PREVALANCE OF DEPRESSION, ANXIETY, STRESS AND ITS ASSOCIATED FACTORS AMONG MARRIED WOMEN IN RURAL AREAS OF KOLAR -A CROSS-SECTIONAL STUDY

BY

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Under the guidance of

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LIST OF ABBREVIATIONS

- 5-HT – 5-Hydroxytryptamine (Serotonin)
- ANM – Auxiliary Nurse Midwife
- ARI – Acute Respiratory Infection
- ASHA – Accredited Social Health Activist
- BCC – Behavior Change Communication
- BDNF – Brain-Derived Neurotrophic Factor
- CBC – Complete Blood Count
- CNS – Central Nervous System
- CRP – C-Reactive Protein
- CUMS – Chronic Unpredictable Mild Stress
- DASS – Depression Anxiety Stress Scales
- ESR – Erythrocyte Sedimentation Rate
- GABA – Gamma-Aminobutyric Acid
- HPA – Hypothalamic-Pituitary-Adrenal (axis)
- IAP – Indian Academy of Paediatrics
- IEC – Information, Education, Communication
- LRTI – Lower Respiratory Tract Infection
- MCH – Mean Corpuscular Hemoglobin
- MCHC – Mean Corpuscular Hemoglobin Concentration

- MCV – Mean Corpuscular Volume
- MPV – Mean Platelet Volume
- NE – Norepinephrine
- NRHM – National Rural Health Mission
- NTRK2 – Neurotrophic Receptor Tyrosine Kinase 2
- OPD – Outpatient Department
- PCT – Plateletcrit
- PDW – Platelet Distribution Width
- PHC – Primary Health Centre
- PLCR – Platelet Large Cell Ratio
- ROS – Reactive Oxygen Species
- RTI – Respiratory Tract Infection
- SD – Standard Deviation
- SDS – Social Defeat Stress
- SLC6A4 – Solute Carrier Family 6 Member 4 (Serotonin Transporter Gene)
- SPSS – Statistical Package for Social Sciences
- URTI – Upper Respiratory Tract Infection
- WHO – World Health Organization

ABSTRACT

Introduction:
Mental health disorders like depression, anxiety, and stress are pressing public health concerns, particularly among married women in rural India. Socio-economic challenges, cultural norms, and familial responsibilities contribute to their heightened risk of psychological distress. Despite the severity of these issues, research and data on mental health in rural areas like Kolar, Karnataka, remain limited, making it difficult to fully address their needs.

Objectives:
To estimate the prevalence of depression, anxiety, and stress among rural married women in Kolar and also to identify those associated socio-demographic factors

Materials and methods:
A community-based cross-sectional observational study conducted within a specific population. was conducted between July 2023 and December 2024 among 630 married women aged 18–60 years in the Rural Health Training Centre (RHTC) field practice area of Devarayasamudra, Kolar. Participants were selected using multi-stage random sampling. Data was collected using a pre-tested, semi-structured questionnaire and the DASS-42 scale. Statistical analysis was performed using SPSS version 22.0 with Chi-square tests and logistic regression.

Results:
The prevalence of depression, anxiety, and stress was 72.3%, 71.9%, and 61.9%, respectively. Severe to extremely severe forms were notably high. Significant associations were found between mental health status and factors like age, education level, socioeconomic status, and family structure ($p<0.05$). Older women and those from lower socio-economic backgrounds showed higher prevalence rates.

Conclusion:
A substantial burden of depression, anxiety, and stress exists among married women in rural Kolar. Socio-demographic factors critically influence mental health. Community-based mental health programs focusing on early detection and socio-economic empowerment are urgently needed.

Keywords:
Depression, Anxiety, Stress, Married Women, Rural Health, Kolar, Mental Health.

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INTRODUCTION

1.INTRODUCTION

Mental health is a condition of well-being in which a person can cope with the normal stresses of life, can realize his or her own potential, and can be productive in order to make valuable contributions to his or her community. It is conceptually and instrumentally important, and also necessary for general well-being. At any given moment all sorts of life circumstances, at the individual, family, community, and societal levels are influencing mental health for good or for bad. Most people are resilient but individuals who are subject to misfortunate circumstances (poverty, violence, disability, inequality) are more likely to suffer mental health problems.[1]

Depressive disorder, commonly known as depression, is a widespread mental health condition. It is identified by persistent feelings of sadness or a loss of interest and enjoyment in daily activities over an extended period.[2] Based on data from the Global Burden of Disease (GBD) report of 2021, the World Health Organization estimates that around 3.8% of the global population experiences depression. This includes 5% of adults, with prevalence rates differing by gender—4% among men and 6% among women. Among individuals aged 60 and older, the rate is slightly higher at 5.7%. In total, approximately 280 million people worldwide are affected by depression.[3]

Anxiety disorders are widespread across different populations, with considerable variations based on demographic and situational factors. The Global Burden of Disease (GBD) 2023 study, conducted by Syed Fahad Javaid et al., presents a systematic analysis of global health data. According to its findings, anxiety disorders affect approximately 4.05% of the world's population, impacting around 301 million individuals. This represents a substantial increase of over 55% in prevalence from 1990 to 2019, highlighting

the growing burden of anxiety-related conditions worldwide.[4] Women may experience anxiety symptoms at various stages of their lives and in different ways. Anxiety disorders, such as panic disorders, phobias, and generalized anxiety disorders, are significantly more common in women.[5]

Stress is defined as a condition that disrupts or has the potential to disrupt a person's normal physiological or psychological functioning. It includes a range of factors that can affect an individual's well-being and overall life equilibrium.[6]

According to the WHO, stress is defined as a state of worry or mental tension resulting from a challenging situation. It has become one of the most unavoidable health concerns of the modern century worldwide. In developing countries like India, stress among females is twice as prevalent as in males, particularly when they are required to balance both professional and household responsibilities.[7]

Mental disorders, particularly anxiety and depression, have been increasing at a significant rate globally, with women being more vulnerable to these conditions compared to men. Research findings from a 2015 study highlighted a substantial rise in these disorders over the past decades, reporting a 42% increase in anxiety disorders and a 54% surge in depressive disorders since 1990. The increasing prevalence of these conditions highlights the urgent need for heightened awareness, timely diagnosis, and enhanced mental health interventions. Strengthening these efforts is essential to reducing the impact of anxiety disorders on individuals and society, ensuring better support and care for those affected.[8]

A study done in India by M.K., Rema and Kaur, Parneet et al., on 2020 reveals that a substantial proportion of married women in India experience high levels of anxiety, stress, and depression, raising serious mental health concerns.

Notably, 87% of the participants reported experiencing frequent stress, emphasizing the widespread nature of the issue. Furthermore, the findings indicate a strong correlation between stress and depression with marital adjustment, suggesting that difficulties in marital relationships may significantly contribute to the mental health challenges faced by women.[9]

In rural settings, socio-economic factors present unique challenges for married women such as education, healthcare and economic dependency they significantly contribute to their mental health burden. A study conducted in rural Maharashtra by Michelle Kermode et al. highlights how various socioeconomic factors—such as poverty, unemployment, and low education levels—contribute to financial strain and elevate mental health risks among rural women. Recognizing these influences is essential for developing targeted interventions that effectively address mental health challenges faced by married women in these communities.[10]

A study conducted in rural Puducherry by Manikandan Srinivasan et al. found that women aged 18 to 59 years experienced high levels of depression, anxiety, and stress. The research identified several predictors of depression, including financial instability, marital difficulties, and restricted access to mental health support. These findings emphasize the urgent need for targeted interventions designed to address the specific challenges faced by women in rural areas, promoting better mental well-being and overall quality of life.[11]

In a similar vein, baseline data obtained from the Systematic Medical Appraisal, Referral, and Treatment (SMART) Mental Health Project, conducted in rural Andhra Pradesh, shed light on the concerning prevalence of mental health disorders in the community. Notably, these mental health conditions were found to be disproportionately higher among women, indicating their increased vulnerability to psychological distress. Among the various contributing factors analysed, financial stress emerged as a key

determinant, further exacerbating the mental health burden faced by women in these rural settings. These findings underscore the urgent need for comprehensive mental health interventions that address both psychological and socio-economic challenges.[12]

A study conducted in rural Tamil Nadu emphasized that factors such as socio-economic status, marital conflicts, and lack of social support play a crucial role in contributing to poor mental health outcomes among married women, highlighting the urgency for targeted research and community-based mental health initiatives.[13]

Although mental health issues are increasingly being recognized as a significant public health concern, research focusing specifically on depression, anxiety, and stress among married women in rural India remains limited. Most available studies either center on urban populations or present generalized findings across genders, overlooking the distinct socio-cultural and economic challenges that rural married women encounter.

NEED FOR STUDY

2.NEED FOR THE STUDY

Women commonly experience those mental health challenges such as depression, anxiety, and stress, which often remaining unrecognized, underdiagnosed, and untreated.[14] This issue is especially pronounced in rural regions, where socio-cultural influences and restricted healthcare access further intensify the challenge.[15] A study assessing the degree of depression and anxiety among married women highlighted the significant mental health challenges faced by this demographic.[16]

Given the limited research on mental health challenges among married women in rural India, there is a pressing need for focused studies to understand the extent of these mental health issues and their associated factors. Rural married women face unique socio-economic, cultural, and familial pressures that may significantly impact their psychological well-being. Understanding the prevalence and key factors influencing these mental health conditions is essential for closing the knowledge gap and enhancing access to mental health care and support systems in rural communities.

Despite the increasing awareness of mental health, rural communities continue to struggle with significant challenges due to insufficient mental health infrastructure. Many women hesitate to seek help due to stigma, societal expectations, and traditional gender roles, which can lead to prolonged emotional distress. Additionally, the pressures of managing household responsibilities, financial dependence, and family dynamics can contribute to mental health struggles. Research that explores these challenges can help uncover the key barriers preventing rural married women from accessing the mental health support they need.

Apart from social and economic factors, biological and life-stage changes also play a significant role in women's mental health. Hormonal fluctuations,

pregnancy, postpartum transitions, and menopause can all influence emotional well-being. By raising mental health awareness and incorporating emotional wellness into routine healthcare, women can receive the support they need at the right time. A focused study on rural married women in Kolar can shed light on these aspects and contribute to developing comprehensive healthcare strategies that address both physical and mental well-being.

Recognizing that mental health is integral to overall well-being, there is an opportunity to expand community-driven mental health programs in rural areas. Strengthening primary healthcare services, integrating mental health screenings, and increasing awareness campaigns can ensure early identification and timely support for women facing anxiety, stress, or depression. By understanding the prevalence and influencing factors in this population, valuable insights can guide policy reforms and better resource allocation, ultimately improving mental health services and enhancing the quality of life for rural married women.

Furthermore, studies have shown that a woman's mental health does not just affect her, it influences her family and community as well. Increased stress and anxiety can take a toll on maternal health, work productivity, and even child development. Examining these interconnected effects is crucial for designing effective, family-centred mental health interventions that offer long-term benefits.

Finally, early detection and intervention are key to preventing long-term complications of mental health problems. A comprehensive investigation in rural Kolar can generate region-specific data to help policymakers, healthcare providers, and community leaders implement targeted mental health programs. Addressing the root causes and improving access to mental health services can significantly reduce the mental health burden and enhance overall well-being in rural communities.

OBJECTIVES OF STUDY

3.OBJECTIVES

1. To estimate the prevalence of depression, anxiety and stress among married women in rural areas of Kolar.

2. To study the factors associated with depression, anxiety and stress among married women in rural areas of Kolar.

REVIEW OF LITERATURE

4.REVIEW OF LITERATURE

DEPRESSION

According to WHO, Depressive disorder, commonly referred to as depression, is a widespread mental health condition that can impact anyone. It is marked by a prolonged period of low mood or a diminished interest and enjoyment in daily activities.

Unlike ordinary mood swings and emotional responses, depressive episodes last most of the day, nearly every day, for at least two weeks. Individuals experiencing depression may struggle with disrupted sleep, changes in appetite, feelings of worthlessness, hopelessness about the future, and even thoughts of death. Fatigue and difficulty concentrating are also common symptoms.[17]

Depression stems from a multifaceted interaction of social, psychological, and biological influences. Those who have endured abuse, major losses, or other difficult life experiences face an increased risk of developing this condition.[18]

PATHOPHYSIOLOGY OF DEPRESSION

Depression results from complex psycho-neuro-immuno-endocrinological disturbances involving neurotransmitter dysregulation, immune dysfunction, and endocrine imbalances. The pathophysiology includes impaired monoamine signaling, where decreased serotonin, dopamine, and norepinephrine levels contribute to mood disturbances. Neuroimmune mechanisms play a significant role, as chronic inflammation and CNS immune dysregulation are implicated in depression's onset and progression.[19]

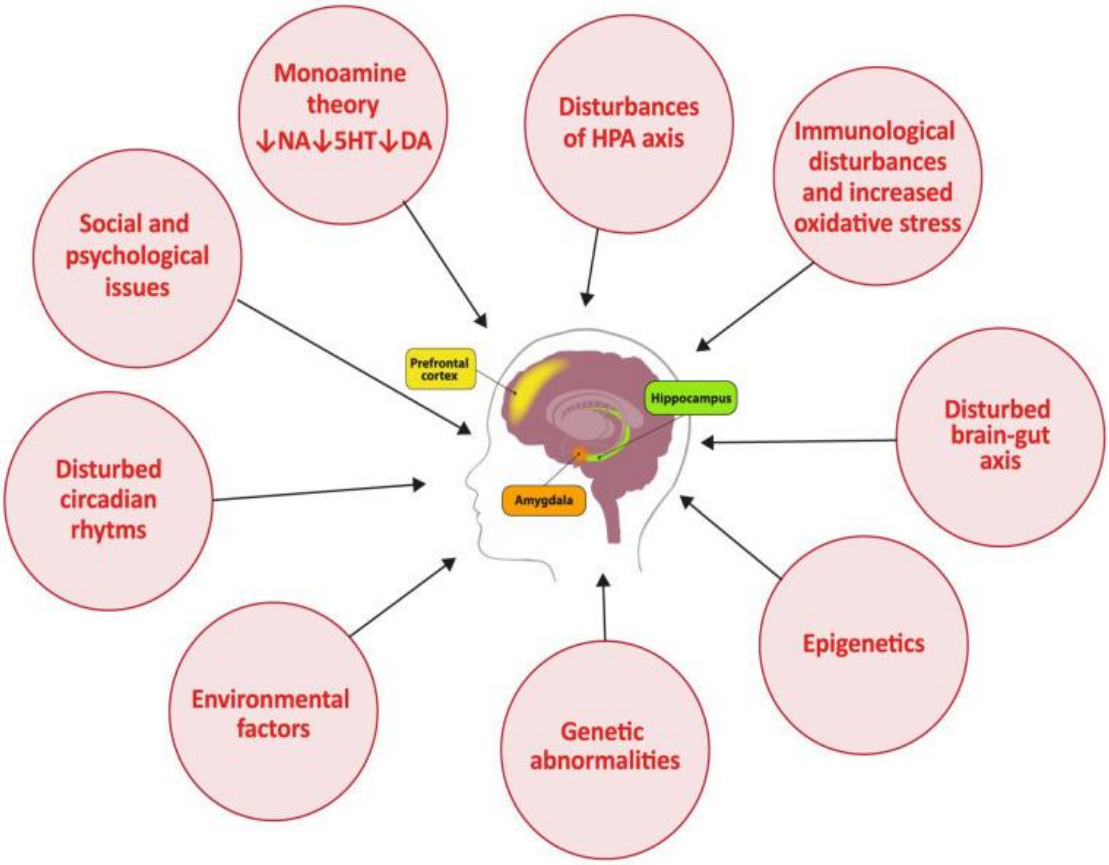
Depression is a widespread and complex mental disorder with a multifaceted underlying mechanism that remains unclear. Chronic stress and inflammation play a significant role in both its onset and progression by triggering microglia, which then release proinflammatory cytokines and reactive oxygen

species (ROS). These inflammatory processes interfere with serotonin and norepinephrine metabolism, worsening depressive symptoms.

Furthermore, heightened inflammation negatively impacts neuroplasticity by lowering neurotrophins levels, causing structural brain changes, particularly in the hippocampus. The hyperactivity of the hypothalamic-pituitary-adrenal (HPA) axis in depression leads to excessive cortisol production, which fuels neuroinflammation and contributes to the persistence of symptoms. Studies using animal models, such as chronic unpredictable mild stress (CUMS) and social defeat stress (SDS), further reinforce the connection between stress-induced inflammation and depression-like behaviours.

Structural and genetic factors further contribute to depression's pathophysiology. Morphological changes in the hippocampus, including volume reduction, have been observed, suggesting impaired neurogenesis and synaptic plasticity. Polymorphisms in the serotonin transporter gene (5-HTT) have been linked to increased susceptibility to depression, affecting serotonin availability in the synaptic cleft. Additionally, downregulation of neurotrophins, particularly brain-derived neurotrophic factor (BDNF), has been noted, impairing neuronal growth and survival. These neurobiological alterations highlight the intricate mechanisms underlying depression, necessitating further research to understand individual variations in pathophysiological pathways.[20,21]

FIG.NO-1: Pathophysiology of Depression[19]



SYMPTOMS OF DEPRESSIVE DISORDER

A depressive episode differs from ordinary mood fluctuations, persisting for most of the day, nearly every day, for a minimum of two weeks. Additional symptoms may also be present and shown in the figure number 2.

Depression can significantly impact various aspects of life, including personal relationships, work, school, and community involvement.

A depressive episode is classified as mild, moderate, or severe based on the number and intensity of symptoms, as well as the extent of impairment in daily functioning.

Depressive episodes can follow different patterns, including:

- Single-episode depressive disorder, where an individual experiences a single depressive episode.
- Recurrent depressive disorder, which involves a history of at least two separate depressive episodes.
- Bipolar disorder, where depressive episodes alternate with periods of manic symptoms, such as euphoria, irritability, heightened energy or activity, increased talkativeness, racing thoughts, inflated self-esteem, reduced need for sleep, distractibility, and impulsive or reckless behaviour.[22]

FIG.NO-2: Symptoms of Depression

ANXIETY

Anxiety is a normal reaction to stress, and in its milder forms, it can be helpful by keeping individuals alert to threats, aiding in preparation for difficult situations, and improving concentration. However, anxiety disorders extend beyond typical nervousness or worry, involving ongoing and excessive fear or anxiety. These disorders are among the most frequently seen mental health issues.

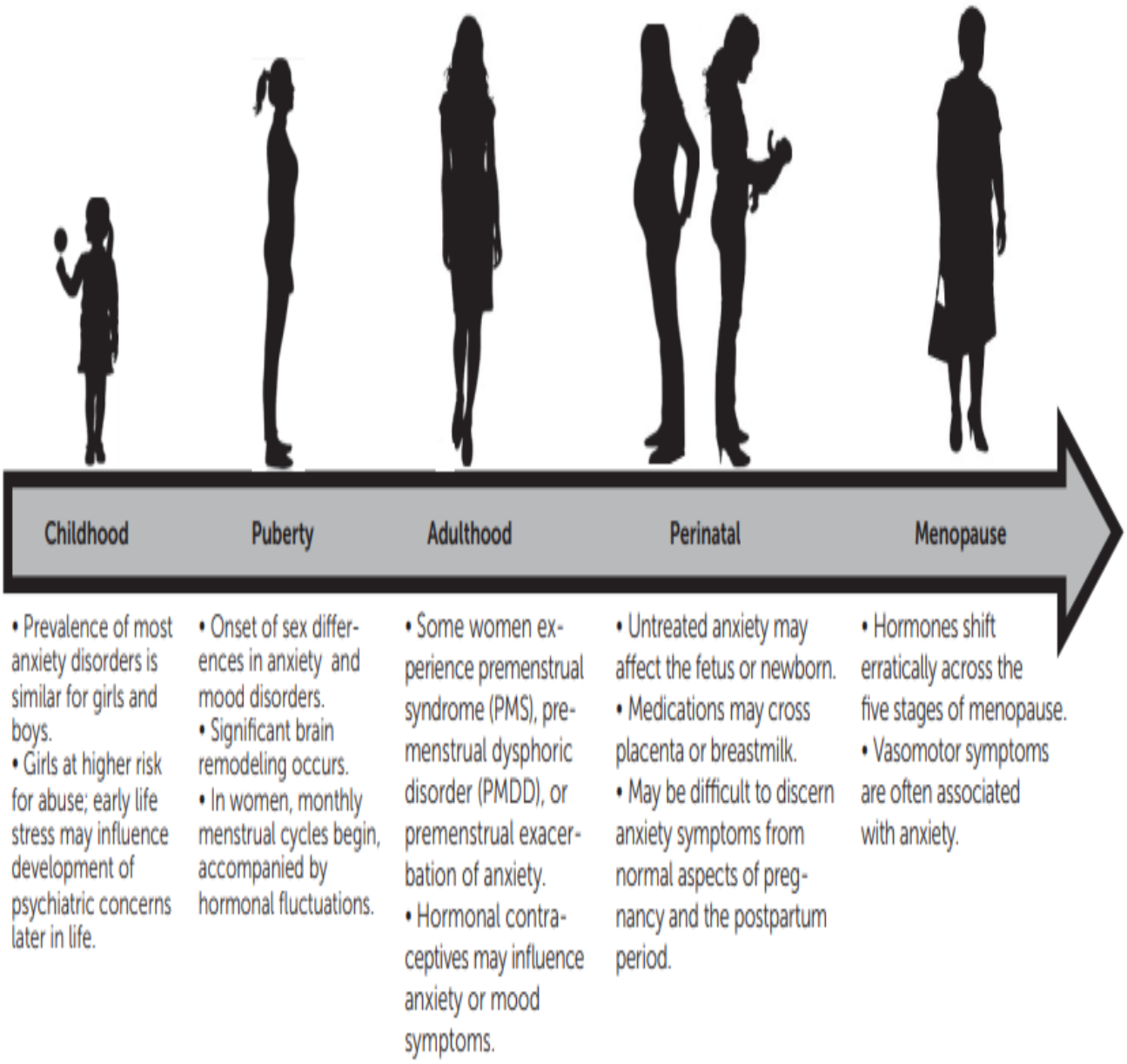
Anxiety usually entails anticipating future threats and is commonly associated with muscle tightness and avoidance behaviors. People experiencing it may avoid scenarios that provoke or worsen their symptoms, which can adversely affect their academic, professional, and personal lives.

To diagnose an anxiety disorder, the fear or anxiety must:

• Be out of proportion to the actual situation or unsuitable for the individual's age.

• Disrupt their capacity to carry out everyday tasks effectively.[23]

FIG.NO-3: Anxiety Disorders across the female lifespan[5]



PATHOPHYSIOLOGY OF ANXIETY

Anxiety disorders arise from a complex interplay of genetic, neurobiological, and environmental factors, leading to dysregulation of key neural circuits. The fear-anxiety circuit and the extinction circuit are central to anxiety pathophysiology, with imbalances in these networks resulting in persistent

fear and worry. Functional and structural abnormalities in these regions contribute to hyperactivity in the fear circuit and impaired fear extinction. Additionally, deficiencies in brain-derived neurotrophic factor (BDNF) and neurotrophic receptor kinase tyrosine 2 (NTRK2) reduce neuroplasticity, further weakening extinction responses and perpetuating anxiety symptoms.

Neurotransmitter dysregulation plays a crucial role in anxiety disorders, particularly involving the GABAergic, serotonergic, and noradrenergic systems. Reduced gamma-aminobutyric acid (GABA) activity results in decreased inhibitory control over excitatory pathways, leading to heightened anxiety responses. Alterations in serotonin (5-HT) and norepinephrine (NE) signalling contribute to excessive fear responses and difficulty in emotional regulation. Genetic studies have identified variations in SLC6A4 (serotonin transporter gene) and BDNF, influencing susceptibility to anxiety disorders. Epigenetic modifications also impact stress reactivity and neuroplasticity, altering the function of key anxiety-related circuits. These molecular and genetic factors interact with environmental stressors, further increasing an individual's vulnerability to developing anxiety disorders.

Structural and functional imaging studies have confirmed hyperactivity in the amygdala and dysfunction in the prefrontal cortex, disrupting the balance between fear response and cognitive control. The paraventricular nucleus of the thalamus, anterior cingulate cortex, and ventral hippocampus also play a role in encoding fear memories and regulating emotional responses. Dysfunction within these networks results in exaggerated threat perception and impaired fear extinction, which are hallmarks of anxiety disorders. Additionally, heightened activity in the HPA axis due to chronic stress leads to excessive cortisol release, exacerbating neural dysregulation. These interconnected neurobiological, genetic, and epigenetic factors contribute to the persistence and severity of anxiety disorders, highlighting their complex and heterogeneous pathophysiology.[24–26]

SYMPTOMS OF ANXIETY DISORDERS

Individuals with an anxiety disorder may experience excessive fear or worry related to a specific situation, such as a panic attack or social interaction, or, in the case of generalized anxiety disorder, a wide range of everyday situations. These symptoms typically persist for an extended period, lasting several months or more. Additional symptoms may also be present and shown in the figure no 4.

