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Medical Sciences 4300: London-Middlesex Suicide Prevention Council

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LONDON-MIDDLESEX SUICIDE PREVENTION COUNCIL (LMSPC)

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LONDON-MIDDLESEX SUICIDE PREVENTION COUNCIL

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Executive Summary

Suicide is an issue that affects people of all backgrounds, and takes the lives of many individuals every year. The London-Middlesex Suicide Prevention Council (LMSPC), an organization established in 1990, seeks to provide suicide prevention training to members of the community. They seek to engage community members in prevention and intervention by recognizing warning signs that may exist among the London-Middlesex region. The three main programs that strive to deliver these skills are ASIST, ASK, and safeTALK, each with a slightly different focus. LMSPC's current goal is to increase access to these services through external grants and potential partnerships. Our Community Engaged Learning (CEL) project aimed at creating a repository of grants to allow LMSPC to improve the targeting of their grant applications. Through these grants, the organization will be able to host more classes, and provide training at subsidized prices to increase community access. Additionally, this project worked to produce a series of infographics, which will hopefully increase education on myths regarding suicide, and the available training programs via LMSPC's social media platforms. Online advocacy provides a point of first contact to potential participants of LMSPC's three programs, and educates the community on the difficult truths of suicide. Although a lot of progress has been made over the past several months, the fight against suicide is far from over. Going forward, LMSPC will continue to strengthen partnerships, and grow their organization through external grants. Ultimately, this organization's impacts are incredibly significant and far-reaching as they work to save lives, and make the London-Middlesex region a safer environment.

Introduction

Case Study

In spring of 2016, within the span of four months, five youth took their own lives in Woodstock, Ontario, a town with a population of only 38,000 people (Cheung, 2016). In such a small and tight-knit community, the impacts of this "cluster suicide" were significant (M. Whitfield, personal communication, October 16, 2017). The after-effects were widespread and affected several youth, teachers and community members. With resources like the Youth Suicide Prevention Council and the Canadian Mental Health Association present within the community, the city should have been better prepared. However, they were so ill-prepared that they did not know how to deal with the situation afterwards. Due to the lack of post-vention and outreach programs, the community had nowhere to turn when they were experiencing these overwhelming emotions. Had suicide prevention training programs been implemented, the community would have been able to recognize the warning signs ahead of time (M. Whitfield, personal communication, October 16, 2017). Moreover, had teachers, coaches, parents, and even the students' peers been able to direct the affected individuals to the correct resources, one or more of the children could have been saved.

Description of Community Served

The London-Middlesex area spans the city of London and the surrounding townships and municipalities that constitute the Middlesex County. Suicide has been a growing concern within this area, affecting both men and women. Statistics and information about suicide in the London-Middlesex area are kept both by the Coroner's Office and the London Police Service. The most recent statistics are from the period 2000 to 2010, recorded by the London Police. This information shows

that there has been an average of 34 deaths by suicide over the last 10 years with an average of 26 to 47 deaths per year ("Suicide Statistics", 2012). The individuals who have died by suicide are 75% males and 25% female ("Suicide Statistics", 2012).

We were paired with the London-Middlesex Suicide Prevention Council (LMSPC) that works within this region. It is an online-based, non-profit, voluntary council initiated in 1990. LMSPC works to deliver suicide prevention training programs, along with support and treatment for survivors of suicide. Its vision statement is "a community in which all people are supported to develop their full potential, attain their life expectancy, and enjoy a positive quality of life" ("About Us", n.d.). Moreover, its mission is to reduce suicide and suicidal behaviour, as well as the impact that suicide can have on individuals, families and communities ("About Us", n.d.). This organization works to provide public awareness, education, and advocacy about the myths surrounding suicide, as well as ways to prevent suicide. LMSPC also trains the public on the skills required to recognize possible warning signs of individuals considering suicide. In addition, the organization addresses stigma and discrimination experienced by individuals who have considered or attempted suicide, and the family members of those who have died by suicide.

Objectives

Our Community Engaged Learning (CEL) project focused on a central need in London to have more individuals within the community trained in suicide prevention and intervention. However, the cost of the training programs is a large barrier to individuals. LMSPC constantly receives emails from those interested in being trained, but are unable to afford the associated fees for the training room, food, and materials of the training programs. Our project focused on ensuring that the vast majority of

people within the community have access to the training programs. We worked to achieve this by compiling a list of possible grants, and their requirements so that LMSPC may provide the available trainings (ASIST, safeTALK, and ASK) at a significantly reduced rate to the community (D. Lalonde, personal communication, October 16, 2017). Some potential grant opportunities include those available through the Ontario Trillium Foundation, Green Shield Canada Giving Program, and Westminster College Foundation. Our group also worked to contact local organizations and sports leagues to determine whether their staff would be interested in participating in these training programs. The second part of our plan focused on creating a variety of social media posts. Here, we addressed some of the myths and language around suicide so as to help reduce the stigma, and clarify common misconceptions. Additionally, we put together infographics that LMSPC could share on their social media platforms to showcase the various training programs that are available, and what they help to achieve.

Description of Requested Project

Suicide is considered a leading cause of death worldwide, accounting for over 800,000 deaths per year ("Preventing Suicide: A Global Imperative", 2014). Over the last 45 years, the global suicide rate has increased by 60%, with the highest rates being found among the male population ("Preventing Suicide: A Global Imperative", 2014). It is also the second leading cause of death amongst young individuals, yet it is one of the most preventable ("Preventing Suicide: A Global Imperative", 2014). Moreover, most people who die of suicide give off warning signs prior to ending their life (Ramchand et al., 2017).

