#### 1.1 Mental Health

The World Health Organization defines mental health as "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution with his or her community". Mental health is a term used to describe either a level of cognitive or emotional well-being or an absence of a mental disorder. Mental health includes an individual's ability to enjoy life and procure a balance between life activities and efforts in order to achieve psychological resilience (Encyclopaedia II-Mental Health, 2005).

## 1.2 Depression

Studies have found that one of the frequent illnesses of adolescents referred for psychological treatment is 'depression'. Depression may be understood as a mood that everyone experiences at some point in time and it is a transient mood state. In the clinical sense, it is a serious affective disorder. Individuals having depression have a very low self perception marked with negative orientation towards the world (Santrock, 1996).

Depression can also be caused by a combination of genetic and environmental factors. The condition may be triggered by stressful life events such as bullying, abuse or parental separation can affect depression. However, it also depends on the young individual's receptivity to it, its meaning for them and its consequences on them. Depression is also known to be an inheritable mental illness because if one parent has depression, their children are said to be eight times more likely to become depressed than in families where neither parent is depressed. Study has shown that rates for

identical twins are 45-50%, while the rate for non-identical twins is 25% (Buckley, 2001). This suggests that vulnerability to depression and anxiety can be inherited where certain environmental stressors may be involved. Depression can be caused by repeated losses and/or in situations where there is repeated trauma that the person has been exposed to, and when that person ends up feeling hopeless and that there is no escape, learned helplessness may develop and lead to depression (Buckley, 2001).

Millions of people worldwide are affected by mental, behavioral, neurological and substance use disorders. According to WHO report in 2002, 154 million people globally suffer from depression. Data from 1769 young adults and children indicate that the life time prevalence of depression is 15.3% while the comparable rate in adults is 17%. In studies done by Eisenberg and Kovacs (In Keller,Ryan,Strober, 2001), suicide is known to be the third leading cause of death in adolescents and it is directly related to depressive disorders. Weissman (In Keller, Ryan,Strober, 2001) reports that depressed adolescents grow up to become depressed adults and this has an impact on their work, family life and on psychiatric and medical hospitalizations. Therefore, the magnitude of adolescents' depression can be cannot be overlooked as it can hamper an adolescent through later life.

#### 1.3 Adolescence

Adolescence is generally understood as a period between childhood and adulthood. Personal growth such as physical, psychological generally takes place maximally during this time and it is this that gives the period its special place within the field of developmental psychology. Although there are several ways of conceptualizing adolescence, it is known to begin when young people first show signs

of puberty that continues until most of them are sexually matured. According to some authors, it covers the ages from twelve years to the early twenties (Hopkins, 1983).

Adolescence is considered as a time of storm and stress, intense moodiness, and preoccupation with the self. In the past, adolescents' difficulties, including depressions were considered as part of normal development. Adolescents difficulties were not considered as an important developmental variation and their problems were often neglected because of the belief that they would grow out of them (Petersen, Compas, Brooks-Gunn, et.al. 1993).

#### 1.4 Risk Behavior

Risk behavior in this study is understood as any behavior indulged by a person that renders him / her to take risks that harm his / her life and or causes him/her to be threatened due to actions taken by him / her. In this study, risk behavior particularly include *use of substances* that are harmful, *sexual risks* that renders adolescents vulnerable to disease and pregnancy, *financial risk* taking as well as risk taking by attempting to end ones life through *suicide*.

Centre for Disease Control and Prevention (CDC) has identified six health risk behaviors as being particularly salient for the development of optimal health. These six risk behaviors include: (a) behaviors that contribute to unintentional injuries and violence; (b) tobacco use; (c) alcohol and other drug use; (d) sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases; (e) unhealthy dietary behaviors; and (f) physical inactivity. During early childhood, these behaviors are often established and may continue and increase through adolescence. Parent – adolescents' relationship influences adolescent health and developmental outcomes, as

well as the development components. Parenting styles such as parental warmth versus coldness, acceptance versus rejection, structure versus chaos, autonomy, detachment, permissiveness, consistent versus inconsistent discipline, and connection versus distance behaviors all have been found to influence adolescent health and risky health behaviors (Newman, Harrison, Dashiff, et.al. 2008).

# 1.5 Coping and Social Support

Patel, Flisher, Nikapota, et.al. 2007, focus on promoting child and adolescents' mental health in their study. Children and adolescents in low and middle income countries (LAMIC) constitute 35–50% of the population. Although the population in many such countries is predominantly rural, rapid urbanization and social change is under way, with an increase in urban poverty and unemployment, which are risk factors for poor child and adolescent mental health (CAMH). They suggests that promoting resilience provides the dominant approach for mental health promotion, while reducing the impact of risk factors may be considered the dominant approach in prevention.

#### 1.6 Statement of the Problem

Depression or depressive ideation has become an emerging social problem in today's context. While depression is fast emerging as a major public health challenge across age groups, suicide due to depression is found to be more among youth .Youth is the period of life during which most mental disorders emerge however, provision of mental-health services is weakest during adolescence and youth. Despite the enormity of the issue, research studies on youth, particularly adolescents are still insufficient. This study intends to explore the prevalence of depression in adolescents and to probe into the causes and consequences of the problem. Further it will explore the risk

behavior of adolescents and their exposure to risks such as suicide, substance abuse, financial risk and sexual risk among school- going adolescents who are at risk of depression or having depressive symptoms. The study will also attempt to find out the coping strategies and social supports employed by adolescents and study these in relation to gender differences. Lastly the study will suggest measures for social work intervention.

# 1.7 Objectives

- To understand prevalence of depression among secondary school-going adolescents in Mizoram.
- To identify the causes of depression across gender among secondary schoolgoing adolescents.
- To understand the risk behavior across gender among secondary school-going adolescents.
- 4) To understand the differences across genders with reference to coping patterns.
- 5) To suggest measures for Social Work intervention with secondary school-going adolescents.

#### 2.1 Theoretical Framework

Erikson's Psycho-social Perspective holds that psycho-sexual and psychosocial growth take place together, and that at each stage of life the task of establishing an equilibrium between oneself and the social world is attempted. According to this perspective, a crisis is equivalent to a turning point in life, where exists the potential to move forward or regress (Jensild, A.T., Brook, J.S., Brook, D.W., Macmillan, C., 1978).

Classical psycho-analysis is grounded on Id psychology. Erikson's focus is on the Ego which is seen as possessing strength and offering ways of dealing with life's task in competent and creative ways. Ego psychology deals with both the early and the later developmental stage for the assumption is that current problems cannot simply be reduced to repetition of unconscious conflicts from early childhood. The stage of adolescence, mid-adulthood and later adulthood, each involve particular crises that must be addressed. As one's past has meaning in terms of the future there is continuity in development reflected by stage of growth each stage is related to the other stages Jensild, A.T., Brook, J.S., Brook, D.W., Macmillan, C., 1978).

## 2.2 Adolescents and Depression

In the past, children and adolescents were not considered candidates for depression according to Whitley 1995 (in Nunley,...). Depression was believed to be a mental illness that affected only adults. Today, depression is widely recognized and health professionals confirmed that depression is a serious condition affecting both adolescents and young children (Whitley, Lamarine, in Nunley, ). Views on adolescent depression have changed significantly even since the seventies where

childhood depression was thought to be masked by other conditions. Fritz (1995) writes that depressive symptoms such as digestive problem, sleep disorders or persistent boredom are found among adolescents. Other writers prefer to move past the philosophy of masked depression and view adolescent depressive symptoms as similar to those of adults (Nunley). Across the life span, adolescents are particularly vulnerable to peer influence that leads to depression because they share a stressful biological event over a relatively short period of time, and these physical changes are coupled with shifting personal expectations and new social demands (Maxwell, 2002).

According to a study by Hopkins, depression is not a common diagnosis among adolescents. Among the 10-14 year old age group, only 1.5-3.5 percent of psychiatric patients are diagnosed as depressed. However, it increases with age during the adolescent period. Another study also finds that depression is more common among females than males in adolescents (Hopkins, 1983).

Rohde, in his study of the current and lifetime co-morbidity of depressive (i.e., major depressive disorder and dysthymia) with other common mental disorders examined the community samples of older adolescents (n = 1,710) and adults (n = 2,060). During adolescence, current and lifetime histories of depression were highly co-morbid with several other mental disorders. However, adults had a lower but statistically significant degree of co-morbidity, primarily with substance use disorder. Depression among adults and adolescents usually occur after other rather than to precede it. However, co-morbidity did not affect the duration or severity of depression. As a result, co-morbidity in adolescents was associated with greater frequency of suicidal behavior and treatment seeking. Therefore, findings suggest that

depression at an early age is associated with a greater degree of co-morbidity and may represent a more serious form of the disorder (Rhode, Lewinsohn, Seeley, 1991).

#### 2.3 Theories related to Risk Behavior

Recent theories of adolescent risk consider the interaction of risk factors that continued to emphasize risk behaviors. It has been particularly influential in substance abuse prevention. Serial Risk Behavior Theory (Stantonetal, 1997 in Diaz, Peake, Surko, Bhandarkar, 2004) suggested that long term risk behaviors have looked at the endurance of risk behaviors. This theory also suggests that many adolescents shift from one risk behavior to another over time, with no obvious increase in the total number of risk behaviors they engage in concurrently. This contributed much to the thinking about adolescent risk but raise questions as they do not address the issue of why adolescents appear to take risks. In contrast, Problem Behavior Theory Blum (In Diaz, Peake, Surko, Bhandarkar, 2004) focuses on the co-occurrence of risk behaviors within high-risk groups and suggests that adolescents who are attracted to one risk behavior will be attracted to others. Risk behavior is goal directed rather than random thrill seeking. Dryfoos (In Diaz, Peake, Surko, Bhandarkar, 2004) suggests that risk behaviors co-occur in large numbers of adolescents, with the same high risk groups engaging in multiple risk behaviors. Also, adolescents who seem low risk in their own behaviors might be at risk due to the behaviors of friends and associates or due to social factors rather than individual risk behaviors Blum (In Diaz, Peake, Surko, Bhandarkar, 2004). Shapiro & Seigel (In Diaz, Peake, Surko, Bhandarkar, 2004) also stated that risk behaviors may also have different consequences for different sub groups; however this has received little attention in research efforts. Blum et.al. (2001) build on Jessor's (1991) concept of adolescent risk as a product of five

contributing domains which suggests that risk theory is built on an ecological systems model that in corporate study of childhood experience of risk behaviors, factors that contribute to positive health outcomes, and the influence of macro level factors such as politics, youth laws and policies, economics, and historical events (Diaz, Peake, Surko, Bhandarkar, 2004).

