A Study to Assess the Burden of the Family Members of the Patients with Mental Health Disorders in a Selected Hospital

Om Subhashree Lenka[1], Sushree Diptimayee[1], Smitarekha Rout[2], Stitiprangya Das[2], Suvashree Mohanty[3], Sephali Moharana[3*]

[1]*Msc Tutor, Department of Mental Health Nursing, SUM- II, Siksha 'O' Anushandhan University, Bhubaneswar, Odisha*

[1]*Msc Tutor, Department of Mental Health Nursing, Maharani Prem Kumari Nursing College,Mayurbhanj, Odisha*

[2]*Assistant Professor, Department of Mental Health Nursing, Prativa Devi College of Nursing Bhubaneswar, Odisha*

[2]*Assistant Professor, Department of Mental Health Nursing, VISWASS College of Nursing,Bhubaneswar, Odisha*

[3]*Deputy Nursing Superintendent, Department of Child Health Nursing, Sum Hospital, Siksha 'O' Anushandhan University, Bhubaneswar, Odisha*

[3*]*Assistant professor, Department of mental health nursing, SUM Nursing College, Siksha 'O' Anushandhan University, Bhubaneswar, Odisha*

Abstract—**Background: Mental health disorders not only affect the patients but also place a significant psychological, social, and financial burden on their family members. Family caregivers often experience stress, role overload, and emotional exhaustion while providing continuous care.**

Aims: The study aims to assess the level of burden experienced by family members of patients with mental health disorders in a selected hospital.

Methods: A study conducted to assess the family burden of mental health disorder patients in selected hospital of Bhubaneswar, Odisha in a view to develop informational booklet. A survey research design was adopted and purposive sampling technique was used to select 120 samples. Self- structured questionnaire was used to collect the demographic variables, standardized knowledge questionnaire for assessing the burden of the family members. The investigator collected the data through proper consent from Hospital for one month.

Results: Findings revealed that a majority of the caregivers experienced a moderate to severe level of burden. Factors such as duration of illness, type of disorder, and caregiver's relationship with the patient were significantly associated with the level of burden ($p < 0.05$).

Conclusions: The study concludes that family members of mentally ill patients face considerable burden, highlighting the need for supportive interventions, psychoeducation, and counseling to enhance coping strategies and reduce stress among caregivers.

Index Terms—**Family burden, caregivers, mental health disorders, stress, psychoeducation**

I. INTRODUCTION

Caregivers of family members with mental health disorders often face lifestyle changes that lead to stress and burden. This cross-sectional study aimed to identify factors linked to caregiver burden. A total of 281 caregivers from Psychosocial Care Centers in three cities of Goiás State, Brazil, participated between June 2014 and June 2015. They completed a sociodemographic questionnaire and the Zarit Burden Interview. Data were analyzed using bivariate tests and multiple linear regression. Most caregivers were women, married, with low education and income. The average burden score was 27.66. Factors significantly associated with higher burden included depression, age over 60, lack of caregiving support, recent patient crisis, frequent contact days, and having other dependents needing care. These findings highlight the need for community programs, such as psychoeducational support groups, to reduce caregiver burden.[1]

A General Psychosocial Care Center (CAPS Geral), a CAPS for Alcohol and Drugs (CAPS AD), and the Psychiatric Admissions Unit of a General Hospital (UIPHG). A total of 385 caregivers participated216 from CAPS Geral, 86 from CAPS AD, and 83 from UIPHGand the Family Burden Interview Scale (FBIS-BR) was used for assessment. Data were analyzed using Excel and SPSS with a 5% significance level. Findings showed that caregivers at the UIPHG experienced the highest overall objective burden, particularly in daily caregiving tasks. Subjective burden was also greater in this group, especially concerning supervision of problematic behaviors, worries about the future, and concerns regarding treatment and care. Sex and age were found to be associated with caregiver burden.[2]

