

**YANGON UNIVERSITY OF ECONOMICS
DEPARTMENT OF APPLIED ECONOMICS
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**A STUDY OF KNOWLEDGE AND AWARENESS, AND
PERCEPTION ON DEPRESSION AMONG YOUNG ADULTS
IN YANGON REGION**

**SIST NAING KYAW
MPA – 31 (20th BATCH)**

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**A thesis submitted in partial fulfillment of the requirements for the
degree of Master of Public Administration (MPA)**

Supervised by

U Than Htun Lay
Associate Professor
Department of Applied Economics
Yangon University of Economics

Submitted by

Sist Naing Kyaw
Roll No. 31
MPA 20th Batch

January, 2023

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This is to certify that this thesis entitled “**A STUDY OF KNOWLEDGE AND AWARENESS, AND PERCEPTION ON DEPRESSION AMONG YOUNG ADULTS IN YANGON REGION**”, submitted as a partial fulfillment towards the requirements for the degree of Master of Public Administration has been accepted by the Board of Examiners.

Board of Examiners

Dr. Khin Thida Nyein
(Chairperson)

Pro-Rector

Yangon University of Economics

Dr. Kyaw Min Htun

(External Examiner)

Pro-Rector (Retd)

Yangon University of Economics

Dr. Su Su Myat

(Examiner)

Professor / Head

Department of Applied Economics

Yangon University of Economics

U Than Htun Lay

(Supervisor)

Associate Professor

Department of Applied Economics,

Yangon University of Economics

Daw N Khum Ja Ra

(Examiner)

Associate Professor

Department of Applied Economics

Yangon University of Economics

January, 2023

ABSTRACT

This study was a community-based descriptive study. The objective of the study is to assess knowledge and awareness, and perception of depression among young adults in the Yangon region. In this study, 224 young adults were collected randomly, and the questionnaires were administered through both face-to-face interviews and online surveys with a Google form. The knowledge, awareness and perception of depression were assessed by using the Myanmar version of questionnaires. The secondary data was collected from the Ministry of health and sport and WHO websites. The study reveals that over 50% of young adults answered correctly in 54% of knowledge and awareness of depression questions. Over 50% of young adults answered correctly in 72% of perception of depression questions. However, there are some weaknesses in knowledge, awareness and perception. Therefore, health education in high schools and universities was important for the Yangon region and more investment in mental health is needed to develop mental health facilities such as emergency hotline centers, etc. Additionally, human resources in mental health are the important issues that need to be developed in the Yangon region.

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LIST OF ABBREVIATIONS

CBT	Cognitive Behavioural Therapy
DSM-V	Diagnostic and Statistical Manual of Mental Disorders 5
ECT	Electroconvulsive Therapy
GDP	Gross Domestic Product
GSHS	Global School-based Student Health Survey
HIV	Human Immunodeficiency Virus
ICD 10	International Classification of Diseases 10
MOHS	Ministry of Health and Support
PMS	Premenstrual Syndrome
SIMD	Substance-Induced Mood Disorder
WHO	World Health Organization
WHO-AIMS	World Health Organization Assessment Instrument for Mental Health Systems

CHAPTER I

INTRODUCTION

1.1 Rationale of the Study

Depression is one of the major challenges in the healthcare system faced globally affecting 3.8% of the population. It affects more than 280 million people worldwide and involves all ages. Depression is a common mental disorder, and its severity can range from mild to seriously fatal based on the impact of symptoms like mood disorder to a disabled social and functional life, even suicide. Twenty-five percent of young adults will experience a depressive episode by age 24 years, the highest incidence rate of any age group. Every year more than 700,000 people die due to suicide and depression is the fourth leading cause of death in the population aged between 15-29 years old. In addition, it affects females more than males.

Depression is a mood disorder that negatively affects the way an individual feels, thinks, and acts. It is also known as Major Depressive Disorder. It can affect everyone regardless of age, sex, or other demographics. The exact cause of depression is not clear, some individuals with depression may not have any specific factor at all. However, several contributing factors are certain chemicals in the brain, genetics, personality (low self-esteem or stress), and environment (negligence, abuse, or poverty).

In young adults, depression has significant impacts on cognitive thinking, academic performance, relationships with peers, death rates, and self-esteem. Although depression can lead to numerous challenges, young adults frequently do not seek help and experience difficulties in their day-to-day activities. Symptoms range widely from mild feelings of depression to very severe and deep feelings of depression. Most of the young adults with indications of depression may not recognize their symptoms initially but may eventually have suicidal thoughts. Therefore, knowledge of mild depressive symptoms in young adults is important for appropriate early detection and improved prognosis.

According to the Diagnostic and Statistical Manual of Mental Disorders - 5 (DSM-V), depression is a clinically diagnosed illness based on an individual experiencing five or more of the following symptoms for at least two weeks: depressed mood, lack of energy or concentration or interest, a feeling of worthless or guilty or hopelessness, changes in sleep, diet or weight pattern (can be increased or decreased), suicidal thoughts, and body aches or headache or cramps or psychomotor agitation without any organic diseases. Young adults are five more likely to suffer from depression compared to teenagers.

Distinguishing between typical behaviors and signs of mental illness can be challenging for young adults who are learning self-identity and self-expression. Less than half of young adults correctly associate depression with a mental illness. There is a significant delay in young adults seeking help for depressive symptoms. There are unique opportunities to promote mental health literacy and health-seeking behaviors through school-based depression awareness programs. Little is known regarding the effectiveness of school-based depression awareness programs.

Yangon is Myanmar's most populous city and its most important commercial center. Most of the young adults in Myanmar migrate to Yangon for further education, career development and struggle for life. Covid-19 and political crises make most young adults to jobless, hopeless, lonely, social punishment, Victim blaming, discrimination and isolation are contributing factors to depression for young adults in Myanmar. So, Negative perceptions and knowledge about depression may prevent many young adults from accepting prevention, prognosis and treatment for depression.

1.2 Objective of the Study

The objective of the study is to assess knowledge and awareness, and perception on depression among young adults in the Yangon region.

1.3 Method of the Study

This thesis uses a descriptive method based on primary data and secondary data. Primary data were collected using face-to-face interviews and internet google form surveys of the random sample of 224 respondents, aged between 18 to 25 years in the Yangon region. Secondary data were collected from MOHS Myanmar and the WHO website. Other relevant facts and figures were collected from internet websites and read in the thesis papers.

1.4 Scope and Limitation of the study

This thesis studies knowledge, awareness and perception of depression. The target population was young adults (between 18 to 25 years) who live in Yangon Region. The survey was conducted from November 2022 to December 2022.

1.5 Organization of the study

This paper is organized into five chapters. Chapter I is the introductory chapter and consist of the rationale of the study, objective of the study, scope and limitation of the study, method of the study and organization of the study. Chapter II is the literature review. Chapter III describes mental health situation in Myanmar. Chapter IV describes the analysis of survey data. This thesis finally concludes with Chapter V which presents findings and recommendations.

CHAPTER II

LITERATURE REVIEW

2.1 Depression

“Depression is a common mental disorder that presents with depressed mood, loss of interest or pleasure, a feeling of guilt or low self-worth, disturbed sleep or appetite, low energy, poor concentration and among women, amenorrhea.” This problem can become chronic or recurrent and lead to substantial impairments in an individual’s ability to take care of his or her everyday responsibilities. Depression, in its most severe form, can result in suicide, which claims the lives of over 700,000 people annually and ranks as the fourth most common cause of death among 15-29 year olds. Although feeling sad or low is a normal experience, when persistent sadness impacts daily functioning, it may signal depression. Depression is common affecting about 280 million people worldwide. Depression is not a normal part of growing older. It is a treatable medical illness, much like heart disease or diabetes” (Geriatric Mental Health Foundation).

Depression is essentially an episodic recurring disorder, each episode lasting usually from a few months to a few years with the normal period in between about 20 percent of cases; depression follows a chronic course with no remission, (Thornicroft and Sartorius, 1993) especially when adequate treatment is not available. The recurrent rate for those who recover from the first episode is around 35 percent within 2 years and about 60 percent at 12 years. The recurrent rate is higher in those who are more than 60 years of age. One of the particularly tragic outcomes of depressive disorders is suicide.

2.2 History of Depression

Historically, depression has been recognized as a common disease and described by various names since antiquity. Ancient Greek and Roman physicians coined the term “melancholia” for patients with depression due to a disorder of black

bile. There are four senses of humor such as wind, black bile, yellow bile and phlegm. Hippocrates: In the fourth century BC, Hippocrates made an early reference to distress and melancholia. He described melancholia (black bile) as a state of “aversion to food, sleeplessness, irritability and restlessness.

Psychoanalysis: In the twentieth century, psychoanalytic theorists believed that many mood disorders stemmed from the psychological response to loss. Differentiation was often made between endogenous caused by biological factors and exogenous caused by loss or other psychological stresses. Emil Kraepelin: Emil Kraepelin noted that psychotic patients had a cyclical pattern and prominent symptoms of mood. Others had more chronic patterns that also featured cognitive impairment and now called Schizophrenia.

2.3 Epidemiology

Depression is a prevalent illness that affects people worldwide, with an estimated 3.8% of the global population impacted, including 5.0% of adults and 5.7% of older adults (over 60 years). About 280 million individuals across the globe suffer from depression. Depression affects approximately 6.7% of adults in any given year and 16.6% of people at some point in their lives. While depression can occur at any age, it typically first appears during the late teens to mid-20s. Women are more susceptible to depression than men, with some research indicating that one-third of women will experience a major depressive episode during their lifetime. There is a significant degree of genetic inheritance (approximately 40%) when depression runs in families (parents, children and siblings Depression is distinct from typical mood fluctuations and brief emotional reactions to daily stressors. When it recurs and has a moderate or severe level of intensity, depression can develop into a severe health condition, leading to significant suffering and impaired functioning in work, school, and family life. Despite the existence of proven, successful therapies for mental disorders, over 75% of individuals in low- and middle-income countries do not receive any treatment. Barriers to effective care include a lack of resources, a lack of trained healthcare providers and social stigma associated with mental disorders. In countries of all income levels, people who experience depression are often not correctly diagnosed, and others who do not have the disorder are too often misdiagnosed and prescribed antidepressants.

The death of a loved one, the loss of a job, or the ending of a relationship are difficult experiences for a person to endure. It is usual for emotions of sadness or grief to arise in response to such situations. Those undergoing loss may often describe themselves as feeling "down" or "blue," but feeling sad is not equivalent to having clinical depression. The grieving process is inherent and distinctive to every person, and it exhibits certain similarities with depression. Both grieving and depression can entail profound sorrow and retreat from customary pursuits. They differ significantly in crucial aspects: During grieving, painful feelings come in waves, often intermixed with positive memories of the deceased. In major depression, mood and/or interest (pleasure) are decreased for most of the two weeks. In grief, self-esteem is usually maintained. In major depression, feelings of worthlessness and self-loathing are common. In grief, thoughts of death may surface when thinking of or fantasizing about "joining" the deceased loved one. In major depression, individuals may have persistent thoughts of self-harm or suicide, often stemming from feelings of worthlessness or being unable to cope with the intense emotional pain caused by the condition. Grief and depression can co-exist. Depression may arise in individuals following the loss of a loved one, losing a job, or experiencing physical assault or a major disaster. When depression and grief occur simultaneously, the resulting grief tends to be more intense and prolonged than grief experienced without depression. It is crucial to differentiate between grief and depression, as this distinction can aid individuals in obtaining the necessary help, support, or treatment.

2.4 Risk Factors for Depression

Depression can impact anyone - even a person who appears to live comfort lifestyle. Depression can be influenced by various factors:

- **Biochemistry:** Symptoms of depression may be linked to variations in specific chemicals in the brain.
- **Genetics:** Depression has a strong genetic basis, which can result in its occurrence within families, e.g, In the case of identical twins, if one twin experiences depression, the other twin has a 70 percent likelihood of developing the disorder at some point during their life.
- **Personality:** Individuals who exhibit low self-esteem, have a tendency to feel overwhelmed by stress, or possess a generally pessimistic outlook on life, are believed to have a higher susceptibility to experiencing depression.

- Environmental factors: Prolonged exposure to violence, neglect, abuse, or poverty can increase the susceptibility of certain individuals to depression.