Suicide is the result of a complex interplay of numerous factors, which range from environmental to psychological ("Suicide in Canada," n.d.). Those who die by suicide do not necessarily need to have a mental illness, as most suicides are brought on by the immense pain felt by the individual, preventing them from being able to deal with day-to-day life stressors ("Suicide in Canada," n.d.). Providing at risk individuals with support and coping mechanisms will hopefully prevent suicidal thoughts from forming in their mind.

A 2010 study conducted by Dr. Hinduja and Dr. Patchin looked at possible root experiences that could lead to suicidal thoughts (Hinduja & Patchin, 2014). They conducted a study in the United States, and identified that involvement in bullying and cyberbullying are contributing factors to children having suicidal thoughts. Findings indicated that regardless of whether a child was an aggressor or victim, they were 47% more likely to engage in suicidal thinking (Hinduja & Patchin, 2014). This leads the scientists to believe that a possible cause for suicidal thoughts is exposure to violent behaviour. Additionally, race was found to affect whether an individual was more likely to have suicidal thoughts (Hinduja & Patchin, 2014). Per 100,000 youth, Caucasian individuals had 1.26 deaths by suicide (Hinduja & Patchin, 2014). In comparison, non-Caucasian individuals in the same group had 1.36 deaths by suicide (Hinduja & Patchin, 2014).

Among adult suicide cases, causes are more complex and can be due to drug addictions, isolation, unemployment, and other traumatic experiences. In a study conducted in 2008 by Dr. Nock and his group of researchers, men were seen to have more suicide attempts than women (Nock et al., 2008). Furthermore, the attempts made by male individuals were often fatal (Nock et al., 2008). While certain demographics are affected by suicide more than others, it is important to implement solutions that focus on everyone getting a better understanding of how to combat suicide.

In the past, there was a lot of stigma surrounding mental illness (M. Whitfield, personal communication, October 16, 2017). Because of this, there were few resources for individuals who were having suicidal thoughts, and minimal programs to train individuals on how to recognize warning signs (M. Whitfield, personal communication, October 16, 2017). Over the years, there has been an increased emphasis on mental health. In March of 2017, Western University hosted the Stories of Illness and Health event ("Stories of Illness and Health", n.d.). They invited both faculty and community members to come together at the Wolf Performance Hall to share personal stories of acute and chronic illness relating to mental health ("Stories of Illness and Health", n.d.). Just one month after, Western's Schulich School of Medicine and Dentistry faculty hosted a professional seminar called the "Brain, Mind and Body - Trauma, Neurobiology and Healing Relationship" ("Brain, Mind and Body", 2017). Additionally, Western's University Student's Council has hosted a Wellness Week for the past 5 years ("Western's Wellness Week", n.d.). Increased public dialogue regarding mental health is further evidenced by the greater level of engagement in the Bell Let's Talk program every year since the program's inception ("Results and Impact", 2017). All of these initiatives indicate a greater willingness amongst the Canadian public to discuss and reduce the stigma surrounding mental health, including suicide.

Being alone with suicidal thoughts has been known to increase the risk of harm or death ("Are You At Risk?", n.d.). It is important for an individual experiencing suicidal thoughts to talk to someone whom they feel comfortable with ("Are You At Risk?", n.d.). Ideally, they should reach out to an individual that can work with them and prevent suicidal thoughts from developing ("Are You At Risk?", n.d.). Gatekeepers are individuals that are able to recognize warning sizes of suicide, and refer someone who is at risk of suicide to the correct resources (QPCR Institute, 2012). These individuals can come in many forms including physicians, coaches, teachers, school administrators, law

enforcement and even peers. Gatekeeper training programs are now being implemented, which teach individuals the skills to recognize the signs and symptoms of suicide ("Are You At Risk?", n.d.). LMSPC has adopted three gatekeeper training programs designed by Life Works. The purpose of ASIST, ASK, and safeTALK is to educate people on how to become a suicide alert helper and be able to recognize an individual with suicidal thoughts ("How Can I Help?", n.d). These programs are very important for parents, teachers, co-workers, and other community members who come into contact with individuals that are inclined to have suicidal thoughts. Research has shown that gatekeeper training increases knowledge, attitude, and confidence when a situation arises regarding high risk individuals (Marcouz, Renaud, & Chagnon, 2007; Isaac et al., 2009). One major barrier to implementing these comprehensive training programs is financial restraint, which limits who can attend (Shannonhouse, Shaw, Wanna, Porter, & Lin, 2017).

The issue of suicide is one of increasing importance in the greater London community. The average number of deaths by suicide has increased more than four-fold in less than ten years ("Suicide Statistics", 2012). Studies done by LMSPC have shown that suicide is the second leading cause of death among Canadians aged 10-24 years old, including young Londoners ("A Framework for the Development of a Suicide Prevention Strategy", 2011).

