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

AUDITORY HALLUCINATION AND CHILDHOOD TRAUMA AMONG INDIVIDUALS WITH SERIOUS MENTAL HEALTH CONDITIONS AT AMANUEL MENTAL SPECIALIZED HOSPITAL: A CROSS-SECTIONAL STUDY

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A THESIS SUBMITTED TO THE DEPARTMENT OF PSYCHIATRY, SCHOOL OF MEDICINE, COLLEGE OF HEALTH SCIENCES, ADDIS ABABA UNIVERSITY FOR THE PARTIAL FULFILMENT OF THE SPECIALTY CERTIFICATE IN PSYCHIATRY

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ACRONYMS AND ABBREVIATIONS

AAU: Addis Ababa University

ACE: Adverse Childhood Experience

AH: Auditory Hallucination

AMSH: Amanuel Mental Specialized Hospital

AOR: Adjusted Odds Ratio

APA: American Psychological Association

BD: Bipolar Disorder

BPD: Borderline Personality Disorder

CDC: Centers for Disease Control and Prevention

CI: Confidence Interval

COR: Crude Odds Ratio

CTQ: Childhood Trauma Questionnaire

EA: Emotional Abuse

EN: Emotional Neglect

HIV: Human Immunodeficiency Virus

HPA: Hypothalamic–pituitary–adrenal

IQR: Interquartile Range

MDD: Major Depressive Disorder

N: Sample size

NeuroGAP: Neuropsychiatric Genetics of African Populations study

OR: Odds Ratio

OSSS-3: Oslo Social Support Scale (3-item)

p: p-value

PA: Physical Abuse

PN: Physical Neglect

PSYRATS-AH: Psychotic Symptom Rating Scales – Auditory Hallucinations Subscale

PTSD: Post-Traumatic Stress Disorder

r: Pearson correlation coefficient

SA: Sexual Abuse

SAMHSA: Substance Abuse and Mental Health Services Administration

SCOPE: Studying the Context of Psychoses to Improve Outcomes in Ethiopia research team

SD: Standard Deviation

SPSS: Statistical Package for the Social Sciences

TLEs: Traumatic Life Events

UBACC: University of California San Diego Brief Assessment of Capacity to Consent

VACS: Violence Against Children and Youth Surveys

VIF: Variance Inflation Factor

VISQ-R: Varieties of Inner Speech Questionnaire - Revised

WHO: World Health Organization

WMH: World Mental Health

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ABSTRACT

Background: Childhood trauma is increasingly being recognized as linked with serious mental health conditions and also auditory hallucinations. But there is limited literature from the region on the relationship of subcategories of childhood trauma with auditory hallucination that is seen cross-diagnostically.

Objective: This study aimed to describe auditory hallucinations and childhood trauma, and examine their association among individuals with serious mental health conditions at Amanuel Mental Specialized Hospital (AMSH).

Method: An institution-based cross-sectional study was conducted among 418 individuals with serious mental health conditions using a consecutive sampling method. Data were collected using a structured questionnaire encompassing socio-demographic variables, clinical variables, Psychotic Symptom Rating Scales – Auditory Hallucinations Subscale (PSYRATS-AH), Childhood Trauma Questionnaire (CTQ), and the Oslo Social Support Scale (OSSS-3). Descriptive statistics were used to summarize all variables. Bivariate analysis and multivariable logistic regression were used to identify associations.

Result: More than half of the participants reported experiencing moderate to severe childhood trauma, with moderate to severe physical neglect being the highest (48.3%) reported subcategory. Each one-point increase in the emotional neglect score was associated with a slight increase in the odds of having lifetime auditory hallucinations (AOR = 1.12; 95% CI: 1.04–1.21; p = 0.002). Also, each one-point increase in the physical neglect score was associated with a slight increase in the odds of having lifetime auditory hallucinations (AOR = 1.18; 95% CI: 1.05–1.32; p = 0.005). Participants with secondary education and above had 2.16 times higher odds of lifetime auditory hallucinations compared with those with below secondary education (AOR = 2.16; 95% CI: 1.17–3.97; p = 0.014). Compared with unemployed participants, self-employed participants had 2.18 times higher odds of lifetime auditory hallucinations (AOR = 2.18; 95% CI: 1.07–4.46; p = 0.033).

Conclusion: Childhood trauma, specifically emotional and physical neglect, shows statistically significant association with lifetime auditory hallucination.

Recommendation: Childhood trauma should be addressed in the routine clinical care of individuals with serious mental health conditions and trauma informed approaches should be strengthened when working with people with auditory hallucinations.

Key words: Childhood Trauma, Auditory Hallucination, Serious Mental Health Conditions, Ethiopia

1. INTRODUCTION

1.2 Background of the study

Auditory hallucinations (AH) are perceptions of external sound in the absence of external stimulation that may occur either in the clinical or non-clinical population in the awake state(1). They are major features of psychotic illnesses like schizophrenia, schizoaffective disorder, and bipolar disorder, with a lifetime prevalence up to 56.7% in this cross-diagnostic group(2). Though usually associated with schizophrenia, AHs are not specific to schizophrenia and can occur in several other mental health conditions too(1).

AHs can vary from distressing, uncontrollable voices with negative content to less frequent, manageable ones with neutral or positive content(3). The definition of negative voice-content encapsulates a variety of concepts, from the literal language of voices to what the person believes the words in the voice mean, and usually takes the form of threats and negative evaluations directed towards the person (4). According to United Kingdom (UK) Equality Act 2010 (Chapter 15, Section 26) negative voice content is defined as “speech by voices that a reasonable person would interpret as violating their dignity, or creating an intimidating, hostile, degrading, humiliating or otherwise offensive environment”(4,5).

Trauma refers to any disturbing experience that is caused by human or nature, that a person becomes exposed to directly or indirectly, and causes the person an overwhelming amount of disruptive bodily and mental impacts that have the potential to affect that person’s well-being(6,7). These adverse life events can occur anytime in a person’s life and those usually included in adverse childhood experiences are a range of physical, emotional, and sexual abuse and also physical and emotional neglect that take place before the age of 18years(8). More than 3/4th of respondents from over 20 countries were found to have experienced life time traumas according to World Health Organization (WHO) World Mental Health (WMH) surveys(9). The Centers for Disease

Control and Prevention (CDC)-Kaiser Adverse Childhood Experiences(ACE) Study has also reported that more than half of its respondents (52%) experienced 1 category of adverse childhood exposure, and 6.2% reported 4 or more exposures(8). In an African study conducted in 5 countries, the proportion of individuals who reported experiencing at least one ACE was found to be >72%(10). In a South African study, 63.7% adolescents reported at least one type of childhood trauma on the Childhood Trauma Questionnaire (CTQ), and emotional neglect (EN) was found to be the most reported among subcategories (11).

Chronic stress due to earlier trauma has been connected to a variety of psychiatric disorders via Hypothalamic–pituitary–adrenal (HPA) dysregulation(12). Among the many neurobiological and psychosocial theories that try to explain how AHs arise, one implicates trauma, as it has the potential to result in intense, emotionally charged memories that are incompletely processed and more likely to resurface as hallucinations, involuntarily and without appropriate contextual cues, due to biological changes in the brain it brings about(13–17). Another theory explains how self-generated inner speech can be mistakenly attributed as if coming externally following cognitive biases, mood, and heightened threat perception(1,18,19).

Trauma and adverse childhood experiences have been found to be closely associated with a wide range of psychiatric disorders over the years(20–22) and Post Traumatic Stress Disorde (PTSD) by definition follows trauma. There are lots of researches that studied the relationship between exposure to trauma and psychotic disorders. Patients with psychosis are 2.7 times more likely to have experienced childhood adversity(23). There has been studies also that explore the relationship between variety of traumas and hallucinatory voices reporting different results on their association(4,24–38).

In population based studies, the median proportion of AH in the general population is estimated 13.2%(39). The Highest prevalence of AH among the clinical population is in schizophrenia where AH is a core diagnostic feature, ranging from 60-80% but AHs are

also prevalent in other disorders like mood disorders, Borderline Personality Disorder (BPD) and Post Traumatic Stress Disorder (PTSD) to a varying degree(40–44).

Available studies in Africa and, in particular, in Ethiopia are mostly those that explored the relationship between ACEs and a range of psychotic illnesses. A study done at the Comprehensive Specialized Hospital in Bahir Dar, Ethiopia, showed that individuals with schizophrenia reported at least one ACE more than the healthy participants(45). Analysis from the case-control Ethiopia Neuropsychiatric Genetics of African Populations(NeuroGAP)-Psychosis study showed that a group with psychotic disorder conveyed greater trauma and psychological distress than the controls(46). A study that is part of NeuroGAP-Psychosis, which included Ethiopia, also showed that specific forms of trauma and psychotic symptoms may influence one another in a bidirectional manner to a varying degree(47). Another data collected as part of a broader initiative, NeuroGAP-Psychosis, which included Ethiopia, revealed a modest increased odds of trauma among cases compared with controls(48).

1.2 Statement of the Problem

Auditory hallucinations, or hearing voices, are among the most troubling and functionally impairing symptoms experienced by individuals, especially those with mental illness, and, unfortunately, some AHs remain resistant to standard treatments and persist for many years(1). Even though voice hearing occurs both in clinical and non-clinical population and doesn’t always lead to distress and dysfunction, negative content such as abusive, threatening, or commanding voices usually lead to higher levels of distress requiring more care(49).

If hallucinations, as any other psychiatric illness or symptom, are to be approached biopsychosocially, understanding their relationship to trauma helps in addressing AHs comprehensively. There is a growing evidence from global research suggesting that Adverse Childhood Experiences are significant risk factors for the development and severity of AHs(4,24–38). Despite growing evidence globally, there is limited evidence

in Ethiopia examining the relationship between specific childhood trauma subtypes and auditory hallucinations among individuals with serious mental illness.

1.3 Rationale of the Study

Psychiatric interventions that target and take into consideration the possible relations AHs might have with trauma might contribute to the reduction in negative content and voice-related distress(28). An important recommendation that might arise from this study, apart from studying the prevalence and association of AHs and childhood trauma in our setting, is for clinicians to ask for details of AHs and approach symptoms in a trauma-informed way(26). Both thematically and directly, trauma and hallucinatory voices are found to be linked phenomenologically to varying degrees, highlighting the need to approach AHs with trauma in mind during case formulation and management(38).

Some studies have studied the relationship between trauma and psychosis in the African population, including Ethiopian(45–48,50–52), but the relationship between childhood trauma and AHs is not analyzed in low-income countries like Ethiopia, to my knowledge.

Therefore, it is beneficial both for the clinical work and input to the field to study the relationship between childhood trauma and AHs amongst individuals with mental illness in Ethiopia, where culture and childhood traumas, which are known to influence hallucinatory voices(4), probably differ in many ways from the high income countries.

1.4 Literature Review

1.4.1 Conceptual and theoretical aspects

A Hallucination is a perception that arises in the absence of corresponding external stimulation in any of the sensory modalities while one is awake(53). These perceptual disturbances can be auditory, visual, olfactory, gustatory, tactile or other somatic hallucinations. Auditory hallucinations are subjective perceptions of voices in the absence of congruent external stimuli(1,54).

Auditory hallucinations, though mostly associated with schizophrenia, occur both in non-clinical population as well as in people with borderline personality disorder, depression,

bipolar disorder, post-traumatic stress disorder, substance abuse and neuropsychiatric disorders such as dementia, Parkinson's disease and epilepsy(1). Hypnagogic, hypnopompic, and grief-related hallucinatory experiences are among the experiences that occur in the non-clinical population(1).

Auditory hallucinations vary characteristically from condition to condition and also evolve. They can be other verbal or non-verbal sounds, "soundless voices," varying in volume and clarity, ranging from single words to conversations, occurring occasionally or constantly, and perceived as if coming from inside or outside(55). The content can be positive, neutral, or negative, with second- or third-person grammar(55). Voices might be personified by individuals, occasionally related to past trauma, and attributed to different origins by the individuals(55). Negative voices usually will be louder, there will be lack of control, and they are more distressing and constitute commands, insults, and abuse—often spoken in second or third person(55). Some patients experience AHs only during acute episodes, while others have persistent, treatment-resistant hallucinations(55). Compared to clinical voice-hearers, nonclinical voice-hearers usually experience voices less negatively, less frequently, with less distress, shorter duration, better perceived control and attribute it to spiritual meanings or familiar people that aren't around anymore(55).

A range of theories and models are proposed to explain the underlying mechanisms of AHs. The Feed-Forward Model or Neurocognitive Action Self-Monitoring System, suggests under normal circumstances when a motor action is planned including inner speech, an efferent copy of the intended action or thought which is called corollary discharge is sent to the relevant sensory cortices comparing and matching the predicted and received act so that less attention is given to the act or thought and also for the brain to be able to tell apart self-generated and externally generated sensations(18). But when there is a breakdown in self-monitoring actions of the brain and a corollary discharge dysfunction occurs, awareness levels of those thoughts and actions rises and patients fail to perceive their own internally generated thoughts and actions and attribute it to external sources(1,18). Inner speech models similarly suggest auditory hallucinations to arise due to sensory attenuation absence and attributing self-

generated inner speeches or verbal thoughts to external sources(18,19). In people with psychosis or vulnerable people, this happens in states of heightened threat perception or cognitive biases(1).

