Exploring the Risk Factors of Suicide Attempters Among Young Individuals

Khalida Rauf* Naiza Parvaiz**

Abstract

Suicide has been described as the act of intentionally ending one's own life. It is one of the leading causes of death and a major public health concern. The present study was designed to examine the potential causes of suicidal acts through qualitative research design. The sample comprised 30 individuals admitted to Jinnah hospital, who tried to attempt suicide. The participants were selected by purposive sampling and the data were gathered by qualitative semi-structured individual interviews. Data were analyzed using the conventional approach, whereby the content was analyzed to identify codes, categories, and themes. The results indicated four main themes from the current study, which included family factors, social factors, environmental factors, and individual factors. These results have important implications for the prevention of suicide. Psychological clinic practitioners and prevention programs should include the above factors in their assessment checklist.

Keywords: Risk factors; self-harm; suicide; suicide attempt; suicidal behaviors; suicidal ideation.

JEL Classification: Z 000

1. Introduction

Life is a precious gift from God. Each year eight hundred and thousands of people end their life by committing suicide (World Health Organization, 2014). In other words, every 40 seconds, one person dies by suicide. People die, life changes, people come and go, but life goes on. It is believed that for every problem there is a solution, which can be resolved individually or with the coordination and facilitation of relatives and friends.

^{*}Department of Psychology, Federal Urdu University for Arts, Science & Technology, Karachi, Pakistan. Email: drkhalidarauf@yahoo.com

^{**}Department of Psychology, Federal Urdu University for Arts, Science & Technology, Karachi, Pakistan. Email: Naiza123parvaiz@gmail.com

Suicide is an act of intentionally ending one's own life, while a suicide attempt can be defined as potentially self-injurious behavior with an aim to end one's life, but with an innocuous upshot (Esposito- Smythers & Goldston, 2008). The center for Disease Control defines suicide as a corrigible self-directed, detrimental event, where there is an intention to die, but the attempt may not result in injury (Centre for Disease Control, 2016). These definitions clearly indicate that suicide is an attempt with the intention to end one's life.

1.1 Types of suicide:

The following types of suicides are given by Durkheim (1897) based on different ideologies:

1.1.1 Altruistic suicide

Altruistic suicide transpires when involvement is inordinately high in society. They sacrifice their lives in order to fulfill some obligation for a group or society, for example, Japanese kamikaze pilots give their lives in the hope that they win. Captain Rashid Minhas Shaheed crashed his plane to prevent the hijack plan of the enemy. These people believed in their nation's cause (Lee, 2018; Lubell et al., 2002). Guardian reported the incidence of child sacrifice for goddess Kali in Uttar Pradesh, India.

1.1.2 Anomic suicide

Anomic suicide is committed during periods with high levels of frustration and stress, which is unexpected and sudden, like disappointment or extreme financial loss. According to research, during the economic upheaval, the ratio of suicide among people of 15 to 64 years increases (Sternheimer, 2011).

1.1.3 Fatalistic suicide

Fatalistic suicide is committed by individuals who are kept under strict rules and regulations or placed under high expectations, which destroys their sense of self and individuality. Examples of fatalistic suicide may be persecution and slavery where an individual chooses suicide in order to escape from such a detrimental situation. Celebrities in South Korea, like Kim Jong-Hyun, attempted suicide due to the pressure of being in the spotlight (Cheng et al., 2007).

1.1.4 Egoistic suicide

Egoistic suicide is committed when individuals feel that they are alienated. These feelings stem from the absence of social integration. Such individuals receive no social care and support, which leads them to commit suicide in order to escape from being an outlier (Lee, 2018; Lubell et al., 2002).

1.1.5 Prevalence

Suicide is a global phenomenon. Worldwide, each year 1.5 million people commit suicide. This means that 12 out of 100, 000 people are involved in a suicidal act. For each person who dies by suicide, ten people have attempted suicide (World Health Organization preventing suicide, 2014). Worldwide, 1.4 million people ended their lives in 2017. It is approximated that about 1.5 million people put an end to their lives through suicide in 2020. In 2016, the suicide rate in Pakistan as given by the World Bank was 7.28 per thousand individuals.

Although suicide affects all age groups, during recent years it has been witnessed and reported that the ratio has increased among the adults aged 25 to 44 years as compared to the older adults between the age of 65 and above. The global mortality rate of suicide is 16 per hundred thousand males and 7 deaths per hundred thousand females (WHO, 2016). In 2017, the suicide rate for males was 13.9 deaths per hundred thousand and 6.3 deaths per hundred thousand for females. The methods of suicide attempts vary from country to country, and it is also associated with access to murderous means (Chen et al., 2011). Women mostly self-poison, while men hang from fans or firearms (Kaplan et al., 2009).

1.1.6 Risk factors

According to the American Psychological Association (APA), risk factors can be defined as any environmental, psychological, or other characteristics that can increase the possibility of developing a disease or disorder. Suicide has multiple triggers. It is often associated with stressful life events, health issues, daily life stressors, and accompanied by a feeling of hopelessness. Mental illnesses like major depression, substance abuse and psychosis are the main predictors of suicide. Anxiety, personality, eating, and trauma-related disorders also contribute to suicidal thoughts (Bachmann, 2018). A suicide attempt may be associated with various psychological, social and medical conditions. Psychological and social studies suggest that contextual factors such as unemployment, divorce rates also contribute to suicide rates (Rehkopf & Buka, 2006). Whereas, some studies have indicated that low socioeconomic status, isolation, and limited access to mental health facilities may contribute to high suicidal rates (Hirsch & Cukrowicz, 2014) that erupt from stressful events and are thoughts of past memories or painful events (Phillips et al., 2007). It should be noted that suicide attempts increase with the increasing number of risk factors (Luoma et al., 2002).

1.2 Problem statement

The current study aims to explore the risk factors that can trigger the act of suicide. According to Kessler et al. (1999), suicide attempts have been reported to be a cry of help from someone at the time they feel desperate to live their lives and are unable to solve stressful life events (Luoma et al., 2002). In the light of these researches, this study aims to explore the causes that where did as mothers, as a fan there and as friends we go wrong? Why do the individuals resist sharing their feelings with their loved ones and embracing suicide? As far as the researchers' knowledge goes, his topic has not been studied using the qualitative method, which provides deeper insights into the issues. The findings of this study may guide the practitioner to set interventions for its prevention.

1.3 Research questions

This research aims to explore the answers to the following questions:

- 1. What are the risk factors that lead a person to attempt suicide?
- 2. What are the most common factors that lead to attempting suicide?
- 3. Which methods are common for suicidal attempts?

2. Literature Review

2.1 Suicide and Culture

Suicide attempt and actual suicide is a phenomenon that occurs in every culture, but the methods and frequency may vary from culture to culture (Canetto, 2008). A person's age, sex, family background, religious background, types of people involved also differ within cultures. Lester (1998) argued that suicide models have to be grounded culturally.

2.2 Cultural script theory

Cultural script theory is rooted in social psychology and anthropology. States that suicide is a behavior that is modeled socially (Canetto, 1997; Canetto & Lester, 1998). This theory represents scripts of culture or narratives about people who commit suicide. The theory elaborates the different ways and reasons for ending their lives in different cultures. This theory presents writings for ethical and non-ethical suicide. Ethical suicide is validated socially and non-ethical suicide is stigmatized socially. Good scripts of suicide dictate permission of committing this act. As in European and American countries, suicide is expected from those patients who are terminally ill and disabled (Stice & Canetto, 2008). This indicates that suicide is acceptable in the West and is common, which leads to a higher rate of suicides among older adults. Positive script increases the propensity of suicidal thoughts (Eshun, 2003; Gutierrez et al., 2000; Joe et al., 2007; Limbacher & Domino 1985; Stein et al., 1998).