2.5 Symptoms and Patterns

In a depressive episode, the individual typically endures persistent feelings of sadness, irritability, or emptiness, or experiences reduced enjoyment or interest in activities, for most of the day, nearly every day, over a period of at least two weeks. In addition, a variety of other symptoms may be present, such as poor concentration, feelings of excessive guilt or low self-worth, hopelessness about the future, thoughts about death or suicide, disrupted sleep patterns, changes in eating habits or weight and feeling especially tired or low in energy. In certain cultural settings, bodily symptoms may be a more common means of expressing changes in one's mood among some individuals. (e.g. - pain, fatigue, weakness). These physical symptoms are not attributed to any underlying medical condition.

Depressive episodes can significantly impair a person's ability to function in important areas of their life, such as personal relationships, family, social activities, education, or work. The severity of symptoms and their impact on functioning can determine the classification of the episode as mild, moderate, or severe. There are different patterns of mood disorders including (1) single-episode depressive disorder, meaning the person's first and only episode), (2) recurrent depressive disorder, meaning the person has a history of at least two depressive episodes; and (3) bipolar disorder, meaning that depressive episodes alternate with periods of manic symptoms, which include euphoria or irritability, increased activity or energy, and other symptoms such as increased talkativeness, racing thoughts, increased self-esteem, decreased need for sleep, distractibility, and impulsive reckless behavior.

2.6 Types of Depression

There are some types of depressive disorders that doctors can diagnose, including:

1. Unipolar major depression
2. Persistent depressive disorder, also called dysthymia, when depression lasts for at least 2 years
3. Disruptive mood dysregulation disorder, when children and teens get very cranky, angry, and often have intense outbursts that are more severe than a child's typical reaction

4. Premenstrual dysphoric disorder, when a woman has severe mood problems before her period, more intense than typical premenstrual syndrome (PMS)
5. Substance-induced mood disorder (SIMD), when symptoms happen while you're taking a drug or drinking alcohol or after you stop
6. Depressive disorder caused by the underlying medical condition
7. Other depressive disorders, such as minor depression

Other specific features of depression, such as:

- Anxious distress. You worry a lot of things that happen losing control.
- Mixed features. You have both depression and mania -- periods of high energy, talking too much, and high self-esteem.
- Atypical features. You can feel good after happy events, but you also feel hungrier, need to sleep a lot, and are sensitive to rejection.
- Psychotic features. You believe things that aren't true, or see and hear things that aren't there.
- Catatonia. You can't move your body normally. You will be still and unresponsive or have uncontrollable movements.
- Peripartum depression. Your symptoms start during pregnancy or after birth children.
- Seasonal pattern. Your symptoms get worsen especially the colder, darker months and changes in the seasons.

2.7 Depression and Suicide with Young Adults

Young adult age ranges depend on whom you ask, the "young adults" age range could refer to people aged 12 to 18, or it could refer to those aged 18 to 30. In general, young adults are people between the ages of 12 and 30. For a more specific number

- **According to medicine and psychology**
Erik Erikson (most influential psychologist) - aged between 19 to 39.
In the field of health and medicine, young adult - aged between 15 to 29.
- **According to the government**
US, young adults - aged between 18 to 24
- **According to the popular culture**

Young adults - aged between 13 to 20

- **According to research and science**

Massachusetts Institute of Technology (MIT), young adult is generally defined as 18 to 22 or 18 to 25. In this study, the young adult's age range is 18 to 25 years according to the young adult development project of MIT.

Anybody who thinks or discusses harming themselves should be treated very seriously. Do not hesitate to call your local suicide hotline. But there is no facility of emergency hotline center for suicide in our country. If you are experiencing thoughts of suicide, seeking help is crucial. There are many options available to you besides going to the emergency room. Warning signs include (1) Thoughts or talk of death or suicide, (2) Thoughts or talk of self-harm or harm to others, (3) Aggressive behavior or impulsiveness. If your child or teenager is prescribed antidepressants, it is important to closely monitor their behavior for any changes or signs of worsening depression or suicidal thoughts. Some of the signs to watch out for include: Increased agitation or restlessness, Heightened anxiety or panic attacks, Difficulty sleeping or sleeping too much, Loss of appetite or overeating, Withdrawal from social activities or relationships, Increased irritability or aggression, Unusual changes in mood or behavior and Thoughts or talk of self-harm or suicide.

2.8 Diagnosis of Depression

The diagnosis of depression according to ICD-10 or DSM – V, International Classification of Diseases – 10 is as follows - Symptoms of Depression (ICD–10)

1. Depressed mood
2. Loss of interest and enjoyment
3. Reduced energy, being easily fatigued, diminished activity
4. Marked tiredness on slight effort
5. Reduced concentration and attention on a task
6. Reduced confidence and self-esteem
7. Feeling of guilt and unworthiness
8. Bleak and pessimistic view of the future
9. Ideas or acts of self-destruction or suicide
10. Disturbed sleep
11. Diminished appetite and libido
12. Unexplained physical symptoms

If the above symptoms persist for at least two weeks, then there is significant impairment of social and occupational functioning. If normal stresses of life do not explain the symptoms. When rest and relaxation have not helped. (International Classification of Diseases (ICD-10), 10th revision, WHO, 1992).

DSM–5 Criteria for a major depressive episode

- A. To be diagnosed with a major depressive episode, an individual must have experienced five or more of the following symptoms during the same two-week period and the symptoms must represent a change from their previous functioning: At least one of the symptoms must be either depressed mood or loss of interest or pleasure. Symptoms that are clearly attributable to another medical condition should not be included.
1. Depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g. appears tearful). Note: In children and adolescents can be irritable mood.
 2. Markedly diminished interest or pleasure in all or, almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation)
 3. Significant weight loss when not dieting or weight gain (e.g. a change of more than 5 percent of body weight in a month), or decrease in appetite nearly every day. In children, consider failure to make expected weight gains.
 4. Insomnia or hypersomnia nearly every day.
 5. Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down).
 6. Fatigue or loss of energy nearly every day.
 7. Feeling of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick).
 8. Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others).

9. Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.

B. The symptoms cause clinically significant distress or impairment in social, occupational or other important areas of the functioning.

C. The episode is not attributable to the physiological effects of a substance or to another medical condition. Note that Criteria A-C represents a major depressive episode. Responses to a significant loss (e.g., bereavement, financial ruin, losses from a natural disaster, a serious medical illness or disability) may include the feelings of intense sadness, rumination about the loss, insomnia, poor appetite and weight loss noted in Criterion A which may resemble a depressive episode. Although such symptoms may be understandable or considered appropriate to the loss, the presence of a major depressive episode in addition to the normal episode to a significant loss should also be carefully considered. This decision inevitably requires the exercise of clinical judgment based on the individual's history and cultural norms for the expression of distress in the context of loss.

D. The occurrence of the major depressive episode is not better explained by schizoaffective disorder, schizophrenia, schizophreniform disorder, delusional disorder, or other specified and unspecified schizophrenia spectrum and other psychotic disorders.

E. There has never been a manic episode or a hypomanic episode.

These exclusion criteria do not apply if all of the manic-like or hypomanic-like episodes are substance-induced or are attributable to the physiological effects of another medical condition. (Diagnosis and Statistical Manual of Mental Disorders (DSM-V) Fifth Edition, American Psychiatric Association)

2.9 Treatment of Depression

Depression is among the most treatable mental disorders. Most people with depression respond well to treatment, with an estimated success rate of 80% to 90%. Most of the patients experience some improvement in their symptoms. Before proceeding with any diagnosis or treatment, it's important for a healthcare provider to perform a diagnostic evaluation, which includes a discussion and a physical assessment. Sometimes, healthcare professionals may recommend a blood test to rule out the possibility that the symptoms of depression are caused by an underlying medical

condition, such as a thyroid disorder or a vitamin deficiency. This is important because addressing the underlying medical cause may help alleviate the depression-like symptoms. The assessment process will involve a thorough examination of symptoms, medical and family histories, as well as cultural and environmental factors, in order to determine a diagnosis and develop a tailored treatment plan.

2.9.1 Medication

Depression is a complex mental health disorder that can be caused by a variety of factors, including genetic, environmental, and psychological factors. One of the potential causes of depression is an imbalance in brain chemistry, particularly a deficiency in certain neurotransmitters such as serotonin, dopamine, and norepinephrine. These neurotransmitters are responsible for regulating mood, appetite, sleep, and other bodily functions. Antidepressants are medications that can help balance neurotransmitter levels in the brain, particularly serotonin levels. There are several different types of antidepressants, including selective serotonin reuptake inhibitors (SSRIs), serotonin-norepinephrine reuptake inhibitors (SNRIs), and tricyclic antidepressants (TCAs), among others. These medications work by increasing the availability of neurotransmitters in the brain, which can improve mood and reduce symptoms of depression. Although there may be some initial improvement within the first couple of weeks of taking antidepressants, it may take two to three months to experience the full benefits. If a patient does not feel any significant improvement after a few weeks, their psychiatrist may adjust the dosage or switch to another antidepressant. It is recommended to inform your doctor if a medication is ineffective or if you encounter any adverse effects, and in some cases, alternative psychotropic medications may be beneficial. Psychiatrists generally advise patients to continue taking medication for at least six months after symptoms have improved, and for some individuals at high risk, long-term maintenance treatment may be proposed to reduce the likelihood of future episodes.

2.9.2 Psychotherapy

Psychotherapy, or “talk therapy,” is sometimes used alone for the treatment of mild depression; for moderate to severe depression, psychotherapy is often used along with antidepressant medications. Cognitive behavioral therapy (CBT) has been found to be effective in treating depression. CBT is a form of therapy focused on problem-

solving in the present. CBT helps a person recognize distorted/negative thinking with the goal of changing thoughts and behaviors to respond to challenges in a more positive manner. Psychotherapy may involve only the individual, but it can include others. For example, family or couples therapy can help address issues within these close relationships. Group therapy brings people with similar illnesses together in a supportive environment, and can assist the participant to learn how others cope in similar situations. Depending on the severity of the depression, treatment can take a few weeks or much longer. In many cases, significant improvement can be made in 10 to 15 sessions.

2.9.3 Electroconvulsive Therapy (ECT)

ECT is a medical intervention typically reserved for individuals suffering from severe major depression that has been resistant to other treatments. This therapy involves brief electrical stimulation of the brain while the patient is under anesthesia and is usually administered two to three times per week, totaling six to 12 treatments. A team of medical professionals, including a psychiatrist, an anesthesiologist, and a nurse or physician assistant, typically manages ECT. Despite being in use since the 1940s, years of research have improved ECT's efficacy, leading to its recognition as a mainstream treatment rather than a last resort.

2.9.4 Self-help and Coping

People can take various steps to alleviate depression symptoms, such as engaging in regular exercise to boost mood, maintaining good sleep habits, consuming a healthy diet, and abstaining from alcohol, which is a depressant. Depression is a legitimate condition, and support is accessible. With the appropriate diagnosis and therapy, most individuals suffering from depression can recover. If you're struggling with depression symptoms, make an appointment with your family doctor or psychiatrist and express your concerns to receive a comprehensive assessment and initiate your mental health journey.

2.10 Contributing Factors and Prevention

Depression arises from a multifaceted interplay of biological, psychological, and social factors, and individuals who have experienced negative life events such as loss of employment, bereavement, or trauma are at an increased risk of developing this condition. The repercussions of depression are far-reaching and can further compound an individual's stress levels, impair their functioning, and exacerbate their depression symptoms. Additionally, depression and physical health are intricately linked, as evidenced by the bidirectional relationship between cardiovascular disease and depression.

Research has demonstrated that implementing prevention initiatives can help lower the rates of depression. To prevent depression, community-based efforts like school programs that promote positive coping skills among kids and teens have been found to be effective. Additionally, interventions that target parents of children with behavioral issues can lead to a reduction in symptoms of depression for parents and improved outcomes for their kids. For older individuals, exercise programs have also been shown to be a useful tool in preventing depression.

2.11 Reviews of Previous Study

Zwe Khant Zaw (2018) has conducted an assessment of the association between perceived social support and depression among elderly people in North Okkalapa township. It found that 16.2 percent of the study population was found to have depression. It also found that depression was a significant association with age group, sex group, occupation, marital status and previous history of physical illness statistically. There was a strong association between depression and perceived social support in the study population (p -value <0.001). Education standards, family history of mental illness, leisure time behavior and income are not associated statistically significantly with depression. A low level of perceived social support is strongly and significantly associated with depression among elderly people. Elderly people who received high levels of perceived social support have not occurred depression and moderate to low levels of perceived social support can be depressed.

