



ST. PAUL'S HOSPITAL MILLENNIUM MEDICAL COLLEGE

Department of psychiatry

Caregiver burden and associated factors among patients with substance use disorder at Saint Paul's Hospital Millennium Medical College, Addis Ababa, Ethiopia.

Institutional based cross-sectional study

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January 2025 G.C

Addis Ababa, Ethiopia



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Institution based cross-sectional study

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Addis Ababa, Ethiopia

I, Hiwot Hido, do hereby certify that the contents of this research work are the results of my own original work and that they have never been presented for any other degree in any other institution, and that all sources of materials used for the thesis have been duly acknowledged.

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St. Paul's Hospital Millennium Medical College
Graduate Study Program

Table 1. Table summary of the Project

Name of investigator	Dr. Hiwot Hido
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ABSTRACT

Background: A family member with Substance Use Disorder (SUD) significantly influences various aspects of family life. These costs families face are known as family burden. There are limited numbers of studies on the extent of the burden. As a result, it is crucial to assess the caregiver burden to enable healthcare professionals to offer essential psychological and clinical support.

Objective: To investigate caregiver burden among patients with SUD and associated factors at SPHMMC Addis Ababa, Ethiopia

Methods: An institutional-based cross sectional study was conducted from September to December to October 2024 G.C at SPHMMC. The sample size was 387 caregivers of patients with SUD who were selected by using a systematic random sampling technique. Family burden interview schedule (FBIS) was used to assess burden of caregivers. Data were analyzed using SPSS version 26. Simple and multivariate linear regressions were used to identify factors associated with the outcome variable. The p values of < 0.05 were declared statistically significant.

Results out of 387 caregiver, 246 (63.6%) had severe objective burden and 300 (77.5%) had severe subjective burden. Duration of illness, the time spent caring for the patient, the number of substances involved, caregivers' income levels and the history of previous admissions were significantly associated with caregiver burden.

Conclusion and recommendation The study showed that more than half (63.6%) of the studied participants had severe objective burden. Caregiver's burden should be considered in every step of therapeutic process of patient. Future research should carry out longitudinal studies to further investigate. Furthermore, Stakeholders are encouraged to create early intervention initiatives and establish support groups for caregivers

Keywords: Substance use disorder, caregivers burden, SPHMMC, Ethiopia

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ACRONYMS/ABBREVIATIONS

DSM 5 TR- Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revised

FBIS – family burden interview schedule

SPHMMC - St. Paul's Hospital Millennium Medical College

SUD- substance use disorder

WHO-world health organization

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INTRODUCTION

1.1 Background

Substance Use Disorder (SUD) is a pervasive and widespread public health and social issue with chronic and recurring conditions that demand more than just cessation of drug use(1).The term SUD applies to the specific substance that is abused for a prolonged duration. The diagnosis of SUD is based on a pathological pattern of behaviors related to the use of substances. The World Health Organization (WHO) describes SUD as a problematic pattern of substance use leading to clinically significant impairment or distress. In general, the diagnostic criteria can be grouped into four categories: impaired control, social impairment, risky use, and pharmacological criteria(2).

Substance use extends its impact beyond the individual using the substance, encompassing family and community members(1). A family member with SUD significantly influences various aspects of family caregiver life, including interpersonal and social relationships, leisure activities, and financial stability. These costs families face are known as family burden (3). A burden on caregivers encompasses both subjective and objective elements. In 1966, Hoening and Hamilton sought to differentiate between objective and subjective burden, with the former encompassing the financial and daily routine impact of illness on the caregivers, and the latter referring to the personal effects on the caregivers(4) .

Families, as the fundamental social unit, play a crucial role in influencing the recovery or decline of individuals, consequently affecting communities and society as a whole(1). The burden on caregivers also plays a crucial role in predicting the prognosis for the individual with SUD(5) .

Understanding the nature and factors contributing to caregiver burden is essential for designing effective interventions to support families. Assessing the burden of care on caregivers provides valuable insights for developing social, psychological, and educational interventions that can effectively assist caregivers and enhance the quality of care. Neglecting caregiver needs can have a detrimental impact on treatment outcomes for care recipients and may increase the risk of worsening substance use issues (6) .

Therefore, addressing the physical and mental health of caregivers is essential in reducing their burden and improving their overall well-being, which ultimately positively influences the

treatment and well-being of the individual with SUD (7). This approach is supported by successful strategies used in other psychiatric disorders, such as schizophrenia, where interventions focusing on both the patient and the caregiver have been effective(8).

1.2 Statement of the problem

The profound and multifaceted impact of substance use and addiction on caregivers encompasses financial, social, cultural, mental, and physical health issues(9). All caregivers experience some sort of burden while providing care to their loved ones with Substance Use Disorder (SUD)(10). Living with or caring for a person with SUD can trigger or exacerbate physical illness and disease among family members and caregivers(11). Also causing social, psychological, and emotional harm that affects their quality of life. Many experience heightened anxiety and stress, reduced social standing, and disrupted interpersonal, working, and community relationships(12).

Compared to other mental illnesses, the caregiver burden on families of patients with Substance Use Disorder is as high as on families of patients with severe mental disorders(13), and in some cases, significantly higher. A study conducted in Turkey in 2019 compared family burden between SUD, bipolar disorder, and schizophrenia, revealing severe burden levels of 66%, 42%, and 34%, respectively(14) .

Substance Use Disorder has been extensively studied; however, research focusing on the burden on caregivers and related issues is an emerging area of study. Although the impact of substance abuse on families has gained attention since the 1990s, research in this area is relatively recent(3).

In Ethiopia, the issue of substance use is acknowledged as a growing concern(15). Despite the notable prevalence of substance use, there are limited numbers of studies on the extent and nature of the burden experienced by caregivers of individuals with SUD. It is crucial to assess the caregiver burden to enable healthcare professionals to offer essential psychological and clinical support.

This study aims to assess the level of caregiver burden and its associated factors among patients with SUD at SPHMMC and be an addition to the literature as a reference by revealing the serious social consequences of SUD.

1.3 Significance of the study

The findings of this study will provide valuable information on the burden of care for patients with SUD. This information can be used to improve clinician services, such as counseling for caregivers on how to effectively deal with a family member with SUD, in order to prevent burnout in the caregiving process. This, in turn, can have a positive impact on the patient's outcome.

Furthermore, the study's results can be utilized by local health policy makers to gain a contextual understanding of the level of caregiver burden and associated factors among those affected by SUD. This can enable them to be more proactive in implementing substance use policies and support services.

Finally, this study will address a gap in the literature in our country by providing data on the burden on caregivers of patients with SUD. It can act as a reference material for other researchers who may be interested in carrying out studies on related topics in the future.

2. LITERATURE REVIEW

Substance use disorders (SUD) pose a significant global health challenge, with millions of individuals affected by this condition worldwide. SUD also places a heavy burden on caregivers. Caregivers often experience significant emotional, financial, and social burdens(16).

A burden on caregivers in the context of substance use is influenced by various factors, including socio-demographic characteristics of patients and caregivers and clinical factors such as the duration of substance use, previous treatment ,type substance use and number of substance use (10).

2.1 prevalence of SUD

The United Nations Office on Drugs and Crime's 2021 report suggests that approximately 296 million individuals between the ages of 15 and 64 worldwide were reported to be using drugs, equating to approximately 1 in 17 people within this age group. The report also suggests that the global number of individuals with SUD is around 36 million(17). A systematic review of 27 population-based studies in sub-Saharan Africa, conducted between January 2000 and December 2016, revealed that the overall prevalence of substance use among adolescents in this region was found to be 41.6%. The review indicated that there is a high prevalence of psychoactive substance and drug use among adolescents in sub-Saharan Africa(18) In Ethiopia, the overall current prevalence of occasional or daily substance use is approximately 46.74%(19) .

2.2 caregiver burden

Worldwide, around 100 million families are impacted by the challenges of having a family member with a substance use disorder, underscoring the significant strain on households(20). A cross sectional study conducted at a teaching hospital in north India revealed that nearly all caregivers of individuals with SUD experienced a moderate or severe burden. Specifically, 65.3% of caregivers faced moderate objective burden, while 34.7% experienced severe objective burden. Moreover, 74% reported severe subjective burden, with only 26% reporting moderate subjective burden.22In another hospital-based study conducted in India, primary caregivers of individuals with substance use disorder reported that 27% experienced severe total family burden and 73% experienced moderate family burden. Additionally, 52% reported moderate subjective

burden, while 28% reported severe subjective burden, contrasting with the objective burden where only 24% experienced severe burden(21). Similarly, a study in Kenya found a high prevalence (91.45%) of caregiver burden among patients with SUD(22).

Financial burden emerged as a major challenge for caregivers in various studies. For example, in a cross sectional study conducted in Turkey, 38 out of 42 participants mentioned facing financial difficulties and accumulating debts, with some resorting to selling the patient's belongings(14). In an Indian study involving 100 primary caretakers of individuals with SUD, 57% experienced moderate financial burden, while 41% faced severe financial burdens(21). According to a study conducted at an addiction outpatient clinic in Egypt, many family caregivers experienced financial burdens due to high treatment costs, loss of the patient's income, job loss from drug intoxication, and frequent relapses(23). In another cross sectional study conducted in Kenya, the economic burden on caregivers was significant, with 89.8% indicating that SUD treatment had affected their family's finances. Borrowing money to cover treatment costs was common among caregivers(22).

Social burden also posed challenges for caregivers. In Turkey, 30% reported breakdowns in intra-family relations due to caring for someone with SUD(14). Another study in Kenya found that tension within families was reported by 89.3% of caregivers. Concerns such as suicide attempts, domestic violence, and property theft were prevalent among caregivers (22).

The impact of addiction on caregivers extends beyond financial and social burdens to their mental well-being (24). Caregivers experience higher emotional burden(25). In a study conducted in Turkey, almost all caregivers reported negative mental effects from dealing with substance use challenges (14).

In a cross sectional study conducted in Bosnia and Herzegovina, with a test group comprising caregivers of drug addicts (opioid addicts) who were preparing for inclusion in the community, and a control group comprising caregivers of addicts already in the therapeutic community, caregivers of drug addicts preparing for inclusion in the community showed greater psychological distress compared to those already in therapeutic communities(26). In Nigeria, over half of caregivers of individuals with SUD experienced psychological distress according to a descriptive survey conducted in neuropsychiatric outpatient settings (27).

2.3 Associated factors

2.3.1 Socio-demographic factors

Socio-demographic variables are one of the factors that influence the severity of caregivers burden(28).

In hospital based study conducted in India female caregivers experience severe burden compared to male caregivers, accounting for 80.8% and 73%, respectively³⁰. The same study has shown that families with lower monthly income and higher monthly expenses on substances experienced severe objective burden. A higher percentage of severe objective burden (53.8%) was observed in families with a monthly income ranging from Rs. 20,000 to Rs. 40,000. Additionally, 86.6% of severe burden was identified in families of patients who had monthly expenditure on substances of Rs. 15,000 and above(3).

