

**PERCEIVED SOCIAL SUPPORT, STIGMA AND MENTAL HEALTH
OF FEMALE SEX WORKERS IN AIZAWL CITY**

**DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF PHILOSOPHY**

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(REGN NO – MZU/M.PHIL./595 OF 12.06.2020)



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MIZORAM
JANUARY, 2021**

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BY
REMDINGPUII

Department of Psychology

Under the supervision of
Dr. Zoengpari

Submitted

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Dated: 29.01.2021

Certificate

This is to certify that the present dissertation titled, 'Perceived Social Support, Stigma and Mental Health of Female Sex Workers in Aizawl City' is the bonafide research conducted by Remdingpuii under my supervision. She worked methodologically for her dissertation which is submitted for the Master of Philosophy under the Mizoram University.

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Supervisor

DECLARATION

I, Remdingpuii, hereby declare that the subject matter of this dissertation is the record of work done by me, that the contents of this dissertation did not form basis of the award of any previous degree to me or to do the best of my knowledge to anybody else, and that the dissertation has not been submitted by me for any research degree in any other University/Institute.

This is being submitted to the Mizoram University for the degree of Master of Philosophy in the Psychology.

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ACKNOWLEDGEMENT

First and foremost, I would like to thank the Almighty God for giving me an endless blessing, good health, strength and his guidance throughout the process of this work.

I would like to express my deepest gratitude toward my supervisor, Dr. Zoengpari, who constantly encourages me to offer my best. I thank her for her patience, continuous support, motivation and for understanding my shortcomings and guiding me during the whole period of this research.

I am grateful to the Department of Psychology, Mizoram University, for giving me an opportunity to do a research, encouraging me and providing help throughout the journey.

I would like to express my sincere gratitude to Mizoram State Aids Control Society (MSACS) for granting me permission to collect my data and I am so grateful toward FSW-TI, an organization for helping me in collecting the data, as well as Chite Home, OKM Home, and TBC Home, Sakawrtuichhun.

My sincere thanks go to Dr. C. Lalfamkima Varte, Professor at the Department of Psychology, for his assistance in statistics and helping me complete my research. I also thank my fellow research scholar and senior research scholar for their insight and feedback.

Finally, I am so thankful to my family and friends, who always there for me, giving me a constant support and prayers.

(REMDINGPUII)

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INTRODUCTION

Sex work is the exchange of sexual services for money or its equivalent (Overs, 2002). Sex worker activist Carol Leigh coined the term 'sex work' in the 1970s. The term 'sex worker' is used to refer to "Woman, male and transgender individuals and young people who have received, frequently or occasionally, money or products in exchange for sexual services. Sex work differs between countries and cultures, and within them. Sex work can vary in the extent to which it is more or less "formal" or structured and in the degree to which it is distinct from other social and sexual relations and forms of sexual economic exchange" (UNAIDS 2012). Sex workers may or may not consider themselves as sex workers, they are eighteen years or older. If a person is forced into sex work or works involuntarily, they may not be considered as a sex worker. The workplaces and work arrangement of sex workers' are diverse. Harcourt and Donovan (2005) classified sex work into direct (open, formal) and indirect (hidden, informal) sex work. Direct sex workers sell sex for a living and are usually consider sex work as their first source of income. They usually work in the Brothel, the street, or as escort, etc. Indirect sex workers may work through the internet (over the phone such as virtual), lap dancers, waitresses, and may work in the massage parlor and spa, and they do not consider sex work as their first source of income.

'Prostitution' or 'prostitute' is another term for sex work and is commonly used in legislation enacted in the nineteenth and twentieth century. The term 'prostitution' has a negative connotation and considered sex work as stigmatizing and demeaning, therefore the term sex work is preferred (Sex Work and the Law in Asia and the Specific; John Godwin, October 2012).

The pan-India survey (2011) found that women enter the labor markets at an early age because of poverty and limited education, and sex work is one of the options available for females in the labor markets. Females usually start involving sex work at the age of 15-18 years, women who enter into the sex industry have various reasons, but mostly due to economic hardship or

poverty, negative circumstances in life, for buying drugs and some engage in the sex industry by their own choice (Rossler et, al, 2010; S.Niranjan et, al., 2011; the pan-India survey, 2011). A study in India shows that poverty including debt, lack of education and low socioeconomic status, lack of family and social support, early marriage, and domestic violence are the reason for entering sex work (Chattopapadhyay et, al, 1994). Some females enter sex work due to desire to withdrawn from marital life (such as free from violence, humiliation, and dominance from the husband) (S.Niranjan et, al., 2013). Also, according to Niranjan Saggurti et al., 2011, women involve in sex work due to an array of reasons and mostly associated with lack of economic and social resources. Most sex works has economic reason as a strong basis, used primarily as a source of income for sex workers, but also for dependent kin and associates including pimps, managers, and ancillary workers. Individual sex workers have very different motives and baselines such as mode of survival, debt, drug dependency, coercion, forcible compulsion, and social connection, to a desire for wealth, stability, and social mobility (Harcourt, C; B, Donovan, 2005). For many female sex workers, sex work is not their first occupation in general. The 1st Pan-India Survey for Sex Workers, 2011 found that 1488 females had worked in a different workplace before entering sex work while 1158 females enter sex work directly. The most common types of sex work in South India is Street-based sex work for example parks, streets, bus stands, markets, railway stations (P.Chandrasekaran et, al., 2006).

Many studies have reported that sex work is related to health issues, mental health problems, and substance misuse (H. Ward and S. Day, 2006). Sex workers are at high risk of getting or transmitting sexually transmitted diseases (STIs) and Human Immunodeficiency Virus (HIV). They face a high level of violence such as physical violence, sexual violence, and emotional and psychological violence than the general female populations which may lead to lifelong disabilities and life-threatening consequences for their health (Bhattacharjya, M et, al 2015). Female sex workers who encounter a high level of violence reported a poor mental health such as suicide attempts, depressive

symptoms and loneliness (Zhang et al, 2017). For people who work as sex workers, stigma and discrimination are still common, and they even face a challenge in seeking for health care facilities (Teijlingen et, al 2009). Female sex workers also show high rates of psychological problems such as worrying, depression, anxiety, post-traumatic stress disorder, suicidal ideation, suicide attempt, and childhood sexual abuse (W.Rossler et, al 2010; G.Jing et, al 2017; V. Poliah and S. Paruk 2017).

According to Sailo, S. L., (2019) Women Sex Workers in Aizawl, belonged to families where the parents are divorced, remarried, or widowed, and some come from stable families too. Most of them indulged in injecting drug use, and consume alcohol, and initiation to sex work as 16 years on average. That majority of them studied up to high school and belonged to lower socio-economic background. Sex workers in Mizoram entered into this business at the age of below 18 years, an overwhelming majority of sex workers were initiated into this business by a woman friend; other causes include peer pressure, financial reasons, drug addiction, family instability, etc.

In Mizoram, sex workers may be divided into three categories based on the place of operation for soliciting, they are Street-based soliciting, Hotel based soliciting, and Home-based soliciting. Due to transient nature of sex work as there are no Brothels, this leads to many issues and challenges not faced by sex workers elsewhere. They have experienced violence in their lives as sex workers, such as verbal violence, physical violence, and sexual violence. Sexually Transmitted Infection (STI) is another major health concern among them. They also reported that they have the feeling of unhappy or depressed, lost self-confidence, feeling worthlessness. Inability to concentrate, loss of sleep being under strain, etc have also been reported by them and it may be reasonably concluded that women sex workers do face a tremendous amount of stress.

Stigma

Female sex workers experience stigmatization because of their work (Salazar, C.C., et.al., 2014). Stigma is when a person or society views someone in a negatively ostracizing manner because they have a distinguishing trait or personality characteristic that is, or believed to be, a hindrance, a negative drawback in the stereotype that they are used to (Mayo Clinic Staff, 2017). Stigma has been referred to as a mark of disgrace or discredits that distinct a person from others. According to Erving Goffman (1963) stigma is an “attribute that is deeply discrediting”. Stigma is defined as labels, stereotypes, or detrimental views attached and attributed to a person or groups of people when their characteristics, behaviors, or even physical features are deemed to be different from, or inferior, to societal norms and their inherent values (Dudley, 2000). It is crucial to realize that most conceptualizations of stigma do not focus specifically nor primarily on mental health or disorders that arise from drug abuse (Crocker, Major, & Steele, 1998; Goffman, 1963). Stigma is relevant as well as prevalent in other circumstances towards individuals of varied backgrounds including racial discrimination, sexism, wealth monopoly, caste system, and sexual orientation (Ahmedani, B. K., 2011).

Stigma is defined as a powerfully negative label that changes a person's self-concept and self-identity (Macionis & Gerber, 2010). Labeling theory posits that self-identity and the behaviour of individuals may be determined or influenced by the terms used to describe or classify them such as people obtain labels from how others view their tendencies or behaviours. Each individual is aware of how they are judged by others because he or she has attempted many different roles and functions in social interactions and has been able to gauge the reactions of those present. It is associated with the concept of self-fulfilling prophecy and stereotyping.

Labeling theory concerns itself mostly not with the normal roles that define our lives, but with those very special roles that society provides for

deviant behaviour, called deviant roles, stigmatic roles, or social stigma. A social role is a set of expectations we have about behaviour. Social roles are necessary for the organization and functioning of any society or group. Labeling theory holds the deviance is not inherent in an act but instead focuses on the tendency of majorities to negatively label minorities or those seen as deviant from standard culture norms (Mead, G.H, Becker, H.S & Tannenbaum, F, 2011). This theory was first proposed in the 1950s, several people contribute to this theory were Howard Becker (1963), Tannenbaum (1951) and Lemert (1938). This theory assumes that although deviant behaviour can initially stem from various causes and conditions, once individuals have been labelled or defined as deviants, they often face new problems that stem from the reaction of self and others to negative stereotypes (stigma) that attached to the deviant label (Becker, 1963; Lemert, 1967).

There are three components of Stigma; Social Stigma, Self-Stigma, and Professional Stigma.

Social Stigma: Social Stigma is the disapproval of persons with mental or behavioral disorders which may be perceived as a negative social characteristic that can create barriers in the structural society. Structural means that the stigma is a belief in the mindset held by the popular majority of society in which the persons with the stigmatized conditions are unable to fit in and are regarded as outcasts, less equal, or viewed to be part of the inferior group. In this context, Stigma is carved into the foundational framework of societies that labels and create inferiority onto the stigmatized person or group. The consequence in this belief system may ensue in unfair access in the integration of treatment services the forming of policies that disproportionately and differentially affect the population distribution.

Health Professional Stigma: It seems improbable that social workers and other health professionals would bear with them, stigmatized beliefs towards their clients; especially those whom they know are subjected to various barriers to engage in treatment. Clients have reported feeling categorized as if they were

'labeled' and/or 'marginalized' by these health professionals (Liggins & Hatcher, 2005). In comparison to non-mentally ill patients, individuals may not even receive equal care of equivalent quality once the working health professionals become sentient or aware of the mental health conditions in those general medical settings (Desai et al., 2002).

Self-Stigma or perceived Stigma: Crocker (1999) demonstrates that stigma not only occurs among others in a community but can also be internalized by the person with the condition or is exposed to that condition. Hence, the continuous influence of social/public stigma impacts an individual to feel remorseful and insufficient regarding their character conditions (Corrigan, 2004). In self-stigma, if one is knowledgeable and aware of the stigma that presides within a society; even if that person has not been the direct subject of stigmatization, it can be immensely impactful to an individual. This impact can have a deleterious effect on a person's self-esteem, efficacy, and questioning of their self-worth, which may lead to a change in their demeanor and an alteration in behavioral presentation (Corrigan, 2007). Nevertheless, Crocker (1999) highlighted the internalization of stigma differs in each individual depending on their given situations. This suggests that depending on the coping mechanism of an individual, personal self-esteem may or may not be as affected by Stigma (Crocker & Major, 1989).

Female sex workers experienced discrimination and occupational stigma (Wong et al, 2011; Benoit et al, 2015), occupational stigma refers to stigma attached to the commercial sex industry (Pheterson, 1993). Zhang et al, (2017) found that female sex workers with high levels of stigma reported high levels of violence and mental health problems. According to Corrigan et al., (2009) self-stigma or internalized stigma may be a cognitive operation through which a stigmatized person is alert to the stereotypes, agrees with the stereotypes and applies the stereotypes to one's self. Internalized stigma reduces individual's self-esteem and self-efficacy, leading an individual to perceive themselves as inferior (Padurariu et al, 2011). The consequences of perceived stigma on psychological distress may be low self-esteem and

fostering social avoidance (Corrigan, 2004; Herek, Saha & Burack, 2013). Rael, 2015; Hong et al., 2010 reported Female sex workers faced a high level of perceived stigma, even in relation to health care settings due to their professions, drug use, and Human Immunodeficiency Virus (HIV) (King et al., 2013). Treloar et al., (2020) reported that Stigma harms mental health among female sex workers; they might also show disgrace, dread, and low self-esteem because of experiencing and anticipating stigma (Ma & Loke, 2019). Hong et al., (2010) conducted a study on Self-Perceived Stigma, Depressive symptoms, Suicidal Behaviors among Female sex workers and he reported that 80% of female sex workers had medium to high perceived stigma, high level perceived stigma predicted high depressive symptoms, suicidal ideation, and attempts. Perceived stigma may results in poor health for sex workers (Benoit et al, 2015). Women engaged in sex work internalized the stigma in the form of depression (Nemoto et al, 2011; Carlson et al, 2017; Stockton et al, 2020).

Wong et al, (2011) conducted a study on Stigma and sex work from the perspectives of female sex workers in Hong Kong; they found that sex workers are being stigmatized in their daily lives, in their interactions with the people, police, and their relatives, leading to poor mental health and withdraw themselves from social networks. Markowitz (1998) studied the effect of stigma and life satisfaction of persons with mental illness found that stigma is associated to depressive-anxiety types of symptoms, Bautista et al, (2015) also reported that stigma is related to poor quality of life.

Mental Health

Mental health is defined by World Health Organization (2001) as “a condition of whole physical, mental, and social well-being and not merely the absence of disease or infirmity”. Mental health is an essential part of health, closely connected with physical health and behavior, and more than the absence of mental illness. G. Silvana et, al (2015) proposed an inclusive definition of mental health, according to them, mental health is “a dynamic

state of internal equilibrium which enables individuals to use their abilities in harmony with universal values of society. Basic cognitive and social skills; the ability to recognized, express and regulate one's own feelings and to empathize with others; the flexibility and ability to deal with adverse life events and social role functions; and the harmonious relationship between body and mind are important components of mental health that contribute to the state of internal equilibrium to varying degrees”.

There are three components of mental health (Keyes, 2014): emotional well-being, psychological well-being, and social well-being. Emotional well-being includes how one feels about his/her life, happiness, and satisfaction, etc. Psychological well-being includes self-acceptance, the purpose of life, personal growth, positive relations with others, capable of managing responsibilities of life, etc. Social well-being includes holding a positive attitude towards others, able to see their daily activities useful to and valued by society and others, a sense of belongingness to a community, etc. Mental health is a state of well-being in which a person realizes his or her full potential, manage stress well, work productively, and able to contribute to his or her communities (World Health Organization, 2018).

The present study covered three domains of mental health including depression, anxiety and stress. Depression is a significant contributor to the global burden of disease and affects people in all communities throughout the world. Depression is a serious medical illness that negatively affects how you feel, your way of thinking, and courses of action taken, that showcases itself with devitalized mood, loss of interest or pleasure, lessened quality of life, decreased energy, feelings of guilt and/or low self-worth with fluctuating sense of self-esteem in the negative radar, disturbed sleep including chronic insomnia, increased or thereby lack of appetite, and poor concentration. Moreover, depression often comes with symptoms of anxiety and these problems can become chronic or recurrent, repetitive episodes, and lead to substantial impairments in an individual's capability to take care of their daily responsibilities.

Depression, without a doubt, can affect anyone—even a person who appears to be living in seemingly ideal circumstances. Several factors can play a role in the onset of depression: Abnormalities in two chemicals in the brain, serotonin, and norepinephrine, might contribute to symptoms of depression, including anxiety, irritability, and fatigue. Depression can run in families, suggesting a genetic link. People deem themselves to have low self-worth, those easily overwhelmed by stress and general anxiety, or those who have; overall, a pessimistic outlook, appear to be vulnerable to depression. Continuous exposure to violence, neglect, abuse, economic crisis, or permutations of those may make people who are already susceptible to depression and even more unsafe victim to the illness. Studies have shown that depression is the leading cause of disability and jeopardy for both males and females, the peril of depression is 50% higher for females than males. It is the leading cause of disease parcel burden for women in high, low, and middle-income countries (WHO, 2008).

Anxiety is a mental and physical reaction to perceived threats and situations of unease. In small quantities, anxiety is helpful. It protects and informs us of the sensed impending danger and harm via cognitive corresponding responses, and focuses our attention on problems that made us anxious. But when anxiety is found to be too severe and profound or occurs too frequently, it can become debilitating, stress-inducing, and enervative in all aspects (Therapist Aid, 2017). Everyone has had feelings of anxiety at some point in their life, whether it is about an impending job interview, getting introduced to a partner's family for the first time, or the prospect of parenthood for doubled responsibilities. While we associate anxiety with alterations to our mental state, experienced as worry, intense aggravations or alarming premonitions perhaps, and physical symptoms like raised heart rate and adrenaline, we also comprehend that it is likely to warn us of things we might need to worry about potentially deleterious things. More importantly, these emotions aid in evaluating possible threats and respond to them in an

appropriate way, perhaps by quickening our reflexes or pivoting our attention for efficient focus (Mental Health Foundation, 2014).

Everyone experiences symptoms of anxiety, generally as occasional and short-lived, and does not cause problems. But when the cognitive, physical and behavioural symptoms of anxiety are persistent, at a fervent frequency and severe, anxiety may cause distress in a person's life to the point that it negatively affects his or her ability to work or study, mentally damaging, negatively influences socialization and ability to manage daily tasks, it may be beyond the apprehended normal range (Rector et.al, 2008).

The following examples of anxiety symptoms may indicate an anxiety disorder:

1. Cognitive: Anxious thoughts, or mental manifestation of anxiety (e.g., "I'm losing control"), anxious predictions (e.g., "I'm going to fumble my words and humiliate myself") and anxious beliefs (e.g., "Only weak people get anxious").
2. Physical: Excessive physical reactions relative to the context (e.g., heart rate palpitations and feeling short of breath in response to being at a socially active place). The physical symptoms of anxiety may be mistaken for symptoms of a physical illness, such as a heart attack.
3. Behavioural: Avoidance of feared situations (e.g., driving), avoidance of activities that elicit sensations similar to those experienced when anxious (e.g., exercise), subtle avoidances (behaviours that aim to distract the person, e.g., talking more during periods of anxiety or stuttering) and safety behaviours (habits to minimize anxiety and feel "safer," or "assured" e.g., always having a cell phone on hand to call for help).

Stress may be defined as the body's reaction of physical, emotional or psychological strain in correspondence to any change that requires an adjustment or response. The body behaves and reacts to the alterations accordingly and it is a common, normal part of life. Stress can be experienced from the surrounding environment and its influences, the body, and thinking

processes. Even pragmatic life changes such as a promotion, a mortgage, or the birth of a child may produce stress.

The human body is programmed to undergo stress and react to it. Stress can be positive, keeping us attentive, prompts hyped stimulation, and condition it for ready avoidance of hazard. Stress falter as negative when a person faces constant challenges without relief or relaxation with the absence of solace in between stressors. As a result, the person becomes overworked, and stress-related tension builds. The body's anatomical autonomic nervous system has a built-in stress retaliation function that allows physiological modifications for the body to combat stressful situations. This stress response, also known as the “Fight-or-Flight” response, is activated in case of an emergency or circumstances that require immediate reaction. However, this response can become chronically operated through prolonged periods of stress. Prolonged activation of the stress response causes wears and tear on the body – both physically and emotionally.

In psychological sciences, stress is a feeling of mental press and tension. The desirable level of stress is low and is useful, healthy even. Stress; in its positive form, can improve biopsychosocial health, facilitate increased performance and may generate better outcomes. Furthermore, positive stress is observed as an important factor in motivation, adaptation, and reaction to the surrounding environment. However, high levels of stress could result in biological, psychological, and social problems and even serious harm to people.

Stress may either be due to external contributions made by an environmental source or caused by the individual’s internal consciousness of perceptions and imagery. The latter form, in turn, can bring about anxiety, and/or other negative emotions and feelings such as pressure, agony, misery, etc., and give rise to serious psychological disorders like Post-Traumatic Stress Disorder (PTSD).

Mental health can be affected by a range of social, psychological, and biological factors, poor mental health is also connected with chronic physical diseases, stressful situations, rapid social change, unhealthy life-style, social exclusion, and many more. Mental health problems can affect anyone at any time and can range from anxiety and depression to rarer problems such as schizophrenia and bipolar disorder (Mind, 2017).

Many studies have indicated that mental illnesses are more common to female sex workers and they experience high rates of mental disorders such as mood disorder, anxiety disorder, depression, post-traumatic stress disorder, suicidal ideation, suicidal attempt, and psychological distress and are associated with violence experience, alcohol use, illicit drug use, inconsistent condom use with the client and the perceived burden of sex works (Rossler et al, 2010; Beattie, S.T., et. al, 2020; Laisuklang & Ali, 2017). Hengartner et al, (2015), study on mental health and functioning of female sex workers, revealed that among female sex workers, mood disorder was more common in those required to pay their debt. Patel et al, (2015) found that female sex workers experienced major depression, and that major depression was significantly related to low autonomy, alcohol use, and exposure to violence, arrest by the police and many more. In an exploratory study by Teixeira & Oliveira (2016) on the prevalence of suicidal behavior, mental health, and social support among female sex workers, they found that 55.8 percent of interviewees reported having depression, 88.2 percent have anxiety and 13.6 percent have stress. A study by Rael and Davis (2016) revealed that among female sex workers, depression was the most common mental health problem. Female sex workers reported high rates of violence, childhood abuse, anxiety and depression (Poliah & Paruk, 2017). Zehnder et al, (2019) reported that female sex workers are suffering from anxiety disorder, depression, dysthymia, and panic disorder. Also, Coatzee et al, (2018) study on Depression and Post-Traumatic Stress disorder among female sex workers, revealed that depression was the most common mental health problems and female sex workers reported having Post-Traumatic Stress disorder. They also

reported that internalized stigma associated with poor mental health. Female sex workers are expected to manifest health issues since they are a marginalized group, emotional impact of sex work affects female sex workers sense of self-worth, internalized stigma, shame and degraded (Gorry et al., 2010). In the general population, females exhibit high rates of depression and anxiety (Angst. J, et, al 2005).

Social Support

Albrecht and Adelman (1984) defined “social support as verbal and nonverbal communication between recipients and provider that reduces uncertainty about the situation, the self, the other, or the relationship, and functions to enhance perceptions of personal control in one’s experience”. Social Support may be regarded as the resources and assistance provided by others, as coping accommodation, or as an exchange of resources (Schwarzer et al, 2003). It is the physical and/or emotional comfort given to us using several different methods by our family, relatives, friends, acquaintances, co-workers, and others as a form of reassurance, validity, or acceptance. It acknowledges the fact that we are a part of a community of people who love and care for us, cherish our presence with value and think pleasantly of us. We all need people we can lean on through the ups and downs, people we can share the merry good times with and can depend on during the bad times; a genuine harmonious rapport. Maintaining a healthy, continuous social support network is hard work, something that requires participation as an ongoing effort over extended periods without major halts (Fairbrother, 2011).

Cutrona and Suhr (1992) defined a social support category system, which involves five general categories of social support; (a) Informational, (b) Emotional, (c) Esteem, (d) Social Network Support, and (e) Tangible Support. Informational support refers to a provision of messages that include advice, guidance, feedback on actions with facts, and informative knowledge usually with the potential of problem-solving. Emotional support is attributed to

expressions of care, concern, gestures of affection, empathy, and sympathy, and offerings of reassuring compassion with trust. Esteem Support is defined as the countenances that help elevate one's skill, abilities, and intrinsic values with proper assistance. Social Network Support may be defined as the messages spoken or actions taken by others or themselves to enhance feelings of belonging to certain groups with similar interests and/or situations. Finally, Tangible Support or Instrumental Support is the provision of physically providing goods, financial assistance, encompasses the concrete, direct way of helping others, and provides service for the recipients.

The two perspectives of Social Support are: perceived availability of support (perceived support) and received support (Vangelisti, 2009; Lakey 2010). Perceived support refers to the subjective judgment of the recipient in the expected availability of support that may be provided from one's friends, family, team-mates, teachers, coaches, and loved ones that they will offer (or have) effective aid during times of need. On the other hand, Received Support refers to the support actually received and enacted by the aforementioned friends, family, team-mates, teachers, coaches, and loved ones, when in need of the supportive measures (Bianco and Eklund, 2001; Rees and Freeman, 2010).