This study examined the level of caregiving burden and the mental health status of family members caring for individuals with mental disorders. Data were collected from 243 caregivers using an Information Form, the Burden Assessment Scale (BAS), and the General Health Questionnaire-12 (GHQ). Findings showed that 67.49% of caregivers were at risk, and 47.3% were at high risk for mental health problems such as anxiety and depression. A positive, statistically significant correlation was found between BAS and GHQ scores ($r = 0.498$; $p = 0.001$), indicating that higher caregiver burden was associated with poorer mental health.[3]

This analytical cross-sectional study included 246 family caregivers selected through convenience sampling. After obtaining necessary permissions and screening participants through inclusion criteria, data were collected over six months using a demographic questionnaire and the Caregiver Burden Inventory (Novak & Guest, 1989). Analysis was performed using descriptive statistics and independent t-tests in SPSS version 21. The mean age of caregivers was 34.53 ± 13.74 years. Children of the patients made up the largest caregiver group (46.3%). Most caregivers experienced moderate (51.5%) or severe (48.5%) levels of burden, with no significant difference between them ($P = 0.74$). Among the burden components, time-dependent burden was the highest, with a mean score of 15.01 ± 1.66. Since caregiver burden can affect the quality of care and potentially worsen the patient's mental condition, providing appropriate training and support for family caregivers is essential to help reduce their burden.[4]

Mental disorders create significant challenges not only for patients but also for their caregivers. With the move toward deinstitutionalization in Saudi Arabia, caregivers now take on responsibilities they are often unprepared for. This study assessed caregiver burden among 377 caregivers at a psychiatric hospital in Jeddah using the Arabic IEQ. Caregivers had a mean age of 36.6 years, and most cared for male patients. The average burden score was 38.4. Younger caregivers experienced more tension, while worrying was higher among those living with spouses and children or in smaller families. "Urging" was greater among caregivers living with the patient, having frequent contact, caring for female patients, and lacking professional support. Burden was highest when caring for close relatives such as parents, children, siblings, or spouses.[5]

The caregivers of patients with depression, substance use disorder, schizophrenia, and bipolar disorder experienced varying levels of burden, with 34% reporting severe burden and nearly half (49%) showing psychological distress. Distress was highest among those caring for patients with schizophrenia, epilepsy, substance use disorder, and depression. High burden was more common among caregivers of relatives with mental retardation, epilepsy, and schizophrenia. Higher education and self-employment predicted psychological distress, while caregiver gender and caring for someone with schizophrenia predicted high burden. Overall, the study highlights a high prevalence of caregiver burden and psychological morbidity, emphasizing the need for better support systems for family caregivers.[6]

Family members caring for relatives with mental illness often experience both objective and subjective burden. This study assessed caregiving burden among 56 family caregivers using the Burden Assessment Schedule. Results showed that 48.2% of caregivers had a moderate burden and 32.1% experienced severe burden. While no significant gender differences were found, married caregivers and spouses reported significantly higher burden levels. Given the high proportion of caregivers experiencing moderate to severe burden, family-focused interventions that strengthen coping skills and social support are strongly recommended.(7)

P Caregivers of people with mental illnesses face many challenges. This study explored the specific burdens experienced by 45 caregivers of individuals with schizophrenia and affective disorders through semi-structured interviews. Analysis revealed eleven major themes, including uncertainty, lack of knowledge, emotional strain, stigma, financial and physical burden, disruption of routine, family conflicts, medication-adherence issues, and inadequate support from health services and government. Overall, care giving affects emotional, financial, and physical wellbeing while limiting daily activities. Although some differences existed between caregivers of schizophrenia and affective disorders, their burden patterns were largely similar. The study highlights the need for stronger financial, educational, and psychosocial support for caregivers.(8)