FIG.NO-4: Symptoms of Anxiety Disorders

Anxiety disorders heighten the risk of developing depression, substance use issues, and suicidal thoughts or behaviours. There are multiple forms of anxiety disorders, including:

- Generalized anxiety disorder – characterized by ongoing and excessive worry about everyday events and activities.
- Panic disorder – involves repeated panic attacks and intense fear of experiencing future episodes.
- Social anxiety disorder – marked by extreme fear and anxiety in social settings due to apprehension about embarrassment, humiliation, or rejection.
- Agoraphobia – entails severe anxiety, fear, and avoidance of situations where an individual may feel trapped, helpless, or exposed.
- Separation anxiety disorder – extreme fear or distress when separated from individuals with whom one shares a deep emotional connection
- Specific phobias – intense, irrational fears of particular objects or situations, leading to avoidance and distress
- Selective mutism – a consistent inability to speak in certain social situations, despite normal speech in other settings, primarily affecting children

It is common for individuals to experience more than one anxiety disorder simultaneously. Symptoms typically begin during childhood or adolescence and may continue into adulthood. Anxiety disorders are more prevalent among women and girls compared to men and boys.[27]

STRESS

The World Health Organization defines stress as a condition of worry or mental strain caused by difficult circumstances. It is an inherent human reaction that enables individuals to handle challenges and threats in life. While stress is a

universal experience, the way it is managed plays a crucial role in overall well-being. It has both psychological and physical effects. When experienced in moderation, stress can be advantageous, assisting in the completion of daily tasks.[28]

However, excessive stress can lead to physical and mental health issues. Developing effective coping strategies can reduce feelings of being overwhelmed and support both mental and physical well-being. Stress can make relaxation difficult and is often accompanied by emotions such as anxiety and irritability. It may impair concentration and lead to physical symptoms like headaches, body aches, digestive issues, or sleep disturbances.[28]

PATHOPHYSIOLOGY OF STRESS

Stress is a multifaceted physiological and psychological reaction to both internal and external difficulties, regulated by sophisticated neurobiological mechanisms. The hypothalamic-pituitary-adrenal (HPA) axis and the sympathetic nervous system are the primary regulators of the stress response, releasing cortisol, adrenaline, and noradrenaline to mobilize energy and enhance survival. While these processes effectively adapt to acute stress, prolonged activation results in HPA axis dysregulation, leading to maladaptive stress responses. While these processes effectively adapt to acute stress, prolonged activation results in HPA axis dysregulation, leading to maladaptive stress responses. Key brain structures, including the amygdala, hippocampus, and prefrontal cortex, play significant roles in stress processing, with the amygdala amplifying emotional responses and the hippocampus modulating memory formation related to stress. Dysfunction in these regions under chronic stress leads to heightened emotional reactivity and impaired cognitive control. Extended periods of stress impair immune function, increasing vulnerability to infections and inflammatory conditions. Cortisol dysregulation impairs

immune surveillance, increasing vulnerability to conditions ranging from common infections to autoimmune diseases and even cancer. Additionally, chronic stress influences neurotransmitter systems, particularly serotonin, dopamine, and glutamate, altering mood regulation and cognitive processing. The continuous activation of the stress response can result in long-term neurochemical imbalances, which contribute to stress-related disorders such as anxiety, depression, and post-traumatic stress disorder (PTSD). Variations in individual stress tolerance determine the extent of physiological and psychological consequences, with some individuals exhibiting heightened sensitivity to stress-induced pathologies.

At the cellular level, stress activates signalling pathways that regulate metabolic and immune responses, triggering molecular changes aimed at maintaining homeostasis. The HPA axis and sympathetic nervous system engage with cellular stress response systems, impacting gene regulation, inflammatory processes, and neuronal adaptability. Prolonged stress exposure disrupts neuroendocrine feedback mechanisms, leading to hyperactivation of the HPA axis and impaired glucocorticoid receptor function, which exacerbates stress-induced neurotoxicity. Alterations in brain structure and function, such as hippocampal shrinkage and impaired prefrontal cortex activity, exacerbate the negative impact of chronic stress, reinforcing its involvement in the onset of multiple stress-related disorders.[29–31]

TYPES OF STRESS

Acute stress: Short-term stress usually arises from immediate challenges or stressors. The body's fight-or-flight mechanism initiates temporary physiological shifts, including a heightened heart rate and the release of adrenaline.

Chronic stress: Occurs when a stressor persists for an extended duration. Long-term exposure to chronic stress leads to accumulated physiological and psychological effects, increasing susceptibility to health conditions such as cardiovascular disease, anxiety, and depression.

Episodic acute stress: Arises in individuals who frequently experience acute stress episodes. This pattern is common among those with chaotic or unstructured lifestyles, constantly dealing with deadlines, obligations, or interpersonal conflicts. The recurring stress cycle worsens health problems and interferes with daily functioning.

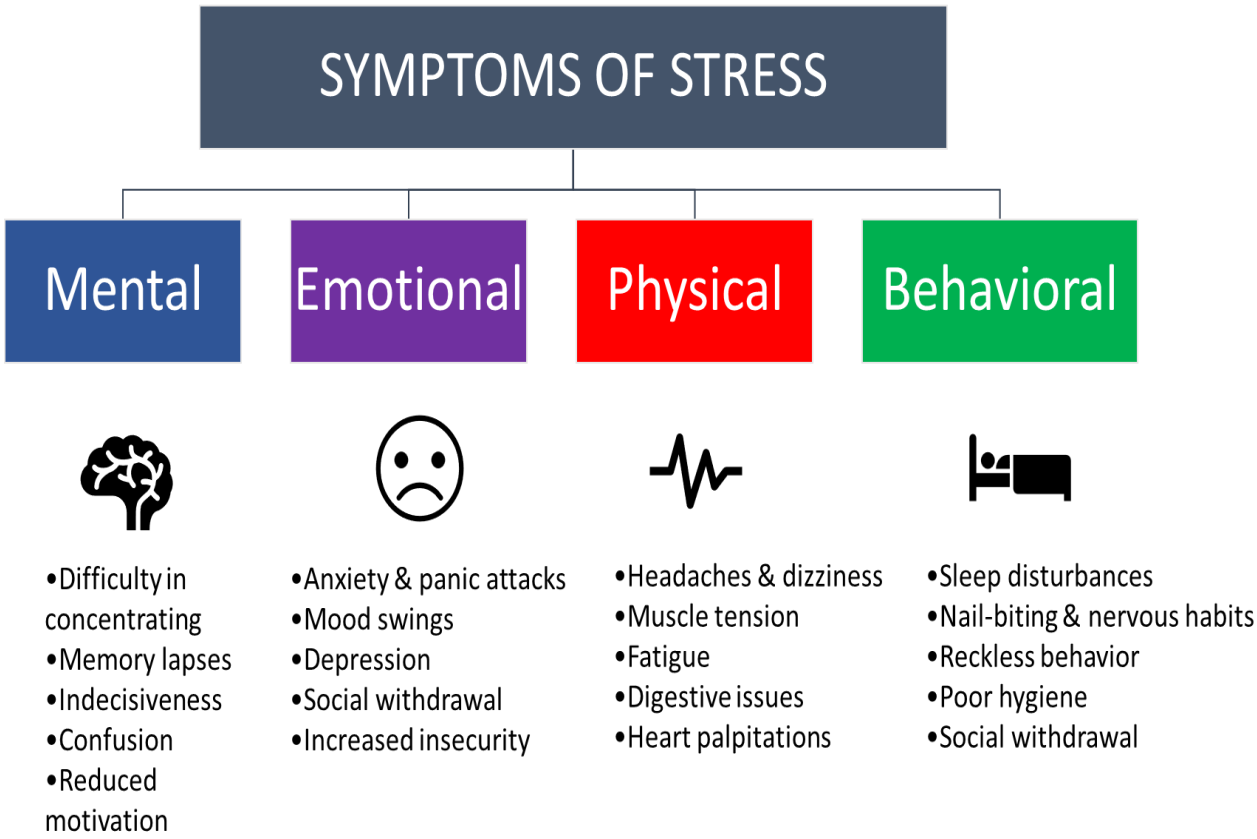
Traumatic stress: Results from encountering traumatic events, including natural disasters, accidents, or acts of violence. Such experiences exceed an individual's coping capacity and may trigger post-traumatic stress disorder (PTSD) symptoms, such as intrusive recollections, avoidance behaviors, and heightened arousal.

Environmental stress: Emerges from unfavorable or difficult environmental conditions, such as excessive noise, pollution, overcrowding, or unsafe living situations. These stressors negatively affect mental and physical health, fostering feelings of discomfort or distress.

Psychological stress: Originates from cognitive or emotional influences, including perceived threats, worries, or negative thought patterns. Common stressors include occupational pressures, academic demands, social comparisons, or self-imposed expectations. It often manifests through anxiety, excessive rumination, or perfectionism.

Physiological stress: Refers to the body's reaction to internal or external stressors that disturb homeostasis. Instances include illness, injury, sleep deprivation, or nutritional deficiencies, which activate physiological stress mechanisms and undermine overall health and well-being.[32–35]

FIG.NO-5: Symptoms of Stress



SYMPTOMS OF STRESS

Stress impacts individuals in various ways, presenting through **mental, emotional, physical, and behavioural symptoms**:

- **Mental Symptoms:** Stress can impair cognitive abilities, resulting in difficulty concentrating, indecisiveness, memory lapses, and a tendency to make impulsive or irrational decisions. Affected individuals may experience confusion, forgetfulness, reduced self-confidence, lack of motivation, and an overall sense of underperformance, particularly under time constraints. Persistent stress can also lead to irritability and a distorted perspective.
- **Emotional Symptoms:** Emotionally, stress may cause frequent anger, anxiety, panic attacks, and a persistent sense of hopelessness. Individuals may struggle with mood swings, excessive guilt, heightened aggression, depression, or increased insecurity. It can also lead to nightmares, cynicism, sadness, and a fear of criticism, often resulting in social withdrawal.
- **Physical Symptoms:** Stress has a significant impact on the body, leading to muscle tension, particularly in the shoulders, back, and neck, along with headaches, dizziness, chest pain, and irregular breathing. Digestive disturbances such as nausea, stomach ulcers, diarrhoea, and excessive stomach acid production are also common. Additionally, stress may cause chronic fatigue, excessive sweating, trembling, heart palpitations, a weakened immune system, and an overall decrease in energy levels. In some cases, stress may contribute to weight fluctuations and persistent aches and pains throughout the body.
- **Behavioural Symptoms:** Stress can also lead to noticeable behavioural changes, including disruptions in eating and sleeping habits—either

excessive or insufficient. Common stress-related behaviours include nail-biting, hair-pulling, social withdrawal, neglect of personal hygiene and grooming, reckless driving, and repetitive movements such as tapping fingers, shaking knees, or grimacing.[36]

SIGNIFICANCE OF DEPRESSION, ANXIETY, STRESS AMONG WOMEN IN PUBLIC HEALTH

Depression is a major public health issue, especially among women in rural areas, where it leads to a considerable burden of disability and a lower quality of life. Its prevalence is notably higher in this group due to various socio-economic and cultural influences, such as financial dependence, gender discrimination, restricted healthcare access, and social isolation. These factors not only intensify mental health challenges but also hinder women from seeking timely support. The consequences of depression extend beyond individuals, affecting families and communities by decreasing productivity, weakening caregiving roles, and increasing healthcare expenses. Tackling these concerns is essential for enhancing overall well-being and improving mental health outcomes for rural women.[37]

On average, nations allocate less than 2% of their healthcare budgets to mental health, with over 70% of mental health spending in middle-income countries directed toward psychiatric hospitals. Nearly half of the global population lives in areas where only one psychiatrist is available for every 200,000 or more individuals. Access to affordable essential psychotropic medications remains scarce, particularly in low-income countries, leaving a substantial portion of individuals with diagnosed mental health conditions untreated. Across all countries, gaps in mental health services are further compounded by

inconsistencies in care quality. Numerous obstacles hinder individuals from seeking mental health support, including inadequate service standards, low mental health literacy, and the stigma and discrimination surrounding mental illness. In several regions, formal mental health services are entirely lacking.[38]

Research done in 2022 in Sembakkam village in Tamil Nadu highlights a prevalence rate of 17.9% of depression among women in rural areas. The interplay of socio-economic hardships, marital conflicts, lack of social support, and stigma surrounding mental health further complicates early diagnosis and treatment.[39]

A Study done in South India in 2020 have reported an anxiety prevalence of 10.6% among rural women.[40] Among women who have experienced domestic violence, this prevalence rises significantly to 76%, highlighting the severe psychological toll of abuse. If not managed, anxiety can result in prolonged distress, disrupt daily activities, and elevate the likelihood of developing co-existing mental health conditions, such as depression.[41]

Psychological stress significantly impacts women living in rural areas, shaped by cultural transitions, financial strains, and socio-environmental challenges. Study done in Pakistan in 2023 indicate that shifting cultural norms and economic difficulties contribute to heightened stress levels among rural women. Fearful realities, including uncertainty about financial stability and social security, further exacerbate their psychological distress. Findings suggest that cultural and financial stressors do not act in isolation but interact to create a complex mental health burden. Understanding these interconnected factors is essential to comprehending the challenges rural women encounter in their daily lives. Analysing the thought processes and coping mechanisms of these women provides valuable insights into their struggles and resilience.[42]

In rural areas, women often face limited job opportunities, lower social support, and challenges in accessing essential services and transportation, contributing to economic hardship and psychological distress. The burden of balancing household responsibilities with agricultural or other production-related work further exacerbates their stress levels. Study done in Iran in 2013 indicate that rural women experience heightened social stress due to awareness of inequalities and increasing exposure to modern societal expectations. Economic instability, lack of employment opportunities, and concerns about their children's future contribute significantly to their mental health burden. The absence of adequate welfare facilities and urban amenities fosters feelings of deprivation and insecurity among rural women. Urban influences have transformed rural life, increasing aspirations while simultaneously intensifying stress due to unfulfilled needs and expectations. As a result, rural women experience heightened anxiety, stress, and psychological distress, which may contribute to the prevalence of mental health disorders in these communities.[43]

Global Perspective on Depression, Anxiety, and Stress Among Married Women

Globally, the prevalence of depression, anxiety, and stress among married women highlights substantial mental health concerns shaped by a complex interplay of biological, social, and cultural factors. Study done in Poland in 2022 among women consistently show that women are disproportionately affected by these conditions due to gender-based stressors, hormonal influences, and societal expectations. Mental health disparities are particularly evident in developing regions, where limited healthcare access and socio-economic challenges further exacerbate these issues.[44]

This research indicates that depression impacts around 14.4% to 18% of women at some stage in their lives, establishing it as one of the most widespread mental health conditions among females. In 2019, 19.2% of women

reported experiencing symptoms of depression, highlighting the increasing prevalence of psychological distress within this group. These figures emphasize the pressing need for comprehensive mental health initiatives designed to tackle the distinct challenges faced by married women across various cultural and economic backgrounds.[44]

A study conducted in 27 European countries using data from the European Health Interview Survey wave 2 (EHIS-2) in 2024 analyzed the prevalence of depression among women and the impact of various individual characteristics. The findings revealed that women were more susceptible to depression compared to men, with factors such as lower education levels, unemployment, and older age increasing the likelihood of experiencing severe depression. Conversely, higher education and income were identified as protective factors against depression. The study also highlighted notable variations in the effects of these characteristics across different countries, despite the general trends remaining consistent. These differences suggest that socioeconomic and demographic factors play a crucial role in mental health disparities among women.[45]

A Study done in Malaysia in 2022 shows that women experience these conditions at significantly higher rates than men due to a complex interplay of biological, psychological, and socio-cultural factors. Hormonal fluctuations, reproductive health issues, and the unique challenges associated with pregnancy and menopause contribute to an increased risk of mental health disorders. Furthermore, the lack of gender-specific mental health policies in many countries exacerbates the issue, leaving women with inadequate support systems and limited access to appropriate healthcare services.[46]

Moreover, social determinants such as gender inequality, domestic violence, and societal expectations play a pivotal role in shaping women's mental health outcomes. Research conducted in Malaysia in 2008 indicates that women

experiencing socio-economic difficulties face an increased likelihood of developing depression and anxiety-related conditions. The stigma surrounding mental health further discourages many women from seeking professional help, leading to the underdiagnosis and undertreatment of these conditions. Addressing these challenges requires comprehensive mental health policies that prioritize gender-specific interventions, enhance access to mental health resources, and promote awareness programs aimed at reducing stigma and encouraging early intervention for mental health concerns among married women worldwide.[46]

National Perspective: Mental Health in Married Women in Rural India

A 2024 study conducted in Maharashtra utilized in-depth interviews with rural women, offering important perspectives on the mental health struggles of married women. The findings underscore the profound effects of systemic stressors on their psychological well-being. Financial hardships, frequent domestic disputes, and deeply embedded societal gender roles emerged as prominent contributors to mental distress among women in these communities. Many women reported feeling trapped in traditional expectations that limited their autonomy and decision-making power, further exacerbating their mental health struggles. These findings emphasize the need for mental health programs that consider the unique socio-cultural realities of rural Indian women, ensuring that interventions are designed to address their specific stressors and promote psychological resilience.[47]

A study conducted among women in Goa found that those experiencing depression frequently associate their condition with several contributing factors. These include poverty, societal pressures related to women's roles,

absence of affection, marital conflicts, widowhood, divorce, and the financial strain of providing dowries for their daughters.[48]

Furthermore, study conducted in Bihar in 2023 have explored the effectiveness of structured livelihood programs in improving mental health outcomes among women in rural India. In Bihar, women's rural livelihood initiative was examined for its impact on psychological well-being. The study included 100 women actively participating in the program and a control group of non-participants to compare mental health indicators. The results demonstrated that involvement in self-help groups had a positive influence on mental health, potentially due to increased economic empowerment, enhanced decision-making abilities, and stronger social networks. Women participating in these livelihood programs exhibited lower rates of mental health disorders, highlighting the vital role of economic independence in promoting improved mental well-being.[49]

A study done in Maharashtra in 2023 among rural women shows a strong correlation between economic dependence and mental distress, empowering women through financial literacy programs, skill development, and self-help groups can serve as an effective strategy to alleviate psychological burdens. Additionally, integrating mental health awareness and support services within existing community frameworks can further strengthen efforts to improve emotional well-being among rural married women. Addressing the socio-demographic factors of mental health through holistic and gender-sensitive policies is imperative in bridging the mental health gap and ensuring long-term well-being for women in these underserved regions.[50]

Regional and Local Studies on Mental Health Among Rural Women

A 2022 study conducted in Southern Karnataka on the mental health of married women utilized a questionnaire to gather data on socio-demographic factors, stigma measured through the Internalized Stigma of Mental Illness (ISMI) scale, and quality of life assessed using the WHO-BREF QOL questionnaire. The research consistently identified various socio-economic and cultural influences as significant contributors to psychological distress. One segment of the study employed a cross-sectional approach to examine internalized stigma and quality of life among 300 participants in a rural community mental health program. The findings demonstrated strong associations between stigma levels and factors such as gender, family structure, and marital status. Importantly, the study emphasized that married women, particularly those from economically disadvantaged backgrounds, faced higher levels of mental health stigma. These insights underscore the importance of targeted interventions that not only enhance mental health care but also address socio-economic and gender disparities affecting mental health outcomes. Customized mental health services are crucial for effectively meeting the specific needs of married women in rural communities, who encounter compounded challenges due to their economic situation and gender roles.[51]

Research conducted in rural Karnataka provided valuable insights into women's unique perspectives on mental health. Several obstacles hinder rural women from accessing mental healthcare, including the absence of women-centered services, a limited number of trained professionals familiar with rural cultural contexts, stigma surrounding mental health support, low awareness of available treatments, transportation difficulties, and the high cost of care. Additional factors that increase their vulnerability include older age, widowhood, poverty, and living in conflict-affected regions. The well-being of rural women is closely tied to physical health, emotional resilience, economic stability, rural identity, family welfare, and community connections.

Psychological therapies tailored to their specific needs have demonstrated positive outcomes. Rural women tend to respond better to assistance provided by community workers and peer volunteers. Therefore, this study emphasizes the importance of adapting mental health services to align with the cultural and practical realities of rural women's lives.[52]

A 2023 study conducted in Bihar examined the influence of women's rural livelihood programs on mental health, with a particular focus on self-help group participation. The research compared the mental health outcomes of women engaged in these groups to those who were not involved. Findings indicated that active involvement in self-help groups had a significantly positive impact on mental well-being, largely due to increased social support and financial empowerment. Women participating in self-help groups reported noticeably lower levels of depression and anxiety, often attributing their improved mental health to enhanced economic stability and a stronger sense of community connection. These results highlight that integrating economic empowerment initiatives, such as self-help groups, alongside mental health interventions can be an effective approach to addressing mental health challenges faced by married women in rural Karnataka. By fostering financial independence and social inclusion, such programs serve as valuable resources for enhancing the mental well-being of women in rural communities.[49]

FIG.NO:6 - Associated Factors Influencing Mental Health Among Married Women[53]

1. Socio-Economic Factors

Dependence on spouses for financial support and widespread poverty significantly contribute to mental health challenges among married women in rural India. Limited access to education and employment opportunities further intensifies feelings of helplessness and diminished self-esteem. A 2010 population-based study in India, which included 5,703 married rural women, identified a strong correlation between low socio-economic status and the

prevalence of common mental disorders (CMDs). The findings indicated that women from economically disadvantaged backgrounds faced a higher likelihood of experiencing CMDs due to financial hardships and restricted autonomy.[54]

A 2024 study from the United States underscores the significant influence of socioeconomic factors on maternal mental health, particularly among economically disadvantaged women. Insufficient access to healthcare, including inadequate prenatal services and the absence of employer-provided insurance, contributes to poorer mental health outcomes. Social support plays a crucial role in mitigating these effects. Moreover, stressful life circumstances such as financial instability and housing insecurity are strongly associated with elevated depression rates. Individuals from lower socioeconomic backgrounds face additional barriers, including financial constraints, stigma, and geographic limitations, which lead to disparities in accessing mental health services. The unequal distribution of healthcare resources further intensifies these challenges, particularly in underserved regions. These findings highlight the strong connection between socioeconomic status and mental health accessibility within marginalized communities.[55,56]

Economic factors, including income, employment status, and social support, play a crucial role in shaping mental health outcomes. Research indicates that financial hardship and job insecurity significantly contribute to mental health disparities, especially among individuals with lower incomes. Interestingly, emotional social support networks have shown an unexpected negative correlation with mental well-being. Findings suggest that socioeconomic inequalities continue to influence mental health disparities across both high- and low-income populations. [57,58]

2. Cultural and Gender Norms

In today's interconnected world, societal expectations continue to influence women's self-esteem and mental well-being, often reinforcing traditional gender roles and cultural norms. A 2024 comparative study conducted across Japan, the US, the UK, India, and China illustrates the profound impact of societal pressures on women's mental health. The research identified a strong link between societal expectations and self-esteem, highlighting the ways in which cultural norms shape women's self-perception. These findings align with previous studies, demonstrating that gendered expectations significantly affect mental health outcomes. The results further emphasize the widespread influence of these factors, showing how the intersection of societal pressures and self-image contributes to psychological distress among women.[57]

A 2022 study analysing gender differences in psychological well-being across 33 countries reinforces these observations, highlighting the continued influence of gendered socialization and societal roles on mental health. Despite progress in gender equality within certain societies, the study found that disparities in mental health persist, with women experiencing lower psychological well-being due to family responsibilities, while men face heightened stress related to work pressures. Interestingly, the study also noted that women in more gender-equal societies do not necessarily exhibit better mental health outcomes compared to those in traditional societies, indicating a divide in women's preferences regarding gender roles and career orientations. These findings emphasize that while gender roles remain a significant factor, their effects are shaped by broader social contexts, further illustrating the complexity of gender norms and their relationship with psychological well-being.[59]

Similarly, a 2020 study conducted in Iran examined the cultural and social factors contributing to gender disparity, focusing on patriarchal ideology, gender stereotypes, and socialization processes. The study, which sampled 385

married women, found high levels of gender inequality, particularly in economic and cultural spheres. While gender stereotypes were not directly linked to inequality, the study identified strong associations between patriarchal norms and gender disparities, demonstrating the persistence of traditional power structures. These findings further support the broader perspective that cultural and gender norms continue to influence women's roles and experiences, affecting their psychological well-being and self-esteem across various societies.[60]

Additionally, the stigma surrounding mental health in rural communities continues to hinder women from seeking support. Mental illnesses are frequently misinterpreted, resulting in underreporting and inadequate treatment. A 2023 study analyzing rural community perspectives on mental healthcare in Odisha, India, revealed that mental illness is often regarded as a neglected condition. Additionally, evolving social dynamics have heightened care-seeking behaviors, highlighting the urgent need for immediate intervention.[50]

3. Marital and Domestic Factors

Research on marital and domestic influences has demonstrated their substantial effect on women’s mental health, particularly concerning psychiatric disorders and stress. A 2023 study conducted across Denmark, Finland, Iceland, Norway, and Sweden explored how household responsibilities contribute to gender disparities in sickness absence due to psychiatric conditions. Reviewing 12 Nordic studies, the research identified marital status, family structure, work-home conflict, and social connections as critical factors affecting sickness absence rates. While certain elements, such as home-to-work conflict and overall workload, were not significantly linked to psychiatric disorders, work-to-home conflict was associated with stress-related diagnoses in men and other mental health conditions in women. Furthermore, the loss of a child or young

adult heightened the risk of sickness absence due to psychiatric disorders, irrespective of the cause of death. These findings emphasize the intricate connection between domestic obligations and mental health outcomes.[61]

Domestic violence is widely recognized as a significant factor affecting women's psychological well-being. A 2024 study examined its long-term consequences on both mental and physical health, emphasizing the recurring nature of abuse. The findings indicated that women who endure domestic violence face an increased risk of developing conditions such as PTSD, depression, and chronic pain.[62] Similarly, a 2020 study conducted in Gilgit-Baltistan, Pakistan, analyzed the prevalence and effects of domestic violence on women's mental health. The research revealed that 88.8% of married women had experienced some form of domestic abuse, with psychological violence being the most frequent. Women subjected to domestic violence demonstrated significantly lower psychological well-being, heightened distress, anxiety, and depression compared to those not affected by abuse. The study also identified key contributing factors to domestic violence, including poverty, in-law influence, coercive relationships, and addiction.[63]

The burden of domestic responsibilities further affects women's psychological well-being, as evidenced by a 2020 study in Japan. This study explored the impact of domestic work stress on women's self-rated psychological health, comparing employed women to homemakers. The findings revealed that reduced control over domestic tasks and conflicts between work and family were linked to poorer mental health, regardless of employment status. Women with greater domestic responsibilities, particularly those engaged in caregiving, experienced lower psychological well-being. Additionally, work-related stress among employed women and inadequate family support contributed to heightened psychological distress. These findings suggest that domestic responsibilities and work-family conflicts significantly shape women's mental

health outcomes.[64] Taken together, these studies highlight the pervasive influence of marital and domestic factors on women's psychological health across different cultural contexts.