Social support has been shown to enhance physical and emotional health. It is an important indicator that acts as a protective factor for individual who encounter negative effect of stress and alleviate depressive symptoms (Aneshensel & Stone, 1982). In addition, positive interaction or relationship with peers may inhibit stress related problems (Costanza et al., 1988). Individual with high levels of social support might have more positive health status, role function and behaviors, psychosocial adjustment, adjustment of life, good coping behavior, better quality of life, better well-being and self-actualization. They might have fewer physical and psychological symptoms and responses, depression, burden, and stress (Wang et al., 2003). Social support improved psychological functioning and stress resilience, helped protect against stressful life events (Dollete et al, 2004).

According to Southwick et al, 2005; Ferreira et al, 2019, the emergence of psychological functioning problems, psychopathology related to trauma, post-traumatic stress disorder and decreased medical morbidity and mortality.

Perceived social support has a significant positive relationship with life satisfaction, which suggest that higher perceived social support is associated with better life satisfaction (Ali et.al., 2010). Strom, J.L, and Egede, L.E, (2012) reports higher levels of social support are associated with improved clinical outcomes, reduced psychosocial symptomatology, and the beneficial lifestyle activities. Bulik (2015) studied social support and negative and positive outcomes of experienced traumatic events in a group of male emergency service workers, and he found that perceived social support plays an important role in gaining benefits from trauma than preventing negative outcomes of the experienced traumatic event. Among older adults, different sources of support were relevant to health across societies. Support from friends and having a partner were related to good health and high levels of support from family, that children and a partner decreased the level of anxiety, depression and lead to a better quality of life (Roohafza et al., 2014; Belanger et al., 2016).

The significance of social support for sex works was observed by Valera, Sawyer, and Schiraldi (2001) in an investigation into the health needs of a sample of sex workers, and a majority of sex workers who participated in this research reported a need for social support. Baruah & Borooah (2017) reported that among female sex workers high level of perceived social support is related to better quality of life. A study by Mao et at., (2017) reported a high level of perceived social support from their families, boyfriends, co-workers and friends, and high level of perceived social support from sex partners or boyfriends were related to Amphetamine type stimulant use. Similarly, other studies also found that social support is protective factor for mental health problems and suicidal behavior (Cooker, et.al. 2002; Chioqueta & Stiles, 2007; Ulibarri et al., 2009; Kleiman & Liu, 2013).

Contemporary research focused on the determinants of social support as indicators for sexual related health consequences such as Human Immunodeficiency Virus (HIV), Sexually Transmitted Diseases (STI) and as preventive behaviour on condom use among female sex workers (Reilly & Woo, 2004; Roy et al., 2012; Chen et al., 2014; Qiao et al., 2014; Choudhury et al., 2015; Shushtari et al., 2018; Carrasco et al., 2018). High levels of social support increased the likelihood of condom use among female sex workers, and may mitigate Human Immunodeficiency Virus (HIV)/ Sexually Transmitted Disease (STI) risk behaviour.

STATEMENT OF THE PROBLEMS

Female sex workers are poorly studied and socially stigmatized group (Alexandre Teixeira & Alexandra Oliveira, 2017). Sex workers are normal individuals and like everyone else, they deserve access to mental health services (Catharine Smith, 2018). Many of them have to work in the sex industry because they need the money to help their families (Hengartner et.al, 2015). Compared to the normal population, women engaging in sex industry face disproportionate health and social disparities (Benoit C et.al, 2017, Gu J et.al, 2014, Sanders TA et.al, 2004, Rossler W et.al, 2010, Surrat HL et.al, 2010, Benoit C et.al, 2001, Cohan D et.al, 2006, Shannon K et.al, 2005, Beyer C et.al, 2015).

Studies carried out on female sex work have focused on Human Immunodeficiency Viruses (HIV) and Sexually Transmitted Infections (STIs) (Nitasha Puri, et, al., 2017), alcohol and drug use, and violence among female sex workers (Chen Zhang et, al., 2014). Few studies have been carried out to explore the mental health, contributing psychological disorder (Hengartner, Michael P, et, al., 2015) and social support (Rima Baruah et, al., 2017) of female sex workers. A few studies that have been conducted reported mental health and psychological issues that depressive symptoms were more prevalent among female sex workers than other female workers (Bassel et al., 2001). Some studies have found evidence of anxiety, depression, paranoid ideation (El-Bassel et, al., 1997), and symptoms of post-traumatic stress disorder (Farley & Barkan, 1998, Chudakov et, al., 2002). Flower (1998) also noted the prevalence of a multitude of psychiatric disorder such as depression, schizophrenia, and suicidal tendencies in sex workers.

As sex workers represent a marginalized population that faces many occupational hazards (Serena Wong, 2009), they are vulnerable to high rates of violence, sexual coercion, stigma, and Human Immunodeficiency Virus (HIV) (Poliah & Paruk, 2017). They are often stereotyped as filthy, immoral,

coldhearted, and unworthy women (Vijayakumar et al, 2015). This stigmatization can lead to a feeling of self-blame and shame, isolated themselves from others, and diminishing accessibility to social and health services (Sallmann, 2010; Rayson & Alba, 2019). And according to labeling theory, deviant labels, criminal labels are associated with stigma, which means that the majority culture has attached specific, negative descriptions or stereotypes to deviant labels (Link & Phellan, 2001).

The exact numbers of female sex workers in Mizoram are difficult to estimate and they are a transient population as there is no brothel or designated area for sex work and sex work is seen as immoral by the community they often work in secrecy. According to the Mizoram State AIDS Control Society (MSACS), there are 906 female sex workers in the state (2019-20). The majority of them work in the capital, Aizawl (Times of India, 2019). Some studies have been done on sex workers and related issues in Mizoram - Women Sex Workers in Aizawl: A Situational Analysis (Sailo, 2019), Commercial Sex Workers in Mizoram (Vansangpuii, 2004), and Pattern of Drug Use, Perceived Social Support and Mental Health of Female sex workers – Intravenous Drugs Users in Aizawl (P.C. Lalbiakkimi, 2013). These studies were a dissertation for the degree of Ph.D and Master of Social Work and Master of Philosophy, in Psychology, submitted to their respective department, Mizoram University. These previous studies presented the profile of female sex workers (P.C.Lalbiakkimi, 2013; Sailo, 2019), socio-economic background, causes for entry into sex work and its implication (Sailo, 2019), and examined the socio-economic status, family strength, self-esteem level and exposure to media (Vansangpuii, 2004), and also explored the pattern of drug use, mental health, and perceived social support of female sex workers who are Intravenous Drug Users (IDU) in Aizawl (P.C. Lalbiakkimi, 2013). However, there are limited studies of female sex workers in Mizoram especially in relation to mental health and stigma.

Most of the prior research has focused on younger female sex workers populations and few studies have been conducted among their older counterparts. Studies with older Female sex workers are important because of socio-biological differences that exist between young and older Female sex workers (Su et al., 2014; Guida et al, 2016). In view of this limitation, the current study aims to fill the gap by including older female sex worker in the study, and conduct a comparative study of younger and older age group of female sex workers. The study will examine the mental health, stigma, and perceived social support of Younger (Ages 18-34 years) and Older (Ages 35-50 years) female sex workers in Aizawl City.

OBJECTIVES

1. To investigate the Mental Health (Depression, Anxiety and Stress), Perceived Social Support, and Stigma of female sex workers in Aizawl City.
2. To investigate whether there is any significant difference between the two groups on the variables under study.
3. To examine whether there is any relationship between the Stigma, Perceived Social Support, and Mental Health (Depression, Anxiety and Stress) among the two groups and the predictability of Mental Health (Depression, Anxiety and Stress) from Perceived Social Support and Stigma.

HYPOTHESES

1. It is expected that there will be a high level of Stigma in both groups.
2. It is expected that there will be a significant difference between the two groups on Perceived Social Support, Depression, Anxiety, and Stress. Younger female sex workers will be higher on Perceived Social Support and the reverse is expected on Depression, Anxiety and Stress as compared to older female sex workers.
3. It is expected that there will be a significant relationship between the Stigma, Perceived Social Support, and Mental Health among the two groups. It is expected that significant predictability will emerge on Mental Health from Perceived Social Support and Stigma.

METHODS AND PROCEDURES

Sample:

The sample of the present study consists of 100 female sex workers, with their age ranging between 18-50 years living in Aizawl. The sample was divided into two age groups – Group 1 (50 female sex workers; 18-34 years) and Group 2 (50 female sex workers; 35-50 years). The population was drawn through purposive sampling. The data was collected from Protective Homes and Centers under the Social Welfare, Mizoram State Aids Control Society (MSACS), and Non-Governmental Organizations (NGOs).

Design of the Study:

The present study incorporated Separate group design where the differences between the two Groups - Group-1 (18-34 years) and Group-2 (35-50 years) was observed on the dependent variable: Perceived Social Support, Sigma and Mental Health. In addition, the study also analyzed the predictability of Mental Health (Criterion) from Perceived Social Support and Stigma (Predictors).

Procedure:

The participants were contacted through Non-Governmental Organizations (NGOs) and Protective Homes and Centers under the Social Welfare, Mizoram State Aids Control Society (MSACS). The primary data for the study was collected in a face to face interaction between the participants and the researcher. The participants were informed that anonymity and confidentiality would be maintained. After taking the necessary consent, the psychological tools was administered by the researcher. The researcher took care to see that the respondents provided honest and independent answers to the questions presented. After careful checking of any missing or unattended questions; the data obtained was analyzed by employing appropriate statistical tools.

Psychological tools:

Multidimensional Scale of Perceived Social Support (Zimmet et, al., 1988):

The Multidimensional Scale of Perceived Social Support (MSPSS) (Zimmet, Dahlin, Zimmet, and Farley, 1988) consisted of 12 items rated on a seven-point Likert scale from 1(Very Strongly Disagree) to 7(Very Strongly Agree). It is designed to measure the perception of support from three sources: Family (items 3,4,8,11), Friends (items 6,7,9,12), and Significant Others (items 1,2,5,10). The total score can range from 12 to 84, the high score indicates the high perceived social support. Alternatively, the possible score range for the subscales/dimension is 4 to 28.

Self-Stigma Scale (Mak, W.W.S. and Cheung, R.Y. M, 2010):

The Self-Stigma Scale (SSS) is developed by Mak and Cheung in 2010. It is a self-report questionnaire, consisted of 9 items rated on a four-point Likert scale from 1(Strongly disagree) to 4(Strongly agree). The scale has three dimensions, they are Affective Scale (Items- 1, 4, 7); Behavioral Scale (Items – 3,6,9); Cognitive Scale (items – 2,5,8). The total score can be obtained by taking all the means of the 9 items. The high score indicate high self-stigma.

Depression Anxiety Stress Scale-21 (DASS-21) (Lovibond & Lovibond, 1995):

The Depression, Anxiety, Stress Scale – 21 is the shortened version of the DASS developed by Lovibond and Lovibond (1995) to assess symptoms of depression, anxiety, and stress among adults. The DASS-21 is a 21 items self-report questionnaire, in completing the DASS-21, the individual is required to indicate the presence of symptoms over the previous week. Each item is scored from 0 (did not apply to me at all, Never) to 3 (Applied to me very much or most of the time). Because DASS-21 is short version, the final score of each items needs to be multiplied by 2.

Statistical Analyses:

To ascertain the applicability of the psychological tools, the following statistical measures were employed:

Descriptive Statistics (Mean, Standard Deviation, Standard Error, Skewness and Kurtosis) was computed to discern the pattern of the distribution of the measured variables for the scales and subscales of Self-Stigma, Significant Others, Family and Friends subscales of Multidimensional Scale of Perceived Social Support (MSPSS), and Anxiety, Depression and Stress the subscales of Depression Anxiety Stress Scale (DASS) among the Two Groups.

Bivariate correlation coefficient was computed separately for the behavioral measures: Self Stigma, Significant Others, Family and Friends the subscales of MSPSS, and Anxiety, Depression, and Stress subscales of DASS.

An Independent Sample T-test was employed to compare the means of Group 1 and Group 2 on the scales and subscales of the behavioral measures.

Finally, Stepwise Hierarchical Multiple Regression was employed separately for Group 1 and Group 2, to determine the predictability of Anxiety, Depression, and Stress subscales of DASS from Self-Stigma; and Significant Others, Family and Friends subscales of MSPSS.

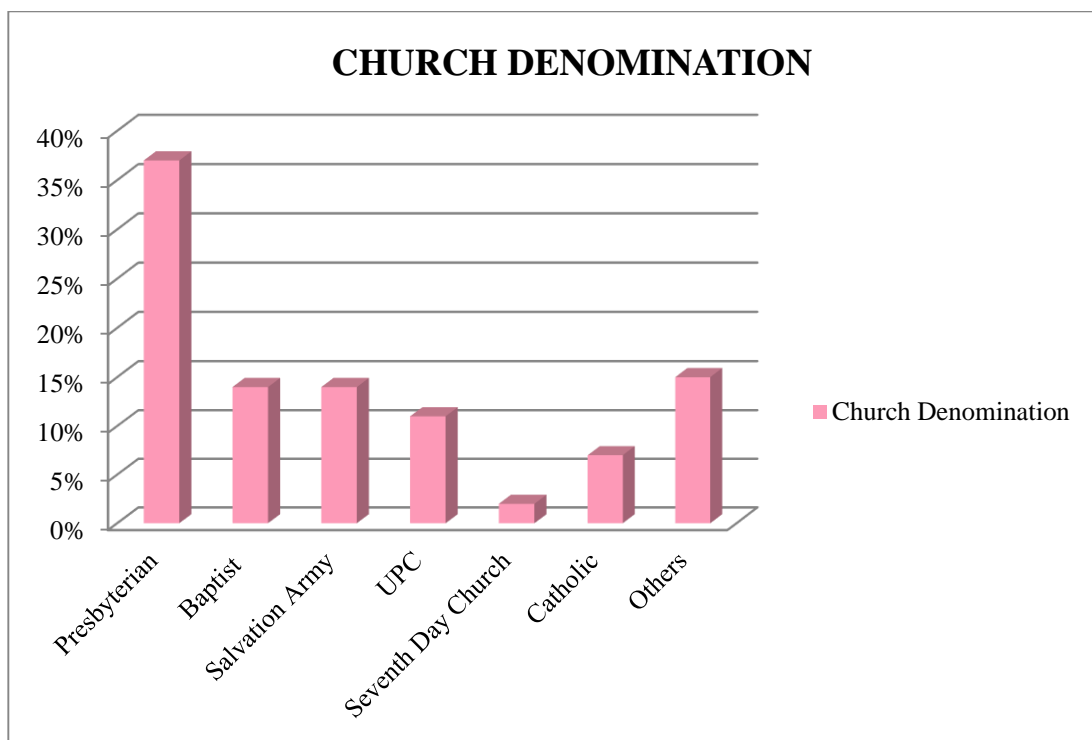
RESULTS

Socio-demographic characteristics

In the present study, the total number of participants was 100. The participants were divided into two age groups, that is Group 1 (ages 18 to 34 years; N=50) and Group 2 (ages 35 to 50 years; N=50). The mean age for Group 1 was 26, the minimum age was 18 and the maximum age was 33. The mean age for Group 2 was 37, the minimum age was 35 and the maximum age was 45. The age of onset of entering into sex work business was found to be 25 years which secure the highest percentage (18%) among the participants. In terms of participant's monthly income, securing the highest percentage (48%) on average was found to be between 5000-1000. In response to the breadwinner, 88% reported 'no' among Group 1 participants, in contrast only 52% responded 'no' among Group 2 participants. The socio-demographic of female sex workers, such as Church denomination, education qualification, marital status, parental status/survival, Tobacco use, drug use, alcohol use, and history of medical hospitalization, security response section or police arrest, protective home/center will be shown in the figure.

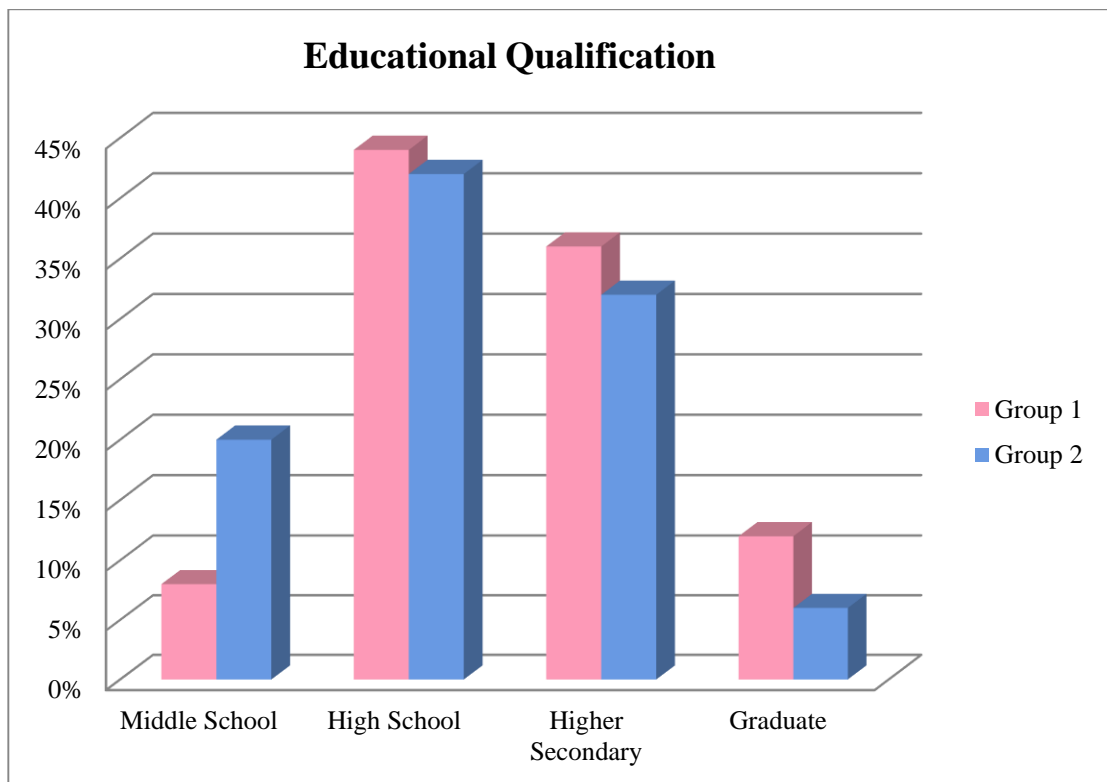
All the participants under study were Christian. Regarding their church denomination, the highest proportion of the participants (37%) were Presbyterian, 14% were Baptist, 14% belonged to Salvation Army, while 11% belonged to UPC (United Pentecostal Church), 2% were Seventh Day Adventists, 7% were Catholics, and 15% belonged to other denominations. The church denomination of the participants is given in Figure 1.

Figure 1: Church Denomination of the participants



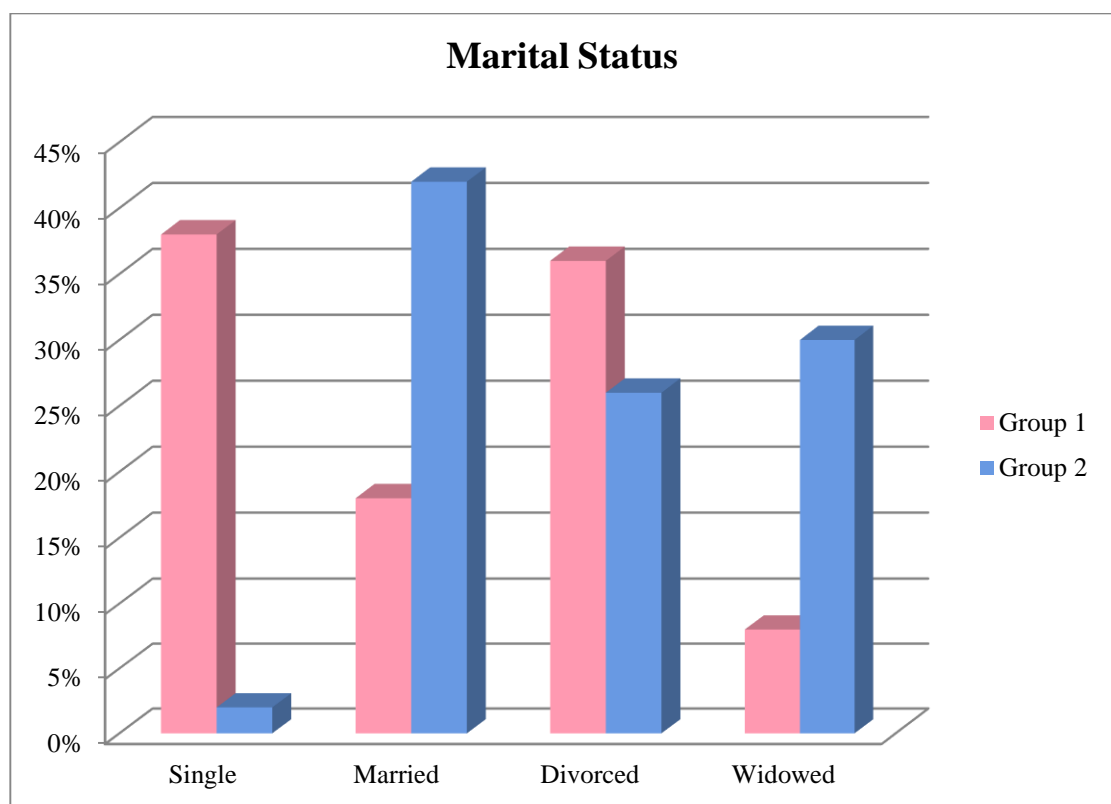
Among Group 1, 8% of the participants had studied till Middle School, 44% had studied till High School, 36% had completed their Higher Secondary education and 12% were graduated. Among Group 2, 20% of the participants had studied till Middle School, 42% had studied till High School, 32% of the participants had completed their Higher Secondary education and 6% were graduated. The Educational Qualification of the participants is given in Figure 2.

Figure 2: Educational Qualification of the two groups



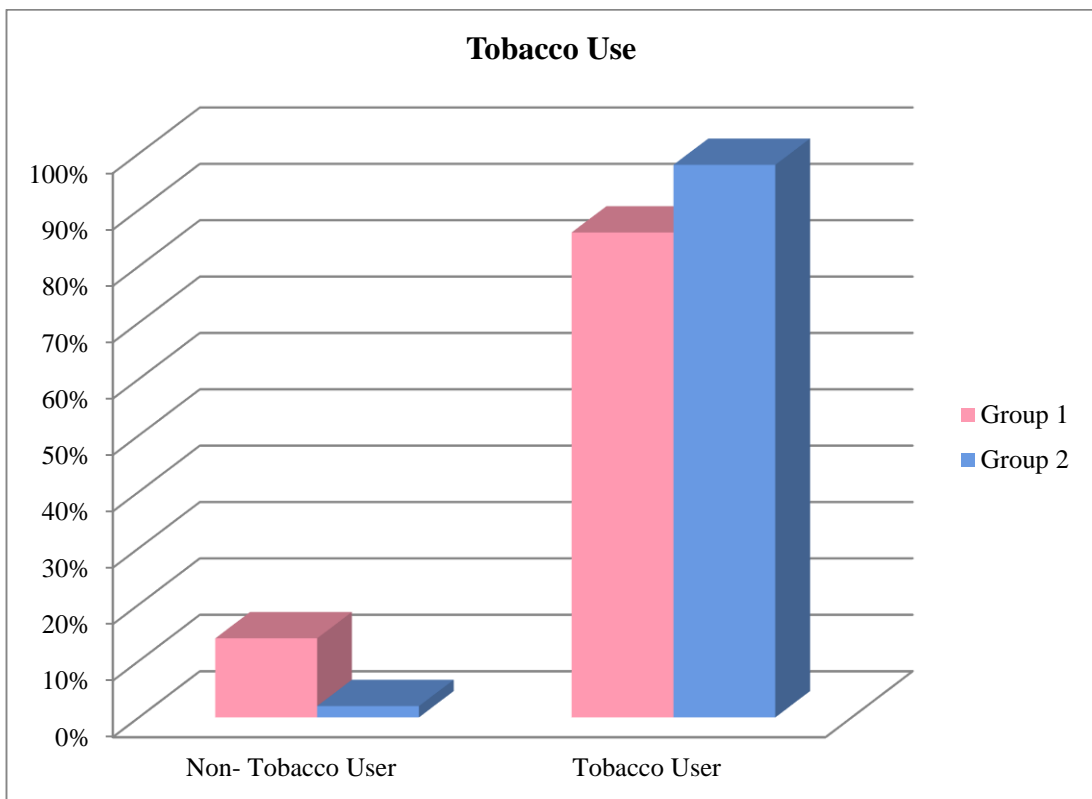
Among Group 1, the highest proportions of the participants (38%) were single, while 36% had been divorced, 18 % were married and 8% were widowed. Among Group 2, the highest proportions of the participants (42%) were married, while 30% were widowed, 26% were divorced and 2% were single. In figure 3, the marital status of the two groups is given.