As a group, we worked with LMSPC to apply for grant opportunities from organizations such as the London Community Foundation, Ontario Trillium Foundation, and Green Shield. We hope to target individuals of the London community that are at a financial disadvantage, who otherwise would not be able to be afford this training. By acquiring grant funding, LMSPC will be able to subsidize a portion of the costs, allowing the training to be more accessible to the public. We also hope to increase the number of people trained in these prevention programs, and not have it limited solely to those who work in the social services field. Moreover, individuals in all age groups are at risk of experiencing

suicidal thoughts or know of someone who is ("Getting Help for Someone Else", n.d.). Ultimately, removing the cost barrier will help LMSPC reach a wider audience, allowing for more individuals to gain the appropriate knowledge and skills to help those who are experiencing suicidal thoughts. Additionally, by using various social media platforms, we hope to share suicide prevention information with the public through a cost-effective medium. Sites like Twitter and Facebook can be used to dispel myths regarding suicide and suicide prevention. These sites will be used by LMSPC to share information about gatekeeper training programs in London. Through these initiatives, we hope to reduce both the number of suicide attempts and deaths in the London-Middlesex region, and empower the people in the community to help those at risk of dying by suicide.

Description of Completed Project

There were two main objectives that our CEL project aimed to achieve through our work with LMSPC. First, we aimed to address the cost barrier currently preventing many London-Middlesex community members from accessing LMSPC's training programs. Second, we hoped to expand the level of awareness in the London-Middlesex region regarding common suicide myths and available LMSPC training programs. These goals and objectives were to be achieved through completion of the following deliverables: social media infographics debunking suicide-related myths and advertising the training programs, as well as grant applications to receive additional funding for LMSPC. Initially, we began to draft a grant proposal using information provided by LMSPC. This information was mainly compiled from topics discussed in our first meeting, as well as a previous grant application that had been made to Ontario Trillium Foundation. However, we were informed about a month into our engagement that the requested deliverables had been slightly modified. Rather than writing the grant applications ourselves, we instead were asked to compile a list of various grants opportunities and their individual requirements. We were tasked to collect specific information relevant to each grant (ex. scope of the grant, application method and deadline, key contact personnel, etc.) (refer to Figure 2). The adjustment was made primarily due to the lack of information necessary for us to accurately complete the grant applications for specific organizations and companies. The varying application windows for each grant also made it impossible to complete the applications within the designated timeframe for our project.

Although the requested deliverables might have changed, the intended goals and objectives that we expected to achieve through our work with LMSPC remained consistent. Through the creation of over ten social media infographics, we hope to dispel many of the myths regarding suicide, while also spreading awareness about LMSPC's various training programs on their Facebook and Twitter pages.

Infographics on each of the training programs were made, including safeTALK, ASK and ASIST (refer to Figure 4a-f). Moreover, infographics were made debunking myths including the idea that suicide mainly affects the youth, or the fact that suicide occurs without warning (refer to Figure 5a-f). In addition to the compilation of relevant grant information, our group also reached out to forty local organizations. We intended to gauge their interest level in LMSPC's initiatives in an attempt to garner their public support for the Council. Through these efforts, we hope to provide a valuable set of data that LMSPC can later use to more effectively and efficiently apply for various sources of funding.

We also intend on providing LMSPC with our poster and final report, both of which were prepared primarily for course evaluation. Although these items were not previously requested by LMSPC, we were informed through later discussions of the significant assistance that our writing would provide the Council when preparing grant proposals in the future. Through all of the research that was conducted, as well as the analysis on updated suicide studies and statistics, we hope that our deliverables will assist LMSPC in receiving additional funding. Ultimately, we hope that this allows for increased accessibility to the Council's training programs, thereby assisting community members in their efforts to reduce the number of suicides in the London-Middlesex region.

Integration of Course Concepts

Chance, Bias, Confounding

The concepts we learned in this course aided us in completing our CEL project in numerous ways. The chance, bias, and confounding module disciplined us in finding appropriate sources for our suicide-related facts and statistics. This was particularly important for our infographics that will be shared across the LMSPC's social media platforms, including Twitter and Facebook. It would not have been suitable to debunk the myths around the topic of suicide with inaccurate or incorrect facts. To avoid sources that had incorrect statements, we looked at the primary literature, and looked for indicators of chance, bias, and confounding. These included looking at the sample size and whether feelings of suicide were measured based on a set criteria. With the practice we gained in class, we were also able to distinguish selection bias from information bias in the context of more psychology and sociology based articles. Moreover, when looking at statistics about suicide as a whole, it is important to look at studies that not only have internal validity, but also external validity. External validity helped us generalize these statistics and note trends that are common worldwide, thereby allowing us to share global statistics on our infographics.

We found a particularly interesting paper that analyzed how confounding factors can affect studies on suicide (Koivumaa-Honkanen, Honkanen, & Viinamaki, 2001). This paper looked at the association between life dissatisfaction and increased risk of suicide (Koivumaa-Honkanen, Honkanen, & Viinamaki, 2001). Koivumaa-Honkanen and her fellow colleagues found that the link between these two variables, which was once thought to be significant, was no longer statistically significant when factors including age, sex, health status, health behaviours, marital status, and social class were controlled for. This further highlights just how important it is to avoid chance, bias, and

confounding when looking at the results of studies that link various variables, and in our case suicide-related risks.

Health Literacy

Health literacy constitutes an individual's ability to accurately obtain and understand basic health information and services (Zhang et al., 2016). A key step in increasing the health outcome of the London-Middlesex community is to improve their overall health literacy. Studies have shown that increased health literacy results in a healthier lifestyle and decisions, better self-management, and a decrease in risky behaviours (Zhang et al., 2016). Thus, by decreasing the stigma around suicide, educating the community about the facts of suicide, debunking the myths, and recognizing warning signs of suicide, those who are at risk can quickly be identified and helped accordingly.

