

Factors Associated with adolescent Suicide: a review of Beck's Cognitive Theory of Depression and Psychache Theory

¹Emmanuel C. Onuoha, ²Perpetua L. Tanyi, ³Henry T. Ajibo, ⁴Chukwu A. Nma-Njoku,

Department of Social Work, University of Nigeria, Nsukka

Corresponding Author: henry.ajibo@unn.edu.ng

ABSTRACT

Suicide is a significant societal problem, with vast social and economic consequences. Adolescent suicide, which has been ranked among the top 10 causes of death in the world, is an issue of increasing concern to school psychologists, educators, and parents. Though studies suggest that interacting with suicidal clients is highly probable, many social workers lack the knowledge to manage this difficult task. Recently, research has called for social workers to reformulate classical theory to advance our understanding of suicidal ideation and behavior. This research work aimed to analyse the factors associated with adolescent suicide, the study also proposed two explanatory theories of suicide behaviour to explain why people die by suicide, and creates a preventive measure to improve the intervention strategies of suicide behavior.

1. INTRODUCTION

Suicide in young people has been identified as a serious public health problem worldwide. In many countries, suicide rates among young people have been increasing (Beautrais, 2000; Dudley, Kelk, Flo-rio, Waters, Howard, & Taylor, 1998; Graham & Burvill, 1992; Van Heeringen, 2001; World Health Organization [WHO], 1999). At least from the 1980's, Suicide has been a leading cause of death for people within the age of 10-64 when the CDC began reporting fatal injury data (CDC, 2010a). Overall, suicide was the 10th leading cause of death in 2010 (Department of Health and Human Services [HHS], 2012). The rate of suicide in America have both vast economic and social consequences. The CDC (2010a) estimated that suicide resulted in \$34.6 billion in work loss and medical costs. Suicide is also psychologically costly: family and friends of individuals who commit suicide are at an increased risk of developing mental illness, abusing substances, and attempting suicide themselves (HHS, 2012).

Rates of suicide increase markedly from childhood into adolescence (Kessler et al. 1999), representing a significant public health concern. In 2011, 4,688 completed suicides were reported for those aged 15–24 (Hoyert and Xu 2012). Suicide is currently the third leading cause of death in this age group (CDC 2010). Moreover, even more youth make non-lethal suicide attempts and actively engage in suicidal ideation. According to data from the 2011 Youth Risk Behavior Survey (Eaton et al. 2012), 7.8 % of high school students in the United States reported a suicide attempt, and 15.8 % seriously considered attempting suicide in the past year. Thus, to form a useful theory of suicide, researchers needs to go beyond associations of suicide behaviors and focus on causal mechanisms (Brent, 2011). The aim of the present study is to identify factors that are associated with adolescent suicide behaviours and to review two predominant theoretical models of suicidal phenomena that have made important contributions to the field.

2. SUICIDE

The word suicide originated from Latin words SUI (of oneself) and CAEDERE (to kill) in the 17th century. The word "suicide" was first used by Sir Thomas Browne- an English physician and philosopher in 1642 in his book "Relegio Medici". Suicide is "a self-inflicted death in which one makes an intentional, direct and conscious effort to end one's life" (Comer, 1995, p. 345). In considering suicide, attention must be directed to suicide ideation. Suicide ideation generally exists prior to suicide, although not all suicide ideation leads to attempted or completed suicide.

3. SUICIDE IDEATION

Suicide ideation refers to the current plans and wishes to commit suicide in the absence of any recent overt suicide attempt (Ranieri, Steer, Lavrence, Rissmiller, Piper, and Beck, 1987).

Ranieri and colleagues (1987) explain that suicide ideation logically precedes a suicide attempt or completed suicide. Suicide ideation does not, however, necessarily imply that suicide will be attempted or completed. Thus, in an investigation of suicidality, a focus on suicide ideation is an appropriate beginning. Beck, Steer, and Ranieri (1988) define the suicide ideator to be “the individual at the earliest stage of suicidal risk” (p. 968). Thus, any investigation of suicidality must logically be extended to include suicide ideation as well.

4. ADOLESCENT SUICIDE BEHAVIOR

Worldwide, suicide accounts for an estimated 6% of all deaths among young people (Patton, Coffey, Sawyer, Viner, Haller & Bose, et al. 2009). As the second leading cause of mortality among females and the third leading cause among males aged 10–24 years, youth suicide is a major global public health concern (Patton, Coffey, Sawyer, Viner, Haller & Bose, et al. 2009). Low- and middle-income countries are home to more than 90% of the world’s children and youth and also account for over 75% of global suicide deaths (WHO, 2014). However, compared to high-income countries, relatively little is known about the epidemiology of adolescent suicide and suicidal behaviours in low- and middle-income countries.

Major risk factors for youth suicidal behaviours includes; being exposed to bullying and violence, alcohol and drug use, mental disorders, peer relationships, loss, family history and hopelessness (Hawton, Saunders, O’Connor, 2012). While much of this evidence comes from Europe and North America, recent research has expanded the knowledge of the determinants of youth suicidal behaviours in several low and middle-income countries. Many factors associated with youth suicidal behaviours in low and middle-income countries overlap with established risk factors from high income countries, including bullying, physical and sexual abuse, mental disorders and depressive symptoms, substance use, and weak family and social relationships (Mahfoud, Afifi, Haddad & Dejong. 2011). However, research in some low and middle-income countries suggests that gender and common mental health problems contribute less to suicidal behaviours (Randall, Doku, Wilson, Peltzer, 2014). While studies from individual countries have provided insights about youth suicidal behaviours, differences in variable definitions and measures, study populations and analytical approaches makes it difficult to compare the prevalence of and risk factors for youth suicidal behaviours across different settings.

5. FACTORS ASSOCIATED WITH ADOLESCENT SUICIDE BEHAVIOUR

Depression: Depression has been frequently reported as a correlate of suicide among adolescents who exhibit suicidal behavior (Brand, King, Olson, Ghaziuddin, & Naylor, 1996; Brent, Perper, Moritz, Baugher, et al., 1993; Marttunen, Aro, Henriksson, & Lonnqvist, 1991; Sadowski & Kelley, 1993). Research studies examining adolescents who make suicide attempts (e.g., Lewinsohn, Rohde, & Seeley, 1994) as well as those who complete suicide (Brent et al., 1988; Shaffer et al., 1996) report high proportion of youngsters suffering from depression. Adolescents with suicide ideation also show symptoms of depression (Lewinsohn, Rohde, & Seeley, 1996). Moderate correlations, varying between .40 and .60, have been found in a number of research studies examining the relationship between depression and suicide ideation (e.g., Cole, 1989; Sadowski & Kelley, 1993). The relation, however, between depression and suicide is not as direct and simple as it seems. Not all youngsters who exhibit suicidal behaviors are depressed (Lewinsohn et al., 1996) nor are all depressed adolescents thinking of suicide.

