



**ADDIS ABABA UNIVERSITY, COLLEGE OF HEALTH SCIENCES,  
SCHOOL OF MEDICINE, DEPARTMENT OF PSYCHIATRY**

**EXPLORING THE EXPERIENCE OF ELECTRO-CONVULSIVE  
THERAPY (ECT) AMONG SERVICE USERS AT AMANUEL  
MENTAL SPECIALIZED HOSPITAL**

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**FEBRUARY 2024**

**ADDIS ABABA UNIVERSITY**



**ADDIS ABABA UNIVERSITY, COLLEGE OF HEALTH  
SCIENCES, SCHOOL OF MEDICINE, DEPARTMENT OF  
PSYCHIATRY**

**EXPLORING THE EXPERIENCE OF ECT TREATMENT  
AMONG SERVICE USER AT AMSH, ADDIS ABABA;  
QUALITATIVE STUDY**

**A THESIS SUBMITTED TO THE DEPARTMENT OF PSYCHIATRY,  
SCHOOL OF MEDICINE, COLLEGE OF HEALTH SCIENCES, ADDIS  
ABABA UNIVERSITY FOR PARTIAL FULFILLMENT OF THE  
REQUIREMENT FOR THE SPECIALITY CERTIFICATE IN PSYCHIATRY.**

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## **Acronyms**

AMSH- Amanuel mental specialized hospital

ECT- Electroconvulsive therapy

MDD-Major Depressive Disorder

MoCA- Montreal Cognitive Assessment

NMS - Neuroleptic Malignant Syndrome

OCD -Obsessive compulsive disorder

OPD – Out Patient Department

UK – United Kingdom

VHA- Veterans Health Administration

## **Acknowledgement**

First and foremost I want to thank God, who guided me through every step of this journey, supported me in every process, and extended his hand to me in my moments of difficulty. His unwavering presence has been my greatest source of strength and perseverance.

I would like to express heartfelt gratitude and deep admiration to my esteemed advisors, Dr. Wubalem Fekadu, Dr. Beakal Amare, and Dr. Azeb Asaminew. Their guidance, insightful feedback, and support have been helpful throughout the entire process of research. Each of them has contributed their unique expertise and perspective, enriching my understanding and enhancing the quality of my work. Their encouragement during challenging moments has been a source of motivation and inspired me to strive me more.

Furthermore I also wish to extend my sincere appreciation to Addis Ababa University for providing me with this invaluable opportunity to conduct my study.

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Table 1 Sociodemographic characteristics

## **ABSTRACT**

**Background:-** Electroconvulsive therapy is a treatment option for serious mental illness. However, little is known about service users' experiences with regarding ECT in Ethiopia.

**Objectives:-** To explore the experience of people who get ECT treatment and their recommendations for future improvement.

**Methods:-** The study used a qualitative phenomenological descriptive approach to explore the experience of service users receiving ECT at Amanuel Mental Specialized Hospital in Addis Ababa. The study included nine participants who had received ECT within the past year, selected through purposive sampling to ensure diverse experiences. Data were collected through semi-structured in-depth interviews, conducted in Amharic, and analyzed thematically using Open Code version 10. Ethical approval was obtained and confidentiality was maintained. The discussions held with the supervisor ensured the data quality.

**Results;** In the thematic analysis our theme were developed; (1) Knowledge about ECT and consent process, where many participants lacked prior knowledge ECT, had limited involvement in decision-making, and received minimal information from healthcare providers. (2) Journey through ECT treatment; participants shared their experiences from preparation to post-ECT care. They appreciated the organized preparation and post-ECT care though some faced anxiety, long wait times and challenges related to the procedure. (3) Perspective on ECT, where most found ECT beneficial, noting improvements in mental health, sleep, and social engagement. Some experienced side effects like forgetfulness or temporary physical discomfort but found them manageable. (4) Recommendations for ECT, Suggestions included providing more pre-treatment information, increasing ECT room to minimize waiting times, and ensuring gender-specific ECT rooms.

**Conclusions ;** This study examined the experience of individuals undergoing ECT , focusing on informed consent, experience of each step of the procedure, perceptions and attitudes. It found that many participants lacked prior knowledge of ECT, but found it beneficial treatment. Family and healthcare support played key roles in treatment acceptance. Participants suggested improving ECT services

## CHAPTER ONE: INTRODUCTION

### 1.1. Background

A Hungarian physician in the 1930s named Ladislav J. Meduna was the first to propose treating mental ill service user with seizures. A groundbreaking finding on the use of ECT treatment was made by two Italian neuropsychiatric researchers, Ugo Cerletti and Luciano Bini. The first person who received ECT in 1938 suffered from delusions and incoherent speech. In the 1940s and 1950s, ECT emerged as the cornerstone of biological therapies for mental illnesses (1, 2). The goal of ECT is to reduce the symptoms of particular mental illnesses by applying electrical current to the brain. Among ECT users, 80% had a diagnosis of MDD(3).

ECT is considered a first line treatment for ; febrile catatonia, NMS, in acute episode episodes of severe depressive episodes and schizoaffective psychosis, schizophrenia with uncontrollable suicidal thoughts even in protected wards, debilitating psychotic symptoms and situations with a high risk of self-harm or harming others. Additionally, cases with severe reduction in oral intake and life threatening or intolerable side effects from medication. ECT is considered a second line treatment for; treatment resistant depression, schizoaffective psychosis, schizophrenia, mania, depression or psychotic symptoms arising from organic brain disease. ECT may be considered a last-resort treatment for :OCD, treatment resistant dyskinesia, treatment-resistant Tourette syndrome, treatment-resistant epilepsy, and even treatment-resistant Parkinson's disease.(4).

There is no absolute contradictions and the relative contraindications include cerebral hemorrhage and myocardial infarction lasting less than three months, enhanced intracerebral pressure, intracerebral tumor, any life threatening anesthesia risk, cerebral aneurysms, other cardiovascular disorders, medical disorders (disturbance of blood coagulation, severe liver diseases, severe pulmonary disease, some neurological disease, osteoporosis and esophageal hernia (4). ECT is considered one of the safest medical procedures; 1:50,000-1:25,000 deaths and serious side effects in less than 1:1000 (5). Regarding the mechanisms of action that make ECT effective, there is no one

conclusive hypothesis. Researchers appear to favor three postulated pathways over all others: monoamine modification; alteration of neurotrophic factors; and anticonvulsant factors. Antidepressant treatments particularly ECT, promote neurogenesis in the hippocampus (2).

Early ECT, before the late 1940s, was administered without anesthesia or muscle relaxants, leading to severe physical complications such as fractures, dislocations, and internal organ injuries. The introduction of modified ECT with anesthesia muscle relaxants and ventilation dramatically reduced these risks but increased the likelihood of complications related with anesthesia like respiratory and cardiac complication. Despite this, there was no significant difference in treatment effectiveness between the two methods. While modified ECT became the standard practice in the 1950s, unmodified ECT persisted globally for decades and raising ethical concerns(6, 7) .

The technical aspects of ECT, including the location of the electrodes and electrical stimuli, can have a significant impact on the side effect profile and therapeutic outcome (8). An appropriate minimum ictal response has been reported to be between 20 to 25 seconds in duration. The course length cannot be predicted, although the average is from 6 to 12 sessions (9). Three types of electrode placements are used in modern ECT practice: bi-temporal, bi-frontal, and unilateral (1). Bilateral ECT is generally associated with more significant short and long term cognitive side effects compared to right unilateral ECT. Service users receiving bilateral ECT are also at higher risk of developing temporary delirium, potentially requiring treatment interruption. Additionally, bilateral ECT may lead to more extensive memory loss. High-intensity right unilateral ECT can be as effective as bilateral ECT in treating major depressive disorder without causing the same level of cognitive impairment. Despite this, the comparative efficacy of these methods for other psychiatric conditions remains unclear. It's common practice to switch to bilateral ECT if there's insufficient improvement after several right unilateral treatments. Right unilateral ECT, when administered with sufficient electrical stimulation is generally more effective than bilateral ECT in reducing cognitive side effects while achieving similar treatment outcomes(10).

According to research, the optimum clinical response with the least amount of cognitive damage is provided by a seizure stimulus that is 150% over the seizure threshold for bilateral ECT and 200–250% above the seizure threshold for unilateral ECT.(9)

Memory loss is the greatest complaints and concerns. There are several neurobiological, technical, and service users related factors that could increase the cognitive adverse effects of ECT(11). There have been cases of anterograde amnesia or the inability to create new memories; however, these are usually transient and resolve away within a few weeks after the treatment.(12) Recent memories are typically more affected than distant memories by retrograde amnesia. It is common to lose memory of the moments just before the procedure and this normally goes away a few weeks after the therapy(13). Since distant memory loss is so uncommon, it might be challenging to measure. It is quite uncommon to lose memory permanently. Headache, nausea, and aching muscles are among the other adverse effects that have been observed. These are nonlife-threatening side effects that might be brought on by the anesthetic, the seizure or a combination of two (14).

It is estimated that one million service users worldwide get ECT each year. ECT seems to be a commonly accessible mental health treatment on every continent.(15)

## **1.2. Statement of the problem**

ECT is effective and safe treatment for serious mental health problems such as major depression , bipolar disorder and schizophrenia (1). While service users generally reported positive outcomes and satisfaction with ECT(16), inconsistencies exist across studies, particularly regarding information provision(16, 17). While ECT can be an effective treatment for mental health conditions, it's crucial to acknowledge and address the potential long-term consequences.

Research on service users' experiences with ECT is lacking in developing nations. Additionally, from manual search and observation, there has not been any qualitative research conducted on service user experience with ECT treatment in our country, which might create a gap in service user care.

Service users' negative experiences with ECT might be a major barriers to its utilization, resulting in a substantial gap between the treatment's potential benefits and its actual uptake.

Service users may be discouraged by the possible negative effects of ECT, since they frequently lack awareness about it. Service users may feel anxious and mistrustful of healthcare professionals if their issues are not sufficiently addressed in the therapeutic relationship and communication. It is possible that service users lack adequate support systems to assist them deal with the difficulties created on by ECT.

Because experience and attitude are related to one another. If the encounter was pleasant, service users would have a good attitude about their care. Conversely, negative views towards therapy result from a poor experience with it.

Furthermore, researching and taking in to account the suggestion of service users might provide insightful data that can be utilized to design better service user centered treatments. Therefore, investigating service users' experience of ECT is so crucial.

### **1.3. LITERATURE REVIEW**

#### **1.3.1. ECT Usage, demographics and Treatment Outcomes**

A meta-analysis of 18 studies from 1973 to 2013 reported a composite event rate of 17 ECT recipients per 100,000 inhabitants. This increased to 19 when excluding low-income countries. ECT prevalence was higher in older studies (19). On recent studies usage rates varied widely across countries, with Sweden, Belgium, and Australia reporting relatively high rates (41-44 per 100,000) compared to Croatia and Ukraine (1.3 per 100,000) (20-22) .

In 2012, 0.11% of veterans health administration (VHA) service users received ECT within two years. These service users were more likely to have MDD, bipolar and personality disorder. For MDD specifically the rate was 0.3% ( 1 in 270 service users ) (23).