According to a cross sectional study conducted at the Department of Psychiatry, Sylhet MAG Osmani Medical College, Sylhet, and a private psychiatric and drug rehabilitation center in Sylhet the occupation of patients was related to caregiver burden, with unemployed caregivers experiencing more burden. The study also revealed that the relationship between the caregiver and the patient was found to be significant, with spouses experiencing higher burden compared to other relationships. The age of caregivers was another significant factor, with younger caregivers experiencing higher burden(10).

2.3.2 Clinical factors

The impact of previous treatment, number, and type of substance on the level of burden has been explored in different studies.

According to a tertiary care hospital-based cross-sectional study conducted in India involving patients with SUD recruited from psychiatric outpatient and emergency departments, Caregivers of patients with multiple substance dependence reported significantly higher levels of severe objective burden compared to those with single substance dependence (94.1% vs. 5.8%).The study also found that alcohol and opium dependence were connected to the most significant burden, while tobacco dependence was associated with the lowest burden. The study also

revealed that higher proportion of severe objective burden (5.8%) and severe subjective burden (6.3%) was seen in families of opioid-dependent patients than alcohol dependence.

Additionally it was found that a higher proportion of severe objective burden (84.6%) and severe subjective burden (81.1%) were observed in families of patients who had previously received treatment for substance dependence(3)

Similarly, a study conducted in Portugal using a cross-sectional design found that caregiver burden was significantly correlated with the number of detoxification treatments(29).. Also it is indicated that family burden was higher in patients with comorbidity and poor compliance(13). A cross-sectional study conducted in Iran on first-degree relatives of patients with severe mental disorders and SUD revealed that poor compliance with treatment was associated with increased burden on caregivers(13).

Furthermore, the duration of substance dependence is associated with the severity of family burden(30). The duration of substance use was a crucial factor examined. In a cross sectional study conducted in Sylhet. The study revealed that significant correlation between the duration of substance use and caregiver burden. Patients who had used substances for a longer duration experienced higher caregiver burden(10) .

In conclusion, various Studies highlight the profound impact of substance use disorders on families encompassing emotional, financial, and social challenges and different factors play a crucial role in determining the extent of burden experienced. Recognizing the extent of burden and associated factors is essential for developing interventions and support systems to assist caregivers and promoting overall well-being within affected households(10).

CONCEPTUAL FRAMEWORK

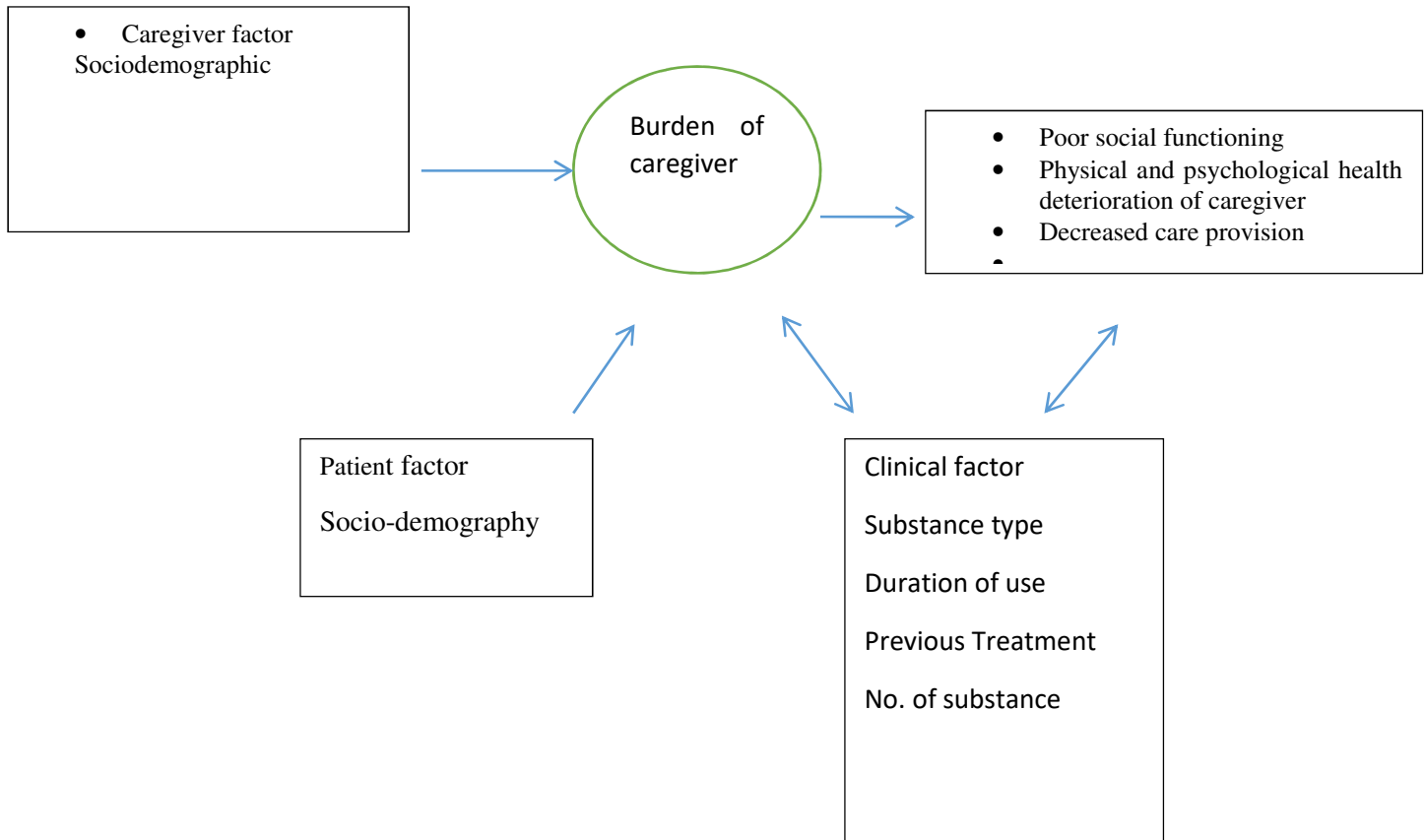


Figure 1 conceptual frame work (5)

3. OBJECTIVES

3.1 General Objective:

- To investigate caregivers burden among patients with SUD and associated factors at SPHMMC Addis Ababa, Ethiopia

3.2 Specific objective

- To determine caregiver burden among patients with SUD at SPHMMC. Addis Ababa, Ethiopia
- To identify associated factors of increased caregiver burden among patients with SUD at SPHMMC. Addis Ababa, Ethiopia

4. METHODOLOGY

4.1 Study setting:

Study area and period:

The study was conducted at SPHMMC, one of the largest government hospitals located in Addis Ababa, the capital city of Ethiopia. The college has more than 2800 clinical, academic, administrative, and supporting staffs that provide medical specialty service to patients who are referred from all over the country. Built in 1969, the hospital serves about 200,000 patients annually on average, with a catchment population of more than 5 million. The hospital has more than 700 beds dedicated to inpatient service. On top of this, this referral hospital is an academic center for both undergraduate and postgraduate health science students.

Currently, the Psychiatry Department of the hospital provides inpatient and outpatient services. It has 27 beds dedicated to inpatient service that encompasses the acute ward, recovery ward, and substance ward. The outpatient unit is subdivided into regular, geriatric, substance, lithium, and pediatric out patients. The substance unit provides outpatient and inpatient treatment services and collaborates with a rehabilitation center located in Addis Ababa, which accommodate up to 13 individuals. The outpatient program serves to around 360 patients over a six-month period, while the inpatient facility has a capacity of nine beds. Together, the outpatient department delivers a range of psychiatric care to more than 18,000 patients with psychiatric problems having varying follow-up intervals. The service is delivered by ten psychiatrists, a neuro psychopharmacologist, thirty-two specializing residents, four psychologists, and eleven trained nurses stationed at each dedicated office (31)

The **study period** was September to December 2024 G.C.

4.2 Study Design:

An institution based cross-sectional quantitative study was conducted.

4.3 Source population:

The source population for this study was all caregivers of patients attending psychiatry adult outpatient department and substance unit at SPHMMC, Addis Ababa, Ethiopia

4.4 Study population:

All caregivers who fulfill the inclusion criteria

4.5 Eligibility criteria

4.5.1 Inclusion criteria

- Caregivers of patients with SUD
- The caregivers aged >18 years

4.5.2 Exclusion criteria

- Those who did not give consent to the study

4.6 Sample size determination

The sample size for this study was calculated using a single population proportion formula.

n = the required sample size

P = the proportion family burden of patients with SUD = 50%

$Z_{\alpha/2}$ = the critical value at 95% confidence level = 1.96

E = precision (margin of error) = 5%

Since there is no similar previous study on caregiver burden among patients with SUD in Ethiopia, assuming a prevalence estimate (P-value) of 50%, a 95% confidence level ($Z = 1.96$) and a margin of error of 5% ($E = 0.05$), the calculation becomes:

$$n = \frac{(1.96)^2 * 0.50(1 - 0.50)}{0.05^2}$$

$$n = \frac{(1.96)^2 * 0.50(0.50)}{0.05^2}$$

$$n = 384$$

Hence, adding 10% non-response rate to the calculated sample size (384), the final sample size required for this study approximately becomes 422.

4.7 Sampling procedure and techniques

An average of 780 patients with SUD is estimated to be seen over the 6 months at psychiatric outpatient and substance unit. Systematic random sampling was used to determine the sampling interval. Hence $K=780/424=1.84$, to approach every second participants for interview, the first sample was chosen randomly via a lottery method. In cases where the second participant was not willing to interview, the next patient was approached.

4.8 Variables in the study

4.8.1 Dependent variable

➤ Caregiver burden

4.8.2 Independent variables

- Socio-demographic characteristic of both the patient with SUD and the caregiver. Such as sex, age, marital status, educational status, religion, residency, income, occupational status.
- Clinical factors. such as
 - Type of substance
 - Duration of substance use
 - Number of substance use
 - Previous treatment

4.9 Data collection tools and techniques

Data were collected using a structured questionnaire and face-to-face interviews were carried out to record data by means of Google Form. To assess burden of caregivers among patients with SUD, family burden interview schedule (FBIS) was used.

4.9.1 Family burden interview schedule (FBIS)

FBIS was used in the study, which measures both objective and subjective aspects of burden. The FBIS has six subdomains for objective burden and a general question for subjective burden. Each item has three response categories, and the total scores range from 0 to 48 for objective burden, with higher scores indicating a higher burden of care. The FBIS has been validated in different parts of the world, including Germany, Hong Kong, and Nigeria, with high levels of reliability. In Nigeria, the reliability was 0.94 with additional test–retest reliability of 0.83 for the

total objective scale score. the tool was also used in Ethiopian study with a Cronbach's alpha of 0.939(28) .

4.9.2 Medical record review

The medical records of participants were reviewed to obtain relevant clinical information, including the diagnosis of the illness, comorbid psychiatric illness and medical illness.

4.9.3 Data Collection Procedure

Two professional healthcare workers were recruited and trained on data collection procedures. For data collectors and supervisors, relevant one-day training was given by the investigator to make them familiar with the data collection tool and the procedures of the study. Data were collected after obtaining informed written consent from the study participants by interviewers.