Depression cannot be considered as an independent predictor of suicide for several reasons. First, because suicidal behavior is part of the symptomology for major depression in diagnostic systems such as the Diagnostic and Statistical Manual of Mental Disorders IV (American Psychiatric Association, 1994) and in the self-report and clinical interview measures of depression, a small proportion of variance is added to the relationship between these two variables (Levy & Deykin, 1989). Secondly, the risk of suffering from a depressive disorder increases across the lifespan, particularly between the ages of 9 and 19 (Maris, Berman, & Silverman, 2000). Accordingly, the high prevalence of depression among adolescents and young adults “limits the specificity of depressive disorders as a predictor of completed suicide” (Maris, Berman, & Silverman, 2000, p. 133). Depression in combination with other risk factors discussed below may increase the risk for adolescent suicide behavior.

Hopelessness: Hopelessness, which refers to a negative attitude about future events, has been the subject of research by several investigators (e.g., Joiner & Rudd, 1996; Mazza & Reynolds, 1998). Research has pointed to the association of hopelessness and suicidality in adults (e.g., Dyer & Kreitman, 1984), and a similar relationship has been inferred for adolescents (e.g., Beautrais, Joyce, & Mulder, 1999). Studies, however, of hopelessness, depression, and suicidal behavior within clinical and nonclinical samples of adolescents have yielded inconsistent results (Cole, 1989; Lewinsohn, Rohde, & Seeley, 1994; Reifman & Windle, 1995; Rotheram-Borus & Trautman, 1988).

In a study of 281 high school students and 53 male juvenile delinquents, Cole (1989) found that hopelessness, especially among males, was not significantly related to suicidal ideation when depression was controlled for. Depression, however, remained an important predictor of suicidal ideation among males and females when hopelessness was controlled for. Similarly, Lewinsohn, Rohde, and Seeley (1993) reported that hopelessness, along with other psychosocial variables, were not related to previous suicide attempts when depression was statistically controlled.

Somewhat different results were found by McLaughlin, Miller, and Warwick (1996) who reported that hopelessness is a more powerful predictor of adolescent suicidal behavior than depression. Hopelessness is associated with adolescent suicide, but more research is needed to investigate whether hopelessness per se or depression accounts for this association.

Drug and Alcohol Abuse: There is considerable empirical evidence for the substantial suicidal risk associated with drug and alcohol abuse (e.g., Jones, 1997; Lyon et al., 2000). Psychological autopsy studies of adolescents who completed suicide have reported the presence of a history of substance abuse as well as increased use at the time of the incident (e.g., Brent, Baugher, Bridge, Chen, Chiappetta, 1999; Shaffer et al., 1996). For example, Hawton, Fagg, and Mckeown (1989) found that 38% of adolescent suicide attempters had consumed alcohol within 6 hours prior to the attempt. Substance abuse, however, is more strongly associated with suicidal behavior than with suicidal ideation (Garrison, McKeown, Valois, & Vincent, 1993). Recently, Gould, Shaffer, Fisher, and Garfinkel (1998) noted the critical role of alcohol in even increasing the chances of ideators to make an actual suicide attempt.

Interaction of factors at the ontogenic level places the adolescent at a higher risk for attempted and completed suicide. A number of research studies revealed that substance abuse comorbid with depression illness increases the likelihood of occurrence of suicidal behavior and ideation (Brent, Baugher, et al., 1999; Brent, Perper, Moritz, Baugher, et al., 1993; Marttunen, Aro, Henriksson, & Lonnqvist, 1994) because alcohol impairs judgment, inhibits problem-solving ability, limits hope for the future, and alters mood (Clark & Fawcett, 1992; Rogers, 1992). Thus, using alcohol to relieve depression and anxiety usually creates more depression and psychological distress, producing an effect labeled myopia (Steele & Joseph, 1990). Substance abuse comorbid with mood disorder, particularly depression, allows for a 50-fold increased risk for suicide (Brent et al., 1999; Shaffer et al., 1996). The combination of alcohol and conduct disorder is also likely to represent important suicide risk factor, especially for the males (Kelly & Lynch, 1999; Kelly, Lynch, Donovan, & Clark, 2001; Renaud, Brent, Birmaher, Chiappetta, & Bridge, 1999). In fact, Gould, Shaffer, Fisher, and Garfinkel (1998) found that substance abuse is correlated with suicide attempts in adolescents and that the association of disruptive behavior disorders to suicide is mediated by an association with substance use disorders. Finally, although substance abuse is positively correlated with suicide, it is not a leading contributor in and of itself.

Family History: Among the risk factors that have been identified in the research studies of adolescent suicidal behavior is a family history of suicide. Adolescents with one or more family members who have committed suicide are at a higher risk of attempting or completing suicide than adolescents who do not have this family history (Brent et al., 1988; Brent, Perper, Moritz, Liotus, Schweers, et al., 1994; Bridge, Brent, Johnson, & Connolly, 1997; Gould, Fisher, Parides, Flory, & Shaffer, 1996; Gutierrez, King, & Ghaziuddin, 1996; Shaffi, Carrigan, Whittinghill, & Derick, 1985). The reasons for multiple family suicides are still not known. These may be attributed to a genetic component (Schulsinger, 1980) rather than to a general index of family chaos and psychopathology because studies have shown that, after controlling for parental psychopathology and poor parent-child relationships, a family history of suicidal behavior places adolescents at a higher risk of suicide (Brent, 1996; Gould et al., 1996).

Parental psychopathology has also been implicated as a risk factor for suicidal behavior. Specifically, high rates of suicide, substance abuse, affective disorder, and antisocial disorders are commonly found in the families of adolescent suicide completers, attempters and ideators (Brent et al., 1988; Brent et al., 1994; Fergusson & Lynskey, 1995; Fernquist, 2000; Lyon et al., 2000). In a case-control study, Brent and colleagues (1994) found that there was a higher incidence of psychiatric problems such as depression, substance abuse, and antisocial disorder among the parents of suicide attempters when compared with the parents of community controls. Results of the study also suggest a direct effect of parental psychopathology on increased suicidal behavior among adolescents. The correlation between parental psychopathology and suicidal behavior was still high even after controlling for depression and substance abuse among suicidal adolescents.