Caring for people with mental illness places a significant burden on families, yet limited information exists on this issue in Ethiopia. This study assessed the level and predictors of caregiver burden among 406 caregivers. Using the Family Burden Interview Schedule, the mean burden score was 23.00 ± 10.71. Higher burden was associated with older caregiver age, being female, spending more daily contact hours with the patient, experiencing stigma, and caring for someone with a history of substance use. In contrast, higher income, lack of formal education, and strong social support were linked to lower burden. Overall, caregivers face substantial challenges, highlighting the need for improved community awareness, better treatment access, stigma reduction, and financial and social support to lessen caregiver burden.(9)

A cross-sectional study of 425 caregivers at Assiut University Hospital assessed stigma, burden, and attitudes toward mental illness using standardized scales. Most patients had bipolar disorder or schizophrenia. Caregivers showed high levels of affiliate and associative stigma and a high burden score. Key factors linked to greater stigma and burden included being a parent caregiver, aggressive patient behavior, poor knowledge, negative attitudes toward mental illness, and seeking traditional healing. Male caregivers and those with low education also reported higher burden. Overall, caregivers experienced significant stigma and burden, highlighting the need for targeted psycho-educational programs.(10)

II. METHODOLOGY

Study Design

This study adopted a quantitative research approach using a descriptive cross- sectional design.

Study Setting

Conducted inIMS & SUM Hospital Bhubaneswarand pilot study conducted in SCB Medical College, Cuttack, Odisha.

Study duration

The study was carried out during one month, including tool validation, pilot study, and main data collection phases.

Sampling Method

In this study non-probability Purposive Sampling technique is used.

Sample size

A total of 120caregivers were included in this study. The sample size was determined using Yamane's formula.

According to Yamene's formula

$n = N/ (1+ N e^2)$

Here n= Sample size, N = Population size, e = Percentage of error i.e. 0.05

Population

In this study population consists of all care givers of people with mental illness admitted in psychiatric ward of hospitals.

Inclusion Criteria

- Family members who are primary caregivers of patients with diagnosed mental health disorders.

- Caregivers who are staying with the patient for at least 6 months.
- Caregivers who can read or understand [English/local language].
- Caregivers willing to participate in the study.

Exclusion Criteria

- Family members of patients with acute medical or terminal illnesses.
- Caregivers who are professionally trained in mental health care.
- Family members who are not available during the data collection period.

Description of the tools

Data were collected using three tools:

Tool-1: Self-structured socio-demographic questionnaire- the variables of primary caregivers of patients. The socio-demographic tool consisted of eight items related to caregiver (age, gender, occupation, education, marital status, duration of caregiving, monthly family income, types of family of the caregivers etc.)

Tool-2: Family Burden Interview Schedule (FBIS)It is a widely used standardized instrument developed by Pai & Kapur (1981) to assess the objective and subjective burdenexperienced by family members of patients with chronic illnesses, including mental health disorders. It is a semi-structured interview tool often used in clinical and research settings to quantify the various dimensions of caregiving burden.

Domains of FBIS-

The FBIS consists of 6 major domains, each evaluating a specific aspect of burden experienced by caregivers:

1. Financial Burden
2. Disruption of Family Routine
3. Disruption of Family Leisure
4. Disruption of Family Interaction
5. Effect on Physical and Mental Health of Others
6. Subjective Burden

Scoring System:

Each item of the FBIS is rated on a 3-point Likert-type scale:

0 = No burden, 1 = Moderate burden, 2 = Severe burden

Total Score:

Items across all six domains are summed. A higher total score indicates a higher level of family burden.

Interpretation (general guidelines):

Score Range	Interpretation
0- 20	Mild burden
21- 40	Moderate burden
41–60	Severe burden

Tool validation& Reliability

Content validity: Reviewed by 5 experts (1 medical professionalism, 3 nursing professionalism, 1 psychology). The tools demonstrated strong reliability, with Cronbach's α. values of 0.78 to 0.92 for internal consistency. Pre-testing (tryout) done in hospital for clarity, ambiguity, and timing. Test–retest reliability is also high (>0.80 across multiple studies).

Study variables

Demographic variables: Socio-demographic characteristics of caregivers (age, gender, education, occupation, income, relationship to patient, duration of caregiving)

Dependent Variable: Level of family burden among caregivers.