A study was conducted by Zhang and his fellow researchers that sampled junior and senior high school students located in six cities across China, including both urban and rural regions. The study looked into the association between high literacy and psychological symptoms with non-suicidal self injury (NSSI) by conducting self-reported surveys (Zhang et al., 2016). NSSI is defined as "any intentional, self-directed behavior that causes immediate destruction of body tissues, with no suicidal intent" (Zhang et al., 2016). It was found that senior high school students had significantly higher health literacy scores than junior high school students, and that junior high school students exhibited greater levels of NSSI (Zhang et al., 2016). In addition, a significant association was seen between increased family economic status and parental education and high health literacy (Zhang et al., 2016).

In addition to the importance of mental health literacy, a study by Oliffe and his fellow researchers shed light on how education tailored to specific demographics would increase health literacy in certain populations. In the study, the difference between male and female mental health literacy was assessed.

It was shown that males with depression had lower health literacy rates than males in the control group (Oliffe et al., 2015). While a similar result was seen in females, depressed males had a lower health literacy rate than women (Oliffe et al., 2015). This outlines the importance of gender specific and sensitive programs to target depression and individuals at risk of suicide. While this is not particularly addressed by LMSPC at the moment, it is something that they can potentially incorporate into some of the training programs.

Therefore, implementing training programs within the community is of great importance, and will hopefully improve the population's health literacy with regards to suicide prevention. Decreasing the stigma around suicide, as well as the negative attitudes around help-seeking behaviour may improve knowledge about those at risk of death by suicide. A follow-up study can then be conducted to analyze if the risk of suicide decreased in individuals who attended LMSPC's training programs.

Opioid Use

The majority of suicides exhibited by individuals with substance use disorders typically do not involve overdose (Ilgen et al., 2016). Opioids are typically prescribed to individuals suffering from chronic pain (Ilgen et al., 2016). An association was found between individuals experiencing chronic non-cancer pain and increased suicide risk when other psychiatric disorders were controlled for (Ilgen et al., 2016). A case cohort study, conducted in the United States, collected data from approximately 120,000 Veteran Health Affairs patients (Ilgen et al., 2016). These individuals suffered from chronic pain conditions, and were prescribed opioids as treatment (Ilgen et al., 2016). During the observational period of the study, 2,601 patients died by suicide (Ilgen et al., 2016). The researchers determined that as opioid dosage increased so did the risk of suicide (Ilgen et al., 2016). It is unknown whether suicide

can be considered an adverse outcome of opioid use, or if it is an effect of the increased pain and severity suffered beyond tolerable levels (Ilgen et al., 2016). It has also been hypothesized that increasing access to opioids can result in suicide by overdose in a group of people that already have higher than average rates of psychiatric disorder (Ilgen et al., 2016). Psychological factors, such as frustration and hopelessness, resulting from an individual's inability to suppress pain, even after elevated opioid intake, could explain why they are more likely to attempt suicide (Ilgen et al., 2016). A greater push needs to be made into optimizing pain management strategies for those suffering severe chronic non-cancer pain conditions to reduce the number of deaths lost by suicide (Ilgen et al., 2016). By acknowledging how the increased opioid use in the London-Middlesex area can affect suicide, LMSPC can target projects pertaining to this issue in the future.

In the most recent data obtained in 2015, 12% of the individuals in Ontario who died of an opioid overdose died by suicide (Network, 2017). Just under 80% of those deaths occurred in people over the age of 45 (Network, 2017). In both males and females, a diagnosis of opioid-use disorder increases the risk of suicide (Opioid Use Disorders and Suicide: A Hidden Tragedy, 2017). The risk of death by suicide was found to increase two-fold for men with an opioid-use disorder, and more than eight-fold for women with an opioid use disorder (Opioid Use Disorders and Suicide: A Hidden Tragedy, 2017). Those who misuse opioids weekly are at a much greater risk for suicide planning and attempts than individuals who used less often (Opioid Use Disorders and Suicide: A Hidden Tragedy, 2017). According to Western University (n.d.), the correlation between opioid use and suicide is of great importance to the London-Middlesex area. This is because the population living in this region have been found to inject opioid drugs on average more often than the rest of Ontario.

Recommended Next Steps

Our work with LMSPC has gotten the ball rolling, but this is definitely not the end. While we were able to contact several local organizations that LMSPC hoped to target for collaboration, many of these groups will require follow-up communication in the future. In addition, the accumulated grant information will give both LMSPC and their future partners the material they require to tailor grants to specific funding agencies. The aim of future projects will be to finalize these grants, and maintain sustainable partnerships that this project sought to create. A large portion of the outreach conducted was targeted towards other organizations in the social enterprise space. Suicide prevention being a prominent theme across every social program makes the work of LMSPC very relevant to other organizations. Their vision is to equip everybody with the skills to recognize and provide support for individuals going through difficult experiences. Going forward, LMSPC will continue to cultivate relationships with partner organizations and certain organizations that have expressed interest, including the following:

Strathroy United FC

This organization is a soccer club located in the town of Strathroy, and receives participation from individuals ranging from 3-25 years of age ("Mission & Vision", n.d.). Through this partnership, LMSPC will look to bring suicide prevention awareness to directors, coaches, and parent volunteers. The goal is to host training programs so that these individuals, who interact with children on a regular basis, are better able to recognize signs of possible suicide. Working alongside Strathroy United FC will provide LMSPC with the ability to attract more participants, and possibly garner funding to grow operations.