Elsevier B.V (2021) stated in the Asian Journal of Psychiatry “Mental health of adolescents in Myanmar: A systematic review of prevalence, determinants and interventions”. It pointed out a systematic review of the peer-reviewed and grey literature to determine (i) the prevalence of mental disorders among adolescents in

Myanmar, (ii) determinants of mental disorders, and (iii) interventions that have been implemented and evaluated. This journal also focused on interventions and found mindfulness meditation training to be an effective approach for young people whose parents were affected by HIV. These findings underscore the need to address adolescent mental health in Myanmar, but also to invest in better data collection efforts.

Benjamin W. Van Voorhees, MD, MPH (2005) has a talented assessment of Beliefs and Attitudes Associated With the Intention to Not Accept the Diagnosis of Depression Among Young Adults. It found that Negative beliefs and attitudes, subjective social norms, and lack of past helpful treatment experiences are associated with the intent to not accept the diagnosis of depression and may contribute to low rates of treatment among young adults.

CHAPTER III

OVERVIEW OF MENTAL HEALTH SITUATION IN MYANMAR

3.1 Mental Health Situation in Myanmar

Mental health is a key driver of health, well-being and socio-economic development, yet until recently, it has remained relatively neglected in global policy and action (World Health Organization, 2008). Indeed, the mental disorder was only included as a key non-communicable disease at the UN's third High-Level Meeting in 2018 (World Health Organization, 2018b). Depression has emerged as a leading cause of disease burden globally, with suicide emerging as a leading cause of mortality amongst young people in many settings (World Health Organization, 2013a, 2020a), with suicidal behaviors more prevalent in females than in males and peaking around 15 years of age. There are good reasons to bring a sharp focus to young people within a public health approach to mental health. During adolescence, there is a high likelihood of mental disorders emerging, and this is due in part to the rapid changes in the social and institutional support systems available, such as schools and healthcare services. Improvements to the mental health of current adolescents also bear a triple dividend: improved quality of life now reduced burden of disease and enhanced earning potential in the future, and positive impacts on the next generation's healthcare. Efforts to address mental health must be context-specific given the wide variation in its conceptualization, as well as the resources available to respond (World Health Organization, 2013b).

Myanmar, a country in South-East Asia with a population of nearly 60 million and made up of 135 unique ethnic groups, serves as an example of this diversity. In recent years, Myanmar has experienced significant socioeconomic and political progress, but mental health has become a particular issue for policymakers. This is particularly so for adolescents (10– 24-year-olds account for a third of Myanmar's population), with the Myanmar government recognizing adolescent mental health as a specific focus of its Five-year National Strategic Plan for Young People's Health (2016–2020) (Ministry of Health Myanmar, 2016). Despite the increasing attention given to adolescent mental health in policy-making, a major obstacle to implementing

effective strategies has been the scarcity of epidemiological data specifically for this age group, which is crucial for identifying their needs and setting intervention targets. Unfortunately, globally, only 6.7% of children and adolescents have access to adequate and comparable mental health data, with Southeast Asia lagging even further behind at less than 4.5%. Moreover, the evidence base for effective mental health interventions for young people is also limited. Nevertheless, there are promising initiatives underway that are working towards collecting better mental health data for adolescents.

The Global School-based Student Health Survey (GSHS) includes measures of adolescent mental health in Myanmar, with data sets from 2007 and 2016 available (World Health Organization, 2020b). There are also a number of other population-based surveys underway for young people in the Asia-Pacific region (World Health Organization, 2017). Aside from a regional report on some findings of the GSHS, these data have not as yet been systematically analyzed or synthesized so as to be accessible to policymakers and programmers.

Table (3.1) Mental Health of Students 13- 17 Years of Age in Myanmar

	Attempted suicide	Seriously Considered attempting suicide	Made a plan to attempt suicide	Worried so much that could not sleep	Felt so sad or hopeless & stopped doing usual activities	Felt lonely	Did not have any close friend	Missed classes without permission	Reported most of the students in their school were kind and helpful
Sex	%	%	%	%	%	%	%	%	%
Male	6.9	7.9	4.9	3.7	25.8	7.2	3.5	33.0	33.8
Female	10.6	10.9	8.6	4.0	28.5	10.1	4.0	22.4	41.7
Age (years)									
13-15	8.4	9.2	6.8	3.9	26.1	8.3	3.6	25.6	38.9
16-17	11.2	10.9	6.8	4.0	33.4	11.2	4.4	38.2	32.5
Total (13-17)	8.8	9.4	6.8	3.9	27.2	8.7	3.7	27.6	37.9

Source: Report of second GSHS in Myanmar, 2016

3.2 The Situation of Mental Health After Covid- 19 in Myanmar

Before the covid 19 and the political crisis, mental health was a neglected issue in Myanmar. Now, the situation is even worse. The obstacles of financial, legislative, structural, and cultural nature have impeded the access to mental health services in Myanmar, and the ongoing COVID-19 and political crisis have further added to the challenges. As a result, mental health has emerged as a crucial concern in Myanmar. Due to a combination of long-standing civil unrest and recent economic downturn caused by COVID-19, Myanmar's political and economic landscape remains highly unstable, with poverty levels having significantly increased from 16% to 63% in the past 8 months, as reported by a study in October 2020. This has created a precarious situation for the country's population.

Myanmar fails to address its issues and continues on its path towards being a failed state, its population may experience serious negative effects on their mental health. Similar effects have been observed in other countries facing conflict, as a global WHO synthesis of 129 studies in such contexts found that up to 20% of conflict-affected populations experience mental health issues, including depression, anxiety, post-traumatic stress disorder, bipolar disorder, and schizophrenia. The report suggests that it is crucial to implement scalable mental health interventions to address the significant burden of mental health issues, given the high number of people in need and the humanitarian imperative to alleviate suffering.’

Myanmar's mental health system is under immense pressure, and there is no official mental health policy in place, resulting in limited access to professional support through primary healthcare channels. Although some care is available through the private sector, it is not comprehensive enough to address the growing burden. Regarding state mental health provision, including funding, staff and infrastructure, the HelpAge study found that staff is not adequately trained and there is little infrastructure to facilitate these services, particularly in the rural area. A chronic shortage of funding is a major contributor to the current situation. Additionally, although there is no available data on the effects of stigma on mental health in Myanmar, research conducted in similar countries indicates that it has severe repercussions. Looking ahead, the principal obstacles confronting Myanmar's mental health sector are a dearth of legal support, inadequate funding, and misconceptions about mental health.

3.3 Depression in Myanmar

At the institution where we completed our psychiatry placement in Myanmar, patients with depression were not commonly seen, and it was only studied as a topic for medical exams. Students were more fascinated by the strange psychotic symptoms of schizophrenia than the sad and gloomy symptoms of depression. In any case, psychiatry was not a subject that attracted serious attention from medical students or doctors and specialists. The medical education in Myanmar did not emphasize the importance of mental health in a person's overall well-being, and this lack of attention extended to mental health services, as evidenced by the meager 0.3% allocation of the total health budget for mental health, according to the WHO AIMS report in 2006. While not representative of the whole population, recent statistics from our charity's mental health clinics have indicated that depression is a prevalent mental health issue in Myanmar, similar to other parts of the world.

Depression is not widely recognized as an illness in Myanmar, and many individuals consider it to be a typical and manageable aspect of life that can be overcome by maintaining one's daily routine. While individuals with mild symptoms may experience recovery, those with more severe symptoms tend to experience a worsening of their condition over time. By the time they are brought to the hospital, sometimes in restraints, by their families, patients are very ill and lack insight into their illness and its associated risks. Specialist mental hospitals in Myanmar, until recently, could offer only unmodified ECT. Understandably, patients and clinicians dreaded this option, although it could be the only life-saving treatment for severe depression.

Mild symptoms related to stress; people take refuge in the religious faith, practice mindfulness and insight meditation, or perform rituals that are in fact more traditional and cultural than religious. It is essential that individuals experiencing moderate to severe depression receive specialized medical care and treatment. In recent years, the suicide rate in Myanmar has gone up a few positions in the list of 25 top causes for years of life lost quantifying premature mortality.

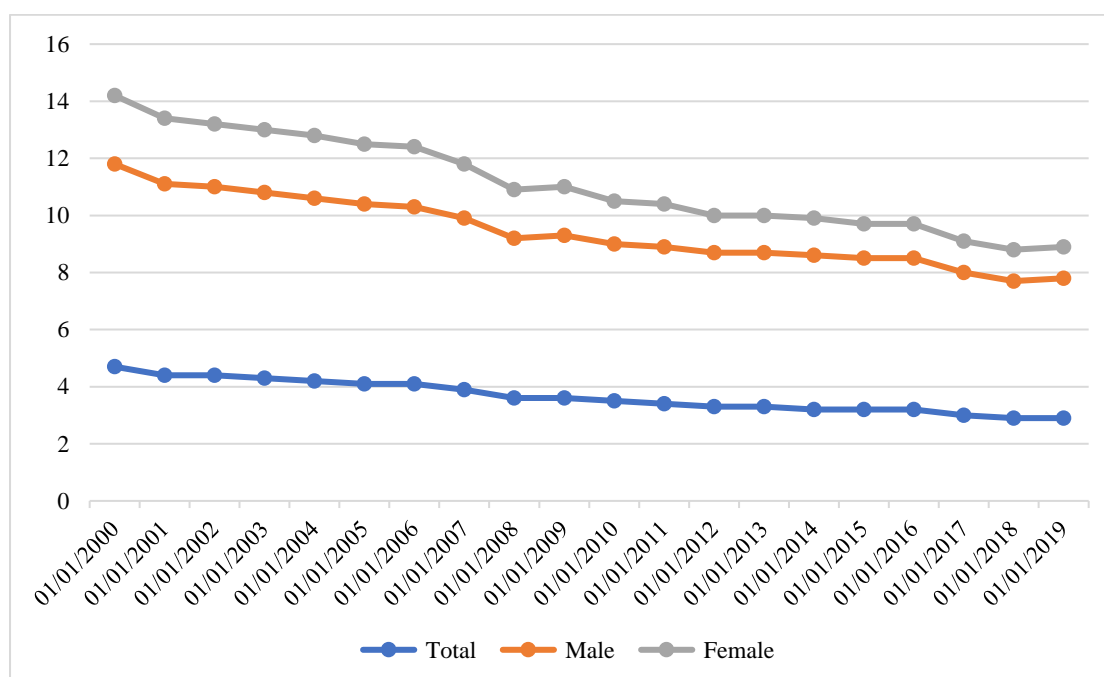
Given the well-established association between depression and suicide, it is concerning that Myanmar's suicide mortality rate of 12.4 per 100,000 population in 2012 exceeded the global average of 11.4, as reported by WHO. It is crucial to diagnose and treat depression in a timely and effective manner, highlighting the importance of

early and accurate identification. There is hope and optimism. In a country where social cohesion is still strong, Myanmar may not require all the formalities of the Western way of managing depression, but rather a pragmatic combination of strands drawn from the evidence-based Western model and the inexpensive psychosocial approach based in its social structure, community spirit and existing helpful practices. Prioritizing open and honest conversations about depression is a necessary step toward developing innovative and creative strategies for managing the condition.

3.4 Suicide Rate and Healthcare Spending in Myanmar

The suicide mortality rate is the number of suicide deaths in a year per 100,000 population. Crude suicide rate (not age-adjusted). According to the 2019 WHO report, Myanmar's suicide rate remained stable at 2.9 per 100,000 population, which is lower than the global average of 9.0. In 2018, the country's suicide rate was 2.90, indicating a decrease of 3.33% from the previous year. Similarly, the suicide rate for 2017 was 3.00, which was 6.25% lower than that of 2016. Although the suicide rate for 2016 was 3.20, there was no increase reported in 2015.