Another theory called Aberrant Memory Model implicates trauma as key content source and impaired memory processing as the way through which those traumatic events become hallucinatory(1). The model proposes AH occurs when emotionally intense, undesirable and abnormal memory, usually of incompletely processed past traumatic experiences, is activated out of context and out of control leading to the sensation to be attributed to external sources(1,14,15). Especially early-life trauma or sexual abuse is strongly implicated, as it produces vivid, emotionally charged memories that are more likely to intrude later in life(16,17). This type of memory activation takes place because of dysfunctional prefrontal inhibition causing inadequate suppression or labeling them as self-generated(1,13). Traumatic stress has also been associated with abnormalities in limbic area, like the amygdala and hippocampus, which could make individuals prone to hallucinations by affecting memory processing(4,27). Neuroimaging studies show a lack of significant activity in the left inferior frontal gyrus, with left insula considerably active, significantly diminished activity in the left inferior parietal lobule and left superior temporal gyrus(56), and abnormalities in parts of the brain like the hippocampus and medial prefrontal cortex, that serve in memory and self-monitoring(14,15).

Trauma-related explanations also conceptualize voice-hearing as a phenomenon where certain thoughts or cognitions are experienced as external, foreign, and perceived as audible voices(4). Hypervigilance, shame, dissociation, and self-critical cognitive processes following adverse life experiences amplify threat perception and disrupt self-concept integration contributing negative voice-content in auditory hallucinations, misinterpretation of internal stimuli, and fragmented parts of the self to manifest as voices(4). Trauma might also influence internalized representations of people or events shaping the schema and contributing to the content of hallucinations(4). Studies suggest despite the content and the emotional tone of AHs, trauma has the potential to result in deficits in cognitive inhibition making one vulnerable to AHs in general(24,57).

Brain imaging studies support this by showing hyperactivation in emotional brain regions during the processing of emotionally negative words in patients with AHs(4).

In a study examining the phenomenology of trauma and voice-hearing among individuals with distressing voices and a history of trauma before symptom onset, both participants and researchers frequently observed a connection between interpersonal trauma and the experience of hearing voices(38). Direct, explicit connections were rated to be 79.5% for any type of link by the participants, while 65.8% by the researchers(38). The association between the content of the voices and the trauma was reported to be 60.3% by the participants, while the same links were reported 24.7% by the researchers' ratings. Independent, thematic similarities between the trauma and the voices was also picked in this study(38).

Another contributing factor to the characteristics of AHs is cultural models of the mind influencing the content and emotional tone(4). The likelihood of more negative contents to arise and worse associated distress has also been observed where there is negative interpretation and relationship with the voices(4). How people engage with the voices also seem to have an impact on the continued content and level of distress(4). People responding to the negative content in hostile manner tend to reinforce the content and the cycle while responding compassionately might help reduce the negative content(4).

1.4.2 Epidemiological Evidence

In a literature review of population based studies done in 7 countries, the prevalence of AH among the general adult population though varying significantly due to many factors, were found to range from 3.1%–19.5% showing that voice-hearing is neither rare nor limited to the clinical population(39).

AHs have the highest prevalence in schizophrenia, where hallucination is one of the core diagnostic criterias of the disorder; 60-80% of patients with schizophrenia spectrum disorders report experiencing auditory hallucinations at some point though multimodal hallucinations are present too in this population(41). AHs are also present in BD and depression to varying degree but significantly often when they present with psychotic

features. Non-psychotic disorders like BPD and PTSD also show notable rates of AHs, especially in trauma-exposed populations. In a systematic review of 14 peer-reviewed publications, prevalence rates of AHs in BD was found to range from 11.3 to 62.8% and in MDD from 5.4 to 40.6%(42). In participants from the United Kingdom and Canada with probable complex PTSD, 27.9 % stated to have experienced AHs, while 15.4 % of participants with probable PTSD reported having experienced AHs(43). In an exploratory analysis of voice hearing in chronic PTSD, 50% of the sample reported AHs(44). In a systematic review of studies reporting on AHs in people with BPD, AHs were expressed in 21–46% of the patients(40).

As it has been discussed previously, characteristics of AHs vary from clinical to non-clinical populations, among different diagnoses, and between individuals, too. In a study done to explore the phenomenological differences of AHs between clinical and non-clinical voice-hearers, 34.7% of the voice utterances were objectively negative, 6.8% were neutral, and 58.5% were positive in the clinical group, while 18.4% of the voice utterances were objectively negative, 4.9% were neutral, and 76.7% were positive in the non-clinical group (33). In another study involving 121 participants from two groups, clinical (n = 75) and non-clinical (n = 46), the clinical group reported higher severity of voices, negative content, voice-related distress, and interpretations of loss of control(31). Higher levels of negative content in voices were associated with higher levels of voice-related distress(31).

On a semi-structured interview on AH phenomenology among Early Intervention in Psychosis service users aged 16–65 in Northern Ireland, fear and anxiety in relation to the voices was reported more than 60%, and abusive/violent voices were reported to be 87.5% in participants(58). In a different study done in the United States (US), appraisal of the AHs as powerful and difficult to control by the patients were associated with increased distress(59).

A number of studies from around the world have also showed a range of association between trauma and AH. In a Duthch case-control study of children with and without

AH, strong links were found between traumatic experiences and stressful events, and both the incidence and persistence of AH, as well as with its severity and delusional ideation(25). In another study involving 57 clinical and 45 healthy voice-hearers from South London and North Wales, participants were compared in terms of exposure to adversity during childhood and adolescence/adulthood, and findings showed no significant differences between the two groups in childhood adversity or lifetime victimization, suggesting that victimization may be associated with the emergence of auditory hallucinations in general, rather than specifically with clinical need-for-care voice-hearing(32).

Some studies suggest childhood adversities are just related to the risk of developing AHs in general and not with the characteristics or the need for care. An online survey examining the effects of abuse experienced during childhood or adulthood and clinical status on the negative content of auditory hallucinations compared four groups: individuals with a psychotic disorder and AHs who had experienced abuse, individuals with a psychotic disorder and AHs who had not experienced abuse, healthy voice-hearers with a history of abuse, and healthy voice-hearers without such a history(24). The study found that the clinical groups reported significantly higher levels of negative voice content than the healthy groups(24). However, abuse history was not associated with the degree of negative content in auditory hallucinations(24). These findings suggest that while exposure to traumatic events may increase vulnerability to experiencing AHs, it does not necessarily explain why the voices contain negative content(24).

In another study investigating the relationship between childhood trauma, hallucinations, and the emotional content of auditory hallucinations, researchers examined trauma exposure and AH phenomenology among 100 patients with psychotic disorders and AH, 127 non-psychotic individuals with AH, and 124 healthy controls without AH(27). The prevalence of the five forms of childhood trauma did not differ significantly between the psychotic and non-psychotic voice-hearing groups(27). However, compared with healthy non-hallucinating controls, non-psychotic individuals with AH were more than

twice as likely to have experienced childhood sexual abuse and more than seven times as likely to have experienced emotional abuse(27). Similarly, patients with psychotic disorders and AH were more than three times as likely to report childhood sexual abuse and more than five times as likely to report emotional abuse(27). Despite these associations, no significant relationships were found between childhood sexual or emotional abuse and specific characteristics of AH, including frequency, duration, location, loudness, beliefs about their origin, controllability, emotional valence, or the level of associated distress(27). These findings suggest that childhood sexual and emotional trauma may increase vulnerability to experiencing auditory hallucinations in general, rather than determining the specific content or characteristics of the voices(27).

Some studies show not only that adversities increase the likelihood of developing AHs, but also that the contents and the distress are related to the adversities sustained early on. An exploratory research on a sample of 30 respondents was done to assess the history of childhood abuse and the contents of their hallucinations and delusions(26). Although the content of hallucinations and delusions did not directly mirror childhood abuse experiences, the analysis identified shared underlying themes, particularly in relation to interpersonal relationships(26). In many cases, participants' psychotic experiences appeared to reflect emotional responses to, or psychological meanings derived from, traumatic childhood events and the feelings associated with them(26). In a study on 61 individuals diagnosed with psychosis (48 with schizophrenia, 13 with bipolar disorder) selected from a large urban university medical center in the US, the researchers found that negative voice-content fully mediated the relationship between ACEs and voice-related distress(60). Participants had a mean ACE score of 4.28, and a strong total effect of ACEs on voice-distress was found(60).

In a study conducted in the United States among 45 young individuals at clinical high risk for psychosis, participants who reported exposure to a greater number of trauma types were significantly more likely to experience fewer non-negative voices, suggesting an association between cumulative trauma exposure and more negatively valenced auditory hallucinations.(30). In another study conducted in Poland among 94 patients

with first-episode schizophrenia, researchers investigated whether a history of childhood trauma was associated with specific types of auditory verbal hallucinations(29). The findings showed that participants with a history of childhood trauma experienced a significantly greater number of auditory hallucination categories than those without such a history(29). In particular, third-person auditory hallucinations, abusive, accusatory, or persecutory voices, and first-rank hallucinations were significantly more common among individuals who had experienced childhood trauma(29). The study also suggested that childhood sexual abuse may be associated with a greater diversity of auditory hallucination types(29).

In a data synthesis of 100 clinical cases from Western Europe, Australia, and Cameroon, conducted to examine the relationship between voice-hearing content, voice characteristics, and life events, 80% of participants had a diagnosis of schizophrenia or another psychotic disorder(34). All participants experienced voices that caused significant emotional distress and/or impaired social or occupational functioning(34). At least one adverse childhood experience was reported by 89% of the sample(34). The most common presentation was hearing exclusively negative and malicious voices (59%), with these voices predominantly criticizing (98%), commanding (73%), or threatening (64%) the hearer(34). In contrast, only four participants reported hearing exclusively affirming and supportive voices, while 37% experienced a mixture of positive and negative voices(34).

A latent profile analysis conducted using baseline data from the AVATAR2 trial sought to identify distinct subgroups of individuals with psychosis who experienced distressing voices based on patterns of childhood trauma, fearful attachment, and voice appraisals(36). The study found that those who had high childhood trauma exposure, especially interpersonal trauma and fearful attachment, the voices were seen as malevolent, powerful, intrusive, and with high levels of negative content, as well as with the worst emotional distress and voice severity(36). In the profiles with lower trauma exposure at childhood and higher exposure at adulthood the voices were less threatening and the distress was less(36).

In a study done in Australia to examine the relationship between childhood trauma, the content of hallucinations, and the content of post-traumatic intrusions in a sample of 66 young people with first-episode psychosis, of those people who reported trauma and hallucinations, 61% experienced post-traumatic intrusions, and of these, 73% experienced hallucinations that were directly or thematically related to their post-traumatic intrusions(37). Twelve people experienced hallucination content directly related to their trauma, of whom 50% also had intrusions relating to the same traumatic event as their hallucinations(37).

In a study to explore trauma-voice links, trauma–voice links were assessed both independently and dependently, by both participants and researchers, among people with distressing voices, from outpatient mental health care teams for people with long-term and complex mental health difficulties, who experienced trauma before voice hearing(38). Independent links (i.e., victimization type, physiological-behavioral, emotional, and cognitive response themes, including negative self-beliefs) were prevalent in participants (51–58%) and low to moderately present in researcher ratings (8–41%) for significant themes(38). Participants and researchers also reported many dependent links (80%, 66%, respectively), most frequently relational links (75%, 64%), followed by content (60%, 25%) and identity links (51%, 22%)(38).

A cross-sectional house hold surveys done in five low- and middle-income sub-Saharan African countries to estimate the prevalence of ACEs among 18–24 year olds, it was found that about 72 % of females and 82 % of males have experienced at least one form of ACE compared to 52% or more experiencing one or more category of ACE exposure reported in the US from the ACE study done in the late 90s(8,10).

Though there aren’t many African studies that explore AHs and trauma, there are some that investigated psychosis and trauma. Data from the Genomics of Schizophrenia in the South African Xhosa people case-control study that set out to study the prevalence of childhood traumatic experiences among cases and controls and the relationship

between specific and cumulative childhood traumatic experiences and schizophrenia, the prevalence of at least one ACE among cases was found to be 94% while 87% among the healthy participants(52). The odds of schizophrenia were 2.44 times higher among those who experienced any trauma than those who reported no traumatic experiences, and also cumulative physical/emotional abuse and neglect experiences increased the odds of schizophrenia in a dose-dependent manner(52). A similar study at the Comprehensive Specialized Hospitals in Bahir Dar, Ethiopia with differing measuring tools than the south African study set out to explore the occurrence of at least one ACE among individuals diagnosed with schizophrenia showed that 69.4% of individuals with schizophrenia and 46.8% of the healthy participants reported at least one ACE which is lower than rates in South Africa (94% and 87% respectively)(45,52). The study found that schizophrenia patients were over twice as likely to report four or more ACEs compared to non-clinical participants, aligning with previous studies indicating a higher prevalence of ACEs among individuals with schizophrenia(45,52).

Case-control study done at Kenya as part of the Neuropsychiatric Genetics of African Population (NeuroGap-Moi) study to explore the association between Traumatic Life Events(TLEs) and psychosis in patients with psychotic disorders and individuals without, the proportion of those who had experienced at least one traumatic life event was almost equal among the cases and controls, (cases 80.3% vs. controls 79.5%) while cases had a higher proportion of participants who reported that the traumatic life event happened to them (cases 60.3% vs. controls 46%)(50). Analysis from the data gathered for the case-control Ethiopia NeuroGAP-Psychosis study, cases similarly reported greater trauma (physical assault, sexual assault, unwanted sexual experience, animal attack intimate partner violence, property loss, restrained, chained or isolated) and psychological distress than the controls(46).