2.3 Suicide process:

Suicidal ideation is an initial process that leads to suicidal plans, suicidal attempts, and complete suicide. Ideation includes thoughts and feelings about suicide (Arria et al., 2009; Harris & Barraclough, 1997). Gould and Kramer's (2001) study showed that thoughts about suicide consists of multiple stressful life events like the socio-economic status of the family, substance use, impulsivity, aggressiveness, poor communication with family, low performance in the work setting, relationship problems, low self-esteem, family history of suicide, exposure of suicide, prior suicide attempts, personality issues, discord in the family, homosexual orientation, impaired strategies of coping, abuse physically, abuse sexually, ethnicity, mental disorders (depression, anxiety, bipolar disorder) and hopelessness (Cukrowicz et al., 2004; Furr et al., 2001; Gutierrez et al., 2000; Hintikka et al., 2008; Konick & Gutierrez, 2005; Smith et al., 2006; Spirito et al., 2005; Stephenson et al., 2006).

2.4 Suicide rate in Pakistan

According to the World Bank (2017), Pakistan's death rate in 2016 was 7.28 per 100,000 people whereas, in 2015, it was 1.4 deaths per 100,000 people. First suicidal attempts, on the other hand, account for only.1.2 percent of all deaths. Over 300 suicide deaths were recorded in Pakistan over a two-year period, according to one study of suicide reports from 35 different cities (Khan & Reza, 2000). The results revealed that males outnumber females by a factor of two and that the majority of male suicides are unmarried men and the same is true for female suicides. According to a study, the majority of female suicides occur in women under the age of 30, with domestic issues being the most common explanation given. Unemployment, health problems, poverty, homelessness, family tensions, depression, and a number of social factors and reasons are among them. Suicide in Pakistan is most often carried out by hanging, using insecticides, or using weapons.

2.5 Suicide and risk factors

Low socioeconomic status, exposure to suicide, mental disorder, unemployment, isolation, helplessness, interpersonal relationship problems, hopelessness, (Guitierrez et al., 2000) hostility, disorientation, substance abuse, lack of social support and low education are the risk factors that can contribute to suicide (Suokas et al., 2010).

Wagner's study (1997) also validates the contribution of these factors to suicidal behavior. Childhood maltreatment includes bullying, school violence, criminal victimization (Johnson et al., 2002). Strict parents, extreme problems in the family and poor communication with family members are other factors contributing to suicide (Wagner, 1997).

2.5.1 Interpersonal relationship

Research supports that negative life experiences and interpersonal problems may play a predictive role in suicidal activity in later life. Parenting either overprotective or avoidant also envisages suicidal behavior in their later lives (Garber et al., 1998). Individuals with problems in interpersonal relationships commit suicide with a non-fatal outcome especially those who have a strained relationship with their guardians as children (Heikkinen et al., 1993). The relationship is found among burden of emotions and thoughts about suicide, plan about suicide, and attempt suicide with a non-fatal outcome and complete suicide (Hill et al., 2018).

2.5.2 Unemployment

Suicide has been connected to a number of social circumstances which include unemployment and poverty (Skapinakis et al., 2006). Longitudinal research using mixed methods to account for observed and unobserved mystifying patterns showed that the unemployment period was positively associated with suicidal ideation (22.9 percent of the sample, p0.005), and slightly positively associated with suicidal attempts (6.3 percent of the cohort, p>0.40), among a cohort of young adults (n=1053) (Fergusson et al., 2001).

2.5.3 Substance abuse

Alcohol and substance use disorders have been shown to be strongly linked to the risk of suicide (Poorolajal et al., 2015). Individuals with a substance use disorder (i.e., a diagnosis of addiction or dependency on alcohol or drugs) are almost six times more likely than those without substance use disorder to experience a lifetime suicide attempt (Kessler et al., 1999). According to numerous reports, suicide attempts in the past and current suicidal thoughts are widespread among people who are undergoing drug and alcohol treatment (Ilgen et al., 2010; Roy, 2009).

2.5.4 Hostility

The connection between hostility and suicidal behavior has been studied extensively. Some of these researches used non-clinical samples or focused on the broader occurrence of intentional injury to self, yielding just circumstantial confirmation (Aubert et al., 2004). Most of the researches that found clear evidence of a correlation between aggression and completed suicide is retroactive, as compared to the people who attempted suicide with a non-fatal outcome, were mentally ill, but did not commit suicide and the people who completed suicide were the ultimate sufferers (Conner et al., 2001).

2.5.5 Marital status

Marital status is one of the major components which contributes to suicidal thoughts. Being single, separated, divorced, and widowed may lead to suicidal behavior (Smith et al., 1988). Rao conducted a study on the relationship of marital status with suicide attempt in India. Rao concluded that marital status is not the only predictor of suicide, while social integration and family support are more significant (Rao et al., 1982). In developing countries, there is little evidence that marital status can lead to suicide. According to Kposowa et al. (1995), marriage provides the strongest defense against suicide for the reason it allows society and group incorporation and decreases community alienation. According to Durkheim marital status in both genders has been presumed to be interrelated with suicide; however, it is also stated that suicidal behavior can be a result of the interaction of psychological (Riabchych & Kapkan, 2021), culture (Cornutiu & Cornutiu, 2014), and social and biological factors (Russell et al., 2017). According to Cavanagh et al. (2003), among married women, husband's infidelity is also a risk factor of suicide.

2.5.6 Mental disorders

Adults who are engaged in suicide attempts reported that their suicide attempts are due to depression (Bae et al., 2005; Evans et al., 2004; Garlow et al., 2008; Konick & Gutier-rez, 2005; Spirito et al., 2005; Westefeld et al., 2006). Various studies show the link between hopelessness and suicide attempt, suicidal ideation and actual suicide (Esposito-Smyther & Christianne, 2005).

2.6 Low socioeconomic status

Poverty and suicide rates were found to be linked in a structured study of public level researches (Hiyoshi et al., 2018). The greater ratio of suicide is related to the higher ratio of unemployed people (Stuckler et al., 2009). Furthermore, there is evidence that social stability and suicide have an inverse relationship (Baller & Richardson, 2002). According to a more recent meta-analysis, unemployment was found to be linked to suicide (Milner et al., 2013). After adjusting for previous mental health, the relative risks of these interactions were decreased. A review of American youths, which is based on the family circle and financial burden as determined by earning of family members was found to be linked firmly to suicide or suicide ideation (Pan et al., 2012). Quantitative meta-studies point to mental illness as a potential mechanism linking low SES levels to the greater possibility of suicide allowing for causality in both directions. Although low SES may be the cause of poor mental health, it might be the result of mental illness. Various researches indicate that mental wellbeing and socioeconomic status are related over time.

