Suicide in Adolescents: Risk Factors, Protective Factors, and Intervention

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Abstract

Suicide is a serious public health problem all around the world with lasting effects on individuals, families, and communities. One high-risk group that expresses a special concern is adolescents due to the significant increase in their rates of suicide over the years. There are a number of risk factors associated with suicide which include exposure to suicide, living with a mental illness, and substance abuse. Protective factors are also an important consideration associated with suicide which includes social connectedness, positive coping skills, and access to effective mental health care. Understanding the relationship between both risk and protective factors of suicidal behaviors are important considerations in suicide prevention. Within societies today there are many different types of intervention programs and other forms of assistance for individuals who experience suicidal behaviors.

Adolescent Suicide: Risk Factors, Protective Factors, and Intervention

Every year more than 800,000 individuals die by suicide around the world (World Health Organization, 2014). Suicide is perceived as a tragic and troublesome event within our societies and is a significant public health concern globally (Gutierrez, 2006).When considering the effects of suicidal behaviors, there is special concern expressed for specific high-risk groups and in today's society one high risk group are adolescents(Centers of Disease Control and Prevention, 2015). Although compared to the general population adolescents complete suicide at a lower rate, there is a concern due to a significant upward trend in their rate throughout the years and in the year 2014 suicide was determined to be the second leading cause of death around the world among individuals between the ages of 15 and 19 (Health Canada, 1994; World Health Organization, 2015).

In one way or another, suicide will touch the lives of almost every individual around the world and the effects can be seen in the lives of families, friends, and communities. This literature review will examine some of the existing risk factors that may be present in someone who is at risk for suicide and will specifically focus on risk factors of the greatest concern. This review will also explore some of the possible protective factors that may help reduce various suicidal behaviors in individuals and will discuss existing available strategies that aim to help prevent the occurrence of various suicidal behaviors. It is my hope that this will bring attention to some of the options, both within and outside our own community which are available.

Terminology

Adolescence is a term typically used when referring to individuals during the "teenage" years which is used to specify individuals between the ages of 12 and 18, however, it can be

extended to individuals as young as 9 years old and as old as 24 years old (CDC, 2015; Gutierrez & Osman, 2008). Adolescence is a time of growth and potential and a period of key developmental experiences where individuals are faced with pressure to engage in various high-risk behaviors (WHO, 2015). Reports have shown that suicide attempts among adolescents are at its highest point during this period of time in their lives.

There is a large existing body of literature surrounding suicide and suicide prevention, therefore it is important that definitions of related terms be consistent so that ideas are clearly interpreted (CDC, 2015). Although the term suicide does not have a single universally accepted definition it can simply be defined as death which is intentional and self-inflicted (Masango, Rataemane, & Motojesi, 2008). Suicide ideation is when an individual experiences thoughts about engaging in suicide related behaviors (Gutierrez & Osman, 2008). A suicide attempt is when an individual engages in some sort of self injurious behavior which is not fatal; however, there was some intention to die (Masango, Rataemane, & Motojesi, 2008). When referring to a range of behaviors that includes suicide ideation, suicide planning, suicide attempts, or completed suicide we can use the term suicidal behavior (WHO, 2014).

Risk factors are characteristics that increase the occurrence of suicidal behaviors, while protective factors are characteristics that decrease the occurrence of suicidal behaviors (Suicide Prevention Resource Center, 2011). These two types of factors are found at several different levels, and they can be either fixed or modifiable within a person (SPRC, 2011).

Risk Factors

There are a large number of established risk factors associated with suicidal behaviors among adolescents and they, along with their levels of effects, vary significantly depending on the specific individual (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002). No single factor can

account for the level of suicide rates or causes of suicide (Health Canada, 1994; Stengel, 1974), and suicidal behavior is instead the result of a complex interaction between various factors which can be grouped as familial, social, environmental, individualistic, or psychological (Health Canada, 1994; van Heeringen, 2001). Due to the vast number of potential risk factors this literature review will focus on three specific risk factors that have shown strong evidence for suicidal behaviors and continue to be an issue within our current society: exposure to suicide, mental illness, and substance abuse (Acosta, Ramchand, Jaycox, Becker, & Eberhart, 2012).