4. Social Support and Community Resources

A 2023 study examining mental health resources, barriers, and intervention needs among women in rural Maharashtra found that the primary factors influencing mental health and illness were largely cultural and socio-economic. The research highlighted the critical role of community-based interventions in effectively addressing these challenges. [50]

Social support and community resources play a vital role in enhancing mental health outcomes for women, particularly in managing depression and anxiety. A 2024 study conducted in India found that depression among women often remains undetected due to somatic symptoms or anxiety-related concerns. The research emphasized the importance of community volunteers, multipurpose health workers, and family members in identifying and addressing mental health needs. The study highlighted that multipurpose health workers, who provide home visits and psychosocial support, were the most widely accepted approach for assisting women with depression. Additionally, family and community networks were recognized as essential in alleviating the impact of depression by offering both emotional and practical support.[65]

A 2024 study conducted in Iran highlighted the crucial role of social support systems in alleviating depression among women. Family support, particularly from spouses and parents, emerged as the most influential factor in reducing depressive symptoms by offering emotional reassurance and assistance with daily activities. Additionally, peer support networks contributed by providing shared experiences and emotional validation. The study emphasizes the importance of comprehensive social support structures, demonstrating that

strong familial and community connections play a significant role in improving women's mental health.[66]

A 2022 study conducted in Canada found that poverty, violence, and inadequate housing significantly heightened the risk of poor mental health among women. However, protective factors such as self-esteem and social support played a crucial role in mitigating these effects. The research showed that women with access to community organizations experienced improved mental health outcomes, as these resources offered emotional support, social interaction, and access to essential services. Additionally, the study demonstrated that women facing economic and social hardships were more likely to struggle with mental health issues, underscoring the importance of community-based networks in alleviating stress and enhancing psychological well-being.[67]

Limited access to mental health services due to geographical isolation and a shortage of professionals remains a significant barrier to care. Expanding service availability through initiatives like telemedicine is essential in addressing this gap. A 2018 study on common mental disorders and risk factors in rural India found that approximately 70–80% of the country's population resides in rural areas, where access to high-quality healthcare facilities is inadequate. [68]

5. Health Factors

A 2017 study conducted in rural Odisha found that women facing reproductive health challenges, such as pregnancy or childbirth complications, exhibited a higher prevalence of mental health disorders, particularly anxiety and depression. Additionally, mental health stigma and societal expectations requiring women to take on domestic and caregiving responsibilities further intensified their psychological burden. The absence of adequate postnatal care

and mental health support systems left these women vulnerable to lasting psychological effects.[69]

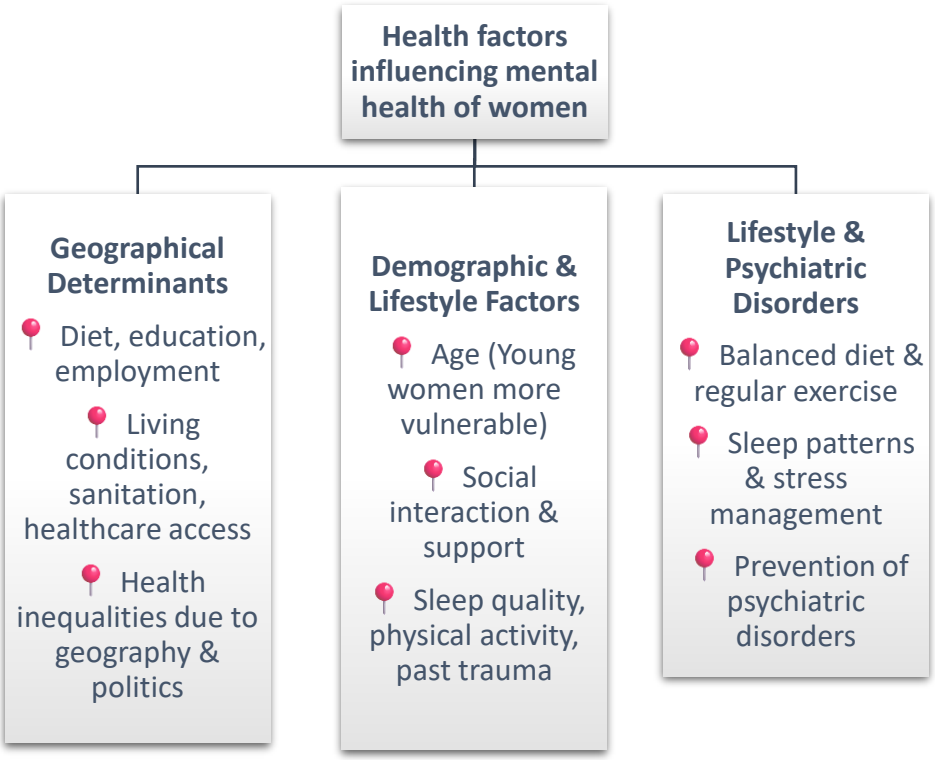
Health-related factors are essential in determining mental health outcomes for women, as they intersect with various demographic and environmental influences. Figure 6 illustrates the key health determinants impacting women's mental well-being. A 2023 study on Geographical Determinants of Mental Health emphasized that aspects such as nutrition, education, employment, workplace conditions, living environment, access to clean water, sanitation, and healthcare services play a significant role in shaping mental health. These factors are, in turn, shaped by geographical elements that impact social structures and economic opportunities, leading to disparities in mental health outcomes. The study also emphasized that health inequalities are embedded in geographical and political ideologies, affecting women's mental health at both individual and community levels.[70]

A 2023 large-scale Internet-based survey conducted across 32 countries identified demographic and lifestyle factors as strong indicators of mental health status. The study highlighted age, frequency of social interactions, sleep quality, physical activity, and traumatic experiences as the most influential determinants of mental well-being. Among these, age emerged as the most significant predictor, followed by social interactions and lifestyle habits, which directly affected mental health scores. The findings revealed that younger women were more susceptible to mental health challenges, emphasizing the crucial role of age-related health determinants in understanding variations in mental well-being.[71]

A review on lifestyle factors and psychiatric diseases highlighted the strong association between diet, physical activity, sleep patterns, and mental health outcomes. Historically, adopting healthy habits such as regular exercise, balanced nutrition, and adequate rest has been linked to improved mental well-

being, even before their scientific basis was fully understood. The study reaffirmed the critical role of lifestyle modifications in reducing psychiatric morbidity and mortality, further emphasizing the connection between health behaviours and mental wellness. These findings reinforce the notion that maintaining a healthy lifestyle plays a significant role in preventing and managing psychiatric disorders, particularly among women.[72]

FIG.NO:7 - Key Health Factors Influencing Mental Health of Women

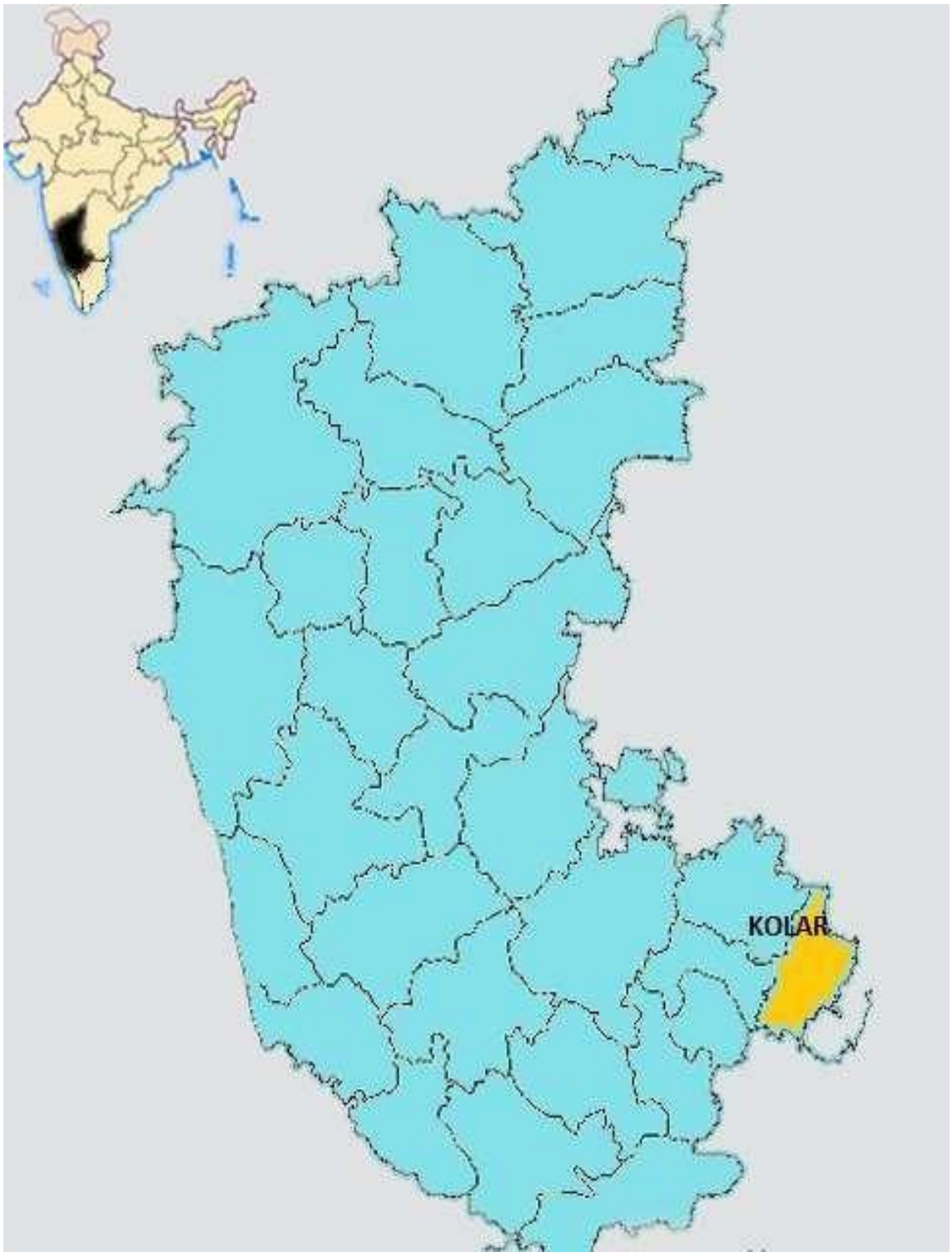


MATERIALS AND METHODS

5.MATERIALS AND METHODS:

•Topography of Kolar district

FIG.NO:8- Map of Karnataka showing Kolar District



STUDY SETTINGS

This study was undertaken in rural part of Kolar District. It is located within the southern part of Karnataka state, located about 60 kilometers from Bengaluru. With 15,36,401 people living there, it has a population of roughly 4012 square kilometers, of which 776,396 are men and 760,005 are women.[73]

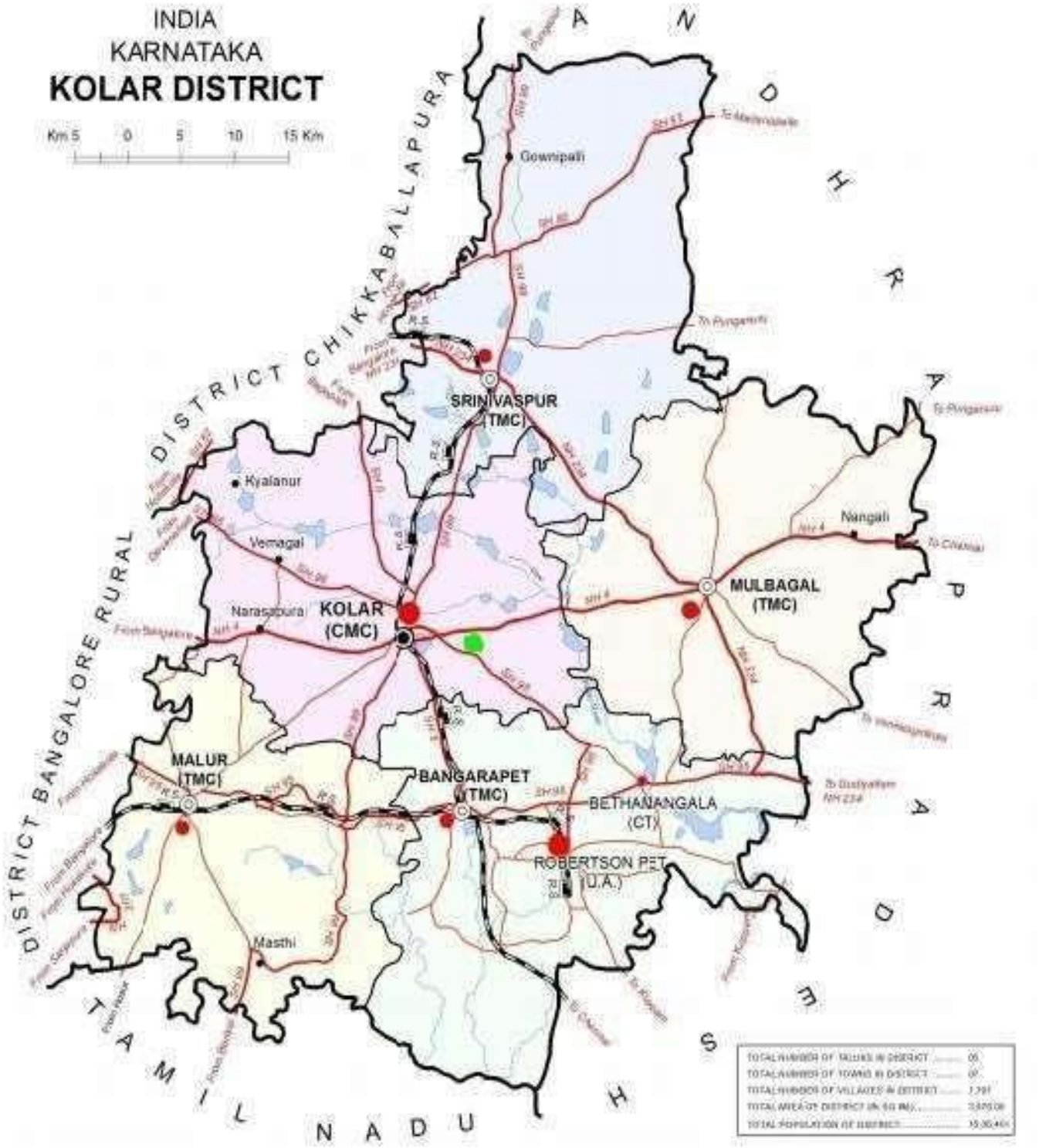
The district includes six Taluks namely Mulbagal, Kolar, Malur, Srinivaspura, Bangarapet and Kolar Gold Fields (KGF). The effective literacy of the district was 75.99% and female literacy of 55.46%.[73]

Kolar district comprises a total of 331 villages. According to the 2011 Census, 31.25% of the district's population resides in urban areas, with a total urban population of 480,073, including 240,965 males and 239,108 females. The sex ratio in urban regions of Kolar district is 992 females per 1,000 males. In comparison, 68.75% of the population resides in rural areas, with a total rural population of 1,056,328, including 535,431 males and 520,897 females. The sex ratio in the rural regions of Kolar district stands at 973 females for every 1,000 males.[73]

Most of the people speak Kannada and a notable proportion also speak Telugu in the regions bordered by Andhra Pradesh and Tamil in KGF. This study was carried out among married women within the field practice area of the Department of Community Medicine at the Rural Health Training Centre (RHTC) in Devarayasamudra, Mulbagal Taluk, Kolar District.

The rural field practice area has a population of 11636 which is spread over 20 villages according to the 2020 (November) Community Need Assessment (CNA) survey of RHTC.

FIG.NO:9- Map of Kolar district with taluks



Study design

Community based Cross-sectional study

Study setting/Study population

Married women in the field practice area of the Department of Community Medicine at the Rural Health Training Centre (RHTC) in Devarayasamudra, Mulbagal Taluk, Kolar District.

Study duration

July 2023 – December 2024

Inclusion criteria:

All married women aged 18 years to 60 years who can understand the questionnaire and comprehend in local language.

Exclusion criteria

- The women not available during house visits.
- Any women with severe physical inability or any other chronic illness.

Sample Size:

Calculation:

Zα at 95% confidence interval is 1.96

Prevalence P=18%

q = (1-p) q = 82

d = 3

$$\frac{Z_{\alpha}^{2}(p)\,(1-p)}{d^{2}}$$

$$= \frac{(1.96)^{2}\,(18)\,(82)}{(3)^{2}}$$

Sample size = 630

S =Sample size, P=Prevalence, d=absolute error, Zα=confidence interval

Sample size estimated based on occurrence of depression among married women in the research by Vikram Aditya et al in 2020 reported the prevalence of 18% depression among married woman considering an absolute error of 3% with 95% confidence interval.[74]

The estimated sample size consisted of 630 married women between the ages of 18 and 60 years.

Sampling Method:

Sampling:

The study was conducted in the Rural Field Practice Area of the Rural Health Training Centre (RHTC) in Devarayasamudra, encompassing 20 villages with a total population of 11,638. These villages fall under three major sub-centres: Devarayasamudra, Keeluholalli, and Kothamangala. The focus group for this study was married women aged 18 to 60 years living in these villages.

Step 1: Village Selection Using Simple Random Sampling

In the first stage, we considered each of the 20 villages as an individual cluster. Then, we used simple random sampling to select 8 villages out of the 20. This means that all 20 villages had an equal chance of being picked, and the selection was done purely by chance that is by using a random number generator.

The 8 villages that were randomly selected for the study were:

- Devarayasamudra
- Keeluholalli
- Kothamangala
- V. Guthahalli
- Malapanahalli
- Bheemapura
- Kemapura
- Kammadati

Step 2: Distributing the Sample Using Probability Proportionate to Size (PPS)

After choosing the 8 villages, we had to decide how many women to survey in each village, out of the total sample size of 630 participants.

Since the number of married women is different in each village, we didn't divide the 630 equally. Instead, we distributed the sample based on the population size of married women in each village so that larger villages contributed more participants and smaller ones contributed fewer. This method helps ensure that the sample better reflects the actual population distribution.

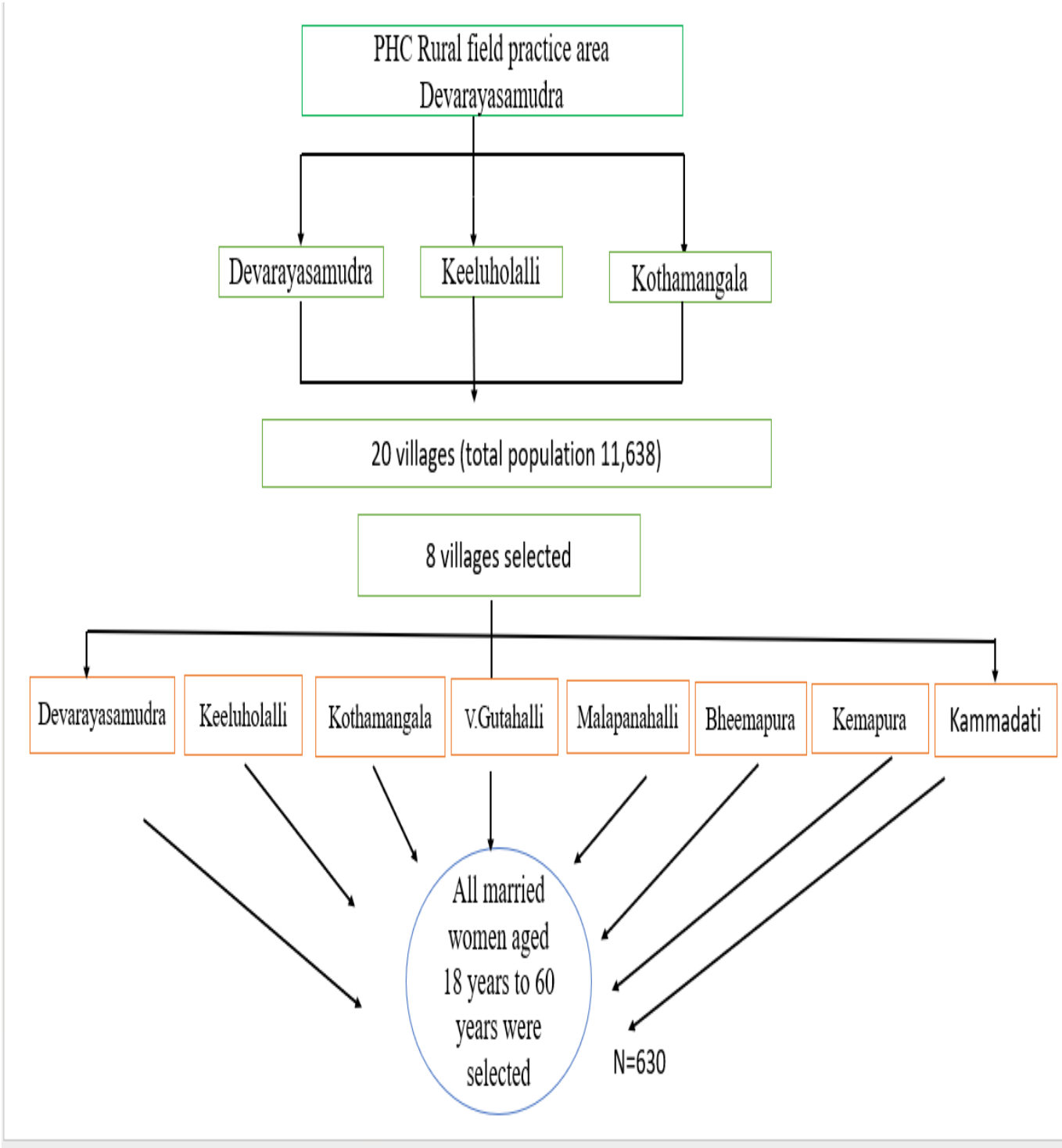
Step 3: Choosing Women Within Each Village

Once we knew how many women we needed to survey in each village, we then prepared a list of all married women aged 18 to 60 years in that village. These lists were obtained from local health records and with help from ASHA workers and Anganwadi workers.

From these lists, we once again used simple random sampling to choose the required number of women. This means every eligible woman in the village had an equal chance of being selected for the study ensuring fairness and reducing any selection bias.

All participants provided written informed consent. Socio-demographic data was collected using a pre-tested, semi-structured, self-administered questionnaire, while the DASS-42 questionnaire was utilized to assess depression, anxiety, and stress levels.[75]

FIG.NO:10- Flow diagram of Sampling



Study Tool:

Study Tool: DASS-42

To evaluate depression, anxiety, and stress among married women in rural Kolar, the Depression, Anxiety, and Stress Scale-42 (DASS-42) served as the primary assessment tool. The DASS-42 is a widely recognized self-report instrument designed to gauge the severity of symptoms related to these conditions. This scale comprises 42 items, categorized into three distinct subscales: depression, anxiety, and stress. Each subscale includes 14 items, with responses measured on a 4-point Likert scale which is ranging from 0 (Did not apply to me at all) to 3 (Applied to me very much, or most of the time).

Scoring and Interpretation of DASS-42

The Depression, Anxiety, and Stress Scale - 42 (DASS-42) is a self-report instrument designed to evaluate the severity of symptoms related to depression, anxiety, and stress. It consists of 42 items divided into three subscales:

- Depression (question 3, question 6, question 9, question 12, question 15, question 18, question 21, question 24, question 27, question 30, question 33, question 36, question 39, question 42) – Assesses feelings of hopelessness, lack of motivation, and sadness.
- Anxiety (question 2, question 5, question 8, question 11, question 14, question 17, question 20, question 23, question 26, question 29, question 32, question 35, question 38, question 41) – Measures symptoms of fear, nervousness, and physiological arousal.
- Stress (question 1, question 4, question 7, question 10, question 13, question 16, question 19, question 22, question 25, question 28, question 31, question 34, question 37, question 40) – Evaluates tension, irritability, and difficulty in relaxation.

Scoring Method:

- Each question is assessed using a 4-level Likert scale:
- 0 = Was not relevant to me at all
- 1 = Was relevant to me to some extent, or occasionally
- 2 = Was relevant to me to a significant extent, or frequently
- 3 = Was highly relevant to me, or almost always

Total Score Calculation:

- The total of the 14 items within each subscale represents the raw score for that particular subscale.
- In the case of DASS-42, which is the complete version of the scale, the final score for each subscale remains the same as the raw score. This differs from DASS-21, where the score is doubled (multiplied by 2).

Interpretation Using Cut-Off Scores:

- The obtained scores are compared against the DASS-42 severity classification (as given in the table below).

Table A Scoring Method for DASS – 42

Response	**Score**
Was not relevant to me at all	0
Was relevant to me to some extent, or occasionally	1
Was relevant to me to a significant extent, or frequently	2
Was highly relevant to me, or almost always	3

Table B Interpretation of DASS-42 scores

Severity Level	Score (Depression)	Score (Anxiety)	Score (stress)
Normal	0 – 9	0 – 7	0 – 14
Mild	10 – 13	8 – 9	15 – 18
Moderate	14 – 20	10 – 14	19 – 25
Severe	21 – 27	15 – 19	26 – 33
Extremely Severe	28+	20+	34+

The DASS-42 has undergone extensive validation across diverse populations, demonstrating strong reliability and construct validity. It has been widely utilized in both clinical and non-clinical settings to evaluate individuals' psychological well-being. This instrument provides a thorough understanding of emotional distress, particularly in groups that face a heightened risk of mental health challenges, such as married women in rural areas.

The responses to the DASS-42 were scored according to the standard procedure, with higher scores on each subscale indicating greater severity of symptoms. The data collected from the questionnaire was analysed to identify patterns and correlations between emotional distress and various demographic and socio-economic factors. This approach provides insights into the potential factors contributing to these psychological conditions.[75]

Pilot Study

Before starting the actual research, a pilot study was done to determine the practicality and validity of the study tools and even methodology. In this pilot study, there were 40 married women from selected villages of rural Kolar

district (the 40 participants were selected randomly). Data were collected and responses were analysed post hoc, as needed to adjust the questionnaire and to improve the clarity of survey items. Findings from the pilot study validated the research tools used in the main study, and informed necessary modifications.