Loss: Life stressors, particularly loss of someone who provides emotional, informational and/or material support from death, separation, divorce or abandonment, have been associated with suicidal behavior among adolescents (Marttunen, Aro, & Lonnqvist, 1993; Brent, Perper, Moritz, Baugher et al., 1993; Gould, Shaffer et al., 1998; Wagner & Cole, 1995; Wichstrom, 2000). In some studies, researchers have examined losses due to different causes (e.g. divorce, death, breaking up with a girlfriend or boyfriend) separately; others, however, have used a looser definition of “loss” variables and grouped adolescents who have experienced loss from any cause together. Some psychological autopsy studies of representative samples of adolescents who have committed suicide have examined the relationship between loss, specifically divorce, and suicide (e.g., Brent et al., 1994; Brent, Perper, Moritz, Allan et al., 1993; Gould et al., 1996; Gould et al., 1998) and have yielded inconsistent results. While some studies have indicated that adolescent suicide completers are more likely to come from a non intact family of origin (e.g., Shaffi, Carri-gan, Whittinghill, & Derrick, 1985), others have found that separation or divorce do not significantly predict suicide attempts (Kovacs, Goldston, & Gatsonis, 1993; Reinherz et al., 1995).

There is an emerging evidence, however, that divorce is much more likely to be a risk factor for suicide if comorbid with other risk factors at the ontogenic level or with other microsystems. Some studies indicated that the additive effect of divorce and substance abuse places adolescents at an increased risk for suicide (e.g., Brent, Perper, Moritz, Baugher, et al., 1993). Others have also found that interaction of several microsystems such as divorce and parental psychopathology are strongly associated with suicidal behavior (e.g., Gould et al., 1996). Finally, Wagner (1997) reports that parental separation or divorce, when considered apart from other losses, does not appear to be a significant risk factor for adolescent suicide. However, losses due to a number of causes—i.e., loss to death, separation, divorce, and child placement outside home—may be a risk factor. In addition, early losses may play a significant role in the emergence of suicidal behavior.

Peers: Adolescence is a period characterized by crucial needs for close friendships, emotional fulfillment, and emotional independence. During this developmental stage, adolescents turn to their peers for emotional support that was previously provided by their parents. They start sharing secrets, plans, and feelings and helping each other solve personal problems and interpersonal conflicts. Loneliness, therefore, becomes one of the greatest problems during adolescence (Rice, 1999). A number of research studies have consistently reported that peer functioning is a predictor of depression, (Aseltine, Gore, & Colten, 1998; Boivin, Poulin, & Vitaro, 1994; Panak & Garber, 1992), conduct problems, and substance abuse (Dishion, Capaldi, Spracklen, & Li, 1995), factors that have been previously cited as possible precursors to adolescent suicide. Other studies have linked low levels of peer social support with suicidal ideation and behavior (Lewinsohn et al., 1993; Negron, Piacentini, Graae, Davies, & Shaffer, 1997; Prinstein, Boergers, Spirito, Little, & Grapentine, 2000; Wichstrom, 2000). Suicidal adolescents have been repeatedly profiled as more isolated than nonsuicidals; almost one third of four adolescents who attempt suicide have reported being isolated from peers, breaking up with a boyfriend/girlfriend prior to the attempt, and/or lacking supportive friendships (e.g., Berman & Schwartz, 1990; Hawton, Fagg, & Simkin, 1996).

In a sample of 96 psychiatric inpatients, ages 12 to 17, Prinstein et al. (2000) examined the association between suicidal ideation and several dimensions of peer functioning, including close friendship support, perceived peer acceptance and peer rejection, and deviant peer crowd affiliation. Results indicated that lack of friendship support and perceived peer rejection were directly associated with suicidal ideation while deviant peer affiliations were related to suicidal ideation, mediated by depression and substance abuse. In fact, several other studies support the association of peer support with suicidal ideation or behavior via psychological impairment such as depression (e.g., DiFilippo & Overholser, 2000; Reifman & Windle, 1995). Whether peer functioning is directly or indirectly related to suicide, problematic peer relations remain important risk factors to be considered, especially when preventing suicidal behavior among at-risk youth.

Schooling: Poor school performance has been associated with adolescent suicidal behaviors (e.g., Borowsky, Ireland, & Resnick, 2001; Lyon et al., 2000; McLaughlin, Miller, & Warwick, 1996; Querlat, 1993; Watt & Sharp, 2001). Borowsky et al. (2001) identified predictive as well as protective factors against suicidal behavior among adolescents of different racial/ethnic groups. Being held back a grade in school was among the predictive factors of suicide attempts. The authors also noted that academic achievement and perceived connectedness to school have protective effects against suicide, indicating that a sense of belonging and safety at school may decrease the risk for suicide. Other scholars, however, reported finding no relationship between academic achievement or school problems and suicidal behavior (DeMan & Leduc, 1993; Pfeffer, Zuckerman, Plutchik, & Mizruchhii, 1984).

While research findings on the relation between school performance and suicide are mixed, it appears that school performance in the presence of other risk factors at the ontogenic or within the microsystem level (e.g., family dysfunction, depression) places adolescents at a higher risk for suicide. For example, Lewinsohn, Rohde, and Seeley (1993) in a study of clinical populations found that suicide attempters had significantly lower level of academic achievement than nonattempters, suggesting a link between poor school performance, depression, and suicide attempts. On the other hand, a child's belief that he or she is a failure increases the risk of suicidal behavior. A child who is unable to develop healthy emotional secure attachment at home, failure at school may become a self-fulfilled prophecy; thus, validating lack of self-worth. Consequently, any drop of school grade when other warning signals coexist may indicate a suicide risk (Orbach, 1988).

Media: One of the examples of the indirect effect of exosystems on adolescents involves the media. Findings of several research studies indicate that media coverage on suicide, including newspaper articles (e.g., Ishii, 1991; Jonas, 1992; Stack, 1991; Wasserman, 1984), television reports (e.g., Bollen & Phillips, 1982; Phillips & Carstensen, 1986; Stack, 1993), and fictional stories (Gould & Shaffer, 1986; Hawton et al., 1999), correlates with statistically significant increase in suicide rates. The increase becomes more pronounced when the amount of publicity given to the suicide story is large (Bollen & Phillips, 1981; Phillips & Carstensen, 1986; Stack, 1987; Wasserman, 1984). Furthermore, media coverage of a celebrity suicide has been found to have the most significant impact on adolescent suicidal behaviors, as it may inspire them to end their lives in a similar fashion (Berman, 1988; Stack, 1987; Wasserman, 1984). Cluster suicides may also be the result of media coverage among adolescents because they are more sensitive than adults to the effects of imitation (Bollen & Phillips, 1982; Phillips & Carstensen, 1986).

Even though many research studies indicated that media coverage of suicide stories is associated with an increase in suicide rates, others have not found such an association (Jobes, Berman, O'Carroll, Eastgard, & Knickmeyer, 1996; Martin & Koo, 1996). For example, Jobes et al. (1996) did not find a significant increase in adolescent suicide following the media coverage of suicide of Kurt Cobain, a rock star. In fact, the authors suggested that Cobain's death might have encouraged the youth to seek help rather than to imitate his mortal behavior. Among the reasons that were found to account for these results was the responsible job the news media did in reporting his death. In general, there is more agreement that media coverage of suicide stories is more likely to affect vulnerable adolescents who have a history of psychopathology, suicidal ideation, and/or troubled home life (Graham, 1992; Wasserman, 1984). More research is needed to examine the effect of recent media technology on adolescents' suicidal behavior.