#### 2.4 Risk Factors

Adolescents encounter numerous risks in their daily lives. Adolescents' risk behaviors including substance use to teen pregnancy are considered influence of peers (Harris, 1998 in Maxwell, 2002). Recent studies show that friends play an important role in both harmful and positive activities. In a study to find out the role of peer influence in adolescent risk behavior, Maxwell used the peer network data set from the National Longitudinal Study of Adolescent Health (Add Health), which examined adolescents in grades VII-XII. Of the total respondents, less than half (n=963) were younger adolescents (12–15 years) and more than half (n=1,006) were older adolescents (16–18 years). This study has two main findings: 1) random same sex friend influences an adolescent to change his or her risk activity level. These numbers show that friends are having a strong effect on adolescent risk behavior. 2) for two behaviors a friend's influence effect varies by the adolescent's behavior. These findings show other works which found peer group influence for cigarette smoking initiation and for not quitting, suggesting that peers may offer teens protection from some risk behaviors (Maxwell, 2002).

Brooks, Harris, Thrall, et.al. 2002 examined the hypothesis that self-reported symptoms of depression and stress may be associated with other risk behaviors. A secondary data analysis of the 1992 Massachusetts Adolescent Health Survey

involving a representative sample of 2224 ninth and twelfth grade students was performed. 14 risk or protective behaviors variables were examined. As a result, more than a third reported feeling depressed/stressed  $\geq 10$  days in the past month. It also found that feelings of depression/stress were associated with increasing age with each additional year and 95% female gender increasing levels of tobacco use.

## 2.5 Bullying and Depression

Bullying is a very common problem at different school levels. It is a serious negative behavior which is found to have a link with depression that has the potential of culminating in suicidal attempt or suicide ultimately. The following studies are reviewed to understand the correlation of bullying and depression and depression as a potential cause for suicide attempts or suicidal ideation.

Sourander, Helstelä, Helenius et.al. conducted a study in 2000 on students within the age group of 8 – 16 years to examine factors associated with bullying and victimization. As a result, about a fifth of boys and less than a tenth of girls were bullied and more than a tenth of girls and of boys were victimized at age 16 years. Both bullying and victimization at age 16 years were associated with a wide range of psychological problems at age 8 years and 16 years. Bullying at age 8 years was associated with bullying at age 16 years while victimization at age 8 was associated with victimization 8 years later. Bullying and victimization are often continual and associated with severe emotional and behavior problems suggesting that preventive efforts need to be focused and targeted at those children who are characterized by both psychological disturbance and bullying.

To assess the association between bullying behavior and depression, suicidal ideation, and suicide attempts among adolescents, Klomek, Marrocco, Kleinman, et.al. conducted a study in 2007 on  $9^{th}$ - through  $12^{th}$ -grade students (n = 2342) in six New York State high schools from 2002 through 2004. Approximately 9% of the sample reported being victimized frequently, and more than a tenth reported bullying others frequently. Frequent exposure to victimization or bullying others was related to high risks of depression, ideation, and suicide attempts compared with adolescents not involved in bullying behavior. Infrequent involvement in bullying behavior also was related to increased risk of depression and suicidality, particularly among girls. The findings indicate that both victims and bullies are at high risk and that the most troubled adolescents are those who are both victims and bullies.

Ireland conducted a study on 102 juveniles (aged 15–17 years) and 100 young (aged 18–21 years) offenders. Offenders were classified into one of four categories: "pure bullies" (solely reporting behaviors indicative of bullying others); "bully/victims" (reporting behaviors indicative of bullying others and of being bullied); "pure victims" (only reporting "victim" behaviors); "not-involved" (not reporting any "bully" or "victim" behaviors). Juveniles reported committing and experiencing more bullying behavior than young offenders. Pure victims and bully/victims reported more symptoms associated with somatic concerns, severe depression, anxiety and insomnia in comparison with pure bullies and those not involved. Bully/victims reported more somatic symptoms and pure victims more social dysfunction (Ireland, 2004).

#### 2.6 Birth Order and Depression

The history of research on birth order effects on psychological characteristics is long and controversial with many theoretical perspectives that often contradict each other. Alfred Adler first affirmed that the order in which an individual is born in a family influences his or her subsequent personality due to the psychological situation created by the presence of siblings, and competing needs for parental attention Researchers are increasingly acknowledging the importance of the family of origin as a determinant of mood disorder (Weissman et al., in Kirkcaldy, Vejlgaard & Siefen, 2009) and suicidal behavior (Melhem et al., in Kirkcaldy, Vejlgaard & Siefen, 2009). Most of the research in this area has examined genetic linkages and histories of abuse in order to explain familial transmission of suicidal behavior. Lester (1987) reported an association between birth order and suicidal behavior, and noted that there were a very high proportion of middle-born and last-born children who had attempted suicide. Kirkcaldy, Richardson-Veilgaard and Siefen, 2009, conducted a study on Birth order: Self-injurious and Suicidal Behavior among adolescents. Taking a sample size of 2553 children and adolescents in a psychiatry clinic in Germany that included history of self-injurious behavior, suicidal intent and socially disruptive and threatening behavior, and diverse socio-demographic variables, birth order was associated with both suicidal and self-injurious behavior, middle children were most likely to exhibit such behavior. Females were more than twice as likely to have self injured than males. They also found that later-born children were more likely to engage in self-destructive behavior than firstborn, with children from larger families (four or more) having the highest incidence of suicidal behavior. Recent research on sibling peer effects has found that children with older siblings are more likely to engage in other negative behaviors such as smoking cigarettes, smoking marijuana, and sexual activity (In Kirkcaldy, Richardson-Veilgaard and Siefen, 2009). Data also

revealed that being a middle child may be more debilitating than being an only child or lastborn child; however, this may be particularly true in more dysfunctional families. The strength of association between birth order category and prevalence of self destructive behavior in this sample is significant. In comparisons of gender in birth no significant differences in suicidal behavior between birth positions for males were found but for females, middle children were much more likely to have attempted suicide. Conversely, there was no difference in self-injurious behavior among birth positions in females, but among males, middle children were significantly more likely to have self injured than firstborns, only children or lastborns. The number of siblings in the family was significantly associated with both suicidal history and self injurious behavior.

## 2.7 Substance Abuse and Depression

Many research findings have revealed that substance abuse as risk behavior is linked to depression. The following literatures are reviewed to understand the impact of substance abuse and depression.

Sixteen patterns of combined sex and drug use behaviors were obtained using cluster analysis of responses to Wave I of the National Longitudinal Study of Adolescent Health. Correlations were tested between behavior patterns and current depression, serious suicidal ideation, and previous suicide attempt, controlling for gender, race/ethnicity, Hispanic ethnicity, family structure, and parent education. Result indicates that compared to youth who abstain from risk behaviors, involvement in any drinking, smoking, and/or sexual activity was associated with significantly increased odds of depression, suicidal ideation, and suicide attempts (Hallfors, Waller, Iritani, et. al. 2004).

Deykin, Levy and Wells in 1987, studied the relationship between alcohol use, substance abuse and depression in 424 college students (271 females and 153 males) between the ages of 16-19 years of age and administered the Diagnostic Interview Schedule. They found that the prevalence of Major Depressive Disorder (MDD) was 6.8%, alcohol abuse was 8.2% and substance abuse was 9.4%. Further they found that alcohol abuse and MDD were associated while substance abuse and depression as well as other psychiatric diagnoses were associated.

Adolescents with Alcohol Use Disorders (AUDs) often have Major Depressive Disorder (MDD). Physical abuse and sexual abuse (PS Abuse) have been observed to be common in adolescents with AUDs. While affected adolescents had typically improved in both alcohol consumption and depression at the young adult assessment, the majority of those with adolescent AUD had AUDs in young adulthood, and MDD remained common in those with a history of PS Abuse. These results indicate that MDD among adolescents with AUD may be partly attributed to PS Abuse (Clark, De Bellis, Lynch, et.al. 2002).

# 2.8 Tobacco Use and Depression

Chadda and Sengupta, 2002 in their article on tobacco use by adolescents discuss the role of family and environment as important factors. To support their article, they referred to the World Bank report which states that every day nearly 99,000 adolescents take to smoking.

To evaluate the independent effects of exposure to others who smoke and receptivity to tobacco advertising on adolescent smoking, a significant interaction was detected between receptivity to tobacco advertising and depression; specifically,

adolescents with a high receptivity to tobacco advertising and clinically significant depressive symptoms were more likely to smoke than adolescents without these symptoms. Data supported hypothesis stated that adolescents with both high advertising receptivity and depressed moods are most vulnerable to experiment with smoking. This study entails tailoring prevention and intervention efforts to include tobacco advertising's effects and the role of depression could lead to a reduction in youth smoking (Tercyak, Goldman, Smith, et.al. 2002).

A study done by Melby, Conger & Conger, et.al. in 1993 evaluates a social-developmental model of early adolescent tobacco involvement with a sample of 204 seventh grade boys. Using data from the young adolescents, their parents, and siblings, they examine the influence of parental childrearing strategies (harsh/inconsistent and nurturant/involved) and reported parent, sibling, and peer tobacco use on tobacco involvement by early adolescents. Results indicate that positive relationships were found between harsh/inconsistent parenting and adolescent tobacco use, and negative relationships between nurturant/involved parenting behaviors and adolescent tobacco use. Parenting behaviors had both direct and indirect effects on adolescent tobacco use through the adolescents' associations with tobacco-using peers.

Acierno, Kilpatrick, Resnick, et.al. 2000, conducted a study on a national household probability sample of 4,023 adolescents aged 12 to 17 years to determine the impact of familial substance use, sexual and physical assault, witnessed violence, depression and Posttraumatic Stress Disorder (PTSD) on risk of smoking. Results indicated that familial substance use increased risk of smoking only for boys and sexual assault or depression increased risk of smoking only for girls. Age, Caucasian

ethnicity, and experiencing physical assault or witnessing violence elevated risk of current cigarette use for both genders. By contrast, PTSD *per se* was not associated with increased risk of smoking.

Brown, Lewinsohn, Seeley, et.al. 1996 conducted a study to examine relationships of cigarette smoking with major depressive disorder (MDD), controlling for co morbidity in a community sample of adolescents. For this study, a representative sample of 1,709 adolescents (aged 14 through 18 years) was assessed. A cross-sectional analysis revealed significant relationships of drug abuse/dependence and disruptive behavior disorders with adolescent smoking, even after the co-occurrence of all other disorders was controlled. Eventually, smoking was found to increase the risk of developing an episode of MDD and drug abuse/dependence, after adjusting for other disorders. Gender did not moderate any of the relationships between psychopathology and smoking. The results suggest important relationships between cigarette smoking and psychiatric disorders among adolescents, particularly with regard to MDD, drug abuse/dependence, and disruptive behavior disorders. These findings have important clinical implications, both for psychiatric care and for smoking prevention and cessation efforts with adolescents.