4.10 Operational definition

Family; means people with strong economic social and psychological commitment regardless of relationship they have it also includes people joined by adoption friendship and marriage(22)

Caregiver: A family member/relative/any person who has most frequent contact with the patient, provides unpaid support to the patient financially, socially, psychologically, and physically, and has mostly been a collateral in the patient's treatment(28) .

Caregiver burden; any negative or unwanted consequence to the caregivers caused by providing care for patients with SUD as measured by the scale of FBIS. The FBIS has three response categories for each item: 0 (no burden), 1 (moderate burden), and 2 (severe burden). The total scores for objective burden range from 0 to 48, with higher scores indicating a greater burden of care. The FBIS has cut-off points for different levels of burden: 0 for no burden, 1-16 for mild burden, 17-32 for moderate burden, and 33-48 for severe burden. To assess subjective burden, there is one general question that asks how much the caregiver has suffered due to the patient's illness, which is scored as severely (2), little (1), or not at all (0)(3) .

Substance use disorder; is a diagnosis provided to the patient by the treating physician

Care giving the provision of physical, emotional, and practical support to an individual with SUD This may include tasks such as monitoring their substance use, providing transportation to treatment programs or appointments, helping them access resources for recovery, offering

emotional support and encouragement, and assisting with daily activities that may be impacted by their substance use.

4.10 Data quality management

The questionnaire used to collect data was prepared by the principal investigator in English version and translated into Amharic version and afan Oromo and back to English version. The FBIS tool contains both closed and an open-ended question specifically designed for the study was adopted from previous similar studies. The data collection tool was translated from English to Amharic and Afan Oromo languages by language experts and then back to English by another language expert to ensure consistency. Brief training for the data collectors (two psychiatry nurses) about the process of data collection was given before the process of data collection. Close supervision was preserved during data collection and questionnaires were double-checked daily for consistency and completeness by data collectors and the principal investigator. Data was collected after obtaining informed consent from the study participants by interviewers. Close supervision was preserved during data collection.

4.11 Methods of data analysis

Data were entered, coded, and cleaned using Google Form and statistical analysis was performed using SPSS version 26. Frequency and cross-tabulation were used to check for missed value and variables. The demographic and clinical characteristics were computed using descriptive statistics such as mean $\pm$ standard deviation and median + interquartile range for continuous variables while percentage and frequencies for categorical ones. Simple and multivariate linear regression was conducted to identify independent predictors of the outcome variable – Caregivers burden of patients with SUD. Assumptions like presence of normal distributions, lack of multi-collinearity among explanatory variables, presence of linearity relationship, independence and homoscedasticity of the errors were checked. The p values of < 0.05 were declared statistically significant. Finally, the study finding was presented using texts, diagrams, tables, and figures. .

4.12 Ethical considerations

Ethical clearance was obtained from the institutional review board of SPHMMC. After official permission from the college was obtained, data collection was started. Before interviewing clients, the purpose of the study was explained in plain language until it was well grasped and

informed written consent was obtained. During data collection, the study participants were informed that the information collected would be kept anonymous, confidential, and that the data collected would be utilized only for this study. Confidentiality of the information collected was maintained by omitting participants' names from the questionnaire.

Finally If the caregiver is found to have suicidal plan or attempt or domestic violence during interview, it was meant to urgently communicate with the treating physician for immediate interventions.

4.13 Dissemination of the study findings

The finding of the study will be submitted to the department of psychiatry and it will be presented. The outcome of this study will be presented to higher officials of the study hospital. It will also be disseminated to other concerned stakeholders. Additionally, as the results are expected to contribute to the health policymakers. Finally, the manuscript will be submitted to a reputable peer-reviewed journal for possible publication.

5. RESULTS

Response rate

A total of 387 participants were recruited for this study, all of whom met the inclusion criteria, resulting in a response rate of 91.7%.

1. Patient Sociodemographic and clinical characteristics

In our study, the majority (91%) of patients with SUD were male, while only 9% were female. The highest number of patients with SUD (44.2%) belonged to the age group of 19-24 years.

Our study revealed that most of the patients with SUD, 270 (69.8%), were single, followed by 81 (20.9%) who were married. Among them, 233 (60.2%) identified as Orthodox in religion, while 120 (31%) were Muslims.

In terms of education, 208 (53.7%) of the study participants had completed secondary education, while 112 (28.9%) had attended college or obtained a higher degree. Despite a significant number of participants having secondary education or above, 230 (59.4%) were unemployed, and 68 (17.6%) were government employees.

The majority of participants, 299 (77.3%), had no previous admissions. Among the 387 participants, 164 (42.4%) had a duration of illness ranging from two to five years, while 92 (23.8%) had a duration of illness between five and ten years.

Most participants, 159 (41.1%), reported using three types of substances. When asked about substance types, 148 (38.2%) indicated that they used three types of substances, with alcohol being the leading substance at 35 (9%), followed by khat at 12 (3.1%).

Additionally, most participants had no comorbid psychiatric illnesses, with 277 (71.6%) reporting no such conditions. In contrast, 110 (28.4%) had comorbid psychiatric illnesses, and only 30 (7.8%) had comorbid medical conditions. The details of the descriptive characteristics are presented in Table 2.

Table. 2 Socio-demographic and clinical characteristics of patient

Variables		Outcome	
		Frequency (n)	Percentage (%)
Age	19-24 years	171	44.2
	25-34 years	163	42.1
	35-49 years	53	13.7
Sex	Male	352	91.0
	Female	35	90
Place of residency	Urban	365	94.3
	non-urban	22	5.7
Marital Status	Single	270	69.8
	Married	81	20.9
	others	36	9.3
Religion	Orthodox Christian	233	60.2
	Muslim	120	31.0
	Protestant	33	8.5
	Catholic		
	Other	1	0.3
Educational status	Not able to read and write	2	5
	Primary education/1-8 th grade/	65	16.8

	Secondary education/9-12 th grade/	208	53.7
	College and above	112	28.9
Occupation	Unemployed	230	59.4
	Government employee	68	17.6
	Private employee	84	21.7
	Other	5	1.3
Average monthly income(in Birr)	0	221	57.1
	1-5000	57	14.7
	5001-10000	70	18.1
	10001-15000	30	7.8
	15001-20000	5	1.3
	>20000	4	1.0
Number of substance	1	64	16.5
	2	124	32.0
	3	159	41.1
	4	38	9.8
	>4	2	.6
Type of substance use	2 substance	136	35.1
	3 substance	148	38.2
	4 substance	34	8.8
	alcohol	35	9.0

	khat	12	3.1
	opioid	11	2.8
	others	11	2.8
Types of psychiatric illness	psychosis	54	49.0
	depression	34	30.6
	bipolar	11	10.0
	others	11	10.0
comorbid medical condition	yes	30	7.8
	No	357	92.2
Types of medical condition	Diabetes	6	20.0
	Hypertension	6	20.0
	Epilepsy	7	23.3
	Others	11	36.7
Number of previous admission	No previous admission	299	77.3
	Once	66	17.0
	Twice	18	4.7
	More than twice	4	1.0

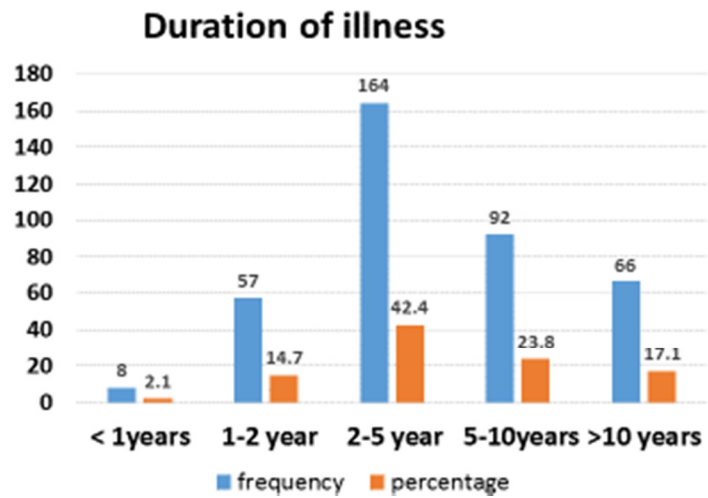


FIG 2. Duration of illness

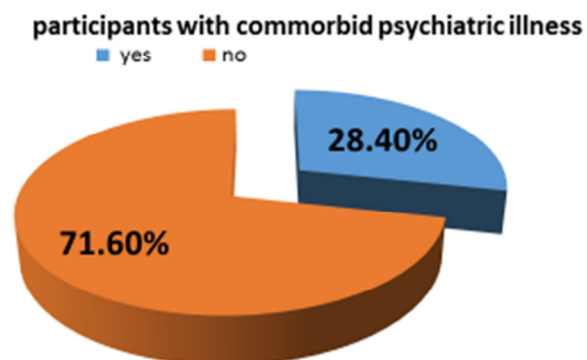


FIG.3 patients with comorbid psychiatric illness

3. Caregivers socio-demographic characteristics

In these study for participants, 219 (56.6%) of caregivers were male, while 168 (43.4%) were female caregivers. The median age of caregivers was 44. The majority of caregivers had an income range of five to ten thousand birr, with 181 (46.8%), while 37 (9.6%) of caregivers had no income.

Regarding their relationship to the participants, 147 (38%) of caregivers were siblings, and 146 (37.7%) were parents. Most caregivers, 187 (48.3%), spend two to six hours with the patients, while 107 (27.6%) spend six to twelve hours with them.

In terms of family support, 150 (38.8%) of participants had one other family member caregiving for them, and 144 (37.2%) had two other family members providing care. The majority of caregivers, 317 (81.9%), were not responsible for caregiving for another person in their family. Additionally, 334 (86.3%) had no comorbid medical illnesses; and 368 (95.1%) had no psychiatric comorbidities.