Statistical analysis

Following the required data cleansing and validation, the coded and entered data was then moved to IBM SPSS Statistics software, version 22.0 for statistical analysis. Factors including age, socioeconomic position and education level were summarized using summary statistics, including average ± standard deviation and proportion distributions.

The distribution of important research variables was graphically represented using tools like pie diagrams and bar charts. The Chi-Squared analysis was used to assess the relationship between the intensity of depression, anxiety, stress and categorical independent elements (such as religious beliefs, educational attainment, and socioeconomic status).

To ascertain the probability of psychological distress, including depression, anxiety, and stress based on a number of independent factors, bivariate logistic regression analysis was conducted. The Findings were expressed as unadjusted odds ratios (COR) with 95% confidence intervals (CI).
To evaluate the influence of each independent variable on depression, anxiety, and stress while considering relevant confounders, a multivariate logistic regression analysis was conducted. The relationships were quantified using adjusted odds ratios (AOR) with 95% confidence intervals (CIs). A 95% confidence interval that excluded the null value was deemed statistically significant for both crude and adjusted odds ratios, while a p value below 0.05 is considered statistically significant for Chi-Square test.

Ethical Considerations

The Ethics Board of Sri Devaraj Urs Academy of Higher Education and Research, Kolar, examined and authorized this study (No. DMC/KLR/IEC/12/2023-24). All participants was included in the study only after getting their consent along with that safety and welfare were guaranteed by the research's adherence to ethical standards, which include autonomy, secrecy, beneficence, and fairness.

Autonomy

- A comprehensive information sheet outlining the goals, methods, possible dangers, and advantages of the research was given to participants.
- Married women were allowed to offer their informed consent before to participating in the study, and participation was entirely optional.
- No repercussions or compulsion were applied to anyone who refused to participate.

Confidentiality

- A private, self-administered questionnaire was used to collect data.
- Anonymized data were safely kept in a secured department facility to avoid unwanted access, and personal identifiers were excluded from the dataset.
- Throughout the study, participants' anonymity was maintained by using their replies only for research.

Benevolence

- Participants who were discovered to exhibit signs of depression or other mental health issues were urged to seek medical attention and were given information about their condition.

- In order to increase mental health awareness and intervention techniques, the study sought to produce significant insights on the occurrence and determinants of depression in rural married women of kolar.
- The goal of the research design and methods was to minimize participant injury and maximize their benefits.

Justice

- A representative sample of married women from Kolar's rural districts was guaranteed by the fair and discrimination-free participant selection process.
- The study's conclusions were intended to inform focused initiatives for better mental health for all participants as well as the larger community.
- Every attempt was made to minimize any possible dangers or costs while guaranteeing an equitable distribution of the benefits of the study.

RESULTS

6.RESULTS

The Investigation was carried out among rural married females in Kolar district to determine the occurrence and various elements linked to depression, anxiety, and stress through the administration of the DASS-42 scale.

Married women in the Rural Health Training Centre (RHTC) Devarayasamudra, Mulbagal Taluk Kolar District, practical training area of the department of community medicine. Various variables related to the prevalence of depression, anxiety and stress were studied. The following findings were made:

TABLE - 1

Age-wise distribution of female study participants (n=630)

Stage of Life[76]	Age in years	Frequency (%)
Early Adulthood	18 - 24	36(5.7)
Early Reproductive Age	25 - 34	174(27.6)
Late Reproductive Age	35 - 44	143(22.7)
Perimenopausal Phase	45 - 54	172(27.3)
Postmenopausal Phase	55 and above	105(16.7)
Total		630(100.0)

(Figures in the parentheses are percentages)

From the above table, it is observed that among the 630 rural married women, majority (27.6%), were aged 25-34 years, followed by 27.3% in 45-54 years, and 22.7% in the age group of 35-44 and there were only 5.7% participants in the age group of 18-24. (Table-1).

TABLE - 2

Educational background of study participants (n=630)

Literacy status	Frequency (%)
Professional	13(2.1)
Graduate	108(17.1)
Intermediate	89(14.1)
High School	139(22.1)
Primary School	153(24.3)
Illiterate	127(20.2)
Total	630(100.0)

(Figures in the parentheses are percentages)

From the above table, it is observed that among the 630 rural married women, the majority (24.3%) had completed primary school education, followed by 22.1% who had completed high school. Around 20.2% were illiterate, while 17.1% had attained graduate-level education. Intermediate-level education was reported by 14.1% of participants, and only 2.1% had pursued professional education. (Table-2)

TABLE - 3

Distribution of the study participants according to Occupation(n=630)

Occupation[77]	Frequency (%)
Professional	27(4.3)
Semi Professional	65(10.3)
Clerical, Shop Owner, Farmer	102(16.2)
Skilled worker	46(7.3)
Semi-skilled worker	59(9.4)
Unskilled worker	87(13.8)
Unemployed	244(38.7)
Total	630 (100.0)

(Figures in the parentheses are percentages)

From the above table, it is observed that among the 630 rural married women, the majority (38.7%) were unemployed, followed by 16.2% engaged in clerical work, shop ownership, or farming. About 13.8% were unskilled workers, 10.3% were semi-professionals, and 9.4% were semi-skilled workers. Skilled workers comprised 7.3% of the participants, while only 4.3% were professionals. (Table-3).

TABLE - 4

Distribution of the study participants according to comorbidities(n=630)

Comorbidities	Frequency (%)
Nil	596(94.6)
Type 2 Diabetes Mellitus	17(2.7)
Hypertension	6(1.0)
Both	11(1.7)
Total	630 (100.0)

(Figures in parentheses are percentage)

From the above table, it is observed that among the 630 rural married women, the majority (94.6%) had no comorbidities. Diabetes was reported in 2.7% of participants, while 1.0% had hypertension. Additionally, 1.7% of participants had both diabetes and hypertension. (Table-4).

TABLE - 5

Distribution of the study participants according to Type of family(n=630)

Type of family	Frequency (%)
Joint	274(43.5)
Nuclear	308(48.9)
Three generation	48(7.6)
Total	630 (100.0)

(Figures in parentheses are percentage)

From the above table, it is observed that among the 630 rural married women, the majority (48.9%) belonged to nuclear families, followed by 43.5% in joint families. A smaller proportion (7.6%) lived in three-generation families. (Table-5).

TABLE - 6

Distribution of the study participants according to Socioeconomic class (According to modified BG Prasad classification 2024[78]) (n=630)

Socioeconomic class	Frequency (%)
Upper	3(0.5)
Upper middle	32(5.1)
Middle	165(26.2)
Lower middle	267(42.4)
Lower	163(25.9)
Total	630 (100.0)

(Figures in parentheses are percentage)

From the above table, it is observed that among the 630 rural married women, the majority (42.4%) belonged to the lower-middle socioeconomic class, followed by 26.2% in the middle class and 25.9% in the lower class. A smaller proportion belonged to the upper-middle (5.1%) and upper (0.5%) socioeconomic classes. (Table-6).

TABLE – 7

Distribution of the study participants according to Number of family members (n=630)

Number of family members[79]	Frequency (%)
Small	274(43.5)
Medium	308(48.9)
Large	48(7.6)
Total	630 (100.0)

(Figures in parentheses are percentage)

From the above table, it is observed that among the 630 rural married women, the majority (48.9%) belonged to medium-sized families, followed by 43.5% in small families. A smaller proportion (7.6%) belonged to large families. (Table-7).

TABLE – 8

Distribution of the study participants according to Personal Habits(n=630)

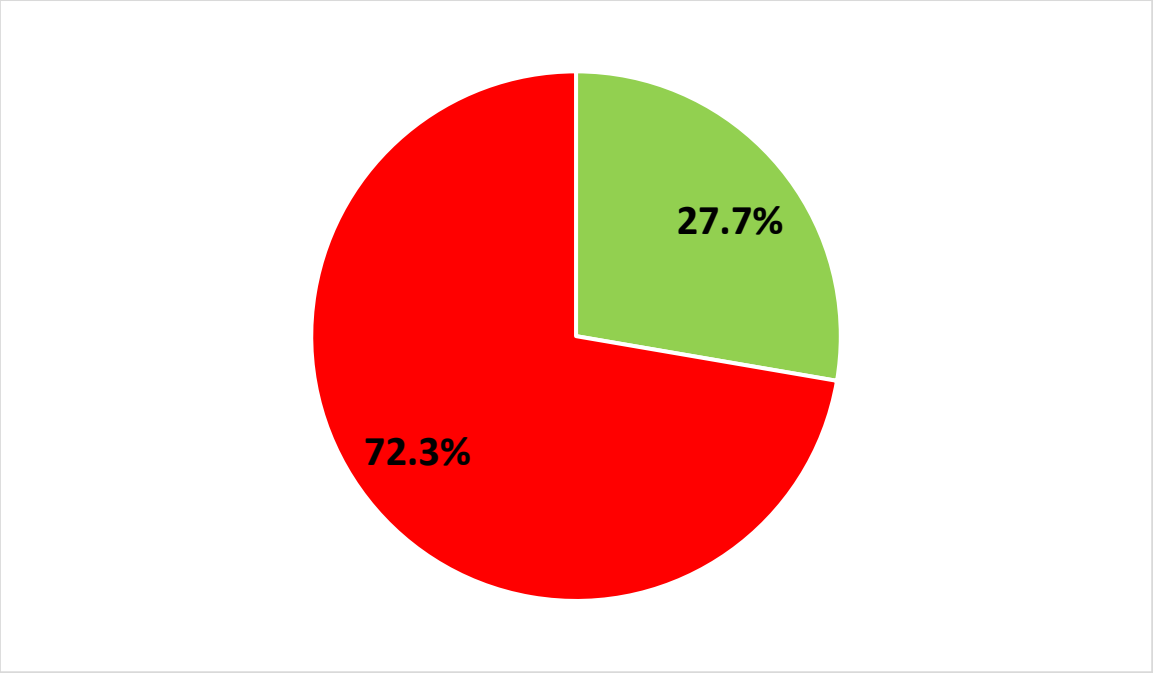
Personal Habits	Frequency (%)
Nil	464(73.7)
Smoking Cigarettes, Beedis	4(0.6)
Tobacco chewing	162(25.7)
Total	630 (100.0)

(Figures in parentheses are percentage)

From the above table, it is observed that among the 630 rural married women, the majority (73.7%) reported having no personal habits related to smoking or tobacco use. However, 25.7% of participants reported chewing tobacco, while a very small proportion (0.6%) reported smoking. (Table-8).

The Prevalence of Depression in Married Women in Rural Areas of Kolar(n=630)

FIG NO - 11



(Figures in parentheses are percentage)

Here is the pie chart representing the prevalence of normal and depression among married women in rural Kolar.

- Green (27.7%) represents women with normal mental health.
- Red (72.3%) represents women experiencing depression (including mild, moderate, severe, and extremely severe cases).

TABLE – 9

The Prevalence of Depression in Married Women in Rural Kolar(n=630)

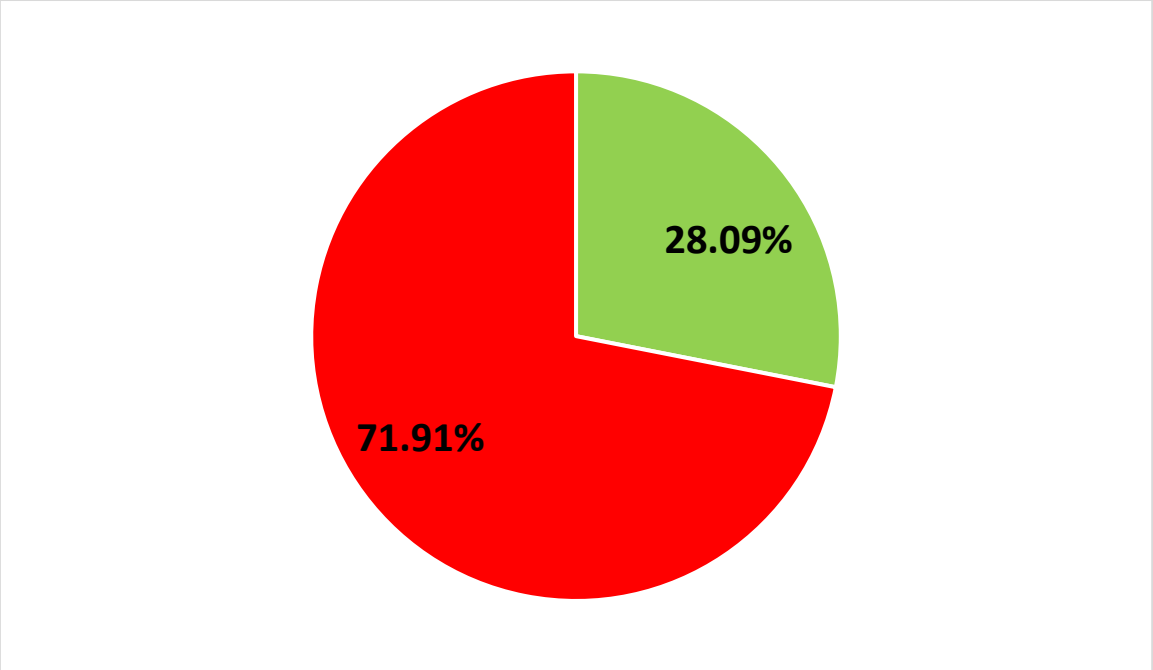
S.no	Depression	Frequency (%)
1	Normal	175(27.7)
2	Mild	82(13.02)
3	Moderate	160(25.4)
4	Severe	173(27.46)
5	Extremely severe	40(6.35)

(Figures in parentheses are percentage)

The table presents the prevalence of depression among married women in rural areas of Kolar (n=630). The findings indicate that 27.7% (175) of women are in the normal category, meaning they do not exhibit symptoms of depression. However, 72.3% (455) of women experience some level of depression, ranging from mild to extremely severe. Specifically, 13.02% (82) have mild depression, 25.4% (160) have moderate depression, 27.46% (173) suffer from severe depression, and 6.35% (40) are categorized under extremely severe depression.

The Prevalence of Anxiety in Among Married Women in Rural Areas of Kolar(n=630)

FIG NO - 12



(Figures in parentheses are percentage)

Here is the pie chart representing the prevalence of normal and anxiety among married women in rural Kolar.

- Green (28.09%) represents women with normal mental health.
- Red (71.91%) represents women experiencing anxiety (including mild, moderate, severe, and extremely severe cases).

TABLE – 10

Prevalence of Anxiety Among Married Women in Rural Kolar(n=630)

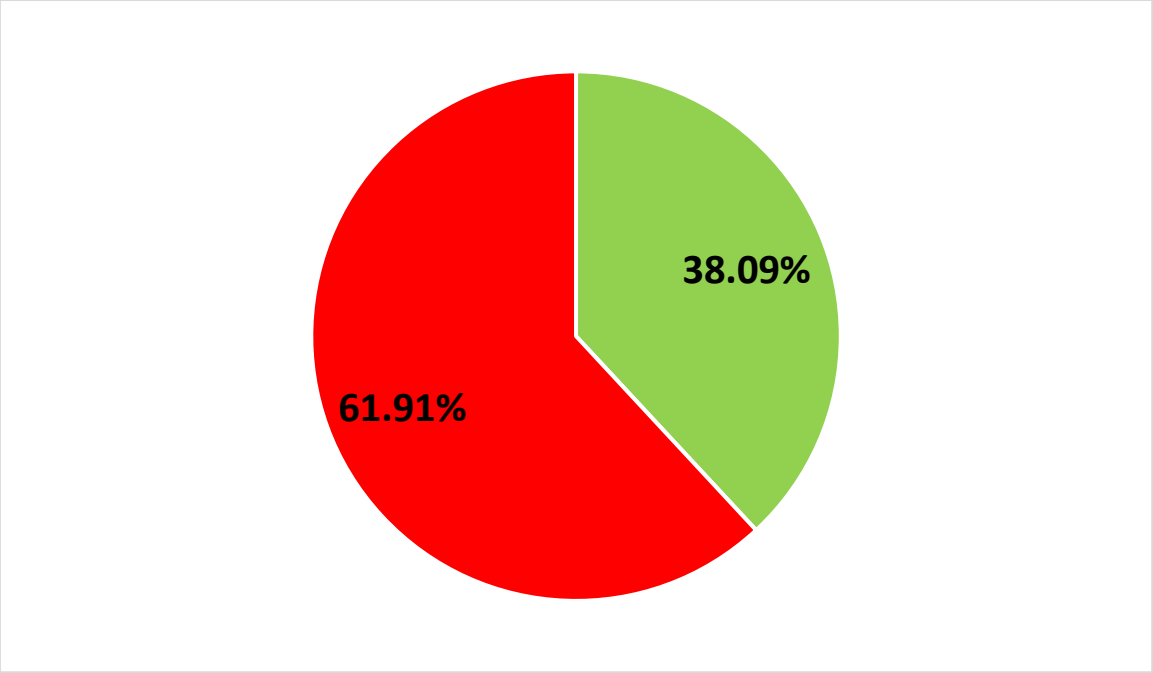
S.no	Anxiety	Percentage
1	Normal	177(28.09)
2	Mild	24(3.8)
3	Moderate	79(12.53)
4	Severe	113(17.93)
5	Extremely severe	237(37.61)

(Figures in parentheses are percentage)

The table presents the prevalence of anxiety among married women in rural areas of Kolar (n=630). The findings indicate that 28.09% (177) of women are in the normal category, meaning they do not exhibit symptoms of anxiety. However, 71.91% (453) of women experience some level of anxiety, ranging from mild to extremely severe. Specifically, 3.8% (24) have mild anxiety, 12.53% (79) have moderate anxiety, 17.93% (113) suffer from severe anxiety, and 37.61% (237) are categorized under extremely severe anxiety.

The Prevalence of Stress in Married Women in Rural Areas of Kolar(n=630)

FIG NO - 13



(Figures in parentheses are percentage)

Here is the pie chart representing the proportion of married women in rural Kolar experiencing stress and maintaining normal psychological well-being.

- Green (38.09%) represents women with normal mental health.
- Red (61.91%) represents women experiencing stress (including mild, moderate, severe, and extremely severe cases).

TABLE – 11

The Prevalence of Stress in Married Women in Rural Kolar(n=630)

S.no	Stress	Percentage
1	Normal	240(38.09)
2	Mild	77(12.22)
3	Moderate	241(38.25)
4	Severe	62(9.84)
5	Extremely severe	10(1.58)

(Figures in parentheses are percentage)

The table presents the prevalence of stress among married women in rural areas of Kolar (n=630). The findings indicate that 38.09% (240) of women are in the normal category, meaning they do not exhibit symptoms of stress. However, 71.91% (390) of women experience some level of stress, ranging from mild to extremely severe. Specifically, 12.22% (77) have mild stress, 38.25% (241) have moderate stress, 9.84% (62) suffer from severe stress, and 1.58% (10) are categorized under extremely severe stress.

TABLE - 12

Association between Age and depression status of rural married women(n=630)

Stage of Life (Age in years)	Normal	Mild	Moderate	Severe	Extremely Severe	Total	Chi-square value (p value, df)
Early Adulthood (18 – 24)	10(27.8)	1(2.8)	11(30.6)	9(25)	5(13.9)	36(100)	$\chi 2$=34.817 p=0.004, df=16
Early Reproductive Age (25 – 34)	53(30.5)	23(13.2)	42(24.1)	38(21.8)	18(10.3)	174(100)	
Late Reproductive Age (35 – 44)	48(33.6)	19(13.3)	32(22.4)	39(27.3)	5(3.5)	143(100)	
Perimenopausal Phase (45 – 54)	39(22.7)	16(9.3)	50(29.1)	58(33.7)	9(5.2)	172(100)	
Postmenopausal Phase (55 and above)	25(23.8)	3(2.9)	33(31.4)	39(37.1)	5(4.8)	105(100)	
Total	175(27.8)	62(9.8)	168(26.7)	183(29)	42(6.7)	630(100)	

(Figures in parentheses are percentage)

From the above table, it is observed that depression severity increases with age among rural married women. Severe depression was reported by 25% of women in early adulthood (18–24 years) and 21.8% in early reproductive age (25–34 years). The highest proportion of severe depression was seen in perimenopausal (33.7%) and postmenopausal (37.1%) women. The chi-square test ($\chi^2 = 34.817$, $p = 0.004$, $df = 16$) shows a notable correlation between age and depressive symptoms.

TABLE - 13

Association between Age and Anxiety status of rural married women(n=630)

Stage of Life (Age in years)	Normal	Mild	Moderate	Severe	Extremely Severe	Total	Chi-square value (p value, df)
Early Adulthood (18 – 24)	9(25)	2(5.6)	0(0.0)	8(22.2)	17(47.2)	36(100)	χ^2=36.015 p=0.003, df=16
Early Reproductive Age (25 – 34)	51(29.3.)	11(6.3)	27(15.5)	32(18.4)	53(30.5)	174(100)	
Late Reproductive Age (35 – 44)	51(35.7)	5(3.5)	26(18.2)	16(11.2)	45(31.5)	143(100)	
Perimenopausal Phase (45 – 54)	42(24.4)	4(2.3)	13(7.6)	37(21.5)	76(44.2)	172(100)	
Postmenopausal Phase (55 and above)	24(22.9)	2(1.9)	13(12.4)	20(19.0)	46(43.8)	105(100)	
Total	175(27.8)	62(9.8)	168(26.7)	183(29)	42(6.7)	630(100)	

(Figures in parentheses are percentage)

From the above table, it is observed that anxiety severity increases with age among rural married women. Extremely severe anxiety was reported by 47.2% of women in early adulthood (18–24 years) and 30.5% in early reproductive age (25–34 years). The highest proportion of extremely severe anxiety was seen in perimenopausal (44.2%) and postmenopausal (43.8%) women. The chi-square test ($\chi^2 = 36.015$, $p = 0.003$, $df = 16$) indicates a statistically significant association between age and anxiety.

TABLE - 14

Association between Age and Stress status of rural married women(n=630)

Stage of Life (Age in years)	Normal	Mild	Moderate	Severe	Total	Chi-square value (p value, df)
Early Adulthood (18 – 24)	14(38.9)	5(13.9)	14(38.9)	3(8.3)	36(100)	χ^2=10.953 p=0.533, df=12
Early Reproductive Age (25 – 34)	75(43.1)	22(12.6)	60(34.5)	17(9.8)	174(100)	
Late Reproductive Age (35 – 44)	65(45.5)	13(9.1)	54(37.8)	11(7.7)	143(100)	
Perimenopausal Phase (45 – 54)	59(34.3)	25(14.5)	71(41.3)	17(9.9)	172(100)	
Postmenopausal Phase (55 and above)	35(33.3)	12(11.4)	42(40)	16(15.2)	105(100)	
Total	248(39.4)	77(12.2)	241(38.3)	64(10.2)	630(100)	

(Figures in parentheses are percentage)

Table 14 presents the association between age and stress status among rural married women. Moderate stress was the most prevalent across all age groups, followed by normal stress. In early adulthood (18-24 years), normal and moderate stress were equally distributed (38.9%), while severe stress was lowest (8.3%). The early reproductive age (25-34 years) had 43.1% normal and 34.5% moderate stress. In the late reproductive (35-44 years) and perimenopausal (45-54 years) phases, moderate stress remained high (37.8% and 41.3%, respectively). The postmenopausal phase (55+ years) had the highest severe stress (15.2%), with 40% experiencing moderate stress. The chi-square test (χ^2=10.953, p=0.533, df=12) indicates no statistically significant association between age and stress status.

TABLE – 15

Association between Education and Depression status of rural married women(n=630)

Education	Normal	Mild	Moderate	Severe	Extremely Severe	Total	Chi-square value (p value, df)
Professional	4(30.8)	1(7.7)	5(38.5)	3(23.1)	0(0.0)	13(100)	χ^2=92.046 p=0.001, df=20
Graduate	47(43.5)	13(12.0)	24(22.2)	18(16.7)	6(5.6)	108(100)	
Intermediate	45(50.6)	7(7.9)	8(9.0)	18(20.2)	11(12.4)	89(100)	
High School	32(23.0)	18(12.9)	45(32.4)	37(26.6)	7(5.0)	139(100)	
Primary School	28(18.2)	14(9.1)	51(33.1)	58(37.7)	3(1.9)	154(100)	
Illiterate	19(15.0)	9(7.1)	35(27.6)	49(38.6)	15(11.8)	127(100)	
Total	175(27.8)	62(9.8)	168(26.7)	183(29)	42(6.7)	630(100)	

(Figures in parentheses are percentage)

From the above table, it is observed that depression severity is higher among less-educated rural married women. Severe depression was reported by 37.7% of primary school-educated women and 38.6% of illiterate women, while extremely severe depression was highest among illiterate women (11.8%). In contrast, professionally educated women had the lowest severe (23.1%) and no extremely severe depression (0.0%). The chi-square test ($\chi^2 = 92.046$, $p = 0.001$, $df = 20$) shows a statistically significant association between education and depression.

TABLE – 16

Association between Education and Anxiety status of rural married women(n=630)

Education	Normal	Mild	Moderate	Severe	Extremely Severe	Total	Chi-square value (p value, df)
Professional	5(38.5)	0(0.0)	1(7.7)	2(15.4)	5(38.5)	13(100)	$\chi 2$=68.48 p=0.001, df=20
Graduate	47(43.5)	4(3.7)	11(10.2)	15(13.9)	31(28.7)	108(100)	
Intermediate	45(50.6)	5(5.6)	4(4.5)	12(13.5)	23(25.8)	89(100)	
High School	32(23.0)	6(4.3)	28(20.1)	23(16.5)	50(36.0)	139(100)	
Primary School	27(17.5)	5(3.2)	22(14.3)	33(21.4)	67(43.5)	154(100)	
Illiterate	21(16.5)	4(3.1)	13(10.2)	28(22)	61(48)	127(100)	
Total	177(28.1)	24(3.8)	79(12.5)	113(17.9)	237(37.6)	630(100)	

(Figures in parentheses are percentage)

From the above table, it is observed that anxiety severity is higher among less-educated rural married women. Extremely severe anxiety was reported by 48% of illiterate women and 43.5% of primary school-educated women, while it was lowest among professionally educated women (38.5%). Severe anxiety was also more common in illiterate (22%) and primary school-educated women (21.4%). In contrast, professionally educated women had the lowest severe (15.4%) and extremely severe anxiety (38.5%). The chi-square test ($\chi^2 = 68.48$, $p = 0.00$, $df = 20$) shows a statistically significant association between education and anxiety.