Ennett, Bauman, Foshee, et. al. studied to examine the nature and effects of parent-child communication about tobacco and alcohol use on adolescent use of these substances. This study included a national sample of 537 adolescent-parent pairs interviewed by telephone. Factor analysis of parent reports of communication identified 3 domains: rules and discipline, consequences and circumstances, and media influences. The study sample is derived from a probability sample of adolescent-parent pairs living in the 48 contiguous states who were participants in an

evaluation of a family-based intervention to prevent adolescent tobacco and alcohol use. Among the 378 adolescents who were nonsmokers at baseline, 21.7% had initiated smoking by follow-up. Of the 195 adolescent nondrinkers at baseline; 36.4% started drinking by follow-up. Escalation of use was reported by 64.1% of the adolescents who were baseline smokers (n= 117) and by 55.5% of baseline drinkers (n= 281). It also finds that baseline smokers (n= 42) or drinkers (n= 61) whose behavior was either at the maximum level at baseline or who at follow-up said they never smoked or drank (i.e., they recanted earlier reports of use) were excluded from the escalation analyses (Ennett, Bauman, Foshee, et. al. 2001).

## 2.9 Sexual Risks and Depression

According to Jegebhoy (1998), research on adolescents' sexual and reproductive behavior is extremely important. However, there is a lack of attention on every dimension of reproductive health including sexuality, reproductive morbidity, abortion seeking and reproductive choice.

Sexual risk behavior is defined as unprotected sexual intercourse with partners who are potential carriers of sexually transmitted diseases, especially HIV and AIDS. The risk is a function of the partner's infection status, the sexual practices employed and the protective measures used. The prevalence of HIV infection and sexual risk behaviors varies across different groups such as adolescents, ethnic groups, homosexuals, heterosexuals, and prostitutes. More than personality factors and risk perception, variables such as behavioral intentions and attitudes toward condoms correlate with HIV-protective behavior. Prevention programs promote condoms as the method of protection. Individuals are also advised to reduce the number of sexual partners and to avoid anonymous sexual partners (Bengel, 2004).

Adolescents are at high risk for a number of negative health consequences associated with early and unsafe sexual activity, including infection with Human Immuno Deficiency Virus, other sexually transmitted diseases, and unintended pregnancy. As a result, researchers have attempted to identify those factors that influence adolescent sexual risk behavior so that meaningful prevention and intervention programs may be developed. In this article, factors from the self, family, and extra-familial systems of influence are discussed. They also consider several methodological problems that limit the literature's current scope, and suggested implications of the adoption of a multi systemic framework for future research endeavors. They propose that research efforts have been hampered by the adoption of models and perspectives that are narrow and do not adequately capture the complexity associated with the adolescent sexual experience. (Kotchick, Shaffer, Miller, et.al. 1999).

Relationships among risky sexual behaviors, other problem behaviors, and the family and peer context were examined for two samples of adolescents. As a result, many adolescents reported behaviors (e.g., promiscuity or nonuse of condoms) which risked HIV or other sexually transmitted disease infection. Such risky behaviors have significant inter-correlation. Consistent condom use was rare among those whose behavior otherwise entailed the greatest risk of infection. In both samples, an index of high-risk sexual behavior was significantly related to antisocial behavior, cigarette smoking, and illicit drug or alcohol use. Variables such as family structure, parenting practices, and friends' engagement in problem behaviors were associated with high-risk sexual behavior. For sexually active adolescents, problem behaviors and social context variables were predictive of nonuse of condoms (Biglan, Metzler, Wirt, et. al., 1990).

A group of researchers, viz. Palen, Smith, Mpofu, et. al. 2006 examined the co-variation of substance use and various sexual behaviors in 2204 students from one area of South Africa. Results indicate that there was an association between lifetime substance use and both sexual activity and certain sexual risk behaviors. At the most recent sexual encounter, there was an association between substance use and being unfamiliar with one's sexual partner, but association between substance use and condom use was not indicated.

Brown, Hadley, Stewart, et.al in 2010 conducted a study to examine the relationship between psychiatric disorders and sexual behaviors among adolescents receiving mental health treatment. Adolescents in mental health treatment have been found to have higher rates of HIV risk behavior than their peer in a study on eight hundred and forty adolescents (56% female, 58% African American,). Adolescents also reported on sexual risk behaviors (vaginal/anal sex, condom use at last sex) and completed urine screens for a sexually transmitted infection (STI). The finding include adolescents meeting criteria for mania, externalizing disorders (oppositional defiant, conduct, and attention-deficit / hyperactivity disorders), or co-morbid for externalizing and internalizing disorders (major depressive, generalized anxiety, and posttraumatic stress disorders) were significantly more likely to report a lifetime history of vaginal or anal sex than those who did not meet criteria for any psychiatric. They concluded that the presence of internalizing and externalizing disorders, especially mania, suggests the need for careful screening and targeting of adolescent sexual behavior during psychiatric treatment.

#### 2.10 Financial Risks and Depression

Mental health disorders in adolescence are pervasive and often carry to adulthood, and appear to be oppositely associated with social status. In one study on how structural aspects of neighborhood context, specifically, socioeconomic stratification and racial/ethnic segregation, affect adolescent emotional well-being by shaping subjective perceptions of their neighborhoods was examined. Sample was taken on community-based of 877 adolescents in Los Angeles County; it was observed that youth in low socioeconomic status (SES) neighborhoods perceive greater ambient hazards such as crime, violence, drug use, and graffiti than those in high SES neighborhoods. The perception of the neighborhood as dangerous, in turn, influences the mental health of adolescents: the more threatening the neighborhood, the more common the symptoms of depression, anxiety, oppositional defiant disorder, and conduct disorder. Social stability and, to a lesser extent, social cohesion, also emerge as contributors to adolescent disorder. This study demonstrates that research into the mental health of young people should consider the socioeconomic and demographic environments in which they live (Aneshensel & Sucoff, 2005).

Hofferth, 1987 (In Blum, et. al. 2000) suggested that because Blacks are more likely to be poor, racial/ ethnic differences may in fact reflect socioeconomic differences among groups. The same perspective is shared by Wilson, 1987 (In Blum, et. al. 2000) saying that several other analyses linked poverty with pregnancy risk and adolescent smoking. In a study done by Blum, et. al. in 2000, briefly, 80 high schools were randomly selected from a national roster of high schools stratified by enrollment, region, urban city, type of school, and racial/ethnic mix. Nearly one quarter (22.6%) of the families had an income of \$20000 or less per year, nearly one third (32.7%) were in the middle income group, and 44.5% had an income greater than \$40000. It is not surprising that income and family structure were moderately interrelated.

Specifically, 93.6% of the youths whose parents reported income of \$40000 or greater came from 2-parent families.

Randomly selected samples of 1,208 high school-aged adolescents were examined on the means through which life stress is associated with depressive symptoms. Analyses focus on family structure, socioeconomic status, and gender as background risks which directly and indirectly influence symptoms, as well as vulnerability contexts that shape differential responsiveness to stressful experiences. Findings include children in single-parent families have higher symptom levels, effects explained by economic conditions and stress exposure-they are no more vulnerable than others to the depressing effects of these stresses and both boys and girls in low SES backgrounds are more vulnerable to a wide range of stresses and support deficits (Gore, Aseltine Jr., Colton, 1992).

Goodman, Slap and Huang examined the public health impact of the socio-economic status (SES) inclination on adolescents' physical and mental health. For this purpose, Population Attributable Risk (PAR) for household income and parental education were calculated relative to depression and obesity among a nationally representative sample of 15 112 adolescents. As a result, PARs for income and education were large. For depression, the adjusted PAR for income was 26%. In addition to the finding, SES is associated with a large proportion of the disease burden within the total population (Goodman, Slap & Huang, 2003).

A study conducted in Orissa on adolescents after one year of the supercyclone in a sample of 108 adolescents, constituting 60 females and 48 males with mean age of 14.3 years and 14.25 years respectively saw no difference between the genders regarding the family structure, first or subsequent born or

parental educational level. Main family income source for most male students (70.8%) was cultivation, whereas relatively more females (56.7%) were from families with other main sources of income. There were 11.1% adolescents in lower SES, 80.6% in middle and 8.3% in upper SES. Most of the males (95.8%) were from middle SES compared to 68.3% females). All adolescents reported significant damage to their houses (making them uninhabitable), starvation, and lack of treatment for physical ailments in the initial few days after the cyclone. The study reveals that one year after the cyclone, the number of adolescents with any of the three diagnoses (Generalized Anxiety Disorder, Post-Traumatic Stress Disorder and Major Depression) studied was 41 (37.9%) (Kar and Bastiya, 2006).

### 2.11 Suicide Risk Behavior and Depression

Depression is one of the major causes for suicides or suicidal attempts. Depression is common among adolescents, and suicide is the third leading cause of death among 15- to 19-year-olds. Although both health problems have been associated with drug use and early sexual intercourse, the relationship has not been systematically studied in a nationally representative sample (Hallfors, Waller, Iritani, et. al. 2004).

As Nunley states suicidal thoughts are often a symptom of depression. Young people may be upset about them and may well be afraid of upsetting others by admitting to them. The suicide rate in teenagers has quadrupled in the last quarter century making it the 3<sup>rd</sup> leading cause of adolescent death in the nation. In Utah, it is the number one cause of death in for individuals 15 – 44 years old (Wagner, 1996). A high school with a population of 2,000 students can expect 50 attempted suicides per

year (Kahn, 1995). And yet depression and other affective disorders continue to be an area primarily ignored by the public schools.

Studies on youth suicidal behaviors have revealed that psychosocial influences from both the family and peers correlated with suicide attempts and ideation. Harter and others (1992) stated that low social support from parents and peers were related to suicide ideation through inducing hopelessness and low self-worth. More recently, Prinstein and others (2000) similarly demonstrated that psychosocial risk factors related to peer and family functioning directly predicted suicide ideation and depressive symptoms in psychiatric patients. it is important to understand the significance of the family and peer relationships in children's and adolescents' social world and how interpersonal relationships in these two dimensions can place youths at risk of psychopathology, but whether and how familial and interpersonal functioning can buffer our new generation against self-destructive thoughts and behaviors ( C.Y. Au, Sing Lau, Margaret T.Y. Lee, 2009).