2.6.1 Suicide and domestic violence

Violence at home with the marital partner erupts violence and is characterized as a form of persistent dominance directed, which gives vent to physical, sexual, and/or psychological assault (Oram et al., 2017). Abuse at home has recently received a lot of attention from researchers and human rights activists as a cause of suicide attempts in women (Indu et al., 2017). Intimate partner abuse seems to be one of the most consistent components for a non-fatal attempts by women in an international report (Kavak et al., 2018). The original suicide theorist, Emile Durkheim, famously suggested in the 1800s that women's rate of actual suicide is low for the reason that they chose to remain in the safe confines of the home (Braswell & Kushner, 2006). Suicidal activity among women has received relatively little attention as a public health issue, despite subsequent studies criticizing Durkheim's thesis (Canetto & Lester, 1998).

2.6.2 Interpersonal violence

Interpersonal abuse is related to a greater chance of suicide and is more prevalent in people with mental illness due to a number of causes. Since violence is linked with the intensity of drug abuse, it may be used as a surrogate measure for the relationship between substance abuse severity and the possibility of suicide (Chermack et al., 2000). Furthermore, aggression has been linked to increased impulsivity, which is again linked to a higher risk of suicide. According to Kral's (2010) study, people who injure themselves have established the potential to do so through prolonged exposure to aggression and unpleasant stimuli. Inflicting harm on another person may be a form of behavioral rehearsal for suicidal actions

Conclusively, many factors contribute to suicide attempts and these risk factors increase the possibility of suicide attempts. The current study investigates these risk factors, which can lead the person to a suicide attempt. By knowing the risk factors, suicide attempts can be prevented by designing effective interventions.

3. Methodology

The current study is based on a qualitative research method using a phenomenological approach. The sample of the current study consisted of 20 participants who were approached through purposive sampling. Ten participants were men and 10 were women, who had attempted suicide. The participants' age was between 18 to 35 years. The data was collected from Jinnah Post Graduate Medical Centre, Karachi.

3.1 Exclusion and inclusion criteria

The exclusion and inclusion criteria are as follows:

- The participants who attempted suicide were included.
- The participants with physical disabilities and attempt suicide were also included.
- Only those participants who were able to talk about their traumatic experiences were included. Participants with severe mental illnesses were excluded.
- Patients above 35 years were excluded.

3.2 Measures

3.2.1 Demographic form

The demographic form consists of 9 questions that gather information about the background of participants. The demographic form includes the eligibility criteria of participants such as age, gender, education, socio-economic status, family structure, marital status, occupation and religion.

3.2.2 Questionnaire for suicide attempt

This open-ended questionnaire of a suicide attempt is in the Urdu language, which consists of 24 items dealing with the risk factors of a suicide attempt which covers social, psychological and physical aspects. Items are rated on open-ended detailed answers. This open-ended questionnaire takes 1 hour to administer.

3.2.3 Ethical considerations

Entire research participants are participating in this research voluntarily and participants were informed by the researcher that any information of the participants will not be disclosed, as well as confidentiality matters have been assured to all participants.

3.2.4 Procedure for data collection

Before the interview of participants, the administration of hospitals was approached and informed consent was signed. The researcher describes the objective of the study and permission for taking interviews of patients. After getting permission from authorities of hospitals participants were approached. Participants were informed about the purpose of the study. When they agreed to participate, they are requested to give verbal and written consent. They were assured that their information will be kept confidential. After taking the consent of the participants the researcher interviewed the patient with the help of an open-ended questionnaire of the suicide attempt. The researcher gave a briefing about the research's objective to participants. In order for the participants to take the interview seriously and respond honestly, the researcher emphasized the significance of the suicide issue and also put a great emphasis on the increasing rate of suicide attempts among youth. This interview takes around 45 minutes to 1 hour to complete. The queries of participants were also entertained for the questionnaire. Complete interviews were recorded in audio for the data analysis and scored through conventional content analysis of the qualitative approach.

3.2.5 Data analysis procedure

A conventional approach is used to determine the research questions. The qualitative method is employed to analyze the data by the conventional approach of content analysis.

3.3 Operational definitions

Suicide: The act of taking one's own life is referred to as suicide (Lippincott et al., 2006).

3.3.1 Suicide attempt

A suicide attempt is characterized as a voluntarily, possibly harmful action accompanied by the non-fatal result and proof of aim to lose one's life (either direct or indirect) (Esposito-Smythers & Goldston, 2008).

3.3.2 Suicidal ideation

Suicidal ideation is described as any self-reported desire to commit suicide or become involved in suicide-related actions (O'Carroll et al., 1996), rather than the behavior itself, intent refers to the behavior's intention, meaning, or objective (Silverman et al., 2007).

3.3.3 Self-harm

Self-harm is characterized as voluntarily, possibly harmful actions for which there is proof (implicit or explicit) that the individual did not plan to kill himself (i.e., had no intent to die) (Silverman et al., 2007).

3.3.4 Suicide threat

A suicide threat is characterized as any interpersonal activity, verbal or nonverbal, that a rational individual would perceive as signaling or implying that suicidal behavior will occur in the near future (Silverman et al., 2007).

3.3.5 Suicidal related behavior

Suicide-related activity is self-inflicted, potentially suicidal actions for which there is proof (either explicit or implicit) that: (a) the person intents to end their lives to accomplish any other goal; or (b) the individual intents to kill himself/herself to some undetermined or known degree (Silverman et al., 2007).

4. Results

4.1 Individual factors

Results of the study show that 27.88% of individuals attempt suicide due to individual factors, which include psychological and emotional problems, previous suicide attempts, depression, chronic illness, regrets and interpersonal relationships. Many individual factors play key roles in the destruction of self-life, one among them is psychological issues. Research suggests that the presence of depression is believed to be one of the vital precursors for suicide attempts in youths (Apter, 2010; Hawton, 1999). In the current study, 18% of individuals attempt suicide due to major depressive disorder which is the highest percentage among all risk factors. There is evidence that psychiatric disorders increase the risk of suicide most importantly affective disorders (Page et al., 2004; Qin & Nordendtof, 2005; Shaffer, 1996). Exploration shows that 60% of young men and 44% of young ladies who attempted suicide have manifestations of moderate depression (Ssegonja et al., 2019). A few examinations have discovered lower self-esteem in young people who belong to this group (Wilde, 2000).

In the current study, 6.83 % of individuals attempt suicide due to the risk factor of psycho-emotional problems like guilt, hopelessness and worthlessness. Various studies showed that suicide attempts are characterized by a greater level of mental pain especially hopelessness. Beautrais et al found that hopelessness is a major risk factor of suicide attempts (Beautrais et al., 1999). Soloff found that suicide attempters are more impulsive and aggressive than people who actually commit suicide (Soloff et al., 1994).

This study shows that 7.38,% of individuals who attempt suicide had a history of previous suicide attempts rendering them more vulnerable to suicidal ideation, attempts and actual suicide (Leon et al.,1990; Coryell & Young, 2005). The history of suicide attempts strongly predicts that an individual will attempt suicide again (Brown et al., 2000). After a suicide attempt, the time ranges from an attempt to two years people are at risk of the suicide attempt. The presence of mental disorders and female gender are potential factors for repeated suicide attempts (Christiansen & Frank Jensen, 2007). The possible reason for the higher risk of female gender for a repeated suicide attempt may be explained by the higher rate of depression among women (Piccinelli & Wilkinson, 2000).