TABLE – 17

Association between Education and stress status of rural married women(n=630)

Education	Normal	Mild	Moderate	Severe	Total	Chi-square value (p value, df)
Professional	5(38.5)	1(7.7)	6(46.2)	1(7.7)	13(100)	$\chi 2$=86.022 p=0.001, df=15
Graduate	60(55.6)	10(9.3)	32(29.6)	6(5.6)	108(100)	
Intermediate	59(66.3))	2(2.2)	21(23.6)	7(7.9)	89(100)	
High School	42(30.2)	23(16.5)	64(46)	10(7.2)	139(100)	
Primary School	47(30.5)	21(13.6)	75(48.7)	11(7.1)	154(100)	
Illiterate	35(27.6)	20(15.7)	43(33.9)	29(22.8)	127(100)	
Total	248(39.4)	77(12.2)	241(38.3)	64(10.2)	630(100)	

(Figures in parentheses are percentage)

Table 17 presents the association between education and stress status among rural married women. Moderate stress was the most common across all education levels except for intermediate and graduate groups, where normal stress was higher (66.3% and 55.6%, respectively). Among illiterate women, severe stress was highest (22.8%), while primary school (48.7%) and high school (46%) participants reported the highest moderate stress. Professional education had the lowest severe stress (7.7%). The chi-square test (χ^2=86.022, p=0.001, df=15) shows a statistically significant association between education and stress status.

TABLE – 18

Association between Occupation and depression status of rural married women(n=630)

Occupation	Normal	Mild	Moderate	Severe	Extremely Severe	Total	Chi-square value (p value, df)
Professional	3(11.1)	3(11.1)	10(37)	8(29.6)	3(11.1)	27(100)	χ^2=53.539 p=0.001, df=24
Semi Professional	19(29.9)	6(9.2)	12(18.5)	17(26.2)	11(16.9)	65(100)	
Clerical, Shop Owner, Farmer	23(22.5)	7(6.9)	28(27.5)	43(42.2)	1(1)	102(100)	
Skilled worker	16(34.8)	3(6.5)	12(26.1)	13(28.3)	2(4.3)	46(100)	
Semi-skilled worker	13(22)	11(18.6)	22(37.3)	12(20.3)	1(1.7)	59(100)	
Unskilled worker	21(24.1)	6(6.9)	21(24.1)	34(39.1)	5(5.7)	87(100)	
Unemployed	80(32.8)	26(10.7)	63(25.8)	56(23)	19(7.8)	244(100)	
Total	175(27.8)	62(9.8)	168(26.7)	183(29)	42(6.7)	630(100)	

(Figures in parentheses are percentage)

From the above table, it is observed that depression severity is higher among unemployed and unskilled rural married women. Extremely severe depression was reported by 7.8% of unemployed women and 5.7% of unskilled workers, while it was lowest among skilled workers (2.4%) and clerical/shop owners (1%). Severe depression was also more common in unemployed (23%) and clerical/shop owner/farmer women (42.2%). In contrast, professionally employed women had the lowest severe (29.6%) and extremely severe depression (11.1%). The chi-square test ($\chi^2 = 53.539$, $p = 0.001$, $df = 24$) shows a statistically significant association between occupation and depression.

TABLE – 19

Association between Occupation and anxiety status of rural married women(n=630)

Occupation	Normal	Mild	Moderate	Severe	Extremel Severe	Total	Chi-square value (p value, df)
Professional	4(14.8)	0(0)	1(3.7)	9(33.3)	13(48.1)	27(100)	χ^2=33.745 p=0.089, df=24
Semi Professional	18(27.7)	1(1.5)	4(6.2)	10(15.4)	32(49.2)	65(100)	
Clerical, Shop Owner, Farmer	22(21.6)	6(5.9)	16(15.7)	18(17.6)	40(39.2)	102(100)	
Skilled worker	14(30.4)	3(6.5)	6(13)	9(19.6)	14(30.4)	46(100)	
Semi-skilled worker	14(23.7)	3(5.1)	10(16.9)	13(22)	19(32.2)	59(100)	
Unskilled worker	22(25.3)	7(8)	11(12.6)	13(14.9)	34(39.1)	87(100)	
Unemployed	83(34)	4(1.6)	31(12.7)	41(16.8)	85(34.8)	244(100)	
Total	177(28.1)	24(3.8)	179(12.5)	113(17.9	237(37.6	630(100)	

(Figures in parentheses are percentage)

The table shows that unemployed and unskilled women have the highest levels of severe and extremely severe anxiety (16.8% and 34.8% for unemployed; 14.9% and 39.1% for unskilled workers). Professionals had the highest extremely severe anxiety (48.1%). The chi-square test ($\chi^2 = 33.745$, $p = 0.089$, $df = 24$) shows no significant association between occupation and anxiety, as the p-value is >0.05.

TABLE – 20

Association between Occupation and stress status of rural married women(n=630)

Occupation	Normal	Mild	Moderate	Severe	Total	Chi-square value (p value, df)
Professional	5(18.5)	2(7.4)	16(59.3)	4(14.8)	27(100)	$\chi 2$=28.163 p=0.060, df=18
Semi Professional	31(47.7)	4(6.2)	26 (40)	4(6.2)	65(100)	
Clerical, Shop Owner, Farmer	32(31.4)	17(16.7)	42(41.2)	11(10.8)	102(100)	
Skilled worker	20(43.5)	5(10.9)	18(39.1)	3(6.5)	46(100)	
Semi-skilled worker	24(40.7)	5(8.5)	27(45.8)	3(5.1)	59(100)	
Unskilled worker	31(35.6)	14(16.1)	36(41.4)	6(6.9)	87(100)	
Unemployed	105(43)	30(12.3)	76(31.1)	33(13.5)	244(100)	
Total	248(39.4)	77(12.2)	241(38.3)	64(10.2)	630(100)	

(Figures in parentheses are percentage)

The table shows the association between occupation and stress levels among rural married women. Unemployed women form the largest group (244), with 13.5% experiencing severe stress. Professional women report the highest percentage of moderate stress (59.3%) and 14.8% severe stress. Clerical workers, shop owners, farmers, and unskilled workers have around 41% in the moderate stress category. Semi-professionals and skilled workers experience lower severe stress levels (6.2% and 6.5%). The chi-square test ($\chi^2 = 28.163$, $p = 0.060$, $df = 18$) indicates no significant association between occupation and stress levels, as the p-value is >0.05.

TABLE – 21

Association between Comorbidities and depression status of rural married women(n=630)

Comorbidities	Normal	Mild	Moderate	Severe	Extremely Severe	Total	Chi-square value(p value, df)
Nil	168(28.2)	60(10.1)	153(25.7)	175(29.4)	40(6.7)	596(100)	χ^2=8.746 p=0.724, df=12
Diabetes	4(23.5)	1(5.9)	8(47.1)	3(17.6)	1(5.9)	17(100)	
Hypertension	1(16.7)	1(16.7)	3(50)	1(16.7)	0(0)	6(100)	
Both	2(18.2)	0(0)	4(36.4)	4(36.4)	1(9.1)	11(100)	
Total	175(27.8)	62(9.8)	168(26.7)	183(29)	42(6.7)	630(100)	

(Figures in parentheses are percentage)

The table shows that most women with depression had no comorbidities (94.6%), as they form the majority of the sample. Among those with comorbidities, moderate depression is highest in diabetic women (47.1%), while severe depression is highest in those with both diabetes and hypertension (36.4%). The chi-square test ($\chi^2 = 8.746$, $p = 0.724$, $df = 12$) indicates no significant association between comorbidities and depression, as the p-value is >0.05.

TABLE – 22

Association between Comorbidities and Anxiety status of rural married women(n=630)

Comorbidities	Normal	Mild	Moderate	Severe	Extremely Severe	Total	Chi-square value(p value, df)
Nil	172(28.9)	24(4)	71(11.9)	101(16.9)	228(38.3)	596(100)	$\chi 2$=19.654 p=0.074, df=12
Diabetes	4(23.5)	0(0)	4(23.5)	5(29.4)	4(23.5)	17(100)	
Hypertension	1(16.7)	0(0)	2(33.3)	3(50)	0(0)	6(100)	
Both	0(0)	0(0)	2(18.2)	4(36.4)	5(45.5)	11(100)	
Total	177(28.1)	24(3.8)	79(12.5)	113(17.9)	237(37.6)	630(100)	

(Figures in parentheses are percentage)

The table shows that most women with anxiety had no comorbidities (94.6%), as they form the majority of the sample. Among those with comorbidities, severe anxiety is highest in women with both diabetes and hypertension (36.4%), while extremely severe anxiety is most common in the same group (45.5%). The chi-square test (χ^2 = 19.654, p = 0.074, df = 12) suggests no significant association between comorbidities and anxiety, as the p-value is >0.05.

TABLE – 23

Association between Comorbidities and stress status of rural married women(n=630)

Comorbidities	Normal	Mild	Moderate	Severe	Total	Chi-square value (p value,df)
Nil	241(40.4)	71(11.9)	226(37.9)	58(9.7)	596(100)	χ^2=17.634 p=0.040, df=9
Diabetes	5(29.4)	3(17.6)	5(29.4)	4(23.5)	17(100)	
Hypertension	2(33.3)	2(33.3)	1(16.7)	1(16.7)	6(100)	
Both	0(0)	1(9.1)	9(81.8)	1(9.1)	11(100)	
Total	248(39.4)	77(12.2)	241(38.3)	64(10.2)	630(100)	

(Figures in parentheses are percentage)

The table shows the association between comorbidities and stress levels among rural married women. The majority (596) have no comorbidities, with 9.7% experiencing severe stress. Women with diabetes show a higher percentage of severe stress (23.5%). Those with hypertension report 16.7% severe stress, while women with both diabetes and hypertension have the highest moderate stress (81.8%) and 10.1% severe stress. The chi-square test ($\chi^2 = 17.634$, $p = 0.040$, $df = 9$) indicates a statistically significant association between comorbidities and stress levels, as the p-value is <0.05.

TABLE – 24

Association between Type of family and depression of rural married women(n=630)

Type of family (Based on family members)	Normal	Mild	Moderate	Severe	Extremely Severe	Total	Chi-square value (p value, df)
Joint	62(22.6)	27(9.9)	83(30.3)	77(28.1)	25(9.1)	274(100)	$\chi 2$=34.338 p=0.001, df=8
Nuclear	108(35.1)	32(10.4)	75(24.4)	82(26.6)	11(3.6)	308(100)	
Three generation	5(10.4)	3(6.3)	10(20.8)	24(50)	6(12.5)	48(100)	
Total	175(27.8)	62(9.8)	168(26.7)	183(29)	42(6.7)	630(100)	

(Figures in parentheses are percentage)

The table shows that severe and extremely severe depression are more common among women from joint (28.1% and 9.1%) and three-generation families (50% and 12.5%) compared to nuclear families (26.6% and 3.6%). Moderate depression is highest in three-generation families (20.8%). The chi-square test ($\chi^2 = 34.338$, $p = 0.001$, $df = 8$) indicates a statistically significant association between family type and depression.

TABLE – 25

Association between Type of family and anxiety status of rural married women(n=630)

Type of family (Based on family members)	Normal	Mild	Moderate	Severe	Extremely Severe	Total	Chi-square value (p value,df)
Joint	67(24.5)	5(1.8)	40(14.6)	53(19.3)	109(39.8)	274(100)	$\chi 2=27.939$ p=0.001, df=8
Nuclear	104(33.8)	17(5.5)	37(12)	51(16.6)	99(32.1)	308(100)	
Three generation	6(12.5)	2(4.2)	2(4.2)	9(18.8)	29(60.4)	48(100)	
Total	177(28.1)	24(3.8)	79(12.5)	113 (17.9)	237(37.6)	630(100)	

(Figures in parentheses are percentage)

The table shows that extremely severe anxiety is highest among women from large families (60.4%), followed by small (39.8%) and medium families (32.1%). Severe anxiety is also more common in large families (18.8%) compared to small (19.3%) and medium families (16.6%). The chi-square test ($\chi^2 = 27.939$, p = 0.001, df = 8) indicates a statistically significant association between family type and anxiety.

TABLE – 26

Association between Type of family and stress status of rural married women(n=630)

Type of family (Based on family members)	Normal	Mild	Moderate	Severe	Total	Chi-square value (p value, df)
Joint	103(37.6)	37(13.5)	106(38.7)	28(10.2)	274(100)	$\chi 2$=33.861 p=0.001, df=6
Nuclear	137(44.5)	35(11.4)	115(37.3)	21(6.8)	308(100)	
Three generation	8(16.7)	5(10.4)	20(41.7)	15(31.3)	48(100)	
Total	248(39.4)	77(12.2)	241(38.3)	64(10.2)	630(100)	

(Figures in parentheses are percentage)

The table indicates varying stress levels among rural married women based on family type. Severe stress is most common in three-generation families (31.3%), followed by joint (10.2%) and nuclear families (6.8%). Moderate stress is highest in three-generation families (41.7%), while extremely severe stress is rare, found only in joint families (0.7%). The association is statistically significant ($\chi^2 = 33.861$, $p = 0.001$, $df = 6$).

TABLE – 27

Association between Socio Economic Status and depression status of rural married women(n=630)

Socio Economic Status	Normal	Mild	Moderate	Severe	Extremely Severe	Total	Chi-square value (p value, df)
Upper class	1(33.3)	0(0)	2(66.7)	0(0)	0(0.0)	3(100)	χ^2=92.046 p=0.001, df=20
Upper middle	7(21.9)	5(15.6)	8(25)	12(37.5)	0(0)	32(100)	
Middle	37(22.4)	17(10.3)	49(29.7)	45(27.3)	17(10.3)	165(100)	
Lower middle	92(34.5)	29(10.9)	63(23.6)	71(26.6)	12(4.5)	267(100)	
Lower	38(23.3)	11(6.7)	46(28.2)	55(33.7)	13(8)	163(100)	
Total	175(27.8)	62(9.8)	168(26.7)	183(29)	42(6.7)	630(100)	

(Figures in parentheses are percentage)

The table shows the association between socio-economic status and depression levels among rural married women. The lower socio-economic groups (lower middle and lower class) have the highest levels of severe and extremely severe depression (26.6% and 4.5% for lower middle; 33.7% and 8% for lower class). The middle-class group also experiences considerable severe depression (27.3%). In contrast, the upper-class group has no cases of severe depression, and the upper middle class has 37.5% severe depression but no extremely severe cases. The Chi-Square analysis (χ^2 = 92.046, p = 0.001, df = 20) indicates a meaningful relationship between socio-economic status and depression severity, as the p-value falls below 0.05, confirming statistical significance.

TABLE – 28

Association between Socio Economic Status and anxiety status of rural married women(n=630)

Socio Economic Status	Normal	Mild	Moderate	Severe	Extremely Severe	Total	Chi-square value (p value, df)
Upper class	1(33.3)	0(0)	1(33.3)	0(0)	1(33.3)	3(100)	χ^2=24.342 p=0.082, df=16
Upper middle	7(21.9)	1(3.1)	2(6.3)	6(18.8)	16(50)	32(100)	
Middle	37(22.4)	10(6.1)	16(9.7)	33(20)	69(41.8)	165(100)	
Lower middle	93(34.8)	10(3.7)	40(15)	41(15.4)	83(31.1)	267(100)	
Lower	39(23.9)	3(1.8)	20(12.3)	33(20.2)	68(41.7)	163(100)	
Total	177(28.1)	24(3.8)	79(12.5)	113(17.9)	237(37.6)	630(100)	

(Figures in parentheses are percentage)

The table indicates that anxiety severity tends to be higher in lower socio-economic groups. Extremely severe anxiety is most prevalent in the upper middle (50%), middle (41.8%), and lower (41.7%) groups. The lower middle (31.1%) and upper class (33.3%) show slightly lower rates. However, the association is not statistically significant ($\chi^2 = 24.342$, $p = 0.082$).

TABLE – 29

Association between Socio Economic Status and stress status of rural married women(n=630)

Socio Economic Status	Normal	Mild	Moderate	Severe	Total	Chi-square value (p value, df)
Upper class	1(33.3)	1(33.3)	1(33.3)	0(0)	3(100)	$\chi 2$=25.137 p=0.014, df=12
Upper middle	9(28.1)	1(3.1)	20(62.5)	2(6.3)	32(100)	
Middle	61(37)	21(12.7)	70(42.4)	13(7.9)	165(100)	
Lower middle	126(47.2)	30(11.2)	82(30.7)	29(10.9)	267(100)	
Lower	51(31.3)	24(14.7)	68(41.7)	20(12.3)	163(100)	
Total	248(39.4)	77(12.2)	241(38.3)	64(10.2)	630(100)	

(Figures in parentheses are percentage)

The table shows a noteworthy relationship exists between socioeconomic status (SES) and stress levels among married women residing in rural areas.. In the upper and upper middle classes, severe stress is low (0% and 6.3%, respectively), while moderate stress is more common (33.3% and 62.5%). In the middle class, 42.4% experience moderate stress, and 7.9% have severe stress. The lower middle class has 47.2% in the normal category, but 30.7% have moderate and 10.9% severe stress. The lower class shows the highest severe stress (12.3%), with 41.7% in the moderate category. The chi-square test ($\chi^2 = 25.137$, $p = 0.014$, $df = 12$) shows a significant association.

TABLE – 30

Association between Number of family members and depression status of rural married women(n=630)

Type of family (Based on family members)	Normal	Mild	Moderate	Severe	Extremely severe	Total	Chi-square value (p value, df)
Small	106(39)	37(13.6)	54(19.9)	65(23.9)	10(3.7)	272(100)	$\chi 2$=48.670 p=0.001, df=8
Medium	29(19.5)	11(7.4)	50(33.6)	45(30.2)	14(9.4)	149(100)	
Large	40(19.1)	14(6.7)	64(30.6)	73(34.9)	18(8.6)	209(100)	
Total	175(27.8)	62(9.8)	168(26.7)	183(29)	42(6.7)	630(100)	

(Figures in parentheses are percentage)

The table shows a notable relationship exists between household size and the severity of depressive symptoms among married women in rural communities. In small families, 39% are normal, while 23.9% experience severe depression and 3.7% extremely severe depression. In medium-sized families, the proportion of normal cases drops to 19.5%, while severe and extremely severe depression increase to 30.2% and 9.4%, respectively. Large families have the highest proportion of severe depression (34.9%) and a notable percentage in the extremely severe category (8.6%). The chi-square test ($\chi^2 = 48.670$, $p = 0.001$, $df = 8$) shows a highly significant relationship.

TABLE – 31

Association between Number of family members and anxiety status of rural married women(n=630)

Type of family (Based on family members)	Normal	Mild	Moderate	Severe	Extremely severe	Total	Chi-square value(p value, df)
Small	103(37.9)	17(6.3)	32(11.8)	39(14.3)	81(29.8)	272(100)	$\chi 2$=39.346 p=0.001, df=8
Medium	34(22.8)	6(4)	19(12.8)	28(18.8)	62(41.6)	149(100)	
Large	40(19.1)	1(0.5)	28(13.4)	46(22)	94(45)	209(100)	
Total	177(28.1)	24(3.8)	79(12.5)	113(17.9)	237(37.6)	630(100)	

(Figures in parentheses are percentage)

The table shows a significant association between the number of family members and anxiety levels among rural married women. In small families, 37.9% are normal, while 14.3% experience severe anxiety and 29.8% extremely severe anxiety. In medium-sized families, the percentage of normal cases drops to 22.8%, while severe and extremely severe anxiety increase to 18.8% and 41.6%, respectively. Large families have the lowest percentage of normal cases (19.1%) and the highest proportion of severe (22%) and extremely severe anxiety (45%). The chi-square test ($\chi^2 = 39.346$, $p = 0.001$, $df = 8$) shows a highly significant relationship.

TABLE – 32

Association between Number of family members and stress status of rural married women(n=630)

Type of family (Based on family members)	Normal	Mild	Moderate	Severe	Total	Chi-square value(p value, df)
Small	135(49.6)	27(9.9)	92(33.8)	18(6.6)	272(100)	$\chi 2=25.711$ p=0.001, df=6
Medium	51(34.2)	17(11.4)	64(43)	17(11.4)	149(100)	
Large	62(29.7)	33(15.8)	85(40.7)	29(13.9)	209(100)	
Total	248(39.4)	77(12.2)	241(38.3)	64(10.2)	630(100)	

(Figures in parentheses are percentage)

The table shows a significant association between the number of family members and stress levels among rural married women. In small families, 49.6% are normal, while 33.8% experience moderate stress and 6.6% severe stress. In medium-sized families, the percentage of normal cases drops to 34.2%, while 43% experience moderate stress and 11.4% mild stress. Large families have the lowest proportion of normal cases (29.7%) and the highest percentage of moderate (40.7%) and severe stress (13.9%). The chi-square test ($\chi^2 = 25.711$, $p = 0.001$, $df = 6$) shows a highly significant relationship.

TABLE – 33

Association of Socio-Demographic Characteristics with the Depression

Socio Demographic Characteristics		Sig	Adjusted OR	95% Confidence interval	
				Upper Limit	Lower Limit
Age in years	Early Adulthood (18 – 24)	0.635	0.813	0.345	1.913
	Early Reproductive Age (25 – 34)	0.231	0.713	0.410	1.240
	Late Reproductive Age (35 – 44)	0.097	0.618	0.351	1.091
	Perimenopausal Phase (45 – 54)	0.828	1.066	0.600	1.891
	Postmenopausal Phase (55 and above) (reference)	0.001	3.200		
Occupation	Professional	0.030	3.902	1.141	13.346
	Semi Professional	0.585	1.181	0.650	2.147
	Clerical, Shop Owner, Farmer	0.059	1.676	0.981	2.863
	Skilled worker	0.792	0.915	0.471	1.775
	Semi-skilled worker	0.111	1.726	0.882	3.377
	Unskilled worker	0.134	1.533	0.877	2.681
	Unemployed (reference)	0.001	2.050		

The table displays adjusted odds ratios (ORs) alongside confidence intervals (CIs) for socio-demographic factors associated with depression. Among age groups, the postmenopausal phase (55 and above) serves as the reference and shows a significantly higher association with depression (OR = 3.200, p = 0.001). Regarding occupation, professionals have significantly higher odds of experiencing depression (OR = 3.902, p = 0.030) compared to the unemployed reference group (OR = 2.050, p = 0.001). The results indicate that individuals who are postmenopausal or engaged in professional occupations face an increased likelihood of experiencing depression relative to other demographic groups.

TABLE – 34

Association of Socio-Demographic Characteristics with the Depression

Socio Demographic Characteristics		Sig	Adjusted OR	95% Confidence interval	
				Upper Limit	Lower Limit
Type of family	Joint	0.062	0.398	0.151	1.047
	Nuclear	0.002	0.215	0.083	0.560
	Three generation (reference)	0.000	8.600		
Socio Economic Status	Upper	0.688	0.608	0.054	6.891
	Upper middle	0.860	1.086	0.436	2.706
	Middle	0.848	1.052	0.628	1.761
	Lower middle	0.015	0.578	0.372	0.900
	Lower (reference)	0.001	3.289		

The table displays adjusted odds ratios (ORs) alongside confidence intervals (CIs) for socio-demographic characteristics in relation to depression. Among family types, individuals from three-generation families (reference category) have a significantly higher association with depression (OR = 8.600, p = 0.000) compared to other family structures. Regarding socio-economic status, individuals from the lower socio-economic group (reference category) have significantly higher odds of depression (OR = 3.289, p = 0.001), whereas those from the lower-middle class show significantly lower odds (OR = 0.578, p = 0.015). These findings indicate that living in a three-generation family and belonging to a lower socio-economic group are significant risk factors for depression.

TABLE – 35

Association of Socio-Demographic Characteristics with the Anxiety

Socio Demographic Characteristics		Sig	Adjusted OR	95% Confidence interval	
				Upper Limit	Lower Limit
Age in years	Early Adulthood (18 – 24)	0.793	0.889	0.368	2.146
	Early Reproductive Age (25 – 34)	0.240	0.715	0.408	1.252
	Late Reproductive Age (35 – 44)	0.031	0.535	0.302	0.945
	Perimenopausal Phase (45 – 54)	0.767	0.917	0.517	1.627
	Postmenopausal Phase (55 and above) (reference)	0.001	3.375		
Occupation	Professional	0.052	2.964	0.992	8.855
	Semi Professional	0.335	1.346	0.736	2.464
	Clerical, Shop Owner, Farmer	0.023	1.875	1.091	3.220
	Skilled worker	0.637	1.178	0.596	2.330
	Semi-skilled worker	0.131	1.657	0.860	3.192
	Unskilled worker	0.135	1.523	0.878	2.643
	Unemployed (reference)	0.001	1.940		

The table displays adjusted odds ratios (ORs) alongside confidence intervals (CIs) for socio-demographic characteristics in relation to anxiety. Among age groups, individuals in the postmenopausal phase show a significantly higher association with anxiety (OR = 3.375, p = 0.001). Regarding occupation, professionals (OR = 2.964, p = 0.052) and clerical/shop owners/farmers (OR = 1.875, p = 0.023) show significantly higher odds of anxiety. The unemployed group (reference category) also has a significantly higher association with anxiety (OR = 1.940, p = 0.001). These findings suggest that postmenopausal individuals, professionals, and unemployed individuals are at a higher risk of anxiety.

TABLE – 36

Association of Socio-Demographic Characteristics with the Anxiety

Socio Demographic Characteristics		Sig	Adjusted OR	95% Confidence interval	
				Upper Limit	Lower Limit
Type of family	Joint	0.074	0.441	0.180	1.084
	Nuclear	0.005	0.280	0.115	0.681
	Three generation (reference)	0.001	7.0		
Socio Economic Status	Upper class	0.708	0.629	0.056	7.126
	Upper middle	0.803	1.123	0.451	2.796
	Middle	0.747	1.088	0.651	1.818
	Lower middle	0.018	0.588	0.379	0.913
	Lower (reference)	0.001	3.179		

The table presents displays adjusted odds ratios (ORs) alongside confidence intervals (CIs) for socio-demographic characteristics in relation to anxiety. Among family types, individuals from three-generation families (reference category) have a significantly higher association with anxiety (OR = 7.0, p = 0.001) compared to other family structures. Regarding socio-economic status, individuals from the lower socio-economic group (reference category) have significantly higher odds of anxiety (OR = 3.179, p = 0.001). These findings indicate that living in a three-generation family and belonging to a lower socio-economic group are significant risk factors for anxiety.

