.31	37.31	371.500	.184	0.027172	37.33	371.000	.193	0.026
	Employed	44	67.69	30.94				30.93			
Current living arrangement	Joint	38	58.46	33.49	494.500	.797	0.0010240	34.89	441.000	.329	0.014655
	Nuclear	27	41.54	32.31				30.33			
Age of onset	Up to 19 years	20	30.77	31.00	410.000	.552	0.005446	35.80	394.000	.417	0.010118
	Above 19 years	45	69.23	33.89				31.76			
Duration of illness	Up to 15 years	45	69.23	31.82	397.000	.430	0.009577	26.78	170.000	.000	0.252844
	16years and above	20	30.77	35.65				47.00			
Any other family member having a history of substance dependence	At least one of the family members affected	12	18.46	33.67	310.000	.887	0.0003102	29.50	276.000	.469	0.0080419
	None of the family members affected	53	81.54	32.85				33.79			
Locality	Rural	39	60	39.85	240.000	.000	0.215539	36.74	361.000	.046	0.061047
	Urban	26	40.00	22.73				27.38			

difference between groups of each sociodemographic variable of persons with alcohol dependence patients as per the coping score obtained from their caregivers. The test result revealed a significant difference in the adaptive dimension score of coping strategies by caregivers with regards to that alcohol depended persons who belong to the Up to std IX group (Median = 41.21, n = 21) and those who belong to Std X and above (Median = 29.08, n = 44), (U = 289.500, p = .011); rural group (Median = 39.85, n= 60) compared to urban locality (Median = 22.73, n= 40), (U= 240.000, p=.000). Except this there was no significant difference between any other groups of other variables of the person with alcohol dependence in adaptive dimensions of coping strategies.

The test result also showed a significant difference in the maladaptive dimension score of coping strategies by caregivers with regards to alcohol depended persons who belong to Middle adulthood = 41 and above (Median = 43.37, n = 19), (U = 240.000, p = .004) and Early adulthood = up to 40 (Median = 240.000, n= 46); duration of illness up to 15 years group (Median = 26.78, n= 45) and those who belong to duration of illness 16 years and above (Median = 47.00, n= 20), (U= 51.50, p= .000); rural group (Median = 36.74, n= 39) compared to urban locality (Median = 27.38, n= 26), (U= 361.000, p= .046). Except this, there was no significant difference between any other groups of other variables of the person with alcohol dependence in maladaptive dimensions of coping strategies.

Table 3 shows the result of the Mann-Whitney U test, which was performed to know the significant difference between groups of each sociodemographic variable of caregivers of persons with alcohol dependence patients as per the coping score obtained from caregivers. Mann Whitney test result revealed that significant difference in the adaptive dimension score of coping strategies by caregivers of those caregivers who belonged to the rural group (Median = 38.00, n= 39) and those who belonged to the urban locality (Median = 26.79, n= 26), (U= 342.000, p= .013). Except this, there was no significant difference between any other groups of other variables of the caregiver of a person with alcohol dependence in adaptive dimensions of coping strategies.

The test revealed that significant difference in the maladaptive coping scores of coping strategies by caregivers of those who belong to the early adulthood

group (Median = 24.14, n= 37) compared to the middle adulthood (Median = 44.71, n= 28), (U= 190.000, p= .000); the std X and above group (Median = 28.97), n= 36) compared to the up to std IX (Median = 38.00 n= 29), (U= 377.000, p= .051); the employed group (Median = 38.24 n= 33) compared to the unemployed (Median = 27.59), n= 32), (U= 355.000, p= .021); the below poverty line (BPL) group (Median = 28.05 n= 31) compared to the above poverty line (APL) group (Median = 39.96), n= 34), (U= 325.000, p= .011). Except this, there was no significant difference between any other groups of other caregiver variables of the person with alcohol dependence in maladaptive dimensions of coping strategies.