Figure 3: The Marital Status of the participants



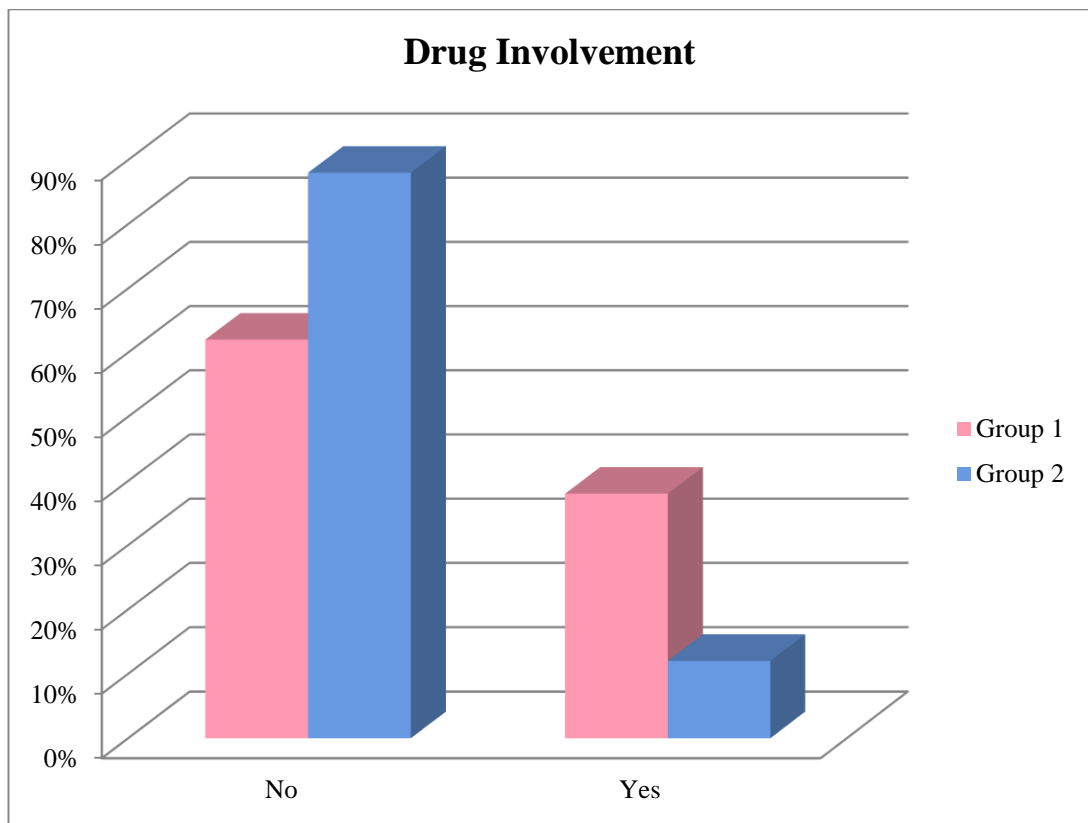
A 'tobacco user' is an individual who uses any tobacco products (World Health Organizations, 2008). Among the participants from Group 1, 86% had reported using tobacco product and 14% had reported to 'never' involved with tobacco products. Among Group 2, 98% were tobacco user, and 2% were non-tobacco user. The result (figure-4) highlighted the use of tobacco in Group 1 and Group 2.

Figure 4: Tobacco Use (User and Non-User) among the two Groups.



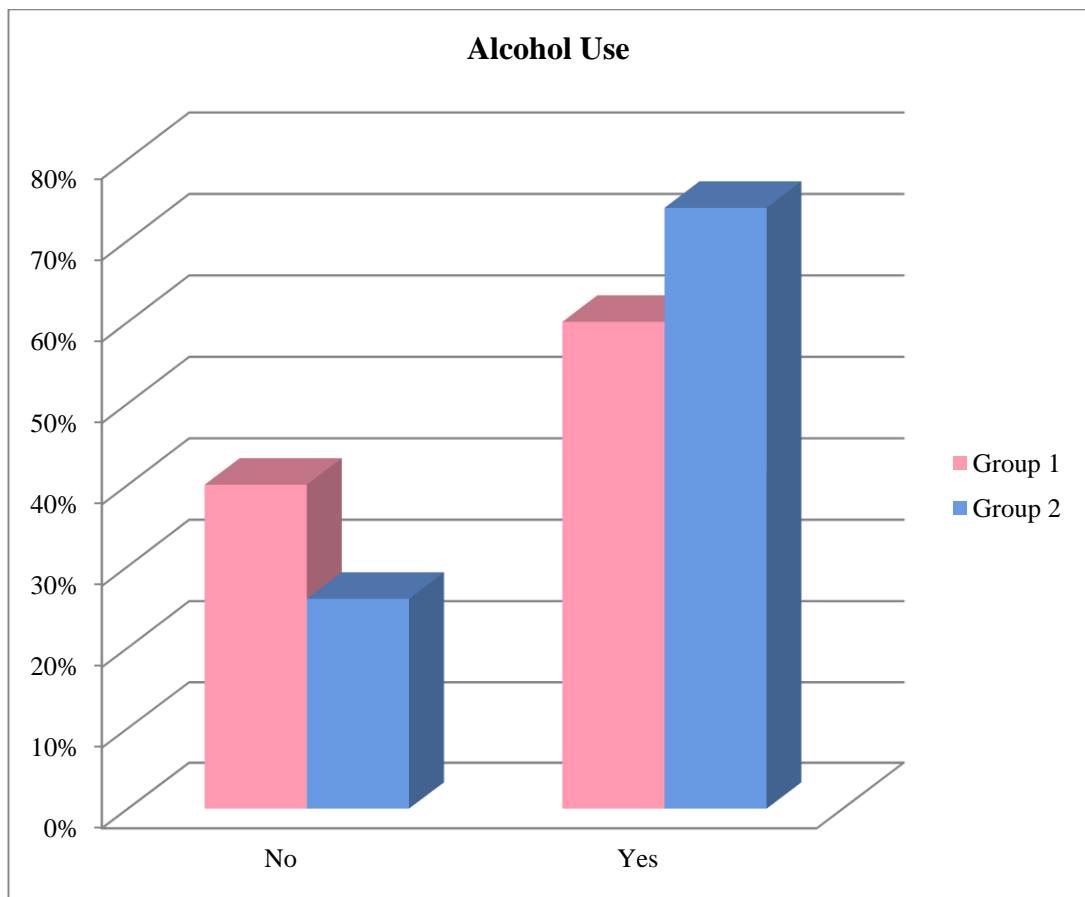
In terms of Drug involvement, 62% among Group 1 participants had responded 'No' in response to history of drug use and 38% had responded 'Yes' in response to drug used. However, among Group 2 participants, 88% responded 'No' in response to history of drug use and 12% had responded 'Yes' respectively. The figure-5 highlighted the history of drug involvement in the two Groups.

Figure 5: History of Drug Involvement



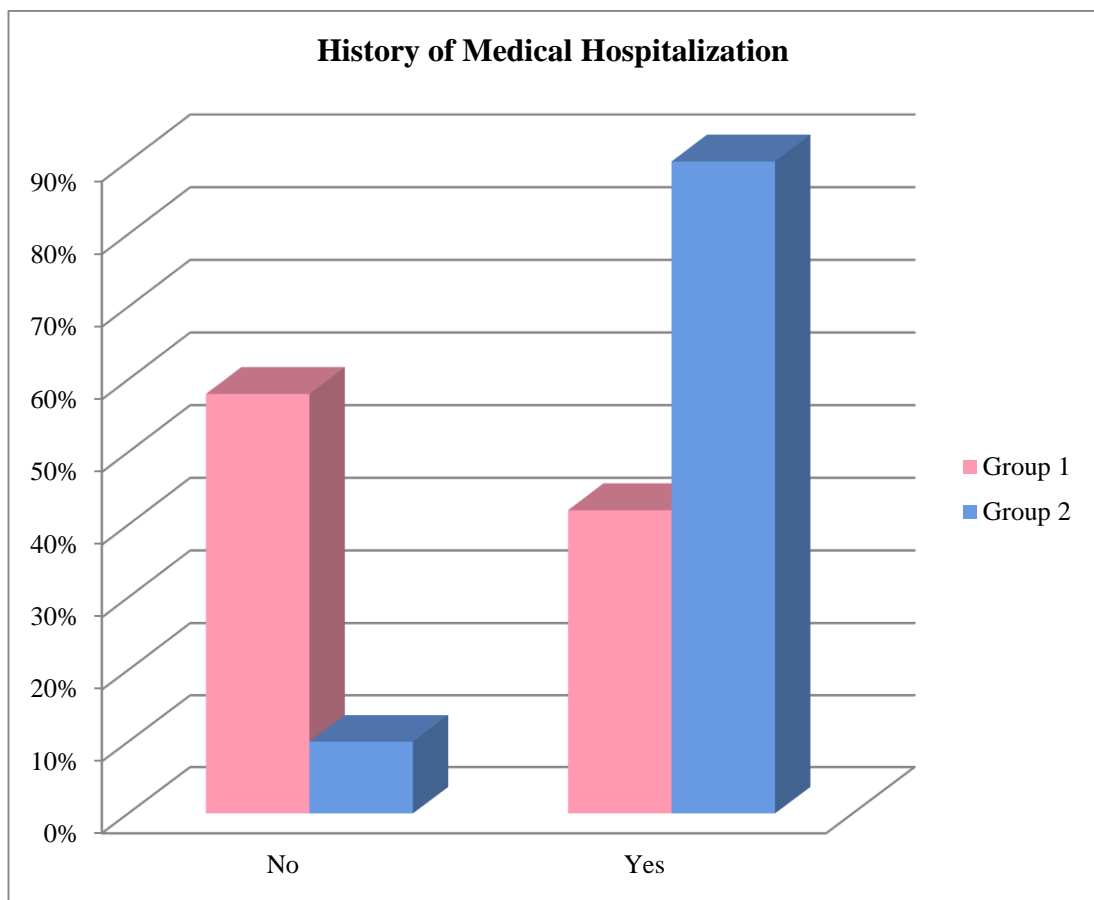
In terms of Alcohol Use, 60% from Group 1 participants had responded 'Yes' in response to history of alcohol use and 40% had responded 'No' in response to history of alcohol use. Among Group 2, 74% had responded 'Yes' in response to history of alcohol use and 26% had responded 'No'. The figure-6 highlighted the history of alcohol use in Group 1 and Group 2.

Figure 6: History of Alcohol Use



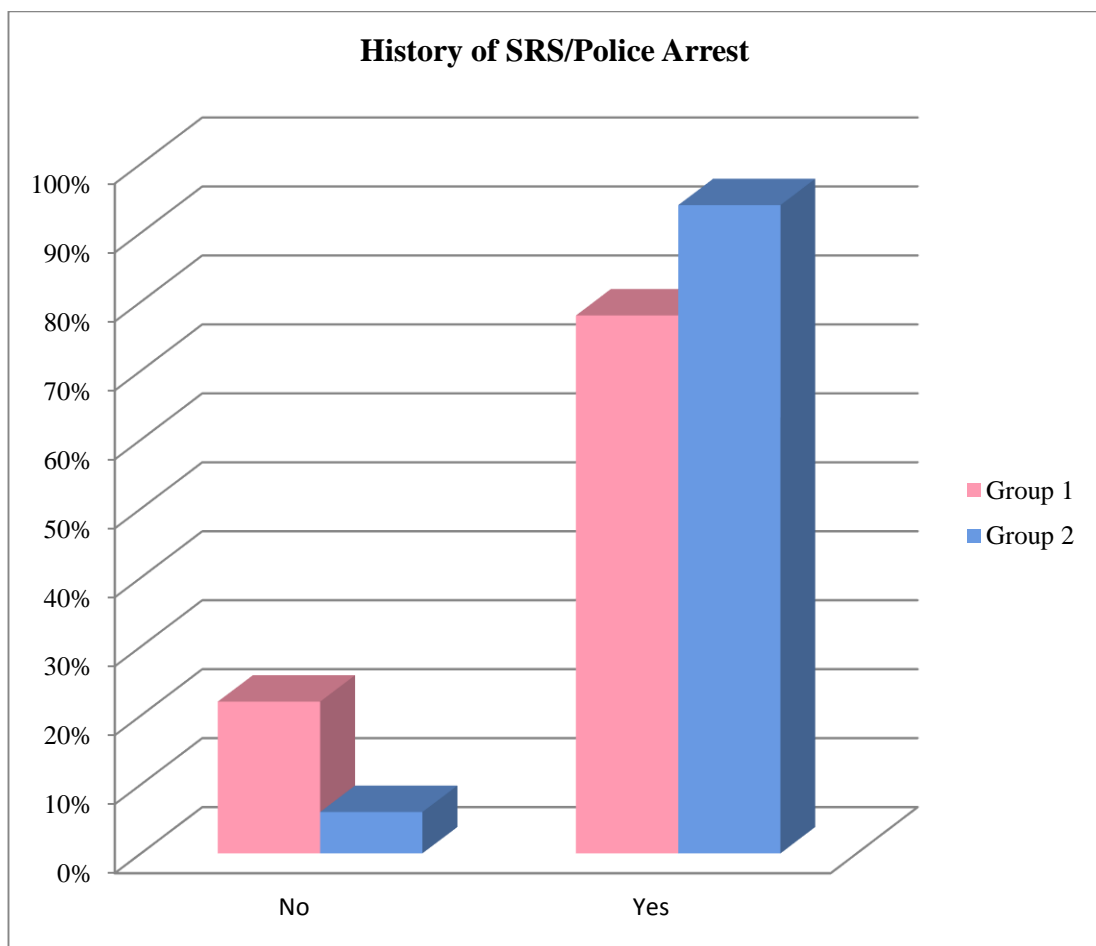
In terms of history of medical hospitalization, 58% among Group 1 participants had responded 'No', 42% responded 'Yes'. In contrast, 90% had responded 'Yes' and 10% responded 'No' among Group 2 participants. The results (figure-7) highlighted the history of medical hospitalization in Group 1 and Group 2.

Figure 7: History of Medical Hospitalization



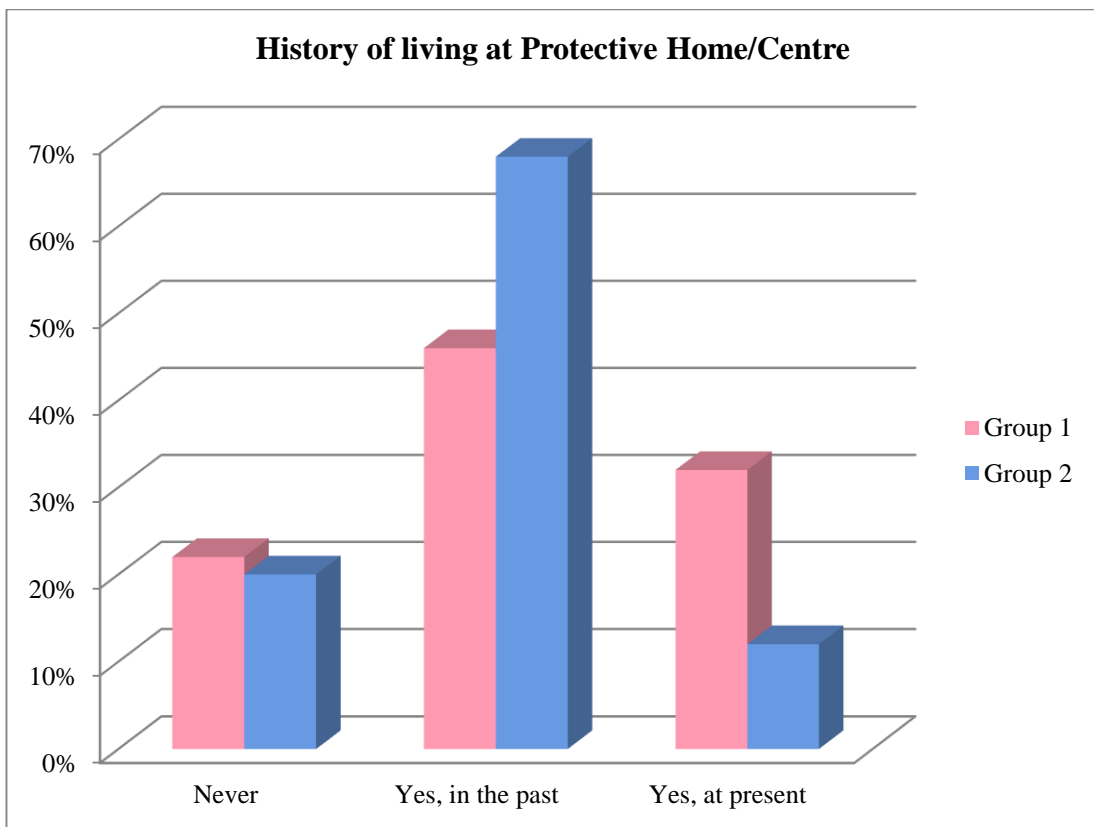
In terms of Security Response Section (SRS)/ Police Involvement, among Group 1 participants, 78% had responded 'Yes' and 22% had responded 'No'. Among Group 2 participants, 94% had responded 'Yes' and 6% responded 'No' in the statement of history of SRS/Police arrest. The results (figure-8) highlighted the history of SRS/Police arrest in the two Groups.

Figure 8: History of Security Response Section (SRS)/Police Arrest



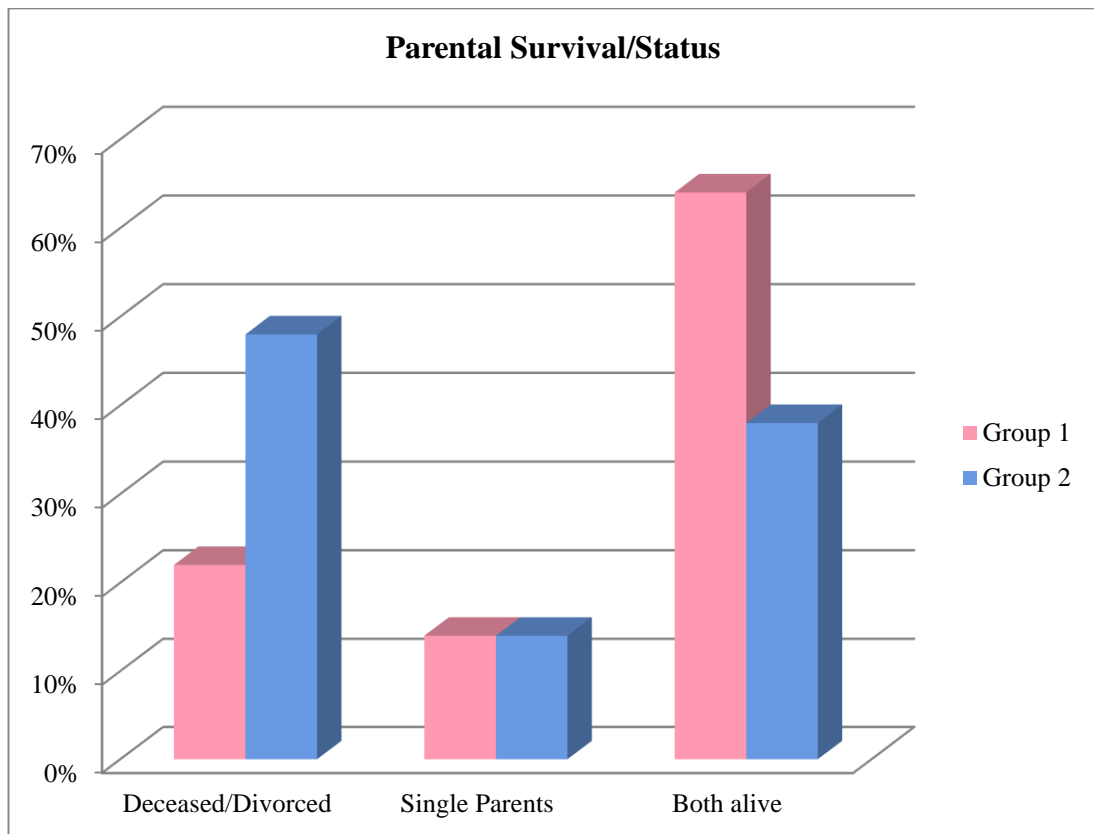
In response to the history of living at Home/Centre, among Group 1 participants, 46% had reported living in the past, 16% were living at present, however, 22% reported to never lived at Home/Centre. Among Group 2 participants, 68% reported living in the past, 12% at present, and 20% never lived in Home/Centre. The results (figure-9) highlighted the history of living at Protective Home/Centre in the two Groups.

Figure-9: History of living at Protective Home/Centre



In response to status of the parents, 64% reported both the parents alive, 14% reported having single parents, 22% reported parental deceased or divorced among participants from Group 1. In Group 2 participants, 38% reported both the parents alive, 14% reported having single parents, and 48% reported parental deceased or divorced. The results (figure-10) highlighted the Parental Status/Survival among the participants from the Group 1 and Group 2.

Figure 10: Parental Survival/Status



Reliability of Instruments

Table 1: The Cronbach Alphas of the behavioral measures of Internal Consistency

Scale/Subscales	Cronbach's Alpha
Self-Stigma Scale	.83
Multidimensional Scale of Perceived Social Support	.94
Significant Others	.89
Family	.92
Friends	.88
Depression Anxiety Stress Scale	.91
Anxiety	.77
Depression	.83
Stress	.72

The reliability of the scales and subscales were measured to ensure the adequacy of the scales used for the present study.

In the Self-Stigma Scale, the internal consistency (Cronbach's alpha) for the scale was .83.

In the Multidimensional Scale of Perceived Social Support, the overall internal consistency (Cronbach's alpha) was .94. The Cronbach alpha's for the subscales was also measured. Thus, the Cronbach's alpha for the Significant others subscale was .89, Family subscale was .92, and Friends subscale was .88.

The Cronbach's alpha for the entire Depression Anxiety Stress Scale was .91, and the Cronbach's alpha for the subscales Anxiety, Depression, and Stress was .77, .83, and .72 respectively.

The result in table 1 showed that the internal consistency of the scales and subscales used in the present study was above .7 which was found to be reliable for the whole sample, indicating the trustworthiness of the scale.

Descriptive statistics

The descriptive statistics table-2 shows the Mean, Standard Deviation (SD), Skewness, Kurtosis, and Standard Error of the scales and subscales of Self-Stigma; Perceived Social Support (Significant Others, Family, and Friend), the subscales of DASS - Depression, Anxiety and Stress among the two groups

Table 2: Descriptive statistics for the Two Groups

	Mean		SD		Skewness		Skewness		Kurtosis		Kurtosis	
	G - 1	G - 2	G - 1	G - 2	Group 1		Group 2		Group 1		Group 2	
					Statistics	Std. Error	Statistics	Std. Error	Statistics	Std. Error	Statistics	Std. Error
Stigma	23.44	22.74	3.535	2.522	-.975	.337	.115	.337	4.598	.662	-.926	.662
Significant Others	18.70	17.60	2.197	3.104	-.960	.337	-1.320	.337	.996	.662	.434	.662
Family	18.20	16.40	2.969	3.110	-1.127	.337	-.326	.337	1.354	.662	-1.321	.662
Friends	18.36	17.98	2.694	2.818	-1.830	.337	-1.336	.337	3.864	.662	.361	.662
Anxiety	11.20	13.72	7.329	5.869	.225	.337	-.003	.337	-1.004	.662	-.678	.662
Depression	17.46	15.92	7.838	5.345	.660	.337	.085	.337	.183	.662	.291	.662
Stress	14.24	14.40	7.190	5.206	.574	.337	.234	.337	-.445	.662	-1.178	.662

The Mean score and the Standard Deviation for the two groups on Self-Stigma (Group 1 mean = 23.44, SD = 3.535; Group 2 mean = 22.74, SD = 2.522), Significant Others (Group 1 mean = 18.70, SD = 2.197; Group 2 mean

= 17.60, SD = 3.104), Family (Group 1 mean = 18.20, SD = 2.696; Group 2 mean = 16.40, SD = 3.110), Friends (Group 1 mean = 18.36, SD = 2.694; Group 2 mean = 17.98, SD = 2.818), Anxiety (Group 1 mean = 11.20, SD = 7.329; Group 2 mean = 13.72, SD = 5.869), Depression (Group 1 mean = 17.46, SD = 7.838; Group 2 mean = 15.92, SD = 5.345), Stress (Group 1 mean = 14.24, SD = 7.190; Group 2 mean = 14.40, SD = 5.206)

In order to assess the relationship between the Self-Stigma, Perceived Social Support (Significant others, family, and friends), and Mental Health (Anxiety, Depression, and Stress) of Group 1 and Group 2, Pearson correlation analysis was conducted and the results of the two groups presented in Table 3.1 and 3.2.

Table 3.1: Pearson Correlation between Self-Stigma, Perceived Social Support (Significant Others, Family and Friends), Anxiety, Depression, and Stress for Group 1.

	Self Stigma	Significant Others	Family	Friends	Anxiety	Depression	Stress
SelfStigma	-	-.25	-.20	-.35*	-.03	.14	.07
Significant Others		-	.88**	.59**	-.52**	-.62**	-.53**
Family			-	.58**	-.55**	-.57**	-.48**
Friends				-	-.63**	-.61**	-.62**
Anxiety					-	.76**	.77**
Depression						-	.88**
Stress							-

******. Significant at the .01 level

*****. Significant at the .05 level

Pearson correlation analysis was conducted to find out the relationship between Self-Stigma, Perceived Social Support (significant others, family, friends), and Mental Health (Anxiety, Depression, Stress) among Group 1. From Table 3.1, it was seen that there is a significant negative correlation between Self-Stigma and the subscales of Perceived Social Support that is

Friends (-.35, $p < .05$), which indicating that increasing levels of Friends support was associated with decreasing levels of Self-Stigma among Group 1 (Ages 18-34 years) participants.