A study by Adcock, Nagy and Simpson examined stress, depression, attempted suicide and knowledge of common signs of potential suicide in Alabama adolescents. A modified version of the National Adolescent Student Health Survey (NASHS) was administered to 3,803 eighth- and tenth-grade public school students during the fall of 1988. The incidence of stress, depression, and attempted suicide was analyzed by gender, ethnicity, locale (urban vs. rural), and participation in sexual intercourse and use of alcohol. Findings indicated that females were at greater risk than were males. Both males and females who engaged in sexual intercourse and alcohol consumption were at greater risk than were not involved. When the data was analyzed by ethnicity, white adolescents who engaged in these behaviors were at

significantly greater risk than were those who abstained; differences were not as obvious for black youth. Comparisons on the knowledge scale indicated that females scored better than males, whites scored better than blacks, and urban students scored better than rural students (Adcock, Nagy and Simpson, 1991).

Sun & Hui (2007) aimed to investigate the family, school, peer and psychological factors that contribute to adolescent suicidal ideation. The participants were 1,358 (680 boys and 678 girls) Hong Kong Chinese adolescents who were divided into younger (12.3 years, *n*=694) and older (15.4 years, *n*=664) age groups. The results showed that family cohesion and sense of school belonging were the core predictors of self esteem and depression, and that depression was a strong mediator of suicidal ideation. In the prediction of suicidal ideation, peer support was significant among girls and younger adolescents only, whereas peer conflict was significant among older adolescents only. Family conflict, teacher support and academic pressure did not show any significant contribution in the prediction.

Suicide is seen as a major public health (Pillai, Andrews and Patel, 2009) and a major social problem (George, P., 2005). George studied suicide in Kerela between 1995-2003 based on quantitative data obtained from the National Crime Record and observed that there were 106 suicide below the age of 14 years in 2001 alone

In the context of Mizoram a study done by Lalmuanpuii Hauhnar in 2007 on a sample of 32 respondents who had lost a family member to suicide, employing purposive sampling, observed that suicide was the ultimate result of depressive ideation. The sample consisted of 24 males and 8 female behaviors in the age group of 15-55 years. Of these, almost 40% of the sample was between the ages of 15-25 years which represents the period of struggle and adjustments in life. Less than a third

(31.3%) of the behavior had attempted suicide prior to the commission of suicide .Of these, almost 12% had attempted suicide within a month of the commission. More than half the respondents had revealed that they were having problems to their family members while a greater majority had revealed their problems to friends (Lalmuanpuii, 2007). The studies above reveal that suicidal risk and depression are very high in youth and that preventive efforts are indicated.

#### 2.12 Gender Differences in Adolescents' Depression

Three major theoretical perspectives have the potential to explain the emergence of a sex difference in depression during adolescence: (1) the gender intensification hypothesis (In Petersen, Sarigiani, Kennedy, 1991), (2) both internal and external coping resources (In Petersen, Sarigiani, Kennedy, 1991), and (3) stressful life events (In Petersen, Sarigiani, Kennedy, 1991). The gender intensification hypothesis is the only one that is developmental in nature, with a particular focus on early adolescence (Petersen, Sarigiani, Kennedy, 1991). Several studies have identified a sex difference in depression showing more depression among adult women (In Petersen, Sarigiani, Kennedy, 1991) that appears to emerge by middle adolescence (In Petersen, Sarigiani, Kennedy, 1991). Thus, several scholars have hypothesized that something changes in early adolescence to cause this reversal of the sex difference. The greater prevalence of depressed adolescent girls and adult women, relative to boys and men, has received significant attention by scholars (In Petersen, Sarigiani, Kennedy, 1991). These findings have led several studies to focus on adolescence as the best age period in which to identify the factors or processes that might explain the greater likelihood that depression would emerge in girls than in boys (Petersen, Sarigiani and Kennedy, 1991). First, it may be that this process operates quite differently for boys and girls. Second, puberty is likely to have different meaning for boys and girls. Evidence from prior studies find that close relationships with parents, especially with fathers, serve as protective factors on several indicators of adjustment more consistently for girls than for boys (In Petersen, Sarigiani, Kennedy, 1991). Compas et al. (1985) found that among young adolescents (ages 12-14 years) girls reported more negative daily events than boys, but this difference was not found among older adolescents. Experiencing a change in the family (e.g., parental death or divorce) is related to depressed affect for girls but not for boys during early adolescence (In Petersen, Sarigiani, Kennedy, 1991). Thus, the nature and number of changes in early adolescence appear to be related to depressed affect in early adolescence.

A study by Lalmuanpuii Hauhnar (2007) on Suicides in Mizoram, India observed that boys were three times more likely than girls to commit suicide and this is contrary to most findings elsewhere.

To understand the gender gap in depression and the age at which this phenomenon appears during adolescence which is less clear compared to adults, Wade, Cairney, Pevalin, 2001 presents a cross-national examination of the emergence of the gender gap in depression during adolescence using national longitudinal panel data from Canada, Great Britain, and the United States. Findings have revealed that females have significantly higher rates of depression for each sample overall. When samples are decomposed by age, the gender gap in depression consistently emerges by age 14 across all three national samples. There is a consistent pattern in the onset of the gender gap in depression at age 14 across all three countries and measures. This

consistency provides important etiologic clues concerning underlying causes of depression.

Another research study conducted by Petersen, Rhode, et.al. in 2000 tried to examine associations of age, gender, and psychosocial factors during adolescence with risk of suicide attempt between ages 19 and 23 years. For this purpose, initial assessments were conducted with 1,709 adolescents (aged 14-18 years) in western Oregon between 1987 and 1989. One year later, 1,507 participants returned for a second assessment. A subset of participants (n = 941; 57.2% women) had a third diagnostic assessment after turning 24. The suicide attempt hazard rate for female adolescents was significantly higher than for male adolescents (n = 941). By age 19, the attempt hazard rate for female adolescents dropped to a level comparable with that of male adolescents. Disappearance of the gender difference for suicide attempts by young adulthood was not paralleled by a decrease in the gender difference for major depression. Adolescent suicidal behavior predicted suicide attempt during young adulthood for female but not male participants. Adolescent psychosocial risk factors for suicide attempt during young adulthood were identified separately for girls and boys. Unlike depression, the elevated incidence rate of suicide attempts by adolescent girls is not maintained into young adulthood.

George (2005) analyzed data on suicide from National Crime Records Bureau and observed that suicide proneness in Kerela, India is more among female. He attributes this to several social factors including shifting of home by women following marriage, harassment, child bearing, etc.

Significant gender differences in aspects of stress exposure and in additive models of stress effects, but stresses and supports do not explain the significant gender

difference in depressive symptoms; girls in low education backgrounds have the highest levels of depressive symptoms; there are no gender differences in vulnerability to stress (Gore, Aseltine Jr., Colton, 1992).

According to Block, 1991(In Nunley,...) the psychological processes related to depression may be different for boys and girls; in one study, boys who were depressed at 18 years of age were aggressive, self-aggrandizing, and under controlled in preschool, whereas depressed 18-year-old girls were over controlled in pre-school (Nunley,...).

There were few differences between boys and girls who abstain from sex and drug behaviors. Girls were less likely than boys to engage in high-risk behaviors, but those who did tended to be more vulnerable to depression, suicidal ideation, and suicide attempt (Hallfors, Waller, et. al. 2004).

A study done by Pillai, Patel, Cardoza, et.al in 2008 observed that of all mental health disorders among adolescents, 27% was depression with girls reporting higher incidence than boys.

The occurrence of depression is higher in females after puberty, suggesting a gender-related difference. Hallsfors, Weller, et.al. 2004 reviews studies that have examined gender differences in the presentation and treatment of depression in adults and discusses how this information applies to depressed children and adolescents. Studies of gender differences in child and adolescent depression are limited. Some studies also suggest that differences seen in adults may also apply to children and adolescents. Further study and evidence-based exploration are required to better

understand gender differences in depression in children and adolescents, according to the author (Hallfors, Waller, et. al. 2004).

Depression, according to Eley, Sugden, Corsico, et.al. 2004 is an excellent example of a complex trait for which gene-environment interactions are likely to be well reported. In their study in 1990, adolescents between the ages of 10-20 years, they administered the Moods and Feelings Questionnaire and found that there was significantly high level of depression in adolescents with females reporting higher levels in environment risk interactions.

A study conducted in Goa on adolescents between the ages of years revealed that females are three times as likely as males to commit suicide (Pillai, Andrews and Patel, 2009).

### 2.13 Coping and Social Support

The following literature has been reviewed to understand the coping pattern and social support sought among adolescents.

Research over the past 20 years suggests that the quality of the parent-adolescent relationship significantly affects the development of risk behaviors in adolescent health. This study presents a review of studies published between 1996-2007 that address specific relationships between parenting styles and six priority adolescent risk behaviors. Adolescents raised in authoritative households consistently demonstrate higher protective and fewer risk behavior than adolescents from non-authoritative families. Considerable evidence also shows that parenting style and behaviors related to warmth, communication and disciplinary practices predict important mediators, including academic achievement and psychosocial adjustment.

Careful examination of parenting style patterns in diverse populations, particularly with respect to physical activity and unintentional injury, will be a critical next step in the development of efficacious, culturally tailored adolescent health promotion interventions (Newman K, Harrison L, Dashiff C, Davies S., 2008).

Substantial literature suggests that supportive family contexts and parenting behaviors may discourage adolescents from engaging in early and risky sexual activities; yet methodological limitations hamper the conclusions regarding causality and directionality that can be drawn from much existing research. Parenting processes significantly predicted later adolescent sexual risk behaviors. Specifically, more regular family activities and less negative and hostile parenting during midadolescence predicted lower sexual risk behaviors during late adolescence (Coley, Medeiros, Schindler, 2008).

Social support from peers and the family are important coping resources, the lack of which can predispose individuals to self-damaging cognitions and suicidal behavior during stressful life events (In C.Y. Au, Sing Lau, Margaret T.Y. Lee, 2009). Thus, a supportive family environment and robust social self-concept could serve as buffers during stressful times. Most studies have focused on finding a relationship between psychosocial variables and suicidal behaviors, more empirical evidence shows that family cohesion (In C.Y. Au, Sing Lau, Margaret T.Y. Lee, 2009) and peer support (C.Y. Au, Sing Lau, Margaret T.Y. Lee, 2009) would moderate the effect of negative cognitions and emotions on suicidality behaviors (C.Y. Au, Sing Lau, Margaret T.Y. Lee, 2009).

Specialized and multidisciplinary care is required for young people who have multiple or complex needs. This care should ideally involve youth-friendly general

practitioners and other primary-health workers collaborating closely with mental-health and substance abuse professionals and an array of support agencies, such as accommodation, educational, and employment services. However, there is far too little systematic research evidence for the burden, risk factors, protective factors, and interventions and models of care for youth mental disorders from most parts of the world (Patel, Flisher, Nikapota, et.al. 2007).