A systematic review from 2012 encompassing seventy studies across all continents revealed significant global variations in ECT practices. On average, service users received eight ECT treatments. Unmodified ECT was mostly used in Asia, Africa, Latin America, Russia, Turkey, and Spain. Bilateral electrode placement was the most common worldwide, while unilateral placement was used in some part of European and Australia (24).

In western countries, ECT was mostly used for older women with depression while in Asia it was more common for younger men with schizophrenia (24). A 2022 systematic review confirmed the dominance of major depression as an indication for ECT globally, with a shift towards schizophrenia in Asia and Africa. Latin America primarily used ECT for schizophrenia and bipolar disorder(28).

ECT was traditionally a last resort for severe , medication resistant case but in Europe , Saudi Arabia , Australia, it is now being used as a first-line treatment for lie threatening conditions, catatonia, service users who previously responded well to it (25). Involuntary ECT, administered under guardianship varied globally, ranging from 1-3% in the USA and Europe to 20-29% in other regions (26, 27).

A meta-analysis identified prolonged depressive episodes and prior medication failures as robust predictors of poor response to ECT. Service users characteristics, such as age, psychosis, and melancholic features, were less predictive (29).

A retrospective cohort study compared clinical outcomes across different ECT indications (acute psychosis, mania, depression, psychotic depression, and catatonia). Significant improvements were observed in illness severity, quality of life, and overall functioning for all groups. While cognitive function (measured by MoCA) generally remained stable, service users with the diagnosis of schizophrenia showed improvement (30). ECT demonstrated superior and faster symptom relief compared to pharmacotherapy, with significant improvements occurring within 2-3 weeks versus 1-6 months for medication. Mania exhibited the most robust symptom improvement compared to positive psychotic symptoms (31).

Regarding the number of ECT sessions needed, 50% of service users with schizophrenia achieved response after six sessions, with treatment-resistant cases requiring an average of 15.8 sessions(32). Mania demonstrated a response rate of 75% after 6.25 sessions (31). In depression, 83.4% responded to six sessions, peaking at 95% by the twelfth. These findings suggest that while clinically meaningful improvement can occur within six ECT sessions across various conditions, more treatments might be necessary for optimal outcomes, especially in treatment-resistant cases(28).

### **1.3.2. Service users' experience of ECT**

This subsection will discuss the service users experience with ECT in terms of clinical outcomes, satisfaction and experience of ECT.

In 2010, a systematic review was released on ECT service users satisfaction. The research covered publications that were published between 1977 and 2009, an average of 20 years ago. In the review, the majority of service users evaluated in clinical settings reported that ECT had helped them (about 70%), and they would receive the treatment again (about 60%). In contrast, consumer-led and/or nonclinical studies revealed lower

levels of satisfaction (between 29% and 55% reported), as well as a decreased willingness to repeat treatment (40%) (16).

Subsequent studies also gave us a similar picture. A quantitative studies conducted in Norway, UK and Australia, 2022, 2017 and 2003 respectively(33-35), reported high service users satisfaction and positive attitudes towards ECT. 73%-80% of service users had positive attitudes toward ECT (34, 35); service users reported that ECT was helpful(36) and that they noticed often described ECT as life-saving (33, 35). Many service users experienced a profoundly beneficial influence on their sense of self as they recovered (35). Similar to the above results, the 2013 study on satisfaction with ECT conducted in India found that just over half of the service users seemed to be satisfied with ECT. On practically every element of the treatment, relatives expressed much more satisfaction than service users did (36).

In a 2014–2015 retrospective research conducted in the US and its territories, 85.5% of service users said that their ECT had benefited them. According to the results, most cognitive and physical health concerns, social functioning, and depression symptoms all show a considerable improvement in the service users. Additionally, service users expressed overall satisfaction with ECT, stating that they felt safe and that the treatment had significantly improved their quality of life. Reduction of depressive symptoms and the ability to resume daily activities are important factors in this regard, while side effects such as memory issues have less of an impact (37). Another studies also indicated positive long-term effects from ECT include survival and improvements in long-term mental health for certain service users(43).

In a 2018 study conducted in China, 64.5% of participants said that ECT is faster than medications, and 66.4% of participants said that ECT has proven to be more effective than medications. (38) Another studies found a similar result: most participants felt ECT was a helpful ECT treatment that worked more quickly than medication, and they would have it again if needed (34, 36). On 2020 research conducted in Israel found that service users who had previously experienced ECT were more willing to start the therapy than

those who had never received it. Service users tend to have more favorable views the more knowledgeable they are (39).

Some literatures mentioned negative experience related with ECT treatment .The anesthesia injection, waiting for treatment, and the recovery phase were some of the unpleasant experiences that were mentioned (34). Most service users felt worried during the ECT procedure for a variety of reasons, including personality changes, brain damage, and long-lasting cognitive impairment. Service users were also afraid they wouldn't wake up after the procedure (36). According to a 1999 qualitative study conducted in the United Kingdom, those who regarded ECT to be disturbing or stressful experience mentioned adverse psychological impacts from the treatment. Feelings of shame, failure, betrayal, worthlessness, lack of confidence, loss of self and an impression of having been mistreated and assaulted were among the psychological effects(46).

The viewpoints of caregivers have significance as they have the potential to impact both the consent procedure and the treatment options chosen by service users. In two studies, the majority of caregivers said they believed ECT was helpful and would encourage their family member to have it again (34, 40). However, some caregivers said that because ECT is connected with memory issues, it should only be used as a last resort (34).

### **1.3.3. The Influence of Information on Service users Experience**

The data from the systematic review revealed that service users receiving ECT were not well-informed about it. This was explained by a number of factors, such as insufficient pre-treatment explanations (about two-thirds of the service users in this analysis reported this), post-ECT memory impairment (about 60% of the service users in this review reported this), or confounding effects of present psychopathology (16).

A qualitative research conducted in Norway that looked at service users' experiences getting information about ECT also revealed that service users frequently complained about not knowing enough about ECT before being asked to consent(33). Additionally in

other studies, the participants expressed dissatisfaction with the inadequate information provided before ECT, since they were unaware of key facts about ECT such as the delivery technique, potential risks, and side effects that have been documented in other studies done in India (36, 41). Instead of having access to medical advice or previous service users' experiences, service users may depend on unfavorable depictions of ECT in popular culture and the media(41).

A consistent finding across studies was the lack of adequate information provided to service users before ECT. While some studies highlighted the issue of inadequate information, a study from Ireland in 2008 reported that 80% of service users felt sufficiently informed to make informed decisions (17).

Additionally in the qualitative study in Norway found that many participants perceived ECT as an outdated treatment had little prior knowledge about it. Their understanding came mostly from movies, media, or dramatic stories. Some actively looked for information through discussions with clinicians, watching YouTube videos, or reading academic articles(33).

#### **1.3.4. Common Side effect and long term consequence**

Electroconvulsive therapy is associated with a range of side effects, with memory impairment being the most frequently reported. A 2010 systematic review indicated that two-thirds of service users receiving ECT on average had side effects. Approximately 60% of service users reported memory problem following ECT, with approximately 40% reporting persistent problems lasting weeks to years(16). In addition to memory impairment other common side effects include headache (33.6%), and muscular soreness (29.9%) were reported in a 2017 study conducted in China(38). A comparable study conducted in the UK revealed a similar result, however the memory impairment was greater at over 80% (34).

Beyond immediate side effects, ECT can have long-term consequences. In 2020, sixteen articles were included in a qualitative meta-analysis on the experience of life after ECT. The negative long-term effects included memory loss, other cognitive declines (loss of

comprehension, communication skills, creativity and artistic ability (42)), physical impairments, trauma, fear, an altered sense of self, difficulties with previously valued activities (daily activities, education, employment), damaged helping relationships, and feelings of grief, frustration, and anger (directed at the physician for being misled; side effects being minimized; being forced to consent and having treatment imposed against their will)(43). Similar to other studies in this meta-analysis, the most common reported adverse side-effect was memory impairment; in a total of fifteen articles, individuals described the total erasure of their recollection of experiences and events that happened before, or sometimes just after, receiving ECT and in five studies, participants reported losing information previously acquired. A few individuals reported experiencing difficulty recalling particular significant life experiences(43).

In addition to the above studies in most studies, service users most frequently reported memory impairment as an adverse consequence of ECT (34, 35, 38). However, some people observe that anterograde memory disturbance usually goes away a few days or weeks following ECT(44). The Australian research highlighted the perception of irreversible memory and cognitive impairments among service users (35).

In addition to the above mentioned side effects, one of the prevalent complaint was confusion (34, 38) ; in a 2017 research conducted in the UK, 43% of service users reported experiencing it (34), although in a 2018 study conducted in China, just 14% of service users experienced confusion(38) .

Participants were able to manage these effects with the help of friends, family, and peers. Whereas, the negative effect of ECT were occasionally made worse by societal stigma and a lack of approval and support from medical professionals, family, and friends. In a similar vein, three studies found that side effects such memory impairments were not well monitored or supported(47).

Additionally, there appears to be no correlation between memory problems and service users satisfaction with ECT, suggesting that treatment benefits may exceed costs for

most service users (45). Service users feel that ECT is helpful even in cases when objective memory impairment persists, and symptom relief lessens the subjective burden of memory problems on service users' lives(35).

### **1.3.5. Service users Recommendations for ECT Treatment Improvement**

Service users undergoing ECT in different countries have identified several key areas for improvement. These include: Decreasing wait times, as prolonged periods increase service user nervousness and anxiety; Improving communication between staff and service users throughout the treatment process to alleviate anxiety and build trust; Offering service user-friendly materials and information at all stages of treatment; Provide a separate waiting area and treatment space for ECT service users to minimize discomfort and exposure to other service users' discomfort; Establish a platform for service users to share their experiences to increase transparency and reduce stigma ; Disseminate up-to-date information emphasizing its benefits alongside potential risks to increase public understanding ,acceptance and addressing public stigma (33-35).

### **1.3.6. ECT practice in Africa**

It's essential to consider regional differences in ECT practices and service user experiences.

A 2013 study in South African hospitals found an annual ECT rate of 0.22 per 10,000 individuals and 1.19 procedures per 10,000. Depression was the most common indication, affecting primarily the 18-59 age group(48). In Africa, schizophrenia was the main indication for ECT treatment (24), although Nigeria showed higher rates for depression(49) ; Malawi showed higher rate for treating mania and psychotic disorders(24). African studies indicated a higher proportion of male ECT service users compared to females, with most service users under 60 years old (48).

On 2010, a retrospective qualitative analysis was carried out in the Khartoum National Psychiatric hospital Khartoum, it was found that out of 269 Sudanese service users who had received ECT, 85% had a great therapeutic response with no serious side effects.

Remarkably, among individuals diagnosed with manic spectrum disorders, the response rate exceeded 90%. Thirty-five percent of the service users were under 40. Mania was the primary reason for ECT (45% of cases), with less than 25% of the sample having depression and mixed affective state (50).

A study done in 2016 at AMSH reviewed ECT use between 2011 and 2015. The rate of ECT use was very low (0.01 per 10,000 residents). Catatonia was the most common diagnosis followed by Schizophrenia. Most service users received ECT because of treatment failure (65.4%). The study found improvement in 90.8% of cases, however, some side effects, like headaches and confusion, occurred in about 12.6% of service users. Notably, most service users were young adults and a very few receiving additional maintenance therapy. Additionally, written consent was primarily obtained from service users' attendants in majority of service users(51).