Chronic illness is one of the major risk factors of the suicide attempt. In the current study, 6..83% of individuals attempt suicide due to chronic illness. Individuals with chronic diseases also suffer from psychological and social problems such as fear of death, hopelessness, dependent on others, extreme sadness and loneliness (De la Grandmaison et al., 2014; Bag, 2014). Individuals with chronic illness who are unable to cope with illness and perceive their illness as a burden feel overwhelmed and exhibit suicide-related behaviors (Ahn et al., 2010).

Table 1

| Case | Gender | Age | Frequency of attempt | Method of suicide attempt |
|------|--------|-----|-------------------------|------------------------------|
| 1 | Men | 24 | 1 | Hanging |
| 2 | Men | 25 | 1 | Firearm |
| 3 | Men | 23 | 1 | Pesticide poisoning |
| 4 | Men | 30 | 2 | Hanging |
| 5 | Men | 28 | 1 | Pesticide |
| 6 | Men | 23 | 1 | Hanging |
| 7 | Men | 20 | 2 | Cutting |
| 8 | Men | 26 | 1 | Jumping |
| 9 | Men | 25 | 2 | Hanging |
| 10 | Men | 32 | 1 | Poison |
| 11 | Women | 23 | 1 | Poison |
| 12 | Women | 24 | 2 | Cutting |
| 13 | Women | 25 | 1 | Drug overdose |
| 15 | Women | 28 | 2 | Medicines |
| 16 | Women | 20 | 2 | Pesticide poisoning |
| 17 | Women | 18 | 1 | Medicine overdose |
| 18 | Women | 19 | 2 | Poison |
| 19 | Women | 28 | 1 | Medicines overdose |
| 20 | Women | 30 | 2 | Medicine overdose |

Respondent's demographic, frequency and method of suicide attempt

4.2 Family factors

The present study shows that 26.92% of individuals attempt suicide due to family factors, which play a key role in life. Communication barriers or emotional distance between young individuals and parents are major factors that contribute to a suicide attempt (Lai & Shek, 2010). Individuals who attempted suicide in this sample reported that they have poor relationships with their family members or failed to express their problems in front of the family. Research suggests that family factors are directly correlated with youth suicide ideation and attempts (Oppenheimer et al., 2018). Whereas, transverse exploration over the pre

vious decade uncovered a connection among potential factors of family and suicidal hazard, which includes family mental history and family-ecological elements e.g., a family group of stars, family connections (Amitai & Apter, 2012; Brent & Melhem, 2008; Bridge et al., 2006). Cross-sectional investigations have over and again shown that significant degrees of negative parent-child relationship quality, and low degrees of positive relationship quality, are precursors of youth suicide conduct in societies and nations (Fleming et al., 2007; Kim & Kim, 2008).

According to the present study, 9.84% of individuals attempt suicide due to low socio-economic status which if accompanied by unemployment are the potential elements that can increase the possibility of suicide attempts (Keyvanara & Haghshenas, 2011; Keyvanara & Haghshenas, 2010). A meta-analysis conducted by Li et al. (2011) found that people with low socio-economic status and low educational achievement are at the highest risks of suicide attempts (Li et al., 2011), however, the relationship between the socio-economic status of family and suicide is not direct. Other factors are playing a role in suicide attempts such as the relationship between low socioeconomic status and psychopathology (Jenkins et al., 2008; Bjelland et al., 2008).

| Themes | Subthemes | | |
|-----------------------|--|--|--|
| Family factors | Family relationship, family socio-economic features | | |
| Social factors | Exposure of suicide in family or media, social isolation and professional support. | | |
| Individual factors | Psycho-emotional problems, Previous suicide attempt, mental disorder depression, chronic illness, regrets, interpersonal relationship problems | | |
| Environmental factors | stressful life events, violence | | |

Table 2Themes and subthemes of suicide attempt

4.3 'Social factors

The study also found that 21.15% of individuals attempt suicide due to social factors. A person who attempts suicide may influence other person's thoughts about suicide. This exposure of suicide can be from an individual's family member or through social media (Hill et al., 2020). A systematic review suggests that suicide attempt of friend or acquaintances is also associated with suicidal behavior (Crepeau-Hobson & Leech, 2013). Social isolation

serves as a root cause of thwarted belongings. Thwarted belongings are an important factor that plays a role in developing suicidal ideation and suicide attempt (Kral, 2010). Social isolation and loneliness predict suicidal behavior (Stickley & Koyanagi, 2016). Some participants reported that social isolation made them feel inferior and also increases the risk of the suicide attempt.

In the current study, participants reported that they did not receive any professional support when they have suicidal ideation or unbearable emotional pain. The barrier in taking professional support is the stigma associated with mental illness. Stigma is viewed as a stressor strong enough to constitute a predisposing factor for suicidal behaviors. Stigma regarding mental illness is associated with suicide attempts especially among people who have mental disorders (Campo-Arias et al., 2019). The current study reveals that 13% of individuals attempt suicide due to environmental factors like disturbing life events and intimate partner violence. Stressful life events like breakup failure in the exam, death of a loved one, etc are seen as critical for developing suicidal behavior among young individuals (Nock et al., 2008; Brent et al., 1993; Zhang et al., 2012).

Researches showed that individuals with histories of stressful life events or who experience trauma are at highest risk of suicide than those without stressful life events (Zhang et al., 2012; Flannery et al., 2001; Uğurlu & Ona, 2009; Kim & Yang, 2014. Again, stressful life events are not directly linked with suicidal behavior. This link is mediated by coping skills, active coping is seen as better handling with stressors while avoidance coping is seen as worse which may lead to psychological problems and even suicide ideation and attempt (Steiner et al., 2002). Most people with histories of stressful life events do not attempt suicide because of the presence of social support. People have a different threshold of pain this is why the individuals who cannot cope, attempt suicide (Gardner et al., 2020).

Gold and his colleagues found a strong association between intimate partner violence and suicide attempt (Gold et al., 2012; Logan, 2011). The relationship between intimate partner violence and suicidal behavior is also not direct rather mediated by psychological disturbances. These disturbances in psychological functioning may lead to suicidal behavior (Wolford-Clevenger & Smith, 2014).

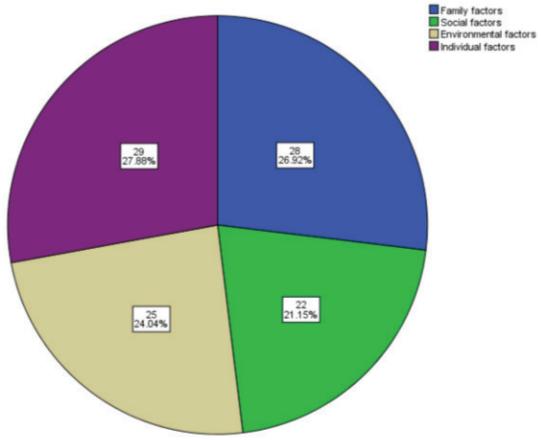


Figure 1: Pie chart showing percentages for different themes of suicide attempts

4.4 Mode of suicide attempt

According to this study, the most common methods of suicide attempt are poison and over-dosage of medicines. Studies demonstrate that the approach used in attempting suicide is a predictor of a subsequent hit suicide (Hawton et al., 2003). Researchers took a look at with follow-up for 21-31 years located that people who had tried suicide by using hanging, strangling had an extremely bad diagnosis. Other strategies (leap over from a height, the use of a weapon) had considerably decreased risk than for striking. In addition, their study also showed that the maximum number of people who commit suicide make use of the identical method—as an example, the method of hanging is 90% in women and men (Tidemalm et al., 2008).