Table 3: Mann Whitney U test performed on adaptive coping score and coping maladaptive score of behavior questionnaire of caregivers concerning sociodemographic data of caregiver of a person with alcohol dependence

Alcohol depended on persons' characteristics				Caregivers' coping							
Variables	Group	Frequency	%	Adaptive Coping				Coping Maladaptive			
				Median	Mann Whitney U	P Value	R ²	Median	Mann Whitney U	P Value	R ²
Age of caregiver	Early adulthood = up to 40	37	56.92	30.49	425.000	.197	0.025601	24.14	190.000	.000	0.301376
	Middle adulthood = 41 and above	28	43.08	36.32				44.71			
Gender	Male	12	18.46	31.38	298.500	.730	0.0018311	41.67	214.000	.073	0.049348
	Female	53	81.54	33.37				31.04			
Marital Status	Single	16	24.61	38.06	311.000	.197	0.025641	35.75	348.000	.495	0.007176
	Married	49	75.38	31.35				32.10			
Educational Qualification	Up to std IX	29	44.61	33.90	496.000	.719	0.0019827	38.00	377.000	.051	0.05844
	Std X and above	36	55.38	32.28				28.97			
Occupation	Unemployed	32	49.23	30.73	455.500	.319	0.015261	27.59	355.000	.021	0.082236
	Employed	33	50.77	35.20				38.24			
Current living arrangement	Joint	38	58.46	33.49	494.500	.797	0.0010240	34.89	441.000	.329	0.014655
	Nuclear	27	41.54	32.31				30.33			
Family income	Below poverty line	31	47.69	31.03	438.000	.296	0.016800	28.05	325.000	.011	0.09996
	Above poverty line	34	52.31	35.78				39.96			
Locality	Rural	39	60.00	38.00	342.000	.013	0.095156	34.89	454.000	.361	0.012852
	Urban	26	40.00	26.79				30.66			

DISCUSSION

The current investigation examines the stress coping behavior among caregivers of patients with alcohol dependence. It was assumed there would be a significant difference in stress coping behavior among caregivers of patients with alcohol dependence. In the present study, caregivers adopted adaptive and maladaptive coping behavior to deal with the stress arising from alcohol-dependent individuals. Most caregivers were found to use active coping as stress coping behavior; the mean score was 3.74±.54,

followed by religion and planning mean score 3.63±.65 and 3.62±.70 respectively. Greater use of adaptive coping suggested that caregivers usually involved an awareness of the stressor and conscious attempts to reduce stress, including solving problems and seeking information. Planning helps to improve emotion regulation, decrease the memory of unpleasant emotions, and help to identify potential barriers to implementation and possible ways to solve them. Religion adaptive coping behavior helps cope with stressful situations and prevent negative emotions through religious beliefs or practice. Whereas the

findings of maladaptive detentions, most of the caregivers were found to use self-distraction and venting as stress coping behavior. The mean score was $3.31 \pm .68$ and $3.11 \pm .56$. This can increase stress rather than decrease it because venting to someone is good, but it only reinforces aggressive impulses.

The sociodemographic of persons with alcohol dependence in the study was similar to the previous studies carried out in India on Caregivers of patients with alcohol dependence (Babu et al., 2021). In the present study, the sociodemographic profile of the patients showed that the majority of alcohol-dependence patients belong to the early adulthood age group, 18-40 years being most prominent (Table 2), and all the patients with alcohol dependence who attended the de-addiction center were males who were noticed similar findings in other studies where the rate of men was higher than females (Babu et al., 2021; Girish et al., 2010; Ramanan et al., 2016; Sen et al., 2016; Vaishnavi et al., 2017). This might be due to adult males being more likely to use alcohol, which is also in accordance with the majority of other Indian studies. A higher representation of Hindu religion among the patients was noticeable, which was 62 (95.38%) Hindu and 3 (4.61%) Sikh, similar to other studies (Sen et al., 2016; Shekhawat et al., 2017). In the present study, most of the patients married, around 50 (76.92%) married, and 15 (23.08%) participants never married; similar results were found in another study (Mehra et al., 2020). In this study majority of patients, 44 (67.69%), were studied more than or equal to the 10th standard. Occupation of the patients showed that a more significant number of the participants are employed, which is 44 (67.69%) among the total participants. 26 (40.00%) patients of the study sample healed from a rural background, while the remaining 39 (60.00%) were from an urban background. This finding is suggested that poor awareness, limited leisure activities, and limited resources for prevention, treatment, and recovery lead to rural individuals having a higher rate of alcohol dependence. Most patients belong to joint families, i.e., 38 (58.46%), while 27 (41.54%) live in nuclear families. Similar results showed in other Indian studies (Mattoo, S. K et al., 2013). The age of onset was higher in the early adulthood (up to 40 year), which was 46 (70.77%) of the study sample, and the duration of illness of patients was noticed to be higher among the up to 15 years group. All the patients consumed alcohol as the primary substance, with 53 (81.54%) patients of the study sample having a history of none of the family members being affected by any substance dependence. This result was similar to another study (Shekhawat et al., 2017).