6. OVERVIEW OF SUICIDE THEORIES

Throughout human history numerous theories have been advanced in an effort to explain or better understand why people seek to take their own lives. In general, these theories can be classified into three groups.

- Biological theories postulate that certain physiological, biochemical or genetic factors exert an important influence on the aetiology of suicide (sometimes in combination with environmental factors). Examples include genetic predispositions, chemical imbalances, abnormal levels of neurotransmitters, neurological damage due to infections, and nutritional disorders (FusØ 1997).
- Psychological and psychiatric theories focus on the states of mind, psyche, or feeling and beliefs about the world of individuals who commit or attempt suicide. Often these theories give little prominence to the broader social relations or the socio-cultural context of suicidal behaviours. (For further discussion of psychological theories, see FusØ 1997, Lester 1988 or Retterstol 1993.)
- Sociological theories focus on the significance of the social environment, social relationships and other social, economic and cultural factors in the aetiology of suicide. Two different types of empirical investigation generally underpin these theories. The first is the mainly quantitative, statistical approach that grew out of the work of the early moral statisticians and Durkheim. The second is the mainly qualitative, ethno-methodological or interpretive approach exemplified by the work of Jack Douglas (Douglas 1967, cited in Giddens 1971a).

7. BECK'S COGNITIVE THEORY OF DEPRESSION

Depression: Depression in particular has long been a well-recognized risk factor for suicide (Robins, Schmidt, & O'Neil, 1959). A major depressive episode is the most common Axis I disorder diagnosed in individuals who go on to die by suicide, with some estimates as high as 87%. Literature has also shown that the possibility of dying by suicide if currently suffering from unipolar major depression is 20 times higher than would be expected in the general population (Cheng, Chen, Chen, & Jenkins, 2000).

Beck's cognitive theory of depression and its relation to suicide is the broadest in scope, postulating that negative cognitions about the self, the world, and the future can explain depressive symptoms. He believed that depressed individuals see themselves as inadequate and unworthy because of their own perceived defects. Depressed individuals are presumed to have a biased perspective towards the world and their own life events, interpreting everything through a lens of negativity. When looking to the future, the depressed person believes that this suffering will continue indefinitely (Rush & Beck, 1978). Beck called these beliefs automatic and dysfunctional thoughts, and believed that depressed individuals favour these negative beliefs while excluding more positive cognitions (Haaga, Dyck, & Ernst, 1991). An individual begins to have suicidal thoughts as a means to escape from their problems when they become too unbearable (Rush & Beck). The depressed person, who considers themselves a burden, may also believe that other people will be better off if he/she were dead.

Although support for Beck's theory has varied, a large review found support for the notion that depressed individuals think more negatively about themselves, the world, and the future (Haaga et al., 1991). Extending from his theory, Beck is also the founder of cognitive-behavioural therapy for depression. This treatment strategy has been shown effective in numerous studies (Beck, 1993) and supports the notion that better treatment of depression reduces the number of suicide victims (Rihmer, 2001). An abundance of other research has supported the notion that depression is associated with suicidality. One study of attempters showed that 80% scored in the depressed range on the Beck Depression Inventory (BDI), with a significant correlation between the depth of depression and suicidal intent (Silver, Bohnert, Beck, & Marcus, 1971). Longitudinal work found that risk of completed suicide was approximately three times higher in severely depressed people, as opposed to those with mild depression (Bradvick, Mattisson, Bogren, & Nettelbladt, 2008). Prospective studies of suicide attempts found that a worsening of the course of major depressive disorder in the month prior to the attempt was predictive of an attempt (Yen, Shea, Pagano, Sanislow, Grilo, et al., 2003). Although it is clear that depression plays a role in suicide, not every depressed person is suicidal and not all suicide attempts occur during a depressive episode (Harkavy-Friedman, Nelson, Venarde, & Mann, 2004).

8. PSYCHACHE

Although both depression and hopelessness have received abundant support as psychological predictors of suicidality, another variable is emerging as an important predictor. Edwin Shneidman, a prominent researcher in the area of suicidology, proposed that psychological pain, or psychache, is necessary and sufficient for suicide to occur, and that it mediates the effects of all other factors, such as depression and hopelessness, in their association with suicide (Shneidman, 1993). He discussed that all suicidal individuals are in a state of perturbation, referring to being upset, or mentally distressed. He postulated that psychache is the introspective recognition of, or the psychological pain associated with perturbation (Shneidman, 1999a). Shneidman defines psychache as the "hurt, anguish, soreness, aching, psychological pain in the psyche, the mind." (Shneidman, 1993, p.145). He argued that all other factors are secondary, and only important to suicide insofar as their association with psychache. For an individual to die by suicide, Shneidman states that the perception of the pain must be unbearable for that person, and that stopping the pain by stopping consciousness is perceived as the only solution. Therefore, suicide is considered the only means to escape the intensely felt psychache. "Suicide is not so much a movement toward death as it is a movement away from intolerable emotion, unendurable pain or unacceptable anguish" (Shneidman, 1984, p. 322).

To summarize, Shneidman (1993) identified six steps in a progression towards a suicidal outcome as: (1) the presence of stresses, failures, or rejections, either social or psychological; (2) influence of other vulnerabilities such as genetic or social factors; (3) stresses are perceived as negative and painful; (4) perception of the psychological pain as unbearable and intolerable; (5) thinking that the only solution for the pain is the cessation of consciousness; and (6) psychological pain that exceeds that individual's tolerance threshold. In this progression, suicide is the likely outcome, and one that Shneidman deems a practical act that is logical to the individual (Shneidman, 1992).

Shneidman postulated that the cause of psychache is unfulfilled psychological needs (Shneidman, 1993, 1999a). He differentiated between two types of needs. Modal needs are those that define a person's personality in its day-to-day functioning, and vital needs are those that an individual could not tolerate being blocked, those that a person would die for. Each individual weigh these needs in an idiosyncratic manner according to their personality and their vulnerability to suicide (Shneidman, 1999a).

These ideas are based on Murray's (1938) volume *Explorations in Personality*, which provides a list of twenty-one psychological needs. Originally, Shneidman believed that all of these needs, alone or in combination, could account for a suicidal act (1984), however, in 2001 he identified seven of these needs as most frequently

associated with suicide: (1) achievement: the need to accomplish something difficult or challenging, (2) affiliation: the need to be near or join with a friend or loved person, (3) autonomy: the need to be independent and free from restraint, (4) counteraction: the need to make up for failure by restricting, (5) in avoidance: the need to avoid humiliation or embarrassment, (6) order: the need to put things or ideas in order, or to achieve balance and precision, and (7) succorance: the need to be supported, loved, and cared for. When one or more of these needs are not met, mental pain is felt, and the individual wants to put an end to this pain.