Exposure to Suicide

It is well established that a prior suicide attempt is the best predictor of subsequent death by suicide and is one of the reasons why the high frequency of attempted suicide in adolescents is a significant health concern (Gould, Greenberg, Velting, & Shaffer, 2003; Spirito, Brown, Overholser, & Fritz, 1989). The risk of repeated suicidal behaviors is highest during the first 3 to 6 months after an attempt, however, the individual remains at a higher risk for 2 years compared to people in the general population (Bridge, Goldstein, & Brent, 2006).

An important factor of a previous suicide attempt is the lethality of the method which was used (Bridge et al., 2006). Individuals, who chose methods which are highly lethal, such as the use of a gun, are at a higher risk of a future attempt as opposed to an individual who chooses a method of low lethality such as an overdose of pills (Spirito et al., 1989). It has been reported that males are more likely to use a lethal method, which is a contributing factor to why males die by suicide at higher rates than females (Spirito et al., 1989).

A family history of suicidal behaviors is also seen as a factor of increased risk of suicide and evidence from various family, twin, and adoption studies have led researchers to conclude

that there may be some genetic trait that predisposes individuals to suicidal behavior (Gould et al., 2003; Health Canada, 1994; Krug et al., 2002). However, it should be recognized that it can be difficult to differentiate between possible genetic factors, the presence of an influential parent, as well as psychiatric history in the family (Gould et al., 2003; Health Canada, 1994).

Adolescents are especially vulnerable to contagion, the increase in suicidal behaviors which is usually the result of inappropriate exposure or messages about suicide (Canadian Association for Suicide Prevention, 2015). This contagion effect can lead to suicide clusters, a sequence of suicide within a relatively short period usually within close geographical proximity (Leenaars et al., 1998). There are reports of suicide clusters for both attempted and completed suicide, and they appear to be limited to adolescents (Gould et al., 2006; Wagner, 2009).

Studies also show that an individual may be at a greater risk for suicide if they lose somebody close, such as a family member or friend to suicide (Gould et al., 2003).

Mental Illnesses

The presence of a mental illness is the most frequently studied risk factor within the literature reporting on suicidal behaviors (Wagner, 2009). Psychological autopsies reveal that 90% of individuals who die by suicide are identified as having at least one diagnosable psychiatric disorder at the time of their suicide (Nock, Borges, & Ono, 2012). The risk of suicide varies with the type of disorder the person lives with, as well as the severity of the disorder (WHO, 2014). However, it is important to recognize that not everyone who shows suicidal behavior has to have a mental disorder and vice versa.

Depression is consistently the most frequently occurring disorder found among adolescent suicide victims and studies reveal that up to 80% of individuals who die by suicide

have had some type of depressive symptoms (Gould et al., 2003; Krug et al., 2002; Masango, Rataemane, & Motojesi, 2008). Individuals who are schizophrenic are also at a lifetime risk of suicide, and this risk is particularly high in young males, patients who are in the early stages of the disease, and patients who experience a chronic relapse (Krug et al., 2002). Schizophrenia is the reported as the greatest disabler among adolescents and occurs most often in individuals between the ages of 16 and 30 years old (Canadian Mental Health Association, 2014).

Individuals who make suicide attempts or die by suicide are often reported to have significant psychiatric comorbidity (Bridge et al., 2006; WHO, 2014). The risk of suicidal behavior increases within a person as comorbidity increases, meaning that people with more than one mental illness are at significantly higher risk of suicide (Bridge et al., 2006; WHO, 2014).

Substance Abuse

Substance abuse appears to play a significant role in both attempted and completed suicide with reports suggesting that 60% of completed suicides occur in individuals who abuse some type of substance (Brizer & Castaneda, 2010; Gould et al., 2003). This can result for various reasons since alcohol and drugs reduce inhibitions and increases impulsivity, which is possibly compounded by a withdrawal from social interaction (DARA, 2015) This in turn can lead to negative social problems and increase the chances of suicidal behaviors (DARA, 2015).