In summary, current research helped in increasing our understanding of suicide attempts, especially among young adults. The findings of risk factors that contribute to suicide attempts are worthwhile. It is important to note that there is not only one factor that leads the individual to suicide attempts, there is an interconnection of risk factors that combine and complicate the risk of the suicide attempt. On the other hand, these factors are not directly linked with a suicide attempt. These factors create disruptions in individual mental health. These disruptions lead the individual to a suicide attempt.

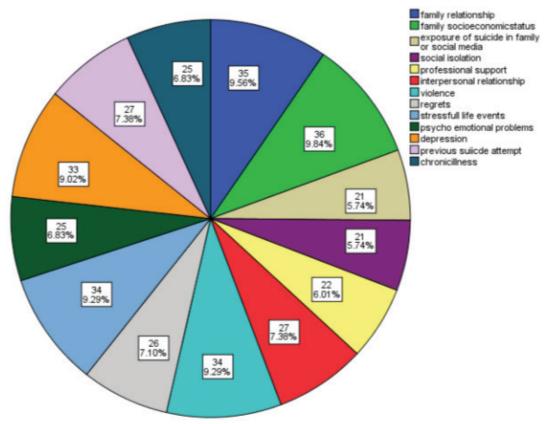


Figure 2: Pie chart showing various subthemes for suicide attempts

5. Conclusions and implications

The current study provides important findings on those factors which may lead to the suicide attempt. Suicide attempts are affected by a variety of factors which include social, family, environmental and individual factors. The findings of this study certainly have implications for educational and as well as clinical areas. Moreover, the extra findings that depression, hopelessness, and social isolation are also independently predictive of suicide ideation among young individuals have crucial implications for suicide evaluation and prevention. The current study has contributed to our understanding of suicide, especially among young adults. It is proposed that suicide prevention applications, counseling facilities, and psychology clinics on university campuses ought to include suicide evaluation programs.

The results are particularly important due to the significant role of context-related factors in suicide attempts. It's critical to confirm the interconnectedness and multiplicity of various factors in a suicide attempt for a specific person, family, and social situation. As a result, suicide prevention and care should be developed on a holistic approach that takes into account the interaction of medical, social, cultural, and family factors in their evaluation and treatment.

The goal of primary prevention is to screen individuals who are predisposed to attempt suicide based on the risk factors identified in this report. Educating teenagers, adults, their families, and the community, especially schools, about risk factors through workshops, brochures, seminars, and media, promoting successful stress management strategies, and offering a support system for this group through healthcare providers are the most rational strategies, according to researchers.

5.1 Limitations and Recommendations for future research

This study looks at only participants' suicide attempts as the criterion. This might also have impacted the volume which tremendous findings had observed. Perhaps future researchers need to take a look at other variables, along with suicide conduct, that may encompass suicide ideation and suicidal behavior. Suicidal ideation is an initial step of the suicidal process so researches on the prevention of suicidal ideation will play a vital role in reducing the suicide rate.

Consequently, the cutting-edge findings might not generalize to different populations. Future studies need to replicate this study in different sample compositions. To better recognize cultural and ethnic subgroups that are more vulnerable to suicide and suicidal behaviors.

References

- American Psychological Association (2021). Adapted from the *Encyclopedia of Psychology* https://dictionary.apa.org/risk-factor.
- Ahn, E., Shin, D., Cho, S., Park, S., Won, Y., & Yun, Y. (2010). Suicide Rates and Risk Factors among Korean Cancer Patients, 1993-2005. *Cancer Epidemiology Biomarkers & Prevention*, 19 (8), 2097-2105. doi: 10.1158/1055-9965.epi-10-0261.
- Amitai, M., & Apter, A., (2012). Social aspects of suicidal behaviour and prevention in early Life: A review. *International Journal of Environmental Research and Public Health*, 9(3), 985–994.
- Apter, A. (2010). Suicidal Behaviour in Adolescence. *The Canadian Journal of Psychiatry*, 55(5), 271-273.
- Arria, A., O'grady, K., Caldeira, K., Vincent, K., Wilcox, H., & Wish, E. (2009). Suicide Ideation among College Students: A Multivariate Analysis. Management of suicidal behaviour: Is the world upside down? *Australian & New Zealand Journal of Psychiatry*, 48(5), 399-401.
- Aubert, P., Daigle, M., & Daigle, J. (2004). Cultural Traits and Immigration: Hostility and Suicidality in Chinese Canadian Students. *Transcultural Psychiatry*, 41(4), 514-532.
- Bag, B. (2014). Depression in Cancer Patients/Kanser Hastalarinda Depression. Psikiyatride Guncel Yaklasimlar/Current Approaches to Psychiatry, 6(2), 186-199.
- Baller, R., & Richardson, K. (2002). Social Integration, Imitation, and the Geographic Patterning of Suicide. *American Sociological Review*, 67(6), 873.
- Bachmann, S. (2018). Epidemiology of Suicide and the Psychiatric Perspective. International Journal of Environmental Research and Public Health, 15(7), 1425.
- Bae, S., Ye, R., Chen, S., Rivers, PA., Singh, KP. (2005). Risky behaviours and factors Associated with suicide attempt in adolescents. *Arch Suicide Res*, 9(2),193-202.
- Beautrais, A., Joyce, P., & Mulder, R. (1999). *Cannabis abuse and serious suicide attempts. Addiction, 94*(8), 1155-1164.

- Bjelland, I., Krokstad, S., Mykletun, A., Dahl, A. A., Tell, G. S., & Tambs, K. (2008). Does a Higher educational level protect against anxiety and depression? The HUNT study. *Social science & medicine*, 66(6), 1334-1345.
- Braswell, H., & Kushner, H. I. (2012). Suicide, social integration, and masculinity in the US Military. *Social science & medicine*, 74(4), 530-536.
- Brent, D., Perper, J., Moritz, G., Allman, C., Friend, A., & Roth, C., (1993). Psychiatric Risk Factors for Adolescent Suicide: A Case-Control Study. *Journal of the American Academy of Child & Adolescent Psychiatry*, 32(3), 521-529.
- Brent, D. A., & Melhem, N. (2008). Familial transmission of suicidal behavior. *Psychiatric Clinics of North America*, 31(2), 157-177.
- Brown, G., Beck, A., Steer, R., Grisham. (2000). Risk factors for suicide in psychiatric Outpatients: a 20-year prospective study. *Journal of Consulting and Clinical Psychology*, 68(3), 371–377.
- Bridge, J., Goldstein, T., & Brent, D. (2006). Adolescent suicide and suicidal behaviour. *Journal of Child Psychology and Psychiatry*, 47(3-4), 372-394.
- Campo-Arias, A., Herazo, E., & Ceballos-Ospino, G. (2019). Stigma-discrimination complex Associated with major depressive disorder. *Revista De La Facultad De Medicina*, 67(4), 531-532.
- Canetto S. S. (1997). Gender and suicidal behavior: Theories and evidence. In R. W. Maris, M. M. Silverman, & S. S. Canetto (Eds.), *Review of suicidology*, 138-167. New York:
- Guilford. Canetto, S., & Lester, D. (1998). Gender, Culture, and Suicidal Behaviour. *Transcultural Psychiatry*, 35(2), 163-190.
- Canetto, S., S. (2008). Women and suicidal behaviour: A cultural analysis. *American Journal* of Orthopsychiatry, 78(2), 259-266.
- Cavanagh, J., Carson, A., Sharpe, M., & Lawrie, S. (2003). Psychological autopsy studies of Suicide: a systematic review. *Psychological Medicine*, 33(3), 395-405.
- Centre for Disease Control and Prevention. (2016). National Center for Injury Prevention and Control, Web-based Injury Statistics Query and Reporting System (WISQARS): https://www.cdc.gov/ncipc/wisqars