Shneidman believed that the most relevant treatment to heightened suicidality is to identify each individual's blocked needs. By addressing the frustrated needs implicated in each particular case, the individual's pain, or psychache levels, will be reduced and suicide can be prevented (Shneidman, 2001). If the pain can be relieved, the individual would be willing to continue to live (Shneidman, 1984).

9. SOCIAL WORK IN SUICIDE PREVENTION

Every 15.2 minutes a person dies by suicide in the U.S, making suicide the 10th leading cause of death (Centers for Disease Control [CDC], 2010). Suicide does not discriminate; it affects persons of all ages, racial groups, religious beliefs, genders, and educational levels (CDC, 2008). Due to its prevalence in today's society, the U.S. Surgeon General, Dr. David Satcher, declared suicide to be a major risk to public health (U.S. Public Health Service, 1999) and in 2001, the U.S. Department of Health and Human Services (U.S. DHHS) noted suicide prevention training, for social workers and other human service professionals, as a key strategic initiative in its national strategy for suicide prevention.

The majority of persons who contemplate suicide seek help from a mental health professional within several months prior to their attempt (Goldsmith, Pellmar, Kleinman, & Bunney, 2002; Luoma, Martin, & Pearson, 2002); suggesting that when accurate assessment and appropriate intervention by a professional is provided, suicides can be prevented. Unfortunately, chronic risk factors and acute warning signs of suicide are often missed by mental health professionals, including but not limited to social workers, based in part to the fact that professionals rarely receive formal training and education on the assessment of and response to client suicide risk (Dickinson, Sumner, & Fredrick, 1992; Jacobson, Ting, Saunders, & Harrington, 2004; Feldman & Freedenthal, 2006; Schmitz et al., 2012; Jacobson, Osteen, Jones, & Berman, 2012). Despite this lack of preparation, the likelihood that social workers and other mental health professionals will come in contact with a client at risk for suicide is high (Feldman & Freedenthal, 2006; Jacobson, et al., 2004; Joe & Neidermeier, 2006).

Working with clients at risk for suicide is one of the most challenging clinical tasks for professionals (Deutsch, 1984; Hendin, Haas, Maltzberger, Szanto, & Rabinowicz, 2004). Bongar (2002) refers to clinical work with clients at risk for suicide as an "occupational hazard," which has the potential to result in adverse effects for the mental health professional, such as compassion fatigue and burnout (Hendin et al., 2004; Jacobson, et al., 2004; Sanders, Jacobson, & Ting, 2005; Ting, Sanders, Jacobson, & Power, 2006).

It is critical that social workers have proper knowledge and professional training to identify and respond to client suicide risk. This is particularly important given the fact that social workers staff the majority of community-based mental health services within the U.S.; settings in which clients at risk for suicide often seek help (Farifteh et al., 2002; Manderscheid et al., 2004). Feldman and Freedenthal (2006) conducted a national survey of social workers and found that despite high likelihood of working with a suicidal client (93% of respondents reported working with suicidal clients), more than two-thirds of the respondents (67.4%) indicated that their training for suicide prevention and intervention had been inadequate. Results from a national survey of school social workers completed 10 years prior to Feldman and Freedenthal (2006) supported this need for training, ranking knowledge of suicide and skills as "extremely important" and "very complex" (Allen-Meares & Dupper, 1998, p. 109).

Part of professional preparation to work with clients at risk for suicide includes knowledge about suicide and suicide prevention. Specifically, preparatory knowledge should include topics such as suicide chronic risk factors, acute warning signs, protective factors, and case management options (Pisani, Cross, & Gould, 2011; Quinnett, 1995; Sanders, et al., 2008). Herron, Ticehurst, Appleby, Perry, and Cordingley (2001) suggested negative attitudes about working with clients at risk for suicide can decrease clinicians' desire to seek training to work with these at-risk clients. Therefore, improving clinicians' attitudes about suicide and suicide prevention, in addition to improving their confidence regarding their ability to assess and respond to clients at risk of suicide, should contribute to better client outcomes with regards to suicide risk management and possible engagement in additional training through continuing professional education as new evidence-based practices

emerge within the field (Chan, Chien, & Tso, 2009; Gibb, Beautrais, & Surgenor, 2010; McAllister, Billett, Moyle, & Zimmer-Gembeck, 2009).

10. CONCLUSION

The factors associated with adolescent suicide are varied and complex which is not a disease, but it is a tragic endpoint of complex etiology and a leading cause of death worldwide. Predicting who will take their life is extremely difficult. Different theories of suicide were able to account for the diverse range of factors associated with adolescent suicidal behavior. There are several characteristics of suicide, including a sense of unbearable psychological pain, a sense of isolation from others, lack of belonging, feeling trapped and hopeless and a burden on others and the perception that death is the only solution when the individual is temporarily not able to think clearly due to being blinded by overwhelming pain and suffering. Some people have a mental health condition, although signs of the condition may not have seemed evident before the suicide. Therefore, the theory components simultaneously will be a major contribution to the existing knowledge. A better understanding of the causal mechanisms will lead to improving intervention strategies. As such, existing research from a variety of areas has been integrated to allow understanding of the complexity of the suicide problem. In addition, examples of intervention and prevention strategies have also been proposed. These strategies encourage the active collaboration of parents, peers, teachers, school administrators, mental health professionals and social workers in the helping process. In fact, as responsible members of society, school psychologists have the greatest capability in developing their knowledge about the extent of adolescent suicide, the risk factors associated with suicide, and the appropriate intervention techniques.