London Junior Knights

This organization is a hockey club located in London that receives participation from individuals ranging from 7-16 years of age ("History", n.d.). Similar to Strathroy United FC, LMSPC will seek to provide suicide prevention training to supervisors, coaches, and parents. The London Junior Knights is a very reputed club across London, and has partnerships with many other social enterprises in the city. Working alongside this club could provide LMSPC with a wider reach across the region and better equip the London-Middlesex community with suicide prevention skills.

Additionally, with the repository of open grants prepared for the LMSPC, they will be able to better target their applications and hopefully receive funding to grow their operation. With additional capital, LMSPC can look to grow their staff base and train more individuals to be able to handle the growing demand for suicide health literacy. These aspects will allow LMSPC to expand its reach across the London-Middlesex community to strengthen the community's ability to prevent and handle suicide.

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Appendix

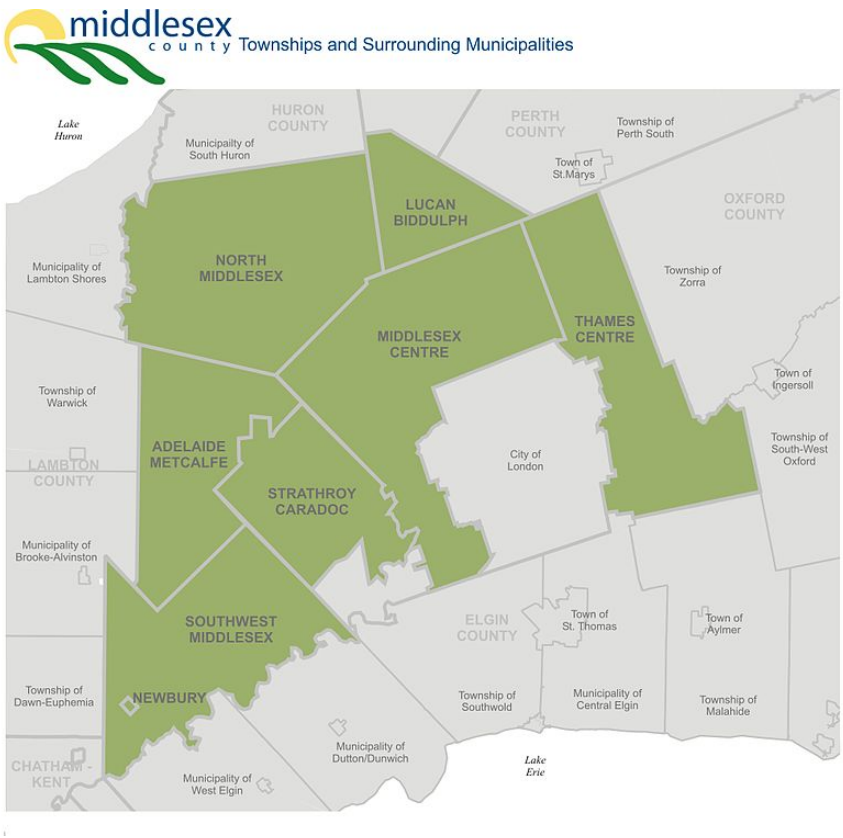

Figure 1. Map of London and Middlesex County townships and surrounding municipalities

Grant Summary	
Name	Westminster College Foundation Grant
Brief History/Goals	Westminster College was founded in the 1950s to provide residential space for Western University students affiliated with the United Church of Canada. Although no longer in operation, a foundation was established in 2007 to keep the organization's original mission of serving the supporting the local community alive
Scope	Westminster College Foundation provides grants to registered charitable organizations in support of programs or projects that help advance and assist in the fields of education, health and/or spiritual care, focusing primarily on youth and/or seniors.
Application Details & Deadlines	Accepted on March 1st and October 1st of each year
Key Contact Personnel	Gloria Rolfe, Executive Director