The sociodemographic profile of caregivers and this study's result were similar in some related Indian studies

(Rammohan et al., 2002; Sen et al., 2016; Vaishnavi, et al., 2017). In the present study, the distribution shows an inclination toward the age group early adulthood of 18-40 years, with 37 (56.92%) being the most prominent. Most of the caregivers were married 49 (75.38%), female 53 (81.54%), and most of the patients' spouses. This was mainly due to a cultural belief that men should be the family's breadwinners and women would be responsible for caring for sick men (Vaishnavi et al., 2017). Most caregivers were educated; 36 (55.384%) studied matriculation and above, and 29 (44.61%) caregivers were studied under matriculation. Also, 33 (50.77%) caregivers were running their lives without being disturbed much by patients' illnesses. They were either self-employed or part-time or full-time employed, and 32 (49.23%) caregivers were housewives/unemployed by occupation. Most participants belong to joint family backgrounds, similar to the previous study (60.00%) of participants were from a joint/extended family (Sen et al., 2016). In the present study, the majority of the caregivers were the wife 37 (56.92%), mother 14 (21.54%), and brother 7 (10.77%) of the patient, similarly in a study, 74% of caregivers were the spouse of the patient (Sen, et al., 2016; Vaishnavi, et al. 2017). In this study, most of the caregivers, 31 (47.69%), had monthly incomes below poverty line, which belonged to lower socioeconomic status, same findings in another study (Rammohan et al., 2002; Sen et al., 2016; Vaishnavi, et al., 2017). Most caregivers, 39 (60.00%), belong to a rural background, similar to another study result (Rammohan et al., 2002). The stress coping behavior is categorized as adaptive coping and maladaptive coping, and further, it is categorized into eight and six subdomains, respectively. Mean, and standard deviation (Table 1), Mann Whitney U test was performed to measure the significant difference between sociodemographic variables of patient (Table 2) and caregivers (Table 3) with stress coping behavior among caregivers. Comparing the caregivers coping with socio-demographic information of patient researchers found that although adaptive coping is higher in the group Up to std IX ($U = 289.500$, $p = .011$); rural group ($U = 240.000$, $p = .000$), while maladaptive coping is higher in those who belong to early adulthood ($U = 240.000$, $p = .004$); duration of illness 16 years and above ($U = 170.000$, $p = .000$); rural group ($U = 361.000$, $p = .046$), still the effect size is small in all the cases. But comparing the caregivers coping with socio-demographic information of caregivers researchers found that the adaptive score is higher in the urban locality group ($U = 342.000$, $p = .013$); the maladaptive score is higher in middle adulthood ($U = 190.000$, $p = .000$); in the up to std IX (Median = 38.00 $n = 29$), ($U = 377.000$, $p = .051$); the employed group (Median = 38.24 $n = 33$) compared to the unemployed (Median = 27.59, $n = 32$), ($U = 355.000$, $p = .021$); the BPL group (Median = 28.05 $n = 31$) compared to the APL group (Median = 39.96, $n = 34$), ($U = 325.000$, $p = .011$). Still, the effect size is small in all the cases.

The study has some limitations. A small sample size (N= 65) has been taken for the present study for alcohol-dependent persons and their caregivers, due to which a robust external validity of the present study could not be ascertained. Proportional representation of persons with substance dependence and caregivers of persons with substance dependence should be undertaken. The sample has been collected using purposive sampling. Random sampling would have provided a better generalization of results. Due to time limitations, the study undertaken was cross-sectional. A randomized block design would have ensured better control of extraneous variables.

CONCLUSION

Findings of the present study were significant differences in the adaptive coping behavior of those who belong to rural groups, followed by those who belong to urban localities. The maladaptive coping scores were significantly lower in the early adulthood group than in the middle adulthood caregivers. Most caregivers use active coping, planning, and religion as adaptive coping behavior and self-distraction and venting as a maladaptive coping behavior. A significant implication of the present study is that these findings can be helpful in further investigation and research works and may help plan intervention strategies.