Table.3 Socio-demographic characteristics of caregivers

Variables		frequency	Percentile
Sex	Male	219	56.6
	Female	168	43.4
marital status	Single	83	21.4
	Married	274	70.8
	Divorced	9	2.3
	Widowed	21	5.4
Religion	Orthodox Christian	241	62.3
	Muslim	117	30.2
	Protestant	28	7.2

	Other	1	.3
Education	Not able to read and write	14	3.6
	Primary education/1-8th grade/	60	15.5
	Secondary education/9-12th grade/	181	46.8
	College and above	132	34.1
Occupation	Unemployed	57	14.7
	Government employee	141	36.4
	Private employee	165	42.6
	Others	19	4.9
	NR	5	1.3
Average monthly income(in Birr)	0	37	9.6
	1-5000	72	18.6
	5001-10000	181	46.8
	10001-15000	71	18.3
	15001-20000	11	2.8
	>20001	15	3.9
Kinship with the	sibling	147	38.0

patient	spouse	26	6.7
	child	18	4.7
	other	50	12.9
For how long did you provide care to the patient	less than 1 year	17	4.4
	1 to 2 years	98	25.3
	2 to 5 years	167	43.2
	5 to 10 years	73	18.
	more than 10 years	32	8.3
How much Time do you spend in caregiving per day	less than 2 hours	65	16.8
	2 to 6 hours	187	48.3
	6 to 12 hours	107	27.6
	more than 12 hours	28	7.2
Number of other family members caregiving for the patient	0	32	8.3
	1	150	38.8
	2	144	37.2
	3	46	11.9
	4	8	2.1
	5	3	.8
	6	3	.8
	7	1	.3

Are you responsible for caregiving for another Patient in your family?	yes	70	18.1
	no	317	81.9
Have you ever used any type of substance in life	yes	51	13.2
	no	336	86.8
Have you used any type of substance in the last 12 months	yes	31	8.0
	no	356	92.0
Do you have any known (informed by any health professional) medical illness	yes	53	13.7
	no	334	86.3
Do you have any known (informed by any health professional) Mental illness	yes	19	4.9
	no	368	95.1

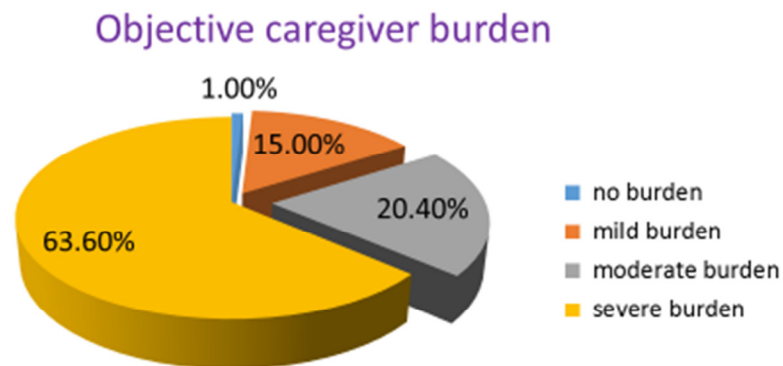
Table. 4 Socio-demographic characteristics of caregivers continued

Care giver age	Mean	41.93
	Median	44.00
	Minimum	19
	Maximum	70

4. Caregiver burden

As measured by the Family Burden Interview Schedule scale (FBIS), out of 387 caregivers, 246 (63.6%) had severe objective burden, 79 (20.4%) had moderate objective burden, and 58 (15.0%) had mild objective burden. In the subjective burden category, 300 (77.5%) had severe burden and 72(18.6%) had moderate burden.

Mean score in the “financial burden” category was 8.69 ± 3.913 . Mean score in category “disruption of routine activities” was 7.75 ± 2.913 , whereas in category “disruption of family leisure,” mean score was 5.10 ± 2.877 . Mean score in category “disruption of family interaction” was 7.40 ± 3.057 . The mean score was 2.53 ± 1.440 in the “physical health” category and was 1.70 ± 1.437 in the “mental health” category. The mean scores for each of the domains measured are illustrated in Table. 5 below.



34

FIG.4 objective Caregiver burden

subjective caregiver burden

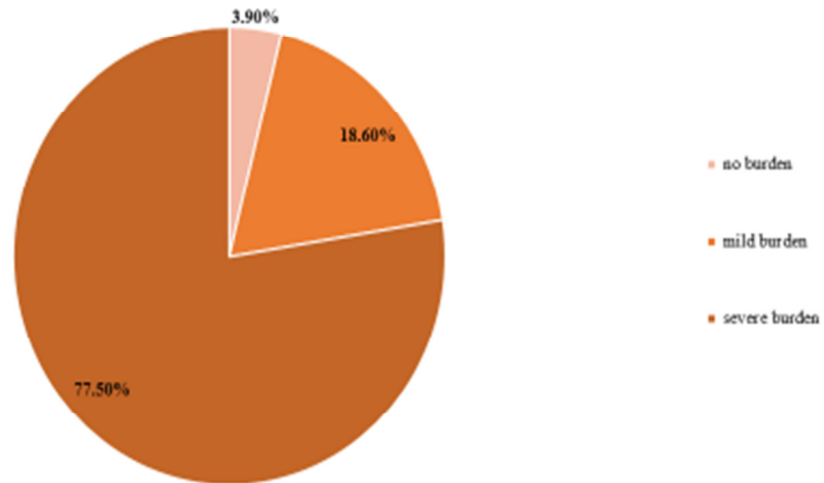


FIG. 5 subjective burden

Table .5 caregiver burden in subdomains

Objective burden subscale range	Sub domains	mean	Std. Deviation
	Financial burden(0-12)	8.69	3.913
	Disruption of routine activities(0-10)	7.75	2.913
	Disruption of family leisure(0-8)	5.10	2.877
	Disruption of family interaction (0-10)	7.40	3.057
	Physical health(0-4)	2.53	1.440
	Mental health (0-4)	1.70	1.437
	Total(0-48)		

Predictors of burden among caregiver

Simple and multivariate linear regressions were used to identify factors associated with the outcome variable – Caregivers burden of patients with SUD. In the final model, among the many variables from simple linear regression (Table 6), included in the multivariable linear regression analysis from patient related factors ,illness period less than 1 year($B=-0.726$, P value= 0.040),lack of previous admission($B= - 0.238$, p value= 0.018) and using one type of substance ($B=-0.547$, p value= 0.000) were negatively and significantly associated with burden of caregivers.

Moreover from caregiver related factors caregiver monthly income $>20,000$ birr ($B=-0.416$, p value= 0.000) and time spent with the patient < 2 hours ($B=-0.284$, p value= 0.009) were associated negatively with burden of caregiver as illustrated in Table 7.

Table. 6 Simple linear regression for burden among caregivers of patients with SUD

variables	R^2	Unstanda rdized coefficien t=B	95% CI	p-value
sex of the patient				
Male ^b	0.020			
female		-6.781	-11.519 to - 2.043	.005
Occupation of the patient				
Un employed ^b	0.013			
Government employee		-1.973	-5.686 to 1.740	.297
Self employed		-3.206	-6.636 to .223	.067
other		5.865	-6.296 to 18.026	.344

Illness period				
2 to 5 year ^b	0.100			
Less than 1 year		-26.619	-35.933to -17.305	.000*
1 to 2 year		-6.674	-10.629 to-2.719	.001*
5 to 10 year		.060	-3.290 to 3.411	.972
More than 10 years		-.335	-4.084 to 3.415	.861
Number of substance				
3 ^b	0.115			
1		-12.355	-16.132 to-8.578	.000*
2		-4.035	-7.091 to-.978	.010*
4		1.881	-2.726 to 6.488	.423
>4		8.223	-9.930 to 26.377	.374
Previous admission				
No ^b	0.050			
once		6.457	2.868 to 10.046	.000*
twice		7.775	1.370 to14.179	.017*
More than twice		14.191	.909 to 27.474	.036*
Comorbid psychiatric illness				
Yes ^b	0.010			
no		-2.991	-6.020 to .037	.053
sex of caregiver				
Male ^b	0.000			

female		.450	-2.319 to 3.219	.750
Marital status				
Married ^b	0.026			
single		-.007	-3.355 to 3.342	.997
divorced		-10.388	-19.442 to -1.334	.025*
widowed		6.564	.513 to 12.616	.034*
Caregivers occupation				
Self-employed ^b	0.003			
unemployed		1.504	-2.656 to 5.663	.478
Government employee		1.060	-2.045 to 4.165	.502
other		2.205	-4.353 to 8.764	.509
Caregiver monthly income				
10001-15000birr ^b	0.080			
<5000birr		.071	-4.718 to 4.861	.977
5000birr-10000birr		2.899	-.928 to 6.726	.137
15001birr-20000birr		.000	-4.259 to 4.258	1.000
>20000birr		-6.451	-10.352 to 2.551	.001*
kinship				
Sibling ^b	0.010			
parent		.223	-2.930 to 3.376	.890
spouse		.116	-5.624 to 5.857	.968

child		.685	-6.053 to 7.423	.842
other		-3.817	-8.235 to .600	.090
Duration of caregiving				
2 to 5 years ^b	0.095			
<1year		-18.379	-24.944 to -11.814	.000*
1 to 2 years		-5.215	-8.496 to -1.934	.002*
5 to 10 years		.582	-3.036 to 4.200	.752
>10 years		.513	-4.464 to 5.489	.840
Time spent in caregiving per day				
2 to 6 hours ^b	0.055			
<2 hours		-8.045	-11.834 to -4.255	.000*
6 to 12 hours		1.384	-1.806 to 4.574	.394
>12 hours		-1.071	-6.404 to 4.262	.693
Other member supporting				
2-3 ^b	0.020			
1		1.913	-1.015 to 4.840	.200
4-5		-7.738	-16.049 to .573	.068
>5		-7.647	-21.188 to 5.893	.267
Other ill members				
Yes ^b	0.005			
no		-2.411	-5.969 to 1.147	.184

b reference group

Table 7. Multiple linear regression for burden among caregivers of patients with SUD

variables	unstandardized coefficients =B	95 % CI	P value
Illness duration			
2-5 years ^b			
<1 year	-.726	-1.421 to -.032	.040*
1 to 2 years	-.082	-.338 to .174	.528
5 to 10 years	-.124	-.345 to .098	.272
>10 years	-.124	-.406 to .157	.386
Previous admission			
Once ^b			
no	-.238	-.434 to -.041	.018*
twice	-.028	-.400 to .345	.884
>twice	.045	-.674 to .764	.903
Number of substance			

3 ^b			
1	-.547	-.767 to -.328	.000*
2	-.172	-.345 to .002	.053
4	.205	-.043 to .454	.105
>4	.514	-.460 to 1.488	.300
Marital status of caregivers			
Married ^b			
single	-.115	-.305 to .075	.234
divorced	-.275	-.753 to .204	.260
widowed	.151	-.167 to .469	.351
Monthly Caregivers income			
10001-15000birr ^b			
<5000birr	.123	-.153 to .399	.382
5000-10000birr	-.060	-.271 to .151	.574
15001-20000birr	-.112	-.343 to .119	.340
>20000birr	-.416	-.622 to -.209	.000*
Duration of caregiving in			

1 to 2 years ^b			
<1 year	-.149	-.639 to .341	.549
2 to 5	.132	-.084 to .348	.232
5 to 10	.181	-.106 to .467	.216
>10 years	.154	-.234 to .541	.435
Time spent in caregiving			
2 to 6 hours ^b			
<2 hours	-.284	-.497 to -.071	.009*
6 to 12 hours	-.044	-.215 to .128	.614
>12 hours	-.066	-.355 to .222	.652

b - Reference group

6 DISCUSSIONS

This study was carried out to investigate caregiver burden among patients with SUD and associated factors at SPHMMC Addis Ababa, Ethiopia. Thus, the study showed that SUD put significant effect on caregivers of patients with SUD. The factors that were significantly associated with caregiver burden included number of substance, history of previous admission, duration of illness, caregiver's monthly income and time spent in caregiving per day.

As measured by the FBIS more than half (63.9%) of caregivers of patients with SUD had severe objective burden. while 79 (20.4%) reported moderate objective burden, and 58 (15.0%) had mild objective burden. In contrast, other studies indicated a higher prevalence of moderate burden compared to severe burden. For instance, a cross-sectional study conducted at a teaching hospital in North India found that 65.3% of caregivers experienced moderate objective burden, whereas 34.7% faced severe objective burden. This could be due to variations in cultural backgrounds. In cultures with strong familial ties, when one member is affected, the entire family feels the impact (3) .