Westminster College Foundation is a member of Pillar Nonprofit Network

Figure 2. Sample Grant Summary

Figure 3. CEL Project Timeline

Infographics-Suicide Prevention Training Programs

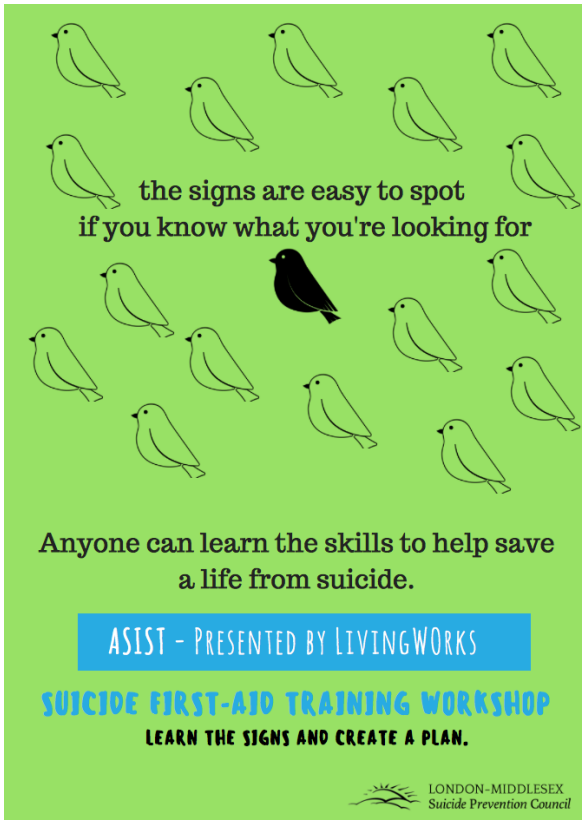

Figure 4a. ASIST Infographic 1

Figure 4b. ASIST Infographic 2