A study done by Chan (1994) was designed to assess the depressive symptoms and coping strategies of Chinese adolescents in Hong Kong. The study has the following concerns as the following: (1) identifying the common depressive symptoms and symptom dimensions of Chinese adolescents; (2) examining the relations of depression with self-esteem, social support, and coping strategies of these adolescents; and (3) comparing the coping activities and strategies of depressed and non-depressed adolescents. In addition, gender differences in depressive symptoms and coping strategies would also be explored. This study was conducted on one hundred and sixty-one secondary school students (37 boys and 124 girls) aged between the ages of 15 years and 18 years. The more common symptoms reported by over 70% of the students were fatigue and self-accusations, while the less common symptoms reported by less than 30% of the students reported weight loss and libido loss. A large proportion of Chinese adolescents in Hong Kong scored in the depressed range, it is imperative that efforts should be directed to help adolescents cope with their depressed mood through acquiring and using more effective and adaptive coping strategies. However, the findings did not provide strong evidence that specific coping strategies were protective. In contrast, the use of avoidant coping strategies was found to be deleterious, consistent with the findings that ineffective escapism was related to increase depressive symptoms (Rhode, Lewinsohn, Seeley, 1991). Further, low selfesteem, especially self-depreciation, and reduced social support, especially from friends, were found to relate to depressive symptom level, suggesting that promoting peer support network and self-esteem enhancement in addition to active and non avoidant coping should be made the treatment focus for depressed Chinese adolescents. It is also possible that depressed adolescents tended to use avoidant coping, to become low in self-esteem, and to alienate friend support. Thus, the possibly bi – direction of depression and coping, needs to be carefully addressed in future studies.

# 2.14 Research Gaps

- i) Research studies on adolescents' mental health and mental illness is not adequately conducted in India, particularly in the North East where sociodemographic characteristics are so different.
- ii) Factors affecting female vulnerability towards depression are not clearly identified.
- Despite the emergence of depression among adolescents as a significant area of study, focus has not been given to the planning of programmes for prevention and treatment exclusively for adolescents' developmental stage.
- iv) Impact of gender difference with regard to suicide has not yet been adequately explored.
- v) One Study conducted in 1992 has found that loss of dear ones is the major cause for depression among adolescents. However, there are few studies that have been conducted in India on this.

- vi) Data supports hypothesis that adolescents with both high advertising receptivity and depressed moods are most vulnerable to experiment with smoking. This could be an interesting area for research since many adolescents, even in Mizoram start smoking during early adolescence.
- vii) Research studies conducted in Hongkong found that family conflicts and academic pressure did not show any significant contribution in the prediction of suicide. However, in Aizawl city, family conflicts have contributed to adolescents' suicide, according to newspaper reports.

# 3.1 Universe of the Study

The universe of the study comprises all students in this age group who are attending Schools in Mizoram. The schools have been selected based on their location as well as the size of student strength being comparable to each other. A list of all students in the identified schools, belonging to classes VIII-XII was selected. Informed consent was obtained and only then was the sample.

## 3.2 Design

The study is descriptive and cross-sectional in nature. Depression, coping and risk behavior of school-going adolescents in Mizoram is the focus of the study.

### 3.3 Sampling

The sample was done in two stages. At the first stage, two government schools in Aizawl from two different localities (one core and one peripheral) were chosen purposively. The schools are among the largest in terms of strength of students. Principals of the schools were met and consent was obtained to conduct the study. In the second stage, a list of all students studying between classes VIII –XII was obtained and a final sample was selected using systematic random sampling. 150 questionnaires each were distributed and 252 completed questionnaires were returned at a return rate of 84%. The student respondents were appraised about the tools and they were able to give a lot of information while researcher was present.

#### 3.4 Tools of Data Collection

A Structured Questionnaire was constructed. It sought information on sociodemographic information, relationship pattern with family, academic particulars, patterns of substance use, risk behaviors, coping mechanism and social support. Becks Depression Inventory II was also used to find out the prevalence of depression among school-going adolescents

#### 3.5 Data Collection

Initially, permission for data collection was sought from the principals of the schools. Detailed demonstration was given to the respondents on BDI II and questionnaire on how to answer the scale and questionnaire.

### 3.6 Data Analysis

Microsoft Excel was employed for data entry and SPSS software was used to tabulate the data. The data is presented in the form of simple percentages and averages.

### 3.7 Limitations of the Study

The tool used to find out the causes of depression was not adequate as a more in depth study is required. Due to paucity of time, respondents answered under time pressure which may hamper the result. The sample was drawn from only two schools and this is not adequate to find out the prevalence of depression among adolescents.

Respondents did not answer many questions accurately possibly due to fear of school authorities, despite being told their identity would be protected.

## 4.1 Results & Discussion

The study sought information from a total of 300 school-going adolescents between the classes of VIII-XII standards where majority of the students studying in these classes belonged to the target age group. In all, 252 respondents returned the completed questionnaires (113 males, 139 females). Table 1 indicates respondents' classes and school. Of the total number of respondents from the 5 classes, more than one third (39.63%) respondents are from class IX and less than a third (29.76%) belong to class X. Less than a tenth (8.73%) are from class VIII, the least among the five classes. More than a half (52.78%) of the total respondents are from Govt. Higher Secondary School, indicating a higher return rate from this school.

Table 1
Socio - Demographic Profile of the respondents

		Gen	der	
Sl.No	Characteristic	Male	Female	Total
		n = 113	n = 139	N = 252
I	Class			
1	Class VIII	12	10	22
		(10.62)	(7.19)	(8.73)
2	Class IX	41	59	100
		(36.28)	(42.45)	(39.68)
3	Class X	32	43	75
		(28.32)	(30.94)	(29.76)
4	Class XI	13	12	25
		(11.50)	(8.63)	(9.92)
5	Class XII	15	15	30
		(13.27)	(10.79)	(11.90)
II	School			
1	Govt. Republic Higher Secondary School	51	68	119
		(45.13)	(48.92)	(47.22)
2	Govt. Higher Secondary School	62	71	133
		(54.87)	(51.08)	(52.78)

Source: Computed (Figures in Parentheses are percentages)

Table 2 (a)
Socio - Demographic Profile of the Respondent

		Ger	nder	
Sl.No	Characteristic	Male	Female	Total
		n = 113	n = 139	N = 252
I	Age Group			
		37	33	70
1	12 -14 Years	(32.74)	(23.74)	(27.78)
1	12-14 1 cars	63	99	162
2	15-17 Years	(55.75)	(71.22)	(64.29)
		13	7	20
3	18 -20 Years	(11.50)	(5.04)	(7.94)
II	Position in Bir	rth Order		
		32	36	68
1	Eldest	(28.32)	(25.90)	(26.98)
		48	65	113
2	Middle	(42.48)	(46.76)	(44.84)
		27	36	63
3	Youngest	(23.89)	(25.90)	(25.00)
		6	2	8
4	No response	(5.31)	(1.44)	(3.17)

(Figures in Parentheses are percentages)

Table 2 (I) shows the age range of the respondents. More than two third (64.29%) of the respondents belong to the age group of 15-17 years. Less than a third (27.78%) are within the age group of 12 – 14 years. Table 2 (II) shows that middle born children are found to be the largest in representation constituting almost a half i.e. (44.84% - male 42.48%, female 46.76%). Earlier studies draw a link between

depression and birth order stating that middle-born children are most likely to suffer depression and exhibit behavior such as suicide and self-injury. (Kirkcaldy, et.al. 2009). Being a middle child may be more debilitating than being an only child or lastborn child, this may be particularly true in more dysfunctional families (Averett, 2006 in Kirkcaldy, et.al. 2009). In the current studies on Mental Health of Adolescents in Mizoram, less than a third reported being first born (26.98% - male 28.32% female 25.90%). Some studies indicate relationship between possibility of engaging in negative behaviors such as smoking cigarette, marijuana and sexual activity for first born children. A quarter of the respondents reported being last born (23.89% male and 25.90% female).

Socio - Demographic Profile of the Respondent

Table 2 (b)

Ш	Type of Family			
		85	102	187
1	Nuclear	(75.22)	(73.38)	(74.21)
		(75.22) 24	(73.38) 29	(74.21) 53
2	Joint	(21.24)	(20.86)	(21.03)
		1	4	5
3	Reconstituted	(0.88)	(2.88)	(1.98)
		3	4	7
4	No response	(2.65)	(2.88)	(2.78)
IV	Head of the Family			
		18	20	38
1	Grand parent	(15.93)	(14.39) 103	(15.08)
		84	103	187
2	Father	(74.34)	(74.10) 12	(74.21) 19
		7	12	19
3	Mother	(6.19)	(8.63)	(7.54)
		3	1	4
4	Uncle	(2.65)	(0.72)	(1.59)
		0	1	1
5	Others	0.00	(0.72)	(0.40)
		1	2	3
6	No response	(0.88)	(1.44)	(1.19)

**Source: Computed** 

(Figures in Parentheses are percentages)

In Table 2 (III), more than two thirds of the total respondents are from Nuclear families. Less than a quarter (21.03%) are from Joint families. Only very few respondents (1.98%) were from a Reconstituted family where it is expected that adolescents from this family background are more vulnerable to depression and risk behavior due to their experience of parents' marital breakdown and remarriage of the

parent. In Table 12 (IV), less than three quarters of respondents (74.21%) belonged to father-headed family which is linked to the finding of Table 2(III) Item- Type of family. A sixth (15.08%) households are headed by grand parents. Less than a tenth (7.54%) has mother-headed family. Single-parent families are vulnerable to depression or involvement in risk behavior by adolescents as compared to those who come from stable two-parent families. Adolescents from a single-parent family are found to be more vulnerable to alcohol abuse and suicide risk (Blum, et.al.2000) which may be associated with socio-economic condition as adolescents belonging to single-parent households have higher levels of depressive symptoms caused by economic conditions and stress exposure (Gore, Aseltine Jr., Colton, 1992).