- Chen, Y. Y., Wu, K. C. C., & Yip, P. S. (2011). Suicide prevention through restricting Access to Suicide means and hotspots.
- Cheng, A. T., Hawton, K., Lee, C. T., & Chen, T. H. (2007). The influence of media reporting of the Suicide of a celebrity on suicide rates: a population-based study. *International journal of epidemiology*, 36(6), 1229-1234.
- Chermack, S., Fuller, B., & Blow, F. (2000). Predictors of expressed partner and non-partner Violence among patients in substance abuse treatment. *Drug and Alcohol Dependence*, 58(1-2), 43-54.
- Christiansen, E., & Frank, J. B. (2007). Risk of Repetition of Suicide Attempt, Suicide Or all Deaths after an Episode of Attempted Suicide: A Register-Based Survival Analysis. *Australian & New Zealand Journal of Psychiatry*, *41*(3), 257-265.
- Conner, K., Cox, C., Duberstein, P., Tian, L., Nisbet, P., & Conwell, Y. (2001). Violence, Alcohol, and Completed Suicide: A Case-Control Study. *American Journal of Psychiatry*, 158(10), 1701-1705.
- Cornutiu, G., &Cornutiu, O. (2014). The Cultural Area of the Suicidal Behaviour. *Advances In Social Sciences Research Journal*, 1(4), 104-108.
- Coryell, W., & Young, E. (2005). Clinical Predictors of Suicide in Primary Major Depressive Disorder. *The Journal of Clinical Psychiatry*, 66(4), 412-417.
- Crepeau-Hobson, M., & Leech, N. (2013). The Impact of Exposure to Peer Suicidal Self-Directed Violence on Youth Suicidal Behaviour: A Critical Review of the Literature Suicide and Life-Threatening Behaviour, 44(1), 58-77.
- Cukrowicz, K., Wingate, L., Driscoll, K., & Joiner, Jr., T. (2004). A Standard of Care for the Assessment of Suicide Risk and Associated Treatment: The Florida State University Psychology Clinic as an Example. *Journal of Contemporary Psychotherapy*, 34(1), 87-100.
- De la Grandmaison, G., Watier, L., Cavard, S., &Charlier, P. (2014). Are suicide rates higher In the cancer population? An investigation using forensic autopsy data. *Medical Hypotheses*, 82(1), 16-19.
- Eshun, S. (2003). Sociocultural determinants of suicide ideation: A comparison between American and Ghanaian college samples. *Suicide and Life Threatening Behaviour*, 33(2), 165-171.

- Esposito-Smyther, Christianne. (2005). Retrieved 24 April 2021, from https://vivo.brown. edu/display/cesp
- Esposito-Smythers, C., & Goldston, D. (2008). Challenges and Opportunities in the Treatment of Adolescents with Substance Use Disorder and Suicidal Behaviour. *Substance Abuse*, 29(2), 5-17.
- Evans, E., Hawton, K., & Rodham, K. (2004). Factors associated with suicidal phenomena in Adolescents: A systematic review of population-based studies. *Clinical Psychology Review*, 24(8), 957-979.
- Flannery, D., Singer, M., & Wester, K. (2001). Violence Exposure, Psychological Trauma, And Suicide Risk in a Community Sample of Dangerously Violent Adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry*, 40(4), 435-442.
- Fleming, T., Merry, S., Robinson, E., Denny, S., & Watson, P. (2007). Self-reported Suicide Attempts and Associated Risk and Protective Factors among Secondary School Students in New Zealand. Retrieved 30 May 2021, from Fortune, S., Sinclair, J., &Hawton, K. (2007). Adolescents' views on preventing self-harm. Social Psychiatry and Psychiatric Epidemiology, 43(2), 96-104.
- Fergusson, D., John Horwood, L., & Woodward, L. (2001). Unemployment and psychosocial Adjustment in young adults: causation or selection? *Social Science & Medicine*, 53(3), 305-320.
- Furr, S., Westefeld, J., McConnell, G., & Jenkins, J. (2001). Suicide and depression among College students: A decade later. Professional Psychology: *Research and Practice*, 32(1), 97-100.
- Garber, J., Little, S., Hilsman, R., & Weaver, K. (1998). Family predictors of suicidal Symptoms in young adolescents. *Journal of Adolescence*, *21*(4), 445-457.
- Gardner, K., Bickley, H., Turnbull, P., Kapur, K., Taylor, P., & Clements, C., (2020) The Significance of site of cut in self-harm in young people. *Journal of Affective Disorders, 266*, 603-609.
- Garlow, S. J., Rosenberg, J., Moore, J. D., Haas, A. P., Koestner, B., Hendin, H., & Nemeroff, C. B. (2008). Depression, desperation, and suicidal ideation in college students: results from the American Foundation for Suicide Prevention College Screening Project at Emory University. *Depression and anxiety*, 25(6), 482-488.

- Gold, K., Singh, V., Marcus, S., & Palladino, C. (2012). Mental health, substance use and Intimate partner problems among pregnant and postpartum suicide victims in the National Violent Death Reporting System. *General Hospital Psychiatry*, 34(2), 139-145.
- Gould, M. S., & Kramer, R. A. (2001). Youth suicide prevention. *Suicide and life-threatening behavior*, *31*(1), 6-31.
- Harris, E., & Barraclough, B. (1997). Suicide as an outcome for mental disorders. *British Journal of Psychiatry*, 170(3), 205-228.
- Hawton, K. (1999). Suicide and attempted suicide among children and adolescents. *Beverly Hills Sage Publications*.
- Hawton, K., Zahl, D., & Weatherall, R. (2003). Suicide following deliberate self-harm: long-Term follow-up of patients who presented to a general hospital. *British Journal of Psychiatry*, 182(6), 537-542.
- Heikkinen, M., Hillevi, M, & Lonnqvist, J. (1993). Life events and social support in suicide, *Suicide Life Threat Behaviour, 23* (4) 343-358.
- Hill, N., Robinson, J., Pirkis, J., Andriessen, K., Krysinska, K., & Payne, A. et al. (2020). Association of suicidal behaviour with exposure to suicide and suicide attempt: A systematic review and multilevel meta-analysis. *PLOS Medicine*, 17(3), e1003074.
- Hill, R. M., Del Busto, C. T., Buitron, V., & Pettit, J. W. (2018). Depressive symptoms and Perceived burdensomeness mediate the association between anxiety and suicidal ideation in adolescents. *Archives of Suicide Research*, *22*(4), 555–568.
- Hintikka, J., Koivumaa-Honkanen, H., Lehto, S., Tolmunen, T., Honkalampi, K., Haatainen, K., & Viinamäki, H. (2008). Are factors associated with suicidal ideation true risk factors? Social Psychiatry and Psychiatric Epidemiology, 44(1), 29-33.
- Hirsch, J. K., & Cukrowicz, K. C. (2014). Suicide in rural areas: An updated review of theLiterature. *Journal of Rural Mental Health*, 38(2), 65–78.
- Hiyoshi, A., Kondo, N., & Rostila, M. (2018). Increasing income-based inequality in suicide Mortality among working-age women and men, Sweden, 1990–2007: is there a point of trend change? *Journal of Epidemiology and Community Health*, 72(11), 1009-1015.