The results of Pearson correlation analysis showed a significant negative correlation between Anxiety and all the subscales of Perceived Social Support, namely from Significant Others (-.52, $p < .01$), from Family (-.55, $p < .01$), and from Friends (-.63, $p < .01$).

The results of correlation analysis also showed a significant negative correlation between Depression and the subscales of Perceived Social Support – Significant Others and Depression (-.62, $p < .01$); Family and Depression (-.57, $p < .01$); Friends and Depression (-.61, $p < .01$).

The results Table 3.1 also showed that Stress was found to have a significant negative correlation with the subscales of Perceived Social Support, namely Significant Others (-.53, $p < .01$), Family (-.48, $p < .01$), and Friends (-.62, $p < .01$).

The results table also showed the significant positive correlation between all the subscales of Perceived social support namely, Significant Others, Family and Friends. Similarly, the results table showed the significant positive correlation between the Anxiety, Depression and Stress.

The results (Table 3.1) indicating that the increasing levels of Significant Others, Friends and Family Support was associated with decreasing levels of Anxiety, Depression, and Stress among Group 1 (Age 18-34 years).

Table 3.2: Pearson Correlation between Self-Stigma, Perceived Social Support (Significant Others, Family, and Friends), Anxiety, Depression, and Stress among Group 2.

	Self Stigma	Significant Others	Family	Friends	Anxiety	Depression	Stress
Self-Stigma	-	-.22	-.00	-.22	.39**	.33*	.42**
Significant Others		-	.68**	.84**	-.51**	-.37**	-.45**
Family			-	.71**	-.47**	-.38**	-.47**
Friends				-	-.51**	-.38**	-.54**
Anxiety					-	.53**	.72**
Depression						-	.78**
Stress							-

***. Significant at the .01 level*

**. Significant at the .05 level*

Pearson Correlation was used to analyze the relationship between Self-Stigma, Perceived Social Support (Significant Others, Family, and Friends), Anxiety, Depression, and Stress among Group 2. From table 3.2, it was seen that Self-Stigma was found to have a significant positive correlation with Anxiety (.389, $p < .01$), Depression (.325, $p < .05$), and Stress (.415, $p < .01$), which indicating that increasing levels of Self-Stigma was associated with increasing levels of Anxiety, Depression, and Stress.

The results of correlation analysis showed a significant negative correlation between Anxiety and Perceived Social Support subscales, namely Significant others (-.513, $p < .01$), Family (-.470, $p < .01$), and Friends (-.514, $p < .01$).

The relationship between Perceived Social Support and Depression was also analyzed and the results showed that there was a significant negative correlation between Depression and the subscales of Perceived Social Support, namely Significant Others (-.369, $p < .01$), Family (-.371, $p < .01$), and Friends (-.380, $p < .01$).

The results Table 3.2 showed a significant negative correlation between Stress and Perceived Social Support Subscales, namely Significant Others (-.447, $p < .01$), Family (-.471, $p < .01$), and Friends (-.539, $p < .01$).

The results table also showed the significant positive correlation between all the subscales of Perceived social support namely, Significant Others, Family and Friends. Similarly, the results table showed the significant positive correlation between the Anxiety, Depression and Stress.

The results (table 3.2) indicated that the increasing level of Significant Others, Family and Friends Support was associated with decreasing levels of Anxiety, Depression, and Stress among Group 2.

t-test for Group 1 and Group 2 on the scales and subscales of Self-Stigma, Perceived Social Support and Mental Health:

The analysis of the t-test for two groups (Group 1 vs Group 2) on the scales and subscales of Self-Stigma, Significant Others, Family and Friends subscales of MSPSS and Anxiety, Depression, and Stress Subscales of DASS were done by using Independent Sample t-test.

Table 4: Levene’s test for the effect of two groups on the scales and subscales of behavioral measures

Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	Df	Sig.
Self-Stigma	Equal variances assumed	1.01	.317	1.14	98	.257
Significant Others	Equal variances not assumed	4.72	.032	2.05	88.250	.044
Family	Equal variances assumed	1.08	.301	2.96	98	.004
Friends	Equal variances assumed	.38	.540	.69	98	.492
Anxiety	Equal variances assumed	3.50	.064	-1.90	98	.061
Depression	Equal variances not assumed	7.92	.006	1.15	86.466	.254
Stress	Equal variances assumed	2.42	.123	-0.1	98	.899

The results (table 4) highlighted Levene's Test for Equality of Variances for the effect of two Groups on the scales and subscales of a behavioural measures.

In view of the homogeneity of variances that emerged significant for Significant Others and Depression scale, equal variances was assumed for all subscales and scales of Self-Stigma, Family, Friends, Anxiety, and Stress while equal variances was not assumed on the Significant Others and Depression.

The results (table 4) revealed significantly greater mean score for Group 1 as compared to Group 2 on Significant Others (Group 1 mean = 18.70, $\sigma = 2.20$; Group 2 mean = 17.60, $\sigma = 3.10$), Family (Group 1 mean = 18.20, $\sigma = 2.97$; Group 2 mean = 16.40, $\sigma = 3.11$). The results (table 4) indicating that Group 1 (Ages 18-34 years) showed higher level of Significant Others support and Family support as compare to Group 2 (Ages 35-50 years).

Stepwise Hierarchical Linear Regression separately for 'Group 1' and 'Group 2':

Finally, to address the objective of the study, series of Stepwise hierarchical multiple regressions was employed separately for Group 1 (Ages 18-34 years) and Group 2 (Ages 35-50 years).

In the stepwise hierarchical regression, to determine the predictability of Anxiety (criterion) in Group 1, Self-Stigma was first included as a predictor in Model-1. In Model-2, Significant Others, Family, and Friends subscales of Perceived Social Support were included as predictors in the second block.

Table 5.1: The Beta Values, Adjusted Regression Coefficient (ΔR^2) & Collinearity Statistics in the prediction of Anxiety from Self-Stigma, Significant Others, Family and Friends for Group1.

	Models		Collinearity Statistics	
	1	2	Tolerance	VIF
Friends	-.63**	-.46**	.666	1.501
Family		-.28*	.666	1.501
ΔR^2	.38**	.42*		

***. Significant at the .01 level*

**. Significant at the .05 level*

The Stepwise hierarchical multiple regression for Group 1 (Table 5.1) emerged with significant predictability of Anxiety from Friends ($F = 30.94$; $p < .01$) in Model-1 and Family ($F = 18.84$; $p < .01$) in Model-2, supported by healthy collinearity diagnostic (Durbin Watson = 1.877). The results table 5.1 revealed the standardized beta values, the Adjusted Regression Coefficients (ΔR^2) and the Collinearity Statistics (Tolerance and Variance Inflation Factor).

The results (Table 5.1) revealed that a) Friends significantly predicted .63% decrease of variation on Anxiety in the first model that was reduced with the inclusion of significant predictor variables in the stepwise analysis and explaining .46% of variation in the final model. b) Family significantly predicted .28% decrease of variation on Anxiety in model – 2

To determine the predictability of Depression (criterion) in Group 1, Self-Stigma was first included as a predictor in Model-1. In Model-2, Significant Others, Family, and Friends subscales of Perceived Social Support were included as predictors in the second block.

Table 5.2: The Beta Values, Adjusted Regression Coefficient (ΔR^2) & Collinearity Statistics in the prediction of Depression from Self-Stigma, Significant Others, Family and Friends for Group1.

	Models		Collinearity Statistics	
	1	2	Tolerance	VIF
Significant Others	-.62**	-.40**	.655	1.528
Friends		-.38**	.655	1.528
ΔR^2	.38**	.46**		

***. Significant at the .01 level*

**. Significant at the .05 level*

The Stepwise hierarchical multiple regression for Group 1 (Table 5.2) emerged with significant predictability of Depression from Significant Others ($F = 30.33$; $p < .01$) in Model-1 and Friends ($F = 21.76$; $p < .01$) in Model-2, supported by healthy collinearity diagnostic (Durbin Watson = 1.853). The results table 5.2 revealed the standardized beta values, the Adjusted Regression Coefficients (ΔR^2) and the Collinearity Statistics (Tolerance and Variance Inflation Factor).

The results (Table 5.2) revealed that a) Significant Others significantly predicted .62% decrease of variation on Depression in the first model that was reduced with the inclusion of significant predictor variables in the stepwise analysis and explaining .40% of variation in the final model. b) Friends significantly predicted .38% decrease of variation on Depression in model – 2.

To determine the predictability of Stress (criterion) in Group 1, Self-Stigma was first included as a predictor in Model-1. In Model-2, Significant Others, Family, and Friends subscales of Perceived Social Support were included as predictors in the second block

Table 5.3: The Beta Values, Adjusted Regression Coefficient (ΔR^2) & Collinearity Statistics in the prediction of Stress from Self-Stigma, Significant Others, Family and Friends for Group1.

	Models		Collinearity Statistics	
	1	2	Tolerance	VIF
Friends	-.62**		1.000	1.000
ΔR^2	.38**			

***. Significant at the .01 level*

**. Significant at the .05 level*

The Stepwise hierarchical multiple regression for Group 1 (Table 5.3) emerged with significant predictability of Stress from Friends ($F = 30.63$; $p < .01$) in Model-1 only, supported by healthy collinearity diagnostic (Durbin Watson = 1.657). The results table 5.3 revealed the standardized beta values, the Adjusted Regression Coefficients (ΔR^2) and the Collinearity Statistics (Tolerance and Variance Inflation Factor).

The results (Table 5.3) revealed that Friends significantly predicted .62% decrease of variation on Stress in Model 1.

To determine the predictability of Anxiety (criterion) in Group 2, Self-Stigma was first included as a predictor in Model-1. In Model-2, Significant Others, Family, and Friends subscales of Perceived Social Support were included as predictors in the second block.

Table 6.1: The Beta Values, Adjusted Regression Coefficient (ΔR^2) & Collinearity Statistics in the prediction of Anxiety from Self-Stigma, Significant Others, Family and Friends for Group2.

	Models		Collinearity Statistics	
	1	2	Tolerance	VIF
Self-Stigma	.39**	.39**	1.000	1.000
Family		-.47**	1.000	1.000
ΔR^2	.13**	.35**		

***. Significant at the .01 level*

**. Significant at the .05 level*

The Stepwise hierarchical multiple regression for Group 2 (Table 6.1) emerged with significant predictability of Anxiety from Self-Stigma ($F = 8.574$; $p < .05$) in Model-1 and Family ($F = 13.90$; $p < .01$) in Model-2, supported by healthy collinearity diagnostic (Durbin Watson = 1.416). The results table 6.1 revealed the standardized beta values, the Adjusted Regression Coefficients (ΔR^2) and the Collinearity Statistics (Tolerance and Variance Inflation Factor).

The results (Table 6.1) revealed that a) Self-Stigma significantly predicted .39% increase of variation on Anxiety in the first model that was neither reduced nor augmented with the inclusion of significant predictor variables in the stepwise analysis and explaining .39% of variation in model-2. b) Family significantly predicted .47% decrease of variation on Anxiety in model – 2.

To determine the predictability of Depression (criterion) in Group 2, Self-Stigma was first included as a predictor in Model-1. In Model-2, Significant Others, Family, and Friends subscales of Perceived Social Support were included as predictors in the second block.

Table 6.2: The Beta Values, Adjusted Regression Coefficient (ΔR^2) & Collinearity Statistics in the prediction of Depression from Self-Stigma, Significant Others, Family and Friends for Group2.

	Models		Collinearity Statistics	
	1	2	Tolerance	VIF
Self-Stigma	.33*	.33*	1.000	1.000
Family		-.37**	1.000	1.000
ΔR^2	.09*	.21**		

***. Significant at the .01 level*

**. Significant at the .05 level*

The Stepwise hierarchical multiple regression for Group 2 (Table 6.2) emerged with significant predictability of Depression from Self-Stigma ($F = 5.69$; $p < .05$) in Model-1 and Family ($F = 7.56$; $p < .01$) in Model-2, supported by healthy collinearity diagnostic (Durbin Watson = 1.988). The results table

6.2 revealed the standardized beta values, the Adjusted Regression Coefficients (ΔR^2) and the Collinearity Statistics (Tolerance and Variance Inflation Factor).

The results (Table 6.2) revealed that a) Self-Stigma significantly predicted .33% increase of variation on Depression in the first model that was neither reduced nor augmented with the inclusion of significant predictor variables in the stepwise analysis and explaining .33% of variation in the final model. b) Family significantly predicted .37% decrease of variation on Depression in model – 2.

To determine the predictability of Stress (criterion) in Group 2, Self-Stigma was first included as a predictor in Model-1. In Model-2, Significant Others, Family, and Friends subscales of Perceived Social Support were included as predictors in the second block.

Table 6.3: The Beta Values, Adjusted Regression Coefficient (ΔR^2) & Collinearity Statistics in the prediction of Stress from Self-Stigma, Significant Others, Family and Friends for Group2.

	Models		Collinearity Statistics	
	1	2	Tolerance	VIF
Self-Stigma	.42**	.41**	1.000	1.000
Family		-.47**	1.000	1.000
ΔR^2	.16**	.37**		

***. Significant at the .01 level*

**. Significant at the .05 level*

The Stepwise hierarchical multiple regression for Group 2 (Table 6.3) emerged with significant predictability of Stress from Self-Stigma ($F = 10.01$; $p < .03$) in Model-1 and Family ($F = 15.27$; $p < .01$) in Model-2, supported by healthy collinearity diagnostic (Durbin Watson = 2.154). The results table 6.3 revealed the standardized beta values, the Adjusted Regression Coefficients (ΔR^2) and the Collinearity Statistics (Tolerance and Variance Inflation Factor).

The results (Table 6.3) revealed that a) Self-Stigma significantly predicted .42% increase of variation on Stress in the first model that was reduced with the inclusion of significant predictor variables in the stepwise analysis and explaining .41% of variation in the final model. b) Family significantly predicted .47 % decrease of variation on Depression in model – 2.

DISCUSSION

The psychometric adequacy of the psychological measures used in the study was aimed in the light of the experiences of cross-cultural psychology. Psychological test(s) of proven psychometric adequacy for a given population, if transported and employed for measurement purposes in another cultural milieu, may not carry their identical psychometric properties, and unless preliminary checks are made, may not be accepted as the reliable measure(s) of the theoretical construct (Witkin & Berry, 1975; Eysenck & Eysenck, 1985). Stated otherwise, efforts were made to adapt the behavioral measures, and to find empirical bases for comparability of the test scores.

Results revealed that the total coefficient of correlation of the subjects emerged to be satisfactory over the levels of analysis for the whole sample, indicating the trustworthiness of the scales, namely, Self-Stigma Scale (.83), Multidimensional Scale of Perceived Social Support (.94), as well as the subscales of the Multidimensional Scale of Perceived Social Support, i.e., Significant Others subscale (.89), Family subscale (.92) and Friends subscale (.88). Reliability was also found for the psychological measures used in the study, i.e., Depression Anxiety Stress Scale (.91) and its subscales – Anxiety (.77), Depression (.83) and Stress (.72).

Demographic characteristics of Younger and Older Female Sex Workers in Aizawl City

The socio-demographic characteristics were included to highlight the profile of Female sex workers in Aizawl City.

Age: In the present study, female sex workers were categorized into two age group – Younger (Ages 18-34 years) and Older (35-50) female sex workers. The results revealed that the mean age for younger female sex worker is 26 years, and the mean age for older female sex workers is 37 years.

Commencement of sex work: The mean age of onset of entering into sex work was 25 years.

Breadwinner: Majority of the participants from Younger female sex workers (88%) and older female sex workers (52%) responded ‘No’ in terms of breadwinner.

Church Denomination: All the participants under the study were Christians. Regarding their church denominations, the highest proportion of the participants (37%) were Presbyterian, 14% were Baptist, 14% belonged to the Salvation Army, while 11% belonged to the United Pentecostal Church), 2% were Seventh Day Adventists, 7% were Catholics, and 15% belonged to other denominations.

Educational Qualification: Regarding the Educational Qualification, the majority of the participants from Group 1 (44%) and Group 2 (42%) studied till high school, few of them were graduated. This may indicate that female sex workers have low level of education (Beattie et al., 2020). The First Pan-India Survey (2011) reported that limited education is one of the reasons for females to enter into sex work.

Marital Status: In Group 1, the highest proportions of the participants (38%) were single, while 36% had been divorced, 18 % were married and 8% were widowed. Among Group 2, the highest proportions of the participants (42%) were married, while 30% were widowed, 26% were divorced and 2% were single

Tobacco Use: The majority of the Younger (86%) and (98%) Older female sex workers reported using tobacco products.

Drug Use: Only 38% from Younger female sex workers and 12% from older female sex workers reported a history of drug use.

Alcohol Use: The majority of participants from Younger female sex workers (60%) and older female sex workers (74%) reported consuming alcohol.

Alcohol and drug use was found to be prevalent among female sex workers in the present study. Studies have indicated that female sex workers began to take drugs because of peer-influence, curiosity, to deal with the pressures of being female sex workers, physical and sexual violence in childhood, continued to take drugs to cope, relax, escape, forget issues, cope with depression, and sell sex (Sagar et al., 2015; Roshanfekar et al., 2015). Drug use and Alcohol consumed by female sex workers is higher as compared to the general population (Cusick et al., 2003; Samet et al., 2010; Odukoya et al., 2013). During sexual activity with clients, female sex workers reported drinking alcohol. Alcohol decreased sexual inhibitions and helped to enhance confidence and resilience. Another common explanation for drinking was to help deal with psychosocial stressors such as domestic and economic stress and the sex work stigma and depression (Heravian et al., 2013).

Medical Hospitalization: In terms of history of medical hospitalization, younger female sex workers (42%) reported a history of medical hospitalization; in contrast older female sex workers (90%) reported a history of medical hospitalization.

Security Response Section (SRS)/ Police Arrest: 78% from Younger female sex workers and 94% from older female sex workers reported a history of Security Response Section (SRS) or Police arrest.

Female sex workers especially street-based sex workers experience a high level of police arrest or involvement and frequent capture (Fick, 2016; Footer et al., 2019). In line with this, majority of the participants in the present study reported a history of Security Response Section (SRS) or Police arrest. Unfavorable Police encounter becomes major stress for female sex workers, and lead to diminished condom carriage and use, as well as an elevated risk of Human Immunodeficiency Virus (HIV) and other sexually transmitted infections (Fick, 2016; Platt et al., 2018). However, few female sex workers reported a positive treatment from Police such as respect, kindness and medical assistance when they encounter sexual assault (Fick, 2016).

Confinement/ treatment in Protective Home/Centre: Among the participants, 46% from Group 1 participants reported a history of confinement in Protective Home or Centre, while 16% participated in the present study while in confinement in a Protective Home/ Centre. Among the Group 2 participants, 68% reported a history of Protective Home or Centre, while 12% of the participants in the present study are currently from protective home/center.

Parent marital Status/ Deceased: Younger female sex workers (14% - 22%) in the present study reported having single parents or parental separation or deceased while, Older female sex workers (14% - 48%) reported having single parents, parents' divorce or deceased. Female sex workers faced more parental divorced, remarried or widowed (Potter et al, 1999; Sailo, 2019).

Level of Self-Stigma among Younger and Older Female sex workers

Studies have reported a high level of stigma, in all facets of the life of female sex workers, stigmatization occurs from clients, general population, hospital and other healthcare service providers and police (Sanders, 2007). The present study, however, attempted to explore perceived or Self-Stigma which occurs when people belonging to a stigmatized group admit and internalized the derogatory views of society (Corrigan, 2002). The findings of the present study indicate moderate level of Self-Stigma (Group 1 mean = 23.44; Group 2 = 22.74). This finding is more or less in line with that of a study in China where moderate to high levels of Self-Stigma were found among female sex workers (Hong et al, 2009).

Level of Perceived Social Support among Younger and Older Female sex workers.

Perceived social support is considered as protective factor for mental health of female sex workers (Maryam & Sahar 2010; Nemoto et al., 2011;

Baruah & Borooah, 2017). It also plays an important role in health-related risk behavior, such as social support increase the likelihood of condom use among female sex workers (Reilly & Woo, 2004; Roy et al., 2012; Carrasco et al., 2018).

The perceived social support of female sex workers in the present study was highlighted by measuring the subscales of perceived social support, namely significant others, family and friend. The results (Table 2) revealed that majority of the participants from the two groups reported an average level of Perceived Social Support, from Significant Others, Family, and Friends support, In contrast to the present finding, Baruah et al., (2017) conducted a study on female sex workers reported high levels of perceived social support, which leads to better quality of life. Similarly, Carlson et al., (2017) & Mao et al.,(2018) reported that female sex workers experienced levels of perceived social support especially from family, friends and intimate partner.

Levels of Mental Health among Younger and Older female sex workers

The mental health of female sex workers in this study is highlighted by measuring their level of depression, anxiety and stress. The findings of the present study revealed moderate level of depression and anxiety, and the low level of stress among Younger and Older female sex workers in Aizawl City. The presence of symptoms of depression and anxiety among female sex workers is consistent with other studies such as Chowdhury et al, (2013); Ghose et al. (2013); Poliah & Paruk, (2016); Laisuklang and Ali, (2017); Puri et al., (2017); Beattie et al, (2020); Simple et al., (2020).

In contrast to the present finding, several studies revealed a high level of depression, anxiety, post-traumatic stress disorder, and psychological distress among female sex workers (Rossler et al., 2010; Patel et al., 2015; Poliah & Paruk., 2016; Shen et al., 2016; Puri et al., 2017; Beattie et al, 2020; Simple et al., 2020). Also Patel et al, (2015, 2016) studied the prevalence and correlates of major depression among Female sex workers in Southern India,

revealed the high levels of major depression and its significant association with low autonomy, exposure to violence, police capture, alcohol use, irregular condom use, etc. Similarly, Carlson et al., 2017; Beattie et al, 2020). S, Shaobing et, al., (2014) found that age group of 21-34 years old and 35 years old or older reported higher levels of depression as compared to 20 years old or younger female sex workers, however, other finding shows that despite the age differences, majority of female sex workers experienced depressive symptoms (Ulibarri et al, 2013; Sagtani et al., 2013; Poliah & Paruk, 2017; Beattie et al., 2020).

The present finding, moderate level of mental health (depression, anxiety and stress) among female sex workers in Aizawl may be due to less experience of violence, stigma and received social support. Also since the majority of the participants in the present study reported a history of having been confined and received treatment in rehabilitation Centre, and 16% from group 1 and 12% from group 2 are currently in protective home/ center undergoing treatment and also the social support received from family, friends and others could be the contributing factors to the moderate level of mental health issues in the present study.

Relationship between Self-Stigma, Perceived Social Support, Mental Health among Group 1 (Younger Female sex workers)

The relationship between Self-Stigma, Perceived Social Support and Mental Health of Younger Female Sex Workers was analyzed by using Pearson Correlation.

Results revealed that there was a significant negative correlation between Self-Stigma and Friends Support; this indicates that increasing levels of Friends support was significantly associated with decreasing levels of Self-Stigma. Significant Others, Family, Friends support was found to have a significant negative correlation with Anxiety, Depression, and Stress. The results indicate that increasing levels of Significant Others, Family and

Friends Support was significantly associated with decreasing levels of Anxiety, Depression, and Stress.

Relationship between Self-Stigma, Perceived Social Support and Mental Health among Group 2 (Older Female sex workers)

The correlational analysis for Group 2 results revealed that among Group 2 (Older female sex workers) participants, Self-Stigma was found to have a significant positive relationship with Anxiety, Depression, and Stress. Significant Others, Family and Friends support was also found to have a significant negative correlation with Anxiety, Depression, and Stress. The results indicate that the increasing levels of Self-Stigma were associated with increasing levels of Anxiety, Depression, and Stress. The significant relationship that emerged for scale and subscales of the behavioral measures warranted the employment of differential and inferential statistics.

A comparative study in terms of age differences among the female sex workers has received less attention in literature. The present study conducted an independent sample *t*-test to compare the means of the two groups. The results revealed that Group 1 (Ages 18-34 years) showed higher levels of Perceived Social Support from Significant Others and Family support as compared to Group 2 (Ages 35-50 years) participants. In contrast with the present findings, Mao et al., 2018 found that despite the age differences, female sex workers reported high levels of Perceived social support from their family. Besides family support, female sex workers received a support from significant others such as a boyfriend, co-workers, and friends.

Stepwise Hierarchical Linear Regression for the two groups

Finally, Stepwise hierarchical multiple regression was employed separately for the two groups. The results revealed that among Group 1 (Ages 18-34 years) participants, an increase in Friends support and Family support significantly predicted a decrease in Anxiety. Consistent with the present

finding, Harandi et al., (2017) reported that having support from friends and family decreases anxiety.