#### **1.4. RATIONALE OF THE STUDY**

Studying Service users' experiences with ECT is important because it can reveal important information about the efficacy and acceptability of ECT treatment and feedback is essential for service users-centered care.

A service users' desire to get ECT can be influenced by their views regarding the therapy; addressing their worries and misunderstandings might enhance treatment adherence. In general, researching service users' experiences with ECT is essential to raising the standard of care and encouraging a more service users-centered approach to mental health treatment. The service users-centric approach ultimately enhances service user's satisfaction, comfort, and safety.

The study aimed to identify the individual experiences with ECT treatment in terms of knowledge, satisfaction, ECT-related side effects, and feelings during ECT treatment, the effectiveness of psychoeducation regarding ECT side effects, procedure, and how the service users attempt to cope with them and their suggestions.

By understanding service users' perspectives, healthcare providers can gather invaluable insights to improve treatment protocols, staff training, the treatment environment, and medical devices. Additionally, gaining insight from service users' experiences can assist improvement of treatment outcomes and elevate satisfaction for service users.

The study's conclusions can assist mental health treatment facilities using ECT machines in enhancing their ECT services, becoming more service users-centered, and improving the quality of the service users experience. The findings of this study can also be used as baseline evidence about service user experience with ECT.

## **CHAPTER TWO: RESEARCH QUESTION**

1. What experiences do service users have with ECT treatment at Amanuel Mental Specialized Hospital?
2. What recommendations do service users have for improving ECT service?

## **CHAPTER THREE: RESEARCH OBJECTIVE**

### **3.1. General objective**

- To explore service users' experiences and recommendations towards ECT at Amanuel Mental Specialized Hospital.

### **3.2. Specific objective**

- To explore the experience of service users' to ECT who are under outpatient care at Amanuel Mental Specialized Hospital.
- To explore service users' recommendations for improving service

## **CHAPTER FOUR: RESEARCH METHOD AND MATERIALS**

### **4.1. Study design**

The study was qualitative, utilizing specifically a phenomenological descriptive approach to explore the experience of service users to ECT who receive out-patient care at Amanuel Mental Specialized Hospital.

### **4.2. Study setting**

The study was conducted at Amanuel Mental Specialized Hospital, Addis Ababa. AMSH is Ethiopia's only mental health hospital and one of the public hospitals located in Addis Ababa. There are 259 beds including 11 private wing beds and 23 emergency beds and it also has 13 outpatient departments and every day, about 500 to 600 service users are seen in an outpatient environment. The hospital now employs 460 support staff members and 384 medical professionals.

An electroconvulsive therapy machine, a modified one used under anesthesia, has been in operation for around ten years at AMSH. Previously, unmodified ECT without anesthesia was administered for many years, resulting in observed side effects like bone fractures. Currently service given three times a week, treating an average of five to six service users per day, with a maximum of twenty and a minimum of four. A room with three beds serves both service user preparation and recovery, currently staffed by two nurses and two anesthetists. But the ECT machine has not been functioning since September.

The decision for ECT is made by the service users' attending psychiatrists. A written informed consent is obtained from the patient if competent, otherwise from their families. Typically, service users undergo six to twelve ECT sessions, three times a week. Baseline laboratory work is performed on each service user. An ECT administration form and observation form are completed. The procedure is conducted in an ECT room with trained nursing staff and an anesthetist. A psychiatry resident or psychiatrist administers the electroconvulsive therapy. Service users fast overnight. Before the procedure, nurses check vital signs. Anesthesia medication, either thiopental (a short-acting barbiturate) or

propofol (depending on availability), is administered, followed by succinylcholine as a muscle relaxant. 100% oxygen is provided, and then electrodes are placed bilaterally on the temporal area. Service users receive re stimulated at a higher intensity if the seizure duration measured is less than 25 seconds

### **4.3. Study period**

The study period was from October 2024 to January 2025 G.C.

### **4.4. Participant**

Participants were service users who had been found at the Amanuel Mental Specialized Hospital's outpatient settings, as well as those who had already received ECT treatment

### **4.5. Eligibility Criteria**

#### **4.5.1. Inclusion criteria**

- Service users who have history of ECT treatment for the last 1 year
- The age of participants is 18 and above.

#### **4.5.2. Exclusion criteria**

- Service users who are acutely ill.
- Service user with severe psychopathology precluding the interview

### **4.6. Sampling**

The participants were selected purposively based on their age, sex, diagnosis, and the number of ECT sessions they had received. Participants were recruited with the help of mental health professionals, including a psychiatry nurse who acted as a gatekeeper. But since it was challenging to find enough participants through healthcare providers assigned for this purpose, a potential participants reached out to through phone calls. Participants who had received ECT treatment within the past year were identified using discharge papers from the ward and finance office, as there were no card numbers in the logbook in ECT room. The participants were contacted by phone to inform them about the study, obtain verbal consent, and to schedule the interview based their appointment

day for follow up. When they came for their follow-up, their capacity were assessed based on the capacity assessment form adopted from other studies, and those who have a capacity gave the written consent, then the interviews were conducted.

Nine service users who underwent ECT at AMSH in the past year were interviewed. This one-year period was chosen to reduce recall bias. Most participants had received ECT five months before the study because the ECT machine has not been working at this time. New interviews were sought until data saturation was achieved, which is when no new information was being gathered. A maximum variation sample was sought to capture a wide range of experiences based on the resources available for the study.

#### **4.7. Data collection procedure**

The principal investigator of this study gathered data through in person, semi-structured in-depth interviews at AMSH's staff office and AMSH OPD. The participant's information on basic sociodemographic factor was collected. This was accomplished through the use of a structured form which included information on the following; age , education level , marital status, employment , living situation , diagnosis, time of treatment and number of course taken. The interview was conducted in Amharic; thus topic guide was translated in to Amharic. The content of the topic guide was modified during the data collection period. During interview, data as recorded using a tape recorder and the investigator took notes including the participant's behavior and emotion to augment the data with the record. The investigator then probed based on the response of the participant. Newly emerging insight and questions were added for clarification, interviews lasted between 30 to 60 minutes. Their medical records were reviewed to gather information about their diagnosis, the indication for ECT, the frequency and the number of sessions.

#### **4.8. Data analysis**

The collection of data was carried out simultaneously with the analysis process. For coding and analysis, the interviews were transcribed, translated into English, and then loaded into Open Code version 10. Data were analyzed in a thematic analytic manner.

After reading each interview, codes were identified, and then the codes were thematically grouped. Groups with similar meanings were placed together to form sub-themes, and sub-themes with similar information were clustered together, leading to the development of wider themes. The investigator cross-checked themes and sub-themes with the raw data and corresponding quotes from each thematic analysis category before creating the thematic data analysis report.

#### **4.9. Data Quality Assurance**

Several measures were taken to ensure the data's integrity. To begin, probing techniques were employed during interviews to elicit rich and detailed data, and the collected data was immediately transcribed verbatim to reduce bias and ensure that it was not misrepresented. The themes and data analysis were discussed with supervisors to ensure that the findings were accurate and reliable.

#### **4.10. Ethical consideration**

Ethical approval was sought from the Psychiatry department, College of Health Sciences of Addis Ababa University, and the Amanuel Mental Specialized Hospital. Participants in the research were asked for written informed consent; during the interview, they were also informed of the study's purpose, methodology, possible risks and benefits, and their ability to withdraw at any time.

The participants were informed that their involvement in the study would not affect the quality of the treatment they received. Transportation and time costs were reimbursed to participants. Confidentiality was maintained by utilizing codes instead of personal identification and not disclosing their information to anybody outside the study team. Strict privacy was upheld during the data gathering process. Data were anonymized.

Participants were informed that they could be linked back to treating mental health clinician if they experienced emotional distress during the interview or if there are additional mental health concern. None of the participants required this service.

#### **4.11. Researcher's professional biases.**

The researcher believed that seizure could be devastating and traumatic for service users, which may have led to a bias that ECT experiences are negative. Acknowledging this bias prior to the interviews and to address this bias, the researcher created interview questions and follow-up probes that aimed to maintain a neutral stance.

# CHAPTER FIVE: RESULTS

## 5.1. Socio-demographic status

The study included a total of nine participants, aged between 18 and 51 years. Three participants were female. Eight participants were single, while one was separated. Regarding education, one participant had completed elementary school, five had finished high school, and three held a BSc degree or higher. In terms of employment, one participant was a student, four were unemployed, two were employed, and two were self-employed.

Regarding living conditions, three participants lived alone, while five lived with their families. In terms of diagnosis, three participants had been diagnosed with Bipolar Disorder, four with Major Depressive Disorder (MDD), one with Schizoaffective Disorder, and one with Schizophrenia. Additionally, two participants with MDD and one with Bipolar Disorder were diagnosed with catatonia at the time of admission for ECT.

The duration of illness varied among participants: three had been ill for less than three years, three for less than five years, one for less than ten years, and two for less than fifteen years. All participants underwent a single course of ECT, except for one participant who had undergone more than ten courses. The number of ECT sessions each participant received ranged from three to twelve

Table 1. Socio-demographic status

Socio-demographic Characteristics	Categories	Number of participants
Gender	Female	3
	Male	5
Age	18-24	3
	25- 40	4
	40-60	2
Marital status	Single	8

	Separated	1
Living status	Living alone	3
	Living with family	5
Educational status	Elementary school (5-8)	1
	High school (9-12)	5
	BSC degree and above	3
Occupation status	Student	1
	Unemployed	4
	Employed	2
	Working in own business	2
Diagnosis	Bipolar disorder	2
	Schizoaffective	1
	Major depressive disorder	1
	Schizophrenia	2
	Catatonia secondary to MDD/bipolar depressive episode	3
Duration of illness	1-5 years	3
	5-10 years	1
	10 -15	2
	Greater than 15 years	3
Number of course of ECT treatment	1 course	8
	More than one	1
Number of sessions of ECT treatment	Less than 6	1
	6-8 sessions	2
	9-12 sessions	5

This study explored participants' experiences of ECT. Four themes emerged from data analysis:

### **1. Knowledge about ECT and consent process**

Knowledge about ECT

Informed Consent and Decision-Making

### **2. Journey through ECT treatment**

Preparation for ECT

Undergoing ECT or Procedure phase

Immediate Aftercare

Interpersonal experience

### **3, Perspectives on ECT**

Concerns associated with receiving ECT

Perceived effectiveness of ECT

Attitudes about ECT

Experience of Side Effects

### **4, Recommendations about ECT Treatment**

Suggestions for improving ECT Practice

Future Willingness to Undergo ECT

Recommending ECT to Others

### **5.2. Knowledge and consent process**

The knowledge about ECT was a theme in understanding participants' perception and experiences. This theme highlights participant's prior knowledge about ECT, their understanding of the reasons for ECT treatment and its mechanism and as well as experiences with informed consent and decision making.

Most participants had no prior knowledge of ECT or never heard about it before undergoing treatment. Even those who had repeated hospital admissions had not learned about ECT. One participant reported that he had heard about ECT during his previous admissions and had watched other service users enter the ECT room, later witnessing their recovery. At that time, he perceived ECT as a brain stimulator primarily used for service users who did not recognize themselves.