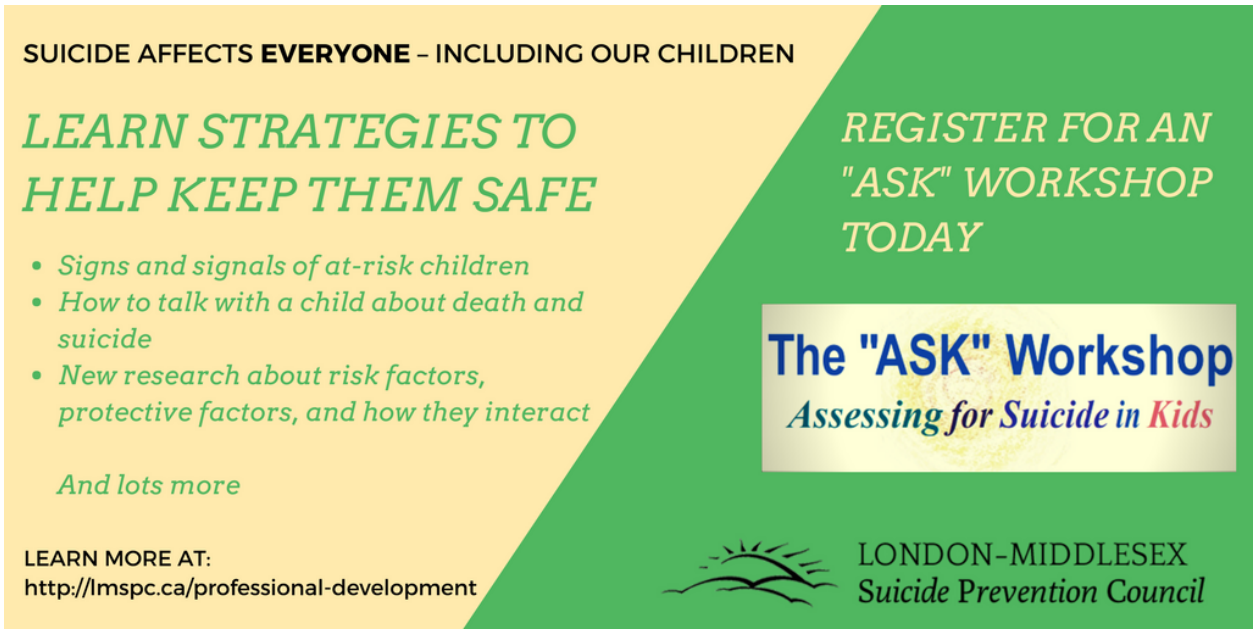

Figure 4c. ASK Infographic 1

Figure 4d. ASK Infographic 2

Figure 4e. safeTALK Infographic 1

Figure 4f. safeTALK Infographic 2

Figure 4e. safeTALK Infographic 3

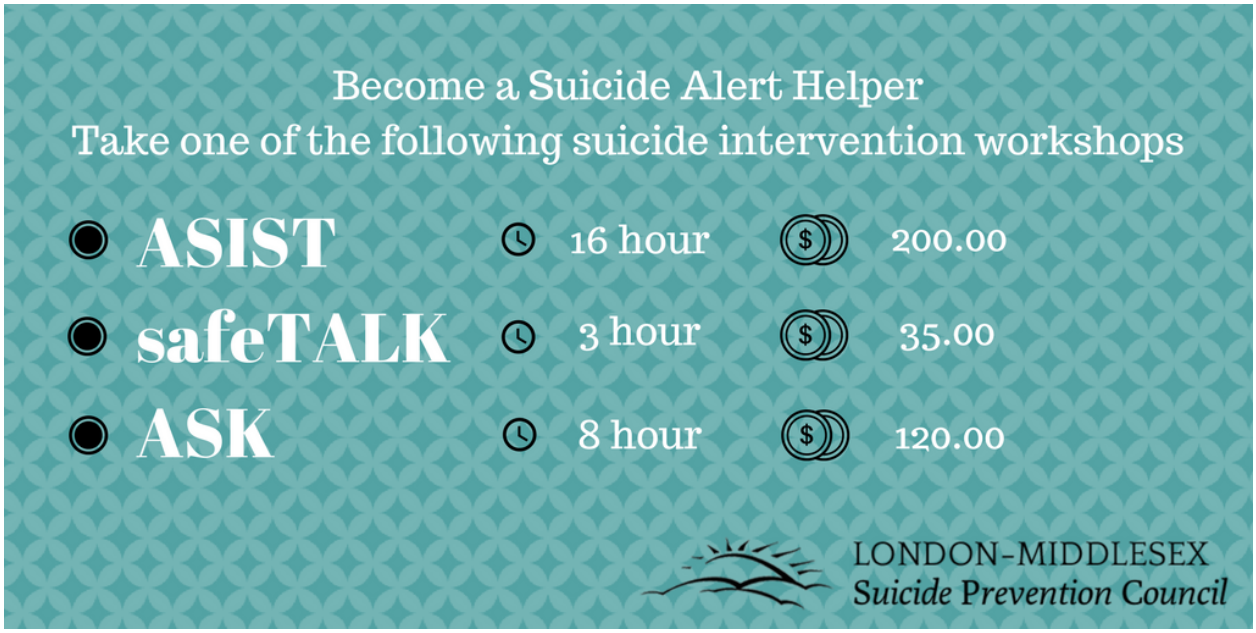

Figure 4f. Suicide prevention training programs