Substance abuse is a significant risk factor especially in individuals who have some type of mental illness which is particularly evident in older adolescent males (Gould et al., 2003). This suggests that substance abuse may facilitate suicidal ideation to actual suicide attempts or completion (Bridge et al., 2006).

Protective Factors

Although understanding risk factors contributes significantly to suicide prevention, it is also important to focus on the different preventative protective factors that play a role (Gutierrez & Osman, 2008; WHO, 2014). Protective factors are not studied as extensively as risk factors and are frequently left out of many suicide assessments (Gutierrez & Osman, 2008; Simon, 2011). Some protective factors can protect an individual against specific risk factors, while others may protect an individual against several risk factors associated with suicide (WHO, 2014). Individuals who struggle with suicidal behavior often find it easier to discuses protective factors rather than risk factors (Simon, 2011). This review focuses on three major protective factors: social connectedness, positive coping skills, and effective mental health care.

Social Connectedness

The risk of suicidal behavior increases when an individual experiences difficult relationship conflict or loss which is why maintaining healthy and close relationships with other people can increase resilience and act as a protective factor against suicide (Gutierrez & Osman, 2008; WHO, 2014). When a person is dealing with extreme difficulty in their life their family, friends, peers and significant other have the potential for giving the most support and help reduce the impact of other external stressors (CDC, 2014; Simon, 2011). This type of social connectedness is especially protective for adolescents because they possess high levels of dependency (Simon, 2011).

Positive Coping Skills

Research shows that adolescents who struggle with suicidal behaviors have an avoidant and passive coping style (Wagner, 2009). These individuals often display difficulty generating, selecting, and implementing solutions to their problems, especially those associated with interpersonal relationship which is why they tend to avoid their problems and have trouble dealing with strong emotions (Wagner, 2009). If an individual has positive coping skills such as problem-solving skills, communication skills, conflict resolution skills, and refusal skills it can reduce the chance they will engage in risky behavior such as suicide (King & Vidourek, 2011). Multiple studies have shown that suicide attempters who develop efficient coping skills decrease their risk of completed suicide later in life because they are more capable of solving personal problems, more willing to seek help from others which can lessen the impact of external stressors (Gutierrez & Osman, 2008; WHO, 2014).

Effective Mental Health Care

Due to the high rates of mental illness in individuals who attempt or complete suicide, having access to effective mental health care is extremely important in reducing the prevalence of suicidal behaviors. When there are barriers to accessing health care, the risk of suicide increases significantly with comorbidity, therefore it is essential that access to health care be timely and effective (WHO, 2014). This can be problematic because there are some places in the world that have limited resources or there is a lack of knowledge regarding health and mental health in particular (WHO, 2014). One major problem is that there is stigma against seeking help for mental illness and suicidal behaviors which can discourage individuals from seeking

appropriate care or support from family and friends. (WHO, 2014). For these reasons, many societies are trying to end this stigma by emphasizing awareness, acceptance, and action.

Intervention

Due to the increase in adolescent suicidal behavior there is a large demand for effective intervention with a typical intervention involving coping and intervening in the event that either you or someone else is experiencing suicidal behaviors (Krug et al., 2002; WHO, 2015). The goal of intervention is to ensure personal safety, assess and respond to the level of risk to determine which service needs to be provided followed by ensuring appropriate care is given to the person (Lieberman, Poland, & Cowan, 2006).

Since it is established that a variety of mental disorders are significantly associated with suicide, early identification and appropriate treatment of the corresponding disorder is an important strategy for decreasing the chance of suicide (Krug et al., 2002). Coupled with and/or inpatient hospitalization, there are medications which can help increase overall well-being, thus reducing the chance of suicidal behavior (Bridge et al., 2006; Krug et al., 2002).