In terms of subjective burden, 300 (77.5%) of caregivers reported severe subjective burden, and 72 (18.6%) indicated moderate subjective burden, which aligns with findings from another study in North India where 74% reported severe subjective burden and only 26% reported moderate subjective burden.(3). Our findings revealed 63.6% of caregivers perceived "objective burden" as severe which was less than subjective burden (77.5%). This difference might be due to the structure of questionnaire, where subjective burden was assessed by only one question and that was related to emotional feeling, whereas objective burden was measured by more precise method, i.e., adding scores from multiple items (24 items).

The mean score for the "financial burden" category was 8.69 ± 3.913 , while the "disruption of routine activities" category had a mean score of 7.75 ± 2.913 . In the "disruption of family leisure" category, the mean score was 5.10 ± 2.877 , and for "disruption of family interaction," the mean score was 7.40 ± 3.057 . The mean score for the "physical health" category was 2.53 ± 1.440 , and in the "mental health" category, it was 1.70 ± 1.437 . These findings differ from other studies due to variations in the socio-demographic characteristics of both patients and caregivers, as well as differences in the clinical profiles of the patients involved. {3}

The median age of caregivers in this study was 44 years, which aligns with findings from a study conducted in India where the maximum proportion of caregivers (34%) fell within the age range of 42–54 years, with a mean age of 45.85 ± 12.92 years. Among the caregivers in our study, 219 (56.6%) were male, while 168 (43.4%) were female. These contrasts with other research where a majority (68%) of caregivers were female and only 32% were male (3), possibly because male caregivers accompanied most patients.

In terms of the caregivers' relationship to the patients, 147 (38%) were siblings, and 146 (37.7%) were parents. Another study conducted in India indicated that the largest group of caregivers consisted of mothers, accounting for 53 (35.3%), followed by wives at 49 (32.7%), and fathers at 38 (25.3%). (3)

Our study found that caregivers of patients with SUD who have been ill for less than one year ($B = -0.726$, $p = 0.040$) experience significantly lower levels of caregiver burden compared to those whose patients have been ill for 2 to 5 years. The negative coefficient of -0.726 indicates that shorter illness duration is associated with reduced caregiver burden. Similarly, a study conducted in Turkey suggests that as the duration of the illness increases, the burden on families also escalates, indicating a growing strain over time. {14} This result could imply that caregivers may experience less burden when caring for patients who are at an earlier stage in their illness, possibly due to factors such as fewer complications.

This study also found that caregivers of patients who use only one type of substance experience significantly lower levels of burden compared to those caring for patients who use three types of substances. Similarly, the finding is in accordance with a cross-sectional study conducted at a teaching hospital in North India, which revealed that caregivers of patients with dependencies on more than one class of substances reported a significantly higher level of objective burden, with 94.1% indicating severe burden compared to just 5.8% of those caring for patients with a single substance dependence.{3} This suggests that the complexity associated with managing multiple substance use issues leads to increased caregiver burden.

In addition, we also found that caregivers of participants with no prior admissions reported lower levels of caregiver burden compared to those whose patients had at least one previous admission. This is consistent with a study conducted in North India, which found that families of patients with a history of treatment for substance dependence reported a notably higher incidence of

severe objective burden (84.6%) and severe subjective burden (81.1%).{3}. This finding could imply that patients without prior admissions may present fewer complications or challenges, leading to a more manageable caregiving situation for their caregivers.

Another important predictor of caregiver burden in our study was the caregivers' monthly income. We found that caregivers of individuals with substance use disorders who earn more than 20,000 Birr reported significantly lower levels of caregiver burden compared to those earning between 10001 and 15,000 Birr. The negative coefficient indicates a quantifiable decrease in burden with increased income, suggesting that higher income may provide caregivers with better resources, support systems, or coping mechanisms that alleviate their burden.

Research from Kenya has demonstrated that caregivers' income levels significantly influence the economic burden they face. {22} Another study conducted in India indicated that families with low monthly incomes experienced a severe objective burden.{3} Similarly a hospital-based study conducted in India revealed that families with lower monthly incomes experienced severe objective burdens, with 53.8% of those earning between Rs. 20,000 and Rs. 40,000 reporting significant difficulties.(32)

Moreover, there was a significant association between caregiver burden and the duration of contact hours spent caring for the participants each day. Caregivers who spent less than 2 hours with the participants experienced a lower level of caregiver burden compared to those who spent between 2 to 6 hours with the participants. This aligns with findings from a cross-sectional study conducted in Turkey, which revealed that longer caregiving durations are predictive of greater caregiver burden.{33}This could imply that spending more time with the patient may lead to greater emotional and psychological strain on the caregiver

In this study, caregiver burden was not significantly associated with factors such as the age, education, occupation, or marital status of the patients. Additionally, there was no correlation found between the family burden and the caregivers' age, education, or marital status. These results are consistent with those observed in other studies.(32)

7 STRENGTH AND LIMITATION

7.1 Strength

One of the primary strengths of this study is the high response rate of 91.7%, which enhances the reliability, and representativeness of the findings. The use of validated and structured questionnaires further adds to the study's robustness, ensuring that data collected is both reliable and valid. The proper follow-up during data collection also stands out as strength, ensuring the accuracy and completeness of the data gathered. The follow-up minimizes the risk of missing or incomplete data contributing to the overall reliability of the study. The study also incorporated several caregiver and patient factors to reduce the confounding effect and to reflect an actual representation of the caregiving burden in the area.

7.2 Limitation

Our study design was cross-sectional that does not show cause and effect relation. All information was obtained from a single-family caregiver and assessment of subjective burden was global, and several mediators such as coping, appraisal, expressed emotions, and social support were not assessed. Structured instruments were not employed to ascertain caregivers' psychological status.

8. CONCLUSION AND RECOMMENDATION

8.1 conclusion

Based on the findings of our study, it can be concluded that substance dependence places a significant burden on caregivers, with over half (63.9%) of caregivers for patients with SUD experiencing severe objective burden. Additionally, 77.5% reported severe subjective burden.

The findings reveal that caregiver burden is significantly affected by several factors, including the duration of the patient's substance use disorder, the time spent caring for the patient, the number of substances involved, caregivers' income levels, and the history of previous admissions for the patient.

These results may indicate early intervention and treatment can alleviate some of the emotional and psychological strain experienced by caregivers. The family unit plays a multifaceted role in substance dependence, highlighting the critical need for enhanced communication between

families and healthcare providers, as well as the active participation of families in the treatment process. Moreover, these results may indicate potential directions for future research in this field

8.2 Recommendations

For health care workers

Caregivers of SUD burdened significantly during caregiving. Encourage healthcare providers to monitor caregiver well-being regularly. It is vital to detect the burden, which needs to be reduced. Caregiver's emotional, social, financial, psychological and physical health should be considered in every step of therapeutic process of patient.

For future researchers

Conduct longitudinal studies to further explore how caregiver burden evolves over time concerning illness duration, treatment outcomes, and caregiver characteristics. Understanding these dynamics can inform future interventions and support systems.

Additionally, future research, should focus on the exact effects of substances and other mediators such as family type and coping on the caregiver burden

For stakeholders

Create and advocate for early intervention initiatives targeted at individuals with SUD. Additionally, set up support groups and counseling services tailored for caregivers.

By addressing these recommendations, stakeholders can better support caregivers of individuals with SUD, ultimately improving the quality of care provided to patients while reducing the burden on their caregivers.

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- 33 Pinar_Boluktas_Caregiving_burden Perspec t_Psychiatric_Care_2021_

ANNEX I ENGLISH VERSION QUESTIONER

Information Sheet

Hello sir/madam, my name is _____. I am conducting a research by the title family burden and associated factors among patient with substance use disorder at Saint Paul hospital millennium medical college for partial fulfillment of a specialty in psychiatry.

The aim of this study is to assess the magnitude of family burden and associated factors among patients with substance use disorder. After this study is conducted, I hope that family caregivers will be given some attention.

The information you give will not be given for a third person and you are not asked to give your name and address to keep your secrets. There are no risks and incentives related with participating in this research. You have the right for partial and total nonparticipation though out the questionnaire.

Voluntary to participate YES

☐

NO

☐

You can contact us by the following address if you have any problems after wards.

Hiwot Hido; 0916599227, hiwothido@gmail.com

THANK YOU!

Consent Form

In signing this document, I am giving my consent to participate in the study entitled “family burden and associated factors among patient with substance use disorder at Saint Paul hospital millennium medical college”

I have been informed about the purpose of this research and I understand that I am selected to participate in this study randomly. I have right to refuse or interrupt the

interview at any time and my name will not be mentioned on the questioners I also understand that there are no risks or incentives for participating on the study. My participation in this study is voluntarily. Signature of the participant-----
 -----Date-----

THANK YOU!

PART-I socio-demographic characteristics of the patient

S. No.	Socio-demographic characters of the patient	
1	Age	_____
2	Sex	1- Male 2- Female
3	Place of residency	1. Urban 2. Non-urban
4	Marital status	1- Single 3- Married 2- Divorced 4- Widowed
5	Religion	1. Orthodox Christian 2. Muslim 3. Protestant 4. Catholic 5. Other _____
6	Educational status	1- Not able to read and write 2- Primary education/1-8 th grade/ 3- Secondary education/9-12 th grade/ 4- College and above
7	occupation	1) Unemployed 2-Government employee 3) Private employee 4- Others
8	Average monthly income	_____

9	Duration of illness	_____
10	type of substances	a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.) No Yes b. Alcoholic beverages (beer, wine, spirits, etc.) No Yes c. Cannabis (marijuana, pot, grass, hash, etc.) No Yes d. Cocaine (coke, crack, etc.) No Yes e. Amphetamine-type stimulants (speed, meth, ecstasy, etc.) No Yes i. Opioids (heroin, morphine, methadone, buprenorphine, codeine, etc.) No Yes j. Other – specify:
11	Number of substances	-----
12	Number of previous admission	1. None 2. Once 3. Twice 4. More than twice
13	Comorbid psychiatric diagnosis	1. Yes 2.No If yes, specify:-----
14	Comorbid medical condition	1. Yes 2.No If Yes, specify:-----

PART-II socio-demographic characteristics of the caregiver

S. No.	Socio-demographic characters of the caregiver		
1	Age	_____	
2	Sex	1- Male 2- Female	
3	Marital status	1- Single 2. Married 3. In relationship 4- Divorced 5- Widowed	
4	Religion	1. Orthodox Christian 2. Muslim 3. Protestant 4. Catholic	

		5. Other _____
5	Educational status	1- Not able to read and write 3. Secondary education /9-12th grade/ 2- Primary education /1-8 th grade/ 4. College and above
6	Occupation	1) Unemployed 2-Government employee 3) Private employee 4- Others
7	Average monthly income	1. _____
8	Kinship with the patient	1- parent 3- spouse 2- sibling 4- child 5- Other
9	For how long did you provide care to the patient	_____
10	How much Time do you spend in caregiving per day	_____
11	Number of other family members caregiving for the patient	_____
12	Are you responsible for caregiving for another patient in your family?	Yes_____ No_____
13	Have you ever used any type of substance in life	Yes_____ No_____
14	Have you used any type of substance in the last 12 months	Yes_____ No_____

15	Do you have any known (informed by any health professional) medical illness	Yes _____ No _____
16	Do you have any known (informed by any health professional) Mental illness	Yes _____ No _____

PART III Family Burden Interview Schedule (FBIS)

We are trying to assess the various difficulties felt by the family of a psychiatric patient, and will ask you a few questions about these. Please do not hesitate to express your true feelings.