Infographics- Myths Surrounding Suicide

Figure 5a. Myth 1

Figure 5b. Myth 2

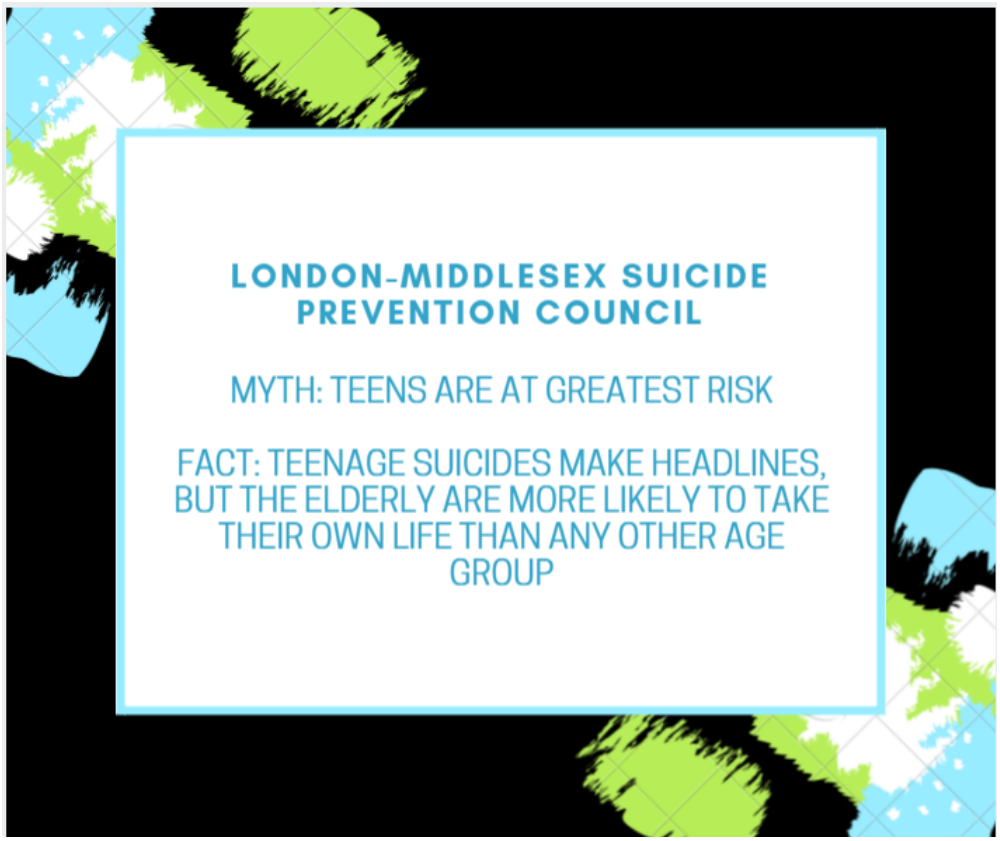

Figure 5c. Myth 3

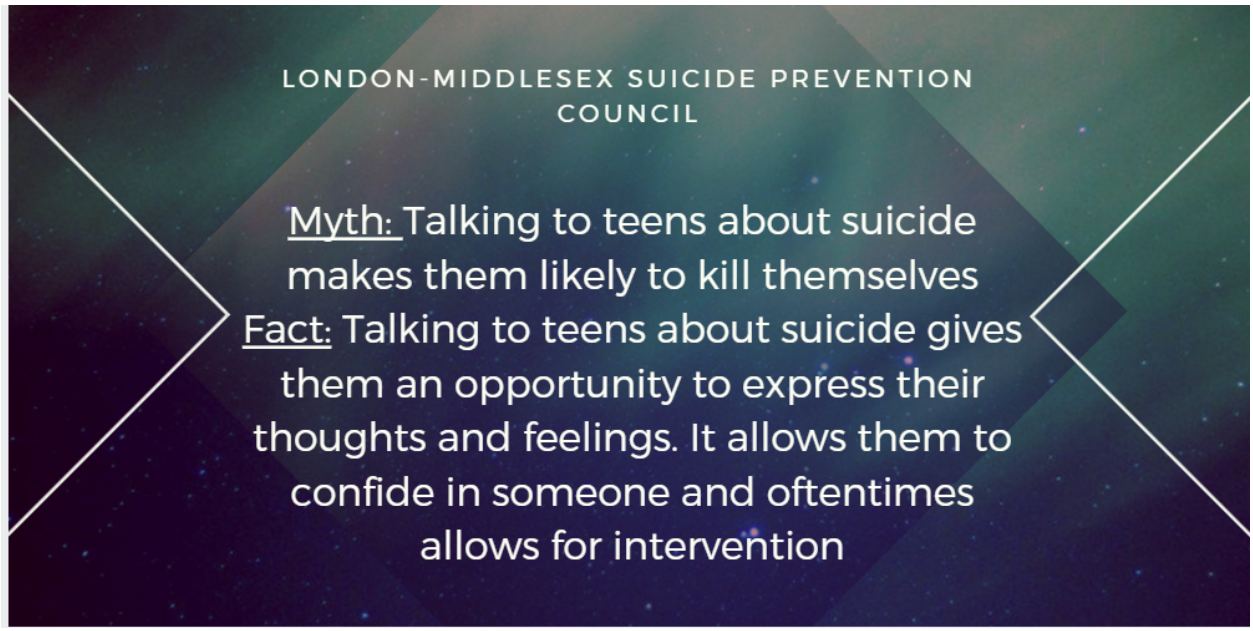

Figure 5d. Myth 4

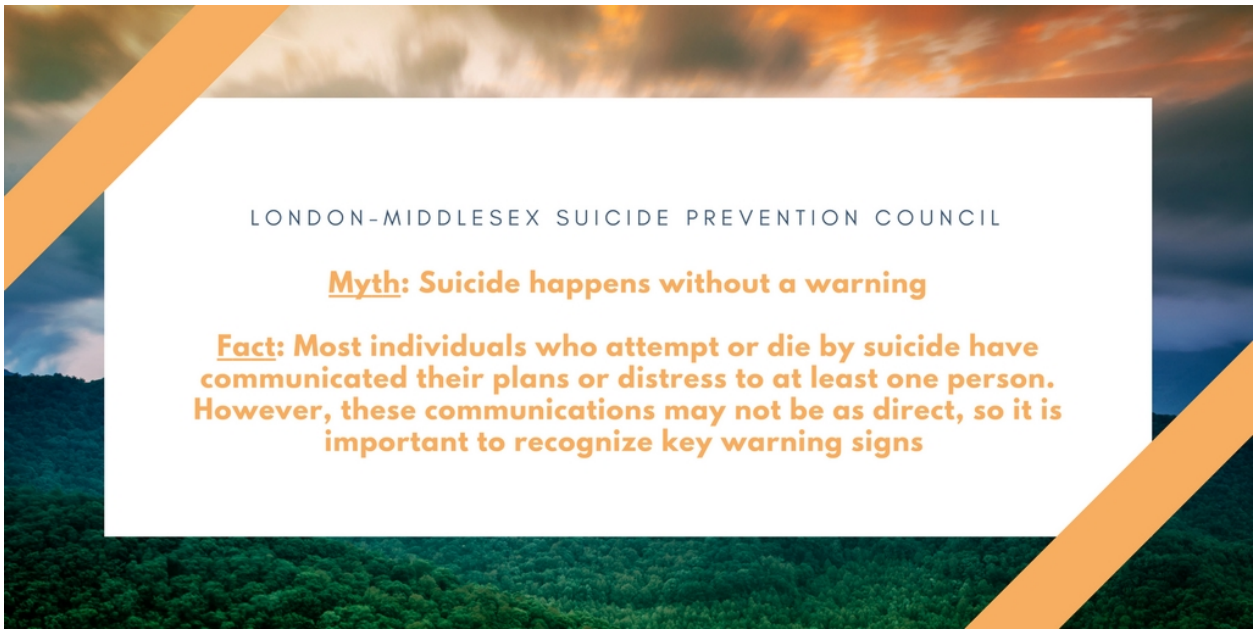

Figure 5e. Myth 5

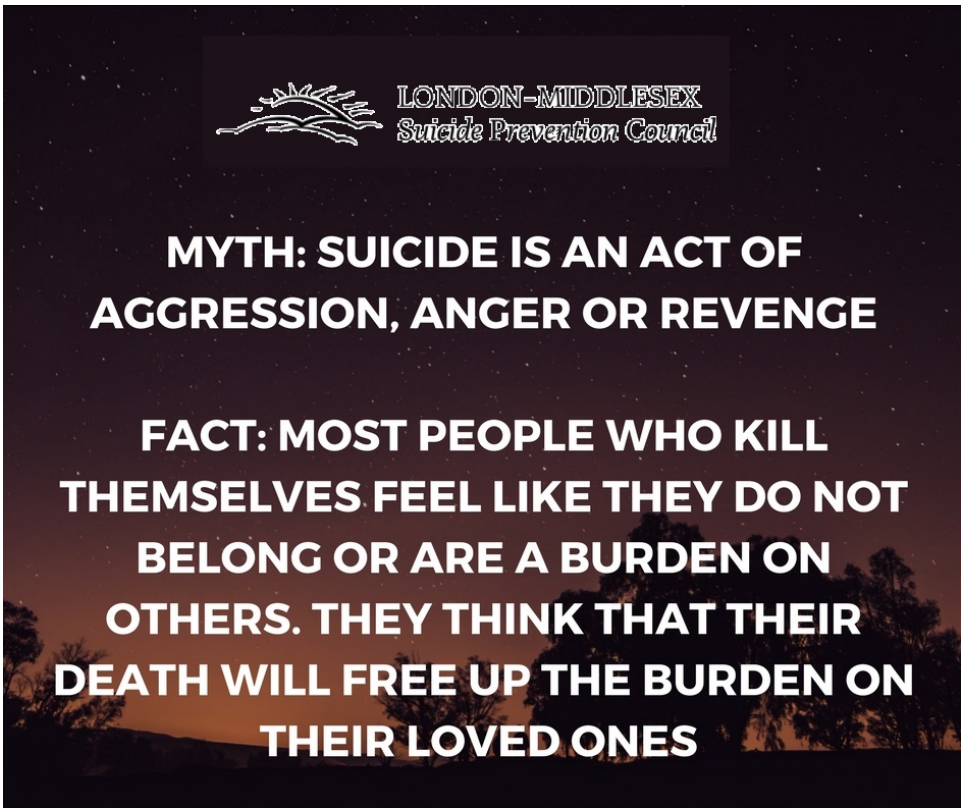

Figure 5f. Myth 6