REFERENCE

1. Lester D. 1988. *Suicide from a Psychological Perspective*. Springfield: Charles Thomas.
2. Giddens A. 1971a. Durkheim and his contemporaries. In A Giddens (ed). *The Sociology of Suicide: A selection of readings* (pp. 3–4). London: Frank Cass and Company.
3. FusØ T. 1997. *Suicide, Individual and Society*. Toronto: Canadian Scholars Press.
4. Douglas JD. 1967. *The Social Meanings of Suicide*. Princeton: Princeton University Press. (Cited by Lester 1989b; Taylor 1988; Douglas 1971).
5. Douglas JD. 1967. *The Social Meanings of Suicide*. Princeton: Princeton University Press. (Cited by Lester 1989b; Taylor 1988; Douglas 1971).
6. Bongar, B. (2002). *The suicidal patient: Clinical and legal standards of care*. Washington, DC: American Psychological Association.
7. Farifteh, F. D., West, J. C., Wilk, J., Narrow, W. E., Hales, D., Thompson, J., Reiger, D. A., et al. (2002). *Mental health practitioners and trainees*. In R. W. Manderscheid & M. J. Henderson (Eds), *Mental Health, United States, 2002*. Rockville, MD: U.S. Department
8. Deutsch, C. J. (1984). Self-reported sources of stress among psychotherapists. *Professional Psychology: Research and Practice*, 15, 833-845. doi:10.1037/0735-7028.15.6.833
9. Chemtob, C. M., Hamada, R. S., Bauer, G. B., Torigoe, R. Y., & Kinney, B. (1988). Patient suicide: Occupational hazard for psychologists and psychiatrists. *Professional Psychology: Research and Practice*, 20, 294-300. doi: 10.1037/0735-7028.20.5.294
10. Centers for Disease Control and Prevention (CDC). (2010). *Suicide: Risk and protective factors*. Retrieved on October 10th, 2019 from <http://www.cdc.gov/violenceprevention/suicide/riskprotectivefactors.html>
11. Centers for Disease Control and Prevention (CDC). (2008). *Web-based injury statistics query and reporting system (WISQARS)* [Online]. National Center for Injury Prevention and Control, CDC. Available from www.cdc.gov/ncipc/wisquars. Centers
12. Allen-Meares, P., & Dupper, D. R. (1998). A national study of knowledge, skills, and abilities: Curriculum development for practicing social work schools. *Journal of Teaching in Social Work*, 17, 101-119. doi:10.1300/J067v17n01_08
13. Dickinson, G. E., Sumner, E. D., & Frederick, L. M. (1992). Death education in selected health professions: *Death Studies*, 16, 281-289. doi: 10.1080/07481189208252575
14. Feldman, B. N., & Freedenthal, S. (2006). Social work education in suicide intervention and prevention: An unmet need. *Suicide and Life-Threatening Behavior*, 36, 467-480. doi: 10.1521/suli.2006.36.4.467
15. Beck, A. T. (1993). *Cognitive therapy: Past, present, future*. *Journal of Consulting and Clinical Psychology*, 61, 194-198.
16. Bradvick, L., Mattisson, C., Bogren, M., & Nettelbladt, P. (2008). Long-term suicide risk of depression in the Lundby cohort 1947-1997—Severity and gender. *Acta Psychiatrica Scandinavica*, 117, 185-191.
17. Cheng, A. T. A., Chen, T. H. H., Chen, C.-C., & Jenkins, R. (2000). Psychosocial and psychiatric risk factors for suicide: Case-control psychological autopsy. *British Journal of Psychiatry*, 177, 360-365
18. Haaga, D. A., Dyck, M. J., & Ernst, D. (1991). Empirical status of cognitive theory of depression. *Psychological Bulletin*, 110, 215-236.

19. Harkavy-Friedman, J. M., Nelson, E. A., Venarde, D. F., & Mann, J. J. (2004). Suicide behavior in schizophrenia and schizoaffective disorder: Examining the role of depression. *Suicide and Life-Threatening Behavior*, 34, 66-76.
20. Robins, E., Schmidt, E. H., & O'Neil, P. (1959). Some intercorrelations of social factors and clinical diagnosis in attempted suicide: A study of 109 patients. *American Journal of Psychiatry*, 114, 221-231.
21. Rush, A. J., & Beck, A. T. (1978). Cognitive therapy of depression and suicide. *American Journal of Psychotherapy*, 32, 201-219.
22. Rihmer, Z. (2001). Can better recognition and treatment of depression reduce suicide rates? A brief review. *European Psychiatry*, 16, 406-409.
23. Murray, H. A. (1938). *Explorations in personality*. Oxford, England: Oxford University Press.
24. Shneidman, E. S. (1993). Suicide as psychache. *The Journal of Nervous and Mental Disease*, 181, 145-147.
25. Shneidman, E. (1999a). Perturbation and lethality: A psychological approach to assessment and intervention. In D. G. Jacobs (Ed.), *The Harvard Medical School guide to assessment and intervention* (pp. 83-97). San Francisco: Jossey-Bass.
26. Shneidman, E. S. (2001). Suicidology and the university: A founder's reflection at 80. *Suicide and Life-Threatening Behavior*, 31, 1-8.
27. Silver, M. A., Bohnert, M., Beck, A. T., & Marcus, D. (1971). Relation of depression to attempted suicide and seriousness of intent. *Archives of General Psychiatry*, 25, 573-576.
28. Yen, S., Shea, T., Pagano, M., Sanislow, C. A., Grilo, C. M., McGlashan, T. H., Skodol, A. E., Bender, D. S., Zagarini, M. C., Gunderson, J. G., & Morey, L. C. (2003). Axis I and Axis II disorders as predictors of prospective suicide attempts.
29. Goldsmith, S. K., Pellmar, T. C., Kleinman, A. M., & Bunney, W. E. (Eds.). (2002). *Reducing suicide: A national imperative*. Washington, DC: The National Academies Press. Retrieved from <http://www.nap.edu/books/030983214/html/>
30. Hendin, H., Haas, A. P., Maltsberger, J. T., Szanto, K., & Rabinowicz, H. (2004). Factors contributing to therapists' distress after the suicide of a patient. *American Journal of Psychiatry*, 161, 1442-1446.
31. Herron, J., Ticehurst, H., Appleby, L., Perry, A., & Cordingley, L. (2001). Attitudes toward suicide prevention in front-line health staff. *Suicide and Life-Threatening Behavior*, 31, 342-347. doi: 10.1521/suli.31.3.342.24252
32. Jacobson, J. M., Osteen, P., Jones, A. L., & Berman, A. (2012). Evaluation of the Recognizing and Responding to Suicide Risk Training. *Suicide and Life-Threatening Behavior*, 42(5), 471-485. doi: 10.1111/j.1943-278X.2012.00105.x
33. Jacobson, J. M., Ting, L., Sanders, S., & Harrington, D. (2004). Prevalence of and reactions to fatal and nonfatal client suicidal behavior: A national study of mental health social workers. *Omega: Journal of Death and Dying*, 49, 237-248. doi: 10.2190/HPKQ-T700EPQL-58JQ
34. Joe, S., & Neidermeier, D. (2006). Preventing suicide: A neglected social work research agenda. *British Journal of Social Work*, 38, 507-530. doi: 10.1093/bjsw/bc1353
35. Kleespies, P. M., Deleppo, J. D., Gallagher, P. L., & Niles, B. L. (1999). Managing suicidal emergencies: Recommendations for the practitioner. *Professional Psychology: Research and Practice*, 30, 454-463. doi:10.1037/0735-7028.30.5.454
36. Knox, S., Burkard, A. W., Jackson, J. A., Shaack, A. M., & Hess, S. A. (2006). Therapists-in-training who experience client suicide: Implications for supervision. *Professional Psychology: Research and Practice*, 37, 547-557. doi:10.1037/0735-7028.37.5.547
37. Luoma, J. B., Martin, C. E., & Pearson, J. L. (2002). Contact with mental health and primary care providers before suicide: A review of the evidence. *American Journal of Psychiatry*, 159, 909-916.
38. Manderscheid, R. W., Atay, J. E., Male, A., et al. (2004). Highlights of organized mental health services in 2000 and major national and state trends. In R.W. Manderscheid & M.J. Henderson M. J. (Eds.). *Center for Mental Health Services: Mental Health, United States, 2002*. Vol. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2004. DHHS Pub. No. (SMA) 3938.
39. Menninger, W. W. (1991). Patient suicide and its impact on the psychotherapists. *Bulletin of the Menninger Clinic*, 55, 216-227.
40. Pisani, A.R., Cross, W.F., & Gould, M.S. (2011). The assessment and management of suicide risk: State of workshop education. *Suicide and Life-Threatening Behavior*, 41, 255-276. doi: 10.1111/j.1943-278X.2011.00026.x
41. Quinnett, P. (1995). *QPR: Ask a question, save a life*. Spokane, WA: QPR Institute and SuicideAwareness/Voices of Education.
42. Sanders, S., Jacobson, J. M., & Ting, L. (2005). Reactions of mental health social workers following client suicide completion: A qualitative investigation. *OMEGA*, 51, 197-216. doi: 10.2190/D3KH-EBX6-Y70P-TUGN