*"I had seen when other patients took it in the courtyard, but I didn't know how they took it.....I thought they had been taking it because they weren't getting better. I believed they were taking it since they couldn't recognize themselves. I thought they were taking it to get back to their health.....They tell me that it's electric shock. I used to stand there and saw people taking it. And when they were discharged after a certain day they get recovered."* ID-06

As participants reflected on their understanding for the reason of ECT, half of the participants explained that ECT was administered because their illness impaired self-awareness, their brain was not functioning properly, their illness was resistant to medication, had persisted for a long time, or due to severe suicidal behavior.

*"I think when they saw the state I was in, it may have reached a stage where it needed it, and my brain may not function properly."* ID-03

*"They gave me electric convulsive therapy when the illness got worse"* ID-04

The participants explained their view on ECT. Four participants described ECT as an electric-based brain stimulation or brain relaxation treatment, which could awaken their minds.

*"Because it is electricity, it is a machine, and it is a mental machine, so I think it make my mind relaxed."* ID-01

*"I used to take it as a kind of brain or mind stimulator."* ID-06

However, one participant questioned why a stimulating treatment was administered while he was on manic episode, indicating some uncertainty about the therapeutic effects of ECT in specific conditions.

*“I think it has a stimulating effect. But I also think that I was at a high point at the moment or it may return to normal...”* ID-03

Interestingly one participant, who is grade 12 student, developed a unique interpretation, described ECT as a microscope that could visualize problems in the brain and assisting in understanding of auditory hallucinations, and correct them. She reported that she did not get this information from anywhere; it was her own way of thinking.

*“I think they give the treatment with electric things; looking through the microscope and seeing the relationship with the brain then they understand what is happening in that area. Then the doctors would give the treatment to the patient. It's like looking at the connection with your brain through a microscope and understanding the noise in your ears.”* ID-05

One participant explained that ECT is not suitable for every service user and could not be effective for all service users. Another recognized that ECT, like any medical procedure, carries potential risks but could not elaborate on what they might be.

*“I understand that it is a normal treatment, but it comes with risks. Because you have to sign before starting it, it makes you feel frustrated. However, I see it as normal. Of course, any treatment has risks, but apart from the risks, I view it as a normal treatment.”* ID-07

A key issue that emerged was the lack of information provided to participants about ECT. All participants reported they did not get any information from healthcare professionals about ECT. When they were asked about details of information that they could be provided such as what ECT is, how it works, its benefits, and possible side effects, they stated that no such explanations were provided before starting treatment. Some participants reported that their families might have received information about ECT, but

they were unsure because they had not been informed by their families and many families could not explain the treatment to the participants due to their lack of understanding about the treatment.

*“Even my family didn't give me an explanation about this because they didn't know what would happen to me when I went in there.” ID-01*

This lack of information left participants with curiosity about ECT. Many participants remained generally unaware of ECT, including its mechanisms and effects on health, even after completing the treatment. They expressed ongoing curiosity about it and were asking explanation about the ECT during interview time. Another participant mentioned that she was not formally informed that she would undergo ECT. One participant, although he had agreed to the treatment, sought further clarification but was unable to get it, which led him to be frustrated. He felt a lack of autonomy, as if he had no choice but to accept the treatment, comparing his situation to being treated like a baby.

*“I think a person should have the right to speak. When I asked why they were giving me this kind of treatment, I thought at least someone should have given me clarification.....But I think it would have been good if I had some clarification in the right way.” ID-03*

*“There was nothing. How to manage a baby, He eats what he is given, and at that time, I accepted the treatment that was given to me. I was not in a condition where I can say no., I was not self-controlled.” ID-03*

The process of informed consent as another significant concern. Many participants did not recall signing an informed consent form. In most cases, the families of the participants were responsible for giving consent; only one participant signed the consent form by himself. Additionally, most participants were not involved in the decision-making process. Despite this, they agreed to undergo ECT when they learned about the ECT treatment, and several factors contributed to their willingness to consent. Some participants had observed others recovering after ECT treatment, while others viewed it as their only option since another option of treatments had not worked for them and considered it a

last-resort option learning from the previous illness episode. However one participant refused to undergo ECT due to her anticipated fear of the treatment.

*“I participated, but I thought it was something that would hurt someone. Because I thought it was a difficult thing. I thought it was a serious and hurtful thing. Then I told them that I didn't want it, it was necessary my father who made me do it.”* ID-01

Capacity to consent was a concern for four participants who reported experiencing reduced capacity and motivation to process information necessary for making decisions due to their illness. They felt it was difficult to think clearly about the decision to undergo ECT, and if information had been provided, they believed they would not have been in a position to comprehend it and make an informed decision.

*“I think they have talked to her (referring her sister). Since I was so sick at that time that she couldn't tell me that. Even if she had told me, I wouldn't have listened.”* ID-08

Some participants reported that presenting ECT as a last resort made them more willing to accept the treatment and additionally prior experience with ECT helped one participant to be more assertive during his next treatment and led him to see it as his only option.

*“The doctors tried and at the end decided that I should have electroconvulsive therapy..... I was on medication. I was taking olanzapine and lamotrigine. It was to treat me with the medication. I went to the hospital when I became seriously ill, I couldn't move, I couldn't do things on my own. .... My activity had stopped completely .....Then the last treatment was ECT”* ID-07

*“But it (the medication) was still not effective..... At the end the doctors decided that I should be treated with electroconvulsive therapy. They tried not to do that, but if there was no change that was the decision in the end..... most of the time the medication did not make a difference for me...”* ID-07

Two participants felt hopeful and excited about trying something that might help them feel better after a long period of severe distress, since their illness had not responded to medication despite taking for long time.

*"I was happy when they told me that I would get this treatment because my illness would decrease and I was happy because it would heal me."* ID-04

*"I was very willing. When they told me that there was electric treatment, I could not wait it until the day to arrive."* ID-08

Trust also played a role for some participants decision-making. One participant agreed to ECT simply because the physician recommended it, while another participant, a teenager, agreed because her family had given their consent, believing they wouldn't agree it was something harmful.

### **5.3. Journey through ECT treatment**

This theme reflects on the service user's perspective throughout the entire ECT process, from preparation to post-ECT care. Most participants described their ECT experience in various ways, highlighting their journey through the different phases of treatment. However most participants found it difficult to recall every details of the treatment process. This theme highlights preparation for ECT, procedure phase, immediate after care and interpersonal process.

Most participant described the preparation made before the procedures as well-organized process. They observed that different professionals were responsible for different tasks and seeing the medical team's preparedness and organization made them to be comfortable. Additionally, having nurses and family members accompany them to the ECT room helped participants feel supported.

*"And it was a very interesting thing they did. They prepared their materials first, I was ready, and then they started the treatment. It was a good environment."* ID-03

Participants recalled specific preparation steps, such as fasting overnight, waiting in line, having an IV cannula inserted, lying on the bed, wearing a face mask, having their blood pressure checked, and receiving anesthesia. Many participants remembered and mentioned that the long waiting lines before treatment and one service user explained it as a negative experience. They anticipated waiting their turn in every session, often standing in a queue with other service users. Among the three female participants, two expressed their stress while they were undergoing ECT because the ECT room was located in the male service users' compound.

*“It was in the place of men; it was in the men's room. It was the place where men were being treated...I was very scared... First they are mentally ill. Second, because they are men.....I was afraid that they would either scold me or insult me.”* ID-01

One participant recalled an incident where, after being fully prepared for the procedure, a power outage forced her to return without receiving the treatment.

*“The light was going off. We were told that the electricity was off and we were returned frequently .....and we have not taken it for one day since the electricity went off.”* ID-01

The participants reported the procedure and how they perceived it. Upon entering the ECT room, Participants described being assisted into the ECT room by nurses. Once prepared, they reported losing consciousness shortly after anesthesia was administered. Some participants described the experience of receiving anesthesia as feeling like they were dying or becoming lifeless or "a corpse" and two participants mentioned that they had unpleasant feelings related to their experiences with anesthesia, and they expressed that it was good to avoid such experiences.

*“I would be happy if the fainting stopped. I would be happy if the loss of consciousness stopped when you came out of it. We did not know our lives when we came out of ECT. I would be happy if this did not happen. I want to see and remember what going in there and seeing them do all the treatment.”* ID-04

One participant, who had undergone multiple courses of ECT, shared a unique and distressing experience during his last course of treatment. He claimed that the procedure began before the anesthesia had taken full effect, causing him to briefly feel the electric shock before losing consciousness. At that time, he thought he was dying and he was certain that something had gone wrong since this experience was so different from his previous ECT sessions and believed the anesthesia had not worked properly. This experience was frightening for him and increased his frustration until the treatment was completed.

*"I went into the machine; after I went in, the treatment began before the anesthesia started to take effect..... When you're under anesthesia, you're not conscious, and you forget things. To be honest, I didn't feel that. I was watching what was going to happen. As soon as the anesthesia took effect, I didn't know anything after that..... There was electrical material inside; I experienced it. I had a feeling of shock, and I was really scared at that time." ID-07*

The participants received post-ECT care immediately after each session. Participants reported being taken away from the ECT room either in a wheelchair or carried by nurses and family members. While some were satisfied with the post-ECT care, others had mixed feelings about the experience. After regaining consciousness, family members played a post ECT care, assisting participants alongside healthcare professionals. One participant reported feeling a great sense of relief after her first session. However, three male participants found the post-treatment experience unpleasant, particularly due to temporary numbness in their extremities, which lasted for about 30 minutes, which made them unable to walk and made them feel dependent on others for assistance and powerless. One participant believed the numbness was a direct effect of the electricity used in ECT.

*"I had the same feeling of numbness as if I had no power.....since they treated you with an electric, so you can get a numbing sensation. In fact, the first time I had it, I was taken on a stretcher, remember that." ID-07*

*“After waking up, they took me in a wheelchair. I remember they were taking me in wheelchair, I could not help myself. I can't manage myself. I can't walk, I'm in a wheelchair as soon as I get out. The challenge was not being able to walk” ID-03*

Another participant reported that after the procedure, he removed his IV cannula and stated he would not take further sessions. He attributed this decision to a lack of insight; however, he attended the next sessions because he had been enjoying the sensation of the IV medication entering his veins.

*“I was about to pull out the needle. A needle was inserted, and I remember pulling out the needle tube. I asked what kind of treatment was being given to me. But I liked the feeling on this side (pointing to the injection site), and I enjoyed the taste of it. I didn't have much objection when I went in, but after I came out, I said that I wouldn't take it anymore. I was sure that I was saying I was not ill; I was healthy.” ID-03*

One participant stated that he had no recollection of undergoing ECT. It was only after completing multiple sessions that he was reminded of the treatment he had received.

*“I knew myself on the last day. It was when I was well that I realized I was taking electroconvulsive therapy.” ID-06*

Family members and healthcare professionals played important roles throughout the whole process of ECT. Most participants (eight) described their families as supportive, providing both emotional and material support. Family members comforted and encouraged them, participated in decision-making, and explained the benefits of ECT, which helped increase acceptance of the treatment. Families actively participated in the treatment process, being present during sessions and providing post-ECT care along with professionals.

However, one participant felt unsupported by his family, as they only visited on ECT days and expressed their frustration about his illness, making him feel ashamed and blamed himself.