A. Financial burden overall		No Burden(0)	Moderate Burden(1)	Severe burden(2)
1	Loss of patient's income: (Has he lost his job? Stopped doing the work, which he was doing before? To what extent does it affect the family income?)			
2	Loss of income of any other member of the family due to patient's illness: (Has anybody stopped working in order to stay at home, lost pay, lost a job? To what extent are the family finances affected?)			
3	Expenditure incurred due to patient's illness and treatment: (Has he spent or lost money irrationally due to his illness? How much has this affected the family finances? How much has been spent on treatment, medicines, transport, and accommodation away from home and so on? How much has been spent on other treatments such as temples and native healers? How has this affected family finances?)			

4	Expenditure incurred due to extra arrangements: (For instance, any other relative coming to stay with the patient; appointing a nurse or servant; boarding out children. How have these affected the family finances?)			
5	Loans taken or savings spent (How large a loan? How do they plan to pay it back? How much does it affect the family? Did they spend			

	from savings? Were these used up? How much is the family affected?)			
6	Any other planned activity put off because of the financial pressure of the patient's illness: (For instance, postponing a marriage, a journey or a religious rite. How far is the family affected?)			
B. Disruption of routine/family activities overall				
1	Patient not going to work, school, college, etc: How inconvenient is this for the family?			
2	Patient not helping in the household work: How much does this affect the family?			
3	Disruption of activities of other members of the family: (Has someone to spend time looking after the patient, thus abandoning another routine activity? How inconvenient is this?)			
4	Patient's behavior disrupting activities: (Patient insisting on someone being with him, not allowing that person to go out, etc? Patient becoming violent, breaking things, not sleeping and not allowing others to sleep? How much does it affect the family?)			
5	Neglect of the rest of the family due to patient's illness: (Is any other member missing school, meals, etc? How serious is this?)			
C. Disruption of family leisure overall				
1	Stopping of normal recreational activities: (Completely, partially, and not at all? How do the family members react?)			

2	Patient's illness using up another person's holiday and leisure time: (How is this person affected by it?)			
3	Patient's lack of attention to other members of the family, such as children, and its effect on them.			
4	Has any other leisure activity had to be abandoned owing to the patient's illness or incapacity e.g. a pleasure trip or family gathering? How do the family members feel about it?			
D. Disruption of family interaction overall				
1	Any ill effect on the general atmosphere in the house: (Has it become dull, quiet? Are there a lot of misunderstandings, etc? How do the family members view this?)			
2	Do other members get into arguments over this (for instance over how the patient should be treated, who should do the work, who is to blame, etc)? How are they affected?			
3	Have relatives and neighbors stopped visiting the family or reduced the frequency of their visits because of the patient's behavior or the stigma attached to his illness? How does the family feel about this?			
4	Has the family become secluded? Does it avoid mixing with others because of shame or fear of being misunderstood? How do the members feel about this?			
5	Has the patient's illness had any other effect on relationships within the family or between the family and neighbors or relatives e.g. separation of spouses, quarrels between two families, property feuds, police intervention, embarrassment for family members, etc? How does the family feel about it?			
E. Effect on physical health of others overall				
1	Have any other members of the family suffered physical ill health, injuries, etc due to the patient's behavior? How has this affected them?			

2	Has there been any other adverse effect on health (e.g. someone losing weight or an existing illness being exacerbated)? How severe is it?			
F. Effect on mental health of others overall				
I	Has any other family member sought help for psychological illness brought on by the patient's behavior (for instance by the patient's suicide bid, or his disobedience, or worry about his future)? How severe is this?			
2	Has any other member of the family lost sleep, become depressed or Weepy, expressed suicidal wishes, become excessively irritable, etc? How severely?			
S B	How much would you say you have suffered owing to the patient's illness?	Not at all	A little	Severely

ANNEX II AMHARIC VERSION QUESTIONER

የመረጃ ቅፅ

ጤና ይስጥልኝ! ስሜ_____ ነው። በአሁኑ ሰአት የሱስ ህመም በታካሚው ቤተሰቦች ላይ የሚያደርሰው ተፅዕኖ እና ተዛማጅ ምክንያቶች በሚል ርዕስ የመመረቂያ ፅሁፌ በመስራት ላይ እገኛለሁ። የዚህ ጥናት አላማ በቅዱስ ጳውሎስ ሆስፒታል ሜዲካል ኮሌጅ የሱስ ህመም በታካሚው ቤተሰቦች ላይ የሚያደርሰው ተፅዕኖ እና ተዛማጅ ምክንያቶች መገምገም ነው። ይህ ጥናት ከተከናወነ የ ህመማዊ አስታማሚዎች ትኩረት ያገኛሉ የሚለ ተስፋ አለን። እርስዎ የሚሰጡን ማንኛውም መረጃ ለሌላ ሶስተኛ ወገን ተላልፎ የማይሰጥ ሲሆን ስምና አድራሻ እንዲሰጡም አይጠየቁም።በዚህ ጥናት ላይ በመሳተፍ የሚያጋጥሞት ምንም አይነት ችግር እና ጥቅም የለም።በቃለ መጠይቁ በከፊልም ሆነ በሙሉ ያለመሳተፍ መብት እንዳለዎት እናረጋግጥሎታለን።ለሚገጥምዎ ችግር ከዚህ በታች ባሉት አድራሻ ማሳወቅ ይችላሉ።

ህይወት ሂደት+251-916 599227, hiwothido@gmail.com
አመሰግናለሁ!!

የስምምነት ውል

በዚህ የሱስ ህመም በታካሚው ቤተሰቦች ላይ የሚያደርሰው ተፅዕኖ እና ተዛማጅ ምክንያቶች በሚል ርዕስ በሚሰራው ጥናታዊ ፅሁፍ ላይ ስላተፍ የዚህን ጥናት አስፈላጊነት የተረዳው ሲሆን በዚህ ጥናት ላይ ለመሳተፍ በዘፈቀደ የተመረጥኩ መሆኑንና ተሳትፎዬ በፈቃደኝነት ላይ የተመሰረተ በመሆኑ በማንኛውም ጊዜ መጠይቁን መሙላት የማቆም(የማቋረጥ) መብት እንዳለኝ አውቃለሁ፡፡ስሜም በመጠይቁ ላይ አይጠቀስም፡፡ በዚህም መሰረት በዚህ ጥናታዊ ፅሁፍ ላይ በሙሉ ፍቃደኝነት መሳተፌን በፊርማዬ አረጋግጣለሁ፡፡

ፊርማ.....

ቀን..... መጠይቅ

ክፍል 1 የታማሚው የስነ ሕዝብ፣ የማሕበራዊ እና ኢኮኖሚያዊ መጠይቅ

1	እድሜ	_____
2	ጾታ	1. ወንድ 2- ሴት
3	አ ድራሻ	1.ከ ተማ 2. ከተማ ያልሆነ
4	የጋብቻ ሁኔታ	1.ያላገባ 2- ያገባ 3. የተፋታ 4- የትዳር አጋር በሞት የተለየው
5	ሐይማኖት	1. ኦርቶዶክስ ክርስቲያን 2. ሙስሊም 3. ፕሮቴስታንት 4.ካቶሊክ 5. ሌላ _____

6	የትምህርት ደረጃ	1. ማንበብና መጻፍ የማይችል 2. የመጀመሪያ ደረጃ/1-8 th ክፍል/ 3. ሁለተኛ ደረጃ/9-12 th ክፍል/ 4. ኮሌጅና ከዚያ በላይ
7	ስራ	1- ስራ የለውም 2. የመንግስት ስራ 3. የግል ስራ 4. ሌላ_____
8	አማካኝ የወር ገቢ	_____
9	የሕመሙ ቆይታ	_____
10	የሚጠቀሙት ዕፅ አይነት	1. የትምህርት ምርቶች (ሲጋራዎች፣ ትምህርት ማኽሽን ወዘተ) 2. የአልኮል መጠጦች (ቢራ፣ ወይን፣ ወዘተ) 3. ካናቢስ/ ማሪዋ 4. ኮኬይን 5. የአምፌታሚን ዓይነት አነቃቂዎች (ጫት፣ ኤክስታሲ፣ ወዘተ) 6. የሚተነፍሱ (ናይት-ረስ፣ ሙጫ፣ ቤንዚን፣ ቀለ፣ ማቅጠኛ፣ ወዘተ) 7. የእንቅልፍ ክኒኖች (ዲያዜፓም፣ አልፕራዛም፣ ሚዳዛም፣ ወዘተ) 8. ኦፒዮይድ (ሄሮይን፣ ሞርፊን፣ ሜታዶን፣ ቡፕረኖርፊን፣ ኮዴይን፣ ወዘተ)

11	የሚጠቀሙት ዕፅ ብዛት	-----
12	ከዚህ በፊት ተኝቶ የመታከም ቁጥር	1. የለም 2. አንድ 3. ሁለት ጊዜ 4. ከሁለት ጊዜ በላይ
13	ተጓዳኝ የአክሲምሮ ህመም	1 . የለም 2 አለ ,ካለ ይጠቀስ
14	ተጓዳኝ የጤና እክል	. 1 የለም 2 አለ ,ካለ ይጠቀስ

ክፍል 2 የአስታማሚው የስነ ሕዝብ፥ የማሕበራዊ እና ኢኮኖሚያዊ መጠይቅ

1	ዕድሜ	
2	ጾታ	ወንድ 2- ሴት
3	የጋብቻ ሁኔታ	1. ያላገባ 2. ያገባ 3. በጾታዊ ግንኙነት ውስጥ 4- የተፋታ 5- የትዳር አጋር በሞት የተለየው
4	ሐይማኖት	1. ኦርቶዶክስ ክርስቲያን 2. ሙስሊም 3. ፕሮቴስታንት 4. ካቶሊክ 5. ሌላ

4	የትምህርት ደረጃ	1. ማንበብና መጻፍ የማይችል 2. የመጀመሪያ ደረጃ/1-8th ክፍል/ 3. ሁለተኛ ደረጃ/9-12th ክፍል/ 4. ኮሌጅና ከዚያ በላይ
6	ስራ	1- ስራ የለውም 2. የመንግስት ስራ 3. የግል ስራ 4 ሌላ
7	አማካኝ የወር ገቢ	
8	ከታማሚው ጋ ያሉት ዝምድና	1. ወላጅ 2-የትዳርአጋር 3. እህት/ወንድም 4- ልጅ 5- ሌላ
9	ታማሚውን ማስታመም ከጀመሩ ምን ያህል ጊዜ ሆነው?	
10	በቀን ምን ያህል ሰአት ታማሚውን በማስታመም ያሳለፋሉ?	
11	ለታማሚው እንክብካቤ የሚያደርጉ ሌሎች የቤተሰብ አባላት ቁጥር	_____
12	ለላ የሚያስታምሙት የቤተሰብ አባል አለ የለም	አለ_____
		የለም_____