Figure (3.1) Suicide Rate of Myanmar 2000-2023

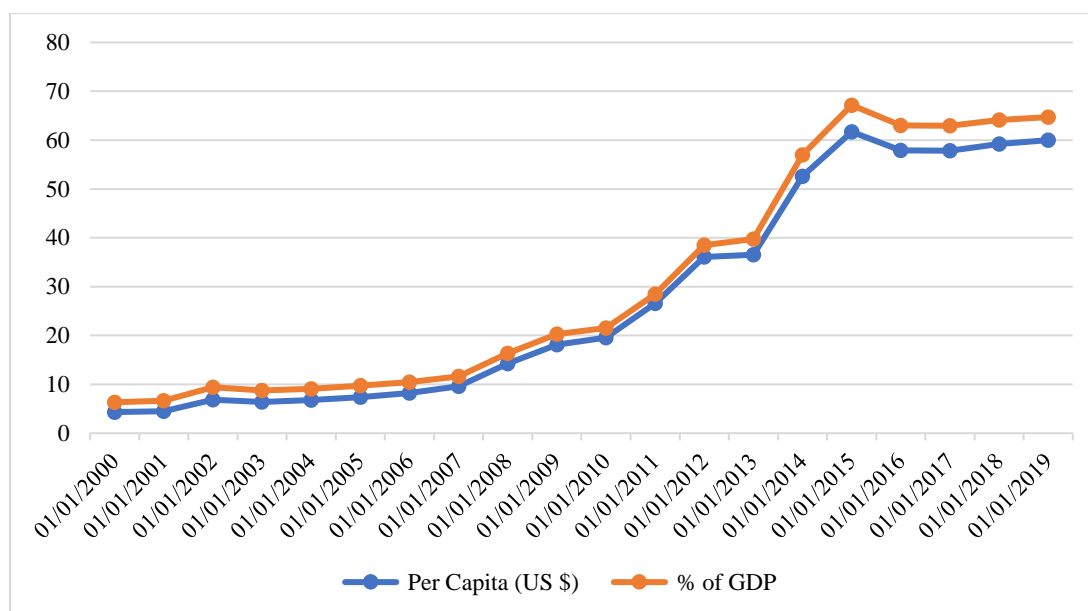


Source: Macro Trends Myanmar's suicide rate, 2000-2023

The current health expenditures, which cover healthcare goods and services consumed annually, show that Myanmar's healthcare spending per capita in current US

dollars was \$60 in 2019, representing a 1.37% increase from the previous year. Similarly, the healthcare spending for 2018 was \$59, indicating a 2.33% rise from 2017, while the spending for 2017 was \$58, representing a 0.13% decline from 2016. In 2016, the healthcare spending was \$58, which was a 6.1% decrease from 2015.

Figure (3.2) Healthcare Spending of Myanmar 2000-2023



Source: Macro Trends Myanmar healthcare spending, 2000-20223

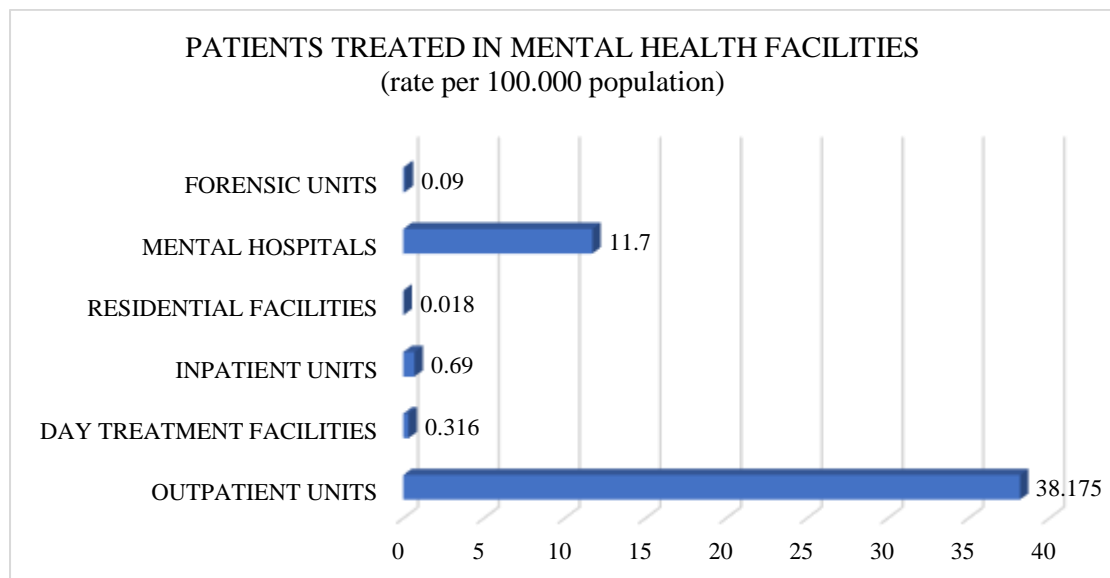
World Health Organization Assessment Instrument for Mental Health Systems (WHO-AIMS) was used to collect information on the mental health system in Myanmar 2006.

3.5 Mental Health Services

The allocation of government health department expenditures towards mental health remains low, at only 0.3%. Myanmar has 25 outpatient mental health facilities, 2 days treatment facilities, 17 community-based psychiatric inpatient units, and 2 mental hospitals. Mental hospitals provide the majority of beds in the country, followed by residential units. In all mental health facilities, the proportion of female patients is less than 40% of the patient population. Among all types of mental health facilities, inpatient units have the highest percentage of female patients (35%), followed by outpatient units (24%). Schizophrenia and neurotic disorders are the most commonly diagnosed conditions in outpatient facilities, while schizophrenia and mood disorders are more commonly diagnosed in mental hospitals. Essential psychotropic drugs from

each therapeutic class are available in inpatient units, mental hospitals, and outpatient facilities.

Figure (3.3) Patients Treated in Mental Health Facilities



Source: WHO-AIMS Report, 2006

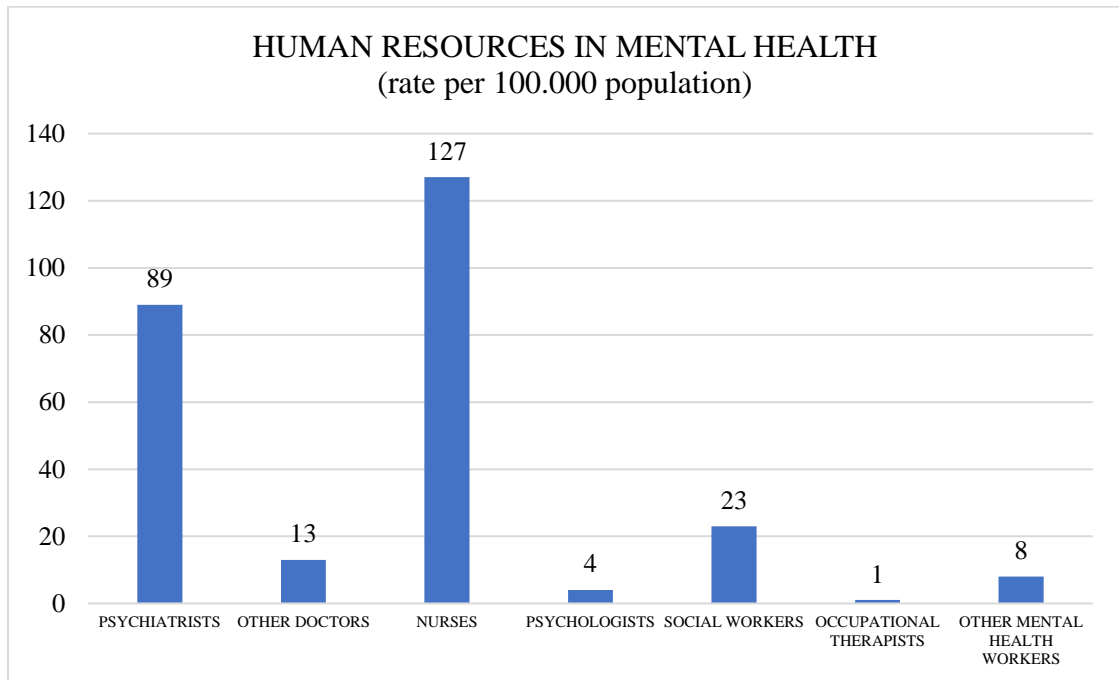
3.6 Mental Health in Primary Health Care

In terms of refresher training on mental health, 1% of primary health care doctors, 3% of nurses, and 2% of non-doctor/non-nurse primary health care workers have received at least two days of training. Non-doctor/ non-nurse primary health care workers are not allowed to prescribe psychotropic medications in any circumstance. Nurses are allowed to prescribe, but with restrictions; they are not allowed to initiate prescription but are allowed to continue the prescription. Primary health care doctors are allowed to prescribe psychotropic medications without restrictions.

3.7 Human Resources

The ratio of mental health professionals and other human resources per 100,000 general population is 0.477. Specifically, there are 89 psychiatrists (0.016 per 100,000 population), 13 other medical doctors (0.02 per 100,000 population), 127 nurses (0.23 per 100,000 population), four psychologists (0.01 per 100,000 population), 23 social workers (0.04 per 100,000 population), one occupational therapist (0.002 per 100,000 population), and eight other health or mental health workers (0.01 per 100,000 population).

Figure (3.4) Human Resources in Mental Health of Myanmar



Source: WHO-AIMS Report, 2006

CHAPTER IV

SURVEY ANALYSIS

4.1 Survey Profile

Yangon is located in Lower Burma (Myanmar) at the convergence of the Yangon and Bago Rivers about 30 km (19 miles) away from the Gulf of Martaban at 16°48' North, 96°09' East (16.8, 96.15). The city's standard time zone is UTC/GMT +6:30 hours, and it is situated 23 meters above sea level. Due to its position on the Irrawaddy Delta, intertidal flat ecosystems can be found in close proximity to the city. Yangon is the largest city of Myanmar, the capital of Myanmar until 2006. The total area was 598.75 sq km (231.18 sq mi) according to 2008. Over 7 million people in Yangon and this city was the most populous city in Myanmar and the most important commercial area in Myanmar. The city is made up of 33 townships and divided into four districts, which overlap with the city's jurisdiction. There are Eastern District, Western District, Southern District and Northern District.

Yangon serves as Myanmar's main center for trade, industry, real estate, media, entertainment, and tourism, and its economy contributes roughly one-fifth of the country's total economy. The Yangon Region's economy was estimated to be 8.93 trillion kyats or 23% of the national GDP according to official statistics. Despite having a high number of qualified teachers, Yangon's educational facilities receive very little funding from the state, with an estimated spending on education of only 0.5% of the national budget according to a 2007 estimate by the London-based International Institute for Strategic Studies.

Yangon serves as the primary commercial center for Lower Burma, handling a diverse range of goods from essential food items to pre-owned vehicles. However, the city's inadequate banking and communication systems have hindered its trade activities. Bayinnaung Market, the country's largest wholesale market, specializes in rice, beans, pulses, and other agricultural products. Meanwhile, Thilawa Port, Myanmar's biggest and most active port, handles the majority of the country's legal imports and exports.

4.2 Survey Design

This study was a study of knowledge, awareness and perception of depression among young adults in the Yangon region. The total population is over 7 million in Yangon. The sample size is 224 respondents in the Yangon city.

The survey design is based on the 224 respondent's data collected. This study was collected by using questionnaires with face-to-face interview method of data collection and online survey with google form. These data were derived from the participants (ag between 18 years to 25 years). Survey started from 1st November to 15th December 2022. The questionnaire is divided into three main parts. They are –

1 Personal Profile

2 Question for knowledge and awareness of depression

3 Question for perception of depression

First, the personal profile included six questions. In this question include the respondents of age, gender, education, marital status, occupation and address. The second part of the question is divided into eleven questions. This section is to assess knowledge and awareness of depression among young adults. Include signs and symptoms of depression, treatable or not, how to treat and complications of the depression. Respondents will fill in YES or NO or DON'T KNOW. The third question was about perception of respondents with depression. The perception was based on 11 questions and respondents will fill in correct answers like YES or NO or DON'T KNOW.

4.3 Survey Findings

4.3.1 Socio-demographic Characteristics of the Respondents

In this survey, the socio-demographic characteristics of respondents are as following.

Table (4.1) Socio-demographic Characteristics of Respondents

Variables	Characteristics	Frequency	Percentage (%)
Age	Age under 20	72	32.1
	Age between 20-23	87	38.8
	Age between 23-25	65	29.0
	Total	224	100
Sex	Male	85	37.9
	Female	139	62.1
	Total	224	100
Education Status	Read and Write	2	0.9
	Primary Education	1	0.4
	Middle Education	14	6.3
	High School Education	167	74.6
	Graduated	40	17.9
	Total	224	100
Marital Status	Single/ Unmarried	212	94.6
	Married	12	5.4
	Total	224	100
Occupation	Unemployed	83	37.1
	Employed	141	62.9
	Total	224	100
Residing Area	Northern District of Yangon	62	27.7
	Eastern District of Yangon	78	34.8
	Western District of Yangon	34	15.2
	Southern District of Yangon	50	22.3
	Total	224	100

Source: Survey data, 2022

Table (4.1) shows the characteristic of the respondents. The majority of respondents ages are 20-23(38.8%), age under 20(32.1%) and age between 23-25 (29.0%) respectively. The respondents ages under 20(32.1%) are not very much different from the ages between 20-23(38.8%). The respondents ages of 23-25 (29.0%) are the minimum percentage. According to age distribution, the results have equal distribution of age, and there is no big difference percentage. Among 224 respondents, 85 respondents were male and 139 respondents were female.