*"They told me not to come here again and that this was the last time. They said they were bored and angry. My family has missed work to help me, and they were telling me that I was bothering them and that they wouldn't bring me back. They said if I got ill again, no one would take responsibility." ID-06*

Another participant noted that though his family supported him, they did not allow him to express his concerns or ask questions, which made him feel unheard and his right of speech was disrespected.

All Participants reported having positive relationships with healthcare professionals. They appreciated the care and encouragement provided by medical staff. Healthcare workers assisted in preparing service users, transporting them to and from the ECT room, administering medication, monitoring side effects, and reassuring participants throughout the process. Four participants highlighted the kindness and attentiveness of the staff, which helped alleviate their anxiety and made the treatment experience more comfortable. Two participants explicitly stated that staff treated all service users equally, regardless of gender or identity. One participant emphasized that the professionals were "human-centered," valuing their service to service users and treating them with dignity. None of the participants identified any significant gaps in their relationships with healthcare providers. While most found communication with professionals easy, a few reported limited interactions.

*"The professionals are human-centric, they are human-oriented, and they want to benefit people..... Human-oriented in a sense when you just serve a sick person and you try to get them out of their problems. Apart from that, there is nothing else that they valued. They serve everyone equally; without distinguishing between me and the other, without distinguishing gender; without identity. I want to say that they only saw us as a human being." ID-03*

*"We communicated with them a lot. After that, we just talked; like a mother and a child; they asked us everything and like you, like a sister, like a brother, they came and asked us; they said how our illness was; they said how we are; they asked us*

*about the situation. This hospital is the one that took care of me like a mother.” ID-08*

#### **5.4. Perspectives on ECT**

This theme explores the subtheme of concerns associated with receiving ECT, the perceived effectiveness of ECT, attitudes about ECT, and experience of Side Effects.

The experience of ECT treatment was marked by a range of emotions, particularly fear and anxiety. Many reported significant apprehension before undergoing ECT, often stemming from unfamiliarity with the treatment, information received from other service users, or misconceptions about the procedure. Fears ranged from concerns about dying during the procedure to worries about electrical injury and other complications. Five participants expressed strong fears before treatment, and most experienced fear at the time of ECT. Three participants specifically associated their fear with the nature of ECT, as it involves an electricity-based machine.

*“Since it is done with electricity, it is not much, but it is a little frustrating.” ID-07*

Some described anticipatory fear, worrying about the procedure and potential risks. A teenage participant, who had completed education up to grade nine, expressed concern that the machine might burn or harm her, attributing her anxiety to a general fear of medical treatments.

Another participant reported hearing from another service users that ECT could be fatal if there is any comorbid illnesses and which was scary for her and her family, though her own suicidal ideation reduced her fear to some extent.

*“At first I thought it was true when people said that it would kill if there was a comorbid illness. When they said this, I thought it was true... I was very worried, wondering if it would kill me.....But I was already thinking about killing myself and dying, so I said it doesn't matter if I die. I just wanted to try it and see if it*

*will save me or not, that's what I said at that time. I really wanted something that would make me feel a little bit better.” ID-08*

She added she felt scared while waiting in line for her first ECT session. She was curious and anxious about how the treatment worked and how electricity would be used in the treatment. However, those feelings went away completely after her first session.

*“The first round was very scary when we were waiting our turn in the queue. After I said okay and went, it made me feel afraid. I was scared in part of my heart, and another part of me was wondering what was wrong with me. I didn't mean how I would die, but how they would give me electricity and how they would give me the medicine. I used to say that electricity is just a light, and I was curious about what it does. I was just wondering if it was injected with a needle or how it worked. But then, when I saw it, it was electricity.” ID-08*

One participant feared the possibility of errors by medical professionals. The requirement to sign a consent form exacerbated this anxiety, as it indicated potential risks. However, over time, he adapted to the treatment and viewed it as a normal medical procedure.

*“At the end, there is a feeling of dying if there is a small mistake ..... You are entirely in the hands of the doctor, I mean I thought in case something happens. I felt frustrated if something happened related to the treatment...I thought there is no perfection in the treatment, there is no perfection in any work. It's just that the person doing it can make a mistake and things don't go on the way.” ID-07*

Another participant described mixed feelings, hope for recovery alongside anxiety about maintaining NPO, fearing that even the accidental water intake could lead to death.

*“I was afraid to go, but I was also happy. I felt both happiness and fear. I was happy when they told me that I would receive this treatment because my illness would decrease, and I was happy because it would heal me. When they told me that*

*death is inevitable, they said that if I ate or drank, I would die. Because of that, I was afraid. I wouldn't eat or drink. I didn't even wash my face, thinking that water would enter my mouth."* ID-04

The perceived effectiveness of ECT is also discussed in this study. Despite the initial fears, most participants described ECT as beneficial to their mental health. But two participants, one diagnosed with catatonia and another diagnosed with schizophrenia acknowledging their recovery but expressed uncertainty about whether their recovery was due to ECT, the medication or both.

Most participants reported the improvements and they mentioned feeling more self-aware, regaining control over their thoughts and actions, calming anxiety, enhancing sleep quality, alleviating hopelessness, experiencing a return to their previous state of health, return to their work and education, improving their social engagement.

*"It made me look at things. Before, I only listened to myself; then it made me come out. Then I went out and observed some things in the outside world, it made me live my own life."* ID-03

*"It calmed me down, I stopped thinking a lot, slept well, and after i got in there, I have recovered. I was very relieved. I would not have recovered without ECT. I was recovered after I got there."* ID-04

One participant reported a significant improvement and complete remission of suicidal thoughts after a single ECT session. She had a history of severe suicidal ideation and attempts, including a hospital incident resulting in a fracture.

*"The benefit is very great. It saved me from death. If I hadn't taken it, I'm sure I would have killed myself. How many times have I been catching electricity, how many times have people rescued me when i tried to kill myself by buying the poisons.....before, I didn't think I could live; I thought I would die....I just said, what is this world going to do to me, I hate myself.... And especially, the thought of killing my self was very difficult; very difficult; it used to worry me. After that, after I got that treatment, it just completely disappeared."* ID-08

*“After I had the treatment, I recognized myself again. It was like coming out of darkness into the sunlight—it felt like that.....When I woke up, it was like the darkness became dawn. From that day on, I felt awake.”* ID-08

Another participant noted that a persistent tension-like headache, which had started after cessation of substance use was relieved following ECT.

*“In a way, there was something that was holding my head. Actually, I used to use substance before and I think it had an impact. There was pain that was squeezing my head..... I think that it has left me. I think it has gone.”* ID-03

One participant found that ECT helped improve her medication adherence, which she considered its primary and the only benefit.

Most participants held a positive attitude toward ECT, though some initially had negative perceptions due to its electric nature and assumed complications. However, those who had negative preconceptions reported a shift of attitude after completing treatment, primarily due to perceived benefits and the absence of feared complications. Some participants expressed eagerness to start ECT, as they sought relief from their illness by any means possible. One participant maintained a positive attitude even before treatment because he had witnessed other service users recovering and being discharged after ECT.

Despite the overall positive perception, experience with side effects varied. Five participants did not experience or notice any side effects, either immediate or delayed. Three participants did not spontaneously report side effects but after initially denying side effects, when asked with close-ended questions by listing potential complications, one participant recalled experiencing forgetfulness during treatment but did not initially associate it with ECT and it returned to baseline after discharge and additionally two others reported forgetfulness which began before starting ECT and one reporting improvement following ECT. One other participants reported experiencing transient headaches, dizziness, disorientation, nausea, and forgetfulness immediately after ECT,

which resolved within 30 minutes. She found them concerning but was reassured by her physician that they were temporary and related with anesthesia.

*“They asked, how did you change, how did you do. When they asked, I told them that it made me forgetful, I didn’t know myself, it made me to be dizzy. When I told them this, they said it was the anesthesia and that it would fade and that I got better. That’s how it was.” ID-08*

Two participants reported side effects spontaneously. One experienced persistent warming of the hands, said it not sweeting rather warming sensation which she perceived by herself and other. Another reported persistent physical tiredness throughout the treatment period, making the treatment difficult and said it was negative experience for him though the fatigue subsided after completing ECT. Both participant did not reported their symptoms to physicians, so no interventions were sought.

## **5.5. Recommendations about ECT Treatment**

This theme highlights suggestions for improving ECT Practice, future Willingness to Undergo ECT and recommending ECT to Others.

Participants provided various suggestions to enhance the ECT treatment experience. One participant gave different recommendation including to increasing the number of ECT rooms to reduce waiting time.

*“But I think it should have two or three rooms because we were waiting to enter in to the room and I don’t think there’s anything else I can say.” ID-03*

The participant who mentioned that he has done his on reading maintaining his wellbeing, suggested that providing comprehensive pre-treatment information, particularly regarding potential side effects and health impacts before the procedure would improve the experience for service users. He explained that involving the service user in decision-making while they are fully aware would help them better understand the treatment process, if possible.

*“If there is a way to be Conscious. After all, it was the illness that caused it. I think it would be good if a person were conscious and took this treatment. Conscious means being able to recognize things; being able to observe people mindfully; being able to observe people; having a mind....I think it means it is good to take it at least after he has regained some consciousness. Because he also needs clarification about it. I think it would be good if he got clarification about the side effects and the health benefits.”*

ID-03

A female participant recommend to establish a separate ECT room for female service users or have additional ECT room in the female ward.

*“It is good for female to have their own room for ECT, just as it is for men, so that both can have separate spaces.”* ID-01

Additionally one male participant gave recommendation to ensure ECT providers take extra precautions to minimize risks and to increase the number of healthcare professionals involved in ECT.

*“What I would like to say is that the people who provide the treatment should be well conscious and minimize the risk.”* ID-07

*“I think there are fewer professionals who provide treatment. I think if there were more people to provide treatment, it would continue and can expand.”*

ID-07

One male participants recommend to allowing service users to remain conscious during the procedure to observe the process and retain memory of each step.

All suggestions came from individual participants rather than being widely shared concerns. Three participants stated they had no recommendations, and one expressed satisfaction with the current practice, suggesting no changes were needed.

Participants also shared their thoughts on whether they would consider ECT as a treatment option in the future. Many participants expressed a willingness to undergo ECT again if needed, referring its positive effects on their recovery. One participant stated that unless another treatment was suggested, she would prefer ECT as a first-line option since it was the only treatment she responded to.

*“I have benefited from it. If I am admitted, I will receive electric treatment. If they admit me, unless they suggest a different treatment, I would still prefer to have it.”*

IN-08

Another participant, who had undergone multiple ECT sessions, explained that his illness only improved with ECT after each relapse, while medication only helped maintain his recovery but not treat active episodes. However, two participants said they would refuse ECT in the future due to the perceived side effects, such as persistent hand warmth and physical tiredness. One participant preferred seeking spiritual healing instead, while another stated he would only undergo ECT if forced.

*“I don't think I will be treated with it again after this time because it caused a warming sensation on my hand. I won't treated with it again, as it might lead to further complications. I mean, I'm trying something else like holy water.”* IN-05

Despite some reservations, most participants would recommend ECT to others with mental illness, sharing their own experiences as proof of its effectiveness. One participant suggested that those relying on spiritual treatments should consider ECT. Additionally, they expressed that if it ordered by a doctor, every service user should accept ECT and undergo it.