Similarly, increase in support of Significant Others and Friends significantly predicted decrease in Depression. To support this finding, Carlson et al, (2017) have shown similar finding was receiving support from friends, family and intimate partner lead to lower depressive symptoms among female sex workers. Increase in Friends support significantly predicted decrease in Stress. Sullivan (1953) stated that friends could negate the effects of negative experiences. One research study found that the presence of friends during negative events caused a reduction in stress levels (Santo and Bukowski, 2011).

Perceived Social Support is considered an important factor for mental health, people who experience higher levels of social support experienced less Mental Health problems (McGill University, 2020). Family and friends support also associates with lower depressive symptoms (Cheng, Y st al., 2014). Consistent with the other findings, among the population of sex workers, social support significantly impact on depression and other mental health (Nemoto et al., 2011; Maryam & Sahar, 2010). Other study also found the association of perceived social support with positive psychological well-being, a better quality of life, achieved life satisfaction and foster hope, alleviate distress (Eom, C.S et al., 2013; Mendieta, I, H et al., 2019; Proescher, E et al., 2020).

Stepwise hierarchical multiple regression revealed that among Group 2 (Older female sex workers) participants, an increase in Self-Stigma significantly predicted an increase in Anxiety, Depression, and Stress. Female sex workers may experience stigma in relation to their occupation and had a significant effect on their mental health (Treloar, C., et.al., 2020). The most common mental health issues among female sex workers were depression, anxiety, and Post-traumatic stress disorder (Puri et al, 2017; Coatzee et al, 2018), they might also exhibit shame, fear, and low self-esteem because of

experiencing and anticipating stigma (Ma & Loke, 2019). Also, Hong., et.al.,(2010) studies in China found female sex workers with high levels of self-perceived stigma were more likely to experience depressive symptoms and suicidal ideation. King, et al., (2013) also reported female sex workers experienced high levels of perceived stigma in relation to sex work, drug use and Human Immunodeficiency Virus (HIV) in health care settings. Previous study also found a consistent result, for instance, Rael, (2015) Female sex workers reported a high level of perceived stigma, and this perceived stigma predicted the depression. Similarly, Carlson et al., (2017) noted that due to internalizing stigma, female sex workers reported of having depressive symptoms.

Finally, increase in Family support significantly predicted a decrease in Anxiety, Depression, and Stress among Group 2 (older female sex workers) participants. Prior research also revealed that family support was found to be a protective factor for mental health (Heather et al, 2015; Lincoln and Chae, 2012), Heather et al, (2015) and Baptista et al, (2013) stated that among young and middle-aged adults, increasing family support significantly predicted lower depression. Other study results also indicate that a high degree of social support correlates to a lower level of depression, anxiety and stress. (Kugbey et al, 2015; Bukhari & Afzal, 2017). Older female sex workers experienced a high level of perceived occupational stigma which results in social isolation and less social support from friends and co-workers leads to a psychological distress and poor mental health (Guida et al., 2016). This might be one of the reasons that family support plays an important role in predicting the mental health among older female sex workers.

SUMMARY AND CONCLUSION

Female sex workers exchange or provide sexual services for money or goods (UNAIDS, 2012). They reported a high level of stigma because of their occupation (Lazurus et al, 2012) as compared to other professions (Rayson & Alba, 2018). This often makes them restrain from visiting health care settings (King et al, 2013; Wong et al, 2010; Rayson and Alba, 2018). Female sex workers experience high level of mental health problems such as depression, anxiety, Post-traumatic stress disorder, suicidal ideation, and other negative psychological distress (Coatzee et al, 2018; Laisuklang & Ali, 2017; Puri et al, 2017; Zhang et al, 2017; Patel et al, 2015; Beattie et al, 2013; Rossler et al, 2010). Valera, Sawyer, and Schiraldi (2001) stressed the importance of social support among female sex workers. Several studies indicated that perceived social support plays an important role in mental health among female sex workers (Nemoto et al., 2011; Maryam & Sahar, 2010; Rossler et al., 2010). Perceived social support refers to how individuals perceived friends, family members, and others as sources available to provide material, psychological, and overall support during times of need (Siedlecki et al, 2014). Therefore, the present study was designed to explore the two group's differences in Perceived Social Support, Stigma, and Mental Health and examine how in turn Perceived Social Support and Stigma impact mental health.

The participants in the present study comprised of 100 female sex workers from Aizawl city, divided into two age groups. Purposive sampling procedure was used for categorizations of the age groups that is 18-34 years as Younger female sex workers (Group1) and 35-50 years as Old female sex workers (Group-2). The majority of the participants studied up to high school, among younger female sex workers, the majority of the respondents were single, while the majority of the participants from older female sex workers were married. The participants were engaged in substance use, reported a history of involvement with protective home/center and Security response

section (SRS) or police arrest. In the present study three hypotheses were formulated.

Hypothesis 1 predicted a high level of stigma in both groups. The present study found a moderate level of stigma, as well as in perceived social support and mental health from depression and anxiety, and a low level of stress among the female sex workers in Aizawl city.

Hypothesis 2 states that there will be a significant difference between the two groups on Perceived social support, depression, anxiety and stress. Younger female sex workers will be high on perceived social and the reverse is expected on depression, anxiety and stress as compared to female sex workers. The present study revealed that significant differences were observed only on Significant Others and Family support between Group 1 (Younger) and Group 2 (Older) participants. Younger female sex workers show higher Significant Others and Family support as compared to older female sex workers. There is no significant difference among the two groups on depression, anxiety and stress.

Hypothesis 3 states that there will be a significant relationship between the Stigma, Perceived Social Support, and Mental Health among the two groups. It is expected that significant predictability will emerge on Mental Health from Perceived Social Support and Stigma. The present study revealed that among Group 1 participants, there was a significant negative correlation between Self-Stigma and Friends Support, this indicates that increasing levels of Friends support was significantly associated with decreasing levels of Self-Stigma. Significant Others, Family, Friends support was found to have a significant negative correlation with Anxiety, Depression, and Stress. The results indicate that increasing levels of Significant Others, Family and Friends Support was significantly associated with decreasing levels of Anxiety, Depression, and Stress.

Among Group 2 participants results revealed Self-Stigma was found to have a significant positive relationship with Anxiety, Depression, and Stress.

Significant Others, Family and Friends support was also found to have a significant negative correlation with Anxiety, Depression, and Stress. The results indicate that the increasing levels of Self-Stigma were associated with increasing levels of Anxiety, Depression, and Stress. Increasing level of perceived social support was associated with decreasing level of Anxiety, depression, and stress.

In terms of the predictability of Mental Health from Significant Others, Family and Friends subscales of Perceived Social Support and Self-Stigma among Younger female sex workers participants, the results highlighted that increase in support from Significant Others and Friends significantly predicted decrease in Depression. The finding also revealed that increase in Friends and Family support significantly predicted decrease in Anxiety, and increase in Friends support significantly predicted decrease in Stress. This results indicates that Perceived Social Support is a protective factor for mental health among Younger female sex workers.

In terms of the predictability of Mental Health from Significant Others, Family and Friends subscales of Perceived Social Support and Self-Stigma among Older female sex workers participants, the results highlighted that increase in Family support significantly predicted a decrease in Anxiety, Depression and Stress. In contrast, an increase in Self-Stigma significantly predicted increase in Anxiety, Depression, and Stress.

The overall stepwise hierarchical regression revealed that Perceived Social Support plays an important role in predicting the mental health of younger and older female sex workers. The present finding is consistent with other findings where perceived social support was reported as a protective factor for depression and other mental health (Shamanesh, 2009, Nemoto et al, 2011). Self-Stigma significantly predicted poor mental health among older female sex workers. Prior study revealed that Female sex workers experienced stigma and discrimination (Wong et al, 2011; Benoit et al, 2015). Older female sex workers who reported a high level of perceived stigma or occupational

stigma are more likely to isolate themselves from society and received less social support which may impact their mental health (Guida et al., 2016).

The findings of this study may be indicative that Mizo Female sex workers in Aizawl have different experience. Each individual accesses and applies different coping skills and mechanisms to manage feelings of stigma, which vary greatly from individual to individual as does the level of effectiveness of these skills in managing feelings and experiences of stigma. Additionally, each individual will find his or her own meaning and voice in experiences of stigma. The study does not provide answers as to why some people believe that poor mental health and stigma is valid whereas others do not. This study demonstrated that sex work as a profession significantly predict the mental health and stigma in the population under study. The present finding such as moderate level of mental health among female sex workers may be due to less experienced of violence, stigma and received social support. The majority of the participants in the present study reported a history of involved with Protective Home or Centre, which could be the contributing factors that change the degree of mental health in the present study.

This study indicates that there is a major need and also the importance of reducing negative stereotyping in popular media, and sensitizing people and the community at large. Several important factors associated with being a female sex worker were identified in this study and the findings can be used for further in-depth research studies, for policy makers to plan more effectively targeted intervention strategies.

LIMITATIONS

It is accepted that every research study has its own limitation, and the same goes for the current research. One of the limitations of the study was that the sample size of this present study is limited, for future study, it is recommended to include a larger sample size to ensure better generalization of results. Besides the analysis of the scales employed in the present study, socio-demographic variables were not included as contributing factors; in view of this socio-demographic variables could be included as contributing factors in the future study. A comparison of different groups could be done. Finally, this study only studied the Perceived Social Support; Stigma, and Mental health, different variables could be included for further study.

A Brief description of Mizoram

Mizoram belongs to one of the states of Northeast India, with Aizawl as its capital city. It is part of the Eight Sister States known as North-Eastern India and shares its borders with the states of Tripura, Assam, Manipur and with the neighbouring countries, Bangladesh and Myanmar. Until 1972, when Mizoram was declared as a Union Territory, like several states of northeastern India, Mizoram was also previously a part of Assam. It became the 23rd state of India on 20 February 1987. The name 'Mizoram' is derived from Mi (people), Zo (lofty place, such as a hill) and Ram (land), and thus Mizoram implies "Land of the hill people". The primary official language of Mizoram is Mizo. Other languages often spoken in the state include Hmar, Mara, Lai, Paite, Gangte, etc.

According to 2011 census, Mizoram's population was at 1,091,014. It is the 2nd least populous state in the country. It is the third most literate state in the country with the rate of literacy at 91.58 per cent. Mizoram covers an area of approximately 21,087 square kilometres. Around 91% of the state is forested. About 95% of current Mizoram population is of diverse tribal origins who settled in the state, mostly from Southeast Asia, over waves of migration starting through the 16th century but seems to be mainly in the 18th century. This is the highest concentration of tribal population among all states of India.

The origin of the word 'Mizo' is not known. Historians speculate that the Mizo are a part of the great wave of the Mongolian race spilling over into the eastern and southern regions of India centuries ago. The Mizo came to be under the influence of the British Missionaries in the 19th Century. Now the majority of the Mizo people follow Christian beliefs. One of the beneficial results of Missionary activities was the spread of schooling, such as the introduction of the Roman script for the Mizo language and establishment of formal education.

The framework and structure of social life in the Mizo society has undergone tremendous changes over years. Before the British arrived into the hills, for all practical purposes, the villages and the clans formed units of Mizo society. The Mizo code of ethics or Dharma revolved around "Tlawmngaihna", an untranslatable term meaning on the part that everyone has the underlying responsibility to be hospitable. It is of kindness, selflessness and being devotedly generous as well as helpful to others without asking for a thing in return. *Tlawmngaihna* to Mizo stands for the spellbinding, virtuous moral force which finds expression in altruistic self-sacrifice for the service and benefit of others, always keeping society and humanity before self-indulgences. The word in the old belief, Pathian, is still used for the term 'God' to this day. The Mizo have been enraptured by their new-found faith of Christianity, with so much dedication and submission that the entirety of their social life and thought-process has been transformed and guided by the Christian Church Organisation, and their sense of values has also undergone a drastic change. The Mizo endorses close-knit society with no class or caste distinction and no discrimination on the grounds of gender. Ninety per cent of them are cultivators and villages exist like a big family. The birth of a child, marriage in the village, death of a person in the village or a community feast arranged by a member of the village are occasions observed with great importance in which the whole village is unitedly involved, even in an instance when the only thing they can offer is moral support.

Mizo society in the past was a patriarchal society where male dominance was asserted. Despite this, Mizos are giving up their old customs fast and are adopting the new mode of life conduct which is greatly influenced by western culture. Many of their present customs are mixtures of their old historical traditions and western pattern of lifestyle. Music is a passion for the Mizo and the young boys and girls take to the western music avidly with commendable skill.

Mizo people are agriculturalist and practise Jhum cultivation. All their societal activities, celebrations and festive events encircle agriculture and

Jhum cultivation. The main festival is Chapchar kût or Spring festival, celebrated after Jhum operations. Mîm kût is another festival celebrated in September, while Pâwl kût is a harvest festival celebrated in December. The popularity of these festivals, however, slowly grew dim with the emergence of Christianity.

PARTICIPANTS CONSENT FORM

Purpose:

The purpose of this study is to investigate the thoughts Female sex workers may experience. This study is part of research under the Mizoram University.

Procedure:

If you agree to participate in the study, you will be asked to do the following:

- Please read each question carefully, and then pick out the one statement that best describes the way you have been feeling.
- There is no estimated time for completion of the questionnaire and there are no right or wrong answers, do not spend much time and please answer all the questions.

Confidentiality:

Your name/identity will never be linked to your responses on the questionnaire, number will be used instead. Information that would make it possible to identify you or any other participant will never be included in any sort of report. The data will be accessible only to those working on this study and will be used only for the research purpose.

After I read and understand about the above information, I consent to participate in this study.

Signature of the Participants _____

THANK YOU

SOCIO – DEMOGRAPHIC PROFILE

1. Age
2. Church Denomination
3. Educational Qualification
4. Commencement of sex work
5. Breadwinner
6. Marital Status
7. Income
8. Parental Status and Deceased
9. Tobacco Use Status
10. Drug Use Status
11. Status of Alcohol Use
12. Medical Hospitalization
13. Security Response Section (SRS)/Police Arrest
14. Status of Protective Home/Centre

MULTIDIMENSIONAL SCALE OF PERCEIVED SOCIAL SUPPORT

(Zimet, Dahlem, Zimet & Farley, 1988)

Please read each statement carefully and indicate how you feel about statement	Very Strongly Disagree	Strongly Disagree	Mildly Disagree	Neutral	Mildly Agree	Strongly Agree	Very Strongly Agree
1. There is a special person who is around when I am in need.	1	2	3	4	5	6	7
2. There is a special person with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
3. My family really tries to help me.	1	2	3	4	5	6	7
4. I get the emotional help and support I need from my family.	1	2	3	4	5	6	7
5. I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7
6. My friends really try to help me.	1	2	3	4	5	6	7
7. I can count on my friends when things go wrong	1	2	3	4	5	6	7
8. I can talk about my problems with my family.	1	2	3	4	5	6	7
9. I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
10. There is a special person in my life who cares about my feelings.	1	2	3	4	5	6	7
11. My family is willing to help me make decisions.	1	2	3	4	5	6	7
12. I can talk about my problems with my friends.	1	2	3	4	5	6	7

DEPRESSION ANXIETY STRESS SCALE (DASS-21) (Lovibond & Lovobond, 1995)

	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.	Never	Sometimes	Often	Almost Always
1.	I found it hard to wind down	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 found it difficult to work up the initiative to do things	0	1	2	3
6.	I tended to over-react to situations	0	1	2	3
7.	I experienced trembling (eg, in the hands)	0	1	2	3
8.	I felt that I was using a lot of nervous energy	0	1	2	3
9.	I was worried about situations in which I might panic and make a fool of myself	0	1	2	3
10.	I felt that I had nothing to look forward to	0	1	2	3
11.	I found myself getting agitated	0	1	2	3
12.	I found it difficult to relax	0	1	2	3
13.	I felt down-hearted and blue	0	1	2	3
14.	I was intolerant of anything that kept me from getting on with what I was doing	0	1	2	3
15.	I felt I was close to panic	0	1	2	3
16.	I was unable to become enthusiastic about anything	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 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
20.	I felt scared without any good reason	0	1	2	3
21.	I felt that life was meaningless	0	1	2	3

SELF-STIGMA SCALE (Mak & Cheung, 2010)

	Please read each statement carefully and indicate how much the statement applied to you	Strongly Disagree	Disagree	Agree	Strongly Agree
1.	I fear that others would know that I am female sex worker	1	2	3	4
2.	My identity as a female sex worker incurs inconvenience in my daily life.	1	2	3	4
3.	I dare not to make new friends lest they find out that I am a female sex worker.	1	2	3	4
4.	I feel uncomfortable because I am a female sex worker.	1	2	3	4
5.	My identity as a female sex worker is a burden to me.	1	2	3	4
6.	I estrange myself from others because I am a female sex worker.	1	2	3	4
7.	I feel like I cannot do anything about my identity as female sex worker	1	2	3	4
8.	The identity of being a female sex worker taints my life.	1	2	3	4
9.	I avoid interacting with others because I am a female sex worker	1	2	3	4

REFERENCES

- Adams, R. E., Santo, J.B., & Bukowski, W.M. (2011, November). The presence of a best friend buffers the effects of negative experiences. *Developmental Psychology*, 47(6), 1786-1791 DOI:10.1037/a0025401.
- Ahmedani B. K. (2011, December). Mental Health Stigma: Society, Individuals, and the Profession. *Journal of social work values and ethics*, 8(2), 41–416.
- Albrencht, T. L., & Adelman, M. B. (1984, September). Social Support and Life Stress, *Human Communication Research*, 11(1), 03-32. DOI: [10.1111/j.1468-2958.1984.tb00036.x](https://doi.org/10.1111/j.1468-2958.1984.tb00036.x)
- American Psychiatric Association. (2006). What is Depression?. Retrieved from <https://www.ndsu.edu/fileadmin/counseling/APAdepression.pdf>
- Aneshensel, C. S., & Stone, J. D. (1982, December). Stress and Depression: A Test of the Buffering Model of Social Support, *Archive of General Psychiatry*, 39(12), 1392-1396. DOI:10.1001/archpsyc.1982.04290120028005.
- Angst, J., Gamma, A., Neuenschwander, M., Ajdacic-Gross, V., Eich, D., Rössler, W., & Merikangas, K. R. (2005). Prevalence of mental disorders in the Zurich Cohort Study: a twenty year prospective study, *Epidemiologia e Psichiatria Sociale*, 14(2), 68-76. DOI: 10.1017/s1121189x00006278.
- Balasubramanian, A., (2017, October). Mizoram-At a Glance, Educational Video Documentaries in Earth, Atmospheric and Ocean Sciences. DOI: 10.13140/RG.2.2.20424.01283
- Balfour, R., & Allen, J. (2014, April). A Review of the Literature on Sex Workers and Social Exclusions: *Department of Health and Social Care*.

Retrieved from <https://www.bl.uk/collection-items/review-of-the-literature-on-sex-workers-and-social-exclusion>

- Baptista, M. N., Carneiro, A. M., & Cardoso, H. F. (2013). Depression, Family Support and Hopelessness: A Correlated Study, *Universitas Psychologica*, 13(2), 693-702. DOI:10.11144/Javeriana.UPSY13-2.dfsh
- Baruah, R., & Borooah, I. P. (2017, October). Perceived Social Support and Quality of Life in Female Sex Workers of Assam, *International Journal of Humanities and Social Science Invention*, 6(10), 01-08.
- Bautista, R. E. D., Shapovalov, D., & Shoraka. (2015, June). Factors Associated with Increased Felt Stigma Among Individual with Epilepsy, *Seizure European Journal Of Epilepsy*, 30, 106-112. DOI:10.1016/j.seizure.2015.06.006.
- Beattie, T. S., Smilenova, B., Krishnaratne, S., & Mazzuca, A. (2020, September). Mental Health Problems Among Female Sex Workers in Low – And Middle – Income Countries: A Systematic Review and Meta-Analysis, *Plos Medicine*, 17(9), DOI:10.1371/journal.pmed.1003297.
- Belanger, E., Ahmed, T., Vafaei, A., Curcio, C. L., Phillips, S. P., & Zunzunegui, M. V. (2016, June). Sources of Social Support Associated with Health and Quality of Life: A Cross Sectional Study among Canadian and Latin American Older Adults, *BMJ Open*, 6(6). DOI:10.1136/bmjopen-2016-011503.
- Benoit, C., Jansson, S. M., Smith, M., & Flagg, J. (2017, November). Prostitution, Stigma and Its effect on the Working Conditions, Personal Lives, and Health of Sex Workers, *The Journal of Sex Research*, 55(4-5), 1-55. DOI:10.1080/00224499.2017.1393652.
- Benoit, C., Mccarthy, B., & Jansson, M. (2015, March). Stigma, Sex Work and Substance Use: A Comparative Analysis, *Sociology of Health and Illness*, 37(3), 437-451. DOI:10.1111/1467-9566.12201.

- Bernburg, J. G. (2009, June). Labeling Theory, *Handbook on Crime and Deviance*, 187-207. DOI:10.1007/978-1-4419-0245-0_10.
- Bhattacharjya, M., Fulu, E. & Murthy, L. with Seshu, M.S., Cabassi, J. & Vallejo-Mestres, M. (2015). The Right(s) Evidence – Sex Work, Violence and HIV in Asia: A Multi-Country Qualitative Study. Summary Report. Bangkok: UNFPA, UNDP, APNSW (CASAM). Retrieved from https://www.nswp.org/sites/nswp.org/files/Rights_Evidence_Summary_2015_0.pdf
- Bianco, T., & Eklund, R. (2001, June). Conceptual Considerations for Social Support Research in Sport and Exercise settings: The Case of Sport Injury, *Journal of Sport & Exercise Psychology*, 23(2), 85-107. DOI:10.1123/jsep.23.2.85.
- Bukhari, S. R., & Afzal, F. (2017, February). Perceived Social Support predicts Psychological Problems among University Students, *The International Journal of Indian Psychology*, 4(2), DOI: 10.25215/0402.082.
- Carlson, C. E., Witte, S. S., Pala, A. N., Tsai, L. C., Wainberg, M., & Aira, T. (2017, June). The impact of violence, perceived stigma, and other work-related stressors on depressive symptoms among women engaged in sex work. *Global Social Welfare : Research, Policy & Practice*, 4(2), 51–57. <https://doi.org/10.1007/s40609-017-0085-5>
- Carrasco, M. A., Barrington, C., Perez, M., Donastorg, Y., & Kerrigan, D. (2018, August). Social Cohesion, Condom Used and Sexually Transmitted Infections Among Female Sex Workers Living with HIV in the Dominican Republic, *International Journal of STD and AIDS*, 30(1), 64-71. DOI:10.1177/0956462418792100.

- Chandrasekaran, P., Dallabetta, G., Loo, V., & Rao, S. (2006, September). Containing HIV/AIDS in India: the unfinished agenda, *The Lancet Infectious Diseases*, 6(8), 508-521. DOI:10.1016/S1473-3099(06)70551-5.
- Chattopadhyay, M., Bandyopadhyay, S., & Duttagupta, C. (1994). Biosocial factors influencing women to become prostitutes in India. *Social Biology*, 41(3-4), 252-259. DOI:10.1080/19485565.1994.9988876.
- Chen, R., Tao, F., Ma, Y., Zhong, L., Qin, X., & Hu, Z. (2014, December). Association Between Condom Use among Commercial Sex Workers in China: A Cross Sectional Study, *PlosOne*, 9(12). DOI: 10.1371/journal.pone.113794.
- Cheng, Y., Li, X., Lou, C., Sonenstein, F. L., Kalamar, A., Jejeebhoy, S., Delany-Moretlwe, S., Brahmhatt, H., Olumide, A. O., & Ojengbede, O. (2014, December). The association between social support and mental health among vulnerable adolescents in five cities: Findings from the study of the well-being of adolescents in vulnerable environments. *The Journal of Adolescence Health*, 55(6), S31-38. DOI: 10.1016/j.jadohealth.2014.08.020.
- Choudhury, S. M., Erausquin, J. T., Park, K., & Anglade, D. (2015, August). Social Support and Sexual Risk Among Establishment-Based Female Sex Workers in Tijuana, *Qualitative Health Research*, 25(8), 1056-1068. DOI:10.1177/1049732315587282.
- Chudakov, B., Ilan, K., Belmaker, R., & Cwikel, J. (2002). The motivation and mental health of sex workers. *Journal of Sex & Marital Therapy*, 28(4), 305-315
- Clair, M. (2018) “Stigma”. Core Concepts in Sociology. Retrieved from https://scholar.harvard.edu/files/matthewclair/files/stigma_finaldraft.pdf

- Cleveland Clinic (2015). What is Stress. Retrieved from <https://my.clevelandclinic.org/health/articles/11874-stress>
- Coetzee, J., Buckley, J., Otwombe, K., Milovanovic, M., Gray, G. E., & Jewkes, R. (2018). Depression and Post Traumatic Stress amongst female sex workers in Soweto, South Africa: A cross sectional, respondent driven sample. *PloS one*, *13*(7), e0196759. DOI:10.1371/journal.pone.0196759.
- Cohan, D., Lutnick, A., Davidson, P., Cloniger, C., Herlyn, A., Breyer, J., Cobaugh, C., Wilson, D., & Klausner, J. (2006). Sex worker health: San Francisco style. *Sexually transmitted infections*, *82*(5), 418–422. DOI:10.1136/sti.2006.020628
- Corrigan, P. (2004, October). How stigma interferes with mental health care. *American Psychologist*, *59*(7), 614-625. DOI:10.1037/0003-066X.59.7.614.
- Corrigan, P. W., Larson, J. E., & Rusch, N. (2009, June). Self-Stigma and The “Why Try” Effect: Impact on Life Goals and Evidence-Based Practices, *World Psychiatry*, *8*(2), 75-81. DOI:10.1002/j.2051-5545.2009.tb00218.x.
- Costanza, R. S., Derlega, V. J., & Winstead, B. A. (1988, March). Positive and Negative forms of Social Support: Effects of Conversational Topics on Coping with Stress Among Same Sex Friends, *Journal of Experimental Social Psychology*, *24*(2), 182-193. DOI:10.1016/0022-1031(88)90020-0.
- Crocker, J., Major, B., & Steele, C. (1998). *Social stigma*. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (504–553). McGraw-Hill.