A study that used data collected from cases with a psychotic disorder (no controls) in Ethiopia, Kenya, and Uganda as part of NeuroGAP-Psychosis, showed that specific types of trauma and psychotic symptoms may interact bidirectionally(47). The trauma type “exposure to a war zone” had the highest bridge strength, betweenness, and

closeness with psychotic symptom “odd or unusual beliefs” having the second highest bridge strength(47). Though the above were most influential in the network, auditory hallucination was also implicated(47). Another data collected as part of a broader initiative, Neuropsychiatric Genetics of African Populations-Psychosis (NeuroGAP-Psychosis) which included Ethiopia, there was a modest increased odd of trauma among cases compared with controls. The trauma types with the highest odds were sexual violence (AOR = 1.99, 95 % CI: 1.86–2.14), physical violence (AOR = 1.69, 95 % CI: 1.62–1.76), and network trauma (causing injury, harm, or death to someone else) (AOR = 1.52, 95 % CI: 1.38–1.67)(48).

One-year prevalence of hallucinations in patients with a diagnosis of Schizophrenia prevalence of AH were found to be 85.4% in Nigeria and 90.8% in Ghana, which is a bit higher than what is reported in the West (61). In a study of characteristics of AHs in schizophrenia and affective psychoses patients in Nigerian army base hospital, the prevalence of bad voices were 48.8% in Schizophrenia and 54.5% in affective psychosis(62).

In an article presenting the estimated community prevalence of voice-hearing among non-clinical Maasai women in northern Tanzania and correlates, the prevalence of voice-hearing was 39.4%, which was higher compared to other studies, and most women also reported high psychosocial stress and traumatic life events, though the characteristics of the voices were not in the scope of the study(51).

1.5 Conceptual Framework

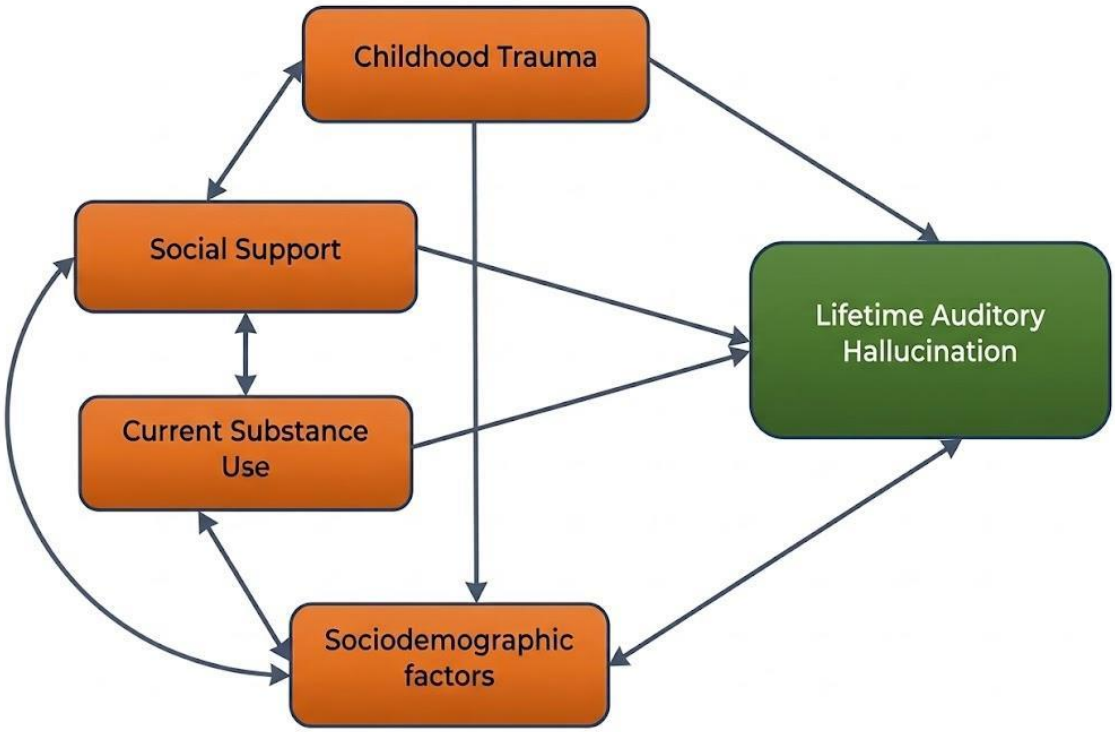


Figure 1 Conceptual Framework

2. RESEARCH QUESTION

1. What is the prevalence of auditory hallucinations among individuals with Serious Mental Health Conditions?
2. What is the persistence of auditory hallucinations among individuals with serious mental health conditions?
3. What is the amount and intensity of negative content and distress associated with auditory hallucinations in individuals with serious mental health conditions?
4. What is the prevalence of childhood trauma among individuals with serious mental health conditions with or without auditory hallucinations?
5. What is the relationship between childhood trauma and auditory hallucination before and after controlling for potential confounders?

3. OBJECTIVES

3.1 General Objective

- To examine the relationship between auditory hallucinations and childhood trauma in individuals with serious mental health conditions.

3.2 Specific Objectives

- To determine the prevalence of auditory hallucinations among individuals with serious mental health conditions
- To determine the duration and continuity of auditory hallucinations among individuals with serious mental health conditions
- To determine the amount and intensity of negative content and distress associated with auditory hallucinations in individuals with serious mental health conditions
- To determine the prevalence of childhood trauma among individuals with serious mental health conditions with or without auditory hallucinations
- To study the relationship between childhood trauma and auditory hallucination before and after controlling for potential confounders

4. MATERIALS AND METHODS

4.1 Study Setting

The study's site was Amanuel Mental Specialized Hospital (AMSH), Addis Ababa. AMSH is one of the public hospitals located in Addis Ababa and the largest psychiatric hospital serving as the national referral hospital. There are around 260 beds, including 11 private wing beds and 23 emergency beds and it also has 13 outpatient departments (OPDs) and every day, about 500 to 600 patients are seen in an outpatient environment. The hospital now employs around 460 support staff members and 384 medical professionals.

4.2 Study Period

The study was done from December 2025 to February 2026.

4.3 Study Design

An institution based cross-sectional quantitative study was done.

4.4 Source Population

All individuals with serious mental health conditions (Schizophrenia, Schizoaffective Disorder, and Bipolar I Disorder) receiving outpatient psychiatric care at Amanuel Mental Specialized Hospital during the study period.

4.5 Study Population with Eligibility Criteria

Inclusion Criteria:

- Age 18years and above
- Understand Amharic language
- Pass capacity assessment to give consent

Exclusion Criteria

- Individuals with acute medical or psychiatric instability

4.6 Sample Size Determination

A single population proportion formula was used

$$N = \frac{Z^2 P (1-P)}{D^2}$$

Where N is sample size

Z (95% CI) = 1.96

P (Expected proportion) = 0.5(contextually, the closest prevalence I found is for prevalence of AH in patients with schizophrenia in Nigeria and Ghana which was 85.4% and 90.8% respectively(61). But these studies were done in specific population of individuals with schizophrenia and not the larger subset of individuals with serious mental illness. So 50% prevalence was assumed for calculation.

D (margin of error) = 0.05 (5%)

By adding a 10% non-response rate: 384 + 38 = **a total sample of <u>422</u>** individuals

4.7 Sampling Procedure

A consecutive sampling method was used.

4.8 Study Variables

Independent Variable

- Sociodemographic factors
- Clinical variables
- Childhood trauma
- Social Support

Dependent Variables

- Life time Auditory Hallucination

4.9 Operational Definitions

Auditory Hallucinations - are perceived sounds in the absence of external stimuli and it will be assessed for different characteristics like negative voice content and voice-related distress with an instrument called Psychotic Symptom Rating Scales – Auditory Hallucinations Subscale (PSYRATS-AH)

Childhood Trauma - refers to any disturbing experience that happened before the age of 17 and is known to have a potential to affect that person's well-being and will be assessed as listed in Childhood Trauma Questionnaire (CTQ).

Current Substance Use – use of at least one psychoactive substance within the past 3 months.

Serious Mental Health Conditions – psychiatric conditions with psychotic symptoms and that result in functional impairment and/or personal distress. These include conditions such as Schizophrenia, Schizoaffective Disorder, Bipolar Disorder, and Major Depressive Disorder with psychotic features that substantially interfere with or limit one or more major life activities.

Social Support – level of perceived social support as measure and reported with Oslo Social Support Scale (OSSS-3)

4.10 Instrument for data collection

Data was collected using a questionnaire containing five sections.

- The first section - demographic characteristics of participants.
- The second section - current treatment, current substance use, and status of AHs.
- The third section - information on auditory hallucinations including Psychotic Symptom Rating Scales – Auditory Hallucinations Subscale (PSYRATS-AH) which is a clinician rated interview scale. This instrument is composed of items that help to describe AH in a person that experienced it in the past week. It was translated to Amharic according to standard translation procedures and used to

describe AH in those participants that had the experience in the previous week without calculation of the total results.

- The fourth section - Childhood Trauma Questionnaire (CTQ), a tool used screen childhood abuse and neglect. In the original validation study in the US, which contained 28 items, the Cronbach α coefficients were as follows: Physical Neglect (α = 0.61), Emotional Abuse (α = 0.87), Emotional Neglect (α = 0.91), Physical Abuse (α = 0.83) and Sexual Abuse (α = 0.92)(63). In a South African study that explored the psychometric properties this tool, Cronbach α coefficients for all subscales ranged from questionable to good; Physical Neglect (α = 0.64), Emotional Abuse (α = 0.67), Emotional Neglect (α = 0.83), Physical Abuse (α = 0.78) and Sexual Abuse (α = 0.89)(64).

The Childhood Trauma Questionnaire (CTQ) utilized in this study has been used in Ethiopia before even though the analysis isn't over yet. Recently, the Studying the context of psychoses to improve outcomes in Ethiopia (SCOPE) research team conducted cross-cultural adaptation following the WHO guideline, including forward and back translation, cognitive interviewing, expert consensus meeting, rewording of items, and adding relevant items to the Ethiopian context(65).

A reliability test from the data was run and the Cronbach α coefficients were as follows: Total CTQ (α = 0.87), Physical Neglect (α = 0.45), Emotional Abuse (α = 0.80), Emotional Neglect (α = 0.77), Physical Abuse (α = 0.82) and Sexual Abuse (α = 0.92). The results ranged from excellent to unacceptable, and they parallel the American and South African study, though the result for physical neglect was well below what was reported in other studies, indicating low internal consistency in this subcategory. This could be due to small number of items in the subcategory or cultural factors or the items in this subcategory not occurring together in most individuals. Excluding this subcategory might result in missing out important information so it was included despite the internal inconsistency it showed.

The scoring responses for CTQ subscales were analyzed together with a total result of childhood trauma and also with all the subscales summed separately to classify

childhood trauma history among participants in their respective categories. Cutoff scores for CTQ subscales were Emotional Abuse (EA) score ≥ 13, Physical Abuse (PA) score ≥ 10, Sexual Abuse (SA) score ≥ 8, Emotional Neglect (EN) score ≥ 15 and Physical Neglect (PN) score ≥ 10(66).

- The fifth section - information on social support using Oslo Social Support Scale (OSSS-3). It is an instrument translated to Amharic based on standard translation procedures and used widely in Ethiopia.

4.11 Data Collection Procedures

Data collectors were recruited, trained and given continuous supervision. Data collection was done by face to face interviews using the above mentioned instruments via Kobo Toolbox by data collectors. It was tried to hold the interviews in private settings.

Then participants were identified and recruited based on the inclusion and exclusion criteria. Capacity to consent was assessed with University of California San Diego Brief Assessment of Capacity to Consent (UBACC) and written informed consent was obtained from the participants who had the capacity to give consent and were willing to participate.

4.12 Data Processing and Management

Data were checked daily for consistency. Data were exported to Microsoft excel and then to SPSS v27 for analysis. Data cleaning and coding was done before analysis.

4.13 Data Analysis

Descriptive statistics were used to summarize all variables. Bivariate analysis (chi-square test and binary logistic regression) was performed to assess crude associations between independent variables and lifetime AH. Multivariable logistic regression was used to identify independent predictors of lifetime auditory hallucinations and control for confounding.

Pearson correlation analysis was conducted to examine the relationships among different types of childhood trauma. Two-tailed tests were used to determine statistical

significance. Multicollinearity among the independent variables was assessed using variance inflation factor (VIF) and tolerance values, with VIF > 5 or tolerance < 0.2 considered indicative of potential multicollinearity. No evidence of significant multicollinearity was found (VIF range: 1.049–1.586; tolerance values > 0.6), allowing all variables to be included in subsequent regression analyses.

4.14 Data Quality Assurance

The questionnaires were reviewed by supervisors and validated instruments with contents that were in accordance with established literature used. Internal consistency was assessed using Cronbach's alpha for CTQ.

Training was given to data collectors and ongoing supervision was held throughout on top of reviewing the data continuously.

4.15 Ethical Consideration

The study was reviewed and approved by Department of Psychiatry, College of Health Sciences, Addis Ababa University ethical review committee and by the research site's ethical review committee as required after formal letter from school was acquired. Verbal and written consent was obtained from the patients after an assessment of capacity to consent for research through UBACC was done. Confidentiality and privacy of information was ensured and communicated to the participants. As the participants were recruited while they were on a queue for their follow up, no further linkage to other psychologists and psychiatrists for intervention was required.