*“And I recommend electric therapy to other sisters and brothers. It is very beneficial.... there are many of our sisters and brothers who are mentally ill and mentally ill without knowing it and was told it evil sprit at holy water place. But their minds are also going ill, and they are often sitting in the monastery. I recommend for them.”* IN-08

## CHAPTER SIX: DISCUSSION

This study explored participants' experiences of ECT. Four themes emerged from data analysis: Knowledge and consent process; Journey through ECT treatment; Perspective of ECT and Recommendations about ECT Treatment

In this research, most participants had no prior knowledge of ECT or had never heard about it before undergoing treatment and only one participant had prior knowledge due to his previous exposure to ECT. However in the qualitative study in Norway found that many participants perceived ECT as an outdated treatment had little prior knowledge about it. Their understanding came mostly from movies, media, or dramatic stories. Some actively looked for information through discussions with clinicians, watching YouTube videos, or reading academic articles (33). In our setting Medias and movies exposure is limited and local Medias and movies do not focus on ECT, which may explain the participants' lack of prior knowledge.

This lack of knowledge was further compounded by the fact that many participants in this research reported healthcare professionals provided no information about ECT. Even after treatment, they still did not understand its mechanisms and effects. Some participants reported that their families also did not know much about the treatment thought their families gave consent. The literatures also showed significant gaps in the information provided to service users about ECT. Similarly a systematic review found that most service users felt they were not given enough details before treatment (16). Additionally in line of this literature most participants in this research did not remember signing a consent form and were not involved in the decision. While all of the participants expect one eventually agreed to treatment, different factors influenced them. However a study from Ireland reported contrasting finding that 80% of service users felt sufficiently informed to make informed decisions (17). This difference suggest that access to information and the consent process may vary across different setting. The lack of service users' involvement in decision making raises ethical concerns, as informed consent is a fundamental principle of medical practice. Strengthening the consent process by ensuring service users fully understand the procedure, risks, and benefits is crucial for ethical and service users-centered care.

Participants found it hard to make an informed decision because their reduced capacity to process information due to illness. Similarly a research from the UK (2011) (34) and Canada (2018)(52) showed that majority of participants felt that their ability to comprehend information about ECT was limited. Additionally like in other studies, trust played a big role in decision-making. These findings show that service users need clear and thorough information and involving support system could improve their experience.

Several participants described ECT as a form of electric-based brain stimulation or brain relaxation, which could awaken their minds. This aligns with previous research where service users saw ECT as a procedure that "resets" or "reboots" brain function, "recharges" the brain, or "awakens" cognitive functions (56, 57). These explanations show how service users make sense of ECT's effects. One participant described ECT as a "microscope" that helps see and correct brain problems, including the auditory hallucinations. This explanation does not appear in past literature, showing how service users create personal interpretations of the treatment. Furthermore, participants in this study understood ECT as a treatment for illness that do not respond to medication, long-term illnesses, and severe mental illness. This is consistent with past research showing that service users view ECT as a last-resort treatment (57). This study also reports that one participant questioned why a stimulating treatment was used during a manic episode. Previous research has shown that ECT is effective for mania (58). This indicates that the participant's ways understanding made some confusion and might be improved by providing information. The variety of service user perceptions highlights the need for better pre-treatment education to give service users a clearer understanding of ECT's mechanism and effects. This research shows how personal experiences shape service user interpretations and suggests the need for tailored explanations to correct misconceptions.

On other hand some participants described the negative experience that they felt distressed due to long waiting times and described anesthesia as making them feel like they were dying or lifeless. Literature also indicates that negative experiences is related to anesthesia, long waiting times, fear of harm during the procedure, and the recovery phase (34, 36,52). Additionally in this research a female participant reported a negative

experience, prepared for ECT but had to return due to a power outage and she felt fear because ECT room located in a male service user's compound. Such an incident adds to understanding how logistical factors can affect the service user experience.

A particular case from this study, a participant who believed he had experienced the electric shock while he received ECT before anesthesia took full effect, leading to a highly distressing experience. This findings supported by literature that if the anesthesia time interval is too short or the dosage is insufficient, service users may remain partially aware during the procedure, increasing discomfort and psychological trauma (53). This shows the need for monitoring and adjustment of anesthesia protocol to reduce the risk of traumatic experience.

Support from family and healthcare professionals is important in the ECT experience. Participants in this study described their families as providing emotional and material support and families helped explain its benefits and reassured service users. This research supports previous studies from the UK and Australia which highlight the role of family in supporting service users , they relied on family for information and advice ,additionally family encouragement increased ECT acceptance and family involvement also contributed to a more positive perception of treatment (24,52,55). However, this study also showed some challenges; one participant felt unsupported, shame and self-blame and another participant's family were not allowed to voice concerns, making him to feel unheard. These findings suggest that while family support is generally helpful, it can also be complex. In our setting the role family is a bit different as they may not be the source of information due to lack knowledge about ECT and they made the decision without involving the service user. Educating families on emotional support and shared decision-making could improve service user's experiences.

All participants in this study reported positive interactions with healthcare professionals and appreciated their care and encouragement. Some specifically mentioned the kindness and attentiveness of staff, which reduced anxiety and improved their treatment experience and added that they perceived the medical team was well prepared helped reassure them. This finding aligns with previous research, showing that healthcare providers play

a crucial role in shaping a positive service user experience and trust and kindness influenced participants' decisions to undergo ECT (54, 55). This shows the importance of having structured approach and building trust through compassionate care make the service user to feel safe and comfortable. Two participants reported that all service users were treated equally; this adds depth to the literature by highlighting perceptions of equality in treatment regardless of gender or identity differences, which may be important in culturally sensitive settings.

While most participants found communication with staff easy and reassuring, a few reported limited interactions with healthcare professionals. The variation in engagement suggests there is room for improvement to ensure all service users feel well informed and supported. Additionally participants in this study were satisfied with post-ECT care. This highlights the important role of both family members and healthcare professionals in supporting service users after treatment.

This research has shown that many participants experience fear and anxiety about ECT but their fears were often based on misunderstandings, lack of information, or what they heard from other service users rather than their own experiences. Studies across different settings found that service users worry about personality changes, brain damage, long-term memory loss, harm during the procedure, and even death (34, 36,52,54). However, in this research, their anxiety decreased as they adapted to the treatment. This pattern of fear reducing over time is also seen in previous studies (2). Additionally a 1999 qualitative study described negative psychological effects such as shame, worthlessness, betrayal, and loss of identity (46). A difference in this research is that no participants reported long-term psychological distress, such as shame or betrayal. This suggests that future research should explore this area further.

Many participants in this study reported ECT helped their mental health by increasing self-awareness, reducing anxiety, improving sleep, and relieving hopelessness and suicidal thoughts. Some participants also said ECT helped them return to work or school and engage more socially. Literatures has consistently shown that many service users find ECT helpful. A review of studies from 1977 to 2009 found that most service users

viewed ECT as beneficial. Similarly, studies in the UK and Australia reported that service users often described ECT as life-saving and improving their sense of self (34,35). Additionally a US study found that 85.5% of service users experienced benefits, including better cognitive and physical health, improved social functioning, and reduced depressive symptoms (37). This research supports other literature findings that ECT has positive outcome on mental health and help to return to their functions and effective for people with treatment-resistant depression and acute suicidality.

However, some participants were unsure whether their recovery was due to ECT, medication, or both. Therefore clear communication with service about the role of each intervention is essential to help them understand the role of each treatment. A unique finding from this research was that in specific cases, ECT helped relieve a persistent tension headache that developed after stopping substance use. This could be a coincidence or it may suggest a need to explore the potential benefit of ECT in treating headache or withdrawal-related symptoms.

Most participants have positive attitudes towards ECT similar to the above mentioned literatures(34,35). However, some participants initially had negative attitudes due to concerns about the electric nature of the treatment and assumed complications to fear of electricity and assumed complications. These insights add depth to previous research by showing how service user attitudes change before and after treatment and providing information before ECT may help reduce the initial negative attitude.

While ECT is associated with several side effects, it is less described in this research. This research presents that four participants reported side effects, but each of them reported different side effects like forgetfulness during treatment, short-term headaches, dizziness, and disorientation, physical tiredness throughout treatment and persistent warming of hand. Five participants did not notice any immediate or long-term side effects. A 2010 systematic review found that two-thirds of ECT service users had side effects, and about 60% reported memory issues, some lasting from weeks to years(16). A 2017 study in China found headaches and muscle soreness were common(38). Other negative effects in past research include cognitive decline, physical issues, fear, trauma, and

challenges in daily life, work, and education(43). In contrast to the above studies a qualitative study done in Khartoum on 2010 reported no serious side effects (50). A quantitative study done on 2016 at AMSH, Ethiopia , not published, found some side effects, like headaches and confusion (51).

The finding of this study aligns with studies done at other settings that showed immediate side effects, memory problem and physical tiredness. But in line of a study done at Khartoum five participants did not perceive any side effects. These findings suggest some experience no side effect, while others face temporary or persistent challenges. While previous studies report high rates of memory impairment and other side effects, this research found fewer cases of memory related concerns. The lack of perceived side effect may be due to lack of information which might cause under recognition and underreporting of side effects. Some participants reported unpleasant post-ECT experiences like discomfort and dependence due to transient numbness after ECT. This findings align with some literature(16, 34, 38 ). One female participant reported an unusual side effect, persistent warmth in her hands after ECT. This was not found in the reviewed literature, suggesting a need for further research to explore on this side effects more.

Participants in this research recommended increasing the number of ECT rooms to reduce long waiting times, providing clear pre-treatment information, and involving service users in decision-making to help them better understand the treatment process. In previous studies, participants recommended reducing waiting times, improving communication between staff and service users, providing service user-friendly materials, creating platforms for sharing service user experiences, giving accurate information about risks and benefits, offering support from former ECT service users, better managing side effects, and increasing family involvement (33-35,54 ).

This study supports previous findings that waiting times, communication, and education remain important areas for improvement across different settings. In addition to the recommendation from the previous literature participant in this study suggested increasing the number of healthcare professionals involved in ECT and ensuring extra

precautions are taken to minimize risks. This reinforces the need to improve staffing levels and safety measures. A female participants recommended having a separate ECT room for female service users or adding an ECT room in the female ward. This suggests that gender-specific concerns about safety and comfort should be considered.

One participant suggested allowing service users to stay conscious during the procedure to observe the process and remember each step. However, a reviewed research does not support this. This recommendation may come from curiosity due to a lack of information before treatment. Providing thorough pre-treatment education, including videos explaining ECT, could help service users feel more informed. Other studies have also suggested using videos to educate service users before treatment (55). This study adds new perspectives, such as the importance of gender-specific treatment spaces and service user curiosity about the procedure. These insights contribute to the ongoing discussion on improving the ECT experience from a service user centered perspective.