- Cusick, L., & Martin, A. (2003, January). Vulnerability and Involvement in Drug Use and Sex Work, *Home Office Research, Development and Statistics Directorate*. Retrieved From https://www.researchgate.net/publication/238070172_Vulnerability_and_Involvement_in_Drug_Use_and_Sex_Work
- Desai, M. M., Rosenheck, R.A., Druss, B.G., & Perlin, J.B. (2002 September). Mental disorders and quality of diabetes care in the veterans health administration. *American Journal of Psychiatry*. 159(9), 1584-90. DOI:10.1176/appi.ajp.159.9.1584. PMID: 12202281.
- Dudley J.R. (2000, October) Confronting stigma within the services system. *Social Work*. 45(5), 449-55. DOI:10.1093/sw/45.5.449. PMID: 11029900.
- Dye, S. Labeling theory. *History of Forensic Psychology*. Retrieved from <http://forensicpsych.umwblogs.org/psychological-theories/psychological-theories-2/labeling-theory>
- Eom, C. S., Shin, D. W., Kim, S. Y., Yang, H. K., Jo, H. S., Kweon, S. S., Kang Y. S., Kim, J. H., Cho, B. L., & Park, J. H. (2013, June). Impact of perceived social support on the mental health and health-related quality of life in cancer patients: results from a nationwide, multicenter survey in South Korea, *Psycho-oncology*, 22(6),1283-1290. doi: 10.1002/pon.3133.
- El-Bassel, N., & Witte, S. (2001). Drug use and physical and sexual abuse of street sex workers in New York City. *Research for Sex Work*, 4, 31-32
- El-Bassel, N., Schilling, R., Irwin, K., & Faruque, S. (1997). Sex trading and psychological distress among women recruited from the streets of Harlem. *American Journal of Public Health*, 87(1), 66-70
- Eysenck, S. B., Eysenck, H., J., & Barret, P. (1985). A revised version of the psychoticism scale, *Personality and Individual differences*, 6(1), 21-29

- Fairbrother (2011), *Vision-Social Support* 6(4). Retrieved from <https://www.heretohelp.bc.ca/visions/social-support-vol6>
- Farley, M., Baral, I., Kiremire, M., & Sezgin, U., (1998). Prostitution in Five Countries: Violence and Post-Traumatic Stress Disorder, *Feminism & Psychology*, 8(4), 405-426. DOI:10.1177/0959353598084002
- Ferreira, S., Magalhaes, E., & Prioste, A., (2019, July). Social Support and Mental Health of Young People in Residential Care: A Qualitative Study, *Anuario de Psicologia Juridica*, 30(1), 00-00. DOI:10.5-93/apj2019a12
- Fick, N. (2016, March). Sex Workers Speak Out: Policing and the sex industry, *South African Crime Quarterly*, 15(15). DOI:10.17159/2413-3108/2006/v0i15a1003.
- Flowers, R. B. (1998). *The prostitution of women and girls*. Jefferson: McFarland.
- Footer, K. H. A., Park, J. N., Allen, S. T., Decker, M. R., Silberzahn, B. E., Heuttner, S., Galai, N., & Sherman S. G. (2019, February). Police-Related Correlates of Client-Perpetrated Violence Among Female Sex Workers in Baltimore City, Maryland, *American Journal of Public Health*, 109(2), 289-295. DOI:10.2105/AJPH.2018.304804.
- Freeman, P., & Rees, T. (2010, January). Perceived Social Support from teammates: Direct and stress-buffering effects on self-confidence, *European Journal of Sport Science*, 10(1), 59-67.. DOI:10.1080/17461390903049998.
- Fuller-Iglesias, H. R., Webster, N. J., & Antonucci, T. C. (2015, March). The complex nature of family support across the life span: Implications for Psychological well-being. *Developmental Psychology*, 51(3), 277–288. DOI:10.1037/a0038665

- Galderisi, S., Heinz, A., Kastrup, M., Beezhold, J., & Sartorius, N. (2015, June). Toward a new definition of mental health. *World psychiatry*, *14*(2), 231–233. DOI:10.1002/wps.20231.
- Global Network Sex Work Project (2017, September). Policy Brief: Sex Work as Work. Retrieved from <https://www.nswp.org/resource/policy-brief-sex-work-work>
- Godwin, J., (2012, October). Sex Work and the Law in Asia and the Pacific. United National Developmental Programme. ISBN: 978-974-680-343-4
- Goffman E. Stigma: Notes on the Management of Spoiled Identity. Englewood Cliffs NJ: Prentice Hall; 1963.
- Gorry, J., Roen, K., & Reilly, J. (2010, March). Selling Your Self? The Psychological Impact of Street Sex Work and Factors Affecting Support Seeking, *Health and Social Care in the Community*, *18*(5), 492-499. DOI:10.1111/j1365-2524.2010.00925.x
- Gu, J., Lau, J. T. F., Li, M., Li, H., Gao, Q., Feng, X., Bai, Y., Hao, C., & Hao, Y. (2014, November). Socio-ecological factors associated with depression, suicidal ideation and suicidal attempt among female injection drug users who are sex workers in China, *Drug Alcohol Depend*, *144*, 102–110. DOI:10.1016/j.drugalcdep.2014.08.011.
- Guida, J., Hu, L., & Liu, H. (2016). The Impact of Occupational Stigma on the Social Networks of Older Female Sex Workers: Results from a Three-Site Egocentric Network Study in China. *AIDS patient care and STDs*, *30*(1), 1–3. DOI:10.1089/apc.2015.0137
- Han, B., Yan, B., Zhang, J., Zhao, N., Sun, J., Li, C., Lei, X., Liu, H., & Chen, J. (2014, April). The influence of the social support on symptoms of anxiety and depression among patients with silicosis. *Scientific World Journal*. 2014. DOI:10.1155/2014/724804.

- Harandi, T. F., Taghinasab, M. M., & Nayeri, T. D. (2017, September). The correlation of social support with mental health: A meta-analysis. *Electronic Physician, 9(9)*, 5212–5222. DOI:10.19082/5212
- Harcourt, C., & Donovan, B., (2005). The many faces of sex. *BMJ Journal, 81(3)*, 201-206. DOI:10.1136/sti.2004.012468.
- Hartley, C., & Coffee, P. (2019). Perceived and Received Dimensional Support: Main and Stress-Buffering Effects on Dimensions of Burnout. *Frontiers in psychology, 10*, 1724. DOI:10.3389/fpsyg.2019.01724
- Hengartner, M. P., Islam, M. N., Haker, H., & Rossler, W. (2015, December). Mental Health and Functioning of Female Sex Workers in Chittagong, Bangladesh, *Frontier in Psychiatry, 6*, 176. DOI:10.3389/fpsyt.2015.00176.
- Heravian, A., Solomon, R., Krishnan, G., Vasudevan, C. K., Krishnan, A. K., Osmand, T., & Ekstrand, M. L. (2012, May) Alcohol consumption patterns and sexual risk behavior among female sex workers in two South Indian communities, *International Journal on Drug Policy, 23(6)*, 498-504. DOI:10.1016/j.drugpo.2012.03.005.
- Herek, G. M., Saha, S., & Burak, J. (2013, February). Stigma and Psychological Distress in People with HIV/AIDS, *Basic and Applied Social Psychology, 35(1)*, 42-54. DOI:10.1080/01973533.2012.746606.
- Herrman, H., Saxena, S., & Moodie, R. Promoting Mental Health: A Report of the World Health Organization, Department of Mental Health and Substance Abuse in collaboration with the Victorian Health Promotion Foundation and The University of Melbourne, *World Health Organization Geneva* ISBN: 9241591595. Retrieved from https://www.who.int/mental_health/evidence/en/promoting_mhh.pdf

- Hombrados-Mendieta, I., Millán-Franco, M., Gómez-Jacinto, L., Gonzalez-Castro, F., Martos-Méndez, M. J., & García-Cid, A. (2019, November). Positive Influences of Social Support on Sense of Community, Life Satisfaction and the Health of Immigrants in Spain. *Frontiers in psychology, 10*, 2555. DOI:10.3389/fpsyg.2019.02555
- Hong, Y., Fang, X., Li, X., Liu, Y., Li, M., & Tai-Seale, T. (2010, January). Self-perceived stigma, depressive symptoms, and suicidal behaviors among female sex workers in China. *Journal of Transcultural Nursing, 21(1)*, 29-34. DOI:10.1177/1043659609349063
- Ioannou, M., Kassianos, A. P., & Symeou, M. (2019, January). Coping With Depressive Symptoms in Young Adults: Perceived Social Support Protects Against Depressive Symptoms Only Under Moderate Levels of Stress. *Frontiers in Psychology, 9*, 2780. DOI:10.3389/fpsyg.2018.02780
- Jeffreys, E. (2015, September). Sex Work Politics and the Term 'Sex works', Global Network of Sex Work Projects, *Research for Sex work*, 14. Retrieved from http://researchgate.net/publication/305515374_Sex_Workers_Politics_and_the_term_Sex_Work.
- Keyes, C. L. M. (2014, August). Mental Health as a Complete State: How the Salutogenic Perspective Completes the Picture, *Bridging Occupational, Organizational and Public Health*: Springer, Dordrecht. 179-192 DOI:10.1007/978-94-007-5640-3_11.
- King, E. J., Maman, S., Bowling, J. M., Moracco, K. E., & Dudina, V. (2013, October). The influence of stigma and discrimination on female sex workers' access to HIV services in St. Petersburg, Russia. *AIDS and behavior, 17(8)*, 2597–2603. DOI:10.1007/s10461-013-0447-7

- Ko, H. C., Wang, L. L., & Xu, Y. T. (2013). Understanding the different types of social support offered by audience to A-list diary-like and informative bloggers. *Cyberpsychology, behavior and social networking*, 16(3), 194–199. DOI:10.1089/cyber.2012.0297
- Koolae, A. K., & Damirchi, F., (2016, October). Comparing Quality of Life Among Female Sex Workers With and Without Addiction, *Journal for Client-Centred Nursing Care*, 2 (4), 201-206. DOI:10.32598/jccnc.2.4.201
- Kugbey, N., Osei-Boadi, S., & Atefoe. (2015, June). The Influence of Social Support on the Levels of Depression, Anxiety and Stress among Students in Ghana, *Journal of Education and Practice*, 6(25). Retrieved from <http://files.eric.ed.gov/fulltext/EJ1078530.pdf>
- Labeling Theory. Retrieved From https://en.wikipedia.org/wiki/Labeling_theory
- Laisuklang, M. G., & Ali, A. (2017). Psychiatric Morbidity Among Female Commercial Sex Workers, *Indian Journal of Psychiatry*, 59(4), 465-470. DOI:10.4103/psychiatry.IndianJPsychiatry_147_16.
- Lakey, B. (2010). *Social support: Basic research and new strategies for intervention*. In J. E. Maddux & J. P. Tangney (Eds.), *Social psychological foundations of clinical psychology*, 177–194. The Guilford Press
- Lalzarzova (2014). Mizo. Thesis submitted in partial fulfillment of the requirement of the Master of Philosophy in Mizo of Mizoram University, Aizawl. Retrieved from <http://mzuir.inflibnet.ac.in/bitstream/123456789/690/1/LALZARZOVA,%20Mizo.pdf>

- Lazarus, L., Deering, K. N., Nabess, R., Gibson, K., Tyndall, M. W., & Shannon, K. (2012). Occupational stigma as a primary barrier to health care for street-based sex workers in Canada. *Culture, health & sexuality, 14*(2), 139–150. DOI:10.1080/13691058.2011.628411
- Liggins, J., & Hatcher, S. (2005). Stigma toward the mentally ill in the general hospital: a qualitative study. *General Hospital Psychiatry, 27*(5):359-64. DOI:10.1016/j.genhosppsy.2005.05.006.
- Lincoln, K. D., & Chae, D. H. (2012, March). Emotional support, negative interaction and major depressive disorder among African Americans and Caribbean Blacks: findings from the National Survey of American Life. *Social Psychiatry and Psychiatric Epidemiology, 47*(3), 361-72, DOI: 10.1007/s00127-011-0347-y.
- Link, B. G., & Phelan, J.C. (2001). Conceptualizing Stigma, *Annual Review of Sociology, 27*, 338-385. DOI:10.1147/annurev.soc.27.1.363.
- Lovibond, S.H., & Lovibond, P.F., (1995). Depression Anxiety Stress Scale-21. Retrieved From <http://depression-test.net/support-files/dass21-dmz.pdf>
- Ma, H., & Loke, A Y. (2019, November). A qualitative study into female sex workers' experience of stigma in the health care setting in Hong Kong. *International Journal for Equity Health, 18*(1), 175. DOI: 10.1186/s12939-019-1084-1.
- Macionis, J. J., & Gerbal, L. M. (2010, January). *Sociology*. (7th Ed). Canada: Pearson Education Canada.
- Major, B., Spencer, S., Schmader, T., Wolfe, C., & Crocker, J. (1998, January). Coping with Negative Stereotypes about Intellectual Performance: The Role of Psychological Disengagement, *Personality and Social Psychology Bulletin, 24*(1), 34-50. DOI:10.1177/0146167298241003

- Mak, W. W. S. & Cheung, R. Y. M. (2010). Self-stigma among concealable minorities in Hong Kong: Conceptualization and unified measurement. *American Journal of Orthopsychiatry*, 80, 263-277
- Manuela, P., Alin, C., Carina, P., & Cristinel, S. (2011). Self-Stigma in Psychiatry: Ethical and Bio-Psycho-Social Perspectives, Romanian Journal of Bioethics, 9(1), 76-82. Retrieved from https://www.researchgate.net/publication/287961005_Selfstigma_in_psychiatry_Ethical_and_bio-psycho-social_perspectives
- Mao, Y., Zhao, Q., & Li, X. (2017). Perceived social support and its association with amphetamine-type stimulant use among female sex workers in Guangxi, China. *Journal of drug abuse*, 3(2), 12. DOI:10.21767/2471-853X.100052
- Markowitz, F. E. (1998, December). The Effects of Stigma on the Psychological Well-Being and Life Satisfaction of Persons with Mental Illness, *Journal of Health and social Behavior*, 39(4), 335-347. DOI:10.2307/2676342.
- Maryan, G., & Sahar, J. G. (2010). The relationship between the social support and mental health in lorestan university students in 2009. *YAFTEH*, 12(1), 57-64. Retrieved from <https://www.sid.ir/en/Journal/ViewPaper.aspx?ID=227590>
- Mayo Clinic Staff, (2017, May). Mental Health: Overcoming the Stigma of Mental Illness. Retrieved From <https://www.mayoclinic.org/diseases-conditions/mental-illness/in-depth/mental-health/art-20046477>
- McGill University, (2020, December). Strong Social Support Deceases Mental Health Problems in Young Adults: Awareness and Presence of Social Support may guard against mental health problems. *ScienceDaily*. Retrieved from <https://www.sciencedaily.com/releases/2020/12/201211115455.htm#:~:>

text=The%20researchers%20found%20that%20people,those%20with%20less%20social%20support

Mead,H.G., Becker,H.S., & Tannenbaum,F., (2011).Labeling Theory. ISBN: 9781234583347

Mental Health Foundation, (2014). Living with Anxiety: Understanding the role and impact of anxiety in our lives, Mental Health Awareness Week 2014. Retrieved from <https://www.mentalhealth.org.uk/sites/default/files/living-with-anxiety-report.pdf>

Mental health: Overcoming the stigma of mental illness. (2017, May). Retrieved from <https://www.mayoclinic.org/diseases-conditions/mental-illness/in-depth/mental-health/art-20046477>

Mind (2017). Understanding Mental Health Problem.s. Retrieved from <http://mind.org.uk/media-a/2949/mental-health-problems-introduction-2017>

Mizoram at Glance. Mizoram Portal, State portal of Mizoram. Retrieved from <https://mizoram.gov.in/page/know-mizoram>

National Portal of India. States Uts – Mizoram, *Know India*. Retrieved from <https://knowindia.gov.in/states-uts/mizoram.php>

Nemoto, T., Bödeker, B., & Iwamoto, M. (2011, October). Social support, exposure to violence and transphobia, and correlates of depression among male-to-female transgender women with a history of sex work. *American journal of public health, 101(10)*, 1980–1988. DOI:10.2105/AJPH.2010.197285

- Odukoya, O. O., Sekoni, A. O., Onajole, A. T., & Upadhyay, R. P. (2013, June). Alcohol consumption and cigarette smoking pattern among brothel-based female sex workers in two local government areas in Lagos state, Nigeria. *African health sciences*, *13*(2), 490–497. DOI:10.4314/ahs.v13i2.41
- Over, C. (2002). Sex workers: part of the solution an analysis of HIV prevention programming to prevent HIV transmission during commercial sex in developing countries. *SAFAIDS Online Catalogue*. Retrieved from https://www.who.int/hiv/topics/vct/sw_toolkit/115solution.pdf
- Pachau, B., (2013). The pattern of drug use, perceived social support and mental health of female sex workers – intravenous drug users in Aizawl: Dissertation submitted to the Department of Psychology, Mizoram University; Aizawl, in partial fulfillment of the requirements for the degree of Master of Philosophy in Psychology, Unpublished
- Pandiyan, K., Shekar, H.C., Prashant, N.R., & Gangadara, A. (2014). A study of Psychological morbidity among female sex workers. *ISOR Journal of Mathematics, Volume 10 (2)*. 81-88.
- Patel, S. K., Saggurti, N., Pachauri, S., & Prabhakar, P. (2015, November). Correlates of Mental Depression Among Female Sex Workers in Southern India, *Asia Pacific Journal of Public Health*, *27*(8), 809-819. DOI: 10.1177/1010539515601480.
- People of Mizoram. Retrieved from <https://mizoram.nic.in/about/people.htm>
- Pheterson, G. (1993). The Whore Stigma: Female Dishonor and Male Unworthiness, *Social Text*, *37*(37), 39-64. DOI: [10.2307/466259](https://doi.org/10.2307/466259)
- Pines, H. A., Patterson, T. L., Rangel, G., Martinez, G., Bazzi, A. R., Ulibarri, M. D., Syvertsen, J. L., Martin, N. K., & Strathdee, S. A. (2015). STI/HIV test result disclosure between female sex workers and their

- primary, non-commercial male partners in two Mexico-US border cities: a prospective study. *Sexually transmitted infections*, *91*(3), 207–213. <https://doi.org/10.1136/sextrans-2014-051663>
- Platt, L., Grenfell, P., Meiksin, R., Elmes, J., Sherman, S. G., Sanders, T., Mwangi, P., & Crago, A. L. (2018, December). Associations between sex work laws and sex workers' health: A systematic review and meta-analysis of quantitative and qualitative studies. *PLoS Medicine*. *15*(12), e1002680. DOI:10.1371/journal.pmed.1002680.
- Poliah, V., & Paruk, S. (2017). Depression, Anxiety Symptoms and Substance Use Amongst Sex Workers Attending a Non-Governmental Organization in KwaZulu-Natal, South Africa, *South African Family Practice*, *59*(3), 116-122. DOI:10.1080/20786190.2016.1272247.
- Potter, K., Martin, J., & Romans, S. (1999, December). Early developmental experiences of female sex workers: a comparative study. *The Australian and New Zealand Journal of Psychiatry*. *33*(6), 935-40. DOI: 10.1046/j.1440-1614.1999.00655.x.
- Proescher, E., Aase, D. M., Passi, H. M., Greenstein, J. E., Schroth, C., & Phan, K. L. (2020, May). Impact of Perceived Social on Mental Health, Quality of Life, and Disability in Post – 9/11 U.S. Military Veterans, *Armed Force & Society*. DOI:10.1177/0095327X20919922
- Puri, N., Shannon, K., Nguyen, P., & Goldenberg, S. M. (2017, December). Burden and Correlates of Mental Health Diagnoses among Sex Workers in an Urban Setting, *BCM Women's Health*, *17*(1), 133. DOI:10.1186/s12905-017-0491-y
- Qiao, S., Li, X., Zhang, C., Zhou, Y., Shen, Z., & Tang, Z. (2015). Social Support and Condom Use Among Female Sex Workers in China. *Health Care for Women International*, *36*(7) 834-50. DOI: 10.1080/07399332.2014.971952.

- Rael, C. T. (2015, December). Perception of Sex Work-Related Stigma in female sex workers from the Dominican Republic: Implications for HIV interventions, *Sexuality & Culture*, 9, 674-684. DOI:10.1007/s12119-015-9284-3
- Rael, C. T., & Davis, A. (2016, May). Depression and key associated factors in female sex workers and women living with HIV/AIDS in the Dominican Republic, *International Journal Of STD & AIDS*, 28(5), 433-440. DOI: [10.1177/0956462416651374](https://doi.org/10.1177/0956462416651374).
- Rayson, J., & Alba, B. (2019, July). Experiences of stigma and discrimination as predictors of mental health help-seeking among sex workers, *Sexual and Relationship Therapy*, 34(3). DOI:10.1080/14681994.2019.1628488.
- Rector, N. A., Bourdeau, D., Kitchen, K., & Joseph-Massiah, L. Anxiety Disorders: An Information Guide, Centre for Addiction and Mental Health. Retrieved from <https://www.camh.ca/-/media/files/guides-and-publications/anxiety-guide-en.pdf>
- Reilly, T., & Woo, G. (2004, May). Social Support and Maintenance of Safer Sex Practices among People Living with HIV/AIDS, *Health & Social Work*, 29(2), 97–105. DOI: 10.1093/hsw/29.2.97.
- Romans, S. E., Potter, K., Martin, J., & Herbison, P. (2001, February). The mental and physical health of female sex workers: a comparative study. *Australian and New Zealand Journal of Psychiatry*, 35(1), 75-80. DOI:10.1046/j.1440-1614.2001.00857.x.
- Roohafza, H. R., Afshar, H., Keshteli, A. H., Mohammadi, N., Feizi, A., Taslimiand, M., & Adibi, P. (2014, October). What's the role of perceived social support and coping styles in depression and anxiety?, *Journal of Research in Medical Sciences*, 19(10), 944–949. Retrieved from :<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4274570/>

- Roshanfekar, P., Noori, R., Dejman, M., Fathi Geshnigani, Z., & Rafiey, H. (2015, June). Drug Use and Sex Work Among At-risk Women: A Qualitative Study of Initial Factors. *Iranian journal of psychiatry and behavioral sciences*, 9(2), e953. DOI:10.17795/ijpbs953
- Rossler, W., Koch, U., Lauber, C., Hass, A. K., Altwegg, M., Gross, V. A., & Landolt, K. (2010). The mental health of female sex workers. *Acta Psychiatrica Scandinavica*, 122(2), 143-153. DOI: 10.1111/j.1600-0447.2009.01533.x
- Roy, K. P., Mahapatra, B., Bhanot, A., Kapoor, A., & Narayanan, S. S. (2012). Psychosocial Correlates of HIV-related Sexual Risk Factors among Male Clients in Southern India, *International Journal of Psychology and Behavioral Sciences*, 2(6), 245-254. DOI: 10.5923/j.ijpbs.20120206.08
- Sagar, T., Jones, D., & Symons, K. (2015). Sex Work, Drug and Alcohol Use: Bringing the Voices of Sex Workers into the Policy and Service Development Framework in Wales, Swansea University Prifysgol Abertawe. Retrieved from <https://gov.wales/sites/default/files/publications/2019-02/sex-work-drug-and-alcohol-use-bringing-the-voices-of-sex-workers-into-the-policy-and-service-development-framework-in-wales.pdf>
- Saggurti, N., Sabarwal, S., Verma, R. K., Halliand, S. S., Jain, A. K. (2013, December). Harsh realities: Reasons for women's involvement in sex work in India, *Global Science Research Journals*, 1(1), 070-077.
- Sagtani, R. A., Bhattarai, S., Adhikari, B. R., & Baral, D. (2013, June). Violence, HIV risk behaviour and depression among female sex workers of Eastern Nepal. *BMJ Open*, 3(6). DOI:10.1136/bmjopen-2013-002763.