5. RESULTS

5.1 Characteristics of the participants

After data cleaning, a total of 418 participants were included in the analysis, among which majority were male 268(64.1%). The mean age of the participants was 37.35 years. Married participants accounted for 122(29.2%), while the rest were either single or previously married. Most participants 261(62.4%) were from Addis Ababa. Only 39(9.3%) had no formal education, while the rest had different levels of education. Over half of the participants 233(55.7%) were unemployed (Table 1).

When assessed for any kind of substance use in the past 3 months, less than one-fifth of the participants reported using either khat, tobacco, alcohol, or cannabis. Among the 418 participants with serious mental health conditions, 301 (72%) endorsed having experienced auditory hallucination at a certain point in their lifetime. The average amount of years since the voices started was 10.5 years. Despite treatment, almost half of them reported that the voices failed to cease completely, at a certain point since onset. Additionally, 89 (29.6%) of them reported having experienced auditory hallucination in the past week (Table 1).

Table 1 Socio-demographic and Clinical Characteristics of the Study Participants (n=418)

Characteristics	**n**	**%**
Sociodemographic Characteristics		
Sex		
Male	268	64.1
Female	150	35.9
Age (years)	Mean 37.35	SD 11.162
Marital Status		
Single	250	59.8
Married	122	29.2
Divorced	39	9.3
Widowed	7	1.7
Residence		
Addis Ababa	261	62.4

Others	157	37.6
Educational Status		
No formal education	39	9.3
Primary education	125	29.9
Secondary education	155	37.1
Higher education	99	23.7
Employment Status		
Unemployed	233	55.7
Employed	92	22
Self-employed	93	22.2
Religion		
Orthodox	220	52.6
Muslim	80	19.1
Protestant	107	25.6
Others	11	2.6
Clinical Characteristics		
Current Substance Use	74	17.7
Khat	42	10
Tobacco	36	8.6
Alcohol	18	4.3
Cannabis	2	0.5
Lifetime auditory hallucinations		
Yes	301	72
No	117	28
Duration since onset of auditory hallucinations (years)	Mean 10.478	SD 8.4281
Persistence of auditory hallucinations after treatment		
Stopped with treatment	162	53.8
Reduced but did not stop	111	36.9
Persisted with no change	28	9.3
Time since last experience of auditory hallucinations		
>12 months ago	135	44.9
Past 12 months, not in past week	77	25.6
Past week	89	29.6

5.2 Social Support

101(24.2%) of the participants had poor support while the rest had moderate to strong support (Table 2)

Table 2 Prevalence of Social Support Levels Among Participants Measured by OSSS-3 (n=418)

	N	%
Poor support	101	24.2
Moderate support	194	46.4
Strong support	123	29.4
Total OSSS	Mean 9.9	SD 2.5

5.3 Characteristics of Auditory Hallucinations

Among the 89 participants who reported having experienced hearing voices others don't, 84(94.4%) of them reported negative contents to varying degrees in their auditory hallucinations. Threatening, derogatory, and self-harm directed commands were among the most frequently reported types of auditory hallucination content. 77(86.5%) of the participants also reported a varying degree of distress caused by the auditory hallucinations they experience (Table 3).

Table 3 Characteristics of Auditory Hallucinations in the Past Week Assessed Using PSYRATS-AH (n=89)

Characteristics	**N**	**%**
Frequency		
Almost weekly or more	23	25.8
Daily or more	43	48.3
Hourly or more	10	11.2
Continuously	13	14.6
Duration		
Seconds	11	12.4
Minutes	46	51.7
An hour or more	12	13.5
Hours	20	22.5
Location		
Inside head only	35	39.3
Inside + close outside	23	25.8
Mixed inside/outside	5	5.6
Outside only	26	29.2
Loudness		
Quieter than own voice	21	23.6
Same as own voice	42	47.2
Louder	15	16.9
Extremely loud	11	12.4
Beliefs about origin		
Entirely internal	32	36.0
<50% conviction voices are external	16	18.0
50–99% conviction voices are external	16	18.0
Entirely external	25	28.1
Amount of negative content		
No negative content	5	5.6
Occasional negative content	15	16.9
<50% of voice content negative	13	14.6
≥50% of voice content negative	30	33.7
All voice content negative	26	29.2
Degree of negative content		
Not unpleasant or negative	10	11.2
Some negative content, not directed at self/family	20	22.5
Personal verbal abuse, general behavior comments	11	12.4

Personal verbal abuse related to self-concept	13	14.6
Personal threats to self/family, extreme instructions, or severe personal verbal abuse	35	39.3
Examples of the contents of the voices		
Derogatory	14	16.7
Didn't specify	6	7.1
Harm-to-others commands	2	2.4
Neutral commands	9	10.7
Non-verbal	6	7.1
Past related	1	1.2
Positive	7	8.3
Random conversations	5	6.0
Self-harm commands	13	15.5
Threatening	21	25.0
Amount of distress		
Voices not distressing at all	12	13.5
Voices occasionally distressing, majority not distressing (< 10%)	9	10.1
Minority of voices distressing (< 50%)	15	16.9
Majority of voices distressing (≥ 50%)	28	31.5
Voices always distressing	25	28.1
Intensity of distress		
Voices not distressing at all	12	13.5
Voices slightly distressing	11	12.4
Voices are distressing to a moderate degree	20	22.5
Voices are very distressing, although subject could feel worse	25	28.1
Voices are extremely distressing, feel the worst he/she could possibly feel	21	23.6
Disruption to life caused by voices		
No disruption; normal social/family life	13	14.6
Minimal disruption; daily/social life mostly maintained	13	14.6
Moderate disruption; some disturbance to daily or social activities; may need support	29	32.6
Severe disruption; hospitalization may be needed; some daily activities maintained	24	27.0
Complete disruption; daily life and relationships not maintained; hospitalization required	10	11.2
Controllability of voices		
Complete control; can bring on or dismiss voices at will	7	7.9
Mostly able to control voices	9	10.1
Control about half the time	9	10.1
Occasional control; voices mostly uncontrollable	12	13.5
No control; cannot dismiss or bring on voices	52	58.4

5.4 Childhood Trauma Scores

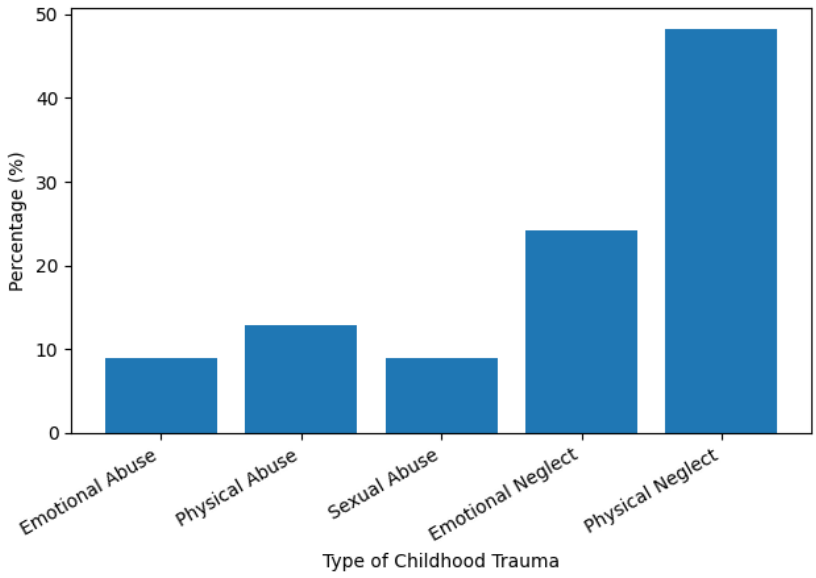
More than half of the participants, 236(56.5%), reported experiencing moderate to severe childhood trauma and the average total CTQ score for participants was 40.95

(SD=11.02; median=38 [IQR: 34-45]). The most endorsed subcategory was physical neglect; 202(48.3%) of the participants reported experiencing moderate to severe physical neglect (Table 4) (Figure 2).

The top 3 items endorsed by participants were not having enough food 196(46.9%) and having to wear dirty clothes 182(43.5%) from the physical neglect category, and being separated from father before the age of 17 126(30.1%) (Figure 3). The mean age at separation from father was 8.98. The mean age of separation from mother was also almost close (8.76) but was reported only by 111(26.6%) of the participants.

Table 4 Prevalence of Childhood Trauma by subcategory measured by CTQ (n=418)

Item	Mean (SD)	Median (IQR)	N (%)
Emotional Abuse	7.26 (3.401)	6 (5–8)	None 318(76.1) Low 63(15.1) Moderate 21(5.0) Severe 16(3.8)
Physical Abuse	6.62 (2.939)	5 (5–7)	None 327(78.2) Low 37(8.9) Moderate 37(8.9) Severe 24(5.7)
Sexual Abuse	5.67 (2.237)	5 (5–5)	None 373(89.2) Low 8(1.9) Moderate 20(4.8) Severe 17(4.1)
Emotional Neglect	11.82 (3.942)	11 (9–14)	None 136(32.5) Low 80(19.1) Moderate 128(30.6) Severe 74(17.7)
Physical Neglect	9.58 (3.108)	9 (7–11)	None 136(32.5) Low 80(19.1) Moderate 128(30.6) Severe 74(17.7)


50
40
30
20
10
0
Percentage (%)
Emotional Abuse
Physical Abuse
Sexual Abuse
Emotional Neglect
Physical Neglect
Type of Childhood Trauma

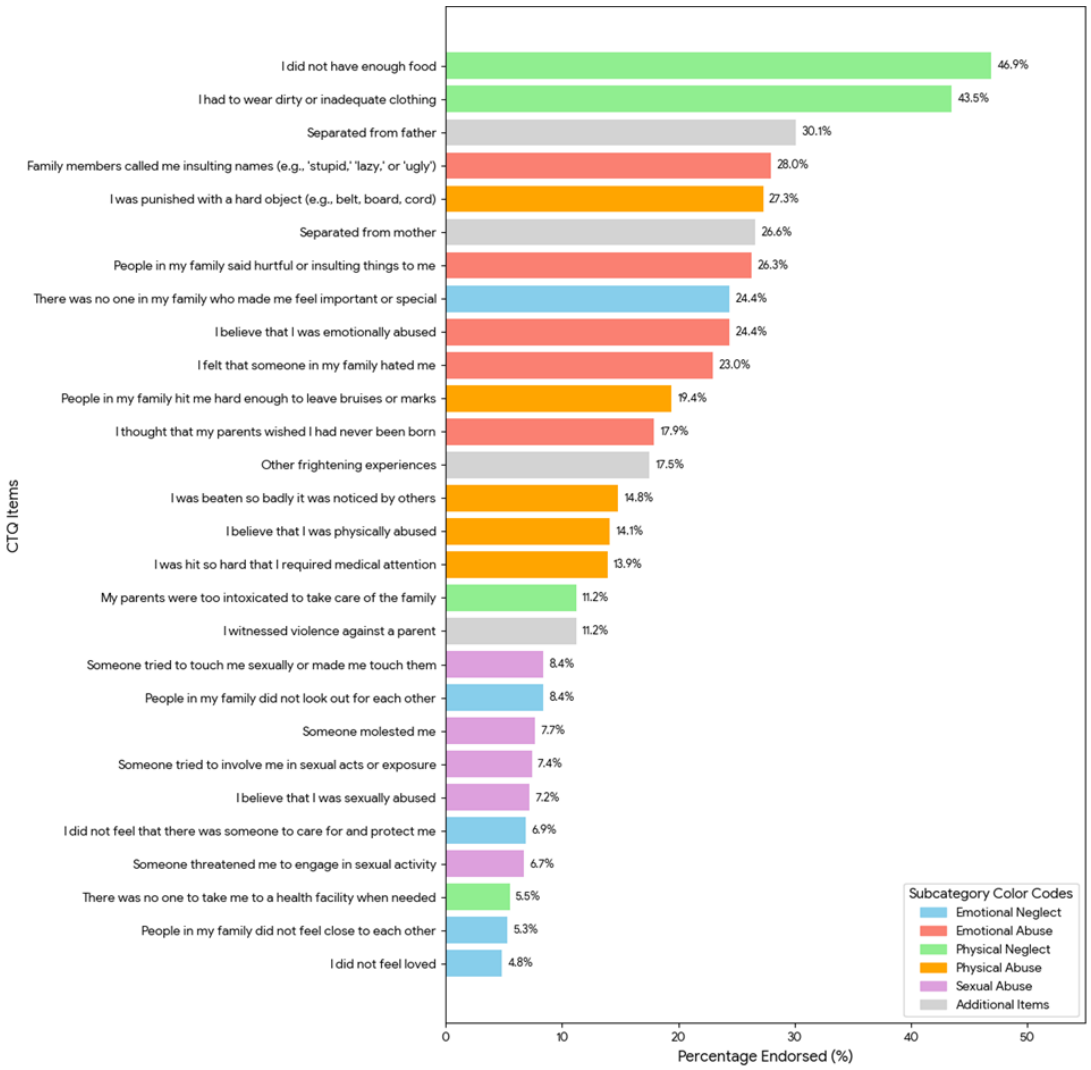


Figure 3 Prevalence of Childhood Trauma by individual CTQ items

5.5 Associated factors of Auditory Hallucinations

No statistically significant association was seen between the childhood trauma subcategories and lifetime auditory hallucination. But employment status showed statistically significant association ($\chi^2 = 8.97$, $p = 0.011$), with the highest prevalence observed among self-employed (Table 5). No statistically significant association was also seen between the other independent variables and auditory hallucination too.