Among the respondents, it can be clearly seen that most of the respondents were high school education, 17.9% respondents were graduates. There is difference between the level of the respondent's education. Two percent of the respondents are read and write levels found in this study.

According to this study, the single respondents are 94.6% and married are 5.4%. The majority of respondents are employed (62.9%) and unemployed participants are 37.1%. Among the respondents, most of the respondents are from the eastern district of Yangon (34.8%), the minimum percentage was 15.2% from the western district of Yangon, 27.7% from the northern district and 22.3% from the southern district of Yangon respectively.

4.3.2 Knowledge and Awareness of Depression

This part describes about knowledge and awareness of depression among respondents.

Table (4.2) Knowledge of Incidence, Gender, Age and Alcohol association with Depression

Variables	Characteristics	Frequency	Percentage
Have you ever heard "depression"?	Yes	214	95.5
	No	10	4.5
	Total	224	100
Have you ever seen depressive patients in your family/friends?	Yes	60	26.8
	No	164	73.2
	Total	224	100
Which gender can the depressive disorder be seen more?	Male	44	19.6
	Female	93	41.5
	Don't know	87	38.8
	Total	224	100
Which age group is more associated with the depressive disorder?	Younger age group	62	27.7
	Middle age group	120	53.6
	Elder age group	42	18.8
	Total	224	100
Alcohol/ substances can cause depressive disorders.	Yes	135	60.3
	No	55	24.6
	Don't know	34	15.2
	Total	224	100.0

Source: Survey data, 2022

According to table (4.2), most of respondents are heard about depression (95.5%) and 4.5% of the respondents are not heard about depression. 60 respondents (26.8%) had experiences of seeing depressive patients and other 164 respondents (73.2%) had no experiences of seeing depressive patients. An Indian study found considerable stigma and misinformation about depression, especially among healthcare workers, showing a large majority said that they never heard about depression or its

definition. Although the overwhelming majority of respondents did not believe that clinical depression results from punishment, from God (82%) or evil spirits (77.5%). In that Indian study, the respondents answered that sufferers had themselves to blame (47.2%), and 32.6% disagreed with the position that clinical depression is a sign of weakness. (Santiago Almanzar, et. al., 2014)

Women are nearly twice as likely as men to be diagnosed with depression. (Sandhya Pruthi, M.D., 2023) 93 respondents (41.5%) answered correctly about the vulnerable sex for depression, 44 respondents (19.6%) answered incorrectly, and other 87 respondents (38.8%) are don't know this question.

Depression is a common illness worldwide, with an estimated 3.8% of the population affected, including 5.0% among adults and 5.7% among adults older than 60 years (ALMGARIF, A. 2022). Answering the age of onset of depressive disorder, most of the respondents answered middle age group 120 (53.6%), younger age group 62 (27.7%) and elder age group 42 (18.8%). 18.8% of respondents answered correctly because elderly people are more associated with clinical depression due to various organic diseases, adverse life events, and loneliness.

Depression is a mental illness frequently co-occurring with substance use. The relationship between the two disorders is bi-directional, meaning that people who misuse substances are more likely to suffer from depression, and vice versa (Kathleen Smith, 2022). Asking about alcohol/substances associated with depression, most of the respondents 135(60.3%) are Yes, 55 respondents (24.6%) are No and other 34 (15.2%) Don't know.

Table (4.3) Signs and Symptoms of Depression

Variables	Characteristics	Frequency	Percentage
Insomnia/ Lack of sleep	Yes	195	87.1
	No	19	8.5
	Don't know	10	4.5
	Total	224	100.0
Fatigue	Yes	162	72.3
	No	37	16.5
	Don't know	25	11.2
	Total	224	100.0

Table (4.3) Signs and Symptoms of Depression (Continued)

Variables	Characteristics	Frequency	Percentage
Lack of happiness	Yes	199	88.8
	No	13	5.8
	Don't know	12	5.4
	Total	224	100.0
Sadness	Yes	205	91.5
	No	12	5.4
	Don't know	7	3.1
	Total	224	100.0
Exhaustion	Yes	65	29.0
	No	117	52.2
	Don't know	42	18.8
	Total	224	100.0
Sleepiness	Yes	40	17.9
	No	137	61.1
	Don't know	47	20.9
	Total	224	100.0
Guilty Feeling	Yes	188	83.9
	No	19	8.5
	Don't know	17	7.6
	Total	224	100.0
Lack of concentration	Yes	175	78.1
	No	25	11.2
	Don't know	24	10.7
	Total	224	100.0
Weight loss/ Lack of appetite	Yes	84	37.5
	No	86	38.4
	Don't know	54	24.1
	Total	224	100.0
Angry	Yes	131	58.5
	No	64	28.6
	Don't know	29	12.9
	Total	224	100.0

Table (4.3) Signs and Symptoms of Depression (Continued)

Variables	Characteristics	Frequency	Percentage
Lack of sexual pleasure	Yes	64	28.6
	No	54	24.1
	Don't know	106	47.3
	Total	224	100.0
Lack of Hope	Yes	176	78.6
	No	29	12.9
	Don't know	19	8.5
	Total	224	100.0
Irritability	Yes	168	75.0
	No	29	12.9
	Don't know	27	12.0
	Total	224	100.0
Meaningless crying	Yes	176	78.6
	No	26	11.6
	Don't know	22	9.8
	Total	224	100.0
Suicidal ideation	Yes	187	83.5
	No	14	6.3
	Don't know	23	10.2
	Total	224	100.0

Source: Survey data, 2022

Table (4.3) showed the knowledge level of respondents concerning about the signs and symptoms of depressive disorder. There are 15 symptoms of depressive disorders exploring the knowledge in this study, and the respondents are grouped according to their responses, i.e. Yes, No, and Don't know.

In this survey, the percentage of respondents who answered "Yes" for each knowledge question of depression is lack of sleep (87.1%), fatigue (72.3%), lack of happiness (88.8%), sadness (91.5%), exhaustion (29%), sleepiness (17.9%), guilty feeling (83.9%), lack of concentration (78.1%), weight loss/ loss of appetite (37.5%), angry (58.5%), lack of sexual pleasure (28.6%), lack of hope (78.6%), irritability (75%), meaningless crying (78.6%), suicidal ideation (83.5%). 13 out of above 15

knowledge questions, most respondents answered correctly the signs and symptoms of depression, and however, 38.4% of respondents disagreed weight loss and loss of appetite, and 24.1% disagreed lack of sexual pleasure as signs and symptoms of depression.

One public study done in Malaysia showed that majority (76.9%) could recognize three or more symptoms of depression, and the participants with a personal experience of depression displayed a significantly better knowledge of symptoms of and therapies for depression than those who did not. (Tahir M Khan, et. al., 2016)

Table (4.4) Awareness of Depressive Symptoms

Variables	Characteristics	Frequency	Percentage
The patients with 4 out of symptoms mentioned in No. 6 is	No Depression	40	17.9
	Mild depression	110	49.1
	Moderate depression	63	28.1
	Severe depression	11	4.9
	Total	224	100.0
Duration of depression needed to consult is	7 days	53	23.7
	14 days	88	39.2
	30 days	83	37.1
	Total	224	100.0
Minimal duration for taking the antidepressants is	1 month	70	31.3
	6 months	127	56.7
	Lifelong	27	12.1
	Total	224	100.0

Source: Survey data, 2022

Above table showed the survey of awareness of the respondents about characteristics of depressive disorder, consisting of 3 questions. According to DSM 5, a person with 5 of above symptoms can be diagnosed as depressive disorder. In this study, 40 respondents (17.9%) answered no depression, 110 respondents (49.1%) answered mild depression, 63 respondents (28.1%) answered moderate depression and 11 respondents (4.9%) answered severe depression, and 17.9% can answer this question correctly.

In this study, 88 respondents (39.2%) answered duration of depression needed to consult is 14 days, 83 (37.1%) answered 30 days, and 53 (23.7%) answered 7 days respectively. Duration of depression needed to consult with mental health specialist is 14 days according to clinical guidelines. One-third of respondents (39.2%) answered correctly in this question. (American Psychological Association, 2019)

According to APA guidelines, minimal duration of 6 months is needed to treat depressive disorder effectively. 56.7% of respondents (n=127) answered 6 months duration is needed, 31.3 % (n = 70) answered 1 month and 12.1 % (n = 27) answered lifelong duration was needed to take medications for depressive illnesses. 56.7% of respondents can answer correctly about the duration needed to take antidepressant medication. . (American Psychological Association, 2019)

Although the above questions are difficult in some way for the non-medical person, there are certain numbers of courses held by the Ministry of Health for non-medical persons concerning diagnosis and treatment of common mental health problems. In this study, the respondents are asked about the diagnosis and treatment of depression, and 17.6% had knowledge of the diagnosis to some extent, 39.2% knew the duration needed to refer or consult, and 56.7% answered minimal duration of medications is 6 months correctly.

These findings are consistent with one meta-analysis done by Malaysia, showing 58% of depression literacy was commonly found out, and lack of uniformity in reporting depression literacy was also noted. Adolescents were poor at recognizing depression, likely to seek help from informal sources and tended to attach a stigma to depression. (Sarbhyan Singh et. al., 2019)

Table (4.5) Treatment Options for Depression

Variables	Characteristics	Frequency	Percentage
Antidepressants	Yes	151	67.4
	No	40	17.9
	Don't know	33	14.7
	Total	224	100.0
Vacation	Yes	199	88.8
	No	12	5.4
	Don't know	13	5.8
	Total	224	100.0
Meditation	Yes	208	92.9
	No	9	4.0
	Don't know	7	3.1
	Total	224	100.0
Counselling	Yes	208	92.9
	No	11	4.9
	Don't know	5	2.2
	Total	224	100.0
Surgery	Yes	7	3.1
	No	191	85.3
	Don't know	26	11.6
	Total	224	100.0
Staying with close friends	Yes	165	73.7
	No	35	15.6
	Don't know	24	10.7
	Total	224	100.0

Source: Survey data, 2022

Table (4.5) mentioned the responses of participants concerned about the various treatment options for depression. Six treatment options are asked with Yes, No and Don't Know responses, including medications, meditation and counseling as common treatment for depression and, while vacation, surgery and staying with friends as uncommon or rarely used treatment methods. 67.4% (n=151) agreed on medications, 92.1% (n=208) agreed on meditation, and 88.8% (n=208) agreed on counseling or psychotherapy as a treatment for depression, showing good knowledge about treatment

options currently used. 88.8% (n=199) agreed on vacation as treatment, 3.1% (n=7) agreed on surgery as treatment, and 73.7% (n=165) agreed on staying with close friends as treatment. These results showed there are large proportion who do not know the correct and widely recommended treatment methods. Our result is consistent with a study's findings that there is a gap in knowledge about treatment methods for depression. Misunderstanding this concept also has treatment implications, as many adults might not seek help. (Hess. S. G, 2004).

Table (4.6) Possible Causes of Depression

Variables	Characteristics	Frequency	Percentage
Prolonged poverty	Yes	143	63.8
	No	55	24.6
	Don't know	26	11.6
	Total	224	100.0
Economic insecurity	Yes	184	82.1
	No	26	11.6
	Don't know	14	6.3
	Total	224	100.0
Covid 19 Infection	Yes	61	27.2
	No	116	51.8
	Don't know	47	20.9
	Total	224	100.0
Chronic physical illness	Yes	134	59.8
	No	55	24.6
	Don't know	35	15.6
	Total	224	100.0
Childhood mental trauma	Yes	168	75.0
	No	39	17.4
	Don't know	17	7.5
	Total	224	100.0

Table (4.6) Possible Causes of Depression (Continued)

Variables	Characteristics	Frequency	Percentage
Bereavement	Yes	123	54.9
	No	69	30.8
	Don't know	32	14.2
	Total	224	100.0
Domestic Violence	Yes	165	73.7
	No	36	16.1
	Don't know	23	10.1
	Total	224	100.0
Loneliness	Yes	199	88.8
	No	12	5.4
	Don't know	13	5.8
	Total	224	100.0
Winning Lottery	Yes	4	1.8
	No	191	85.3
	Don't know	29	12.9
	Total	224	100.0
Life Events	Yes	147	65.6
	No	45	20.1
	Don't know	32	14.2
	Total	224	100.0
Political / Social Crisis	Yes	109	48.7
	No	75	33.5
	Don't know	40	17.8
	Total	224	100.0

Source: Survey data, 2022

Table (4.6) showed the possible causes of depression among the respondents. There are 11 questions in this survey regarding possible causes of depression, including two questions that is incorrect. Most of the participants 63.8% agree that prolonged poverty is possible cause of depression, 82.1% of participants agree with economic insecurity, 59.8% of participants agree with chronic physical illness, 75% of participants agree with childhood mental trauma, 54.9% of participants agree with bereavement, 73.7% agree for domestic violence, 88.8% agree for loneliness and 65.6% agree for life events respectively. This study showed over 50 % of respondents have good level of knowledge about the possible causes of depression.