Data collection procedure

1. Permission was obtained from the institutional ethical committee and hospital authority.
2. The purpose of the study was explained to the participants, and written informed consent was obtained.
3. Data were collected using a face-to-face interview method with the FBIS.
4. Each interview lasted approximately 20–30 minutes.
5. Confidentiality and privacy were maintained throughout the data collection.
6. Data were analyzed using descriptive statistics (mean, SD, frequency, percentage) and inferential statistics (chi-square test) using SPSS software.

Ethical considerations

1. Approval obtained from Institutional Ethics Committee.

2. Written informed consent taken from all participants.
3. Participants were assured of confidentiality and anonymity.
4. The right to withdraw from the study at any stage was respected.
5. No harm was caused to participants during data collection.

Statistical Analysis

SPSS version 21 was used for data analysis. Demographic information and baseline characteristics were summarized using descriptive statistics, including mean values, standard deviations, and frequency counts.The data will be collected and analyzed with descriptive and inferential statistical techniques. The demographic variables will be analyzed by using frequency and percentage. The frequency tables will be formulated for all significant information.

Theoretical Framework

A theoretical framework explains the theories that guide the understanding of family burden in relation to caring for a patient with mental health disorders. For this study, you may use a combination of Stress–Appraisal–Coping Theory and Family Burden Theory.

1. Stress–Appraisal–Coping Theory (Lazarus & Folkman, 1984)

This theory explains how individuals perceive and respond to stressful events. In the context of mental illness, caring for a patient becomes a stressor for family members.

Stressors: Symptoms of mental illness, hospitalization, behavioral issues, financial strain, unpredictability.

Primary Appraisal: Family members perceive caregiving as burdensome or challenging.

Secondary Appraisal: Families assess the resources available (knowledge, support, financial capacity).

Coping: Families use problem-focused (seeking treatment, planning care) or emotion-focused coping (seeking emotional support, acceptance).

Outcome: Level of burden experienced (mild, moderate, severe).

2. Family Burden Theory (Hoenig & Hamilton, 1966)

This theory divides burden into:

Objective burden: Observable effects on the family such as financial strain, disruption of daily routines, loss of social life, physical work.

Subjective burden: Family members' emotional reactions such as worry, frustration, sadness, stigma, guilt.

The tool (e.g., FBIS – Family Burden Interview Schedule) also follows this framework by measuring objective and subjective burden across domains:

- Financial burden
- Disruption of routine
- Disruption of leisure
- Disruption of family interaction
- Physical & mental health effects
- Subjective burden

Conceptual Framework

The study's conceptual framework is adapted from Rajnandini Kshirsagar (2016) — Conceptual Framework of Academic Stress. It is based on the cause-and-effect relationship between stressors, academic stress, and outcomes.

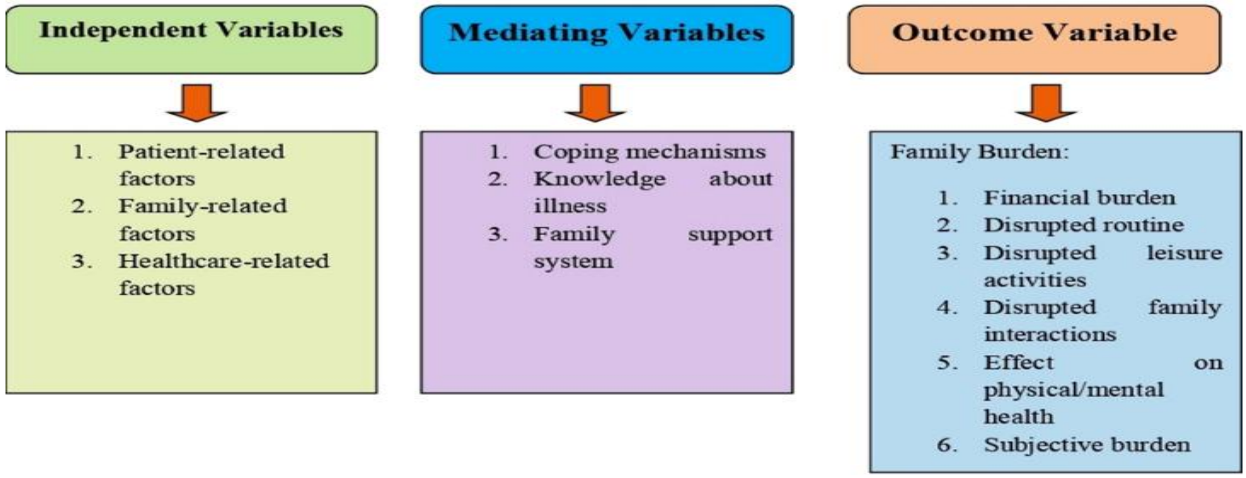
Diagrammatically Represented as:

Patient Factors

Family Factors ──► Appraisal of Stress ──► Coping ──► Family Burden

Health System Factors

Model Components



[Fig- Model components]

III. RESULTS

Table-1: Distribution of subjects based on sociodemographic variables. (N =120)

DEMOGRAPHIC VAIABLES		FREQUENCY(f)	PERCENTAGE (%)
Age	18-30years	30	25
	31-45years	40	33
	46-60years	20	19
	61- 65 years	30	23
Gender	Male	60	50
	Female	60	50
Education	primary education	28	20
	Upper primary education	33	30
	Matriculation	38	36
	Above	26	14
Marital Status	Married	118	98
	Unmarried	2	2
Occupation	Employed	60	50
	Unemployed	20	20
	Self- employed	40	30
Monthly Income	3907- 11707	46	50
	11708- 19515	47	40
	19516- 29199	8	10
Type of family	Nuclear	72	60
	Joint	48	40
Area of residence	Rural	72	70
	Urban	48	30
Relationship with patient	Parents	40	35
	Spouse	40	35
	Children	10	10
	Sibling	30	20
Duration of experiencing patients problem	7 days	8	10
	30 days	18	20
	6 months	40	30
	1 year &> 1 year	50	40

The above table-1 revealed that Frequency (F) and percentage (%) distribution of nurses according to age, gender, father and mother qualification, father and mother occupation, area or place of living, types of family, use of leisure time, duration of hostel living.

Table- 2: Percentage-wise comparison of knowledge levels on academic stress and its management among 12th-grade students. (N=120)

Level ofknowledge	Score	Frequency (f)	Percentage (%)
No Burden	Less Than 5	5	4.1
Mild Burden	6- 24	25	20
Moderate Burden	25- 48	70	58.3
Severe Burden	49- 72	20	16.67

The data presented in table-2 revealed that the most participants experienced some level of burden. A small proportion (4.1%) reported no burden, with scores less than 5. Mild burden was observed in 25 participants (20%) who scored between 6 and 24. The majority, 70 participants (58.3%), fell into the moderate burden category with scores ranging from 25 to 48. Additionally, 20 participants (16.67%) experienced severe burden, obtaining scores between 49 and 72.

Table-3: Chi square analysis showing the association of family burden with selected socio demographic variables. (N=120)

Socio demographic characteristics	df	Chi square	p value
Age (in yrs)	1	0.015	0.902
Sex	2	4.268	0.120
Education	4	4.035	0.401
Marital status	2	9.918	0.007*
Occupation	1	0.006	0.933
Family income	1	0.301	0.578
Types of family	2	13.492	0.001*
Area of residence	1	1.171	0.279
Relationship with patient	1	0.042	0.830
Duration of experiencing patients' illness	1	44.4	0.0001*