TABLE – 37

Association of Socio-Demographic Characteristics with the Stress

Socio Demographic Characteristics		Sig	Adjusted OR	95% Confidence interval	
				Upper Limit	Lower Limit
Age in years	Early Adulthood (18 – 24)	0.546	0.786	0.359	1.720
	Early Reproductive Age (25 – 34)	0.107	0.660	0.398	1.093
	Late Reproductive Age (35 – 44)	0.055	0.600	0.356	1.012
	Perimenopausal Phase (45 – 54)	0.869	0.958	0.573	1.600
	Postmenopausal Phase (55 and above) (reference)	0.001	2.000		
Occupation	Professional	0.019	3.324	1.218	9.067
	Semi Professional	0.502	0.828	0.479	1.434
	Clerical, Shop Owner, Farmer	0.044	1.652	1.013	2.695
	Skilled worker	0.955	0.982	0.520	1.854
	Semi-skilled worker	0.743	1.102	0.618	1.964
	Unskilled worker	0.229	1.365	0.822	2.265
	Unemployed (reference)	0.030	1.324		

The table displays adjusted odds ratios (ORs) alongside confidence intervals (CIs) for socio-demographic characteristics in relation to stress. Among age groups, individuals in the postmenopausal phase show a significantly higher association with stress (OR = 2.000, p = 0.001), indicating they have a higher tendency to encounter stress in comparison to individuals from younger age groups. Regarding occupation, professionals have significantly higher odds of experiencing stress (OR = 3.324, p = 0.019). These findings suggest that postmenopausal individuals, professionals, clerical/shop owners/farmers, and unemployed individuals are at higher risk of experiencing stress.

TABLE – 38

Association of Socio-Demographic Characteristics with the Stress

Socio Demographic Characteristics		Sig	Adjusted OR	95% Confidence interval	
				Upper Limit	Lower Limit
Type of family	Joint	0.07	0.332	0.150	0.737
	Nuclear	0.01	0.250	0.113	0.551
	Three generation (reference)	0.001	5.0		
Socio Economic Status	Upper class	0.940	0.911	0.081	10.274
	Upper middle	0.723	1.164	0.503	2.692
	Middle	0.278	0.776	0.491	1.227
	Lower middle	0.001	0.510	0.338	0.767
	Lower (reference)	0.001	2.196		

The table shows the association of socio-demographic characteristics with stress. Individuals in three-generation families have the highest odds of stress (OR = 5.0, p = 0.001). Nuclear family members have lower odds (OR = 0.250, p = 0.01), while those in joint families also show reduced odds (OR = 0.332, p = 0.07). Lower-middle-class individuals have significantly lower odds of stress (OR = 0.510, p = 0.001), while those in the lower class have higher odds (OR = 2.196, p = 0.001).

DISCUSSION

7. Discussion

The ultimate aim of this study is to assess the prevalence of depression, anxiety, and stress, along with the factors influencing them, among married women residing in rural areas of Kolar. It was conducted in the Rural Health Training Centre (RHTC) Devarayasamudra, Mulbagal Taluk, covering a population of 11,636 across 20 villages. Using a cluster sampling method, 8 villages were randomly selected, and samples were allocated by probability proportionate to size to achieve the estimated sample size of 630. All data were collected using a pre-tested, semi-structured, self-administered questionnaire for socio-demographics and the DASS-42 questionnaire for mental health assessment. Written as well as informed consent was obtained from all participants.

In the present study, it was found that 72.3% of married women experienced depression (including mild, moderate, severe, and extremely severe cases), 71.91% of married women experienced anxiety (including mild, moderate, severe, and extremely severe cases) and 61.91% of married women experienced stress (including mild, moderate, severe, and extremely severe cases)

Prevalence of depression among married women in World

The prevalence of depression among married women in rural areas of Kolar, as assessed using the DASS-42 questionnaire, was found to be 72.3%. This rate is significantly higher when compared to the prevalence rates reported in various international studies.

In a study conducted in Egypt by D.S.Osman et al., the occurrence of depressive symptoms in married women attending primary healthcare facility was 30.2%, as assessed using the PHQ-9 diagnostic criteria. Significant predictors included advanced spouse ages, living with joint families, those who face spousal verbal violence, high body weight, and low marital satisfaction. Almost one-third of Egyptian women who were married experiences depressive symptoms. The much higher prevalence rate in the

present study compared to the Egyptian study could be attributed to differences in study settings, cultural factors, and the use of different assessment tools. Additionally, the focus on rural areas in the present study might explain the elevated prevalence, as rural populations often face unique socio-economic challenges and limited mental health resources.[80]

A study from Turkey by Sule Ergol et al., reported that 29.1% of married women aged 15–49 exhibited varying symptoms of depression, while 38.4% displayed anxiety symptoms. Depression and anxiety were associated with gender-based roles, stressors, negative life experiences, education levels, spouse's education level, spouse's alcohol consumption, monthly income, and smoking habits. Additionally, the approval of marriage by the family and perceived lack of understanding from spouses were significant factors contributing to higher depression rates.[81] Compared to the present study, the lower prevalence in Turkey may be due to differences in cultural perceptions, healthcare access, or even methodological differences.

A study conducted in Bangladesh by Azharul Islam et al., examined the role of employment status, academic qualification, marital satisfaction, and psychological well-being on depression among 200 married women. It reported that 15% of participants scored above the cut-off point for depression. Employment status, academic status, marital satisfaction, and psychological well-being (GHQ-28) were the most influential predictors, accounting for 56.2% of the variability in depression. Psychological well-being and marital satisfaction appeared as the most influential predictors, with lower education and unemployment also associated with higher depression levels.[82] The comparatively lower prevalence in this study conducted in Bangladesh may be explained by differences in assessment tools and cultural perceptions of mental health, as well as the relatively lower socioeconomic burden compared to the rural population studied in Kolar.

A research study carried out in South Korea by In Sook Choo et al. found that elevated levels of depression were associated with factors such as occupational demands, life

stress, deteriorating health, limited social support, and personality vulnerabilities. Additionally, stress related to social roles, financial status, social support networks, and perceptions of housework inequality emerged as significant predictors of depression. Women with preadolescent children were identified as the most at risk, particularly when exposed to occupational stress, life pressures, personality traits, and parenting-related challenges.[83] The findings highlight the multifactorial nature of depression and suggest that social support and economic stability play crucial roles in mitigating depressive symptoms.

The much higher prevalence found in the present study compared to these international studies suggests that rural areas of Kolar may have unique risk factors contributing to depressive symptoms. Limited access to healthcare services, poverty, cultural restrictions, and lack of mental health awareness may all contribute to the high prevalence rate. The results highlight the importance of implementing specialized mental health initiatives, educational campaigns, and readily available psychological support services in rural areas.

Prevalence of Depression among married women in India

The prevalence of depression among married women in rural Kolar, as assessed using the DASS-42 questionnaire, was found to be 72.3%, which is significantly higher compared to previous studies conducted in other rural regions of India.

A study by K. Lamiya et al. in rural North Kerala reported a depression prevalence of 24.2% among married women.[84] Similarly, Krithiga S. Sivakumar et al. found a prevalence of 11.4% in rural Puducherry, with factors such as age, marital status, obesity, adverse pregnancy outcomes, and physical abuse contributing to the risk.[85] In Rajasthan, Manish Kumar et al. reported a prevalence of 15.2%, identifying family ailments,

unusual family events, addiction, debt, early marriage, and infertility as significant contributors.[86]

For instance, a study done in rural Tamil Nadu in 2022 found the prevalence of depression among women of reproductive age to be 17.9%. That study highlighted socio-economic status and religion as significant contributors. Interestingly, most women didn't report family conflicts, although some had family members with alcohol dependence.[87] Despite targeting a similar demographic, the prevalence in Tamil Nadu was far lower than in Kolar. This could be due to differences in local stressors, cultural expectations, or support systems available to women within the family and community.

In Puducherry, another rural study from 2020 reported a 15% prevalence of depression among women, using the DASS-21 scale. Predictors like lower education and living separately or being divorced were found to be significant. Given that the DASS-21 has fewer items than the DASS-42 used in our study, it's possible that milder cases may have gone undetected in the Puducherry sample. Still, the difference in prevalence is striking and hints at deeper, more systemic issues faced by women in Kolar's rural areas.[11]

The study from Kashmir, conducted in 2018, also looked at depressive symptoms among rural residents and found a strong link between depression and factors like low income, illiteracy, and nuclear family settings. While the exact prevalence in women wasn't isolated, women made up a large part of the sample (66.3%).[88] Even so, the overall burden still seemed to be lower than what we found in Kolar. This suggests that beyond the usual socio-economic risks, there may be additional pressures unique to this region, such as work burden, health access issues, or even social isolation despite being in joint families.

In West Bengal, a 2021 study focused on post-natal depression among rural mothers and found a prevalence of 28.9%. Here, depression was strongly associated with poor economic status, unplanned pregnancies, preterm births, and having multiple children. While this was a more focused group women within six to ten weeks of delivery it still reflects the vulnerability of rural women when it comes to mental health.[89]

Lastly, the Longitudinal Ageing Study in India (LASI) in 2024 reported that 21.76% of women aged 50 and above had symptoms of depression, with rural residence, multimorbidity, and functional disability contributing to the risk. While that study targeted an older population, the fact that rural living continued to show a strong association with depression aligns with what we've seen. But again, the gap between 21.76% and 72.3% is wide.[90]

The prevalence rate observed in the present study is notably higher than those reported in these studies. This variation may stem from differences in research environments, demographic profiles, economic factors, cultural influences, and the application of distinct assessment methods. Additionally, the DASS-42 questionnaire used in this study is a comprehensive tool assessing depression, anxiety, and stress together, which may have contributed to the higher prevalence. Further research is needed to explore the underlying factors contributing to this high prevalence in rural Kolar, including socio-economic stressors, healthcare access, and social determinants of mental health.

Prevalence of anxiety among married women in World

In this study, it was observed that 71.91% of married women experienced anxiety, encompassing varying degrees from mild to extremely severe.

The prevalence of anxiety among married women in rural areas of Kolar, as assessed using the DASS-42 questionnaire, was found to be 71.91%. This rate is notably high compared to the prevalence rates reported in various international studies.

In a study conducted in rural Ismailia governorate, Egypt, by Salim A et al., the prevalence of anxiety among women visiting primary healthcare facilities was 76%, with the majority experiencing mild anxiety (46%) followed by mild to moderate anxiety (18%).[91] The high prevalence of anxiety in the present study is comparable to that of the Egyptian study, which also focused on rural populations. Both studies

highlight the impact of socio-cultural factors, abusive environments, and lack of adequate mental health support.

A study conducted in Sylhet, Bangladesh, by Salam et al., aimed at comparing anxiety and depression between women whose husbands work abroad and those living with their husbands. The occurrence of anxiety among the study group was recorded at 51.2%, markedly exceeding that of the control group, with an average anxiety score of 19.82. The findings indicate that factors such as marital separation, difficulties in communication, and inadequate social support play a significant role in contributing to anxiety. The relatively lower prevalence reported in the Bangladesh study could be linked to differences in the study population's focus, with psychological distress stemming more from separation-related concerns than from challenges associated with rural living.

In Ethiopia, a study conducted by Kefelew et al., among female employees of Hawassa industrial park reported a prevalence of anxiety of 79.8% using the DASS-21 scale. Factors associated with anxiety included being single, poor social support, overtime work, longer work experience, and fear of losing one's job.[92] The similarity in anxiety prevalence between the Ethiopian study and the present study could be due to similar socio-economic challenges, limited social support, and high levels of stress experienced by the study populations. However, the difference in study design and population characteristics (industrial workers versus rural married women) may account for some of the variation.

Overall, the results from present study indicate a high occurrence of anxiety found in rural married females and this was found to be consistent with the findings from the studies conducted in Egypt and Ethiopia but significantly higher than the findings from Bangladesh. The elevated prevalence of anxiety in the present study may be attributed to limited access to healthcare services, economic instability, cultural restrictions, and inadequate social support systems prevalent in rural areas.

Prevalence of Anxiety among married women in India

The prevalence of anxiety observed in the current study conducted in the rural areas of Kolar using the DASS-42 questionnaire was 71.91%. This is significantly higher compared to the findings from studies conducted in various other regions of India.

For instance, research done by Sweta Sinha et al., in Jaipur among women in urban slums reported an anxiety prevalence of 38.22% (DASS-21), which, while considerably high, is still much lower than the prevalence rate found in Kolar. The findings from this study indicated that physical inactivity, poor sleep, and generalized pain were correlated with higher anxiety scores, although the DASS symptoms were not strongly associated with most demographic characteristics. However, significant associations were found among separated and widowed females.[93]

Additionally, the study conducted in Southern Karnataka by Rakshitha R Shenoy et al., reported a much lower prevalence of anxiety disorders at 3.37% (GAD-7). This discrepancy can be attributed to the difference in study populations, with the Southern Karnataka study including both urban and coastal populations, and possibly different diagnostic criteria. Moreover, factors like chronic illness, recent bereavement, early marriage, abortion history, and exposure to domestic violence were identified as significant correlates of anxiety in that population.[94]

The study by Avita Rose Johnson et al., from 2016, which looked at anxiety among pregnant women in rural South India. They found a prevalence of 30.6% using the PASS scale. That’s less than half of what we observed. Their study also showed that factors like the husband's alcohol use and low education levels played a role in increasing anxiety, which are similar to some patterns we noticed too. Still, the difference in prevalence could also be tied to the fact that their focus was on antenatal women and they used a different assessment tool.[95]

Then there's the study from Puducherry in 2020, where only 10.6% of rural women were found to have anxiety based on the DASS-21. That's quite low in comparison. The study looked at women between 18 to 59 years of age and found that factors like being less educated or living apart from their husbands were linked to mental health issues like depression. It shows how different the picture can be in various regions, and how local circumstances really matter.[40]

A 2023 study from rural Haryana found that 20% of adults had symptoms of common mental disorders, including anxiety. They used a different tool the GHQ-12 but what's interesting is that they found anxiety and related symptoms were much more common among people who were older, widowed, illiterate, or suffering from chronic illness. Though their numbers are still lower than ours, it reinforces how socioeconomic and health factors contribute heavily to mental well-being in rural areas.[96]

Another study from Maharashtra in 2024 looked at anxiety in rural primigravida mothers—women who were pregnant for the first time. They found very high levels of anxiety, with over 60% showing moderate anxiety and around 37% experiencing severe anxiety. These numbers are closer to what we found in Kolar, and they point to the emotional toll pregnancy can have in rural settings. While that study focused on a specific group, it supports the idea that anxiety among rural women is a serious concern, particularly in times of increased vulnerability.[97]

Furthermore, the study conducted in India by Jana N et al., among urban working women and homemakers using the PSYCOM Anxiety Test, anxiety levels were reported as 70% among homemakers and 56.66% among working women.[98] Anxiety was more common among older homemakers, while younger working women experienced milder anxiety. In comparison, the present study conducted in the rural areas of Kolar using the DASS-42 questionnaire reported a much higher prevalence of anxiety (71.91%) among married women. The higher prevalence in Kolar may be attributed to rural-specific socio-cultural and economic factors, limited mental health services, and the broader assessment criteria of the DASS-42 questionnaire compared to other studies.

Comparing these findings, it is evident that the prevalence of anxiety in rural Kolar is remarkably higher. This could be due to a variety of factors such as the difference in the assessment tools used, sociodemographic differences, and potential lack of mental health resources in rural Kolar.

Prevalence of Stress among married women in World

The present study conducted in rural areas of Kolar using the DASS-42 questionnaire found a prevalence of stress of 61.91%. These women are often carrying the weight of household duties, family responsibilities, and the expectations of their roles as wives and daughters-in-law, with little time or space for themselves.

A 2019 study from Brazil showed a similar pattern, especially in women aged 30 to 50, who were found to be particularly vulnerable to stress. The study highlighted how women are expected to manage not just jobs and households, but also motherhood often referred to as the "triple shift." Media narratives in Brazil often portray this stress as a natural part of being a woman, reinforcing the belief that women should simply absorb the pressure. These ideas reflect how stress isn't just about individual struggles, but also about how society defines and frames what women are expected to handle without complaint.[99]

In Sweden, a 2022 study explored the stress experienced by teenage girls and young women. Through interviews with young women, researchers uncovered how stress isn't only mental it's something they physically feel, through things like sleep issues, body pain, and anxiety. What stood out was how much of this stress came from a constant pressure to perform perfectly and meet social standards. The pressure to always be in control and to meet impossible expectations feels very familiar, even though the setting is different from rural Kolar.[100]

A study from Pakistan in 2020 further emphasized how deep-rooted cultural norms contribute to women's stress. Women there are often expected to tolerate everything silently whether it's emotional pain, lack of support, or unreasonable demands. The study showed that when this pressure builds up with no outlet, it can sometimes lead to extreme emotional responses.[101] It paints a broader picture of how stress in women, especially in traditional societies, isn't just about what happens at home it's also about how culture teaches them to carry the burden without breaking. Additionally, variations in study methodologies, sampling techniques, and assessment tools may have contributed to the differences in reported stress levels.

Prevalence of Stress among married women in India

The prevalence of stress observed in the present study conducted in rural areas of Kolar using the DASS-42 questionnaire was found to be 61.91%.

This prevalence is comparatively lower than the findings from the study conducted by Maria Pis et al., in Udupi, which reported a higher prevalence of stress among women, especially unmarried women (85%) compared to married women (76%). The difference in prevalence might be attributed to the difference in study settings and sample characteristics. While the Udupi study focused on a descriptive survey among women aged 18-45 years, our study targeted rural married women, where social support systems may influence stress levels differently.[102]

Similarly, the occurence of stress in this study is significantly lower compared with the study conducted by P.J. Paramaeswari et al., in Chennai, where the prevalence was reported as 81.5% among women of reproductive age (18-45 years).[103] The higher prevalence observed in the Chennai study could be attributed to the urban setting and different socio-economic and lifestyle factors affecting women in sub-urban South Chennai compared to rural Kolar.

In contrast, the prevalence of stress in present study is relatively consistent with the findings from T. Rekha et al., in Mangalore, where 83.9% of working women reported moderate stress. The difference between these findings may be explained by variations in occupational stress, as our study predominantly focused on homemakers and married women, while the Mangalore study targeted working women from various professional backgrounds.[104]

Compared to the research done by Pranav Nayak et al., in Karnataka, where moderate stress was reported in 84.9% of adults (with females experiencing higher stress levels than males), prevalence in the present study is considerably lower. The Karnataka study was conducted through an online survey and included both genders, which may explain the difference as rural women might experience stress differently from urban populations.[105]

When we look at similar findings from a 2020 study by Rema M. K. et al., in Bangalore, that study found that 87% of women reported being stressed most of the time, especially those aged 22 to 55. These women were struggling to strike a balance between work, home, and social life. What stood out was how closely stress, anxiety, and depression were tied to marital adjustment women who felt emotionally distant or unfulfilled in their marriages were more likely to show higher levels of stress. It painted a clear picture of how deeply personal relationships and societal expectations can impact mental health.[106]

A similar pattern was seen in a 2019 study from Burdwan, West Bengal, by Arunima Chaudhuri and team. In their large sample of 7500 women 56.73% of them were dealing with stress. Their stress often stemmed from family-related issues like conflicts with in-laws, strained marriages, and even abuse. What's important here is that their stress wasn't just emotional it was reflected in measurable ways, with high scores on both the perceived stress scale and life event scales. When we look at these findings together from rural Kolar, urban Bangalore, and Burdwan it becomes clear that stress among Indian women is widespread, deeply rooted in their social and marital environments, and affects them regardless of whether they live in cities or villages.[107]

Overall, the prevalence of stress observed in our study is lower compared to most of the above-mentioned studies. This discrepancy may arise due to differences in the study settings, sample populations, measurement tools, and socio-cultural factors unique to the rural context of Kolar.

Age and Depression, Anxiety, Stress

Anxiety, Depression and Stress among women varies significantly across different age groups, as seen in studies from various countries. A study in the United States (2021) highlighted that middle-aged woman (40–64 years) and older women (65 and above) had significantly lower physical and mental quality of life scores. This aligns with the present study, where postmenopausal women (55 years and above) showed a strong association with depression (OR=3.200, p=0.001). The U.S. study also found that functional health in men was more affected by depression, while in women, health perceptions played a larger role.[108] This suggests that, as women age, their perception of their own health might contribute to their mental well-being, similar to what is observed in present study among postmenopausal women.

A study conducted in Russia (2018) examined gender differences in recurrent depressive disorder and found that women had an earlier onset of depression, more frequent episodes, and poorer recovery compared to men. Symptoms such as anxiety, fatigue, and sleep disturbances were more common in women.[109] This supports the age-related trends seen in my study, where younger age groups, such as early adulthood (18–24 years) and early reproductive age (25–34 years), showed a weaker association with depression (OR=0.813, p=0.635 and OR=0.713, p=0.231, respectively). This suggests that while younger women may experience depressive symptoms, their overall likelihood of developing significant depression may be lower compared to older women.

A study from Brazil (2021) explored the link between parity and depression, finding that women with more children had a higher risk of depression, particularly those of older

reproductive age. The study reported that having three or more children increased the risk of depression by 36 times, and having a low-birth-weight child nearly doubled the risk.[110] In contrast, my study found that women in the late reproductive age group (35–44 years) had a lower odds ratio (OR=0.618, p=0.097) for depression. This suggests that, while childbearing may contribute to depression risk in some populations, in present study, this age group did not appear to have a significant burden of depression. This difference could be due to varying social support systems, cultural factors, or economic conditions influencing maternal mental health.

In the present study, older women, especially those in the postmenopausal phase (55 years and above), had the highest odds of experiencing depression (OR=3.200, p=0.001). In contrast, younger women showed lower odds. This pattern is similar to findings from a study in Turkey (2024), where middle-aged women (40–59 years) reported moderate levels of aging anxiety. Their anxiety was linked to factors like menopausal status, household income, and education level, rather than just aging itself. This suggests that social and economic conditions can play a big role in mental health, rather than biological changes alone.[111]

A study from Hong Kong (2025) found that anxiety disorders among perimenopausal women (45–54 years) have been increasing over time and are expected to rise by 40.67% by 2035. This study pointed to hormonal changes and life circumstances as key factors. However, in the present study, women in this age group did not show a significant link to depression (OR=1.066, p=0.828).[112] This difference raises the question of whether anxiety and depression during perimenopause are solely due to biological factors, or if broader life experiences, like family and work stress, have a bigger impact.

A study from Korea (2020) highlighted the importance of job and marriage satisfaction in aging anxiety. Women with lower resilience and self-esteem were more likely to experience anxiety. In the present study, women in their late reproductive years (35–44 years) had lower odds of depression (OR=0.618, p=0.097), which could be linked to stability in their personal and professional lives. This supports the idea that anxiety is not

just about age but is also influenced by life circumstances. Women who feel more secure in their jobs and relationships may be less likely to experience high levels of stress and anxiety.[113]

A study from the United States (2018) followed women over time and found that concerns about declining health remained steady, while worries about attractiveness and reproductive aging tended to decrease with age. This connects with my study, where older women had higher odds of depression, possibly due to ongoing health concerns. On the other hand, younger women (18–34 years) had lower odds of depression (OR=0.813, p=0.635 and OR=0.713, p=0.231, respectively). This suggests that while older women might struggle with long-term health worries, younger women may not yet be affected by these concerns.[114]

Another Korean study (2019) looked at how cultural views on aging impact anxiety. It found that middle-aged women experience anxiety due to a mix of social value, physical changes, concerns about appearance, and expectations about growing older. This aligns with the present study's findings, where postmenopausal women had the highest odds of depression, while perimenopausal women did not show a significant link. This might indicate that beyond physical aging, societal attitudes toward aging influence mental health, making some women feel more anxious or depressed.[115]

A study conducted in Lithuania in 2024 found that nearly half of elderly women reported high levels of anxiety (49%) and depression (48.4%), with stress affecting about 30% of the population (Lithuania study, 2024). This study also suggests that mental health issues can persist or even worsen with age, particularly when compounded by health concerns and declining independence. Unlike perimenopausal women, whose anxiety is often shaped by societal expectations, elderly women seem to experience anxiety more due to physical decline and chronic illnesses. This highlights how stress, anxiety, and depression evolve across different stages of life, influenced by both biological changes and external circumstances.[116]

In a study done in Andhra Pradesh, India in 2024 specifically examined depression among women aged 45–55 years during menopause. It found that hormonal changes during this period led to increased anxiety, mood swings, and depressive symptoms.[117] However, in my study, the perimenopausal group (45–54 years) did not show a significant association with depression (OR=1.066, p=0.828). This indicates that, while menopause is often considered a high-risk period for mental health issues, other factors such as lifestyle, family support, and coping mechanisms may play a role in determining whether women in this age group experience depression.

A study done in Tamil Nadu in India from 2013 examined depression among reproductive-age women (15–49 years) and found a high prevalence of 39.7%, with significant associations between depression and factors like being widowed, having low education levels, and a lower socioeconomic status. This study emphasized that social determinants may contribute more to depression than biological age alone.[118] In comparison, the present study did not find a significant association between younger reproductive-age groups and depression, particularly among those aged 18–34 years. This could mean that social factors, such as marriage, financial stability, and family structure, influence depression differently across different study populations.