Most of the participants 85.3% disagree that winning lottery was possible cause of depression. Among the participants, 116 participants (51.8%) disagree that covid 19 infection was possible cause of depression. Depression may be one of the major complications of covid 19 infection. (Çalışkan. F., 2020)

For questions concerning political and social crises, this can happen depression by an indirect way, and 109 participants (48.7%) agree political and social issues as causes of depression. An Indian study participating 150 college undergraduate and postgraduate students in the age group of 18 to 27 years indicated that majority of the participants had negative attitudes toward folk therapy, psychosocial manipulation, and physical method of treatment with the perception of the family as a main source for seeking help regarding mental illness. (Chowdhury A., 2019)

Table (4.7) Correct Rate in Knowledge and Awareness Questions

Knowledge and Awareness Questions	Correct Rate	
	Frequency	Percentage
Have you ever heard "depression"?	214	95.5
Have you ever seen depressive patients in your family/friends?	60	26.8
Which gender can the depressive disorder be seen more?	93	41.5
Which age group is more associated with depressive disorder?	42	18.8
Alcohol/ substances can cause depressive disorders.	135	60.3

Table (4.7) Correct Rate in Knowledge and Awareness Questions (Continued)

Knowledge and Awareness Questions	Correct Rate	
	Frequency	Percentage
Signs and Symptoms of depression		
Insomnia/ Lack of sleep	195	87.0
Fatiguability	162	72.3
Lack of happiness	199	88.8
Sadness	205	91.5
Exhaustion	65	29.0
Sleepiness	136	60.7
Guilty Feeling	188	83.9
Lack of concentration	175	78.1
Weight loss/ Lack of appetite	84	37.5
Angry	131	58.5
Lack of sexual pleasure	64	28.6
Lack of Hope	176	78.6
Irritability	168	75
Meaningless Crying	176	78.6
Suicidal ideation	187	83.5
The patients with 4 out of symptoms of depression (mentioned in No.6) suffered from depressive disorder.	110	49.1
Duration of depression needed to consult	87	38.8
Minimal duration for taking the antidepressants	127	56.7
Treatment options for depression		
Antidepressants	151	67.4
Vacation	199	88.8
Meditation	208	92.9
Counselling	208	92.9
Surgery	191	85.3
Staying with close friends	165	73.7

Table (4.7) Correct Rate in Knowledge and Awareness Questions (Continued)

Knowledge and Awareness Questions	Correct Rate	
	Frequency	Percentage
Possible causes of depression		
Prolonged poverty	143	63.8
Economic insecurity	184	82.1
Covid 19 infection	61	27.2
Chronic physical illnesses	134	59.8
Childhood mental trauma	168	75
Bereavement	123	54.9
Domestic violence	165	73.7
Loneliness	199	88.8
Winning lottery	191	85.3
Life events	147	65.6
Political/ Social Crisis	109	48.7

Source: Survey data, 2022

In this study, Knowledge and Awareness questionnaires included 11 questions. Over 50% of respondents answered correctly in 6 questions, and in the 5 questions, the correct rate was below 50%. Depending on the responses to each question, poor and good levels of knowledge can be determined according to the correct rate. In this study, the questions which were answered correctly over 50% of the study population can be defined as good level and less than 50% can be defined as poor level of knowledge. According to this survey, health education about mental health is needed by both the government sector and non-government sector regarding age group, gender of depression, feature of symptoms and duration of symptoms associated with depressive disorder.

4.3.3 Perception of Depression

Under this section, responses of the participants about perception can be grouped as Yes, No and don't know.

Table (4.8) Diagnosis, Cure, Daily Function and Worry associated with Depression

Variables	Characteristics	Frequency	Percentage
Depression can be self-diagnosed	Yes	117	52.2
	No	40	17.9
	Don't know	67	29.9
	Total	224	100.0
A person with depressive disorders should be treated	treated warmly	216	96.4
	treated neutrally	6	2.7
	Ignore him	2	.9
	Total	224	100.0
I am worried about suffering from the depression	Yes	144	64.3
	No	37	16.5
	Don't know	43	19.2
	Total	224	100.0
Depression can be cured	Yes	161	71.9
	No	47	21.0
	Don't know	16	7.1
	Total	224	100.0
Depression can impact the daily functioning	Yes	198	88.4
	No	17	7.6
	Don't know	9	4.0
	Total	224	100.0

Source: Survey data, 2022

Table (4.8) showed the frequency distribution of perception of respondents about depression. In the diagnosis tool of depression, e.g - DSM V, Five or more of the depressive symptoms have been present during the same 2-week period is depression. 52.2% of respondents answer depression can be self-diagnosed. Depressive patients need to care with warm affection, most of the respondents 96.4% answered treated warmly, 2.7 % of respondents answer treated naturally while 2 respondents (0.9%)

choose to ignore depressive patients. Depressive patients need to support warmly because there was strongly association between depression and perceived social support (Zwe Khant Zaw, 2018). People who received high levels of social support have not occurred depression and moderate and low levels of social support can be depressed.

The thinking and responses of respondents in this study reflected their perception of depression. There is no one, who wants to suffer from depression. Most of the respondents 144 (64.3%) worried about suffering from depression, 16.5% of respondents answer “No worries”, and 19.2% answered “don’t know.” Depression is the most common mental disorder. Fortunately, depression is treatable. A combination of therapy and antidepressant medication can help ensure recovery. (American Psychological Association, 2022). 71.9% of participants agree that depression can be cured, don’t know 7.1% and no cure answer was 21.0% of respondents. Most of the participants have good level of perception of this question. Depressive disorders can impact daily functioning of the patients. 88.4% of the participants (n= 198) answer Yes, 7.6% of participants answer No and 4% answered don’t know.

Table (4.9) Hereditary, Risk Factors, Suicide and Drug Addiction associated with Depression

Variables	Characteristics	Frequency	Percentage
Depression is hereditary	Yes	18	8.0
	No	150	67.0
	Don't know	56	25.0
	Total	224	100.0
Chronic disability is a risk factor of depressive disorder	Yes	71	31.7
	No	74	33.0
	Don't know	79	35.2
	Total	224	100.0
Depressive patients should be helped by family and friends	Yes	216	96.4
	No	4	1.8
	Don't know	4	1.8
	Total	224	100.0

Table (4.9) Hereditary, Risk Factors, Suicide and Drugs Addiction associated with Depression (Continued)

Variables	Characteristics	Frequency	Percentage
Information on antidepressant pills should be provided	Yes	203	90.6
	No	8	3.6
	Don't know	13	5.8
	Total	224	100.0
Depression can lead to suicide	Yes	200	89.3
	No	9	4.0
	Don't know	15	6.7
	Total	224	100.0
Medications for depressive disorder can cause addiction	Addictive	97	43.3
	Not addictive	41	18.3
	Don't know	86	38.4
	Total	224	100.0

Source: Survey data, 2022

Table (4.9) showed some questions of perception such as whether depression is hereditary. Etc. 67 % of respondents (n=150) answer No, 56 respondents (25%) was don't know and 18 respondents (8.0%) answer Yes. According to epidemiological studies, 40 % of depressive patients can trace it to a genetic link (Vara Saripalli, Psy.D. 2021). In this study, only 4 % of respondents answered depression is a hereditary disorder.

Many studies proved that chronic disability is a risk factor of depression. Adults with physical/sensory disabilities have a 3.7-fold higher incidence of depression than the general population. (Shen, S. C., Huang, K. H., Kung, P. T., Chiu, L. T., & Tsai, W. C. 2017). However, in this study, 35% of respondents don't know the answer, 33% answered "No" and 31.7% answered "Yes". This finding showed there is a poor level of perception in this question.

Depressive patients should be helped by family and friends, most of the respondents 96.4% agree and the other 3.2% don't know and disagreed with this question. Patients need to be informed about the psychotropic medications used in

depressive disorder, including antidepressants and sedatives, and most of the respondents (90.6%) answered “Yes”, and the rest answered “don’t know” and “No”.

Suicide is the most severe consequence of depressive disorders, and suicide associated with depression was the 4th leading cause of suicide in the world. In this question, nearly 90% of respondents answer “Yes”, 4% answered “No” and 6.7% answered, “don’t know”. Additionally, various types of antidepressants cannot cause addiction, and 43.3% of respondents answer it is addictive, 18.3% answered “not addictive” and “don’t know” 38.4%.

Table (4.10) Correct Rate on Perception of Respondents

Perception Questions	Correct Rate	
	Frequency	Percentage
Depression can be self-diagnosed.	117	52.2
A person with depressive disorders should be treated	216	96.4
I am worried about suffering from the depression	144	64.3
Depression can be cured	161	71.9
Depression can impact the daily functioning	198	88.4
Depression is hereditary	18	8
Chronic Disability is the risk factor of depressive disorder.	71	31.7
Depressive patients should be helped by family/friends	216	96.4
Information on the antidepressant pills should be provided	203	90.6
Depression can lead to suicide	200	89.3
Medications for depression disorder can cause addiction.	41	18.3

Source: Survey data, 2022

Above table showed 11 questions of perception towards depression among the study population, and above 50% of respondents answered correctly in 8 questions. However, in the other 3 questions, the correct rate was below 50%. Depending on the answer to each question, poor and good levels of perception of the respondents can be determined by the percentage of the correct rate for each question. Above 50% correct proportion can be defined as a good level, and the correct proportion of less than 50%

can be defined as a poor level of perception. According to this survey, the public including young adults is needed to be given more health education about genetic factors of depression, chronic disability associated with depression, and antidepressant addiction.

CHAPTER V

CONCLUSION

5.1 Findings

This study aimed to assess the knowledge, awareness and perception of depression among young adults in the Yangon region. Total of 224 random samples were interviewed using structured questionnaires and online surveys with Google Forms. This survey is done among young adults, because depression was 4th leading cause of death in young adults, worldwide. In this survey, according to the socio-demographic characteristics, 37.9% of the respondents were males and 62.1% of females. Among these 94.6% were single and 5.4% were married. Regarding educational level, most represents 74.6% had high school level, 0.4% had primary level, 17.9% were graduates and read and write were 0.9%. Most of the respondents were employed 62.9%. Residing area of most respondents 34.8% lived in the eastern district, 15.2% in the western district, 27.7% in the northern district and 22.3% in the southern district of the Yangon region. Therefore, it can be said that residing area of the respondents was fairly distributed in this sample.

According to the knowledge and awareness level, this survey showed that most young adults have basic knowledge of depression. Most of the respondents were high school level and also good level of knowledge in signs and symptoms of depression, possible causes, minimal duration of taking antidepressants and treatment options for depression. However, poor level of knowledge in duration of depression needs to consult, number of features need to consults, preferred age group and gender.

In the perception of respondents, this study found that most of the respondents have good levels of perception of depression among self-diagnosed, family and friends support, worry to suffer, cure or not, impact of daily life and suicidal ideation. But poor levels of perception in hereditary of depression, high-risk factors (chronic disability) and antidepressant addiction.

5.2 Recommendation

Based on the findings of this study, the following recommendation would like to make. Uplift of knowledge, awareness and perception will need concerted action from policymakers, health professionals and implementing partners. Recommendation aimed to provide the information, to improve the procreative and administrative practice in order, to increase the national investments in mental health. Every effort to promote depression control activities should pay attention to these components and the recommendations from the findings of this study will thus go towards these aspects. This study cannot be representative to the whole young adult population. There was marked unequal distribution in some of the categories according to the proforma of questionnaires, and therefore it might cause some error interpretation of the results.