Adolescent intervention strategies primarily operate in one of three different settings: school, community, and health-care systems (Gould et al., 2003). The goal of these intervention strategies is to help prevent adolescent suicide, while the goal of prevention programs are to prevent the onset of risk factors, reduce existing risk factors, and promote good mental health (Stevens, Bond, Pryce, Roberts, & Platt, 2008).

School-based programs can be further divided into three categories. Universal prevention is designated to help an entire population; selective prevention is designed to help groups of individuals exposed to certain risk factors; and indicated interventions help specific individuals

who display some sort of suicidal behavior (WHO, 2014). Adolescents spend a significant amount of their time at school so it seems an ideal setting for implementing a variety of suicide prevention programs. These programs want to increase awareness of suicidal behaviors so students can recognize these behaviors in themselves or in others who may be at risk (Gould et al., 2003). It also makes students aware that they get help and where they can go to receive this help (Stevens et al., 2008). For example, all schools are equipped with a guidance counselor that is able to help students deal with individual problems. Evaluations of existing programs have reported positive outcomes such as positive changes in knowledge and attitudes toward suicide, intention to seek help, and reduction in suicidal thoughts (Kalafat, 2003). There programs have also shown the ancillary benefits of improvements in academic performance, school attendance, and self-esteem (Health Canada, 1994).

Community-based prevention programs which include crisis centers and hotlines are available to provide immediate support that is convenient and assessable during a crisis (Stevens et al., 2008). By telephone or via their website, a popular hotline is Kids Help Phone which is available to people within all communities, providing individuals the opportunity to talk about their problems (Kids Help Phone, 2015). Many communities also implement weapon control programs as a way to restrict means of suicide (Stevens et al., 2008). The rationale behind means restriction is that suicidal individuals are impulsive, they are often ambivalent about their decision, and the risk period is transient (Stevens et al., 2008). Studies have found that restriction of guns in particular have reduced the overall rates of suicide, as well as suicides related to the use of firearms (Gould et al., 2003).

There are also risks associated with reporting suicide in the media, such as suicide contagion (Gould et al., 2003; Stevens et al., 2008). For these reasons the media should

encourage responsible attitudes about suicide and play a play a positive role in educating the public about certain risks for suicide (Gould et al., 2003; Stevens et al., 2008). Guidelines for media reports on suicide now exist in several different countries (Gould et al., 2003; Stevens et al., 2008).

Health-care based preventions are designed to increase identification of adolescents who are at risk by primary health care workers (Gould et al., 2003). Pfaff (1999) found that majority of suicidal adolescents seeks medical care in the month prior to their suicide, however fewer than half of physician report that they routinely screen patients for suicide risk (Frankenfield et al., 2000). Research that has found that the use of education programs for health care professional have contributed to significant declines in adolescent suicides (Gould et al., 2003).

Conclusion

Suicide, especially among adolescents is a growing concern all around the world. There are many different factors that can put an individual at risk for suicidal behaviors. Together, both risk and protective factors help provide insight to areas to consider for intervention that can help prevent suicidal behaviors. It is important for every person in the world to know that they are not alone and that suicide is preventable.

The increase in suicide rates among adolescents has lead to significant development in valuable research over the years (Gould et al., 2003). Research on the risk factors associated with suicide is well established and is continuing to grow. However, the study of protective factors within the literature is not an extensive. Due to the fact that together, risk and protective factors provide insight on the areas of emphasis for suicide intervention it is important that future researchers continue to identify protective factors and continue to explore existing factors.

Upon the completion of my research I have realized that there are numerous resources for people dealing with suicidal behaviors, including in our very own society. However, I realized that majority of people, including myself, are not fully aware of what these resources are, or how they can reach these resources. I believe that due to the high frequency of suicidal behaviors, especially among adolescent, that it is important for everyone to know their options, and how to take full advantage of this help. To increase awareness of this information I have constructed a brochure which contains telephone numbers, website addresses, and other useful information regarding where help can be found whether it be on Grenfell Campus, in Corner Brook, across the island, or someplace else in the world (see Appendix A). It is extremely important that everyone know that suicide is not the only option, and that there are many resources available to help them through difficult times.