A study conducted in Tamil Nadu, India, where 70.4% of postmenopausal women reported very high stress levels, significantly affecting their quality of life. This research also showed a moderate inverse relationship exists between stress levels and overall quality of life, meaning that as stress increased, overall well-being declined.[119] Similarly, a study from Bihar, India, showed that among postmenopausal women aged 45–55 years, 70% reported severe stress and 28% experienced moderate stress, indicating that menopause is particularly distressing in rural settings due to social, physical, and psychological challenges. They also found that menopause in rural settings was associated with high stress levels, reinforcing the idea that middle-aged women often face multiple pressures related to health, family responsibilities, and social expectations. These findings highlight how menopause and aging contribute significantly to

psychological distress, though the severity may vary based on environment and social factors.[120]

The findings from the present study show that depression is most common among postmenopausal women (55 years and above), while younger women—including those in their reproductive and perimenopausal years also experience depression, though at lower rates. A comparable pattern was identified in a 2024 research from South India, where perimenopausal women living in urban slums reported high levels of stress (83.8%), anxiety (75.7%), and depression (55.4%). This highlights that mental health struggles start even before menopause, especially during the perimenopausal phase, when hormonal changes and social pressures play a significant role.

A 2023 study from Bhubaneswar, which looked at married women aged 15–49 years, also found high levels of stress, anxiety, and depression across different reproductive stages. Unlike my study, which shows depression increasing significantly after menopause, the Bhubaneswar study found that even younger women struggle with mental health issues. This suggests that depression and anxiety are ongoing concerns throughout a woman's life, not just during menopause. The South Indian study also pointed out that factors like marriage and education play a role in shaping a woman's mental health, which could explain why certain age groups experience higher stress levels.[121,122]

Occupation and Depression, Anxiety, Stress

Occupation plays a major role in shaping mental health, and my study on married women in rural Kolar found a strong link between employment status and levels of mental health disorders. These results were consistent with research from Ethiopia (2023), where female industrial workers reported high levels of work-related stress (59.3%) and anxiety (79.8%). The study pointed out that long work hours, fear of losing jobs, and lack of

social support were key contributors to mental distress. This suggests that while employment can provide financial security, it can also introduce stressors that take a toll on mental well-being, especially in high-pressure work environments.[123]

Similarly, research from Saudi Arabia (2024) found that stress, anxiety, and depression were influenced by occupation among pregnant women. While the study focused on antenatal women, it reinforces the idea that working women, especially those balancing multiple responsibilities, are more prone for depression, anxiety and stress. The stress of juggling work and pregnancy could explain the psychological burden, highlighting how different life stages can further complicate the effects of employment on mental health.[124]

Interestingly, a study from Iran (2015) found that employed women had lower levels of depression and anxiety compared to unemployed women. This suggests that having a job might have some protective effects, possibly due to financial independence, structured routines, and social interactions at work. However, the same study also reported that women in private-sector jobs experienced more stress and anxiety, and workers had the highest levels of depression. This highlights that not all jobs are equal—some can be empowering, while others can be mentally exhausting, depending on factors like workload, job security, and workplace conditions.[125]

A study from Pakistan (2022) compared mental health between working and non-working women and found no major differences in depression and anxiety levels. However, stress was significantly higher among working women. This suggests that while employment itself may not always lead to depression or anxiety, the pressures of the workplace—such as deadlines, responsibilities, and work-life balance can contribute to higher stress levels. On the other hand, non-working women may face their own set of challenges, like financial dependence or feelings of isolation, which could affect their mental well-being differently.[126]

The studies from Ethiopia and Pakistan emphasize the stress that comes with demanding jobs, while the study from Iran suggests that employment can sometimes offer mental health benefits. The research from Saudi Arabia further highlights that even women in

non-traditional work situations, like pregnant women, can experience significant work-related stress. These variations make it clear that whether employment improves or harms mental health depends on the type of job, the level of job security, and the support systems available to working women.

A study conducted on Professionals in India showed that job satisfaction was closely tied to mental health among women. Interestingly, factors like age, education, and marital status didn't seem to matter as much as income levels and workplace stressors. This highlights how work-related pressures, rather than personal background, play a bigger role in shaping mental well-being.[127] Similarly a study from Gujarat in 2017 found that homemakers actually had higher levels of stress and anxiety compared to working women. This suggests that having a job might provide a sense of purpose and social interaction that helps manage stress. In the present study showed that occupation could also be a source of stress for many married women, depending on the work environment and the pressure they face both at home and outside. The study done in Gujarat reinforces the idea that mental health isn't just about whether someone works or not, but about the conditions they live and work in.[128]

Another study from Tamil Nadu in 2018 looked at young girls working in textile factories and found a high prevalence of depression and behavioural issues. What stood out was that both current and past employees showed signs of mental distress, which means that the effects of such jobs last beyond employment. The study also pointed out that financial stress was one of the major contributors that causes depression. This aligns with the present study's findings, where financial difficulties and stressful work environments leads to various mental health burden of rural married women.[129]

Another study from South India in 2023 looked at low-income urban women and found that they experienced high levels of anxiety and depression, though they were employed, many still struggled with stress due to migration issues, lack of social support, and the challenges of city life. This mirrors my findings in rural Kolar, where married women working outside the home had to juggle multiple responsibilities, leading to significant

mental distress. Whether in urban or rural areas, the common factor seems to be the overwhelming demands placed on women, both at work and at home.[130]

A 2024 psychological review of working women in India further emphasized the struggles of balancing job responsibilities with family life. It pointed out that many married women experience stress due to male dominance in the household, lack of support from their husbands, and the expectation that they manage both work and home effortlessly. This is very relevant to the present study, where many women reported feeling burdened by both work and domestic duties, leading to heightened levels of stress, anxiety, and depression. The social structure in India often places additional pressure on women, making it harder for them to maintain their mental well-being.[131]

Type of family and Depression, Anxiety, Stress

Family structure plays a huge role in a woman's mental health, shaping how much stress she experiences in her daily life. For instance, a 2013 study from Pakistan highlighted that woman in joint families often felt more stress due to increased household responsibilities and social expectations. At the same time, women in nuclear families sometimes struggled with loneliness and a lack of immediate support. This finding is somewhat similar to what we observed in the present study, where women in nuclear families had lower stress levels than those in three-generation families but still faced mental health challenges.[132]

Another study from Turkey in 2013 looked at the relation between family structure on depression, anxiety and stress joint families could be both supportive and stressful. Women in joint families had shared responsibilities, which could lighten the load, but they also experienced more family conflicts. On the other hand, nuclear families allowed for more autonomy but came with the pressure of managing everything alone. My study supports this idea to an extent, showing that while joint families had lower odds of stress

compared to three-generation families, the actual experience of stress could vary based on family relationships.[133]

A study from Punjab in 2015 focused on the family environment rather than just the type of family. It found that women in emotionally supportive families, whether joint or nuclear, had better mental health, whereas those in conflict-ridden households experienced higher stress levels. This is an important point because in my study, some women in joint families thrived in a nurturing environment, while others found it mentally exhausting to navigate family conflicts and traditional expectations. It shows that simply being in a particular type of family isn't the only factor how that family functions matters just as much.[134]

A more recent study from Turkey in 2024 focused on women with severe mental disorders and found that joint family settings sometimes placed additional caregiving responsibilities on them, leading to high levels of stress. In the present study, women in three-generation families experienced the highest stress, likely because they had to juggle multiple roles caring for children, managing household duties, and sometimes even looking after elderly family members. This aligns with the idea that being a caregiver in a large family structure can be overwhelming, especially when societal expectations add to the pressure.[135]

Overall, these studies show that family structure plays a complex role in women's mental health. While some women benefit from the support of a joint or nuclear family, others find these arrangements stressful depending on their specific family dynamics. In the present study echoes many of these findings, showing that stress levels among women are not just about whether they live in a nuclear, joint, or three-generation family it's also about how those family's function, the roles women are expected to take on, and the level of support they receive.

Socio Economic Status and Depression, Anxiety, Stress

The present study found that women from lower socioeconomic backgrounds were much more likely to experience depression, anxiety, and stress. Those in the lowest income group had the highest odds of mental health issues, while women in the lower-middle class were slightly better off. This pattern isn't unique several studies from different countries have found similar connections between financial struggles and mental health.

A study from Iran in 2017 showed that women with lower socioeconomic status faced increased mental health challenges. Financial difficulties, decreased family support, and daily stressors contributed to their poor mental health, much like what we observed in the present study.[136] Similarly, a 2023 study from Turkey found that low-income women reported more depression and anxiety, but also emphasized that their ability to cope and their sense of self-efficacy played a big role. This suggests that while money is a major factor, how women handle stress and whether they have support systems can make a difference.[137]

A large study from China in 2023 also confirmed that women with lower income and education levels were at a greater risk of depression and anxiety. The study highlighted that woman in rural areas suffered the most, which aligns with my study's findings from rural Kolar, where financial strain was a major source of mental distress.[138] Another study from Madagascar in 2021 provided a deeper understanding of why lower socioeconomic status leads to mental health struggles. It found that women from poorer backgrounds had more exposure to life stressors, and this ongoing stress was the key link between poverty and depression.[139]

These global findings further reinforce that mental well-being is deeply connected to financial security, making it a crucial factor in understanding women's mental health struggles.

A 2024 study from Mumbai, which found that financial instability increases the risk of mental health issues. The Mumbai study also highlighted how stress was a key factor leading to severe depression, a trend that aligns with my findings. Interestingly, it also

noted that a positive emotional outlook could act as a protective factor, showing that resilience plays an important role in mental well-being even in difficult circumstances.[140]

Similarly, a 2018 study in a metropolitan city in India looked at postnatal depression and found that women from lower-income groups were at much higher risk. Factors like poverty, lack of access to maternal healthcare, and lower education levels contributed significantly. What stood out in that study was that many of these women didn't even report their symptoms, likely due to stigma or unawareness. In contrast, the present study was able to identify a clear connection between low socioeconomic status and higher odds of depression, anxiety, and stress. This suggests that mental health struggles among financially disadvantaged women are both widespread and often hidden.[141]

A study done in India in 2024 focusing on economically marginalized communities also supports this link between financial hardship and mental health. It found that women in these communities reported moderate levels of distress, largely due to factors like lack of resources, community violence, and gender discrimination. The present study aligns with these findings, reinforcing that woman in lower-income settings experience ongoing psychological distress due to their financial and social environments. The study also found that factors like age, marital status, and the education level of the family head played a role in predicting distress, which adds another layer of complexity to the issue.[142]

The pattern continues in a 2020 study conducted in rural South India, where one in six women was found to be experiencing depression. This study highlighted how lower education levels and unstable marital status (such as being separated or divorced) made women even more vulnerable. This resonates with my findings, as the lower socioeconomic group in my study had increased odds of facing mental health challenges. It's clear that financial difficulties, combined with other social factors, can make life especially challenging for women in rural areas.[11]

A 2024 study from Karnataka also touched on common mental disorders in women, though it reported a slightly lower prevalence than my study. However, it did find that

women with chronic illnesses, early marriages, past abortions, or a history of domestic violence were at higher risk. While the present study focused primarily on socioeconomic status, both studies suggest that financial struggles often go hand in hand with difficult life experiences that worsen mental health. It's not just about income it's about the cumulative effect of stressors that many women in lower-income groups face.[94]

In Tamil Nadu, a 2022 study once again found that lower socioeconomic status was strongly linked to depression among women. The study pointed out that social stigma, financial burdens, and lack of awareness about those mental health challenges contribute to why so many cases go untreated. The present study aligns with this, as it also highlights how lower-income women face a greater burden of depression, anxiety, and stress. The Tamil Nadu study reported a depression prevalence of nearly 18%, which fits within the range seen in other studies and suggests that this is a widespread issue.[39]

Across all these studies, a common thread emerges women from lower socioeconomic backgrounds face significant mental health challenges. Whether it's due to financial instability, social stigma, lack of healthcare access, or stressful life experiences, the burden of depression, anxiety, and stress falls disproportionately on this group. The present study findings fit within this broader picture, reinforcing that economic struggles remain a key factor in shaping mental health outcomes for women across India.

SUMMARY AND CONCLUSION

8.SUMMARY

This community-based cross-sectional study was conducted among 630 married women aged 18–60 years in the rural field practice area of RHTC, Devarayasamudra, Kolar district, Karnataka. The primary objective was to estimate the prevalence of depression, anxiety, and stress and identify their associated socio-demographic and health-related factors using the DASS-42 (Depression Anxiety Stress Scale-42) questionnaire.

The study revealed high mental health morbidity:

Depression: 72.3%

Anxiety: 71.91%

Stress: 61.91%

Statistical analyses showed that age, education level, socioeconomic status and family type were significantly associated with mental health status. For instance, perimenopausal and postmenopausal women were more likely to experience severe depression and anxiety, and those from lower socioeconomic classes showed higher stress levels.

The findings highlight the critical burden of unrecognized and untreated mental health conditions among married women in rural settings. This study emphasizes the need for targeted interventions, early screening, and community-level mental health integration to improve the psychological well-being of women in these areas.

8.CONCLUSION

This research confirms the high occurrence of depression, anxiety, and stress among married women in rural Kolar and identifies key demographic, social, and health-related determinants. Factors such as age, education, low socioeconomic status, joint family structure, personal habits like tobacco chewing, and presence of comorbidities were associated with higher psychological distress.

The study underscores the urgent need for integrating mental health services at the primary care level, especially in rural communities. By addressing these challenges through a multi-sectoral approach, significant improvements can be made in the mental well-being and overall quality of life of rural married women.

STRENGTH AND LIMITATIONS

9.STRENGTHS OF THE STUDY

- Community-based design ensures real-world relevance and provides grassroots-level data on mental health among rural women.
- Multi-stage sampling across 8 villages ensures representativeness and minimize selection bias.
- Use of a validated tool (DASS-42) adds reliability and comparability of psychological measurements across populations.
- Inclusion of socio-demographic, personal habits, and health variables allowed a holistic understanding of associated factors.
- Ethical norms, including informed consent and participant confidentiality, ensured adherence to ethical standards in human research.

9.LIMITATIONS OF THE STUDY

- The nature of the cross-sectional study restricts causal interpretation, as observed associations do not establish directionality or time-related effects.
- Self-reported data using DASS-42 may be affected by recall bias or social desirability bias.
- No clinical diagnosis or psychiatric validation was performed to confirm depression, anxiety, or stress cases.
- The study excluded women with chronic illnesses, which may underrepresent true mental health burden.
- Findings are not generalizable to unmarried women and urban populations, or other districts outside Kolar.

RECOMMENDATIONS

10.Recommendations

Short-Term Recommendations

a) Mental Health Screening: Incorporate routine DASS-42-based screening during women's OPD visits or house-to-house ANM/ASHA visits.
b) Awareness Campaigns: Conduct rural IEC (Information, Education, and Communication) and BCC (Behavior Change Communication) campaigns to reduce mental health stigma and promote help-seeking behavior.
c) Training of Field Staff: Train ASHA, Anganwadi workers, and PHC staff to identify and refer early symptoms of mental illness.
d) Support Groups: Create village-level women's self-help groups with embedded mental health peer-support and counselling.

Long-Term Recommendations

a) Policy Integration: Promote the integration of mental health services within the National Rural Health Mission (NRHM) and maternal healthcare initiatives to enhance comprehensive well-being.
b) Economic Empowerment: Promote self-help groups, microfinance initiatives, and livelihood training to address financial dependence.
c) School and Youth Engagement: Initiate mental health education for adolescent girls and young women pre-marriage to build resilience.
d) Community Mental Health Clinics: Establish regular outreach psychiatry services in rural PHCs in collaboration with medical colleges.
e) Academic Collaboration: Encourage more region-specific mental health research and longitudinal studies to build local data for policy.

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ANNEXURE

ANNEXURE – I

Section A **Form No.:**

SOCIODEMOGRAPHIC PROFILE

NAME/ ಹೆಸರು:

AGE/ ವಯಸ್ಸು:

EDUCATION/ ಶಿಕ್ಷಣ	Professional/Graduate/Intermediate High school/Primary school/Illiterate
RELIGION/ ಧರ್ಮ	Hindu / Muslim / Christian
OCCUPATION/ ಉದ್ಯೋಗ	Professional / Semi professional Clerical, shop owner, Farmer/ Skilled worker Semi-skilled worker / Unskilled worker/ Unemployed
HISTORY OF DIABETES/HYPERTENSION ಮಧುಮೇಹ/ಅಧಿಕ ರಕ್ತದೊತ್ತಡದ ಇತಿಹಾಸ	Diabetes Hypertension Yes / No Yes / No
TYPE OF FAMILY/ ಕುಟುಂಬದ ಪ್ರಕಾರ	Joint / Nuclear / Three generation
SOCIOECONOMIC CLASS (ACCORDING TO MODIFIED BG PRASAD CLASSIFICATION)	Upper / Upper middle / Middle / Lower middle/ Lower class
NUMBER OF FAMILY MEMBERS/ ಕುಟುಂಬದ ಸದಸ್ಯರ ಸಂಖ್ಯೆ	
PERSONAL HABITS/ ವೈಯಕ್ತಿಕ ಅಭ್ಯಾಸಗಳು	Smoking / Alcohol consumption / Tobacco chewing / Nil

ANNEXURE – II

Information Sheet:

Title: PREVALANCE OF DEPRESSION, ANXIETY, STRESS AND ITS ASSOCIATED FACTORS AMONG MARRIED WOMEN IN RURAL AREAS OF KOLAR -A CROSS-SECTIONAL STUDY.

My name is Dr. Abhiharshan SB, Post graduate in the department of Community Medicine, Sri Devaraj Urs Medical College, Kolar. I'm carrying out a study on prevalence of depression, anxiety, stress and its associated factors among married women in rural areas of Kolar the study has been reviewed by the local ethical review board and has been started only after their formal approval.

Depression, anxiety, stress and its associated factors among married women is frequently unrecognized, under diagnosed and under treated, much less attention has been found among individuals in India. In this regard I'm doing this study to find out the prevalence of depression, anxiety and stress among married woman by giving a simple questionnaire, you need not have to answer any questions that you do not want to answer. However, your honest answer to these questions will help us. We would greatly appreciate your help in responding to the questionnaire.

Participation in this study doesn't involve any cost for you. This study is not only beneficial to you but also to the community at large. The results gathered from this study will be beneficial in estimating the prevalence.

All the information collected from you will be strictly confidential and will not be disclosed to any outsider unless compelled by law. This information collected will be used only for research.

There is no compulsion to participate in this study. You will be no way affected if you don't wish to participate in this study. You are required to sign only if you voluntarily agree to participate in this study. Further, you are at a liberty to withdraw from the study at any time, if you wish to do so. It is up to you to decide whether to participate. This document will be stored in the safe locker in the department of Community Medicine in the college and a copy is given to you for information.

For any further clarification you are free to contact the principal investigator,

Dr. ABHIHARSHAN SB **Contact num: 8610030130**

ANNEXURE - III

ಮಾಹಿತಿ ಹಾಳೆ:

ಶೀರ್ಷಿಕೆ: ಕೋಲಾರದ ಗ್ರಾಮಾಂತರ ಪ್ರದೇಶಗಳಲ್ಲಿನ ವಿವಾಹಿತ ಮಹಿಳೆಯರಲ್ಲಿ ಖಿನ್ನತೆ, ಆತಂಕ, ಒತ್ತಡ ಮತ್ತು ಅದಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ಅಂಶಗಳು -ಒಂದು ಅಡ್ಡ ವಿಭಾಗದ ಅಧ್ಯಯನ.

ನನ್ನ ಹೆಸರು ಡಾ. ಅಭಿಹರ್ಶನ್ ಎಸ್.ಬಿ., ಕಮ್ಯುನಿಟಿ ಮೆಡಿಸಿನ್ ವಿಭಾಗದಲ್ಲಿ ಸ್ನಾತಕೋತ್ತರ ಪದವಿ, ಶ್ರೀ ದೇವರಾಜ್ ಮೆಡಿಕಲ್ ಕಾಲೇಜು, ಕೋಲಾರ. ನಾನು ಕೋಲಾರದ ಗ್ರಾಮೀಣ ಪ್ರದೇಶಗಳಲ್ಲಿನ ವಿವಾಹಿತ ಮಹಿಳೆಯರಲ್ಲಿ ಖಿನ್ನತೆ, ಆತಂಕ, ಒತ್ತಡ ಮತ್ತು ಅದಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ಅಂಶಗಳ ಕುರಿತು ಅಧ್ಯಯನವನ್ನು ನಡೆಸುತ್ತಿದ್ದೇನೆ, ಅಧ್ಯಯನವನ್ನು ಸ್ಥಳೀಯ ನೈತಿಕ ಪರಿಶೀಲನಾ ಮಂಡಳಿಯು ಪರಿಶೀಲಿಸಿದೆ ಮತ್ತು ಅವರ ಔಪಚಾರಿಕ ಅನುಮೋದನೆಯ ನಂತರವೇ ಅಧ್ಯಯನವನ್ನು ಪ್ರಾರಂಭಿಸಲಾಗಿದೆ.

ವಿವಾಹಿತ ಮಹಿಳೆಯರಲ್ಲಿ ಖಿನ್ನತೆ, ಆತಂಕ, ಒತ್ತಡ ಮತ್ತು ಅದರ ಸಂಬಂಧಿತ ಅಂಶಗಳು ಆಗಾಗ್ಗೆ ಗುರುತಿಸಲ್ಪಡುವುದಿಲ್ಲ, ರೋಗನಿರ್ಣಯ ಮತ್ತು ಚಿಕಿತ್ಸೆಯಲ್ಲಿದೆ, ಭಾರತದಲ್ಲಿನ ವ್ಯಕ್ತಿಗಳಲ್ಲಿ ಕಡಿಮೆ ಗಮನವು ಕಂಡುಬಂದಿದೆ. ಈ ನಿಟ್ಟಿನಲ್ಲಿ ನಾನು ಸರಳವಾದ ಪ್ರಶ್ನಾವಳಿಯನ್ನು ನೀಡುವ ಮೂಲಕ ವಿವಾಹಿತ ಮಹಿಳೆಯಲ್ಲಿ ಖಿನ್ನತೆ, ಆತಂಕ ಮತ್ತು ಒತ್ತಡದ ವ್ಯಾಪಕತೆಯನ್ನು ಕಂಡುಹಿಡಿಯಲು ಈ ಅಧ್ಯಯನವನ್ನು ಮಾಡುತ್ತಿದ್ದೇನೆ, ನೀವು ಉತ್ತರಿಸಲು ಬಯಸದ ಯಾವುದೇ ಪ್ರಶ್ನೆಗಳಿಗೆ ನೀವು ಉತ್ತರಿಸಬೇಕಾಗಿಲ್ಲ. ಆದಾಗ್ಯೂ, ಈ ಪ್ರಶ್ನೆಗಳಿಗೆ ನಿಮ್ಮ ಪ್ರಾಮಾಣಿಕ ಉತ್ತರವು ನಮಗೆ ಸಹಾಯ ಮಾಡುತ್ತದೆ. ಪ್ರಶ್ನಾವಳಿಗೆ ಪ್ರತಿಕ್ರಿಯಿಸುವಲ್ಲಿ ನಿಮ್ಮ ಸಹಾಯವನ್ನು ನಾವು ಬಹಳವಾಗಿ ಪ್ರಶಂಸಿಸುತ್ತೇವೆ.ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸುವಿಕೆಯು ನಿಮಗೆ ಯಾವುದೇ ವೆಚ್ಚವನ್ನು ಒಳಗೊಂಡಿರುವುದಿಲ್ಲ. ಈ ಅಧ್ಯಯನವು ನಿಮಗೆ ಮಾತ್ರವಲ್ಲದೆ ದೊಡ್ಡ ಸಮುದಾಯಕ್ಕೂ ಪ್ರಯೋಜನಕಾರಿಯಾಗಿದೆ. ಈ ಅಧ್ಯಯನದಿಂದ ಸಂಗ್ರಹಿಸಿದ ಫಲಿತಾಂಶಗಳು ಹರಡುವಿಕೆಯನ್ನು ಅಂದಾಜು ಮಾಡಲು ಪ್ರಯೋಜನಕಾರಿಯಾಗಿದೆ.

ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ಯಾವುದೇ ಒತ್ತಾಯವಿಲ್ಲ. ನೀವು ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ಬಯಸದಿದ್ದರೆ ನೀವು ಯಾವುದೇ ರೀತಿಯಲ್ಲಿ ಪರಿಣಾಮ ಬೀರುವುದಿಲ್ಲ. ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ನೀವು ಸ್ವಯಂಪ್ರೇರಣೆಯಿಂದ ಒಪ್ಪಿಕೊಂಡರೆ ಮಾತ್ರ ನೀವು ಸಹಿ ಮಾಡಬೇಕಾಗುತ್ತದೆ. ಇದಲ್ಲದೆ, ನೀವು ಹಾಗೆ ಮಾಡಲು ಬಯಸದ್ದಿದರೆ, ಯಾವುದೇ ಸಮಯದಲ್ಲಿ ಅಧ್ಯಯನದಿಂದ ಹಿಂದೆ ಸರಿಯಲು ನಿಮಗೆ ಸ್ವಾತಂತ್ರ್ಯವಿದೆ. ಭಾಗವಹಿಸಬೇಕೆ ಎಂದು ನಿರ್ಧರಿಸುವುದು ನಿಮಗೆ ಬಿಟ್ಟದ್ದು. ಈ ಡಾಕ್ಯುಮೆಂಟ್ ಅನ್ನು ಕಾಲೇಜಿನ ಕಮ್ಯುನಿಟಿ ಮೆಡಿಸಿನ್ ವಿಭಾಗದಲ್ಲಿ ಸುರಕ್ಷಿತ ಲಾಕರ್‌ನಲ್ಲಿ ಸಂಗ್ರಹಿಸಲಾಗುತ್ತದೆ ಮತ್ತು ಮಾಹಿತಿಗಾಗಿ ಪ್ರತಿಯನ್ನು ನಿಮಗೆ ನೀಡಲಾಗುತ್ತದೆ. ಯಾವುದೇ ಹೆಚ್ಚಿನ ಸ್ಪಷ್ಟೀಕರಣಕ್ಕಾಗಿ ನೀವು ಪ್ರಧಾನ ತನಿಖಾಧಿಕಾರಿಯನ್ನು ಸಂಪರ್ಕಿಸಲು ಮುಕ್ತರಾಗಿದ್ದೀರಿ,

ಡಾ. ಅಭಿಹರ್ಶನ್ ಎಸ್.ಬಿ ಸಂಪರ್ಕ ಸಂಖ್ಯೆ: 8610030130

ANNEXURE - IV

INFORMED CONSENT-PARTICIPANT

SL No:

TITLE OF THE STUDY: PREVALANCE OF DEPRESSION, ANXIETY, STRESS AND ITS ASSOCIATED FACTORS AMONG MARRIED WOMEN IN RURAL AREAS OF KOLAR -A CROSS-SECTIONAL STUDY

I, the undersigned, agree to participate in this study and to undergo counselling and disclosure of my personal information and as outlined in this consent form.