Table 3

Relationship with Family Members and Relatives

			Ge	nder				
Sl.No	Relationship with	Male Female n = 113 n = 139		Fem	ale	Total		
				N=252				
		Mean	SD	Mean	SD	Mean	SD	
1	Father	3.4	0.9	3.2	1.0	3.3	1.0	
2	Mother	3.7	0.5	3.6	0.8	3.6	0.7	
3	Grandparents	3.2	1.0	3.2	1.1	3.2	1.0	
4	Siblings	3.5	0.7	3.5	0.8	3.5	0.8	
5	Relatives	2.4	1.4	2.3	1.6	2.4	1.5	

Relationship between parent-children is found to be an important factor in the development of adolescents' health risk behavior (Newman, et.al. 2008). In this study, respondents were asked about the relationship between themselves and their parents, siblings and close relatives (see Table 3). The results indicate their closeness to mother (mean=3.6) as strongest in score and relationship with siblings comes second strongest (mean=3.5). There was not much difference in score for the relationship of father and grand parents (father mean=3.3, grand parents mean=3.2). The finding has a huge significance since poor relationship within the family members may result in depression and escalates in vulnerability to risk behaviors as harsh/inconsistent parenting style is linked with adolescents tobacco use (Melby, et.al. 2003).

Table 4 (a)

Pattern of Substance Abuse

	User/Drug		Gei	ıder			
Sl.No		Malo n=11		Fema N=13		Total N=25	
		Frequency	%	Frequency	%	Frequency	%
I	Self						
	Drug	18	15.93	2	1.44	20	7.94
	Gutkha	4	3.54	10	7.19	14	5.56
	Dendrite	2	1.77	8	5.76	10	3.97
	Zarda pan	3	2.65	6	4.32	9	3.57
	Ganja	1	0.88	5	3.60	6	2.38
	Cigarette	1	0.88	4	2.88	5	1.98
	Sahdah/Raja/Khaini	2	1.77	1	0.72	3	1.19
	Tuibur	2	1.77	0	0.00	2	0.79
	Alcohol	0	0.00	0	0.00	0	0.00
			0.03		0.03		0.03
II	Mother			1		1	
	Alcohol	38	33.6	76	54.7	114	45.2
	Tuibur	19	16.8	36	25.9	55	21.8
	Zarda pan	1	0.9	7	5.0	8	3.2
	Cigarette	5	4.4	3	2.2	8	3.2
	Gutkha	0	0.0	2	1.4	2	0.8
	Drug	0	0.0	0	0.0	0	0.0
	Sahdah/Raja/Khaini	0	0.0	0	0.0	0	0.0
	Dendrite	0	0.0	0	0.0	0	0.0
	Ganja	0	0.0	0	0.0	0	0.0
III	Father						
	Cigarette	57	50.44	69	49.64	126	50.00
	Dendrite	29	25.66	37	26.62	66	26.19
	Alcohol	17	15.04	23	16.55	40	15.87
	Tuibur	3	2.65	9	6.47	12	4.76
	Gutkha	0	0.00	2	1.44	2	0.79
	Ganja	0	0.00	1	0.72	1	0.40
	Drug	0	0.00	0	0.00	0	0.00
	Zarda pan	0	0.00	0	0.00	0	0.00
	Sahdah/Raja/Khaini	0	0.00	0	0.00	0	0.00

Table 4 (b)
Pattern of Substance Abuse

	User/Drug		Ge				
Sl.No		Male n=113		Fema N=13		Total N=252	
		Frequency	%	Frequency	%	Frequency	%
IV	Brother						
	Cigarette	14	12.39	23	16.55	37	14.68
	Dendrite	6	5.31	8	5.76	14	5.56
	Drug	0	0.00	5	3.60	5	1.98
	Alcohol	1	0.88	2	1.44	3	1.19
	Zarda pan	0	0.00	2	1.44	2	0.79
	Ganja	0	0.00	1	0.72	1	0.40
	Sahdah/Raja/Khaini	0	0.00	1	0.72	1	0.40
	Gutkha	0	0.00	1	0.72	1	0.40
	Tuibur	0	0.00	1	0.72	1	0.40
V	Sister						•
	Tuibur	4	3.54	10	7.19	14	5.56
	Alcohol	6	5.31	7	5.04	13	5.16
	Zarda pan	3	2.65	7	5.04	10	3.97
	Gutkha	2	1.77	6	4.32	8	3.17
	Sahdah/Raja/Khaini	0	0.00	1	0.72	1	0.40
	Cigarette	1	0.88	0	0.00	1	0.40
	Drug	0	0.00	0	0.00	0	0.00
	Dendrite	0	0.00	0	0.00	0	0.00
	Ganja	0	0.00	0	0.00	0	0.00
VI	Relatives				1	,	1
	Alcohol	7	6.19	4	2.88	11	4.37
	Cigarette	6	5.31	5	3.60	11	4.37
	Dendrite	4	3.54	5	3.60	9	3.57
	Tuibur	2	1.77	4	2.88	6	2.38
	Zarda pan	2	1.77	0	0.00	2	0.79
	Ganja	0	0.00	1	0.72	1	0.40
	Drug	0	0.00	0	0.00	0	0.00
	Sahdah/Raja/Khaini	0	0.00	0	0.00	0	0.00
	Gutkha	0	0.00	0	0.00	0	0.00

Table 4 contains nine substances of which five items are different forms of tobacco. It also includes the respondent's relationship with the abusers. Table 4 (I) shows that less than a third of the total (7.94%) (male 15.93%, female 1.44%) reported being drug abusers themselves. Reported substance abuse rate by self for gutkha 5.56%, dendrite 3.97%, zarda pan 3.57%, ganja 2.38 %, and cigarette 1.98%. Chewing form of tobacco, tuibur revealed minimal rate of abuse. In spite of the prevalence of alcohol abuse in the society across age groups, report of alcohol use was nil although this particular age group is expected to display high levels of alcohol abuse. The comparison of males and females with reference to dendrite abuse rate reveal that more females report it as compared to males (male 1.77%, female 5.76%). Likewise, females abusing ganja (male 0.88%, female 3.60%) and cigarette (male 0.88%, female 2.88%) reveal higher score. More females use gutkha than males (male 3.54%, female 7.19%). This can be likely due to the concealing of information by adolescents who may fear school authorities and community leaders. Mizoram actually reports very high incidence and prevalence of all substances withan ncreasing trend towards initiation at younger ages. Injecting drug use, alcohol uses are fairly common while use of use of tobacco is highly common.

Substance abuse of family members may also result in depression, escalating the chances of involving in other risk behaviors. Table 4 (II) indicates substance use by mother of the respondents. Less than half (45.2%) respondents reported that their mothers abusing of alcohol, less than a fifth mothers (21.8%) uses tuibur (a liquid form of tobacco). Table 4 (III) indicates that half of them (50%) reported that their fathers smoke or use forms of tobacco and a quarter or more (26.19%) have fathers chewing tobacco. In Table 4 (IV), less than a sixth (14.68%) of respondents reported brothers who abuse alcohol which was followed by dendrite (5.56%). In Table 4 (V),

5.56% reported that their sister uses tuibur (a liquid form of tobacco) which was followed by their chewing tobacco (5.16%). According to Table 4 (VI), an insignificant minority (4.37%) reported unspecified relatives using alcohol, cigarette and chewing form of tobacco (3.57%). Of the nine substances, tobacco and alcohol are the most common substances abused by the respondents and their families. This could be a significant factor for adolescents depression or depressive symptoms and other risky behaviors as substances used by family increased the risk of smoking for boys and whereas sexual assault / depression increased the risk of smoking for girls (Ron Acierno, et.al. 2000). In many studies, depression is found to have been linked with substance abuse. According to Deykin, et. al. in a study done in 1987, the prevalence of Major Depressive Disorder (MDD) was 6.8%, alcohol abuse was 8.2% and substance abuse was 9.4%. Further, alcohol abuse and MDD were associated while substance abuse and depression as well as other psychiatric diagnoses were associated. On the contrary, the findings in the above tables are very alarming and unexpected since all research indicates very high levels of substance abuse among adolescents.

Table 5
Challenges in the Family

		Gender					
SI. No	Problem in Family	Male n=113		Female N=139		Total N=252	
		Frequency	%	Frequency	%	Frequency	%
	Extra Marital Affair /						
1	Marital Discord	25	22.12	41	29.50	66	26.19
2	Family Conflict	27	23.89	45	32.37	72	28.57
3	Terminal Illness	14	12.39	24	17.27	38	15.08
4	Psychiatric Illness	11	9.73	16	11.51	27	10.71

Table 5 consists of four types of challenges in which two items are health-related. Less than one third (28.57%) of the respondents reported having conflicts within the family. Incongenial home environment may be caused by several reasons and this may lead to adolescents' depression as well as risk behavior. More than a quarter (26.19%) reported having extra marital affair / marital discord in the family may be a cause for family conflict. This is an important finding and it could have multiple effects on family especially on adolescence which is a period of storm and stress (Petersen, et.al. 1993).

Health problems demands good financial support and this is likely to affect family environment ultimately leading to adolescents' depression. In this study, a fifth of the respondents (15.08%) stated that terminal illness in their family and psychiatric illness within their family (10.71%) are likely to be severe challenges that cause depression.

Table 6
Self Perceived School Performance

		Ger	nder	Total	
Sl.No	Sl.No School Performance		Female n=139	Total N=252	
1	Very Weak	5 (4.42)	6 (4.32)	11 (4.37)	
2	Weak	43 (38.05)	53 (38.13)	96 (38.10)	
3	Strong	62 (54.87)	74 (53.24)	136 (53.97)	
4	Very Strong	3 (2.65)	6 (4.32)	9 (3.57)	
	Total	113 (100.00)	139 (100.00)	252 (100.00)	

Source: Computed (Figures in Parentheses are percentages)

Many studies have documented that loss of pleasure, loss of interest and difficulty in concentration are included in depressive symptoms. Therefore, self perception of school performance rating was included in the study. More than a half (male% 54.87, female 53.24%) perceived themselves as strong in school performance while more than a third each (male 38.05%, female 38.13%) expressed they were weak in school performance. There was no remarkable difference found between females and males in this regard.

Table 7

Extra Curricular Activities

	Activity		Ger	ıder			
Sl.No		Male	<b>;</b>	Female	9	Total	
	-	n=113		N=139			
		Frequency	%	Frequency	%	Frequency	<b>%</b>
1	Sports	77	68.1	56	40.3	133	52.8
2	Singing	35	31.0	55	39.6	90	35.7
	Playing Music						
3	Instrument	41	36.3	32	23.0	73	29.0
	Drawing /						
4	Painting	27	23.9	34	24.5	61	24.2
5	Dancing	9	8.0	33	23.7	42	16.7
6	Writing	10	8.8	29	20.9	39	15.5
7	Quiz	12	10.6	10	7.2	22	8.7
8	Debate	3	2.7	6	4.3	9	3.6
9	Extempore Speech	1	0.9	5	3.6	6	2.4
	Extra Curricular						
10	Activities	0.21		0.21		0.21	

(Figures in Parentheses are percentages)

Many studies have revealed that persons having higher participation level in activities have minimum level of depressive symptoms. This is reasonable among adolescents since it is a period when lots of physical activities take place. Participation in different activities is also a good coping mechanism for people having depressive symptoms. More than a half (52.8%) of the total (male 68.1%, female 40.3%) reported being involved in sports. Male participation in sports is much higher than females which is considered normal. More than a third (35.7%) of the total (male 31%, female 39.6%) reported being involved in singing. With reference to playing music instruments, male participation is much higher than female (36.3% male and 23% female). Female participation is higher in dancing and writing. Mizo youth are famous for their participation in sports (excelling in sports like basket ball and

football as well as with reference to music. Church activities on a weekly basis also hone their skills in music and many adolescents would be part of the church choir.