The chi-square analysis revealed that among all the selected socio-demographic variables and the level of burden among family members was analyzed. The findings showed that marital status ($\chi^2 = 9.918$, $p = 0.007$), type of family ($\chi^2 = 13.492$, $p = 0.001$), and duration of experiencing the patient's illness ($\chi^2 = 44.4$, $p = 0.0001$) had a statistically significant association with the burden level. On the other hand, variables such as age ($\chi^2 = 0.015$, $p = 0.902$), sex ($\chi^2 = 4.268$, $p = 0.120$), education ($\chi^2 = 4.035$, $p = 0.401$), occupation ($\chi^2 = 0.006$, $p = 0.933$), family income ($\chi^2 = 0.301$, $p = 0.578$), area of residence ($\chi^2 = 1.171$, $p = 0.279$), and relationship with the patient ($\chi^2 = 0.042$, $p = 0.830$) showed no significant association with the burden level.

The analysis revealed that only a few demographic variables showed a statistically significant association with the level of burden among family members. These included marital status ($\chi^2 = 9.918$, $p = 0.007$), type of family ($\chi^2 = 13.492$, $p = 0.001$), and duration of experiencing the patient's illness ($\chi^2 = 44.4$, $p = 0.0001$). These factors were found to be highly significant in influencing the burden experienced.

IV. DISCUSSION

Leta FO, Genna KM, Ibirahim MK, Dechasa TD (2025) A cross-sectional study among 417 family caregivers of people with mental illness in Eastern Ethiopia found a high caregiver burden, with a mean ZBI score of 47.97. Over 75% experienced moderate to severe burden. Significant factors increasing burden were older age, female sex, longer caregiving hours, comorbid illnesses, recent substance use, high perceived stigma, low income, low social support, and caring for additional dependent family members. The study highlights the need for structured caregiver support services, including psychoeducation and group therapy.[11]

Subravgoudar P, Mote MS, Sawant MV, More MS, Salunkhe MS (2025) A quantitative descriptive survey was conducted among 60 family caregivers of mentally ill patients using purposive sampling. Caregiver burden was measured with the Zarit Burden Scale. Most caregivers (46.66%) reported mild to moderate burden; 30% had little or no burden, 20% had moderate to severe burden, and 3.33% experienced severe burden. Caregiver burden showed significant associations with age, residence, and education. The study highlights the need for healthcare professionals to regularly assess and address caregiver burden, with implications for nursing practice, education, administration, and future research.[12]

Mihan R, Mousavi SB, Ardakani MR (2023) First-degree relatives of patients diagnosed with schizophrenia, bipolar I disorder, schizoaffective disorder, or substance use disorder at Razi Psychiatric Hospital completed sociodemographic forms and the Zarit Burden Interview. Results showed no significant difference in caregiver burden between substance use disorders and severe mental illnesses, with most caregivers experiencing moderate to severe burden. Regression analysis indicated higher burden among caregivers of patients with comorbidities, poor treatment compliance, and among female caregivers. Overall, caregiver burden in substance use disorders is as substantial as in other psychiatric conditions, highlighting the need for targeted support.[13]

V. LIMITATION

The study was conducted in a single selected hospital, which limits the generalizability of the findings to larger populations or different settings. Data was collected at one point in time, which does not capture changes in family burden over the course of illness. The burden was assessed using self-reported questionnaires (e.g., FBIS), which may be influenced by recall bias, emotional state, or social desirability bias.

VI. CONCLUSION

These findings highlight that caring for individuals with mental illness places a considerable challenge on families, often leading to stress, exhaustion, and decreased quality of life. The results emphasize the need for: Enhanced family education programs, Counseling and psychological support for caregivers, Improved mental health services, Community-based support systems.

Funding - Self

Conflicts of interest: There are no conflicts of interest for the writers.

Acknowledgements

The authors sincerely appreciate all the participants who willingly dedicated their time and thoughtfully provided sincere and well- considered responses.

Ethics Approval

Approval obtained from Institutional Ethics Committee. Written informed consent taken from all participants. Participants were assured of confidentiality and anonymity. The right to withdraw from the study at any stage was respected. No harm was caused to participants during data collection.

Data Availability

The data is available and can be accessed with a reasonable request.