I have been read out/ explained in my local language i.e., in Kannada and understand the purpose of this study and the confidential nature of the information that will be collected and disclosed during the study.

I have had the opportunity to ask questions regarding the various aspects of this study and my questions have been answered to my full satisfaction. The information collected will be used only for research.

I understand that I remain free to withdraw from this study at any time. Participation in this study is under my sole discretion and does not involve any cost to me.

Subject's name and signature /thumb impression

Name and signature of witness

1. Date:

2.

Name and signature of interviewer:

Name and signature of Principal Investigator: Dr. ABHIHARSHAN SB

ANNEXURE - V

ಮಾಹಿತಿ ನೀಡಿದ ಒಪ್ಪಿಗೆ-ಭಾಗವಹಿಸುವವರು

ಎಸ್‌ಎಲ್ ಸಂಖ್ಯೆ:

ಶೀರ್ಷಿಕೆ: ಕೋಲಾರದ ಗ್ರಾಮಾಂತರ ಪ್ರದೇಶಗಳಲ್ಲಿನ ವಿವಾಹಿತ ಮಹಿಳೆಯರಲ್ಲಿ ಖಿನ್ನತೆ, ಆತಂಕ, ಒತ್ತಡ ಮತ್ತು ಅದಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ಅಂಶಗಳು -ಒಂದು ಅಡ್ಡ ವಿಭಾಗದ ಅಧ್ಯಯನ.

ನಾನು, ಕೆಳಗೆ ಸಹಿ ಮಾಡಿದ್ದೇನೆ, ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ಮತ್ತು ನನ್ನ ವೈಯಕ್ತಿಕ ಮಾಹಿತಿಯ ಸಮಾಲೋಚನೆ ಮತ್ತು ಬಹಿರಂಗಪಡಿಸುವಿಕೆಗೆ ಒಳಗಾಗಲು ಮತ್ತು ಈ ಒಪ್ಪಿಗೆ ನಮೂನೆಯಲ್ಲಿ ವಿವರಿಸಿರುವಂತೆ ಒಪ್ಪಿಕೊಳ್ಳುತ್ತೇನೆ.

ನಾನು ನನ್ನ ಸ್ಥಳೀಯ ಭಾಷೆಯಲ್ಲಿ ಅಂದರೆ ಕನ್ನಡದಲ್ಲಿ ಓದಿದ್ದೇನೆ/ ವಿವರಿಸಿದ್ದೇನೆ ಮತ್ತು ಈ ಅಧ್ಯಯನದ ಉದ್ದೇಶ ಮತ್ತು ಅಧ್ಯಯನದ ಸಮಯದಲ್ಲಿ ಸಂಗ್ರಹಿಸಿದ ಮತ್ತು ಬಹಿರಂಗಪಡಿಸುವ ಮಾಹಿತಿಯ ಗೌಪ್ಯ ಸ್ವರೂಪವನ್ನು ಅರ್ಥಮಾಡಿಕೊಂಡಿದ್ದೇನೆ.

ಈ ಅಧ್ಯಯನದ ವಿವಿಧ ಅಂಶಗಳ ಬಗ್ಗೆ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಲು ನನಗೆ ಅವಕಾಶವಿದೆ ಮತ್ತು ನನ್ನ ಪ್ರಶ್ನೆಗಳಿಗೆ ನನ್ನ ಪೂರ್ಣ ತೃಪ್ತಿಗೆ ಉತ್ತರಿಸಲಾಗಿದೆ. ಸಂಗ್ರಹಿಸಿದ ಮಾಹಿತಿಯನ್ನು ಸಂಶೋಧನೆಗೆ ಮಾತ್ರ ಬಳಸಲಾಗುತ್ತದೆ.

ನಾನು ಯಾವುದೇ ಸಮಯದಲ್ಲಿ ಈ ಅಧ್ಯಯನದಿಂದ ಹಿಂದೆ ಸರಿಯಲು ಮುಕ್ತನಾಗಿರುತ್ತೇನೆ ಎಂದು ನಾನು ಅರ್ಥಮಾಡಿಕೊಂಡಿದ್ದೇನೆ. ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸುವಿಕೆಯು ನನ್ನ ಸ್ವಂತ ವಿವೇಚನೆಗೆ ಒಳಪಟ್ಟಿರುತ್ತದೆ ಮತ್ತು ನನಗೆ ಯಾವುದೇ ವೆಚ್ಚವನ್ನು ಒಳಗೊಂಡಿರುವುದಿಲ್ಲ.

ವಿಷಯದ ಹೆಸರು ಮತ್ತು ಸಹಿ / ಹೆಬ್ಬೆರಳಿನ ಗುರುತು

ಸಾಕ್ಷಿಯ ಹೆಸರು ಮತ್ತು ಸಹಿ

1. ದಿನಾಂಕ**:**

2.

ಸಂದರ್ಶಕರ ಹೆಸರು ಮತ್ತು ಸಹಿ:

ಪ್ರಧಾನ ತನಿಖಾಧಿಕಾರಿಯ ಹೆಸರು ಮತ್ತು ಸಹಿ: ಡಾ. ಅಭಿಹರ್ಶನ್ ಎಸ್.ಬಿ

ANNEXURE - VI

DASS

Name: *Date:*

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you *over the past week*. There are no right or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows:

0 Did not apply to me at all
1 Applied to me to some degree, or some of the time
2 Applied to me to a considerable degree, or a good part of time
3 Applied to me very much, or most of the time

1	I found myself getting upset by quite trivial things	0	1	2	3
2	I was aware of dryness of my mouth	0	1	2	3
3	I couldn't seem to experience any positive feeling at all	0	1	2	3
4	I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion)	0	1	2	3
5	I just couldn't seem to get going	0	1	2	3
6	I tended to over-react to situations	0	1	2	3
7	I had a feeling of shakiness (eg, legs going to give way)	0	1	2	3
8	I found it difficult to relax	0	1	2	3
9	I found myself in situations that made me so anxious I was most relieved when they ended	0	1	2	3
10	I felt that I had nothing to look forward to	0	1	2	3
11	I found myself getting upset rather easily	0	1	2	3
12	I felt that I was using a lot of nervous energy	0	1	2	3
13	I felt sad and depressed	0	1	2	3
14	I found myself getting impatient when I was delayed in any way (eg, elevators, traffic lights, being kept waiting)	0	1	2	3
15	I had a feeling of faintness	0	1	2	3
16	I felt that I had lost interest in just about everything	0	1	2	3
17	I felt I wasn't worth much as a person	0	1	2	3
18	I felt that I was rather touchy	0	1	2	3
19	I perspired noticeably (eg, hands sweaty) in the absence of high temperatures or physical exertion	0	1	2	3
20	I felt scared without any good reason	0	1	2	3
21	I felt that life wasn't worthwhile	0	1	2	3

Reminder of rating scale:

0 Did not apply to me at all
1 Applied to me to some degree, or some of the time
2 Applied to me to a considerable degree, or a good part of time
3 Applied to me very much, or most of the time

22	I found it hard to wind down	0	1	2	3
23	I had difficulty in swallowing	0	1	2	3
24	I couldn't seem to get any enjoyment out of the things I did	0	1	2	3
25	I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat)	0	1	2	3
26	I felt down-hearted and blue	0	1	2	3
27	I found that I was very irritable	0	1	2	3
28	I felt I was close to panic	0	1	2	3
29	I found it hard to calm down after something upset me	0	1	2	3
30	I feared that I would be "thrown" by some trivial but unfamiliar task	0	1	2	3
31	I was unable to become enthusiastic about anything	0	1	2	3
32	I found it difficult to tolerate interruptions to what I was doing	0	1	2	3
33	I was in a state of nervous tension	0	1	2	3
34	I felt I was pretty worthless	0	1	2	3
35	I was intolerant of anything that kept me from getting on with what I was doing	0	1	2	3
36	I felt terrified	0	1	2	3
37	I could see nothing in the future to be hopeful about	0	1	2	3
38	I felt that life was meaningless	0	1	2	3
39	I found myself getting agitated	0	1	2	3
40	I was worried about situations in which I might panic and make a fool of myself	0	1	2	3
41	I experienced trembling (eg, in the hands)	0	1	2	3
42	I found it difficult to work up the initiative to do things	0	1	2	3

ANNEXURE - VII

ದಯವಿಟ್ಟು ಪ್ರತಿಯೊಂದು ವಿವರಣೆಯನ್ನೂ ಓದಿ. ಕಳೆದ ವಾರದಿಂದ ನಿಮಗೆ ಈ ವಿವರಣೆ ಎಷ್ಟು ಹೊಂದುತ್ತದೆ ಎನ್ನುವುದನ್ನು ಆಧರಿಸಿ 0, 1, 2, ಅಥವಾ 3 ಕ್ಕೆ ವೃತ್ತ ಹಾಕಿ. ಇಲ್ಲಿ ಯಾವುದೇ ಸರಿ ಅಥವಾ ತಪ್ಪು ಉತ್ತರ ಇರುವುದಿಲ್ಲ. ಯಾವುದೇ ವಿವರಣೆಯ ಮೇಲೆ ಹೆಚ್ಚು ಸಮಯ ವ್ಯಯಿಸಬೇಡಿ.

ಅಂಕದ ಮಾಪನ ಕೆಳಗಿನಂತಿದೆ:

0 -ನನಗೆ ಸ್ವಲ್ಪವೂ ಅನ್ವಯವಾಗುವುದಿಲ್ಲ

1 - ಸ್ವಲ್ಪ ಅಥವಾ ಕೆಲವೊಮ್ಮೆ ಅನ್ವಯವಾಗುತ್ತದೆ

2 - ನನಗೆ ಗಣನೀಯ ಪ್ರಮಾಣದಲ್ಲಿ ಅಥವಾ ಉತ್ತಮವಾಗಿ ಅನ್ವಯವಾಗುತ್ತದೆ

3 - ಹೆಚ್ಚು ಅಥವಾ ಹೆಚ್ಚಿನ ಸಮಯದಲ್ಲಿ ಅನ್ವಯವಾಗುತ್ತದೆ

1.	ನನಗೆ ಆತಂಕದಿಂದ ಹೊರಬರಲು ಕಷ್ಟವೆನಿಸುತ್ತಿತ್ತು	0 1 2 3
2.	ನನಗೆ ಬಾಯಿ ಒಣಗಿದಂತೆನಿಸುತ್ತಿತ್ತು	0 1 2 3
3.	ನನಗೆ ಸ್ವಲ್ಪವೂ,ಯಾವುದೇ ಸಕಾರಾತ್ಮಕ ಭಾವನೆಯ ಅನುಭವವಾಗುತ್ತಿರಲಿಲ್ಲ	0 1 2 3
4.	ನನಗೆ ಉಸಿರಾಡಲು ಕಷ್ಟವಾಗುತ್ತಿತ್ತು (ಉದಾ: ವೇಗವಾದ ಉಸಿರಾಟ, ದೈಹಿಕ ಶ್ರಮದ ಅನುಪಸ್ಥಿತಿಯಲ್ಲಿ ಉಸಿರಾಟ ಕಷ್ಟ)	0 1 2 3
5.	ಏನಾದರೂ ಕೆಲಸ ಮಾಡಲು ಆರಂಭಿಸುವುದು ಕಷ್ಟವೆನಿಸುತ್ತಿತ್ತು	0 1 2 3
6.	ನಾನು ಸನ್ನಿವೇಶಗಳಿಗೆ ಅತಿಯಾಗಿ ಸ್ಪಂದಿಸುತ್ತಿದ್ದೆ	0 1 2 3
7.	ನನಗೆ ನಡುಕ ಉಂಟಾಗುತ್ತಿತ್ತು (ಉದಾ: ಕೈಗಳಲ್ಲಿ)	0 1 2 3
8.	ನಾನು ಹೆಚ್ಚು ಆತಂಕಕ್ಕೊಳಗಾಗಿದ್ದೇನೆ ಎನಿಸುತ್ತಿತ್ತು	0 1 2 3
9.	ನನಗೆ ಗಾಬರಿಯಾಗುವ ಮತ್ತು ನನ್ನನ್ನು ಮೂರ್ಖನಾಗಿಸುವ ಸನ್ನಿವೇಶಗಳ ಬಗ್ಗೆ ಚಿಂತಿತನಾಗುತ್ತಿದ್ದೆ	0 1 2 3
10.	ನಾನು ಏನನ್ನೂ ಎದುರು ನೋಡುವಂತಿಲ್ಲ ಎನಿಸುತ್ತಿತ್ತು	0 1 2 3
11.	ನನಗೆ ವ್ಯಗ್ರತೆ(ಕೋಪ) ಇದೆ ಎನಿಸುತ್ತಿತ್ತು	0 1 2 3
12.	ನನಗೆ ಆತಂಕರಹಿತವಾಗಿರಲು ಕಷ್ಟವೆನಿಸುತ್ತಿತ್ತು	0 1 2 3
13.	ನನಗೆ ನಿರಾಸೆ ಮತ್ತು ಬೇಸರದ ಭಾವನೆ ಬರುತ್ತಿತ್ತು	0 1 2 3
14.	ನಾನು ಮಾಡುವ ಕೆಲಸಕ್ಕೆ ಅಡ್ಡಬರುವ ಯಾವುದೇ ವಿಷಯದ ಬಗ್ಗೆ ನನಗೆ ಅಸಹಿಷ್ಣುತೆಯಿತ್ತು	0 1 2 3
15.	ನನಗೆ ಗಾಬರಿ ಉಂಟಾಗುತ್ತಿದೆ ಎನಿಸುತ್ತಿತ್ತು	0 1 2 3
16.	ನಾನು ಯಾವುದೇ ವಿಷಯದ ಬಗ್ಗೆ ಉತ್ಸಾಹ ಹೊಂದಲು ಅಸಾಧ್ಯವಾಗುತ್ತಿತ್ತು	0 1 2 3
17.	ನಾನು ಉಪಯುಕ್ತ ವ್ಯಕ್ತಿ ಅಲ್ಲ ಎಂದು ಎನಿಸುತ್ತಿತ್ತು	0 1 2 3
18.	ನಾನು ಹೆಚ್ಚು ಸೂಕ್ಷ್ಮ ಮನಸ್ಸಿನವನು ಎನಿಸುತ್ತಿತ್ತು	0 1 2 3
19.	ದೈಹಿಕ ಪರಿಶ್ರಮದ ಅನುಪಸ್ಥಿತಿಯಲ್ಲಿ ನನ್ನ ಹೃದಯದ ಕ್ರಿಯೆಯ ಬಗ್ಗೆ ನನಗೆ ಅರಿವಿತ್ತು (ಉದಾ: ಹೃದಯ ಬಡಿತ ಹೆಚ್ಚಾಗುವುದು, ಹೃದಯದ ಬಡಿತ ತಪ್ಪಿದಂತಾಗುವುದು)	0 1 2 3
20.	ಯಾವುದೇ ಸರಿಯಾದ ಕಾರಣವಿಲ್ಲದೇ ನನಗೆ ಭಯದ ಅನುಭವವಾಗುತ್ತಿತ್ತು	0 1 2 3
21.	ನನ್ನ ಜೀವನ ಅರ್ಥಹೀನ ಎನಿಸುತ್ತಿತ್ತು	0 1 2 3

22. ನನಗೆ ಗಾಳಿ ಬೀಸಲು ಕಷ್ಟವಾಯಿತು **0 1 2 3**

23. ನನಗೆ ನುಂಗಲು ಕಷ್ಟವಾಯಿತು **0 1 2 3**

24.ನಾನು ಮಾಡಿದ ಕೆಲಸಗಳಿಂದ ನನಗೆ ಯಾವುದೇ ಆನಂದವನ್ನು
ಪಡೆಯಲು ಸಾಧ್ಯವಾಗಲಿಲ್ಲ **0 1 2 3**

25. ದೈಹಿಕ ಅನುಪಸ್ಥಿತಿಯಲ್ಲಿ ನನ್ನ ಹೃದಯದ ಕ್ರಿಯೆಯ ಬಗ್ಗೆ ನನಗೆ ಅರಿವಿತ್ತು
ಪರಿಶ್ರಮ **0 1 2 3**

(ಹೃದಯದ ಬಡಿತ ಹೆಚ್ಚಳದ ಭಾವನೆ, ಹೃದಯ ಬಡಿತವನ್ನು ಕಳೆದುಕೊಂಡಿದೆ)

26. ನಾನು ನಿರಾಶೆ ಮತ್ತು ನೀಲಿ ಎಂದು ಭಾವಿಸಿದೆ **0 1 2 3**

27. ನಾನು ತುಂಬಾ ಕೆರಳುತ್ತಿದ್ದೇನೆ ಎಂದು ನಾನು ಕಂಡುಕೊಂಡೆ **0 1 2 3**

28. ನಾನು ಪ್ಯಾನಿಕ್ಗೆ ಹತ್ತಿರವಾಗಿದ್ದೇನೆ ಎಂದು ನಾನು ಭಾವಿಸಿದೆ **0 1 2 3**

29.ಏನೋ ನನ್ನನ್ನು ಅಸಮಾಧಾನಗೊಳಿಸಿದ ನಂತರ ಶಾಂತವಾಗಲು
ನನಗೆ ಕಷ್ಟವಾಯಿತು **0 1 2 3**

30.ನಾನು ಕೆಲವು ಕ್ಷುಲ್ಲಕದಿಂದ "ಎಸೆಯಲ್ಪಡುತ್ತೇನೆ" ಎಂದು
ನಾನು ಹೆದರುತ್ತಿದ್ದೆ ಆದರೆಪರಿಚಯವಿಲ್ಲದ ಕಾರ್ಯ **0 1 2 3**

31.ನಾನು ಯಾವುದರ ಬಗ್ಗೆಯೂ ಉತ್ಸುಕನಾಗಲು ಸಾಧ್ಯವಾಗಲಿಲ್ಲ **0 1 2 3**

32. ನಾನು ಮಾಡುತ್ತಿರುವುದಕ್ಕೆ ಅಡಚಣೆಗಳನ್ನು ಸಹಿಸಿಕೊಳ್ಳುವುದು
ನನಗೆ ಕಷ್ಟವಾಯಿತು **0 1 2 3**

33. ನಾನು ನರಗಳ ಒತ್ತಡದ ಸ್ಥಿತಿಯಲ್ಲಿದ್ದೆ **0 1 2 3**

34.ನಾನು ಸಾಕಷ್ಟು ನಿಷ್ಪ್ರಯೋಜಕ ಎಂದು ನಾನು ಭಾವಿಸಿದೆ **0 1 2 3**

35.ನಾನು ಯಾವುದರ ಬಗ್ಗೆಯೂ ಸಹಿಸದೆ ಇದ್ದೆ
ನಾನು ಏನು ಮಾಡುತ್ತಿದ್ದೆ **0 1 2 3**

36. ನನಗೆ ಗಾಬರಿ ಅನಿಸಿತು **0 1 2 3**

37.ಭವಿಷ್ಯದಲ್ಲಿ ನಾನು ಆಶಾದಾಯಕವಾಗಿರಲು ಏನನ್ನೂ
ನೋಡಲಾಗಲಿಲ್ಲ **0 1 2 3**

38.ಜೀವನವು ಅರ್ಥಹೀನ ಎಂದು ನಾನು ಭಾವಿಸಿದೆ **0 1 2 3**

39. ನಾನು ಉದ್ರೇಕಗೊಳ್ಳುವುದನ್ನು ಕಂಡುಕೊಂಡೆ **0 1 2 3**

40. ನಾನು ಭಯಭೀತರಾಗುವ ಮತ್ತು ಮಾಡುವ ಸನ್ನಿವೇಶಗಳ ಬಗ್ಗೆ ನಾನು
ಚಿಂತಿತನಾಗಿದ್ದೆನಾನೇ ಮೂರ್ಖ **0 1 2 3**

41. ನಾನು ನಡುಗುವಿಕೆಯನ್ನು ಅನುಭವಿಸಿದೆ (ಉದಾ, ಕೈಯಲ್ಲಿ) **0 1 2 3**

42.ಕೆಲಸಗಳನ್ನು ಮಾಡಲು ಉಪಕ್ರಮವನ್ನು ಮಾಡಲು ನನಗೆ ಕಷ್ಟವಾಯಿತು **0 1 2 3**

ANNEXURE – VIII

GANTT CHART

STEP	ACTIVITY	TIME PERIOD										
		2023			2024				2025			
		Feb-march	April	May-June	July	Aug-September	October-November	December	January	February	March	April
1	Topic search, selection & synopsis writing											
2	Synopsis submission											
3	Approval by IEC*											
4	Proforma Preparation and validation											
5	Pilot project											
6	Review of literature											
7	Data collection											
8	Data analysis											
9	Dissertation writing											
10	Submission of dissertation											

ANNEXURE - IX

SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

SRI DEVARAJ URS MEDICAL COLLEGE

Tamaka, Kolar

INSTITUTIONAL ETHICS COMMITTEE

Members

1. **Dr. D.E.Gangadhar Rao, (Chairman)** Prof. & HOD of Zoology, Govt. Women's College, Kolar
2. **Dr. Sujatha.M.P, (Member Secretary),** Prof. Department of Anesthesia, SDUMC
3. Mr. Gopinath Paper Reporter, Samyukth Karnataka
4. Mr. G. K. Varada Reddy Advocate, Kolar
5. Dr. Hariprasad S. Prof. Dept. of Orthopedics, SDUMC
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9. Dr. Munilakshmi U Asst. Prof. Dept. of Biochemistry, SDUMC
10. Dr.D.Srinivasan, Assoc. Prof. Dept. of Surgery, SDUMC
11. Dr.Shilpa M D Assoc. Prof. Dept. of Pathology, SDUMC

No. DMC/KLR/IEC/12/ 2023-24 **Date: 10/04/2023**

PRIOR PERMISSION TO START OF STUDY

The Institutional Ethics Committee of Sri Devaraj Urs Medical College, Tamaka, Kolar has examined and unanimously approved the synopsis entitled **" Prevalance Of Depression, Anxiety, Stress And Its Associated Factors Among Married Women In Rural Areas Of Kolar -A Cross Sectional Study"** being investigated by **Dr.Abhiharshan S B & Dr.Muninarayana.C** in the Department of Community Medicine at Sri Devaraj Urs Medical College, Tamaka, Kolar. **Permission is granted by the Ethics Committee to start the study.**

Sujatha.M.P
Member Secretary
Member Secretary
Institutional Ethics Committee
Sri Devaraj Urs Medical College
Tamaka, Kolar.

Chairman
CHAIRMAN
Institutional Ethics Committee
Sri Devaraj Urs Medical College
Tamaka, Kolar

ANNEXURE - X

Conducting interview to rural married women in Devarayasamudra.

ANNEXURE – XI

DEFINITION OF VARIABLES

1. Age

- **Definition**: The age of the participant in completed years, grouped into 5 categories: 18–24, 25–34, 35–44, 45–54, and 55+.[76]

2. Education Status

- **Definition**: The highest level of formal education completed by the participant, categorized as Illiterate, Primary School, High School, Intermediate, Graduate, or Professional.[78]

Education Status – Definitions

- Illiterate – A person who cannot read or write in any language.
- Primary School – Completed up to Class 5.
- High School – Completed Class 6 to Class 10.
- Intermediate – Completed Class 11 and 12 (also called Pre-University).
- Graduate – Completed a bachelor's degree (e.g., B.A., B.Sc., B. Com).
- Professional – Completed professional degree education such as MBBS, BE, or LLB.[78]

3. Occupation

- **Definition**: The type of work or employment the participant is engaged in, categorized based on the Kuppuswamy socioeconomic classification: Professional, Semi-professional, Clerical/Farmer, Skilled, Semi-skilled, Unskilled, and Unemployed.[78]

Occupation – Definitions

- Professional – Occupations requiring advanced qualifications or academic degrees (e.g., doctor, engineer, professor).
- Semi-professional – Moderately skilled jobs needing some training or diploma (e.g., nurse, technician, teacher).
- Clerical/Shop Owner/Farmer – Occupations involving business, desk jobs, or agriculture (e.g., clerks, shopkeepers, farmers).

- Skilled Worker – Jobs requiring technical training or apprenticeship (e.g., tailor, electrician, carpenter).
- Semi-skilled Worker – Jobs requiring limited or basic skills (e.g., driver, vendor, cleaner).
- Unskilled Worker – Manual labour without formal training (e.g., daily wage labourers, sweepers).
- Unemployed – Not engaged in any income-generating employment or occupation.[78]

4. Type of Family

- **Definition**: The family structure in which the participant lives: Nuclear, Joint, or Three-generation family.

5. Number of Family Members

- **Definition**: The total number of members in the household, categorized as Small (≤4), Medium (5–6), or Large (≥7).[79]

6. Socioeconomic Status

- **Definition**: Determined using the **Modified BG Prasad Classification 2024**, based on per capita monthly income.[78]

7. Comorbidities

- **Definition**: Presence of chronic medical conditions such as diabetes mellitus or hypertension, or both.

8. Personal Habits

- **Definition**: Use of tobacco or smoking practices (Cigarette/Beedi smoking, Tobacco chewing).

Psychological Variables Assessed Using DASS-42 Scale

9. Depression

- **Definition**: Measured using 14 items on the DASS-42 scale. Scores are categorized into Normal, Mild, Moderate, Severe, and Extremely Severe.[75]

10. Anxiety

- **Definition**: Measured using 14 items on the DASS-42 scale, with severity classification similar to depression.[75]

11. Stress

- **Definition**: Measured using 14 items on the DASS-42 scale. Higher scores indicate more severe symptoms.[75]

ANNEXURE – XII

Master Chart