Table 8
Challenges in School

Sl.No			Gen				
51.110	Challenges	Male n=113		Female n =139		Total N=252	
		Frequency	%	Frequency	%	Frequency	%
1	Scholastic Problems	34	30.1	38	27.3	72	28.6
	Poor Assistance in						
2	Homework	17	15.0	30	21.6	47	18.7
3	Poor Peer Relationship	20	17.7	10	7.2	30	11.9
4	Inadequate Financial Assistance	15	13.3	13	9.4	28	11.1
5	Problems with Teachers	7	6.2	9	6.5	16	6.3
	Too Little Extra –						
6	Curricular Activities	5	4.4	3	2.2	8	3.2
7	Bullying	2	1.8	4	2.9	6	2.4

**Source: Computed** 

In Table 8, less than a third (28.6%) reported scholastic problem as the main challenge faced in school. Poor peer relationship (18.7%) was reported as well. poor assistance in homework (11.9%), were among main challenges faced in school. Too many extra – curricular activities (11.1%) and inadequate financial assistance (11.1%) was reported as the main challenges faced in school. Bullying has lowest scores (2.4%) which is a finding that brings relief as it is a serious challenge faced by many students associated with severe emotional and behavior problems (Sourander, et.al.2000).

Table 9
Problem Behaviour in Community

			Gen	der			
Sl.No	Risks	Male n=113		Female n=139		Total N=252	
		Frequency	%	Frequency	%	Frequency	%
1	Truancy	35	31.0	20	14.4	55	21.8
2	Bullying	16	14.2	8	5.8	24	9.5
3	Gang Fight	24	21.2	8	5.8	32	12.7
4	Petty Theft	27	23.9	24	17.3	51	20.2
5	Damaging Community Assets	5	4.4	3	2.2	8	3.2

More than a fifth (21.8%) reported truancy as the most common problem behavior of both female (14.4%) and male (31%) respondents. A fifth (20.2%) have committed petty thefts (male 23.9%, female 17.3%). In comparison between male and female adolescents, it is evident that male adolescents' involvement in problem behaviors in the community is much higher than female adolescents.

Table 10 Sexual Risk Behavior

Sl. No	Sexual Risk	Male n=113		Female n=139		Total N=252	
		Frequency	%	Frequency	%	Frequency	%
1	Watching Pornography	100	88.5	62	44.6	162	64.3
2	Reading Sex Materials from Magazines/ Books beyond study purpose	48	42.5	37	26.6	85	33.7
3	Masturbation	76	67.3	8	5.8	84	33.3
4	Watching Adults having Sex	22	19.5	12	8.6	34	13.5
5	Cyber Sex	27	23.9	6	4.3	33	13.1
6	Phone Sex	22	19.5	8	5.8	30	11.9
7	Involved in Sexual Intercourse	12	10.6	4	2.9	16	6.3
8	Getting Paid in Kind or Cash for Sex	3	2.7	0	0.0	3	1.2

As shown in Table 10, more than two thirds of the total respondents (64.3% - male 88.5%, female 44.6%) reported that they used to watch pornographic materials. One third of the total respondents each reported reading sex materials from magazines/ books (33.7%) and masturbation (33.3%). Less than a sixth (13.5%) reported being involved in watching adults having sex while cyber sex was reported by less than a sixth (13.1%). Respondents reported being involved in phone sex in a tenth of cases (11.9%). Involvement in actual sexual intercourse was reported by 6.3%. In all the sex risk, of male respondents was found to be higher (10.6%) as

compared to females (2.9%). Among younger teens, females were less likely than males to have initiated sexual intercourse in a finding by other research studies elsewhere (Blum, et.al. 2000). This is a serious risk behavior because adolescents who are involved in sexual risk, problem behaviors and nonuse of condoms are most likely to face severe consequences (Biglan, Metzler, et. al., 1990). Although masturbation is not considered as sexual risk by many, regular practices increase the chance of being open to sexually active behavior.

Table 11
Financial Risk Behavior

Sl.	Financial Risk	Male		Femal	e	Total	
No		n=113		n=139	n=139		2
		Frequency			Frequency	%	
1	Borrowing						
	money without						
	parents'						
	knowledge	81	71.7	106	76.3	187	74.2
2	Selling objects						
	without parents'						
	knowledge	5	4.4	3	2.2	8	3.2
3	Working for						
	money without						
	parents'						
	knowledge	61	54.0	51	36.7	112	44.4

**Source: Computed** 

More than two thirds (74.2%) of the total respondents reported that they used to borrow money without their parents' knowledge. Less than a half of the respondents (44.4%) used to work for money without their parents knowledge. Although, item 1 and 3 may not be considered as a risk, frequent practice may result in risk behavior. What these youngsters do with the money borrowed or earned is

unaccounted for and this is a very significant finding. Financial risks is considered as a result of poverty which is linked with teen pregnancy risk and adolescents smoking (Blum, et.al. 2000) since youth in low socio-economic status (SES) neighborhoods perceive greater ambient hazards such as crime, violence, drug use, and graffiti than those in high SES neighborhoods. (Aneshens, et.al. 2006).

Table 12
Social Support for Relationship Problems

Sl. No		Male n=113		Female n=139		Total N=252		
		Frequency	%	Frequency %		Frequency	%	
I								
	Person Most	Turned to	T		T	T		
	Friends	59	52.2	83	59.7	142	56.3	
	Mother	19	16.8	42	30.2	61	24.2	
	Sister	11	9.7	30	21.6	41	16.3	
	Father	12	10.6	14	10.1	26	10.3	
	Relatives	10	8.8	8	5.8	18	7.1	
	Brother	11	9.7	6	4.3	17	6.7	
	Teacher	1	0.9	4	2.9	5	2.0	
	Neighbor	1	0.9	0	0.0	1	0.4	
	Mode of help	0	I		I	T	T	
	Discussing	45	39.8	68	48.9	113	44.8	
II	Giving advice	43	38.1	68	48.9	111	44.0	
	Listening	16	14.2	25	18.0	41	16.3	

**Source: Computed** 

More than a half (56.3%) reported that they turned most frequently to friends for support (male 52.2 % female 59.7%) and less than a quarter (24.2%) respondents reported that they turn to mother. This figure was more than double in the case of adolescent girls as compared to boys. Table 2(II) shows that less than a half (44.8%) respondents reported that discussion is the most common mode of help they received. Giving advice is also a very common mode of help (44%).

Table 13
Social Support for Scholastic Problems

			Gen	der			
Sl. No		Male n= 11		Female n=139		Total N=252	
		Frequency %		Frequency	%	Frequency	%
	<b>Person Most Turn to</b>						
I	Teacher	49	43.4	66	47.5	115	45.6
	Mother	43	38.1	71	51.1	114	45.2
	Father	29	25.7	41	29.5	70	27.8
	Relatives	23	20.4	25	18.0	48	19.0
	Sister	16	14.2	22	15.8	38	15.1
	Friends	15	13.3	22	15.8	37	14.7
	Brother	13	11.5	11	7.9	24	9.5
	Neighbor	1	0.9	3	2.2	4	1.6
II	Mode of help						
	Teaching	81	71.7	107	77.0	188	74.6
	Paying tuition fees	18	15.9	31	22.3	49	19.4
	Giving extra class	13	11.5	11	7.9	24	9.5

**Source: Computed** 

Less than a half (45.6%) reported that they turn to teachers for scholastic problems and less than a quarter (24.2%) respondents reported that they turn to the mother for help. The females who turned to mother outweigh that of the males. Respondents reported that teaching is the most common mode of help they receive for

scholastic help (74.6%). Less than a fifth (19.4%) reported that paying for tuition fees is mode of help they received.

Table 14 Social Support for Financial Problem

			Ger	ıder						
Sl.NO		Male n=113		Female n=139		Total N=252				
		Frequency	%	Frequency	%	Frequency	%			
	Person Most Turned to									
I	Mother	62	54.9	93	66.9	155	61.5			
	Father	47	41.6	67	48.2	114	45.2			
	Relatives	29	25.7	34	24.5	63	25.0			
	Friends	15	13.3	23	16.5	38	15.1			
	Sister	10	8.8	16	11.5	26	10.3			
	Brother	8	7.1	6	4.3	14	5.6			
	Teacher	1	0.9	5	3.6	6	2.4			
	Neighbor	0	0.0	3	2.2	3	1.2			
	Mode of help									
II	Giving allowances	90	79.6	119	85.6	209	82.9			
	Lending money	15	13.3	25	18.0	40	15.9			
	Paying through									
	work	4	3.5	3	2.2	7	2.8			

**Source: Computed** 

In times of financial problems, almost two thirds (61.5%) reported they turn to the mother and less than half (45.2%) reported that they turn to father. An overwhelming majority (82.9%) reported that giving allowances is the most common mode of help. And less than a sixth (15.9%) received help through lending money. Many studies on adolescents discuss the problems faced by them in reference to relationships, financial difficulties and school. These are important areas of research that suggest directions for further study and in reference to policy.

Table 15 Social Support for Psychological Problems

			Ger					
Sl. NO		Male n=113		Femal n=139	-	Total N=252		
110		Frequency	%	Frequency	%	Frequency	<b>%</b>	
	<b>Person Most Turned</b>	to						
I	Friends	39	34.5	61	43.9	100	39.7	
	Mother	42	37.2	53	38.1	95	37.7	
	Sister	10	8.8	35	25.2	45	17.9	
	Father	22	19.5	20	14.4	42	16.7	
	Relatives	20	17.7	13	9.4	33	13.1	
	Brother	8	7.1	9	6.5	17	6.7	
	Teacher	7	6.2	5	3.6	12	4.8	
	Neighbor	1	0.9	0	0.0	1	0.4	
II	Mode of help							
11	Giving advice	52	46.0	74	53.2	126	50.0	
	Discussing	29	25.7	66	47.5	95	37.7	
	Listening	21	18.6	20	14.4	41	16.3	

More than a third (39.7%) reported that they seek help from friends and mother (37.7%) in reference to psychological problems. Respondents reported that giving advice (50 %) and discussion (37.7%) are the most common mode of help they received.