Table 5 Cross-Tabulation of Factors Associated with Auditory Hallucination (n=418)

Variable	Category	n(%)	AH Yes n(%)	AH No n(%)	χ^2 (p-value)
Emotional Abuse	None Low Moderate Severe	318(76.1) 63(15.1) 21(5.0) 16(3.8)	224 (70.4) 50 (79.4) 17 (81.0) 10 (62.5)	94 (29.6) 13 (20.6) 4 (19.0) 6 (37.5)	3.63 (0.304)
Physical Abuse	None Low Moderate Severe	327(78.2) 37(8.9) 37(8.9) 24(5.7)	231 (70.6) 29 (78.4) 22 (73.3) 19 (79.2)	96 (29.4) 8 (21.6) 8 (26.7) 5 (20.8)	1.68 (0.641)
Sexual Abuse	None Low Moderate Severe	373(89.2) 8(1.9) 20(4.8) 17(4.1)	266 (71.3) 6 (75.0) 15 (75.0) 14 (82.4)	107 (28.7) 2 (25.0) 5 (25.0) 3 (17.6)	1.12 (0.773)
Emotional Neglect	None Low Moderate Severe	119(28.5) 198(47.4) 63(15.1) 38(9.1)	88 (73.9) 147 (74.2) 45 (71.4) 21 (55.3)	31 (26.1) 51 (25.8) 18 (28.6) 17 (44.7)	6.01 (0.111)
Physical Neglect	None Low Moderate Severe	136(32.5) 80(19.1) 128(30.6) 74(17.7)	94 (69.1) 63 (78.8) 86 (67.2) 58 (78.4)	42 (30.9) 17 (21.3) 42 (32.8) 16 (21.6)	5.33 (0.149)
Employment Status	Employed Self-employed Unemployed	92(22.0) 93(22.2) 233(55.7)	66 (71.7) 78 (83.9) 157 (67.4)	26 (28.3) 15 (16.1) 76 (32.6)	8.971 (0.011)*

*$p < 0.05$

Correlation analysis revealed that emotional neglect was positively associated with other forms of childhood trauma, particularly emotional abuse ($r = 0.413$, $p < 0.001$) and physical neglect ($r = 0.501$, $p < 0.001$). Although these correlations were moderate, multicollinearity diagnostics indicated no significant multicollinearity among the independent variables (VIF range: 1.049–1.586; tolerance values > 0.6), suggesting that all trauma variables could be retained in the regression model.

In the binary logistic regression analysis emotional neglect, entered as a continuous variable, was significantly associated with lifetime auditory hallucinations. Each one-point increase in the emotional neglect score was associated with a 12% increase in the odds of having lifetime auditory hallucinations (AOR = 1.12; 95% CI: 1.04–1.21; $p = 0.002$). Also, physical neglect, entered as a continuous variable, was significantly

associated with lifetime auditory hallucinations. Each one-point increase in the physical neglect score was associated with an 18% increase in the odds of having lifetime auditory hallucinations (AOR = 1.18; 95% CI: 1.05–1.32; p = 0.005). (Table 6)

Participants with secondary education and above had 2.16 times higher odds of lifetime auditory hallucinations compared with those with below secondary education (AOR = 2.16; 95% CI: 1.17–3.97; p = 0.014). Compared with unemployed participants, self-employed participants had significantly higher odds of lifetime auditory hallucinations (AOR = 2.18; 95% CI: 1.07–4.46; p = 0.033). However, there was no statistically significant association between being employed and lifetime auditory hallucinations (AOR = 1.30; 95% CI: 0.70–2.39; p = 0.406). (Table 6)

Table 6 Binary Logistic Regression Analysis of Factors Associated with Auditory Hallucinations (n=418)

Variable	Category	Mean, Median, (SD), n(%)	COR(95%CI)	AOR(95%CI)	p
Emotional Abuse		7.22, 7, (3.29)	1.03 (0.96–1.11)	1.03 (0.93–1.14)	0.578
Physical Abuse		6.62, 5, (2.95)	1.06 (0.98–1.15)	1.02 (0.91–1.15)	0.715
Sexual Abuse		5.67, 5, (2.25)	1.09 (0.97–1.23)	1.13 (0.98–1.30)	0.105
Emotional Neglect		18.24, 19, (4.00)	1.04 (0.99–1.10)	1.12 (1.04–1.21)	0.002*
Physical Neglect		7.36, 7, (2.66)	1.08 (1.00–1.18)	1.18 (1.05–1.32)	0.005*
Oslo Social Support Scale	Poor Moderate Strong	101(24.2) 194(46.4) 123(29.4)	1 1.21 (0.72–2.04) 1.05 (0.62–1.78)	1 1.51 (0.82–2.79) 0.88 (0.46–1.70)	- 0.190 0.715
Current Khat Use	No Yes	376(90.0) 42(10.0)	1 1.17 (0.56–2.42)	1 1.64 (0.60–4.52)	- 0.338
Current Tobacco Use	No Yes	382(91.4) 36(8.6)	1 1.01 (0.47–2.18)	1 0.74 (0.27–2.02)	- 0.557
Current Alcohol Use	No Yes	400(95.7) 18(4.3)	1 1.95 (0.55–6.93)	1 1.24 (0.31–4.94)	- 0.761
Sex	Male Female	268(64.1) 150(35.9)	1 0.71 (0.46-1.11)	1 0.67 (0.38-1.18)	- 0.164
Age	18-24 25-34 35-44 45-54 55 and above	50(12.0) 126(30.1) 127(30.4) 83(19.9) 32(7.7)	1 1.73 (0.86–3.49) 2.20 (1.07–4.50) 1.50 (0.71–3.18) 1.67 (0.64–4.39)	1 1.80 (0.80–4.03) 2.23 (0.96–5.16) 1.31 (0.54–3.20) 1.93 (0.58–6.42)	- 0.156 0.061 0.555 0.282

Marital Status	Single Married Previously-married	122(29.2) 46(11.0) 250(59.8)	1 1.15 (0.52-2.54) 0.91 (0.55-1.48)	1 1.21 (0.49-2.95) 0.96 (0.52-1.78)	- 0.683 0.899
Religion	Orthodox Muslim Protestant	220(52.6) 80(19.1) 107(25.6)	1 0.63 (0.37-1.10) 0.88 (0.52-1.47)	1 0.61 (0.32-1.15) 0.93 (0.49-1.77)	- 0.129 0.833
Educational Status	Below secondary education Secondary education and above	164(39.2) 254(60.8)	1 1.51 (0.90–2.54)	1 2.16 (1.17–3.97)	- 0.014*
Employment Status	Unemployed Employed Self-employed	233(55.7) 92(22.0) 93(22.2)	1 1.28 (0.74–2.21) 2.47 (1.33–4.58)	1 1.30 (0.70–2.39) 2.18 (1.07–4.46)	- 0.406 0.033*

*$p < 0.05$

6. DISCUSSION

The present study set out to observe the relationship between auditory hallucinations and childhood trauma in individuals with serious mental health conditions, along with describing characteristics of auditory hallucination and childhood trauma in the study population.

In this study, the prevalence of lifetime auditory hallucinations among individuals with serious mental health conditions was 72%, exceeding the 56.7% reported in a cross-diagnostic study from the United States(2). Several factors could account for this difference. One possible explanation is that the proportion of patients with specific diagnoses may differ between studies. Since the prevalence of auditory hallucinations varies across psychiatric disorders, even among those with psychotic features, differences in diagnostic composition may influence the overall prevalence of auditory hallucinations. There are limited reports from Africa on the prevalence of auditory hallucination that isn't diagnosis-specific.

The average duration since the onset of auditory hallucination in the participants was 10 years, and persistence of auditory hallucination was seen in nearly half of the participants. The persistence is comparable to what was seen in previous studies on frequent or persistent hallucinatory activity over the 20 years, being reported in 40-45% of schizophrenia patients(67), even though this study didn't categorize and report participants by diagnosis.

More than 90% of the participants reported having negative content, to a varying degree, in the auditory hallucinations they experience, which is also comparable to what is reported in previous literature (58,59). But a study in Nigeria reported around 50% negative content prevalence, which is much lower than this study's and other studies' reports(62). The content of auditory hallucinations is influenced by multiple factors that may vary across different settings. Additionally, the definition of negative content may differ depending on individual interpretations and the measurement methods used across studies, which could account for the observed differences. Nearly 90% of participants reported experiencing distress related to auditory hallucinations, which is

comparable to the 94% reported in a study conducted in the Netherlands that used the PSYRATS to assess participants(68).

More than half of the participants (56.5%) reported experiencing moderate to severe childhood trauaverage total CTQ score for participants was 40.95, with subcategory scores of EA (8.9%), PA (12.9%), SA (8.9%), EN (24.2%), and PN (48.3%). These scores are lower than what is reported in the South African study in patients with schizophrenia: any trauma (94.4%), physical/emotional abuse (83.5%), neglect (72.7), and sexual abuse (56.4%)(69). When also compared with results found from a cross sectional study in Tunisia among women with schizophrenia, total mean score (56.34), EA (14.6%), PA (39%), SA (24.4%), EN (97.6%), and PN (4.9%), except for physical neglect, the current results are consistently lower(70). Multiple factors can be a reason for this huge gap between the previous studies and the current study, among which can be how the childhood trauma items were subcategorized for analysis, cultural differences in the experiences and reporting them, and also contextual differences.

In the current study, each one-point increase in the emotional neglect score was associated with slightly higher odds of having lifetime auditory hallucinations (AOR = 1.12; 95% CI: 1.04–1.21; p = 0.002). This might indicate that even a minimal amount of emotional neglect during childhood might leave one vulnerable to the experience of auditory hallucination. This finding is in line with what has been reported in a study from the Netherlands that compared healthy controls with patients with auditory hallucinations. They used the CTQ with similar subscale cutoffs and the PSYRATS to assess auditory hallucinations, resulting in 1.36 times higher odds of emotional neglect in the group with patients with auditory hallucinations(27). Also, each one-point increase in the physical neglect score was associated with 1.18 times higher odds of having lifetime auditory hallucinations (AOR = 1.18; 95% CI: 1.05–1.32; p = 0.005). This result is also comparable to the 1.81 times higher odds of physical neglect reported in patients with auditory hallucinations in the previous study(27). Although few African studies have directly examined the association between auditory hallucinations and specific subcategories of childhood trauma, a study in South Africa that set out to study the relationship between specific and cumulative childhood traumatic experiences and

schizophrenia found that individuals who experienced physical or emotional neglect had modest positive association with schizophrenia (OR 1.23, 95% CI 1.0–1.52)(71).

These associations between childhood trauma and auditory hallucinations are consistent with previous studies suggesting that childhood trauma contributes to the development of auditory hallucinations and psychotic disorders. Chronic stress resulting from early abuse and neglect has been associated with abnormalities in limbic area, like the amygdala and hippocampus, which could make individuals prone to hallucinations by affecting memory processing(4,27). Childhood trauma might also influence internalized representations of people or events shaping the schema and contributing to the content of hallucinations(4), as we have seen in the high percentage of negative contents reported in this study. The findings from this study can highlight the place of trauma informed care in serious mental health conditions too.

In the present study, participants with secondary education and above had 2.16 times higher odds of lifetime auditory hallucinations compared with those with less than secondary education (AOR = 2.16; 95% CI: 1.17–3.97; p = 0.014). Previous studies show lower educational attainment to be more associated with schizophrenia or worse symptomatology, unlike the current study, even though it is not diagnosis-specific(72–74). The finding in the present study which is different from what is traditionally known could be due to multiple factors. The current study's population is not schizophrenia alone, which might contribute to other diagnoses that have less of an impact on cognitive functioning than schizophrenia. People with moderate and higher levels of education also might be more likely to recognize and report the experience of auditory hallucinations.

Another unusual finding is, compared with unemployed participants, self-employed participants in the present study had 2.18 times higher odds of lifetime auditory hallucinations (AOR = 2.18; 95% CI: 1.07–4.46; p = 0.033) eventhough there was no statistically significant association between being employed and lifetime auditory hallucinations. Previous studies show poor occupational functioning and unemployment that gets worse with follow up to be associated with schizophrenia spectrum disorders(75,76). The current study's population are not schizophrenia alone which

might have contributed to a lesser degree of the impact of the disease in the occupational function worsening. The increased odds seen in the self employed group can also be due to variety of factors. Self employment in our country's context might be related to a range of psychosocial stress associated with uncertainities, financial insecurity, and work unstablities. People with auditory hallucination might also prefer self-employment because of the flexibilities it provide resulting in higher proportion of patients with auditory hallucination being under the category of self employment.

7. STRENGTHS AND LIMITATIONS

Since this study was a cross-sectional study, causality cannot be inferred for all variables. The other limitations of this study are recall and social desirability biases, which might reduce the accuracy of the childhood trauma reports. The version of the CTQ that has been cross-culturally adapted lacks the minimization/denial items, so we can't know the level of underreporting of childhood trauma, which could have affected some of the results. This study is cross-diagnostic and didn't examine the independent variables for each diagnosis individually, which makes it not ideal for making diagnosis-specific generalizations. The participants also came from a single hospital, which mainly serves referral cases, so the findings might not be generalizable to the whole population. Variables that weren't part of this study, like medication, substance use details, and timing of trauma, might have confounding effects, and they weren't included in the scope of this study. The detailed description of the auditory hallucinations might also benefit from being of high quality if done with no resource limitations.

Some of the strengths of this study that can be mentioned are that it focused on specific subtypes of trauma for analysis instead of just overall trauma, allowing comparison with previous literature at the subcategory level. By focusing on auditory hallucinations rather than a specific diagnosis, this study encompasses a broader population, as auditory hallucinations are a common feature across multiple psychotic disorders. This trauma subtype AH link also contributes to the limited literature on this link in the geographic area.