Most participants in this research reported that they will be willing to undergo ECT in the future if needed since the perceived outcome, prioritize their health and perceived it as their only option treatment. This align with a literature which showed that the service users would be willing again if need because it had quicker response than medication (34, 36). This highlights the importance of positive treatment outcomes in shaping service user attitudes toward ECT. Two participant reported they would not be willing due to the experience of perceived side effect which align with a consumer-led and nonclinical studies which revealed a decreased willingness to repeat treatment (16). This implies the need for better management of the perceived side effects, discussion on possible side effects and improved service user education. In addition most participants in this study also would recommend ECT to others with mental illness. The study on women's experiences with ECT found that most participants would only recommend it as a last resort and would warn others about memory loss (52). In contrast, this research presents a more positive perspective on ECT compared to the above literature, where women were more hesitant about recommending the treatment. The difference could be influenced by factors such as expectations and treatment outcomes

## **CHAPTER SEVEN: LIMITATION**

Since the interviews were conducted by the principal investigator who is a psychiatry resident, working in the hospital, this may have made some participants hesitant to share their true opinions or criticize aspects of their treatment. Most of the participants focused on positive aspects of the care they have received and did not spontaneously disclose adverse effects of the procedure. Measures were taken to build trust with the participants through clarifying the role of the researcher, explaining the objectives of the research, and to reassure on confidentiality and anonymity. Additional probing questions were also used to illicit responses. However, there is a possibility that these mitigation measures were not sufficient and some negative experiences remained unreported.

The study used purposive sampling from outpatient clinics. In the data collection period, the service users who were eligible were in the age range 18 to 51. The experiences of older age group in ECT may have been missed which could have provided additional insight.

## **CHAPTER EIGHT: CONCLUSION**

This study explored participants' experiences with ECT, highlighting gaps in informed consent and decision-making. Many lacked prior knowledge and relied on trust in family or healthcare providers. While most initially feared ECT, they later accepted it due to its benefits, such as improved mood and reduced suicidal thoughts. However, side effects varied, including temporary memory issues and fatigue. Support from family and healthcare staff was important. They recommended better pre-treatment information, increased staffing, reduced wait times, and separate treatment spaces for men and women.

Clear communication, informed consent, and service user-centered care are essential to improving the ECT experience. Future research should focus on understanding side effects, enhancing decision-making, and tailoring treatment to individual needs.

## CHAPTER NINE: RECOMMENDATION

Based on the findings of this study, several recommendations can improve the experience and effectiveness of Electroconvulsive Therapy for service users.

In setting or hospitals where ECT treatment is available, healthcare providers should offer clear and accessible information about ECT before treatment, including details about the procedure, its benefits, potential side effects, and the service user's role in decision-making. Providing materials in simple language and using visual aids for service users and their families can help improve understanding. It may also be beneficial to have consent procedures guideline. Service users should also have enough time to ask questions and express concerns before making a decision.

To address long waiting times at AMSH, increasing the number of ECT rooms could help reduce delays and improve service user comfort. Additionally, some female participants felt uncomfortable receiving ECT in male's compound. Establishing a separate ECT room for female service users or providing additional ECT rooms in female wards at AMSH could improve their sense of safety and comfort.

Some participants expressed frustration over power outages that led to canceled sessions. Ensuring that backup power sources are available at AMSH that would improve the consistency the treatment process.

It is also important to ensure that staff receive proper training and regular updates, in setting where ECT treatment is available, to provide accurate information and quality care related to the ECT procedure.

Additionally MOH should reinforce each hospital providing ECT service to have policies focused on standardizing pre-treatment information delivery to improve service user experiences with ECT.

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## **APENDIXES**

### **Annex 1: Information sheet**

My name is Dr. Bethelhem Zerihun. I am a psychiatry resident at the Department of Psychiatry of Addis Ababa University. My advisors are Dr. Wubalem Fekadu, Dr. Beakal Amare and Dr. Azeb Asaminew Alemu. I am conducting a study on the experience of patient to ECT at Amanuel mental specialized hospital. The purpose of the study is to explore experience of service user to ECT. You are selected to participate in this study because you are currently seeking care at the ward or outpatient service at Amanuel Mental Specialized Hospital. Participants for the study are selected through convenient sampling method this means the participants are selected based on their availability and willingness to participate in the study. You are selected to participate in this study because you gave a verbal consent to be contacted by a researcher on the subject. Your participation in the study will add a new and better understanding of ECT treatment and you will be contributing to the development of comprehensive care on ECT.

The interview will take about 30-60 minutes, in a secure private office; you can take a break if you want. Notes will be taken in addition to audio recording during the interview so that I don't miss anything. The records will only be used for this research and I will not your name or other identifying information to ensure your confidentiality by assigning code names/numbers that will be used on all research notes and documents. Your participation in this study is voluntary. If you decide to take part in this study, you will be asked about your understanding of the study and once that is checked you will be asked to sign a consent form.

Even after signing the consent form, you are still free to withdraw anytime during the interview. Whether or not you decide to participate will have no effect on your care at Amanuel hospital. There will not be any direct benefit for you due to your participation in this study. After completing the interview, you will be paid 300-birr reimbursement for your time and transportation. You might feel stressed or uncomfortable with certain interview questions. If you feel uncomfortable with any of the question in the interview, you have a right not to answer.

If you feel distressed during and after the interview you can stop or withdraw from the interview anytime. If you require further support, I will link you to professionals in this hospital who can follow you. If you have any question or concern about this study or your participation in it please contact me, Dr .Bethlehem Zerihun through my E-mail address zbethi2005@gmail.com or my phone number +251912296755.

**የመረጃ ቅጽ**

ዶ/ር ቤተልሄም ዘረሁን እባላለሁ። በአዲስ አበባ ዩኒቨርሲቲ የአእምሮ ህክምና ትምህርት ክፍል የአዕምሮ ህክምና ስፔሻላይዝ በማድረግ ላይ የምገኝ ሀኪም(ሬዚደንት) ነኝ። የጥናት አማካሪዎቼ ዶ/ር ውብዓለም ፈቃዱ ፣ ዶ/ር በአካል አማረ እና ዶ/ር አዜብ አሳምነው ናቸው። በአማኑኤል የአእምሮ ስፔሻላይዝድ ሆስፒታል የአእምሮ ህመም ክፍል ተኝቶ ታካሚ የሆኑ እና ክትትል ላይ ያሉ ከዚህ ቀድሞ የኤሌክትሪክ ንዝረት ህክምና ያደረጉ የአእምሮ ህመም ታካሚዎች ስለ የኤሌክትሪክ ንዝረት ህክምና ያላቸውን ልምድ ላይ ጥናት እያካሄድኩ ነው። የጥናቱ አላማ የኤሌክትሪክ ንዝረት ህክምና ያደረጉ የአእምሮ ህመም ታካሚዎች ስለ የኤሌክትሪክ ንዝረት ህክምና ያላቸውን ልምድን ለመዳሰስ ነው። በጥናቱ ላይ ተሳታፊ የሚሆኑ ለመሳተፍ ፈቃደኛ የሆኑ እና መረጃ በሚሰበሰቡበት ወቅት መገኘት የሚችሉ ታካሚዎች ተሳታፊ ይሆናሉ። በዚህ ጥናት ላይ ለመሳተፍ የተመረጡበት ምክንያት በአማኑኤል ሆስፒታል አልጋ ይዘው ወይም በተመለሰሽነት እየታከሙ በመሆኑ እና በጉዳዩ ላይ ጥናት የሚያደርገው ሰው እንዲያነጋግሮት የቃል ፍቃድ ለሚያክሙአት ባለሙያ ስለሰጡ ነው። በጥናቱ ላይ በመሳተፍዎ በኤሌክትሪክ ንዝረት ህክምና ላይ ያለን ዕውቀት ለማጎልበት እና አገልግሎቶችን ለማሻሻል አስተዋፅዖ ያደርጋሉ።

ቃለ መጠይቁ ከ30-60 ደቂቃ ይወስዳል። ካስፈለገች በመካከል እረፍት መውሰድ ይቻላል። ቃለ መጠይቁ የምናደርገው ደህንነቱ በተጠበቀ የግል ቢሮ ውስጥ ነው። በቃለ መጠይቁ ወቅት ምንም መረጃ እንዳያመልጠኝ ከማስታወሻ በተጨማሪ ድምጽ እቀርጻለሁ። የድምጽ መዝገቦቹ ለዚህ ጥናት ብቻ ጥቅም ላይ ይውላሉ። በሁሉም የጥናት ማስታወሻዎች እና ሰነዶች ላይ የኮድ ስሞችን ወይም ቁጥሮችን በመመደብ ምስጢራዊነትዎን እጥብቃለሁ። የእርስዎን ስም ወይም ሌላ መለያ መረጃ አልጠቀምም።

በዚህ ጥናት ውስጥ ያለዎት ተሳትፎ በፈቃደኝነት ነው። በዚህ ጥናት ውስጥ ለመሳተፍ ከወሰኑ ስለ ጥናቱ ያለዎትን ግንዛቤ ይጠየቃሉ። ስለ ጥናቱ መገንዘብዎን ከተረጋገጠ በኋላ የፍቃደኝነት መጠየቅያ ፎርም ላይ

እንዲፈረሙ ይደረጋል። የፍቃደኝነት ቅጹን ከፈረሙ በኋላም ቢሆን ቃለ መጠይቁ በማንኛውም ጊዜ ማቋረጥ ይችላል። ለመሳተፍ መወሰን ወይም አለመወሰን በአማካኝ ሆስፒታል በሚያደርጉት ክትትል ላይ ምንም ተጽእኖ አይኖረውም። በዚህ ጥናት ውስጥ በመሳተፍ ምንም አይነት ቀጥተኛ ጥቅም አያገኙም። ቃለ መጠይቁን ከጨረሱ በኋላ ለጊዜው እና ለመጓጓዣ ማካካሻ 300 ብር ይከፈላል። በቃለ መጠይቅ ወቅት የመጨናነቅ ስሜት እና ምችት ማጣት ሊሰማዎት ይችላል። መመለስ የማይፈልጉት ጥያቄ ካለ ያለመመለስ መብትዎ የተጠበቀ ነው። ነገርግን በቃለ መጠይቁ ወቅት የስሜት መረበሽ ከተሰማዎት በማንኛውም ጊዜ ቃለ መጠይቁን ማቆም ይችላሉ። በምናነሳው ርዕስ ምክንያት በቃለ መጠይቁ ሂደት ውስጥ ጥሩ ስሜት ካልተሰማዎት እና ተጨማሪ አርዳታ ካስፈለገ በዚህ ሆስፒታል ውስጥ ካሉ ባለሙያዎች ጋር አገናኝተው ይጋለጡ። በዚህ ጥናት ላይ በማንኛውም ጊዜ ጥያቄ ወይም ቅሬታ ካሎት እኔን ማለትም ዶ/ር ቤተልሄም በኢሜል zbethi2005@gmail.com ወይም በስልክ ቁጥር 0912296755 ልታናግሩኝ ትችላላችሁ።

## Annex 2: Brief assessment of capacity to consent

I will now ask you some questions to check your understanding regarding the research study.

(For the interviewer: For each of the following questions and tick yes if the service user answers the questions correctly and tick no if the service user did not answer correctly after the information sheet is read to them)

What's the purpose of the study?

Yes  No

What's the risks and benefits of the study?

Yes  No

Is this a research or medical care?

Yes  No

Will withdrawing from the study impact your care at the hospital?

Yes  No

The service user has the capacity to consent for this research study (Tick yes and proceed to fill the consent form if the service user answered all the above questions correctly.)