Table 16
Social Support for Family-related Problems

Sl. NO		Male n=113		Femal n=139		Total N=252				
		Frequency	%	Frequency	%	Frequency	<b>%</b>			
	Person most turn	on most turn to								
I	Relatives	31	27.4	43	30.9	74	29.4			
	Mother	28	24.8	43	30.9	71	28.2			
	Father	28	24.8	21	15.1	49	19.4			
	Friends	10 8.8		36	25.9	46	18.3			
	Sister	10	8.8	13	9.4	23	9.1			
	Neighbor	4	3.5	8	5.8	12	4.8			
	Brother	7	6.2	4	2.9	11	4.4			
	Teacher	2	1.8	2	1.4	4	1.6			
	Mode of help									
II	Giving advice	52	46.0	69	49.6	121	48.0			
	Discussing	25	22.1	45	32.4	70	27.8			
	Listening	18	15.9	24	17.3	42	16.7			

Less than a third (29.4%) reported they turn to relatives and more than a quarter turn to mother (28.2%).Less than a half (48%) reported that giving advice is the most common mode of help and more than a quarter (27.8%) received discussion as a mode of help.

Table 17
Social Support for Health problems

Sl.			Ge				
NO		Male n=113		Female n=139		Total N=252	
		Frequency	%	Frequency	%	Frequency	%
I	Person most turn	to					
	Relatives	73	64.6	105	75.5	178	70.6
	Mother	47	41.6	57	41.0	104	41.3
	Father	47	41.6	37	26.6	84	33.3
	Friends	25	22.1	22	15.8	47	18.7
	Sister	6	23.0	17	12.2	43	17.1
	Neighbor	16	14.2	18	12.9	34	13.5
	Brother	7	6.2	10	7.2	17	6.7
	Teacher	9	8.0	5	3.6	14	5.6
II	Mode of help						
	Taking to doctors	54	47.8	81	58.3	135	53.6
	Nursing at home	57	50.4	55	39.6	112	44.4
	Buying medicines	44	38.9	48	34.5	92	36.5

More than two thirds (70.6%) reported that they turn to mother and more than one third (41.3%) respondents reported that they turn to father for help. Again more than half (53.6%) respondents reported that going to a doctor is the most common mode of help. Less than a half (44.4%) responded that nursing at home is the mode of help they received and more than one third (36.5%) reported buying medicine is a mode of help they received.

It is evident from the above tables (12-17) that mothers play a major role in giving social support and also female respondents are found to be closer with mothers than male respondents. Friends play a significant role in providing social support especially for relationship problem and psychological problems as social support from peers and the family are important coping resources, and if an individual is lacking in these support systems it could result in self-damaging cognition and possibly even lead to suicidal behavior during stressful life events (in Maxwell, 2002). However, brothers score lowest among the family members in all the five tables.

Table 18 Beck's Depression Inventory II

	Deek 9 De			ender			
Sl.No		Male n=113			T		otal 252
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	Sadness Pessimism Past Failure Loss of Pleasure Guilty Feelings Punishment Feelings Self-Dislike Self-Criticalness Suicidal Thoughts or Wishes Crying Agitation Loss of Interest Indecisiveness Worthlessness Loss of energy Changes in Sleeping pattern Irritability Changes in Appetite Concentration Difficulty	Mean 0.6 0.7 1.1 0.7 1.0 0.9 0.3 1.1 0.3 0.6 0.7 0.4 0.8 0.7 0.3 1.0 0.6 1.0 0.8	S.D 0.5 0.7 0.9 0.8 0.7 1.1 0.6 0.8 0.6 1.1 0.9 0.6 0.7 0.8 0.6 0.7 0.8	Mean 0.8 0.8 1.1 0.8 1.1 1.0 0.5 1.0 0.5 1.2 0.7 0.6 0.8 0.9 0.6 1.0 0.7	S.D 0.4 0.7 0.8 0.6 0.9 0.7 0.8 0.6 1.1 1.1 0.8 0.7 0.9 0.6 0.7 0.9	Mean 0.7 0.8 1.1 0.7 1.1 0.9 0.4 1.0 0.4 0.9 0.7 0.5 0.8 0.8 0.5 1.0 0.7 1.0 1.0	S.D 0.5 0.7 0.8 0.6 1.0 0.7 0.8 0.6 1.1 1.0 0.7 0.7 0.9 0.6 0.7
20 21	Tiredness or Fatigue Loss of interest in Sex	0.6 0.3	0.6 0.6	0.8 0.3	0.8 0.8	0.7 0.3	0.7 0.7

Level of Depression			
Minimal(0-13)	48	51	99
	(42.5)	(36.7)	(39.3)
Mild(14-19)	40	44	84
	(35.4)	(31.7)	(33.3)
Moderate(20-28)	20	29	49
	(17.7)	(20.9)	(19.4)
Severe(29-63)	5	15	20
	(4.4)	(10.8)	(7.9)

According to the BDI II, more than one third of the total respondents (39.3%) are within the range of minimal score (0-13). And one third (33.3%) of the respondents belong to the mild range (14-19). Less than a fifth (19.4% - male17.7 %, female 20.9%) are within the range of moderate (20-28). Less than a tenth of the respondents (7.9% - male 4.4%, female 10.8%) rate themselves belonging to severe range (29-63). Females are higher in both moderate and severe range as compared to male. Adolescent girls have been found to rate negative life events as more stressful than boys (in Petersen, et.al.1991).

Table 19

Relationship between Family and School. Risk Behaviour and Depression:
Zero Order Correlation Matrix

	Variable	Var01	Var02	Var03	Var04	Var05	Var06	Var07	Var08	Var09
Age	Var01	1	-0.06	-0.11	0.03	0.15**	-0.04	0.22**	0.04	-0.05
Family Relationship	Var02	-0.06	1	0.10	-0.05	-0.03	0.00	-0.03	0.04	0.15**
Extra Curricular Activities	Var03	-0.11	0.10	1	0.20**	0.09	0.15**	0.09	0.21**	0.08
Challenges in School	Var04	0.03	-0.05	0.20**	1	0.02	0.16**	0.12*	0.16**	0.16**
Substance Use Index	Var05	0.15**	-0.03	0.09	0.02	1	0.22**	0.23**	0.23**	0.16**
Risk Behavior in Community	Var06	-0.04	0.00	0.15**	0.16**	0.22**	1	0.37**	0.27**	0.17**
Sexual Risk	Var07	0.22**	-0.03	0.09	0.12**	0.23**	0.37**	1	0.28**	0.20**
Financial Risk	Var08	0.04	0.04	0.21**	0.16**	0.23**	0.27**	0.28**	1	0.15**
Depression	Var09	-0.05	0.15**	0.08	0.16**	0.16**	0.17**	0.20**	0.15**	1

Karl Person's correlation co-efficient was used to understand the correlation between family, school, risk behaviors and depression. Age has correlation with sexual risks (0.22) and substance abuse (0.15). Family relationship directly correlates with depression (0.15). Extra curricular activities have correlation with challenges in school (0.20), risk behaviors in community (0.15) as well as financial risks (0.21). Challenges in school have correlation with risk behaviors in community (0.16), sexual risks (0.12), financial risks (0.16) and depression (0.16). Substance use has correlation with risk behavior in community (0.22), sexual risk (0.23), financial risk (0.23) as well as depression (0.16). Risk behaviors in community have correlation with sexual risk (0.37), financial risk (0.27) and depression (0.17). Sexual risk behavior has correlation with financial risk (0.28) and depression (0.20). Financial risks have correlation with depression (0.15). Depression has correlation with family relationship (0.15), challenges in school (0.16), substance use (0.16), risk behaviors in community (0.17), sexual risk (0.20) and financial risks (0.15).

## **Conclusion and Suggestions**

## 5.1 Conclusion

The focus of the study is on "Mental Health of Adolescents: Depression, Coping and Risk Behavior among Secondary School Students in Mizoram". Sampling was drawn from two Government schools in Aizawl from different localities using a Structured Questionnaire of data collection and Becks Depression Inventory was used to find out the prevalence of depression among the adolescents. 252 completed questionnaires were returned. Due to paucity of time respondents answered under time pressure which may hamper the result.

The objectives of the study are to understand prevalence of depression among secondary school-going adolescents in Mizoram, to identify the causes of depression across gender among secondary school-going adolescents, to understand the risk behavior across gender among secondary school-going adolescents, to understand the differences across genders with reference to coping patterns, and to suggest measures for Social Work intervention with secondary school-going adolescents.

This study revealed that depression is present among adolescents in Mizoram although not high in number yet very significant in reference to gender. Depressive symptoms are fairly common among adolescents. Poor family relationship, substance abuse, academic performance, sexual risks, problematic behaviors as well as financial risks are found to be the main factors contributing to depression among adolescents. Adolescents' involvement in risk behaviors such as substance use, financial risks, sexual risks and risky conducts in community are frequent and very high especially in reference to sexual risk and financial risk. Males are more vulnerable to sexual risk, problematic behaviors in community such as petty

thefts, truancy, gang fight and bullying as well as financial risks whereas females are found to be more depressed. This finding is corroborated by other studies as it is more common among females than males during adolescence. Sexual risk behavior is the most common risk involved by both male and female. There is not much difference between female and male with reference to social support and coping with challenges. Social support is minimal but present within the primary level and mother is seen as most supportive person.

## 5.2 Suggestions for Social Work Intervention

Suggestions for social work intervention emanate from this study are-

- Policy suggestions include better networks between Government and NGOs to promote adolescents mental health. School mental health programs can directly address risk behavior, depression, suicidal ideation and substance abuse.
- 2. Research implications of this study suggest that more studies are required on issues related to perceived social support, sexual risk behavior, financial risk behavior and depression and causes of depression.
- 3. Program implication of the study include
  - a) Life-skill workshops for adolescents to cope with challenges they face at school, family and community. Such workshops need to address issues related to assertive skills of adolescents, refusal skills to withstand the pressures related to substance abuse, sexual risks and other challenges. Further communication skills are required to help them learn better style of communication within family, among peers and in the community.

- b) Awareness Campaign across age groups to highlight significance of mental health of adolescents, their vulnerability to risk behaviors and prevalence of depression.
- c) Establishment of more recreational facilities. Adolescents in and out of schools do not have many recreational facilities for channeling their energy in healthy activities which could prevent hem from risky behavior.
- d) Parenting skills workshop is required because problems between parent and adolescents may result in depression and risk behavior among adolescent.

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