8. CONCLUSIONS

Auditory hallucination and also negative contents with emotional distress are highly prevalent among individuals with serious mental health conditions. Childhood trauma is also prevalent in this population, though the numbers are lower than what is reported in the region and globally. A modest association was seen between emotional and physical neglect during childhood and lifetime auditory hallucination after controlling for confounders. Higher level of education and self-employment were also found to be positively associated with lifetime prevalence of auditory hallucination.

9. RECOMMENDATIONS

Since the prevalence of childhood trauma was not negligible and the association with auditory hallucination was significant, it is recommended that routine clinical care for people with serious mental health conditions go beyond current symptoms. Trauma-informed care at all levels would benefit this population for a better outcome. The contents of the hallucination, as it has been reported, are highly associated with negative and distressing content, simultaneously being persistent for almost half of the participants, which calls for the need of cognitive behavioral approaches to address the distress.

Recent traumatic events aren't usually missed in clinical care of patients, but the same might not be said for childhood abuse and neglect. So, incorporating formal childhood trauma assessment tools into routine clinical care might ensure consistent screening and early identification.

An environment that is safe and favorable for the healthy development of children is a result of many stakeholders. Therefore, it is recommended that policies and mechanisms that ensure a safe and nurturing environment to children while also addressing adversities early on be strengthened. A growing awareness of the association of childhood traumas with mental health conditions might contribute to a better understanding of underlying mechanisms and improved prevention strategies.

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11. APPENDICES

11.2 Participants Consent and Information Sheet

Identification _____

Good morning/Good afternoon.

My name is _____. I am a data collector for the study undertaken by Dr. Rediet Tesfaye, a final year psychiatry resident at Addis Ababa University, college of health sciences, school of medicine, department of psychiatry.

The purpose of this study is to assess the relationship between auditory hallucinations and childhood trauma in individuals with serious mental health conditions. The finding of this study will hopefully provide knowledge on prevalence of auditory hallucinations and its characteristics including persistence, associated distress and how it is related with childhood trauma.

Procedure: The choice of participants is made by consecutive sampling.

Confidentiality: The information that you give us will be kept confidential and will be used for this study purpose only. Your name and other personal identity will not be recorded on data collection form. We will never tell anyone else any piece of information that will identify you from your response.

Voluntariness of the study and Right as a participant: Anyone who will not be willing to participate in the study will have the right to discontinue at any time in the process.

Possible risks and benefits: There is no direct benefit that you will get from this study right now. Similarly, there is no incentive for those who participated in the study. You might feel distressed during and after the interview and might have discomfort with some questions but there is no direct risk associated with participating in this study. Do you agree to participate in this study? Yes, _____ continue.

Thank you for volunteering to participate in the study.

Data collector Name _____

Signature_____

Date _____

Person to contact: If you want to know more information you can contact;

Name: Dr. Rediet Tesfaye

Tel: +251913047541

መለያ ቁጥር _____

_____ እባላለሁ። በአዲስ አበባ ዩንቨርስቲ ጤና ሳይንስ ኮሌጅ የአእምሮ ህክምና ስፔሻሊቲ የመጨረሻ ዓመት ተማሪ በሆኑት ዶ/ር ረድኤት ተስፋዬ ለሚደረገው ጥናት መረጃ ሰብሳቢ ነኝ።

የዚህም ጥናት ለሌሎች ሰዎች የማይሰሙ ድምፆችን በመስማትና በልጅነት ጊዜ የደረሰ የስነ ልቦና ጉዳት በማስተናገድ መካከል ያለውን ግንኙነት ከባድ የአእምሮ ጤና ችግር ባለባቸው ታካሚዎች ዘንድ ለማጥናት ያለመ ነው። በጥናቱ የሚገኘው ወጤት ለሌሎች ሰዎች የማይሰሙ ድምፆችን መስማት አሁን ላይ የሚገኝበትን የስርጭት ሁኔታ እና መገለጫው ስለሆነው የቆይታ ጊዜ ተጨማሪ መረዳትን ይሰጣል ብለን እናምናለን። እንደዚሁም ከርሱ ጋር ተያይዘው ስለሚመጡ ተያያዥ ጭንቀቶች እና በልጅነት ጊዜ ከሚደርስ የስነ ልቦና ጉዳት ጋር ስላለው ግንኙነትም ተጨማሪ መረዳትን ይሰጣል ብለን እናምናለን።

የተሳታፊዎች አመራረጥ ሁኔታ፡ በጥናቱ ላይ የሚሳተፉት ሰዎች በተከታታይ የናሙና አወሳሰድ ዘዴ የተመረጡ ናቸው።

መረጃን በሚስጥር ስለመያዝ፡ በዚህ ጥናት ወቅት የሚሰጡንን መረጃ በሙሉ በሚስጥር የምንጠብቃቸው ሲሆን ለዚህ ጥናት ብቻ የምንጠቀማቸው ይሆናል። ስምዎ እና ሌሎች የማንነት መገለጫዎች በዚህ የመረጃ አሰባሰብ ሂደት ላይ የማይመዘገቡ ይሆናል። ከሚሰጡን ምላሾች ላይ ማንነቶን ሊገልጹ የሚችሉ የትኛውንም ዓይነት መረጃዎች በምንም ዓይነት ሁኔታ ለሌሎች አሳልፈን አንሰጥም።

የተሳታፊው መብቶች እና ፈቃደኝነት፡ በዚህ ጥናት ላይ መቀጠል ያልፈለገ ማንኛውም ተሳታፊ የሚደረግለትን ቃለ-መጠይቅ በማንኛውም ጊዜ ማቋረጥ ይችላል።

ጥቅሞች እና ጉዳቶች፡ በአሁኑ ጊዜ ከዚህ ጥናት በቀጥታ ልታገኙት የምትችሉት ምንም ዓይነት ጥቅም የለም። በተጨማሪም በጥናቱ ላይ ለሚሳተፉ ሰዎች የሚደረግ ምንም ዓይነት ጥቅማ ጥቅም የለም። በቃለ-መጠይቁ ወቅትና በኋላ ጭንቀት ሊሰማዎ እና በአንዳንድ ጥያቄዎች ምክንያት ምቾት ማጣት ሊኖርብዎት ይችላል። ሆኖም በዚህ ጥናት ውስጥ ከመሳተፍ ጋር የተያያዘ ቀጥተኛ አደጋ የለም።

በዚህ ጥናት ላይ ለመሳተፍ ፈቃደኛ ነዎት?

_____አዎን እንቀጥል። የተሳታፊው ፊርማ_____

በዚህ ጥናት ላይ ተሳታፊ ለመሆን ፈቃደኛ ስለሆኑ እናመሰግናለን።

የመረጃ ሰብሳቢ ስም _____ፊርማ _____ቀን _____

ተጨማሪ መረጃ ካስፈለግዎ በሚከተለው ቁጥር ያግኙን

ስም፡ ዶ/ር ረድኤት ተስፋዬ

ስልክ +251913047541

11.2 Capacity Assessment for Consent

የዩሲኤስዲ አጭር ፈቃደኝነት መስጠት ስለመቻል የግንዛቤ ምዘና (UCSD Brief Assessment of Capacity to Consent - UBACC)

1. አሁን የተገለጸልዎት ጥናት ዓላማ ምንድን ነው?	0	1	2 ((2 = ከባድ የአእምሮ ጤና ችግር ባለባቸው ሰዎች ላይ ለሌሎች ሰዎች የማይሰሙ ድምፆችን በመስማት (auditory hallucinations) እና በልጅነት ጊዜ የደረሰ የስነ ልቦና ጉዳት (childhood trauma) መካከል ያለውን ግንኙነት ለመገምገም)
2. በዚህ ጥናት ውስጥ ለመሳተፍ እንዲያስቡ ያደረገዎት ነገር ምንድን ነው?	0	1	2 (2 = በዚህ መስክ የእውቀት እድገት ላይ የበኩሌን አስተዋፅኦ ለማድረግ)
3. ይህ በዋናነት ምርምር ነው ወይስ በዋናነት ሕክምና ብለው ያምናሉ?	0	1	2 (2 = ምርምር)
4. በዚህ ጥናት ውስጥ መሳተፍ ካልፈለጉ ግዴታ ሊሳተፉ ይገባል?	0	1	2 (2 = አይ)
5. ከዚህ ጥናት ቢያቋርጡ፣ መደበኛውን ሕክምናዎን መቀጠል ይችላሉ?	0	1	2 (2 = አዎ)
6. በዚህ ጥናት ውስጥ ከተሳተፉ፣ እንዲያደርጉ ከሚጠየቁት ነገሮች መካከል ጥቂቶቹ ምንድን ናቸው?	0	1	2 (2 = ለጥያቄዎች መልስ መስጠት)
7. በዚህ ጥናት ውስጥ የሚሳተፉ ሰዎች ሊያጋጥሟቸው የሚችሉትን አንዳንድ አሉታዊ ነገሮች ወይም ምቾት ማጣቶች ይግለጹልኝ።	0	1	2 (2 = በቃለ-መጠይቁ ወቅትና በኋላ ጭንቀት ሊሰማቸው እና በአንዳንድ ጥያቄዎች ምክንያት ምቾት ማጣት ሊኖር ይችላል)
8. ከዚህ ጥናት ሊገኙ የሚችሉ አንዳንድ ጥቅሞችን ይግለጹልኝ።	0	1	2 (2 = ለሌሎች ሰዎች የማይሰሙ ድምፆችን የመስማት(auditory hallucinations) ስርጭት፣ ባህሪያቱ እና ከልጅነት የስነ ልቦና ጉዳት ጋር ስላለው ግንኙነት የእውቀት እድገት ላይ ይረዳል)
9. በዚህ ጥናት ውስጥ መሳተፍ ለእርስዎ ምንም ጥቅም ላይኖረው ይችላል?	0	1	2 (2 = አዎ)

ማሳሰቢያ: አንድ ታካሚ በየትኛውም ጥያቄ ላይ 2 ነጥብ ካላገኘ፣ እዚያ ጥያቄ ላይ ያለው መረጃ ሊደገም እና 2 ነጥብ ያጣበት ጥያቄ እንደገና ሊጠየቅ ይችላል። ይህ በጠቅላላው እስከ 3 ጊዜ ሊደረግ ይችላል። ታካሚው በማንኛቸውም ጥያቄዎች ላይ 2 ነጥብ ካላገኘ፣ በጥናቱ ውስጥ አይካተትም።

11.3 Questionnaire

ክፍል ነ: ማኅበራዊ መረጃ

ነ) ዕድሜ _____

2) ፆታ

ሀ. ወንድ

ለ. ሴት

3) ሃይማኖት

ሀ. ኦርቶዶክስ

ለ. ፕሮቴስታንት

ሐ. ካቶሊክ

መ. ሙስሊም

ሠ. የለም

ረ. ሌላ _____

4) የጋብቻ ሁኔታ

ሀ. ያገባ/ች

ለ. የተፋታ/ች / ተለያይቶ የሚኖር/ምትኖር

ሐ. ሚስት የሞተችበት/ባል የሞተባት

መ. ያላገባ/ች

5) የትምህርት ደረጃ

ሀ. ማንበብ እና መጻፍ የማይችል/የማትችል

ለ. መደበኛ ያልሆነ ትምህርት

ሐ. መደበኛ ትምህርት

መደበኛ ትምህርት ከሆነ፣ እስከ ምን ደረጃ ተምረዋል? ____

6) የሥራ ሁኔታ

ሀ. ሥራ የሌለው/የሌላት

ለ. ተቀጥሮ የሚሠራ/ምትሠራ

ሐ. በግሉ የሚሠራ/ምትሠራ

7) የመኖሪያ ቦታ

ሀ. አዲስ አበባ

ለ. አፋር

ሐ. አማራ

መ. ቤኒሻንጉል-ጉሙዝ

ሠ. ማዕከላዊ ኢትዮጵያ

ረ. ድሬዳዋ

ሰ. ጋምቤላ

ሸ. ሐረሪ

ቀ. ኦሮሚያ

በ. ሲዳማ

ተ. ሶማሊያ

ቸ. ደቡብ ኢትዮጵያ

ኀ. ደቡብ ምዕራብ ኢትዮጵያ

ነ. ትግራይ

ክፍል 2: የህክምና መረጃ

1) አሁን ላይ ያላቸው ዋና ህመም

ሀ. ስኪዞፈሪንያ

ለ. ስኪዞአፈ ክቲቭ ዲስኦርደር

ሐ. ባይፖላር I ዲስኦርደር

2) አሁን ላይ የሚወስዱት የአእምሮ ህክምና መድኃኒት ስም _____

3) አሁን ላይ የሚጠቀሙት የሱስ አምጪ ንጥረ ነገር

ሀ. ጫት

ለ. ትንባሆ/ሲጋራ

ሐ. አልኮል

መ. ካናቢስ/ሃሺሽ/ጋንጃ

ሠ. ሌሎች _____

4) ሌሎች ሰዎች የማይሰማቸው የሚመስሉ ድምፆችን ወይም ጫጫታዎችን ወይም ሹክሹክታዎችን ሰምተው ያውቃሉ?