- Sahni, R., & Shankar, V. K., (2011, April). The first Pan-India survey of sex workers. Retrieved from http://sangram.org/resources/Pan_India_Survey_of_Sex_workers
- Sailo, S. L., (2019). Women Sex Workers in Aizawl: A Situational Analysis: Thesis submitted in partial fulfillment of the requirement of the Doctor of Philosophy in Social Work of Mizoram University, Aizawl. *Shodhganga@INFLIBNET/Mizoram University*. Retrieved from <http://shodhganga.inflibnet.ac.in/handle/10603/120499>
- Salazar, C. C., Apraez, L. M., & Martinez, M. A. (2014). Female Sex Workers in the City of Bogota: From Stigma to Empowerment, *The Graduate Institute Geneva*. DOI:10.4000/poldev.1923.
- Samet, J. H., Pace, C. A., Cheng, D. M., Coleman, S., Bridden, C., Pardesi, M., Saggurti, N., & Raj, A. (2010, August). Alcohol use and sex risk behaviors among HIV-infected female sex workers (FSWs) and HIV-infected male clients of FSWs in India. *AIDS and behavior*, *14*(1), S74–S83. DOI:10.1007/s10461-010-9723-y
- Sanders, T. (2007, January). Becoming an Ex-Sex Worker: Making Transitions out of a deviant Career, *Feminist Criminology*, *2*(1), 74-95. DOI:10.1177/1557085106294845.
- Scambler, G. (2007, December). Sex Work Stigma: Opportunist Migrants in London, *Sociology*, *41*(6), 1079-1096. DOI:10.1177/0038038507082316.
- Schwarzer, R., Knoll, N., & Rieckmann (2003). Social Support, International to Health Psychology. Retrieved from http://userpage.fu-berlin.de/~schuez/folien/social_support_2.pdf
- Seib, C. (2007, June) *Health, well-being and sexual violence among female sex workers : a comparative study. PhD thesis, Queensland University of Technology*. Retrieved from https://eprints.qut.edu.au/16398/1/Charlotte_Seib_Thesis.pdf

Sex Workers, Retrieved from https://en.wikipedia.org/wiki/Sex_worker

Shahsavarani, A. M., Abadi, E. A. M., & Kalkhoran, M. H. (2015). Stress: Facts and Theories through Literature Review., *International Journal of Medical Review*, 2(2), 230-241.

Shannon, K., Kerr, T., Strathdee, S. A., Shoveller, J., Montaner, J. S., & Tyndall, M. W. (2009). Prevalence and structural correlates of gender based violence among a prospective cohort of female sex workers, *BMJ*. DOI:10.1136/bmj.b2939.

Sherbourne, C. D., Meredith, L. S., & Ware Jr, J. E. (1992, August). Social Support and Stressful life events: age differences in their effects on health – related quality of life among the chronically ill, *Quality of Life Research*, 1, 235-246.

Shushtari, Z.J., Hosseini, S.A., Sajjadi, H., Salimi, Y., Latkin, C., & Snijders, T. A. B. (2018, August) Social network and HIV risk behaviors in female sex workers: A systematic review. *BMC Public Health*, 18(1), 1020. DOI: 10.1186/s12889-018-5944-1.

Siedlecki, K. L., Salthouse, T. A., Oishi, S., & Jeswani, S. (2014, June). The Relationship Between Social Support and Subjective Well-Being Across Age. *Social indicators research*, 117(2), 561–576. DOI:10.1007/s11205-013-0361-4

Simple, O., Tumwesigye, N. M., Ndejjo, R., & Abbo, C. (2020, July). Prevalence and Factors Associated with Major Depression Among Female Sex Workers in Post-Conflict Gulu District: A Cross-Sectional Study, *Sex Work and Major Depression in Conflict-Affected Settings, Research Square*. DOI: 10.21203/rs.3.rs-50097/v1.

Southwick, S. M., Vythilingam, M., & Charney, D. S. (2005, April). The Psychobiology of Depression and Resilience to Stress: Implications for Prevention and Treatment, *Annual Review of Clinical Psychology*, 1, 255-291. DOI:10.1146/annurev.clinpsy.1.102803.143948.

- Steese, S., Dollette, M., Phillips, W., Hossfeld, E., Matthews, G., & Taormina G. (2006). Understanding Girls' Circle as an intervention on perceived social support, body image, self-efficacy, locus of control, and self-esteem. *Adolescence*, *41*(161), 55-74. PMID: 16689441.
- Stockton, M. A., Pence, B. W., Mbote, D., Oga, E. A., Kraemer, J., Kimani, J., Njuguna, S., Maselko, J., & Nyblade, L. (2020, July). Associations among experienced and internalized stigma, social support, and depression among male and female sex workers in Kenya. *International Journal of Public Health*, *65*(6), 791-799. DOI:10.1007/s00038-020-01370-x.
- Su, S., Li, X., Zhang, L., Lin, D., Zhang, C., & Zhou, Y. (2014, August). Age group differences in HIV risk and mental health problems among female sex workers in Southwest China. *AIDS care*, *26*(8), 1019–1026. DOI:10.1080/09540121.2013.878780
- Sullivan, H. S., (1953). The interpersonal theory of psychiatry. 1st ed. *New York: Norton*.
- Surrat, H. L., & Inciardi, J. A. (2010). An effective HIV risk-reduction protocol for drug-using female sex workers. *Journal of prevention & intervention in the community*, *38*(2), 118–131. <https://doi.org/10.1080/10852351003640732>
- Swain, S.N., Saggurti, N., Battala, M., Verma, K. R., & Jain, A. K. (2011, May). Experience of violence and adverse reproductive health outcomes, HIV risks among mobile female sex workers in India. *BMC Public Health* *11*, 357. DOI:10.1186/1471-2458-11-357
- Teijlingen, E. R. V., & Ghimire, L. (2009, March). Barriers to Utilization of Sexual Health Services by Female Sex Workers in Nepal, *Global Journal of Health Science*, *1*(1). DOI:10.5539/gjhs.v1n1p12.

- Teixeira, A., & Oliveira, A. (2017). Exploratory study on the prevalence of suicidal behavior, mental health, and social support in female sex workers in Porto, Portugal. *Health Care for International Women*, 38(2), 159-166. DOI: 10.1080/07399332.2016.1192172.
- The Times of India, (2019). 25% Mizoram sex workers have HIV, highest in India. Retrieved from [https://timesofindia.indiatimes.com/city/shillong/25-mizoram-sex-workers-have-hiv-highest-in-india/articleshow/71698535.cms#:~:text=AIZAWL%3A%20Almost%20one%20in%20every,\(NACO\)%2C%20has%20found](https://timesofindia.indiatimes.com/city/shillong/25-mizoram-sex-workers-have-hiv-highest-in-india/articleshow/71698535.cms#:~:text=AIZAWL%3A%20Almost%20one%20in%20every,(NACO)%2C%20has%20found).
- The world health report (2001), Mental health: New Understanding, New Hope. Retrieve from <https://www.who.int/whr/2001/en/>
- Therapist Aid LLC, (2017). What is Anxiety?. Retrieved from <https://www.therapistaid.com/worksheets/what-is-anxiety.pdf>
- Treloar, C., Stardust, Z., Cama, E., & Kim, J. (2020). Rethinking the relationship between sex work, mental health and stigma: a qualitative study of sex workers in Australia, *Social Science & Medicine*, 268. DOI:10.1016/j.socscimed.2020.113468.
- Ulibarri, M. D., Hiller, S. P., Lozada, R., & Rangel, M. G. (2013, May). Prevalence and Characteristics of Abuse Experiences and Depression Symptoms among Injection Drug-Using Female Sex Workers in Mexico, *Journal of Environmental and Public Health*, 1:631479
- Ulibarri, M. D., Semple, S. J., Rao, S., Strathdee, S. A., Fraga-Vallejo, M. A., Bucardo, J., De la Torre., A., Salázar-Reyna, J., Orozovich, P., Staines-Orozco, H. S., Amaro, H., Magis-Rodríguez, C., & Patterson, T. L. (2009). History of abuse and psychological distress symptoms among female sex workers in two Mexico-U.S. border cities. *Violence and Victim*, 24(3), 399-413. DOI:10.1891/0886-6708.24.3.399.

- UNAIDS Guidance note on HIV and Sex Work (2012, April). Joint United Nations Programme on HIV/AIDS. ISBN: 9789291737635.
- Valera, R. J., Sawyer, R. G., & Schiraldi, G. R. (2001). Perceived health needs of inner-city street prostitutes: A preliminary study. *American Journal of Health Behaviour*, 25(1), 50-9. DOI:10.5993/ajhb.25.1.6.
- Vanelisti, A. L., (2009, May). Challenges in conceptualizing social support, *Journal of Social and Personal Relationships*, 26(1), 39-51. DOI:10.1177/0265407509105520.
- Vansangpuii, (2004). Commercial Sex Workers in Mizoram: Dissertation submitted to the Department of Social Work, University; Aizawl, in partial fulfillment of the requirements for the degree of Master of Social Work, Unpublished.
- Vijayakumar, G., Chacko, S., & Panchanadeswaran, S., (2015). Sex Workers Join the Indian Labour Movement, *New Labour Forum*, 24(2). DOI:10.1177/1095796015579200
- Wang, H. H., Wu, Z. S., & Liu, Y. Y., (2003). Association between social support and health outcomes: Meta-Analysis. *The Kaohsiung Journal of Medical Sciences*, Volume 19 (7), 345-350. DOI: 10.1016/S1607-551X(09)70436-X.
- Ward, H., & Aral, S. O. (2006, October). Globalization, the sex industry and health. *Sexually Transmitted Infections*, 82(5), 345-347. DOI: 10.1136/sti.2006.123044.
- Witkin, H. A., & Berry, J. W. (1975). Psychological differentiation in cross-cultural perspective. *EST Research Bulletin Series*, 1975(1), i-100.
- Wong, S., (2009). What are the mental health seeking behaviors of female sex workers? Master's Thesis, Smith College, Northampton. Retrieved from <http://scholarworks.smith.edu/theses/1161>

- Wong, W. C. W., Holroyd, E., & Bingham, A. (2011, January). Stigma and Sex work from the perspective of female sex workers in Hong Kong, *Sociology of Health & Illness*, 33(1), 50-65. DOI:10.1111/j.1467-9566.2010.01276.x
- World Health Organization. (2008, September). WHO Policy on Non-Recruitment of Smokers or Other Tobacco Users. Retrieved From https://www.who.int/employment/FAQs_smoking_English.pdf
- World Health Organization. (2018, March). Mental health: Strengthening our Response. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response>
- Yasamy, M. T. (2012, January). Depression: A global public health concern. Mental Health GAP Action Programme. Retrieved from https://www.researchgate.net/publication/285075782_Depression_A_global_public_health_concern
- Zehnder, M., Mutschler, J., Rössler, W., Rufer, M., & Rüsch, N. (2019, February). Stigma as a Barrier to Mental Health Service Use Among Female Sex Workers in Switzerland. *Front Psychiatry*, 5, 10-32. DOI:10.3389/fpsyt.2019.00032.
- Zhang, L., Li, X., Wang, B., Shen, Z., Zhou, Y., Xu, J., Tang, Z., & Bonita, S., (2017, July). Violence, stigma and mental health among female sex workers in China: A structural equation modeling. *Women Health*, 57(6), 685-704. DOI: 10.1080/03630242.2016.1186781.
- Zimet, G. D., Powell, S.S., Farler, G.K., Werkman, S., & Berkoff, K. A., (1990, December). Psychometric characteristics of the Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, Volume (55), 610-617. DOI :10.1080/00223891.1990.9674095.

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DEGREE	:	Master of Philosophy
DEPARTMENT	:	Psychology
TITLE OF DISSERTATION	:	‘Perceived Social Support, Stigma and Mental Health of Female Sex Workers in Aizawl City’
DATE OF ADMISSION	:	24. 07. 2019
COMMENCEMENT OF SECOND SEMESTER/DISSERTATION	:	03. 02. 2020
APPROVAL OF RESEARCH PROPOSAL		
1. DRC	:	12. 04. 2020
2. BOS	:	08. 06. 2020
3. School Board	:	12. 06. 2020
MZU REGISTRATION NO.	:	1906287
M.Phil. REGISTRATION NO. AND DATE	:	MZU/M.Phil./595 of 12.06.2020
DATE OF SUBMISSION	:	29. 01. 2021
EXTENSION (IF ANY)	:	Nil

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CERTIFICATE

This is to certify that the present dissertation titled, 'Perceived Social Support, Stigma and Mental Health of Female Sex Workers in Aizawl City' is the bonafide research conducted by Remdingpuii under my supervision. She worked methodologically for her dissertation which is submitted for the Master of Philosophy under the Mizoram University.

This is to further certify that the research conducted by Remdingpuii has not been submitted in support of an application to this or any other University/Institute

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INTRODUCTION

Sex work is the exchange of sexual services for money or its equivalent (Overs, 2002). Sex worker activist Carol Leigh coined the term 'sex work' in the 1978s. The term 'sex worker' is used to refer to "Woman, male and transgender individuals and young people who have received, frequently or occasionally, money or products in exchange for sexual services. Sex work differs between countries and cultures, and within them. Sex work can vary in the extent to which it is more or less "formal" or structured and in the degree to which it is distinct from other social and sexual relations and forms of sexual economic exchange" (UNAIDS, 2012).

Many studies have reported that sex work is related to health issues, mental health problems, and substance misuse (H. Ward and S. Day, 2006). Sex workers are at high risk of getting or transmitting sexually transmitted diseases (STIs) and Human Immunodeficiency Virus (HIV). They face a high level of violence such as physical violence, sexual violence, and emotional and psychological violence than the general female populations which may lead to lifelong disabilities and life-threatening consequences for their health (Bhattacharjya, M et, al 2015).

According to Sailo, S. L., (2019) Women Sex Workers in Aizawl, belonged to families where the parents are divorced, remarried, or widowed, and some come from stable families too. Most of them indulged in injecting drug use, and consume alcohol, and initiation to sex work as 16 years on average. That majority of them studied up to high school and belonged to lower socio-economic background. Sex workers in Mizoram entered into this business at the age of below 18 years, an overwhelming majority of sex workers were initiated into this business by a woman friend; other causes include peer pressure, financial reasons, drug addiction, family instability, etc.

Female sex workers experience stigmatization because of their work (Salazar, C.C., et.al., 2014). Stigma is when a person or society views someone in a negatively ostracizing manner because they have a distinguishing trait or personality characteristic that is, or believed to be, a hindrance, a negative drawback in the

stereotype that they are used to (MCS, 2017). Stigma has been referred to as a mark of disgrace or discredits that distinct a person from others. There are three components of Stigma; Social Stigma, Self-Stigma, and Professional Stigma.

Social Stigma: Social Stigma is the disapproval of persons with mental or behavioral disorders which may be perceived as a negative social characteristic that can create barriers in the structural society. **Health Professional Stigma:** It seems improbable that social workers and other health professionals would bear with them, stigmatized beliefs towards their clients; especially those whom they know are subjected to various barriers to engage in treatment. **Self-Stigma or Internalized Stigma:** Crocker (1999) demonstrates that stigma not only occurs among others in a community but can also be internalized by the person with the condition or is exposed to that condition. Hence, the continuous influence of social/public stigma impacts an individual to feel remorseful and insufficient regarding their character conditions (Corrigan, 2004).

Mental Health

Mental health is defined by World Health Organization (2001) as “a condition of whole physical, mental, and social well-being and not merely the absence of disease or infirmity”. Mental health is an essential part of health, closely connected with physical health and behavior, and more than the absence of mental illness.

The present study covered three domains of mental health including depression, anxiety and stress. Depression is a significant contributor to the global burden of disease and affects people in all communities throughout the world. Depression is a serious medical illness that negatively affects how you feel, your way of thinking, and courses of action taken, that showcases itself with devitalized mood, loss of interest or pleasure, lessened quality of life, decreased energy, feelings of guilt and/or low self-worth with fluctuating sense of self-esteem in the negative radar, disturbed sleep including chronic insomnia, increased or thereby lack of appetite, and poor concentration.

Anxiety is a mental and physical reaction to perceived threats and situations of unease. In small quantities, anxiety is helpful. It protects and informs us of the sensed impending danger and harm via cognitive corresponding responses, and focuses our attention on problems that made us anxious. But when anxiety is found to be too severe and profound or occurs too frequently, it can become debilitating, stress-inducing, and enervative in all aspects (Therapist Aid, 2017).

Stress may be defined as the body's reaction of physical, emotional or psychological strain in correspondence to any change that requires an adjustment or response. The body behaves and reacts to the alterations accordingly and it is a common, normal part of life. Stress can be experienced from the surrounding environment and its influences, the body, and thinking processes.

Social Support

Social Support may be regarded as the resources and assistance provided by others, as coping accommodation, or as an exchange of resources (Schwarzer et al, 2003). It is the physical and/or emotional comfort given to us using several different methods by our family, relatives, friends, acquaintances, co-workers, and others as a form of reassurance, validity, or acceptance. It acknowledges the fact that we are a part of a community of people who love and care for us, cherish our presence with value and think pleasantly of us. We all need people we can lean on through the ups and downs, people we can share the merry good times with and can depend on during the bad times; a genuine harmonious rapport. Maintaining a healthy, continuous social support network is hard work, something that requires participation as an ongoing effort over extended periods without major halts (Fairbrother, 2011).

The two perspectives of Social Support are: perceived availability of support (perceived support) and received support (Vangelisti, 2009; Lakey 2010). Perceived support refers to the subjective judgment of the recipient in the expected availability of support that may be provided from one's friends, family, team-mates, teachers, coaches, and loved ones that they will offer (or have) effective aid during times of need. On the other hand, Received Support refers to the support actually received and enacted by the aforementioned friends, family, team-mates, teachers, coaches, and

loved ones, when in need of the supportive measures (Bianco and Eklund, 2001; Rees and Freeman, 2010).

Social support has been shown to enhance physical and emotional health. It is an important indicator that acts as a protective factor for individual who encounter negative effect of stress and alleviate depressive symptoms (Aneshensel & Stone, 1982). The significance of social support for sex works was observed by Valera, Sawyer, and Schiraldi (2001) in an investigation into the health needs of a sample of sex workers, and a majority of sex workers who participated in this research reported a need for social support. Baruah & Borooah (2017) reported that among female sex workers high level of perceived social support is related to better quality of life

STATEMENT OF THE PROBLEM

Female sex workers are poorly studied and socially stigmatized group (Alexandre Teixeira & Alexandra Oliveira, 2017). Sex workers are normal individuals and like everyone else, they deserve access to mental health services (Catharine Smith, 2018). Many of them have to work in the sex industry because they need the money to help their families (Hengartner et. al., 2015). Compared to the normal population, women engaging in sex industry face disproportionate health and social disparities (Benoit C et. al., 2017, Gu J et.al., 2014, Sanders TA et.al., 2004, Rossler W et.al., 2010, Surrat H.L et.al., 2010, Benoit C et.al., 2001, Cohan D et.al., 2006, Shannon K et.al., 2005, Beyer C et.al., 2015).

Studies carried out on female sex work have focused on Human Immunodeficiency Viruses (HIV) and Sexually Transmitted Infections (STIs) (Nitasha Puri, et, al., 2017), alcohol and drug use, and violence among female sex workers (Chen Zhang et, al., 2014). Few studies have been carried out to explore the mental health, contributing psychological disorder (Hengartner, Michael P, et, al., 2015) and social support (Rima Baruah et, al., 2017) of female sex workers. A few studies that have been conducted reported mental health and psychological issues

that depressive symptoms were more prevalent among female sex workers than other female workers (Bassel et al., 2001). Some studies have found evidence of anxiety, depression, paranoid ideation (El-Bassel et al., 1997), and symptoms of post-traumatic stress disorder (Farley & Barkan, 1998, Chudakov et al., 2002). Flower (1998) also noted the prevalence of a multitude of psychiatric disorder such as depression, schizophrenia, and suicidal tendencies in sex workers.

As sex workers represent a marginalized population that faces many occupational hazards (Serena Wong, 2009), they are vulnerable to high rates of violence, sexual coercion, stigma, and Human Immunodeficiency Virus (HIV) (Poliah & Paruk, 2017). They are often stereotyped as filthy, immoral, coldhearted, and unworthy women (Vijayakumar et al, 2015). This stigmatization can lead to a feeling of self-blame and shame, isolated themselves from others, and diminishing accessibility to social and health services (Sallmann, 2010; Rayson & Alba, 2019). And according to labeling theory, deviant labels, criminal labels are associated with stigma, which means that the majority culture has attached specific, negative descriptions or stereotypes to deviant labels (Link & Phellan, 2001).

The exact numbers of female sex workers in Mizoram are difficult to estimate and they are a transient population as there is no brothel or designated area for sex work and sex work is seen as immoral by the community they often work in secrecy. According to the Mizoram State AIDS Control Society (MSACS), there are 906 female sex workers in the state (2019-20). The majority of them work in the capital, Aizawl (Times of India, 2019). Some studies have been done on sex workers and related issues in Mizoram - Women Sex Workers in Aizawl: A Situational Analysis (Sailo, 2019), Commercial Sex Workers in Mizoram (Vansangpuii, 2004), and Pattern of Drug Use, Perceived Social Support and Mental Health of Female sex workers – Intravenous Drugs Users in Aizawl (P.C. Lalbiakkimi, 2013). These studies were a dissertation for the degree of Ph.D and Master of Social Work and Master of Philosophy, in Psychology, submitted to their respective department, Mizoram University. These previous studies presented the profile of female sex workers (P.C.Lalbiakkimi, 2013; Sailo, 2019), socio-economic background, causes for entry into sex work and its implication (Sailo, 2019), and examined the socio-

economic status, family strength, self-esteem level and exposure to media (Vansangpuii, 2004), and also explored the pattern of drug use, mental health, and perceived social support of female sex workers who are Intravenous Drug Users (IDU) in Aizawl (P.C. Lalbiakkimi, 2013). However, there are limited studies of female sex workers in Mizoram especially in relation to mental health and stigma.

Most of the prior research has focused on younger female sex workers populations and few studies have been conducted among their older counterparts. Studies with older Female sex workers are important because of socio-biological differences that exist between young and older Female sex workers (Su et al., 2014; Guida et al, 2016). In view of this limitation, the current study aims to fill the gap by including older female sex worker in the study, and conduct a comparative study of younger and older age group of female sex workers. The study will examine the mental health, stigma, and perceived social support of Younger (Ages 18-34 years) and Older (Ages 35-50 years) female sex workers in Aizawl City.

METHODS AND PROCEDURE

Sample:

The sample of the present study consists of 100 female sex workers, with their age ranging between 18-50 years living in Aizawl. The sample was divided into two age groups – Group 1 (50 female sex workers; 18-34 years) and Group 2 (50 female sex workers; 35-50 years). The population was drawn through purposive sampling. The data was collected from Protective Homes and Centres under the Social Welfare, Mizoram State Aids Control Society (MSACS), and Non-Governmental Organizations (NGOs).

Objectives of the study

1. To investigate the Mental Health (Depression, Anxiety and Stress), Perceived Social Support, and Stigma of female sex workers in Aizawl City.
2. To investigate whether there is any significant difference between the two groups on the variables under study.
3. To examine whether there is any relationship between the Stigma, Perceived Social Support, and Mental Health (Depression, Anxiety and Stress) among the two groups and the predictability of Mental Health (Depression, Anxiety and Stress) from Perceived Social Support and Stigma.

Design of the Study:

The present study incorporated Separate group design where the differences between the two Groups - Group-1 (18-34 years) and Group-2 (35-50 years) was observed on the dependent variable: Perceived Social Support, Stigma and Mental Health. In addition, the study also analysed the predictability of Mental Health (Criterion) from Perceived Social Support and Stigma (Predictors).

Procedure:

The participants were contacted through Non-Governmental Organizations (NGOs) and Protective Homes and Centres under the Social Welfare, Mizoram State Aids Control Society (MSACS). The primary data for the study was collected in a face to face interaction between the participants and the researcher. The participants were informed that anonymity and confidentiality would be maintained. After taking the necessary consent, the psychological tools was administered by the researcher. The researcher took care to see that the respondents provided honest and independent answers to the questions presented. After careful checking of any missing or unattended questions; the data obtained was analyzed by employing appropriate statistical tools.

Psychological Tools

Multidimensional Scale of Perceived Social Support (Zimmet et. al., 1988): The Multidimensional Scale of Perceived Social Support (MSPSS) (Zimmet, Dahlin, Zimmet, and Farley, 1988) consisted of 12 items rated on a seven-point Likert scale from 1 (Very Strongly Disagree) to 7 (Very Strongly Agree). It is designed to measure the perception of support from three sources: Family (items 3,4,8,11), Friends (items 6,7,9,12), and Significant Others (items 1,2,5,10).

Self-Stigma Scale (Mak, W.W.S. and Cheung, R.Y. M, 2010): The Self-Stigma Scale (SSS) is developed by Mak and Cheung in 2010. It is a self-report questionnaire, consisted of 9 items rated on a four-point Likert scale from 1 (Strongly disagree) to 4 (Strongly agree).

Depression Anxiety Stress Scale-21 (DASS-21) (Lovibond & Lovibond, 1995): The Depression, Anxiety, Stress Scale – 21 is the shortened version of the DASS developed by Lovibond and Lovibond (1995) to assess symptoms of depression, anxiety, and stress among adults. The DASS-21 is a 21 items self-report questionnaire, in completing the DASS-21, the individual is required to indicate the presence of symptoms over the previous week.