43. Sanders, S., Jacobson, J. M., & Ting, L. (2008). Preparing for the inevitable: Training social workers to cope with client suicide. *Journal of Teaching in Social Work*, 28(1), 1-18. doi: 10.1080/08841230802178821
44. Schmitz, W. M., Quinnett, P., Kleespies, P. M., Jahn, D., Simpson, S., Feldman, B. N., Gutin, N. J., & Allen, M. (2012). Preventing suicide through improved training in suicide risk assessment and care, pp 43(3), 292-304. doi: 10.1111/j.1943-278X.2012.00090.
45. Ting, L., Sanders, S., Jacobson, J. M., & Power, J. (2006). Dealing with the aftermath: A qualitative analysis of reactions of mental health social workers after a client suicide. *Social Work*, 51, 329-342.
46. U.S. Public Health Service. (1999). The surgeon general's call to action to prevent suicide. Washington, DC. Retrieved from: <http://www.surgeongeneral.gov/library/calltoaction/calltoaction.htm>.
47. World Health Organization. (2014). Public health action for the prevention of suicide: a framework. World Health Organization.
48. Brent D. A. (2011). Preventing youth suicide: time to ask how. *Journal of the American Academy of Child & Adolescent Psychiatry*, 50(8):738-40.
49. Shneidman E. (1977). Definition of suicide. Jason Aronson, Incorporated.
50. Karthick, S., & Barwa, S. (2017). A review on theoretical models of suicide. *International Journal of Advances in Scientific Research*, 3(9), 101-109. DOI: 10.7439/ijasr.v3i9.4382.
51. Bursztein C, Apter A. (2009), Adolescent suicide. *Current opinion in psychiatry*, 22(1):1-6.
52. Rosenberg ML, Davidson LE, Smith JC, Berman AL, Buzbee H, Gantner G, Gay GA, Moore-Lewis B, Mills DH, Murray D, & O'carroll PW. (1988), Operational criteria for the determination of suicide. *Journal of forensic Science*, 33(6):1445-56.
53. Brent DA, Kupfer DJ, Bromet EJ, Dew MA. (1988). The assessment and treatment of patients at risk for suicide. *American Psychiatric Press review of psychiatry*, 7:353-85.
54. Centers for Disease Control and Prevention. (2010a). National center for injury prevention and control: Web-based injury statistics query and reporting system (WISQARS). Fatal injury reports. Atlanta, GA: National Center for Injury Prevention and Control. Retrieved from: <http://www.cdc.gov>
55. Linehan MM, Cochran BN, & Kehrer CA. (2001). Dialectical behavior therapy for borderline personality disorder. *Clinical handbook of psychological disorders: A step-by-step treatment manual*. 4:365-420.
56. Berman, A.L., (1988). Fictional depiction of suicide in television films and imitation effects. *American Journal of Psychiatry*, 145, 982-986.
57. Borowsky, I.W., Ireland, M., & Resnick, M.D. (2001). Adolescent suicide attempts: Risk and protectors. *Pediatrics*, 107,485- 496.
58. Brand, E.F., King, C.A., Olson, E., Ghaziuddin, N., & Naylor, M. (1996). Depressed adolescents with a history of sexual abuse: Diagnostic comorbidity and suicidality. *Journal of the American Academy of Child and Adolescent Psychiatry*, 35, 34- 41.
60. Patton GC, Coffey C, Sawyer SM, Viner RM, Haller DM, Bose K, et al. (2009). Global patterns of mortality in young people: a systematic analysis of population health data. *Lancet*. 2009 Sep 12;374(9693):881-92. doi: [http://dx.doi.org/10.1016/S0140-6736\(09\)60741-8](http://dx.doi.org/10.1016/S0140-6736(09)60741-8) PMID: 19748397
61. Stack, S.A. (1991). Social correlates of suicide by age: Media impacts. In A.A. Leenaars (Ed.), *Life span perspectives of suicide: Time-lines in the suicide process* (pp. 187-213). New York: Plenum press.
62. Stack, S.A. (1993). The media and suicide: A nonadditive model, 1968-1980. *Suicide and Life-Threatening Behavior*, 23,63- 66.
63. American Academy of Child and Adolescent Psychiatry. (1994). *Facts for teachers: Teen suicide*. Washington, DC: Author.
64. Wasserman, I.M. (1984). Imitation and suicide: A re-examination of the Werther effect. *American Sociological Review*, 49,427- 436.
65. Wagner, B.M. (1997). Family risk factors for child and adolescent suicidal behavior. *Psychological Bulletin*, 121, 246-298.
66. Shaffer, D., Gould, M.A., Fisher, P., Trautman, P., Moreau, D., Kleinman, M., & Flory, M. (1996). Psychiatric diagnosis in child and adolescent suicide. *Archives of General Psychiatry*, 53, 339-348.
67. Reinherz, H.Z., Giaconia, R.M., Silverman, A.B., Friedman, A., Pakiz, B., Frost, A.K., & Cohen, E.K. (1995). Early psychosocial risks for adolescent suicidal ideation and attempts. *Journal of the American Academy of Child and Adolescent Psychiatry*, 34, 599-611.
68. Renaud, J., Brent, D.A., Birmaher, B., Chiappetta, L., & Bridge, J. (1999). Suicide in adolescents with disruptive disorders. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38, 846-851.
69. Phillips, D., & Carstensen, L.L. (1986). Clustering of teenage suicide after television news stories about suicide. *New England Journal of Medicine*, 315, 685- 689.
70. Rogers, J.R. (1992). Suicide and alcohol. *Journal of Counseling and Development*, 70, 540-543.