ABBREVIATION

FBIS: Family Burden Interview Schedule, IEC: Institutional Ethics Committee, SPSS: Statistical Package for Social Sciences, SD: Standard Deviation

REFERENCE

[1] Souza AL, Guimarães RA, de Araújo Vilela D, De Assis RM, de Almeida Cavalcante Oliveira LM, Souza MR, Nogueira DJ, Barbosa MA. Factors associated with the burden of family caregivers of patients with mental disorders: a cross-sectional study. BMC psychiatry. 2017 Oct 25;17(1):353.

[2] Eloia SC, Oliveira EN, Lopes MV, Parente JR, Eloia SM, Lima DD. Family burden among caregivers of people with mental disorders: an analysis of health services. Ciência & Saúde Coletiva. 2018;23:3001-11.

[3] Kızılırmak B, Küçük L. Care burden level and mental health condition of the families of individuals with mental disorders. Archives of Psychiatric Nursing. 2016 Feb 1;30(1):47-54.

[4] Haghgoo A, Zoladl M, Afroughi S, Rahimian H, Saeid Mirzaee M. Assessment of the burden on family caregivers of patients with mental disorders hospitalized in Shahid Rajai Hospital in Yasuj, 2016. Iranian Journal of Psychiatric Nursing. 2017 Jul 10;5(2):39-44.

[5] Alzahrani SH, Fallata EO, Alabdulwahab MA, Alsafi WA, Bashawri J. Assessment of the burden on caregivers of patients with mental disorders in Jeddah, Saudi Arabia. BMC psychiatry. 2017 May 30;17(1):202.

[6] Udoh EE, Omorere DE, Sunday O, Osasu OS, Amoo BA. Psychological distress and burden of care among family caregivers of patients with

mental illness in a neuropsychiatric outpatient clinic in Nigeria. Plos one. 2021 May 6;16(5):e0250309.
[7] Bhandari AR, Marahatta K, Rana M, Ojha SP, Regmi MP. Caregiving burden among family members of people with mental illness. Journal of Psychiatrists' Association of Nepal. 2015;4(1):36-42.
[8] Von Kardorff E, Soltaninejad A, Kamali M, Eslami Shahrbabaki M. Family caregiver burden in mental illnesses: The case of affective disorders and schizophrenia–a qualitative exploratory study. Nordic journal of psychiatry. 2016 May 18;70(4):248-54.
[9] Ayalew M, Workicho A, Tesfaye E, Hailesilasie H, Abera M. Burden among caregivers of people with mental illness at Jimma University Medical Center, Southwest Ethiopia: a cross-sectional study. Annals of General Psychiatry. 2019 Jun 24;18(1):10.
[10] Ebrahim OS, Al-Attar GS, Gabra RH, Osman DM. Stigma and burden of mental illness and their correlates among family caregivers of mentally ill patients. Journal of the Egyptian Public Health Association. 2020 Nov 9;95(1):31.
[11] Leta FO, Genna KM, Ibirahim MK, Dechasa TD. Family caregiver burden and associated factors among caregivers of people with mental illness attending outpatient treatment in public hospital in Eastern Ethiopia, Ethiopia: hospital-based cross-sectional study. BMJ open. 2025 Oct 1;15(10):e098359.
[12] Subravgoudar P, Mote MS, Sawant MV, More MS, Salunkhe MS, Kumbhar MS, Bansode MV, Jadhav MS, Yadav MV. Level of Caregivers Burden among Family Members of Mentally Ill Patients Visiting Psychiatric Outpatient Department. International Journal of Pharmacy Research & Technology (IJPRT). 2025 Aug 7;15(2):1020-9.
[13] Mihan R, Mousavi SB, Ardakani MR, Rezaei H, Hosseinzadeh S, Astaneh AN, Alikhani R. Comparison of caregivers' burden among family members of patients with severe mental disorders and patients with substance use disorder. Iranian Journal of Psychiatry. 2023 Apr;18(2):183.