Statistical Analysis

To ascertain the applicability of the psychological tools, the following statistical measures were employed:

Descriptive Statistics (Mean, Standard Deviation, Standard Error, Skewness and Kurtosis) was computed to discern the pattern of the distribution of the measured variables for the scales and subscales of Self Stigma, Significant Others, Family and Friends subscales of Multidimensional Scale of Perceived Social Support (MSPSS), and Anxiety, Depression and Stress the subscales of Depression Anxiety Stress Scale (DASS) among the Two Groups.

Pearson correlation coefficient was computed separately for the behavioral measures: Self-Stigma, Significant Others, Family and Friends the subscales of MSPSS, and Anxiety, Depression, and Stress subscales of DASS.

An independent Sample *t*-test was employed to compare the means of Group 1 and Group 2 on the scales and subscales of the behavioral measures.

Finally, Stepwise Hierarchical Multiple Regression was employed separately for Group 1 and Group 2, to determine the predictability of Anxiety, Depression, and Stress subscales of DASS from Self Stigma; and Significant Others, Family and Friends subscales of MSPSS.

RESULTS AND DISCUSSION

The reliability of the scales and subscales were measured to ensure the adequacy of the scales used for the present study. The result shows that the internal consistency of the scales and subscales used in the present study was above .7 which was found to be reliable for the whole sample, indicating the trustworthiness of the scale.

The socio-demographic characteristics were included to highlight the profile of Female sex workers in Aizawl City.

Age: In the present study, female sex workers were categorized into two age group – Younger (Ages 18-34 years) and Older (35-50) female sex workers. The results revealed that the mean age for younger female sex worker is 26 years, and the mean age for older female sex workers is 37 years.

Commencement of sex work: The mean age of onset of entering into sex work was 25 years.

Breadwinner: Majority of the participants from Younger female sex workers (88%) and older female sex workers (52%) responded ‘No’ in terms of bread-winner.

Church Denomination: All the participants under the study were Christians. Regarding their church denominations, the highest proportion of the participants (37%) were Presbyterian, 14% were Baptist, 14% belonged to the Salvation Army,

while 11% belonged to the United Pentecostal Church), 2% were Seventh Day Adventists, 7% were Catholics, and 15% belonged to other denominations.

Educational Qualification: Majority of the participants from Group 1 (44%) and Group 2 (42%) studied till high school, few of them were graduated.

Marital Status: In Group 1, the highest proportions of the participants (38%) were single. Among Group 2, the highest proportions of the participants (42%) were married.

Tobacco Use: The majority of the Younger (86%) and (98%) Older female sex workers reported using tobacco products.

Drug Use: Only 38% from Younger female sex workers and 12% from older female sex workers reported a history of drug use.

Alcohol Use: The majority of participants from Younger female sex workers (60%) and older female sex workers (74%) reported consuming alcohol.

Medical Hospitalization: In terms of history of medical hospitalization, younger female sex workers (42%) reported a history of medical hospitalization; in contrast older female sex workers (90%) reported a history of medical hospitalization.

Security Response Section (SRS)/ Police Arrest: 78% from Younger female sex workers and 94% from older female sex workers reported a history of Security Response Section (SRS) or Police arrest.

Confinement/ treatment in Protective Home/Centre: Among the participants, 46% from Group 1 participants reported a history of confinement in Protective Home or Centre, while 16% participated in the present study while in confinement in a Protective Home/ Centre. Among the Group 2 participants, 68% reported a history of Protective Home or Centre, while 12% of the participants in the present study are currently from protective home/center.

Parent marital Status/ Deceased: Younger female sex workers (14% - 22%) in the present study reported having single parents or parental separation or deceased while,

Older female sex workers (14% - 48%) reported having single parents, parents divorce or deceased.

The findings of the present study indicate a moderate level of self-stigma among the female sex workers (Group 1 mean = 23.44; Group 2 = 22.74). This finding is more or less in line with that of a study in China where moderate to high levels of self-stigma were found among female sex workers (Hong et al, 2009). Similarly, the results revealed that majority of the participants from the two groups reported an average level of Perceived Social Support, from Significant Others, Family, and Friends support, In contrast to the present finding, Baruah et al., (2017) conducted a study on female sex workers reported high levels of perceived social support, which leads to better quality of life. Finally, the findings of the present study revealed moderate level of depression and anxiety, and the low level of stress among Younger and Older female sex workers in Aizawl City.

Pearson Correlation Coefficient was computed separately for the two groups. Results revealed that among Group 1 (younger female sex workers) participants, there was a significant negative correlation between Self Stigma and Friends Support; this indicates that increasing levels of Friends support was significantly associated with decreasing levels of Self Stigma. Significant Others, Family, Friends support was found to have a significant negative correlation with Anxiety, Depression, and Stress. The results indicate that increasing levels of Significant Others, Family and Friends Support was significantly associated with decreasing levels of Anxiety, Depression, and Stress.

Among Groups 2 (older female sex workers) participants, revealed that Self Stigma was found to have a significant positive relationship with Anxiety, Depression, and Stress. Significant Others, Family and Friends support was also found to have a significant negative correlation with Anxiety, Depression, and Stress. The results indicate that the increasing levels of Self Stigma were associated with increasing levels of Anxiety, Depression, and Stress. The significant relationship that emerged for scale and subscales of the behavioral measures warranted the employment of differential and inferential statistics.

t - test was used to compare the means of the two groups. The results revealed that Group 1 (Ages 18-34 years) showed higher levels of Perceived Social Support from Significant Others and Family support as compared to Group 2 (Ages 35-50 years) participants. In contrast with the present findings, Mao et al., 2018 found that despite the age differences, female sex workers reported high levels of Perceived social support from their family. Besides family support, female sex workers received a support from significant others such as a boyfriend, co-workers, and friends.

Finally, Stepwise hierarchical multiple regression was employed separately for the two groups. The results revealed that among Group 1 (Ages 18-34 years) participants, an increase in Friends support and Family support significantly predicted a decrease in Anxiety. Consistent with the present finding, Harandi et al., (2017) reported that having support from friends and family decreases anxiety.

Similarly, increase in support of Significant Others and Friends significantly predicted decrease in Depression. To support this finding, Carlson et al, (2017) have shown similar finding was receiving support from friends, family and intimate partner lead to lower depressive symptoms among female sex workers. Increase in Friends support significantly predicted decrease in Stress.

Perceived Social Support is considered an important factor for mental health, people who experience higher levels of social support experienced less Mental Health problems (McGill University, 2020). Family and friends support also associates with lower depressive symptoms (Cheng, Y et al., 2014). Consistent with the other findings, among the population of sex workers, social support significantly impact on depression and other mental health (Nemoto et al., 2011; Maryam & Sahar, 2010).

Stepwise hierarchical multiple regression revealed that among Group 2 (Older female sex workers) participants, an increase in Self Stigma significantly predicted an increase in Anxiety, Depression, and Stress. Female sex workers may experience stigma in relation to their occupation and had a significant effect on their mental health (Treloar, C., et.al., 2020). The most common mental health issues

among female sex workers were depression, anxiety, and Post-traumatic stress disorder (Puri et al, 2017; Coatzee et al, 2018), they might also exhibit shame, fear, and low self-esteem because of experiencing and anticipating stigma (Ma & Loke, 2019). Also, Hong, et.al.,(2010) studies in China found female sex workers with high levels of self-perceived stigma were more likely to experience depressive symptoms and suicidal ideation.

Finally, increase in Family support significantly predicted a decrease in Anxiety, Depression, and Stress among Group 2 (older female sex workers) participants. Prior research also revealed that family support was found to be a protective factor for mental health (Heather et al, 2015; Lincoln and Chae, 2012), Heather et al, (2015) and Baptista et al, (2013) stated that among young and middle-aged adults, increasing family support significantly predicted lower depression. Other study results also indicate that a high degree of social support correlates to a lower level of depression, anxiety and stress. (Kugbey et al, 2015; Bukhari & Afzal, 2017).

CONCLUSION

The present study found a moderate level of Self-Stigma, Perceived Social Support and Mental Health from depression and anxiety, and low level of stress among the female sex workers in Aizawl. In the present study, significant differences were observed on Significant Others and Family support between Group 1 (Ages 18-34 years) and Group 2 (Ages 35-50 years) participants, indicating that Group 1 participants show higher Significant Others and Family support as compared to Group 2 participants

In terms of the predictability of Mental Health from Significant Others, Family and Friends subscales of Perceived Social Support and Self-Stigma among Group 1 participants, the results highlighted that increase in Perceived social support significantly predicted a decrease in Anxiety, Depression and Stress. Perceived social support is a protective factor for Mental Health among Group 1.

In terms of the predictability of Mental Health from Perceived Social Support and Self-Stigma among Group 2 participants, the results highlighted that increase in Perceived Social Support particularly from Family support significantly predicted a decrease in Anxiety, Depression and Stress. In contrast, an increase in Self Stigma significantly predicted an increase in Anxiety, Depression, and Stress.

The overall findings of the stepwise hierarchical regression suggest that Perceived Social Support, significantly impacts the overall Mental Health (Depression, Anxiety, Stress) among Younger Female sex workers as well as among older female sex workers. Perceived social support plays an important role in mental health among female sex workers regardless of age (Nemoto et al., 2011; Maryam & Sahar, 2010; Rossler et al., 2010; Sherbourne et al., 1992). Self-Stigma significantly impacts the overall Mental Health (Depression, Anxiety, and Stress) of Older Female sex workers.

The findings of this study may be indicative that Mizo Female sex workers in Aizawl have different experience. Each individual accesses and applies different coping skills and mechanisms to manage feelings of stigma, which vary greatly from individual to individual as does the level of effectiveness of these skills in managing feelings and experiences of stigma. Additionally, each individual will find his or her own meaning and voice in experiences of stigma. The study does not provide answers as to why some people believe that poor mental health and stigma is valid whereas others do not. This study demonstrated that sex work as a profession significantly predict the mental health and stigma in the population under study. The present finding such as moderate level of mental health among female sex workers may be due to less experienced of violence, stigma and received social support. The majority of the participants in the present study reported a history of involved with Protective Home or Centre, which could be the contributing factors that change the degree of mental health in the present study.

This study indicates that there is a major need and also the importance of reducing negative stereotyping in popular media, and sensitizing people and the community at large. Several important factors associated with being a female sex worker were identified in this study and the findings can be used for further in-depth research studies, for policy makers to plan more effectively targeted intervention strategies.

REFERENCES

- Aneshensel, C. S., & Stone, J. D. (1982, December). Stress and Depression: A Test of the Buffering Model of Social Support, *Archive of General Psychiatry*, 39(12), 1392-1396. DOI:10.1001/archpsyc.1982.04290120028005.
- Baptista, M. N., Carneiro, A. M., & Cardoso, H. F. (2013). Depression, Family Support and Hopelessness: A Correlated Study, *Universitas Psychologica*, 13(2), 693-702. DOI:10.11144/Javeriana.UPSY13-2.dfsh
- Baruah, R., & Borooh, I. P. (2017, October). Perceived Social Support and Quality of Life in Female Sex Workers of Assam, *International Journal of Humanities and Social Science Invention*, 6(10), 01-08
- Benoit, C., McCarthy, B., & Jansson, M. (2015, March). Stigma, Sex Work and Substance Use: A Comparative Analysis, *Sociology of Health and Illness*, 37(3), 437-451. DOI:10.1111/1467-9566.12201.
- Bhattacharjya, M., Fulu, E. & Murthy, L. with Seshu, M.S., Cabassi, J. & Vallejo-Mestres, M. (2015). The Right(s) Evidence – Sex Work, Violence and HIV in Asia: A Multi-Country Qualitative Study. Summary Report. Bangkok: UNFPA, UNDP, APNSW (CASAM). Retrieved from https://www.nswp.org/sites/nswp.org/files/Rights_Evidence_Summary_2015_0.pdf
- Bianco, T., & Eklund, R. (2001, June). Conceptual Considerations for Social Support Research in Sport and Exercise settings: The Case of Sport Injury, *Journal of Sport & Exercise Psychology*, 23(2), 85-107. DOI:10.1123/jsep.23.2.85.
- Bukhari, S. R., & Afzal, F. (2017, February). Perceived Social Support predicts Psychological Problems among University Students, *The International Journal of Indian Psychology*, 4(2), DOI: 10.25215/0402.082

- Carlson, C. E., Witte, S. S., Pala, A. N., Tsai, L. C., Wainberg, M., & Aira, T. (2017, June). The impact of violence, perceived stigma, and other work-related stressors on depressive symptoms among women engaged in sex work. *Global Social Welfare : Research, Policy & Practice*, *4*(2), 51–57. <https://doi.org/10.1007/s40609-017-0085-5>
- Cheng, Y., Li, X., Lou, C., Sonenstein, F. L., Kalamar, A., Jejeebhoy, S., Delany-Moretlwe, S., Brahmhatt, H., Olumide, A. O., & Ojengbede, O. (2014, December). The association between social support and mental health among vulnerable adolescents in five cities: Findings from the study of the well-being of adolescents in vulnerable environments. *The Journal of Adolescence Health*, *55*(6), S31-38. DOI: 10.1016/j.jadohealth.2014.08.020
- Chudakov, B., Ilan, K., Belmaker, R., & Cwikel, J. (2002). The motivation and mental health of sex workers. *Journal of Sex & Marital Therapy*, *28*(4), 305-315
- Coetzee, J., Buckley, J., Otjombe, K., Milovanovic, M., Gray, G. E., & Jewkes, R. (2018). Depression and Post Traumatic Stress amongst female sex workers in Soweto, South Africa: A cross sectional, respondent driven sample. *PLoS one*, *13*(7), e0196759. <https://doi.org/10.1371/journal.pone.0196759>.
- Cohan, D., Lutnick, A., Davidson, P., Cloniger, C., Herlyn, A., Breyer, J., Coughlin, C., Wilson, D., & Klausner, J. (2006). Sex worker health: San Francisco style. *Sexually transmitted infections*, *82*(5), 418–422. DOI:10.1136/sti.2006.020628
- Corrigan, P. (2004, October). How stigma interferes with mental health care. *American Psychologist*, *59*(7), 614-625. DOI:10.1037/0003-066X.59.7.614.
- Crocker, J., Major, B., & Steele, C. (1998). *Social stigma*. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (504–553). McGraw-Hill

- El-Bassel, N., & Witte, S. (2001). Drug use and physical and sexual abuse of street sex workers in New York City. *Research for Sex Work*, 4, 31-32
- El-Bassel, N., Schilling, R., Irwin, K., & Faruque, S. (1997). Sex trading and psychological distress among women recruited from the streets of Harlem. *American Journal of Public Health*, 87(1), 66-70
- Fairbrother (2011), Vision-Social Support 6(4). Retrieved from <https://www.heretohelp.bc.ca/visions/social-support-vol6>
- Farley, M., Baral, I., Kiremire, M., & Sezgin, U., (1998). Prostitution in Five Countries: Violence and Post-Traumatic Stress Disorder, *Feminism & Psychology*, 8(4), 405-426. DOI:10.1177/0959353598084002
- Flowers, R. B. (1998). *The prostitution of women and girls*. Jefferson: McFarland.
- Freeman, P., & Rees, T. (2010, January). Perceived Social Support from teammates: Direct and stress-buffering effects on self-confidence, *European Journal of Sport Science*, 10(1), 59-67.. DOI:10.1080/17461390903049998.
- Gu, J., Lau, J. T. F., Li, M., Li, H., Gao, Q., Feng, X., Bai, Y., Hao, C., & Hao, Y. (2014, November). Socio-ecological factors associated with depression, suicidal ideation and suicidal attempt among female injection drug users who are sex workers in China, *Drug Alcohol Depend*, 144, 102–110. DOI:10.1016/j.drugalcdep.2014.08.011.
- Guida, J., Hu, L., & Liu, H. (2016). The Impact of Occupational Stigma on the Social Networks of Older Female Sex Workers: Results from a Three-Site Egocentric Network Study in China. *AIDS patient care and STDs*, 30(1), 1–3. DOI:10.1089/apc.2015.0137
- Harandi, T. F., Taghinasab, M. M., & Nayeri, T. D. (2017, September). The correlation of social support with mental health: A meta-analysis. *Electronic Physician*, 9(9), 5212–5222. DOI:10.19082/5212

- Hengartner, M. P., Islam, M. N., Haker, H., & Rossler, W. (2015, December). Mental Health and Functioning of Female Sex Workers in Chittagong, Bangladesh, *Frontier in Psychiatry*, 6, 176. DOI:10.3389/fpsy.2015.00176.
- Hong, Y., Fang, X., Li, X., Liu, Y., Li, M., & Tai-Seale, T. (2010, January). Self-perceived stigma, depressive symptoms, and suicidal behaviors among female sex workers in China. *Journal of Transcultural Nursing*, 21(1), 29-34. DOI:10.1177/1043659609349063
- Kugbey, N., Osei-Boadi, S., & Atefoe. (2015, June). The Influence of Social Support on the Levels of Depression, Anxiety and Stress among Students in Ghana, *Journal of Education and Practice*, 6(25). Retrieved from <http://files.eric.ed.gov/fulltext/EJ1078530.pdf>
- Lakey, B. (2010). *Social support: Basic research and new strategies for intervention*. In J. E. Maddux & J. P. Tangney (Eds.), *Social psychological foundations of clinical psychology*, 177–194. The Guilford Press
- Lincoln, K. D., & Chae, D. H. (2012, March). Emotional support, negative interaction and major depressive disorder among African Americans and Caribbean Blacks: findings from the National Survey of American Life, *Social Psychiatry and Psychiatric Epidemiology*, 47(3), 361-72, DOI: 10.1007/s00127-011-0347-y.
- Link, B. G., & Phelan, J.C. (2001). Conceptualizing Stigma, *Annual Review of Sociology*, 27, 338-385. DOI:10.1147/annurev.soc.27.1.363.
- Lovibond, S.H., & Lovibond, P.F., (1995). Depression Anxiety Stress Scale-21. Retrieved From <http://depression-test.net/support-files/dass21-dmz.pdf>
- Ma, H., & Loke, A Y. (2019, November). A qualitative study into female sex workers' experience of stigma in the health care setting in Hong Kong. *International Journal for Equity Health*, 18(1), 175. DOI: 10.1186/s12939-019-1084-1.

- Mak, W. W. S. & Cheung, R. Y. M. (2010). Self-stigma among concealable minorities in Hong Kong: Conceptualization and unified measurement. *American Journal of Orthopsychiatry*, 80, 263-277
- Mayo Clinic Staff, (2017, May). Mental Health: Overcoming the Stigma of Mental Illness. Retrieved From <https://www.mayoclinic.org/diseases-conditions/mental-illness/in-depth/mental-health/art-20046477>
- McGill University, (2020, December). Strong Social Support Deceases Mental Health Problems in Young Adults: Awareness and Presence of Social Support may guard against mental health problems. *ScienceDaily*. Retrieved from <https://www.sciencedaily.com/releases/2020/12/201211115455.htm#:~:text=The%20researchers%20found%20that%20people,those%20with%20less%20social%20support>
- Nemoto, T., Bödeker, B., & Iwamoto, M. (2011, October). Social support, exposure to violence and transphobia, and correlates of depression among male-to-female transgender women with a history of sex work. *American journal of public health*, 101(10), 1980–1988. DOI:10.2105/AJPH.2010.197285
- Over, C. (2002). Sex workers: part of the solution an analysis of HIV prevention programming to prevent HIV transmission during commercial sex in developing countries. *SAFAIDS Online Catalogue*. Retrieved from https://www.who.int/hiv/topics/vct/sw_toolkit/115solution.pdf
- Pachau, B., (2013). The pattern of drug use, perceived social support and mental health of female sex workers – intravenous drug users in Aizawl: Dissertation submitted to the Department of Psychology, Mizoram University; Aizawl, in partial fulfillment of the requirements for the degree of Master of Philosophy in Psychology, Unpublished
- Poliah, V., & Paruk, S. (2017). Depression, Anxiety Symptoms and Substance Use Amongst Sex Workers Attending a Non-Governmental Organization in

- KwaZulu-Natal, South Africa, *South African Family Practice*, 59(3), 116-122. DOI:10.1080/20786190.2016.1272247.
- Puri, N., Shannon, K., Nguyen, P., & Goldenberg, S. M. (2017, December). Burden and Correlates of Mental Health Diagnoses among Sex Workers in an Urban Setting, *BCM Women's Health*, 17(1), 133. DOI:10.1186/s12905-017-0491-y
- Rayson, J., & Alba, B. (2019, July). Experiences of stigma and discrimination as predictors of mental health help-seeking among sex workers, *Sexual and Relationship Therapy*, 34(3). DOI:10.1080/14681994.2019.1628488.
- Rosler, W., Koch, U., Lauber, C., Hass, A. K., Altwegg, M., Gross, V. A., & Landolt, K. (2010). The mental health of female sex workers. *Acta Psychiatrica Scandinavica*, 122(2), 143-153. DOI: 10.1111/j.1600-0447.2009.01533.x
- Sailo, S. L., (2019). Women Sex Workers in Aizawl: A Situational Analysis: Thesis submitted in partial fulfillment of the requirement of the Doctor of Philosophy in Social Work of Mizoram University, Aizawl. *Shodhganga@INFLIBNET/Mizoram University*. Retrieved from <http://shodhganga.inflibnet.ac.in/handle/10603/120499>
- Salazar, C. C., Apraez, L. M., & Martinez, M. A. (2014). Female Sex Workers in the City of Bogota: From Stigma to Empowerment, *The Graduate Institute Geneva*. DOI:10.4000/poldev.1923.
- Schwarzer, R., Knoll, N., & Rieckmann (2003). Social Support, International to Health Psychology. Retrieved from http://userpage.fu-berlin.de/~schuez/folien/social_support_2.pdf
- Shannon, K., Kerr, T., Strathdee, S. A., Shoveller, J., Montaner, J. S., & Tyndall, M. W. (2009). Prevalence and structural correlates of gender based violence among a prospective cohort of female sex workers, *BMJ*. DOI:10.1136/bmj.b2939.

- Su, S., Li, X., Zhang, L., Lin, D., Zhang, C., & Zhou, Y. (2014, August). Age group differences in HIV risk and mental health problems among female sex workers in Southwest China. *AIDS care*, 26(8), 1019–1026. DOI:10.1080/09540121.2013.878780
- Surrat, H. L., & Inciardi, J. A. (2010). An effective HIV risk-reduction protocol for drug-using female sex workers. *Journal of prevention & intervention in the community*, 38(2), 118–131. <https://doi.org/10.1080/10852351003640732>
- Teixeira, A., & Oliveira, A. (2017). Exploratory study on the prevalence of suicidal behavior, mental health, and social support in female sex workers in Porto, Portugal. *Health Care for International Women*, 38(2), 159-166. DOI: 10.1080/07399332.2016.1192172.
- The Times of India, (2019). 25% Mizoram sex workers have HIV, highest in India. Retrieved from [https://timesofindia.indiatimes.com/city/shillong/25-mizoram-sex-workers-have-hiv-highest-in-india/articleshow/71698535.cms#:~:text=AIZAWL%3A%20Almost%20one%20in%20every,\(NACO\)%2C%20has%20found.](https://timesofindia.indiatimes.com/city/shillong/25-mizoram-sex-workers-have-hiv-highest-in-india/articleshow/71698535.cms#:~:text=AIZAWL%3A%20Almost%20one%20in%20every,(NACO)%2C%20has%20found.)
- Therapist Aid LLC, (2017). What is Anxiety?. Retrieved from <https://www.therapistaid.com/worksheets/what-is-anxiety.pdf>
- Treloar, C., Stardust, Z., Cama, E., & Kim, J. (2020). Rethinking the relationship between sex work, mental health and stigma: a qualitative study of sex workers in Australia, *Social Science & Medicine*, 268. DOI:10.1016/j.socscimed.2020.113468.
- UNAIDS Guidance note on HIV and Sex Work (2012, April). Joint United Nations Programme on HIV/AIDS. ISBN: 9789291737635.
- Valera, R. J., Sawyer, R. G., & Schiraldi, G. R. (2001). Perceived health needs of inner-city street prostitutes: A preliminary study. *American Journal of Health Behaviour*, 25(1), 50-9. DOI:10.5993/ajhb.25.1.6.

- Vanelisti, A. L., (2009, May). Challenges in conceptualizing social support, *Journal of Social and Personal Relationships*, 26(1), 39-51. DOI:10.1177/0265407509105520.
- Vansangpuii, (2004). Commercial Sex Workers in Mizoram: Dissertation submitted to the Department of Social Work, University; Aizawl, in partial fulfillment of the requirements for the degree of Master of Social Work, Unpublished.
- Vijayakumar, G., Chacko, S., & Panchanadeswaran, S., (2015). Sex Workers Join the Indian Labour Movement, *New Labour Forum*, 24(2). DOI:10.1177/1095796015579200
- Wong, S., (2009). What are the mental health seeking behaviors of female sex workers? Master's Thesis, Smith College, Northampton. Retrieved from <http://scholarworks.smith.edu/theses/1161>
- Zimet, G. D., Powell, S.S., Farler, G.K., Werkman, S., & Berkoff, K. A., (1990, December). Psychometric characteristics of the Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, Volume (55), 610-617. DOI :10.1080/00223891.1990.9674095.