ሀ. በፍፁም

ለ. አዎ

5) ሌሎች ሰዎች የማይሰማቸው የሚመስሉ ድምፆችን ወይም ጫጫታዎችን ወይም ሹክሹክታዎችን ለመጀመሪያ ጊዜ የሰሙት መቼ ነው? _____ (በዓመታት)

6) ድምጾቹን ለመቀነስ የታሰበ ሕክምና (እንደ መድሃኒት ወይም ሳይኮቴራፒ) ከተደረጎለት በኋላም ድምፆቹ ወይም ጫጫታዎቹ ወይም ሹክሹክታዎቹ ቀጥለዋል?

i. አይደለም – ድምጾቹ በሕክምና ሙሉ በሙሉ ቆመዋል

ii. አዎ – ድምጾቹ ቀንሰዋል ነገር ግን ሙሉ በሙሉ አልቆሙም

iii. አዎ – ድምጾቹ ምንም ሳይለወጡ ቀጥለዋል

7) ድምፆቹ ወይም ጫጫታዎቹ ወይም ሹክሹክታዎቹ ከጀመሩበት ጊዜ አንስቶ፣ እነሱን ሳይሰሙ ያሳለፉት ረጅሙ ጊዜ ምን ያህል ነው?

i. በፍፁም ሙሉ በሙሉ ነፃ ሆኜ አላውቅም

ii. ከ1 ቀን በታች

iii. ከ1–7 ቀናት

iv. ሳምንታት

v. ወራት

vi. _____ ዓመታት

8) ሌሎች ሰዎች የማይሰሟቸው የሚመስሉ ድምፆችን ወይም ጫጫታዎችን ወይም ሹክሹክታዎችን ለመጨረሻ ጊዜ ያጋጠመዎት/የሰሙት መቼ ነበር?

i. ከ12 ወራት በፊት

ii. ባለፉት 12 ወራት ውስጥ አንዳንድ ጊዜ፣ ግን ባለፈው 1 ሳምንት ውስጥ የለም

iii. ባለፈው 1 ሳምንት ውስጥ

- ማሳሰቢያ: ለ8ኛው ጥያቄ መልስ “iii” (ባለፈው 1 ሳምንት ውስጥ) ከሆነ፣ ወደ ክፍል 3 ይቀጥሉ።

ክፍል 3: ለሳይኮቲክ ምልክቶች መለኪያ መጠይቅ: ለሌሎች ሰዎች የማይሰሙ ድምፆችን ስለመስማት መጠየቂያ (PSYRATS-AH)

አጠቃላይ *መመሪያዎች*

የሚከተለው በቅደም ተከተል የተዋቀረ ቃለ-መጠይቅ ለሌሎች ሰዎች የማይሰሙ ድምፆችን ስለመስማት የተለያዩ ገጽታዎች ልዩ ልዩ ዝርዝሮችን ለማግኘት ታስቦ የተዘጋጀ ነው። ጥያቄዎቹ በሚጠይቁበት ጊዜ፣ የቃለ-መጠይቁ **አብዛኞቹ ነጥቦች የታካሚውን የባለፈው ሳምንትን ልምዶች** *ለመመዘን* ታስቦ የተሰራ ነው።

የሚከተሉት **ሁለት ጥያቄዎች ግን ይለያሉ። ጥያቄ ቁጥር 4** ላይ የድምጾቹ የጉልህነት መጠን የሚመዘነው በቃለ-መጠይቁ ጊዜ ባለው የድምጾች ጩኸት ልክ ወይም ታካሚው ለመጨረሻ ጊዜ ባጋጠመው ጊዜ በነበረው የድምጾች ጩኸት ልክ *መሠረት* መሆን አለበት።እንዲሁም **ጥያቄ ቁጥር 5** የድምጾችን *መ*ንስኤ በተመለከተ ግለሰቡ ያለውን እምነት በሚጠይቁበት ጊዜ፣ የታካሚውን ምላሽ *መመዘን* ያለቦት በቃለ-*መ*ጠይቁ ጊዜ በሚያምንበት ነገር ላይ ተመስርቶ ነው።

1. ድግግሞሽ (Frequency) - ድምጾቹን ስንት ጊዜ ያጋጥሞታል/ይሰሙታል?

ምሳሌ: በየቀኑ፣ ቀኑን ሙሉ፣ ወዘተ.

የውጤት መጠን	*መግለጫ*
0	ድምጾች የሉም ወይም በሳምንት ከአንድ ጊዜ በታች ይሰማሉ/ያጋጥማሉ።
1	ድምጾቹ በሳምንት አንድ ጊዜ ወይም ከዚያ በላይ ያጋጥማሉ።
2	ድምጾቹ በቀን አንድ ጊዜ ወይም ከዚያ በላይ ያጋጥማሉ።
3	ድምጾቹ በሰዓት አንድ ጊዜ ወይም ከዚያ በላይ ያጋጥማሉ።
4	ድምጾቹ ያለማቋረጥ ወይም ሙሉ በሙሉ ያለማቋረጥ (ማለትም ለጥቂት ሰከንዶች ወይም ደቂቃዎች ብቻ ይቆማሉ) ያጋጥማሉ።

2. የቆይታ ጊዜ (Duration) - ድምጾችዎን በሚሰሙበት ጊዜ፣ ለምን ያህል ጊዜ ይቆያሉ?

ምሳሌ: ለጥቂት ሰከንዶች፣ ደቂቃዎች፣ ሰዓታት፣ ቀኑን ሙሉ?

የውጤት መጠን	***መግለጫ***
0	ድምጾች የሉም።
1	ድምጾቹ የሚቆዩት ለጥቂት ሰከንዶች ብቻ ነው (አላፊ ድምጾች)።
2	ድምጾቹ የሚቆዩት ለበርካታ ደቂቃዎች ነው።
3	ድምጾቹ የሚቆዩት ቢያንስ ለአንድ ሰዓት ነው።
4	ድምጾቹ በአንድ ጊዜ ለብዙ ሰዓታት ይቆያሉ።

3. ቦታ (Location) - ድምጾቹን በሚሰሙበት ጊዜ፣ ከየት የሚመጡ ይመስላሉ?

- ከራስዎ ውስጥ እና/ወይም ከራስዎ ውጭ ነው?
- ድምጾቹ ከራስዎ ውጭ የሚመጡ የሚመስሉ ከሆነ፣ በትክክል ከየት ነው የሚመጡ የሚመስሉት?

የውጤት መጠን	***መግለጫ***
0	ምንም ድምጾች የሉም።
1	ድምጾቹ ከራስ ውስጥ ብቻ የሚመጡ ይመስላሉ።
2	ድምጾቹ ከራስ ውጭ ግን ለጆሮ ወይም ለራስ ቅርብ ናቸው። ከራስ ውስጥ ያሉ ድምጾችም ሊኖሩ ይችላሉ።
3	ድምጾቹ ከራስ ውስጥ ወይም ለጆሮ ቅርብ እንዲሁም ከራስ ውጭ ግን ከጆሮ ራቅ ያሉ ሆነው ይሰማሉ።
4	ድምጾቹ ከራስ ውጭ ብቻ የሚመጡ ይመስላሉ።

4. የድምፅ መጠን (Loudness) - የድምጾቹ መጠን ምን ያህል ጉልህ ናቸው? (ምን ያህል ጮክ ያሉ ናቸው?)

- ከራስዎ ድምጽ ይበልጥ ከፍ ያሉ ናቸው?
- ተመሳሳይ መጠን አላቸው?
- ዝቅ ያሉ ናቸው ወይስ ሹክሹክታ ብቻ ናቸው?

የውጤት መጠን	***መግለጫ***
0	ምንም ድምጾች የሉም።
1	ከራስ ድምጽ ዝቅ ያሉ ናቸው።

የውጤት መጠን	መግለጫ
2	ከራስ ድምጽ ጋር ተመሳሳይ ድምቀት አላቸው።
3	ከራስ ድምጽ ይበልጥ ከፍ ያሉ ናቸው።
4	በጣም ከፍተኛ ድምጽ ያላቸው (ጩኸት)።

5. ድምጾቹ ከምን የተነሳ የመጡ እንደሆነ ያሉ እምነቶች (Beliefs in the origin of voices) - የሚሰሟቸው ድምፆች ከምን የተነሳ ነው ይሚመጡት ብለው ያስባሉ?

- ድምጾቹ ከራስዎ ጋር በተያያዙ ምክንያቶች የተከሰቱ ናቸው ወይስ በሌሎች ሰዎች ወይም በውጫዊ ምክንያቶች ብቻ?
- ታካሚው ውጫዊ መነሻን ከገለጸ: ድምጾችዎ በ_____ (ታካሚው የገለጻቸውን ምክንያቶች ይጨምሩ) የተከሰቱ መሆናቸውን ምን ያህል ያምናሉ? ከ0 እስከ 100 ባለው መለኪያ ይግለጹ፤ 100 ማለት ሙሉ በሙሉ እርግጠኛ ነዎት፣ ምንም ጥርጣሬ የለዎትም ማለት ነው፤ 0 ማለት ደግሞ ሙሉ በሙሉ ውሸት ነው ማለት ነው።

የውጤት መጠን	መግለጫ
0	ምንም ድምጾች የሉም።
1	ድምጾቹ ሙሉ በሙሉ ከውስጥ የተፈጠሩ እና ከራስ ጋር የተያያዙ እንደሆኑ ያምናሉ።
2	ድምጾቹ ከውጫዊ ምክንያቶች የመጡ መሆናቸውን ከ50% በታች እምነት አለው።
3	ድምጾቹ ከውጫዊ ምክንያቶች የመጡ መሆናቸውን 50% ወይም ከዚያ በላይ (ግን ከ100% በታች) እምነት አለው።
4	ድምጾቹ ሙሉ በሙሉ በውጫዊ ምክንያቶች የተነሳሱ እንደሆኑ ያምናል።

6. የድምጾቹ አሉታዊ ይዘት መጠን (Amount of negative content of voices) - የሚሰሟቸው ድምፆች ደስ የማያሰኙ ወይም አሉታዊ ነገሮችን ይናገራሉ?

- ድምጾቹ ከሚናገሯቸው ነገሮች ውስጥ ጥቂት ምሳሌዎችን ሊሰጡኝ ይችላሉ? (እነዚህን ምሳሌዎች ይመዝግቡ _____)
- ድምጾቹ እንደዚህ አይነት ደስ የማያሰኙ ወይም አሉታዊ ነገሮችን የሚናገሩት ምን ያህል ጊዜ ነው?

የውጤት መጠን	መግለጫ
0	ምንም ደስ የማያሰኝ ይዘት የለም።
1	አልፎ አልፎ ደስ የማያሰኝ ይዘት አለ።
2	አብዛኛው የድምጾቹ ይዘት ደስ የማያሰኝ ወይም አሉታዊ አይደለም (ከ50% ያነሰ ነው)።

የውጤት መጠን	መግለጫ
3	አብዛኛው የድምጾቹ ይዘት ደስ የማያሰኝ ወይም አሉታዊ ነው (50% ወይም ከዚያ በላይ ነው)።
4	ሁሉም የድምጾቹ ይዘት ደስ የማያሰኝ ወይም አሉታዊ ነው።

7. የአሉታዊ ይዘት ደረጃ (Degree of negative content)

(በመለኪያው ላይ ያሉትን መስፈርቶች በመጠቀም ይገምግሙ፤ አስፈላጊ ከሆነ ታካሚውን ለበለጠ ዝርዝር ይጠይቁ።)

የውጤት መጠን	መግለጫ
0	ደስ የማያሰኝ ወይም አሉታዊ አይደለም።
1	አንዳንድ የአሉታዊ ይዘት መጠን አለ፣ ግን ከታካሚው ወይም ከቤተሰብ ጋር የተያያዘ ነገር አይደለም። ለምሳሌ: ወደ ታካሚው ያልተሰነዘሩ አስተያየቶች ወይም የስድብ ቃላት ፣ ለምሳሌ "ወተቱን የሚያከፋፍለው ሰው አስቀያሚ ነው"።
2	በታካሚው ላይ የሚሰነዘሩ በባህሪ ላይ የሚሰጡ አስተያየቶች። ለምሳሌ: "ይህን ማድረግ ወይም መናገር የለብህም"።
3	በታካሚው ላይ የሚሰነዘሩ ከራስ ጽንሰ-ሀሳብ ጋር የተያያዙ ስድቦች። ለምሳሌ: "ሰነፍ ነህ/ሽ፣ አስቀያሚ ነህ/ሽ፣ እብድ ነህ/ሽ፣ ጠማማ ነህ/ሽ"።
4	በታካሚው ላይ የሚሰነዘሩ የግል ማስፈራሪያዎች። ለምሳሌ: ታካሚውን ወይም ቤተሰቡን ለመጉዳት ማስፈራሪያዎች፣ ራስን ወይም ሌሎችን ለመጉዳት ከባድ መመሪያዎች ወይም ትዕዛዞች እንዲሁም በ (3) ላይ የተጠቀሰው አይነት ስድቦች።

8. የጭንቀት መጠን (Amount of distress) - ድምጾችዎ ጭንቀት ይፈጥራሉ? ምን ያህል ጊዜ ነው?

የውጤት መጠን	መግለጫ
0	ድምጾቹ በጭራሽ ጭንቀት አይፈጥሩም።
1	ድምጾቹ አልፎ አልፎ ጭንቀት ይፈጥራሉ፣ አብዛኞቹ ግን ጭንቀት የማይፈጥሩ ናቸው (< 10%).
2	ጥቂቶቹ ድምጾች ጭንቀት ይፈጥራሉ (< 50%).
3	አብዛኞቹ ድምጾች ጭንቀት ይፈጥራሉ (≥ 50%).
4	ድምጾቹ ሁል ጊዜ ጭንቀት ይፈጥራሉ።

9. የጭንቀት መጠን (Intensity of distress) - ድምጾቹ ጭንቀት በሚፈጥሩበት ጊዜ፣ ምን ያህል ጭንቀት ይፈጥራሉ?