REFERENCES

- Babu, M., Maria Joy, P., Thomas, R., Varghese, P. R., & Kuttichira, P. (2021). Demographic profile of alcohol use disorder patient who received care from a de-addiction centre in central Kerala. *International Journal of Community Medicine and Public Health*, 8(1), 243.
- Bhowmick, P., Tripathi, B. M., Jhingan, H. P., & Pandey, R. M. (2001). Social support, coping resources and codependence in spouses of individuals with alcohol and drug dependence. *Indian journal of psychiatry*, 43(3), 219.
- Cook, J. A., Lefley, H. P., Pickett, S. A., & Cohler, B. J. (1994). Age and family burden among parents of offspring with severe mental illness. *American journal of orthopsychiatry*, 64(3), 435-447.
- Girish, N., Kavita, R., Gururaj, G., & Benegal, V. (2010). Alcohol use and implications for public health: patterns of use in four communities. *Indian journal of community medicine: official publication of Indian Association of Preventive & Social Medicine*, 35(2), 238.
- Gupta, J., Mattoo, S. K., Basu, D., & Sarkar, S. (2014). Psychiatric morbidity, social support, and coping in wives of alcohol and opioid dependent men. *International Journal of Mental Health*, 43(2), 81-94.
- Janghel, G., & Shrivastav, P. (2017). Coping behavior assessment scale (Indian adaptation): Establishing psychometrics properties. *The International Journal of Indian Psychology*, 4(3), 152.
- Kliewer, W., & Zaharakis, N. (2013). Community violence exposure, coping, and problematic alcohol and drug use among urban, female caregivers: A prospective study. *Personality and individual differences*, 55(4), 361-366.
- Mattoo, S. K., Nebhinani, N., Kumar, B. A., Basu, D., & Kulhara, P. (2013). Family burden with substance dependence: a study from India. *The Indian journal of medical research*, 137(4), 704.
- McEwen, B. S. (1998). Protective and damaging effects of stress mediators. *New England journal of medicine*, 338(3), 171-179.
- Mehra, A., Kumar, A., Grover, S., Chakrabarti, S., & Avasthi, A. (2020). Relationship of stigma with burden and coping among caregivers of patients with severe mental disorders. *Indian Journal of Social Psychiatry*, 36(1), 11-18.
- Pandey, S., & Shrestha, K. (2020). Coping Strategies Among Spouses of Alcohol dependents at Gokarneswor, Kathmandu, Nepal.
- Pearlin, L. I., Menaghan, E. G., Lieberman, M. A., & Mullan, J. T. (1981). The stress process. *Journal of Health and Social behavior*, 337-356.
- Ramanan, V. V., & Singh, S. K. (2016). A study on alcohol use and its related health and social problems in rural Puducherry, India. *Journal of family medicine and primary care*, 5(4), 804.
- Rammohan, A., Rao, K., & Subbakrishna, D. K. (2002). Burden and coping in caregivers of persons with schizophrenia. *Indian Journal of Psychiatry*, 44(3), 220.
- Ravindran, O. S., & Joseph, S. A. (2017). Loss of coping resources and psychological distress in spouses of alcohol dependents following partner violence. *Indian Journal of social psychiatry*, 33(3), 202-207.
- Sen, S. K., Victor, R., & Saxena, K. (2016). Family burden in alcohol dependence: A study in north-eastern India. *Int J Med Sci Public Health*, 5(1), 24-33.
- Shekhawat, B. S., Jain, S., & Solanki, H. K. (2017). Caregiver burden on wives of substance-dependent husbands and its correlates at a Tertiary Care Centre in Northern India. *Indian journal of public health*, 61(4), 274-277.
- Shilpa, K., & Vaidyanath, G. A. (2020). Comparative Study of Marital Coping Strategies in Spouses of Patients with schizophrenia and Alcohol Dependence Syndrome. *GROUP*, 1(30), 40-80.
- Vaishnavi, R., Karthik, M. S., Balakrishnan, R., & Sathianathan, R. (2017). Caregiver burden in alcohol dependence syndrome. *Journal of addiction*, 2017.
- World Health Organization. International statistical classification of diseases and related health problems: 10th revision (ICD-10). <http://www.who.int/classifications/apps/icd/icd.1992>.