Yes  No

### ፈቃድ የመስጠት አቅም አጭር ግምገማ

ጥናቱን በተመለከተ ያለዎትን ግንዛቤ ለመፈተሽ አሁን አንዳንድ ጥያቄዎችን እጠይቅዎታለሁ።

(ለጠያቂው፡ የመረጃ ቅጹ ከተነበበላቸው በኋላ ለሚከተሉት እያንዳንዱ ጥያቄዎች ታካሚዎ ጥያቄዎቹ በትክክል ከመለሱ አዎ የሚለውን ምልክት ያድርጉ። ጥያቄዎቹ በትክክል ካልመለሱ አይ የሚለውን ምልክት ያድርጉ።)

የጥናቱ ዓላማ ምንድን ነው?

አዎ  አይ

የጥናቱ አደጋዎች እና ጥቅሞች ምንድን ናቸው?

አዎ  አይ

ይህ ጥናት ነው ወይስ የሕክምና እገልግሎት?

አዎ  አይ

ከጥናቱ መውጣት በሆስፒታል ውስጥ ያለዎት ክትትል ላይ ተጽእኖ ይኖረዎልል?

አዎ  አይ

(ለጠያቂው ብቻ) ታካሚዎ ለዚህ የምርምር ጥናት ፈቃድ የመስጠት አቅም አላቸው ?

አዎ  አይ

ታካሚዎ ከላይ ያሉትን ሁሉንም ጥያቄዎች በትክክል ከመለሱ የፍቃድ ቅጹን መሙላት ይቀጥሉ።

**Annex 3: Consent Form**

I have received information and understood the information provided about the research, procedure, risks, benefits and that participating in the research won't impact the treatment I receive at AMSH. I am informed that audios will be recorded and that the researchers will ensure to preserve my confidentiality. I understand the provided information and have had the opportunity to ask questions. I consent to take part in the research of service users' experience to ECT at Amanuel Mental Specialized Hospital.

Participant's Signature \_\_\_\_\_ Date \_\_\_\_\_

Researcher's Signature \_\_\_\_\_ Date \_\_\_\_\_

**የፈቃደኝነት መጠየቅያ ቅጽ**

ስለ ጥናቱ መረጃ ተስጥቶኛል። ስለ ጥናቱ አሰራር፣ ስጋቶች፣ ጥቅም እንዲሁም በጥናቱ መሳተፊ በ አማካኝ ሆስፒታል የማገኘውን ህክምና ላይ ተጽእኖ እንደማይኖረው ከቀረበው መረጃ ተረድቻለሁ። ድምጽ እንደሚቀረጽ እና የማንነቴን ሚስጥር እንደሚጠበቅ ተነግሮኛል። የቀረበልኝን መረጃ ተረድቼ ጥያቄዎችን ለመጠየቅ እድሉን አግኝቻለሁ። በአማካኝ የአእምሮ ስፔሻላይዝድ ሆስፒታል የኤሌክትሪክ ንዝረት ህክምና ያደረጉ የአእምሮ ህመም ታካሚዎች ስለ የኤሌክትሪክ ንዝረት ህክምና ያላቸውን ልምድ ላይ ጥናት ለመሳተፍ ፈቃደኝነቴን በፊርማዬ አረጋግጣለሁ።

የጥናት ተሳታፊ ፊርማ \_\_\_\_\_ ቀን \_\_\_\_\_

የአጥኝ ፊርማ \_\_\_\_\_ ቀን \_\_\_\_\_

**Annex 4: Socio demographic characteristics of participants**

Thank you for agreeing to take part in the study. I will now ask you questions about yourself.

Age -----

Marital status -----

Educational status -----

Occupation -----

Living situation -----

Duration of illness -----

Diagnosis-----

Time of ECT treatment-----

Frequency of ECT treatment -----

If you had a single ECT treatment, how many session did you take? -----

If you had multiple ECT treatment, how many session did you take in the most recent ECT treatment and what was the maximum and minimum number of course? -----

**የተሳታፊዎች ማህበራዊና ስነ-ሕዝብ አወቃቀር መረጃዎች**

በጥናቱ ላይ ለመሳተፍ ስለተስማማችሁ እናመሰግናለን። አሁን ስለራስዎ ጥያቄዎችን እጠይቅዎታለሁ።

ዕድሜ \_\_\_\_\_

የጋብቻ ሁኔታ \_\_\_\_\_

የትምህርት ደረጃ \_\_\_\_\_

የሥራ ሁኔታ \_\_\_\_\_

የኑሮ ሁኔታ \_\_\_\_\_

ህመሙ የቆየበት ጊዜ \_\_\_\_\_

የህመም ዓይነት \_\_\_\_\_

ምን ያህል ጊዜ ነው የኤሌክትሪክ ንዝረት ህክምና የወሰዱት? \_\_\_\_\_

የኤሌክትሪክ ንዝረት ህክምና አንድ ጊዜ ከሆነ የወሰዱት በቅርብ ፣ ምን ያህል ዙር ነው የወሰዱት?

\_\_\_\_\_

የኤሌክትሪክ ንዝረት ህክምና ከአንድ ጊዜ በላይ ከሆነ የወሰዱት፤ በቅርብ የነበረው ላይ በአንድ ዙር ምን

ያህል ጊዜ ተሰጥዎት? በአንድ ዙር ከፍተኛ የሆነ ቁጥር ሰንት ወሰዱ አነስተኛውስ?

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## Annex 5: Topic guide

1. Tell me about your treatment before you start the ECT?
2. Tell me your prior understanding about ECT?
  - Where do you get this information?
3. Tell me about the process of deciding to undergo ECT treatment? If he or she does not know about the process of decision ask this question
  - Why do you think ECT recommended for you?
4. Did you get any information about your ECT treatment after the decision?
  - What kind of information did you receive?
  - Tell me about your understanding of ECT?
5. What was your involvement in the decision making?
  - Did you agree to take ECT? If not; what was your reason ?
6. Would you tell me your experience when you took ECT treatment on the first session and how was your experience on subsequent course?
7. How your family or caretaker did support you during your ECT treatment?
8. How was the interaction of medical team during your ECT treatment?
9. What were benefits you gained from ECT treatment?
10. Have your attitudes towards ECT changed since your treatment(s)? If so, how have they changed?
11. What are the challenges you faced with ECT?
  - Can you describe any immediate and delayed side effects you experienced from ECT?
  - How was it managed?
12. Will you willing to take the ECT in the future if it is indicated?
13. Would you recommend ECT to someone else in a similar situation? Why or why not?
14. If you could change anything about your experience with ECT, what would it be?
15. What is your recommendation for improving ECT treatment?

Thank you for participating in this study.

**የመጠይቅ መመሪያ**

1. ከኤሌክትሪክ ንዝረት ህክምና በፊት ሰለነበሮት ህክምና ይገኛሉ?
2. ስለኤሌክትሪክ ንዝረት ህክምና ከሕክምናዎ በፊት የነበሮት መረዳት ምን ይመስል ነበረ?
  - ይህን መረጃ ከየት እንዳገኙ ይገኛሉ?
3. ኤሌክትሪክ ንዝረት ህክምና እንዲያደርጉ የተወሰነው በምን ዓይነት ሂደት እንደነበር ይገኛሉ?
  - ሂደቱ እንዴት እንደነበር የማያቁት ከሆነ የኤሌክትሪክ ንዝረት ህክምና ለምን የታዘዘሎት ይመስሎታል?
4. ይህን ሕክምና እንዲወስዱ ከተወሰነ በኋላ ስለኤሌክትሪክ ንዝረት ሕክምናዎ ከባለሙያ መረጃ አግኝተው ነበር?
  - አግኝተው ከሆነ ምን መረጃ አገኙ?
  - የኤሌክትሪክ ንዝረት ህክምናን እንዴት እንደሚረዱት ይገኛሉ?
5. የኤሌክትሪክ ንዝረት ህክምና በማድረግ ውሳኔ ውስጥ የእርስዎ ተሳትፎ ምን ነበር?
  - ሕክምናውን ለመውሰድስ ተስማምተው ነበር?
  - ተስማምተው ካልነበረ ምን ነበር ምክንያቶቻት?
6. የኤሌክትሪክ ንዝረት የመጀመሪያው ዙር ሕክምናዎ ምን ይመስል ነበር? ቀጥሎ በነበሩት ዙሮች ላይስ እንዴት ነበር?
7. በኤሌክትሪክ ንዝረት ህክምና ወቅት ከቤተሰቦችዎ ወይም ከቅርብ ረዳትዎች ያገኙት ምን ዓይነት ድጋፍ ነበር?
8. በኤሌክትሪክ ንዝረት ህክምናው ወቅት ከህክምና ቡድኑ ያገኙት ድጋፍና የነበረዎት ግኑኝነት ምን ይመስል ነበር?
9. ከኤሌክትሪክ ንዝረት ህክምና ያገኛቸው ጥቅሞች ምንድናቸው?
10. ከህክምናዎ በኋላ ስለ ኤሌክትሪክ ንዝረት ህክምና ያለዎት አመለካከት ተለውጧል? ከተለወጠ በምን መልኩ እንደተለወጠ ሊነግሩን ይችላሉ?
11. የኤሌክትሪክ ንዝረት ህክምናን ሲወስዱ ተግዳሮት የሆኑባቸው ነገር ምን ነበር?

- በኤሌክትሪክ ንዝረት ህክምናው ወቅት ወዲያውና ቆይቶ ያጋጠሞትን የጎንዮሽ ጉዳዮች ካሉ ሊገልጹልን ይችላሉ?
- ኖረው ከነበረ ለማስተካከል ምን ተደረገ?

12. ወደፊት የኤሌክትሪክ ንዝረት ሕክምና ቢያስፈልገው ፈቃደኛ የሚሆኑ ይመስሉታል?

13. የኤሌክትሪክ ንዝረት ህክምና በተመሳሳይ ሁኔታ ውስጥ ላለ ሌላ ሰው ቢሰጥ ጥሩ ነው ብለው ይመክራሉ? ለምን?

14. በኤሌክትሪክ ንዝረት ህክምና ወቅት ካጋጠምዎት ነገር ማስቀረት ቢቻል የቱን ማስቀረት ይመርጡ ነበር?

15. የኤሌክትሪክ ንዝረት ሕክምና ላይ ቢሻሻል የሚሉት ነገር ካለ?

ጥያቄዎቼን ጨርሻለሁ። በተጨማሪ መናገር የሚፈልጉት ወይም መደረግ አለበት የሚሉት ነገር ካለ? ለሰጡኝ ማብራሪያ በጣም አመሰግናለሁ።

## **DECLARATION OF ORIGINAL WORK (THESIS)**

I, the undersigned, declare that this thesis is my original work, where my work is indebted to the work of others, it has not been accepted or presented for a degree in this or any other university and that all sources of materials used for the thesis have been fully acknowledged.

If proven otherwise, I understand that appropriate actions will be taken based on the Senate Legislation of Addis Ababa University and the Guidelines provided by the Ministry of Education.

Name of Investigator: Dr Bethelhem Zerihun

Signature: \_\_\_\_\_

Date of submission: 17/02/25 GC

This thesis proposal has been submitted to DOP with my approval as a supervisor

- ✓ Name and Signature of the first Supervisor \_\_\_\_\_
- ✓ Name and Signature of the second supervisor \_\_\_\_\_