71. Prinstein, M.J., Boergers, J., Spirito, A., Little, T., & Grapentine, W.L. (2000). Peer functioning, family dysfunction, and psychological symptoms in a risk factor model for adolescent inpatients' suicidal ideation survey. *Journal of Clinical Child Psychology*, 29, 392–406.
72. Martin, G., & Koo, L. (1996). Celebrity suicide: Did the death of Kurt Cobain influence young suicides in Australia? *Archives of Suicide Research*, 3, 187–198.
73. Maris, R.W., Berman, A.L., & Silverman, M.M. (2000). *Comprehensive textbook of suicidology*. New York: Guilford Press.
74. Marttunen, M.J., Aro, H.M., Henriksson, M.M., & Lonnqvist, J.K. (1991). Mental disorders in adolescent suicide. *Archives of General Psychiatry*, 48, 834–839.
75. Mazza, J., & Reynolds, W. (1998). A longitudinal investigation of depression, hopelessness, social support, and major and minor life events and their relations to suicidal ideation in adolescents. *Suicide and Life-Threatening Behavior*, 28, 358–374.
76. McLaughlin, J., Miller, R., & Warwick, H. (1996). Deliberate self-harm in adolescents: Hopelessness, depression, and problem solving. *Journal of Adolescence*, 19, 523–532.
77. Hawton, K., Fagg, J., & McKeown, S.P. (1989). Alcoholism, alcohol and attempted suicide. *Alcohol and Alcoholism*, 24, 3–9.
78. Lewinsohn, P.M., Rohde, P., & Seeley, J.R. (1996). Adolescent suicidal ideation and attempts: Prevalence, risk factors, and clinical implications. *Clinical Psychology: Science and Practice*, 3, 25–36.
79. Lyon, M.E., Benoit, M., O'Donnell, R.M., Getson, P.R., Silber, T., & Walsh, T. (2000). Assessing African American adolescents' risk for suicide attempts: Attachment theory. *Adolescence*, 35, 121–134.
80. DiFilippo, J.M., & Overholser, J.C. (2000). Suicidal ideation in adolescent psychiatric inpatients as associated with depression and attachment relationships. *Journal of Clinical Child Psychology*, 29, 155–166.
81. Hawton, K., Fagg, J., & Simkin, S. (1996). Deliberate self-poisoning and self-injury in children and adolescents under 16 years of age in Oxford 1976–1993. *British Journal of Psychiatry*, 169, 202–208.
82. Jonas, K. (1992). Modeling and suicide: A test of the Werther effect. *British Journal of Social Psychology*, 31, 295–306.
83. Kelly, T.M., Lynch, K.G., Donovan, J.E., & Clark, D.B. (2001). Alcohol use disorders and risk factor interaction for adolescent suicidal ideation and attempts. *Suicide and Life-Threatening Behavior*, 31, 181–193.
84. Ishii, K. (1991). Measuring mutual causation: Effect of suicide news on suicide in Japan. *Social Science Research*, 20, 188–195.
85. Jobes, D.A., Berman, A.L., O'Carroll, P.W., Eastgard, S., & Knickmeyer, S. (1996). The Kurt Cobain suicide crisis. *Suicide and Life-Threatening Behavior*, 17, 310–325.
86. Gould, M.S., Shaffer, D., Fisher, P., & Garfinkel, R. (1998). Separation/divorce and child and adolescent completed suicide. *Journal of the American Academy of Child and Adolescent Psychiatry*, 37, 155–163.
87. Clark, D.C., & Fawcett, J. (1992). An empirically based model of suicide risk assessment for patients with affective disorder. In D. Jacobs (Ed.), *Suicide and clinical practice* (pp. 55–73). Washington, DC: American Psychiatric Press.
88. Cole, D.A. (1989). Psychopathology of adolescent suicide: Hopelessness, coping beliefs, and depression. *Journal of Abnormal Psychology*, 98, 248–255.
89. Brand, E.F., King, C.A., Olson, E., Ghaziuddin, N., & Naylor, M. (1996). Depressed adolescents with a history of sexual abuse: Diagnostic comorbidity and suicidality. *Journal of the American Academy of Child and Adolescent Psychiatry*, 35, 34–41.
90. Gotlib, I. H., Hammen, C. L. (Eds.). (2009). *Handbook of depression*. (2nd ed.). New York, NY: The Guilford Press.
91. Bridge, J.A., Brent, D.A., Johnson, B.A., & Connolly, J. (1997). Familial aggregation of psychiatric disorders in a community sample of adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 36, 628–637.
92. Boivin, M., Poulin, F., & Vitaro, F. (1994). Depressed mood and peer rejection in childhood. *Development and Psychopathology*, 6, 483–498.
93. World Health Organization, (2014). Preventing global suicide: a global imperative. Geneva: retrieved from: http://www.who.int/mental_health/suicide-prevention/world_report_2014/en/
94. GSHS Lebanon, (2005). Prevalence and determinants of suicide ideation among Lebanese adolescents: results of the J Adolesc. 34(2):379–84. doi: <http://dx.doi.org/10.1016/j.adolescence.2010.03.009> PMID: 20434762
95. Randall JR, Doku D, Wilson ML, Peltzer K. (2014). Suicidal behaviour and related risk factors among School-aged youth in the republic of Benin. *PLoS One*. 9(2):e88233.

96. Hawton K, Saunders KE, O'Connor RC. (2012). Self-harm and suicide in adolescents. *Lancet*. 23;379(9834):2373–82. doi: [http://dx.doi.org/10.1016/S0140-6736\(12\)60322-5](http://dx.doi.org/10.1016/S0140-6736(12)60322-5) PMID: 22726518
97. King, K.A. (2000). Preventing adolescent suicide: Do high school counselors know the risk factors? *Professional SchoolCounseling*, 3, 255–263.
98. Hoyert, D. L., & Xu, J. (2012). Deaths: Preliminary data for 2011. *National Vital Statistics Reports*,61(6),51.
99. Kessler, R. C., Borges, G., & Walters, E. E. (1999). Prevalence of and risk factors for lifetime suicide attempts in the National Comorbidity Survey. *Archives of General Psychiatry*,56(7),617.
100. Eaton, D. K., Kann, L., Kinchen, S., Shanklin, S., Flint, K. H., Hawkins, J., et al. (2012). Youth risk behavior surveillance-United States, 2011. *MMWR SurveillSumm*,61(4), 1–162.
101. Beautrais, A. L. (2000). Risk factors for suicide and at-tempted suicide among young people. *Australian and New Zealand Journal of Psychiatry*, 34,420 – 436.
102. Van Heeringen, C. (2001). Suicide in adolescents. *International Clinical Psychopharmacology*, 16(Suppl. 2), S1–S6.