To get more effective care for young adults depression, nationwide study design and longitudinal study design should be done. Health education in high schools, universities, websites, TV channels and billboards to early detect diagnosis and effective treatment to improve mental health of young adults. Also need for more investment in mental health spending and an emergency hotline number for mental health emergencies like suicidal ideation and attempt. Research and clinical effect need to be moved toward understanding, recognizing and treating young adult depression. It is also recommended that further study should be done at various community levels with larger sample sizes.

REFERENCES

- Al Omari, O., Khalaf, A., Al Hashmi, I. et al. A comparison of knowledge and attitude toward mental illness among secondary school students and teachers. *BMC Psychol* 10, 109(2022). <https://doi.org/10.1186/s40359-022-00820-w>
- Almanzar, S., Shah, N., Vithalani, S., Shah, S., Squires, J., Appasani, R., & Katz, C. L. (2014). Knowledge of and attitudes toward clinical depression among health providers in Gujarat, India. *Annals of Global Health*, 80(2), 89-95.
- ALMGARIF, A. (2022). Depression And Antidepressants Side Effects.
- American Psychiatric Association. Depression. 2021. Available from <https://www.psychiatry.org/patientsfamilies/depression/what-is-depression>
- American Psychological Association. (2019). Clinical practice guidelines for the treatment of depression across three age cohorts. Retrieved from <https://www.apa.org/depression-guideline>.
- Çalışkan, F., & Dost, B. (2020). The evaluation of knowledge, attitudes, depression and anxiety levels among emergency physicians during the COVID-19 pandemic. *Signa Vitae*, 16(1), 163-171.
- Carroll, D., Wulan, N., Swe, Z. Y., Myint, A. A., Sanda, S., Lwin, A. M., Oo, T., Khaing, L. L., San, C. C., Tun, W. P. P., Cini, K., Win, P. M., & Azzopardi, P. (2021). Mental health of adolescents in Myanmar: A systematic review of prevalence, determinants and interventions. *Asian journal of psychiatry*, 61, 102650. <https://doi.org/10.1016/j.ajp.2021.102650>
- Cho, S. M., Saw, Y. M., Saw, T. N., Than, T. M., Khaing, M., Khine, A. T., Kariya, T., Soe, P. P., Oo, S., & Hamajima, N. (2021). Prevalence and risk factors of anxiety and depression among the community-dwelling elderly in Nay Pyi Taw Union Territory, Myanmar. *Scientific reports*, 11(1), 9763. <https://doi.org/10.1038/s41598-021-88621-w>
- Depression and antidepressants side effects from <http://repository.limu.edu.ly/bitstream/handle/123456789/4322/Depression.pdf?sequence=1>
- Depression in women: Understanding the gender gap from <https://www.mayoclinic.org/diseases-conditions/depression/in-depth/depression/art-20047725>

- Freeman, M. S. N., Rickard, D. N. P., & CPNP-AC, M. (2022). *Depression Awareness Programs for Adolescents: A Scoping Review*.
- Hess, S. G., Cox, T. S., Gonzales, L. C., Kastelic, E. A., Mink, S. P., Rose, L. E., & Swartz, K. L. (2004). A survey of adolescents' knowledge about depression. *Archives of psychiatric nursing*, 18(6), 228-234.
- International Journal of Medical Science and Clinical Research Studies (Public Awareness of depression – An Informal Clinical study) from <https://doi.org/10.47191/ijmscrs/v2-i2-01>
- J Affect Disord;288: 145-147, 2021 06 01. | MEDLINE (bvsalud.org) Objectively measured digital technology use during the COVID-19 pandemic: Impact on depression, anxiety, and suicidal ideation among young adults.
- Jorm, A. F., Korten, A. E., Jacomb, P. A., Christensen, H., Rodgers, B., & Pollitt, P. (1997). "Mental health literacy": a survey of the public's ability to recognize mental disorders and their beliefs about the effectiveness of treatment. *Medical Journal of Australia*, 166(4), 182-186.
- Kessler, R. C., & Walters, E. E. (1998). Epidemiology of DSM-III-R major depression and minor depression among adolescents and young adults in the National Comorbidity Survey. *Depression and anxiety*, 7(1), 3–14. [https://doi.org/10.1002/\(sici\)1520-6394\(1998\)7:1<3::aid-da2>3.0.co;2-f](https://doi.org/10.1002/(sici)1520-6394(1998)7:1<3::aid-da2>3.0.co;2-f)
- Khan, T. M., Syed Sulaiman, S. A., Hassali, M. A., Anwar, M., Wasif, G., & Khan, A. H. (2010). Community knowledge, attitudes, and beliefs towards depression in the state of Penang, Malaysia. *Community Mental Health Journal*, 46, 87-92.
- Kim, E., & Im, E. O. (2015). Korean-Americans' knowledge about depression and attitudes about treatment options. *Issues in mental health nursing*, 36(6), 455-463.
- Klerman G. L. (1988). The current age of youthful melancholia. Evidence for increase in depression among adolescents and young adults. *The British journal of psychiatry: the journal of mental science*, 152, 4–14. <https://doi.org/10.1192/bjp.152.1.4>
- Klerman, G. L., & Weissman, M. M. (1989). Increasing rates of depression. *Jama*, 261(15), 2229-2235.

- Lin, E., & Parikh, S. V. (1999). Sociodemographic, clinical, and attitudinal characteristics of the untreated depressed in Ontario. *Journal of affective disorders*, 53(2), 153–162. [https://doi.org/10.1016/s0165-0327\(98\)00116-5](https://doi.org/10.1016/s0165-0327(98)00116-5)
- Mayorga, N. A., Smit, T., Garey, L., Gold, A. K., Otto, M. W., & Zvolensky, M. J. (2022). Evaluating the Interactive Effect of COVID-19 Worry and Loneliness on Mental Health Among Young Adults. *Cognitive therapy and research*, 46(1), 11–19. <https://doi.org/10.1007/s10608-021-10252-2>
- Mobile phone use and stress, sleep disturbances, and symptoms of depression among young adults - a prospective cohort study from <https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-11-66>
- Mulango, I. D., Atashili, J., Gaynes, B. N., & Njim, T. (2018). Knowledge, attitudes and practices regarding depression among primary health care providers in Fako division, Cameroon. *BMC psychiatry*, 18, 1-9.
- Nordt, C., Rössler, W., & Lauber, C. (2006). Attitudes of mental health professionals toward people with schizophrenia and major depression. *Schizophrenia Bulletin*, 32(4), 709-714.
- Report of the second Global School-based Student Health Survey (2016) in Myanmar from <https://apps.who.int/iris/handle/10665/274350> Report of the second Global School-based Student Health Survey (2016) in Myanmar (who. int)
- Shen, S. C., Huang, K. H., Kung, P. T., Chiu, L. T., & Tsai, W. C. (2017). Incidence, risk, and associated factors of depression in adults with physical and sensory disabilities: A nationwide population-based study. *PloS one*, 12(3), e0175141. <https://doi.org/10.1371/journal.pone.0175141>
- Singh, S., Zaki, R. A., & Farid, N. D. N. (2019). A systematic review of depression literacy: Knowledge, help-seeking and stigmatising attitudes among adolescents. *Journal of Adolescence*, 74, 154-172.
- Tsai, J., Elbogen, E. B., Huang, M., North, C. S., & Pietrzak, R. H. (2021). Psychological distress and alcohol use disorder during the COVID-19 era among middle- and low-income U.S. adults. *Journal of affective disorders*, 288, 41–49. <https://doi.org/10.1016/j.jad.2021.03.085>
- Van Voorhees, B. W., Fogel, J., Houston, T. K., Cooper, L. A., Wang, N. Y., & Ford, D. E. (2005). Beliefs and attitudes associated with the intention to not accept

the diagnosis of depression among young adults. *Annals of family medicine*, 3(1), 38–46. <https://doi.org/10.1370/afm.273>

Vilma Hänninen, Hillevi Aro, Sex differences in coping and depression among young adults, *Social Science & Medicine*, Volume 43, Issue 10, 1996, Pages 1453-1460, ISSN 0277-9536, [https://doi.org/10.1016/0277-9536\(96\)00045-7](https://doi.org/10.1016/0277-9536(96)00045-7) (<https://www.sciencedirect.com/science/article/pii/0277953696000457>)

WHO-AIMS report from https://cdn.who.int/media/docs/default-source/mental-health/who-aims-country-reports/myanmar_who_aims_report.pdf?sfvrsn=e7675363_3&download=true

World Health Organization. (2021). Suicide worldwide in 2019: global health estimates.

World Health Organization. Depression. 2021. Available from <https://www.who.int/news-room/fact-sheets/detail/depression>

Zwe Khant Zaw (2018). Association between perceived social support and depression among elderly people in north okalapa township. Degree of Master of Medical Science, Mental Health, Defence Services Medical Academy, Yangon.

APPENDIX

Google form link

https://l.facebook.com/l.php?u=https%3A%2F%2Fdocs.google.com%2Fforms%2Fd%2F%2F1FAIpQLSf7AtwwpuoiRcVqkiqp56bmlhHcR7A5xNeYKwmU2MiuIuImzQ%2Fviewform%3Fusp%3Dsf_link%26fbclid%3DIwAR2nx82228mvxr9S5nj21-ORYcZgE3J8Aiteaj5ySxdQg-4-oosRPbDeuMM&h=AT3iktO6kaT6ziQYSoN_odN6v3G6uKOIRe_u4fuTWy_QH5eYwpesKvsADiFedG76FZRE2YPEBdXYzJT2FouSCLoln9PcJsdWYyEkp8EC3A6o2X0Kf134AzooXgmpvrMShlVPA

1. Male / Female -
2. Age -
3. Education - (read and write) (primary school) (middle school) (high school) (graduate)
4. Single / Married -
5. Occupation -
6. Address -

Knowledge and Awareness of depression

1. Have you ever heard "depression"?

- (1) Yes (2) No (3) Don't Know

2. Have you ever seen depressive patients in your family/friends?

- (1) Yes (2) No (3) Don't Know

3. Which gender can the depressive disorder be seen more?

- (1) Male (2) Female (3) Don't Know

4. Which age group is more associated with the depressive disorder?

- (1) Young Age (2) Middle Age (3) Old Age

5. Alcohol/ substances can cause the depressive disorders.

- (1) Yes (2) No (3) Don't Know

6. Signs and Symptoms of Depression

No.	Feature	Yes	No	Don't Know
1	Insomnia/ Lack of sleep			
2	Fatigue			
3	Lack of happiness			
4	Sadness			
5	Exhaustion			
6	Sleepiness			
7	Guilty Feeling			
8	Lack of concentration			
9	Weight loss/ Lack of appetite			
10	Angry			
11	Lack of sexual pleasure			
12	Lack of Hope			
13	Irritability			
14	Meaningless Crying			
15	Suicidal ideation			

7. A patient with 4 out of symptoms of depression (mentioned in No.6) suffered from depressive disorder.

- (1) No Depression (2) Mild Depression
(3) Moderate Depression (4) Severe Depression

8. Duration of depression needed to consult is

- (1) 7 Days (2) 14 Days (3) 30 Days

9. Minimal duration for taking the antidepressants is

- (1) 1 Month (2) 6 Months (3) Lifelong

10. Treatment Option for Depression

No.	Treatment	Yes	No	Don't Know
1	Antidepressants			
2	Vacation			
3	Meditation			
4	Counselling			
5	Surgery			
6	Staying with close friends			

11. Possible causes of depression

No.	Causes	Yes	No	Don't Know
1	Prolonged poverty			
2	Economic insecurity			
3	Covid 19 Infection			
4	Chronic physical illness			
5	Childhood mental trauma			
6	Bereavement			
7	Domestic Violence			
8	Loneliness			
9	Winning Lottery			
10	Life Events			
11	Political / Social Crisis			

Perception of Depression

12. Depression can be self-diagnosed.

- (1) Yes (2) No (3) Don't Know

13. A person with depressive disorders should be treated

- (1) treated warmly (2) treated neutrally (3) Ignore him

14. I am worried about suffering from the depression

- (1) Yes (2) No (3) Don't Know

15. Depression can be cured

- (1) Yes (2) No (3) Don't Know

16. Depression can impact the daily functioning
(1) Yes (2) No (3) Don't Know
17. Depression is hereditary
(1) Yes (2) No (3) Don't Know
18. Chronic disability is risk factor of depressive disorder
(1) Yes (2) No (3) Don't Know
19. Depressive patients should be helped by family and friends
(1) Yes (2) No (3) Don't Know
20. Information of antidepressant pills should be provided
(1) Yes (2) No (3) Don't Know
21. Depression can lead to suicide
(1) Yes (2) No (3) Don't Know
22. Medications for depressive disorder can cause addiction
(1) Yes (2) No (3) Don't Know