- Ilgen, M., Burnette, M., Conner, K., Czyz, E., Murray, R., & Chermack, S. (2010). The Association between violence and lifetime suicidal thoughts and behaviours in individuals treated for substance use disorders. *Addictive Behaviours*, 35(2), 111-115.
- Indu, P., Remadevi, S., Vidhukumar, K., Shah Navas, P., Anilkumar, T., & Subha, N. (2017). Domestic Violence as a Risk Factor for Attempted Suicide in Married Women. *Journal of Interpersonal Violence*, 35(23-24), 5753-5771.
- Jenkins, R., D., Bebbington, P., Brugha, T., Farrell, M., & Coid, J. et al. (2008). Debt, income And mental disorder in the general population. *Psychological Medicine*, 38(10), 1485-1493
- Joe, S., Romer, D., & Jamieson, P. (2007). Suicide Acceptability is related to Suicide Planning in U.S. Adolescents and Young Adults. *Suicide and Life-Threatening Behavior*, 37(2), 165-178.
- Johnson, J. G., Cohen, P., Gould, M. S., Kasen, S., Brown, J., & Brook, J. S. (2002). Childhood Adversities, interpersonal difficulties, and risk for suicide attempts during late Adolescence and early adulthood. *Archives of general psychiatry*, 59(8), 741-749.
- Kaplan, M., McFarland, B., &Huguet, N. (2009). Firearm Suicide among Veterans in the General Population: Findings from the National Violent Death Reporting System. *Journal of Trauma: Injury, Infection & Critical Care, 67*(3), 503-507.
- Kavak, F., Aktürk, Ü. Özdemir, A., & Gültekin, A. (2018). The relationship between Domestic violence against women and suicide risk. *Archives of psychiatric nursing*, 32(4), 574-579.
- Kessler, R., Borges, G., & Walters, E. (1999). Prevalence of and Risk Factors for LifetimeSuicide Attempts in the National Comorbidity Survey. Archives of General Psychiatry, 56(7), 617-626.
- Keyvanara, M., &Haghshenas, A. (2010). The Sociocultural Contexts of Attempting Suicide Among Women in Iran. *Health Care for Women International*, *31*(9), 771-783.
- Keyvanara, M., & Haghshenas, A. (2011). Sociocultural contexts of attempting suicide Among Iranian youth: a qualitative study. *Eastern Mediterranean Health Journal*, 17(06), 529-525.

Khan, M., & Reza, H. (2000). The Pattern of Suicide in Pakistan. Crisis, 21(1), 31-35.

- Kim, H., & Kim, H. (2008). Risk Factors for Suicide Attempts among Korean Adolescents. *Child Psychiatry and Human Development, 39*(4), 529-529.
- Konick, L., & Gutierrez, P. (2005). Testing a Model of Suicide Ideation in College Students. Suicide and Life-Threatening Behaviour, 35(2), 181-192.
- Kposowa, A., Breault, K., & Singh, G. (1995). White Male Suicide in the United States: A Multivariate Individual-Level Analysis. *Social Forces*, 74(1), 315-325.
- Kral, M. (2010). Book Review: Thomas Joiner, Why People Die by Suicide. Cambridge, MA: Harvard University Press, 2005. 288 pp. US\$24.95 (hbk), ISBN 9780674019010; US\$16.95 (pbk), ISBN 9780674025493. *Transcultural Psychiatry*, 47(3), 515-518.
- Lai Kwok, S., &Shek, D. (2010). Hopelessness, Parent-Adolescent Communication, and Suicidal Ideation among Chinese Adolescents in Hong Kong. Suicide and Life-Threatening Behaviour, 40 (3), 224-233.
- Lee, J. (2018). Family of late SHINee star Jonghyun sets up foundation support young artists. Retrieved from The Straits Times: https://www.straitstimes.com/lifestyle/ entertainment/family-of-late-shinee-star-jonghyun-sets-up-foundation-to-supportyoung
- Leon, A., Friedman, R., Sweeney, J., Brown, R., & Mann, J. (1990). Statistical issues in the Identification of risk factors for suicidal behaviour: The application of survival analysis. *Psychiatry Research*, 31(1), 99-108.
- Li, Z., Page, A., Martin, G., & Taylor, R. (2011). Attributable risk of psychiatric and socio-Economic factors for suicide from individual-level, population-based studies: A systematic review. Social Science & Medicine, 72(4), 608-616.
- Limbacher, M. L., & Domino, G. (1985). Attitudes toward suicide among attempters, Contemplators, & non-attempters. Omega: *Journal of Death and Dying*, 16(4), 325-334.
- Lippincott Williams & Wilkins. (2006). Stedman's Medical Dictionary, Philadelphia, ISBN 978-0-7817-3390-8.
- Logan, J., Hall, J., & Karch, D. (2011). Suicide categories by patterns of known risk factors: A latent class analysis. *Archives of general psychiatry*, 68(9), 935-941.

- Lubell, K., Pickering, W. & Walford, G., (2002). Durkheim's Suicide: A Century of Research and Debate. *Contemporary Sociology*, *31*(5), 612.
- Luoma, J., Martin & Pearson, J. (2002). Suicide and Marital Status in the United States, 1991–1996: Is Widowhood a Risk Factor?.*American Journal of Public Health*, 92(9), 1518-1522.
- Milner, A., Page, A., & LaMontagne, A. (2013). Cause and effect in studies on Unemployment, mental health and suicide: a meta-analytic and conceptual review. *Psychological Medicine*, 44(5), 909-917.
- Nock, M., Borges, G., Bromet, E., Alonso, J., Angermeyer, M., & Beautrais, A. (2008). Cross-national prevalence and risk factors for suicidal ideation, plans and attempts. *British Journal of Psychiatry*, 192(2), 98-105.
- O'Carroll, P., Berman, A., Maris, R., Moscicki, E., Tanney, B., & Silverman, M. (1996). Beyond the Tower of Babel: A Nomenclature for Suicidology. *Suicide and Life-Threatening Behaviour, 26*(3), 237-252.
- Oppenheimer, C., Stone, L., & Hankin, B. (2018). The influence of family factors on time to Suicidal ideation onsets during the adolescent developmental period. *Journal of Psychiatric Research*, 104, 72-77.
- Oram, S., Khalifeh, H., & Howard, L. (2017). Violence against women and mental health. *The Lancet Psychiatry*, 4(2), 159-170.
- Page A, Morrell S, Hobbs C, Carter G, Dudley M, Duflou J, ET Palmer, C. (2004). Suicide Attempt History, Self-Esteem, and Suicide Risk in a Sample of 116 Depressed Voluntary Inpatients. *Psychological Reports*, 95(3), 1092-1094.
- Pan, Y., Stewart, R., & Chang, C. (2012). Socioeconomic disadvantage, mental disorders and Risk of 12-month suicide ideation and attempt in the National Comorbidity Survey Replication (NCS-R) in US. *Social Psychiatry and Psychiatric Epidemiology*, 48(1), 71-79.
- Phillips, A., Der, G., & Carroll, D. (2007). Stressful life-events exposure is associated with 17-Year mortality, but it is health-related events that prove predictive. *British Journal of Health Psychology*, 13(4), 647-657.
- Piccinelli, M., & Wilkinson, G. (2000). Gender differences in depression. British Journal of Psychiatry, 177(6), 486-492.