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Appendix A

Grenfell Suicide Awareness and Prevention Brochure

Help Is Available At Grenfell

WHO?

- Students
- Faculty
- Staff

WHY?

- Personal Problems
- Academic Concerns
- Career Questions

WHERE?

- Arts & Science Building in Student Services
- Maureen Bradley
  - Office: AS233A
  - Phone: 637-6211 (x6211)
  - Email: mbradley@grenfell.mun.ca

For More Information about the Counseling Services Available at Grenfell Campus visit the website: http://www.grenfell.mun.ca/counselling/Pages/default.aspx

Community Resources

Available 24 Hours:

Western Memorial Regional Hospital: 637-5000

RCMP: 637-4433

RNC: 637-4100

Victims Crisis Line: 1-800-267-5183

Depression Line: 1-800-268-0999

Transition House Crisis Line: 634-4198

Counseling Services Available (9:00A.M. – 5:00P.M.):

Addiction Services: 634-4506

Big Brothers Big Sisters: 634-3719

Blomidon Place: 634-4171

Corner Brook Women's Centre: 639: 8522

Humber Community YCMA: 639-9676

Family Outreach Resource Center: 634-2316

Support Groups:

Alcoholics Anonymous: 639-1682

Bereavement Group: 637-5664

Overeaters Anonymous: 634-4253

KNOW YOUR OPTIONS

Dealing With Suicide

Help Is Only A Phone Call Away…

Anywhere…

Anytime…

NATIONAL SUICIDE PREVENTION LIFELINE
1-800-273-TALK (8255)
suicidepreventionlifeline.org

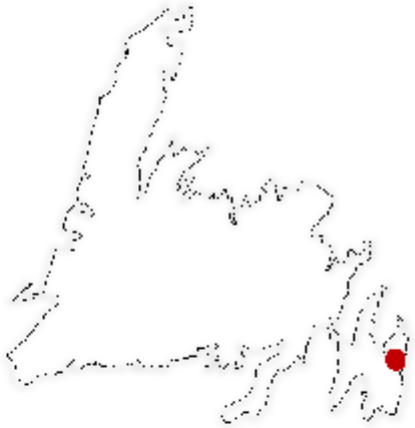
1 800 668 6868
Kids Help Phone
kidshelpphone.ca

Newfoundland & Labrador
HealthLine
Confidential & Free
1•888•709•2929
TTY: 1-888-709-3555 • Service bilingue
Your Health. Your Call.

Mental Health Crisis Centre (Newfoundland and Labrador)

Serving Newfoundland and Labrador
47 St. Clare Avenue, St. John's, NF A1C 2J9

- Crisis 24 hours: 1-888-737-4668
- Crisis: 1-709-737-4668
- Business: 1-709-737-4271



WALK-IN SERVICES ARE AVAILABLE!!

Other Services in St. John's, NL

- Waterford Hospital: 1-709-777-3300
- Mobile Crisis Response Team: 1-709-737-4668
- Psychiatric Assessment Unit: 1-709-777-3021
- Recovery Center: 1-709-752-3021

Other Helpful Links…

www.crisiscallcenter.org

www.helpguide.org

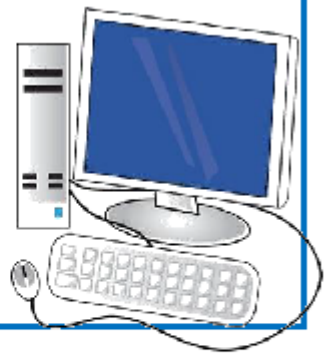
www.suicideprevention.ca

www.cmha.ca/mental-health

www.lostallhope.com

www.hc-sc.gc.ca/hl-vs/alt_formats/pacrb-dgapcr/pdf/iyh-vsv/diseases-maladies/suicide-eng.pdf

http://westernhealth.nl.ca/index.php/programs-and-services/services-a-z/addictions-prevention-and-mental-health-promotion-2/Suicide-Prevention



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