ကောက်ယူသူ၏အချက်အလက်

မင်္ဂလာပါ။ ကျွန်တော်က ရန်ကုန်စီးပွားရေးတက္ကသိုလ် ပြည်သူ့ရေးရာစီမံခွဲမှုသင်တန်း မဟာဘွဲ့လွန်တန်းမှ သင်တန်းသား မောင်စစ်နိုင်ကျော် ဖြစ်ပါတယ်။ ယခုစာတမ်းသည် မဟာဘွဲ့လွန်တန်းအတွက် ကျမ်းပြုရန် ဖြစ်ပါတယ်။ ညီလေး/ ညီမလေး အနေဖြင့် စိတ်ကျရောဂါနှင့်သက်ဆိုင်သော အသိပညာ၊ သတိထားဆင်ခြင်မှုနှင့် ခံယူချက် သဘောထားတို့ကို စစ်တမ်းကောက်ယူရာတွင် ပူးပေါင်းပါဝင် ဖြေကြားပေးစေလိုပါတယ်။ ပူးပေါင်းပါဝင်ခြင်းဖြင့် လူငယ်တွေကြား ဖြစ်ပေါ်တက်သော စိတ်ကျရောဂါနှင့်ပတ်သတ်၍ ပိုမိုထိရောက်သော ကာကွယ်တားဆီးရေးနှင့်ပညာပေးလုပ်ငန်းစဉ်များကို လုပ်ဆောင်နိုင်ရန် ရည်ရွယ်ပါတယ်။ ဖြေကြားမှုများကို လျှို့ဝှက်သေချာစွာ သိမ်းဆည်းထားမည်ဖြစ်ပြီး စာတမ်းပြုစုရာတွင်လည်း တစ်ဦးတစ်ယောက်ချင်းစီ အနေဖြင့်မဟုတ်ဘဲ အားလုံးပေါင်း ခြံ့၍ တင်ပြသွားမည် ဖြစ်ပါသည်။ ညီလေး / ညီမလေးတို့၏ ထင်မြင်ယူဆချက်များသည် ကျွန်တော်အတွက် တန်ဖိုးထား အလေးထားရမည့်အရာများဖြစ်ပြီး ပူးပေါင်းပါဝင်မှုကို အထူးပင်ကျေးဇူးတင်ရှိအပ်ပါတယ် ခင်ဗျာ။

ဖြေကြားသူ

- ၁။ ကျား / မ -
- ၂။ အသက် -
- ၃။ ပညာအရည်အချင်း - ရေးတက်/ဖတ်တက်()၊ မူလတန်း()၊ အလယ်တန်း()၊
အထက်တန်း()၊ ဘွဲ့ရ()
- ၄။ အိမ်ထောင်ရှိ/မရှိ -
- ၅။ အလုပ်အကိုင် -
- ၆။ နေရပ်လိပ်စာ -
- ၇။ ရက်စွဲ -

စိတ်ကျရောဂါနှင့် သက်ဆိုင်သော အသိပညာနှင့် သတိထားဆင်ခြင်မှုဆိုင်ရာမေးမြန်းလွှာ

၁။ သင်သည် စိတ်ကျရောဂါကို ကြားဖူးပါသလား ?

က။ ကြားဖူးသည် ()

ခ။ မကြားဖူးပါ ()

၂။ သင့်ပတ်ဝန်းကျင်(ဆွေမျိုး/သူငယ်ချင်း)တွင် စိတ်ကျရောဂါ ခံစားနေရသူ မြင်ဖူးပါသလား ?

က။ မြင်ဖူးပါသည် ()

ခ။ မမြင်ဖူးပါ ()

၃။ စိတ်ကျရောဂါသည် ကျား/မ မည်သူတွင်ပိုဖြစ်သနည်း ?

က။ ကျား ()

ခ။ မ ()

ဂ။ မသိပါ ()

၄။ စိတ်ကျရောဂါသည် မည်သည့်အသက်အပိုင်းတွင် ပိုဖြစ်သနည်း ?

က။ လူငယ်ပိုင်း ()

ခ။ လူလတ်ပိုင်း ()

ဂ။ လူကြီးပိုင်း ()

၅။ အရက် / ဆေး သုံးစွဲမှုကြောင့် စိတ်ကျရောဂါ ဖြစ်စေနိုင်သည်။

က။ မှန် ()

ခ။ မှား ()

ဂ။ မသိပါ ()

၆။ စိတ်ကျရောဂါ၏ လက္ခဏာများမှာ အောက်ပါအတိုင်းဖြစ်သည်။

စဉ်	လက္ခဏာများ	မှန်	မှား	မသိပါ
၁	အိပ်မပျော်ခြင်း			
၂	လေးလံထိုင်းမှိုင်းခြင်း			
၃	မပျော်ရွှင်ခြင်း/စိတ်ပိတ်စားမှုနည်းခြင်း			
၄	ဝမ်းနည်းခြင်း/မျှော်လင့်ချက်မဲ့ခြင်း			
၅	မောပန်းလွယ်ခြင်း			
၆	အိပ်ငိုက်ခြင်း			
၇	အပြစ်ရှိသလိုခံစားရခြင်း/ တန်းဖိုးမဲ့ခြင်း			
၈	အာရုံစူးစိုက်၍မရခြင်း			
၉	ပိန်ခြင်း/ ဝခြင်း / စားမဝခြင်း			
၁၀	စိတ်တိုခြင်း			
၁၁	လိင်ကိစ္စအားနည်းခြင်း/စိတ်မပါခြင်း			
၁၂	အနာဂတ်ပျောက်ဆုံးခြင်း/မရှိခြင်း			
၁၃	စိတ်ဂဏာမငြိမ်ဖြစ်ခြင်း			
၁၄	အကြောင်းမရှိဝမ်းနည်း ငိုကြွေးခြင်း			
၁၅	မိမိကိုယ်ကို သတ်သေရန်ကြံစည်ခြင်း			

၇။ မေးခွန်း နံပါတ် (၆)မှ လက္ခဏာများအနက် လက္ခဏာ(၄)ခုခံစားနေရသူသည်

က။ စိတ်ကျရောဂါမဟုတ်ပါ ()

ခ။ အနည်းငယ်စိတ်ကျရောဂါရှိသည် ()

ဂ။ အသင့်အတင့်စိတ်ကျရောဂါရှိသည် ()

ဃ။ ဆိုးဝါးသောစိတ်ကျရောဂါရှိသည် ()

၈။ စိတ်ကျရောဂါလက္ခဏာကို အချိန်မည်မျှကြာလျှင် ဆရာဝန်နှင့်ပြသရမည်နည်း ?

က။ ၁ ပတ်ကျော် ()

ခ။ ၂ပတ်ကျော် ()

ဂ။ ၁လကျော် ()

၉။ စိတ်ကျရောဂါအတွက် အနည်းဆုံး ဆေးသောက်သင့်သောကာလမှာ

က။ ၁လ ()

ခ။ ၆လ ()

ဂ။ တသက်လုံး ()

၁၀။ စိတ်ကျရောဂါကို ကုသနိုင်သောနည်းလမ်းများမှာ

စဉ်	နည်းလမ်းများ	မှန်	မှား	မသိပါ
၁	ဆေးသောက်ခြင်း			
၂	အပန်းဖြေခရီးထွက်ခြင်း			
၃	တရားထိုင်ခြင်း			
၄	နှစ်သိမ့်ဆွေးနွေးခြင်း			
၅	ခွဲစိတ်ကုသခြင်း			
၆	သူငယ်ချင်းများနှင့်ပျော်ပါးခြင်း			

၁၁။ အောက်ပါအချက်များသည် စိတ်ကျရောဂါ ဖြစ်စေရန် တွန်းအားပေးသည်။

စဉ်	အကြောင်းအရာ	မှန်	မှား	မသိပါ
၁	အလွန်အမင်း(သို့) ကာလကြာရှည် ဆင်းရဲခြင်း၊ ငတ်မွတ်ခြင်း။			
၂	စီးပွားရေး မသေချာမှု/ ငွေကြေး ခက်ခဲမှု			
၃	ကိုဗစ် ပြင်းထန်စွာ ခံစားရမှု			
၄	နာတာရှည် နာမကျန်းမှု အကြပ်အတည်း			
၅	ငယ်ဘဝ စိတ်ဒဏ်ရာရမှု			
၆	မိသားစု/ရင်းနှီးသူ/သူငယ်ချင်း သေဆုံးမှု သို့ ဆုံးရှုံးမှု			
၇	အိမ်တွင်းအကြမ်းဖက်ခံရမှု			
၈	အထီးကျန်ခြင်း/ လူမှုရေးဖိအားများခြင်း			
၉	ထိပေါက်ခြင်း			
၁၀	စိတ်ဒဏ်ရာ ရခဲ့ဖူးသော အတွေ့အကြုံ			
၁၁	လူမှုရေး/ နိုင်ငံရေး ကသောင်းကနင်းဖြစ်မှု			

စိတ်ကျရောဂါနှင့် သက်ဆိုင်သော ခံယူချက်သဘောထားဆိုင်ရာ မေးမြန်းလွှာ

၁၂။ စိတ်ကျရောဂါရှိ/မရှိ မိမိကိုယ်ကိုစမ်းစစ်၍ သိရှိနိုင်သည်။

က။ မှန် ()

ခ။ မှား ()

ဂ။ မသိပါ ()

၁၃။ စိတ်ကျရောဂါ ခံစားနေရသူတစ်ယောက်ကို

က။ နွေးနွေးထွေးထွေးဆက်ဆံမည် ()

ခ။ မသိလိုက်မသိဖာသာ နေမည် ()

ဂ။ ပစ်ပယ်ထားမည် ()

၁၄။ မိမိကိုယ်တိုင် စိတ်ကျရောဂါဖြစ်မှာကို

က။ ကြောက်သည် ()

ခ။ မကြောက်ပါ ()

ဂ။ ဘယ်လိုမှမနေပါ ()

၁၅။ စိတ်ကျရောဂါမှာ

က။ ကုသလျှင် ပျောက်ကင်းနိုင်သည် ()

ခ။ ကုသရန် ခက်ခဲသည် ()

ဂ။ မသိပါ ()

၁၆။ စိတ်ကျရောဂါသည် နေ့စဉ်လုပ်ငန်းဆောင်တာများကို ထိခိုက်စေနိုင်သည်။

က။ မှန် ()

ခ။ မှား ()

ဂ။ မသိပါ ()

၁၇။ စိတ်ကျရောဂါသည် မျိုးရိုးလိုက်တက်သည်။

က။ မှန် ()

ခ။ မှား ()

ဂ။ မသိပါ ()

၁၈။ ခန္ဓာကိုယ်ပိုင်းဆိုင်ရာရောဂါများ၊ နာတာရှည်ရောဂါများ၊ ခွဲစိတ်ကုသခံရခြင်းများ၊ ကိုယ်ဝန်ဆောင်သည်များ၊ မီးယပ်သွေးဆုံး ရောဂါများသည် စိတ်ကျရောဂါကို ဖြစ်ပွားစေနိုင်သည်။

က။ မှန် ()

ခ။ မှား ()

ဂ။ မသိပါ ()

၁၉။ စိတ်ကျရောဂါခံစားနေရသူကို ပတ်ဝန်းကျင် (မိသားစု/ သူငယ်ချင်း) ဖေးမ ကူညီရန်

က။ လိုအပ်သည် ()

ခ။ မလိုအပ်ပါ ()

ဂ။ မသိပါ ()

၂၀။ စိတ်ကျရောဂါအတွက် သောက်ဆေးများ၏ ဘေးထွက်ဆိုးကျိုးများကို သိရှိရန်

က။ လိုအပ်သည် ()

ခ။ မလိုအပ်ပါ ()

ဂ။ မသက်ဆိုင်ပါ ()

၂၁။ စိတ်ကျရောဂါကြောင့် မိမိကိုယ်ကိုသတ်သေသည်ထိ ဖြစ်စေနိုင်သည်။

က။ မှန် ()

ခ။ မှား ()

ဂ။ မသိပါ ()

၂၂။ စိတ်ကျရောဂါအတွက် ဆေးဝါးများကို ကြာရှည်စွာသောက်သုံးနေရသူသည်

က။ ဆေးစွဲနိုင်သည် ()

ခ။ မစွဲနိုင်ပါ ()

ဂ။ မသိပါ ()