- ትንሽ፣ መካከለኛ ወይስ ከባድ ጭንቀት ያስከትላሉ?

- ከዚህ ቀደም ከነበረው ሁሉ በጣም ከፍተኛው የጭንቀት ደረጃ ላይ ናቸው?

የውጤት መጠን	መግለጫ
0	ድምጾቹ በጭራሽ ጭንቀት አይፈጥሩም።
1	ድምጾቹ ትንሽ ጭንቀት ይፈጥራሉ።
2	ድምጾቹ በመካከለኛ ደረጃ ጭንቀት ይፈጥራሉ።
3	ድምጾቹ በጣም ከፍተኛ ጭንቀት ይፈጥራሉ፣ ምንም እንኳን ታካሚው ከዚህ የከፋ ስሜት ሊሰማው ቢችልም።
4	ድምጾቹ እጅግ በጣም ከፍተኛ ጭንቀት ይፈጥራሉ፣ ሊሰማው ከሚችለው ሁሉ የከፋውን ስሜት ይሰማዋል/ይሰማታል።

10. በድምጾቹ ምክንያት በህይወት ውስጥ የሚፈጠር መስተጓጎል (Disruption to life caused by voices) - ድምጾቹ በህይወትዎ ላይ ምን ያህል መስተጓጎል ያመጣሉ?

- ድምጾቹ ከመሥራት ወይም ሌሎች የቀን እንቅስቃሴዎችን ከማድረግ ያግዱዎታል?
- ከጓደኞችዎ እና/ወይም ከቤተሰብዎ ጋር ባለው ግንኙነት ውስጥ ጣልቃ ይገባሉ?
- ራስዎን የመንከባከብ ችሎታዎን (ለምሳሌ መታጠብ፣ ልብስ መቀየር፣ ወዘተ) ያበላሻሉ/ያስተጓጉላሉ?

የውጤት መጠን	መግለጫ
0	በህይወት ውስጥ ምንም መስተጓጎል የለም፤ ማህበራዊ እና ቤተሰባዊ ግንኙነቶችን (ካሉ) ማስቀጠል ችለዋል።
1	ድምጾች በጣም ትንሽ መስተጓጎል በህይወት ውስጥ ይፈጥራሉ፤ ለምሳሌ በትኩረት ላይ ጣልቃ ይገባሉ፣ ነገር ግን የቀን እንቅስቃሴዎችን እና/ወይም ማህበራዊ ወይም ቤተሰባዊ ግንኙነቶችን ማስቀጠል ችለዋል እንዲሁም ያለ ድጋፍ ራሳቸውን ችለው መኖር ይችላሉ።
2	ድምጾች መካከለኛ መጠን ያለው መስተጓጎል በህይወት ውስጥ ይፈጥራሉ፣ ይህም በአንዳንድ የቀን እንቅስቃሴዎች እና/ወይም ቤተሰባዊ ወይም ማህበራዊ እንቅስቃሴዎች ላይ አንዳንድ መረበሽ ይፈጥራል። ታካሚው ሆስፒታል ውስጥ ባይሆንም፣ በድጋፍ በሚሰጥ መኖሪያ ቤት ሊኖር ወይም በዕለት ተዕለት የኑሮ ችሎታዎች ላይ ተጨማሪ እርዳታ ሊቀበል ይችላል።
3	ድምጾች ከባድ መስተጓጎል በህይወት ውስጥ ይፈጥራሉ፣ ይህም ሆስፒታል መተኛት ብዙውን ጊዜ አስፈላጊ ያደርገዋል። ታካሚው ሆስፒታል ውስጥ እያለ አንዳንድ ዕለታዊ እንቅስቃሴዎችን፣ ራስን መንከባከብን እና ግንኙነቶችን ማስቀጠል ይችላል። ታካሚው በድጋፍ በሚሰጥ መኖሪያ ቤት ውስጥ ሊሆን ይችላል ነገር ግን በእንቅስቃሴዎች፣ በዕለት ተዕለት የኑሮ ችሎታዎች እና/ወይም በግንኙነቶች ረገድ ከባድ መስተጓጎል እያጋጠመው ነው።
4	ድምጾች በዕለት ተዕለት ሕይወት ላይ ሙሉ በሙሉ መስተጓጎል ይፈጥራሉ፣ ይህም ሆስፒታል መተኛት ያስፈልጋል። ታካሚው ማንኛውንም ዕለታዊ እንቅስቃሴ እና ማህበራዊ ግንኙነት ማስቀጠል አይችልም። ራስን መንከባከብ ደግሞ በከፍተኛ ሁኔታ ተስተጓጉሏል።

11. የድምጾችን መቆጣጠር መቻል (Controllability of voices)

- ድምጾችዎ የሚከሰቱበትን ጊዜ መቆጣጠር እንደሚችሉ ያስባሉ?
- ድምጾችዎን ማስወገድ (ማባረር) ወይስ ማምጣት (መጥራት) ይችላሉ?

የውጤት መጠን	***መግለጫ***
0	ታካሚው ድምጾቹን መቆጣጠር እንደሚችል ያምናል እና ሁልጊዜ በፈለገ ጊዜ ማምጣት ወይም ማስወገድ ይችላል።
ነ	ታካሚው በአብዛኛው ጊዜ ድምጾቹን መቆጣጠር እእንደሚችል ያምናል ።
2	ታካሚው ግማሽ ያህሉን ጊዜ ድምጾቹን መቆጣጠር እንደሚችል ያምናል ።
3	ታካሚው ድምጾቹን ድምጾቹን መቆጣጠር እንደሚችል ያምናል ነገር ግን አልፎ አልፎ ብቻ። በአብዛኛው ጊዜ ታካሚው መቆጣጠር የማይችላቸውን ድምጾች ያጋጥመዋል።
4	ታካሚው ድምጾቹ መቼ እንደሚከሰቱ ምንም ዓይነት ቁጥጥር የለውም እና በጭራሽ ማስወገድም ሆነ ማምጣት አይችልም።

በልጅነት ህይወት የሚያጋጥሙ ኦሉታዊ ክስተቶችን ለመለየት የተዘጋጀ መጠይቅ (CTQ)

"ለእያንዳንዱ ጥያቄ፣ ተሳታፊው ምን እንደሚሰማው በሚገልጸው ሐሳብ መሠረት ከፊት ለፊት ካሉት ሣጥኖች የሚስማማውን ይምረጡ።"

	ከ 17 ዓመት በታች እድሜ በነበርኩ ጊዜ:		
1	በቂ ምግብ አልነበረኝም	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4

		በጣም ብዙጊዜ	5
2	የሚንከባከበኝና የሚጠብቀኝ ሰው እንዳለ አውቅ ነበር	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
3	በቤተሰቤ ውስጥ ያሉ ሰዎች "ሞኝ"፣ "ሰነፍ" ወይም “አስጠሊታ” እያሉ ይጠሩኝ ነበር	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
4	ወላጆቼ በጣም ሰክረው(ጠጭ ሁነው) ቤተሰባቸውን መንከባከብ ያቅታቸው ነበር።	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
5	በቤተሰቡ ውስጥ እኔ ተፈላጊ ወይም የተለየሁ እንደሆንኩ እንዲሰማኝ የረዳኝ አንድ ሰው ነበር።	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
6	የምለብሳቸው ልብሶቼ የቆሸሹ ነበሩ፡፡	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
7	እንደምወደድ ይሰማኝ ነበር።	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3

		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
8	ወላጆቼ ባትወለድ ይሻል ነበር ብለው የሚያስቡ ይመስለኝ ነበር	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
9	ከቤተሰቦቼ መካከል በድብደባ ከባድ ጉዳት አድርሶብኝ ወደ ጤና ተቋም ተወስጄ አውቃለሁ።	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
10	ቤተሰቦቼ በተደጋጋሚ ይገርፉኝ/ይደበድቡኝ ስለነበር ሰውነቴ ላይ የቁስል ምልክት አለኝ።	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
11	በቀበቶ፣ በቦርድ፣ በገመድ ወይም በሌላ ከባድ/ጠንከር ባለ ነገር ተቀጥቼ አውቃለሁ።	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
12	ቤተሰቦቼ እርስ በርስ ይተጋገዙ ነበር?	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
13	ቤተሰቦቼ የሚጎዳ ከባድ ስድብ ይሰድቡኝ ነበር።	በፍፁም	1
		ከስንት አንዴ	2

		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
14	አካላዊ ጥቃት ደርሶብኝ ነበር ብዬ አምናለሁ	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
15	በጣም ከመደብደቤ የተነሳ አስተማሪዎቼ፣ ጎረቤት ወይም የጤና ባለሙያዎች አይተውት ስለሱ ጠይቀውኝ ያውቃሉ	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
16	ከቤተሰቤ ውስጥ የሚጠላኝ/የማይወደኝ ሰው እንዳለ ይሰማኛል።	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
17	በቤተሰቤ ውስጥ ያሉ ሰዎች የእርስ በርስ ቅርርባቸው ጥሩ እንደነበር ይሰማኛል።	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
18	በጾታዊ ግንኙነት መልኩ ሊነካኝ ሞክሮ ወይም እንድነካው ያስደረገኝ ሰው ነበር፡፡	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
19		በፍፁም	1

	ከእነሱ ጋር የጾታ ግንኙነት ካልፈፀምኩ በቀር እንደሚጎዳኝ ወይም ስለ እኔ በውሸት እንደሚያወራብኝ ዛቶብኝ የሚያውቅ ሰው አለ።	ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
20	የጾታዊ ግንኙነት እንድፈጽም ወይም የጾታዊ ግንኙነት ነገሮችን እንድመለከት ሞክሮ የሚያውቅ ሰው አለ	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
21	ፆታዊ ጥቃት ተፈጸሞብኝ ያውቃል።	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
22	ስሜታዊ/ሞራላዊ በደል ተፈጽሞብኛል ብየ አምናለሁ	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
23	የሚያስፈልገኝ ሲሆን ወደ ጤና ተቋም የሚወስደኝ ሰው ነበር።	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
24	የፆታ ጥቃት ደርሶብኝ ነበር ብዬ አምናለሁ	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5

25	ቤተሰቦቼ የብርታትና የድጋፍ ምንጭ ነበሩ።	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
	ከ 17 ዓመት በታች እድሜ በነበርኩ ጊዜ:		
26	ሌላ ልጅ ወይም በአሥራዎቹ ዕድሜ ውስጥ የሚገኝ ወጣት አካላዊ ጉዳት (ለምሳሌ መቃጠል፥ መቆረጥ፥ መቁሰል ወይም ሌላ) አድርሶብኝ ያውቃል።	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
27	ሌላ ልጅ ወይም በአሥራዎቹ ዕድሜ ውስጥ የሚገኝ ወጣት ስሜታዊ ወይም ሥነ ልቦናዊ ጉዳት አድርሶብኝ ያውቃል ። (ለምሳሌ, ፍርሀት, መጥፎ ህልም, መታመም, ለብቻ መሆን መፈለግ, ማልቀስ, ወይም ሌላ)።	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
28	አንድ ሰው ከወላጆቼ በአንዱ ላይ ጥቃት ሲፈፅም አይቻለሁ	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
29	በጣም አስፈሪ የሆነ ሌላ ሁኔታ ገጥሞህ ያውቃል	በፍፁም	1
		ከስንት አንዴ	2
		አንዳንዴ	3
		ብዙጊዜ	4
		በጣም ብዙጊዜ	5
	ከነበረ(ግለጽ)		
30	ከወላጅ ቤተሰቦቼ አንዱ ወይም ሁለቱ ጋር ተለይቼ እኖር ነበር(ከ6 ወር በላይ)		
31	ከእናት ተለይቼ እኖር ነበር	አይ	0

		አዎ	1
32	አዎ ከሆነ፤ እድሚህ/ሽ ስንት ነበር:		
33	ከአባቴ ተለይቼ እኖር ነበር	አይ	0
		አዎ	1
34	አዎ ከሆነ፤ እድሚህ/ሽ ስንት ነበር:		

ክፍል 5 - አስሎ 3 አይተም ማህበራዊ ድጋፍ መመዘኛ ጥያቄዎች

ተ.ቁ ጥያቄዎች መልስ ሊሆኑ የሚችሉ ምርጫዎች አስተያየት

1. ከቤተሰቦችሽ/ህ ወይም ከዘመዶችህ እርዳታ/ድጋፍ ቢያስፈልግዎ ማግኘት ምን ያህል ቀላል ነው?

በጣም አስቸጋሪ----------1

አስቸጋሪ ----------2

ቀላልም ባይሆን የሚቻል----------3

ቀላል ----------4

በጣም ቀላል----------5

2. ከፍተኛ ችግር ቢያጋጥምዎ የቅርብ የሆኑ እና ይረዱኛል ብለው የሚተማመኑባቸው ምን ያህል ሰዎች ይኖራሉ?

ምንም----------1

1-2----------2

3-5----------3

5+----------4

3. ሌሎች ሰዎች ስለ እርሶ ጉዳይ ምን ያህል ግድ ይላቸዋል ወይም ያስቡልዎታል

ምንም ----------1

ትንሽ----------2

አላውቅም----------3

የተወሰነ ----------4

በጣም ----------5

12. DECLARATION

I the undersigned, declare that this thesis report 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: _____

Signature: _____

Date of submission: _____

This thesis has been submitted for examination with my approval as University Supervisor

Name and Signature of the first Supervisor _____

Name and Signature of the second supervisor _____