- Poorolajal, J., Haghtalab, T., Farhadi, M., & Darvishi, N. (2016). Substance use disorder and risk of suicidal ideation, suicide attempt and suicide death: a meta-analysis. *Journal of Public Health*, 38(3), e282-e291.
- Qin, P., & Nordentoft, M. (2005). Suicide risk in relation to psychiatric hospitalization: Evidence based on longitudinal registers. *Arch Gen Psychiatry*, 62(4), 427-432.
- Rao, A. V., Hariharasubramanian, N., Devi, S. P., Sugumar, A., & Srinivasan, V. (1982). Lithium prophylaxis in affective disorder. *Indian journal of psychiatry*, 24(1), 22-30
- Riabchych, Y., & Kapkan, M. (2021). The social and psychological factors of youth's suicidal *Behaviour. Psychological Journal*, 7(1), 9-19.
- Roy, A. (2009). Characteristics of Cocaine Dependent Patients Who Attempt Suicide. Archives of Suicide Research, 13(1), 46-51.
- Rehkopf, D., & Buka, S. (2006). The association between suicide and the socio-economic Characteristics of geographical areas: a systematic review. *Psychological Medicine*, 36(2), 145-157.
- Russell, K., Rasmussen, S., Hunter, S., & Bernert, R. (2017). 1107 Sleep disturbance as a risk Factor for non-suicidal self-injury and suicidal behaviour in youth. *Sleep*, 40(suppl_1), A412-A413.
- Shaffer, D. (1996). Psychiatric Diagnosis in Child and Adolescent Suicide. Archives Of General Psychiatry, 53(4), 339-348.
- Silverman, M., Berman, A., Sanddal, N., O'Carroll, P., & Joiner, T. (2007). Rebuilding the Tower of Babel: A Revised Nomenclature for the Study of Suicide and Suicidal Behaviours Part 1: Background, Rationale, and Methodology. *Suicide and Life-Threatening Behaviour*, 37(3), 248-263.
- Smith, J., Alloy, L., & Abramson, L. (2006). Cognitive Vulnerability to Depression, Rumination, Hopelessness, and Suicidal Ideation: *Multiple Pathways to Self-Injurious*.
- Smith, J. M., Alloy, L. B., & Abramson, L. Y. (2006). Cognitive vulnerability to depression, Rumination, Hopelessness, and suicidal ideation: Multiple pathways to self-injurious thinking. *Suicide and Life- threatening behaviour*, 36(4), 443-454.

- Soloff, P. H., Lis, J. A., Kelly, T., Cornelius, J. R., & Ulrich, R. (1994). Risk factors for Suicidal behavior in borderline personality disorder. *The American Journal of Psychiatry*, 151(9), 316-323.
- Ssegonja R, Alaie I, Philipson A, Hagberg L, Sampaio F, Moller M, Von Knorring L, Sarkadi A, Langenskiold S, Von Knorring Al, Bohman H, Jonsson U, Feldman I. (2019) Depressive disorders in adolescence, recurrence in early adulthood, and healthcare usage in mid-adulthood: A longitudinal cost-of-illness study. *Journal of Affective Disorders*, 258, 33-41.
- Skapinakis, P., Weich, S., Lewis, G., Singleton, N., & Araya, R. (2006). Socio-economic position and Common mental disorders. Longitudinal study in the general population in the UK. *British Journal of Psychiatry*. 17, 189-109.
- Skapinakis, P., Weich, S., Lewis, G., Singleton, N., & Araya, R. (2006). Socio-economic Position and common mental disorders: Longitudinal study in the general population in the UK. *The British Journal of Psychiatry*, 189(2), 109-117.
- Spirito, A., Webb, M., Cheek, S., Wolff, J., & Esposito-Smythers, C. (2005). An Update on The Latest Treatment Approaches with Suicidal Adolescents. *Current Treatment Options in Psychiatry*, 8(2), 64-76.
- Stein, D., Brom, D., Elizur, A., &Witzum, E. (1998). The association between attitudes Toward suicide and suicidal ideation in adolescents. Acta Psychiatrica Scandinavica, 97(3), 195-201.
- Steiner, H., Erickson, S., Hernandez, N., & Pavelski, R. (2002). Coping styles as correlates of Health in high school students. *Journal of Adolescent Health*, 30(5), 326-335.
- Stephenson, H., Pena-Shaff, J., & Quirk, P. (2006). Predictors of college student suicidal Ideation: Gender differences. *College Student Journal*, 40(1), 109-117.
- Sternheimer, K. (2011). Everyday Sociology Blog: Social Problems and Anomic Suicide. Retrieved 14 June 2021, from https://www.everydaysociologyblog.com/2011/05/ social-problems-and-anomic-suicide.htmlrs.
- Stice, B. D., & Canetto, S. S. (2008). Older adult suicide: Perceptions of precipitants and Protective factors. Clinical Gerontologist: *The Journal of Aging and Mental Health*, 31(4), 4-30.

- Stickley, A., & Koyanagi, A. (2016). Loneliness, common mental disorders and suicidal behavior: Findings from a general population survey. *Journal of Affective Disorders*, 197, 81-87.
- Stuckler, D., Basu, S., Suhrcke, M., Coutts, A., & McKee, M. (2009). The public health Effect of economic crises and alternative policy responses in Europe: an empirical analysis. *The Lancet*, 374(9686), 315-323.
- Suokas, J., Suominen, K., Isometsä, E., Ostamo, A., & Lönnqvist, J. (2010). Long-term risk Factors for suicide mortality after attempted suicide - Findings of a 14-year follow-up study. Acta Psychiatrica Scandinavica, 104(2), 117-121.
- Tidemalm, D., Långström, N., Lichtenstein, P., & Runenson, B. (2008). Risk of suicide after Suicide attempt according to coexisting psychiatric disorder: Swedish cohort study with long term follow-up.
- Wagner, B. M. (1997). Family risk factors for child and adolescent suicidal behaviour, *Psychological Bulletin, 121*(2), 246-298.
- Westefeld, J., Button, C., Haley, J., Jr, Kettmann, J.J., MacConnell, J., Sandil, R., & Tallman, B. (2006). College student suicide: a call to action. *Death Study*, *30*(10), 931-956.
- Wilde, E. J. (2000). Adolescent suicidal behaviour. In K. Hawton & Kavan Heringen (Eds.), *The International Handbook of Suicide and Attempted Suicide*, 249–261 Chichester:
- World Bank Reports and papers. (2016). Retrieved 24 April 2021, from https://www.world bank.org/en/programs/icp/brief/academic-and-research-papers.
- World Health Organization. (2014). Preventing suicide: A global imperative. Retrieved on April 26, 2021, from: https://www.who.int/publications/i/item/9789241564779.
- Wolford-Clevenger, C., & Smith, P. (2014). A Theory-Based Approach to Understanding Suicide Risk in Shelter-Seeking Women. Trauma, Violence, & Abuse, 16(2), 169-178.
- Zhang, X., Wang, H., Xia, Y., Liu, X., & Jung, E. (2012). Stress, coping and suicide ideation in Chinese college students. *Journal of Adolescence*, 35(3), 683-690.