13	ዕዕ ተጠቅመው ያውቃሉ	አው___
14	በባለፈው 12 ወራት ዕዕ ተጠቅመው ያውቃሉ	አው___ አላውቅም
15	በሀኪም የተነገሮት የጤና እክል	አለ_____
		የለም_____
16	በሀኪም የተነገሮት የአእምሮ ህመም	አለ_____
		የለም_____

ህመሙ በታካሚው ቤተሰብ ላይ ስለሚያስድረው ጫና/ተፅዕኖ የሚዳስስ ቅጽ (Family Burden

Interview Schedule (FBIS)

ተ.ቁ	መለኪያ	ምንም ጫና አይፈጥርም	መካ ከለኛ ጫና ፈጥሯል	ከፍ ተኛ ጫና ፈጥሯል
ሀ	ኢኮኖሚያዊ ጫና			
1	ታካሚው የገቢ ምንጩን አጥቷል? (ለምሳሌ በህመሙ ምክንያት ስራውን አጥቷል? ስራ መስራትን አቁሞዋል?... ይህ በቤተሰቡ ገቢ ምንጭ ላይ ምን ያህል ተፅዕኖ/ጫና ፈጠረ?)	0		2
2	በታካሚው ህመም ምክንያት ሌላ የቤተሰብ አባል የገቢ ምንጩን (ለምሳሌ ከታካሚው ጋር ቤት ለመሆን ስራ ማቆም/ማቋረጥ፣ ክፍያ ማጣት፣ ስራ ማጣት....በዚህ	0		2

	ምክንያት የቤተሰቡ ገቢ/ኢኮኖሚ ምን ያክል ጫና ተፈጠረበት?)		
3	ለታካሚው ህመምና ከህክምና ጋር ተያይዞ የወጣ ወጪ(ለምሳሌ ታማሚው/ዋ በህመሙ ምክንያት ገንዘብ ያባክናል? ለህክምና፣ ለመድሀኒት፣ ለትራንስፖርት እንደሁም ከቤት ውጭ ለሚደረጉ ታካሚውን የሚመለከቱ ወጪዎች እና ለባህል/ሀይማኖታዊ ህክምና ምን ያክል አወጡ? በዚህ ምክንያት የቤተሰቡ ገቢ/ኢኮኖሚ ምን ያክል ጫና ተፈጠረበት?)	0	2
4	በታካሚው ምክንያት ለተጨማሪ ወጪዎች መጋለጥ፤ (ለምሳሌ ሌላ ቤተሰብ/ዘመድ ለማስታመም/ለመርዳት መጥቶ መቆየት፣ ነርስ/ሞግዚት መቅጠር፣....እነዚህ በቤተሰቡ ፍይናንስ/ገቢ ላይ ምን ያክል ተፅዕኖ ፈጠሩ?)	0	2
5	ከታካሚው ህመም ጋር በተያያዘ ምን ያህል ብድር ወስደዋል? ብድሩ እንዴት እንደሚከፍሉስ ያቀዱት ነገር አለ? በታካሚው ምክንያት ገንዘብ መቆጠብ አቁመዋል? እነዚህ ችግሮች ምን ያክል ቤተሰቡ ላይ ተፅዕኖ ፈጠሩ?	0	2
6	በታካሚው ህመም ምክንያት በተፈጠረ የገንዘብ እጥረት የታቀዱ ነገሮች በሰዓቱ ሳይከናወኑ የቀሩ አሉ? ለምሳሌ የጋብቻ ጊዜ መዘግየት፣ መንፈሳዊ /ሀይማኖታዊ ፕሮግራሞች መስተጓጎል/መሰረዝ? በነዚህ ምክንያት ቤተሰቡ ላይ ምን ያክል ጫና ተፈጠረ?	0	2
ለ	በቤተሰብ ጊዜና አጠቃላይ የዕለት እንቅስቃሴ/ስራ ላይ የሚፈጠር ጫና		
7	ታካሚው ከስራ፣ ከት/ቤት፣ ከኮሌጅ ወዘተ መቅረት! ይህ ቤተሰቡ ላይ ምን ያክል ችግር ፈጠረ?	0	2
8	ታካሚው በቤት ውስጥ ሥራ አያግዝም? ይህ በቤተሰቡ ላይ ምን ያክል ተፅዕኖ ፈጠረ?	0	2
9	በታካሚው ምክንያት የሌሎች ቤተሰብ አባላት የእለት እንቅስቃሴ መስተጓጎል፤ (ለምሳሌ ታካሚውን ለመጠበቅ ሌሎች መደበኛ ስራዎችን መተዉ? ቤተሰቡ በዚህ	0	2

	ምክንያት ያክል ተቸገረ?)		
10	የታካሚው ባህሪ አስቸጋሪ መሆን ፤(ለምሳሌ ታካሚው ሌላ ሰው ከእርሱ ጋር እንዲሆን አጥብቆ መፈለግ ወይም ትቶት እንዳይሄድ መከልከል ወዘተ፤ ታካሚው ለሌሎች አደገኛ መሆን ለምሳሌ፡ መሳደብ፤ መማታት፤ እቃ መስበር፤ ሌሎች እንዳይተኙ ማድረግ ወዘተ እነዚህ ችግሮች በቤተሰቡ ላይ ምን ያክል ችግር/ ጫና ፈጠሩ)	0	2
11	በታካሚው ህመም ምክንያት ለሌላ የቤተሰብ አባል ተኩረት አለመስጠት፤(ለምሳሌ፡ ሌላ የቤተሰብ አባል ከስራ ወይም ትምህርት ቤት መቅረት፤ ምግብ መብላትን መርሳት ወዘተ ይህ ችግር ክብደቱ ምን ያክል ነው?)	0	2
ሐ	አጠቃላይ የቤተሰብ ትርፍ ሰዓት ላይ የሚፈጠር ጫና		
12	ከዚህ በፊት ይደረጉ የነበሩ መዝናናት ሙሉ በሙሉ፤ በክፍልና ወይም በጭራሽ ማቆም የቤተሰቡ አባላት ለዚህ ሁኔታ ምን ምላሽ ሰጡ?	0	2
13	ታካሚው የሌላ ሰው የበዓላት ጊዜና ትርፍ ሰዓት እየተጠቀመ / እየተሻማ ነው፤ በዚህ ምክንያት ያ ሰው ምን ያክል ይጎዳል?	0	2
14	ታካሚው ለቤተሰቡ አባላት ለምሳሌ ለልጆች ትኩረት መስጠት አለመቻሉ ቤተሰቡን ምን ያክል ተፅዕኖ ፈጠረበት?	0	2
15	በታካሚው ህመም ምክንያት በትርፍ ጊዜ ታቅደው የነበሩ ፕሮግራሞች ለምሳሌ የመዝናኛ ጉዞ፤ ከቤተሰብ ጋር መሰባሰብ መስተጓጎል/መቅረት? በዚህ ጉዳይ የቤተሰቡ አባላት ምን ይሰማቸዋል?	0	2
መ	አጠቃላይ የቤተሰብ መስተጋብር/ግንኙነት ላይ የሚፈጠር ጫና		
16	በቤት ውስጥ የተፈጠረ አላስፈለገ መጥፎ ነገር አለ? ለምሳሌ ቤቱ አሰልፎ ሆነ ወይም ፀጥ አለ? ወይም ቤት ውስጥ አለመግባባቶች አሉን? የቤተሰብ አባላቱ ይህንን	0	2

	ተፅዕኖ እንዴት ያየታል?		
17	ሌሎች የቤተሰቡ አባላት ጭቅጭቅ ውስጥ ገብተው ያወቃሉ? (ለምሳሌ ታካሚው እንዴት መታከም እንዳለበት፤ ማን ማሳከም እንዳለበት፤ ለህመሙ ማን ነው ተጠያቂው? ወዘተ) እነዚህ ቤተሰቡ ላይ ምን ያክል ተፅዕኖ ፈጠሩ?	0	2
18	ዘመዶች እና ጎረቤቶች በታካሚው ህመም ምክንያት ወይም ከህመሙ ጋር የተያያዘ ማግለል ቤተሰቡን መጠየቅ አቁመዋል ወይም ቀንሰዋል? በዚህ ላይ ቤተሰቡ ምን ይሰመዋል?	0	2
19	ቤተሰቡ ከሌሎች ሰዎች ተገለጸዋል? በሀፍረት ወይም ሌሎች በትክክል አይረዱም በሚል ፍራቻ ራሳቸውን ከሌሎች ጋር መሆን አቁመዋል? በዚህ ላይ የቤተሰቡ አባላት ምን ይሰማቸዋል?	0	2
20	የታካሚው ህመም በቤተሰቡ መካከል ወይም በቤተሰቡና በጎረቤት/ወዳጅ ዘመድ መካከል የግንኙነት መሻከር እንድፈጠር ምክንያት ሆኗል? ለምሳሌ ትዳር መላያየት፣ የቤተሰብ ጠብ፣ ንብረት መካፈል.... ቤተሰቡ ምን ይሰማዋል?	0	2
ሠ	በአካላዊ ጤና ላይ የሚፈጠር ጫና		
21	ከቤተሰብ አባላት ውስጥ በታካሚው ህመም የባህሪ ችግር ምክንያት አካላዊ የጤና መታወክ ያጋጠመው አለ? ለምሳሌ አደጋ መድረስ ወዘተ ይህ ለቤተሰቡ ምን ያህል ችግር ሆኗል?	0	2
22	ለተጨማሪ የጤና መታወክ የተጋለጠ ቤተሰብ አባል አለን? ለምሳሌ ክብዴት መቀነስ፣ በፊት የነበረ ህመም መባባስ ወዘተ የችግሩ መጠን ምን ያክል ነው?	0	2
ረ	በአዕምሮ ጤና ላይ የሚፈጠር ጫና		
23	ከቤተሰብ አባላት ውስጥ የስነ ልቦና ቀውስ አጋጥሞት እርዳታ ያስፈለገው ሰው አለ? ለምሳሌ ህመምተኛው ራሱን የማጥፋት እቅድ፣ አለመታዘዝ ወይም ስለ ህመምተኛው	0	2

	መፃኢ መጨነቅ? ይህን ችግር ክብደቱ ምን ያክል ነው?		
24	የቤተሰቡ አባል የሆነ ሰው ለእንቅልፍ ማጣት፣ ድብርት፣ ራስን የማጥፋት ፍላጎት፣ በተደጋጋሚ መነጫነጭ ወዘተ ችግር የተጋለጠ አለ? አዎ ከሆነ የችግሩ መጠን ምን ያክል ነው?	0	2
አጠቃላይ ከግል ስሜት ጋር/ subjective burden/ ያለው የታካሚው ጫና/ተፅዕኖ			
25	የታካሚው ህመም ምን ያህል ጫና/ተፅዕኖ/ችግር ፈጥሮብኛል ብለህ ታስባለህ?	ምን ም(0) መጠን ኛ(1)	ከፍተኛ(2)

ANNEX III AFAN OROMO VERSION QUESTIONER

WARAQAA GAAFFII OROMIFFAAN

KUTAA-I Gaaffilee Hawaas-diinagdee Dhukkubsataa/Yaalamaa

S. No.	Hawaas-diinagdee Dhukkubsataa/Yaalamaa	
1	Umurii	Waggaa_____
2	Saala	1- Dhiira 2- Durba
3	Iddoo jireenyaa	1 magaalaa

		2 magalaan ala/baadiyyaa
4	Sadarkaa ga'ila	1- Kan hin fuune/ hin heerumne 2- Kan fuudhe/hin heerumne 3- Kan wal-hiikee 4- Kan wal-hiikne garuu waliin hin jiraanne,fkn kan du'e
5	Amantii	1. Ortodooksii 2. Musliima 3. Protestaantii 4. Kaatoolikii 5. Kan biraa(ibsi)_____
6	Sadarkaa barnootaa	1- Barreessuuf dubisuu kan hin dandeenye 2- Sadarkaa barumsajalqabaa (1-8 ^{ffaa}) 3- Sadarkaa barumsa lammaffaa(9-12 ^{ffaa}) 4- Kolleejjii fi isaa ol
7	Gita hojii	1 hojii dhabaa 2 hojjetaa motummaa 3 hojjetaa dhunfaa 4 kan biraa
8	Galii ji'aa gidduu galeessaan Qarshii	_____
9	Erga dhukkubsachuu eegaltanii guyyoota meeqa ta'a?	Guyyoota_____
10	Kanaan dura yeroo meeqaaf tajaajila ciisanii yaalamuu argatanii beektu?	1. Ciisee yaaleme hin beeku 2. Yeroo tokkoo qofa 3. Yeroo lama 4. Yeroo sadii fi isaa ol
11	Gosata araedaa	1 Tamboo 2 Dhugati alcoholi 3 hashisha

12	Bayina araadaa fayyadamtan	-----
13	Dhkkuba sammu kan biraa ni qabdu	-----
14	Dhkkuba dhibee kessaa ni qabdu	-----

KUTAA-II Gaaffilee Hawaas-diinagdee Yaalchisaa

S. No.	Gaaffilee Yaalchisaa	Hawaas-diinagdee
1	Umurii	Waggaa_____
2	Saalaa	1- Dhiira 2- Durba
3	Sadarkaa Gaa'ilaa	1- Kan hin fuune/ hin heerumne 2- Kan fuudhe/hin heerumne 3- Kan wal-hiikee 4- Kan wal hin fuune garuu hariiroo keessa kan jiru 5- Kan wal-hiikne garuu waliin hin jiraanne, fkn kan du'e
4	Amantii	1. Ortodooksii 2. Musliima 3. Protestaantii 4. Kaatoolikii 5. Kan biraa(ibsi)_____
5	Sadarkaa barnootaa	1- Barreessuuf dubisuu kan hin dandeenye 2- Sadarkaa barumsa jalqabaa (1-8 ^{ffaa}) 3- Sadarkaa barumsa lammaffaa(9-12 ^{ffaa})

		4- Kolleejjii fi isaa ol
6	Gita hojii	1- Qonnaan bulaa 2- Haadha warraa 3- Hojjataa mootummaa 4- Daldalaa 5- Barataa/ttuu 6- Dafqaan bulaa 7- Kan biraa(ibsi)_____
7	Galii ji'aa gidduu galeessaan	Qarshii _____
8	Walitti dhufeenya/Hariiroo dhukubsataa/yaalamaa faana qabdan	1- Abbaa 2- Haadha 3- Obboleessa/obboleettii 4- Adaadaa/Eessuma/Wasiila 5- Kan biraa(ibsi)
9	Yeroo hangamiif dhukubsachiisaa/ yaalchisaa turtan?	_____
10	Guyyaa tokkotti sa'aa meeqaaf dhukubsachiistuu/yaalchistu?	_____
11	Nama biraa meeqatu siin waliin yaalchisaa jira?	Namoota_____
12	Maatii kee keessatti dhukkubsataan ati tajaajiltu jiraa?	Ee_____ Miti_____
13	jireenya kee keessatti araada gara garaa fayyadamtee beektaa?()	Ee_____ Miti_____
14	Ji'a 12'n darbe keessa wanta araada ta'e	Ee_____

	fayyadamtee beektaa	Miti_____
15	Dhibee qaama keessoo beekamaa haakimaan sitti himame qabdaa?	Ee_____ Miti_____
16	Dhibee sammuu haakimaan sitti himame qabdaa?	Ee_____ Miti_____

KUTAA-III Gaaffiilee Dadhabina/Dhiibbaa Maatii Dhukkubsataa

	A. Ba'aa qarshii waliigalaan	Dhiibbaa hin qabu	Dhiibbaa giddugaaleessa	Dhiibbaa cimaa
1	Dhukkubsataan galii dhabuu: (hojii isaa/isii dhabeeraa/dhabdeettii?Dhiibbaan galii maatii irratti qabu maal fakkaata?)	0	1	2
2	Sababa dhukkuba dhukkubsataatiif maatii keessaa namni galii isaa dhabe jiraa? (namni hojjechuu dhaabe sabaa mana turuutiif, kaffaltii dhabuun, hojii dhabuun? Galiin maatii hammam hubamee?)	0	1	2
3	Baasii sababa dhukkuba dhukkubsataatii fi yaalsisuuf ba'e: sababa dhukkuba isaatiif baasiin ykn qarshiin osoo itti hin yaadiin ba'e? Hammam galii maatii hube? Qorichaaf, geejjibaaf,bultiif fi kkf? Baasii kan biraa kan yaalumsa karaa amantaatiinii fi aadaatiin godhamu irratti ba'e? Kun akkamiin galii qabeenya maatii miidhe/hube?)	0	1	2
4	Baasii wantoota dabalataatiif ba'e: (fknf, fira dhukkubsataa bira dhufeef; nama kunuunsu qacaruuftii: ijoollee irra adda baasuuf	0	1	2

	dallaa ijaaruu. Kun akkamiin galii maatii hubee?)			
5	Liqii liqeeffatame ykn qarshii qusannoo irraa ba'e: (akkamiin deebisuuf karoofattan? Hammam maatii huba? Qusannoo irraa wanti baaftan jiraa? Kan qusattan ni fixxanii? Miidhaa hammamiitu maatii irra ga'e?)	0	1	2
6	Sababa baasii dhukkuba dhukkubsataatiif wanti karoofattanii dhiistan: (fkn, gaa'ila achi dheeressuu, imala ykn ayyaana ayyaneffachuu dhiisuu? Maatiin hammam hubame?)	0	1	2
B. Dhiibbaa Waliigalaa hojii idilee maatii irra gahe				
7	Dhukkubsataan gara hojii, mana barumsaa kolleejjii fi kkf deemuu dhiiseera: kun hagam maatiitti ulfaata?	0	1	2
8	Dhukkubsataan mana keessatti maatii hojii hin gargaaru: kun ammam maatii miidha?	0	1	2
9	Miidhaa hojii maatii kan biraa irra ga'e: (namni biraa dhukkubsataaeguuf jecha yeroo isaa ni gubaa, hojii idilee isaa dhiisee? Hammam maatiitti ulfaata?	0	1	2
10	Amala ykn sochii dhukkubsataan qabu kan dalagaa hube: (dhukkubsatan aakka namni tokkochi bira turu fedhuu, namni sun akka bira deemuu eyyemuu diduu, kkf? Achiin dhukkubsataan jeeqamuu, wantoota cabsuu, hirriba dhabuufi namoota biraa rafuu dhorkuu? Kun hammam maatii hube?)	0	1	2
11	Sababa dhukkuba dhukkubsataaf maatiin biraa dagatamuu: (namni biraa kan barumsa dhiise, nyaataa fi kkfa/ kun hammam ulfaata?)	0	1	2
C. Waliigala boqonnan maatii jeeqamuu				

12	Boqochuuf ykn bashannanuuf yeroo dhabuu: guutummaati, walakkaan, hamma murtaa'e? Kana maatiin akkamiin ilaala?)	0	1	2
13	Dhukkubni dhukkubsataa guyyaa ayyaanaa fi sa'aatii boqonnaa nama biraa fudhachuu: (namni kun akkamiin kanaan miidhame?)	0	1	2
14	Dhukkubsataan maatii isaa kan biraaf xiyyeeffannoo dhabuu, akka daa'immaniif, fi miidhh inni jara irratti qabu.	0	1	2
15	Sababa dhukkuba/dadhabina dhukkubsataaf sa'aatiin boqonnaa ykn bashannanaa gubachuu/utuu itti hin fayyadamiin hafuu fknf fedhii daawwannaa ykn walitti dhufeenya maatii? Kana ilaalchisee maatitti maaltu dhaga'ama?)	0	1	2
D. Waliigala walitti dhufeenyi maatii jeeqamuu				
16	Waliigalatti miidhaa mana keessatti mudate: (cimaadhaa, yartuu dhaa? Waan baay'ee kan namaa hin galle, kkf? Miseensi maatii akkamitti ilaala?)	0	1	2
17	Miseensi maatii kan biraa kana irratti walfalmaa(fkf akka itti dhibamaan yaalamu, eenyu kan hojjetu, eenyu kan komatamu, kkf? Akkamiin miidhaman?	0	1	2
18	Sababa amala dhukkubsataaf ykn qooddii dhukkuba waliin walqabateenfirri ykn ollaan maatii dhukkubsataa dubbisuu dhiisuu ykn hir'isuu? Maatiin akkamiin yaade kana?	0	1	2
19	Maatiin qofaatti baafameera? Sababa hubannoo dhabuun ykn sodaachuutiin maatiin qofaatti baafameera? Miseensi maatii akkamitti ilaala?	0	1	2
20	Dhibeen dhukkubsataa miidhaa kan biraa walitti dhufeenya maatii gidduutti ykn maatii fi olla ykn fira gidduutti fkn walii hiikuu, maatii gidduutti waldhabuu, qabeenya irratti waldhabuu,	0	1	2

	poolisiin gidduu seenuu, maallaqni gidduu maatiiti baduu, kkf? (maatiin akkamiin ilaala?)			
E. Waliigala Miidhaa qaamaa				
21	Sababa dhibee dhukkubsataatiif Maatii keessaa namni miidhaan qaamaa irra ga'e ni jiraa? Kun akkamitti jara miidhe?	0	1	2
22	Miidhaan qaamaa kan biraa mudateeraa(fkf, ulfaatinni hir'achuu, dhukkubni kanaan dura ture namatti ka'uu? Kun hagam cimaa dha?	0	1	2
F. Waliigala fayyaa sammuu nama kan biraa		0	1	2
23	Miseensa maatii keessaa namni gaargarsa ogeessa xiinsammuu barbaade jiraa sababa rakkoo dhibee dhukkubsataaf isaan irra ga'een (fkn, dhukkubsataan of ajjeesuu yaaluu, gorsa fudhachuu diduu, waan gara fuulduraa sodaachuu) kun hagam ulfaata?	0	1	2
24	Miseensaa maatii keessa kan hir'aba dhabe, kan of jibbe, kan of ajjeesuu yaade, kan waan xiqqootti baay'ee haaruu, kkf? Hammam ulfaata?	0	1	2
S.B	Dhukkubsataa gargaaruuf jecha hammamin rakkadhe ofiin jetta?	Gonku ma hin rakkan ne (0)	Xiqoo(1)	Baay'e e e(2)

