AT THE INTERFACE OF MEDICINE AND DANCE

by

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Abstract

This paper will combine the arts and sciences in such a manner as to address the overwhelming prevalence of suicide in today's society. An introduction will be given first to present the reader with the barriers of collaboration between the arts and sciences as well as to describe how the author chose to bring about an interdisciplinary perspective through the use of this particular topic of suicide. Next, the performance of the dance component of this Honors Project entitled *In Loving Memory* will be explained from the importance of the speech to the significance of the story that is told throughout the piece. After which, the paper will shift towards the pre-medical aspect of the project, addressing first how physicians can be more aware of the signs contributing to suicide within their patients. Then, the topic of suicide as a public health issue will be further examined. To finish it all up, a quick overview will be given, hitting the highpoints of this Honors Project and the issues that suicide presents to today's physicians and society as a whole.

Introduction

According to the Oxford Dictionary, medicine is defined as the science or practice of the diagnosis, treatment, and prevention of disease (in technical use often taken to exclude surgery).[1] Medicine is typically associated with the sciences and is even classified as such. With this general thought, there leaves no space for an introduction of the arts within the sciences. The arts and sciences are isolated in their own individual worlds, completely ignoring the other's existence. The option for crossing over between these two categories hardly even exists, leading to the rare possibility of exchange and integration. For my Final Honors Project, I wanted to break down these barriers in order to create a more collaborative effort between the arts and sciences. The inspiration behind this project developed from an interdisciplinary perspective by focusing on my Pre-Medicine emphasis while also incorporating my passion for dance. In this manner, I wanted to use dance as a means of communicating to the public the seriousness of a particular healthcare epidemic society is facing today. A new approach of raising awareness for a medical cause.

In November, I conducted two weeks of extensive research on a wide variety of health conditions and how common they are in the United States. After much internal debate, I selected to focus on the issue of suicide and its overwhelming prevalence in today's society. According to the most recent statistic from the Centers for Disease Control and Prevention, suicide is the second leading cause of death among those aged 15-24.[2] With this having such an impact on the college community, I decided that I would create a choreographic dance in response to suicide and those it affects. This piece was performed on the evening of May 9, 2019 in Mark A. Chapman Theatre at the Senior Dance Concert "Who We Are, Who We Become." Along with creating a dance, I further expanded upon suicide in the healthcare setting by addressing how

physicians can learn to be aware of the warning signs of these mental health conditions within their patients and by calling attention to the public health issue that suicide presents.

The Performance: *In Loving Memory*

The official performance of this choreographic dance centered around suicide awareness was held on Thursday, May 9, 2019 at 7:00pm in Mark A. Chapman Theatre at the end-of-the-year Senior Dance Concert entitled "Who We Are, Who We Become." The piece was given the name of *In Loving Memory*. Within the concert's program, I inserted a choreographer's note stating that *In Loving Memory* was a piece dedicated to suicide awareness. In addition to this, I presented the audience with an approximate two-minute speech before the dance was performed. Both the speech and the dance are included in the YouTube video link that was attached with this project (see Appendix). I will proceed to further explain the vision behind *In Loving Memory* as it can be seen in the performance.

To begin, I addressed the audience with a speech. In this speech, I introduced the creation behind *In Loving Memory* and how the topic of suicide was reached. I, then, directed the audience in a more positive outlook on suicide by giving them two words to focus on throughout the performance: *encouraged* and *empowered*. *Encouraged* in a sense to know that it is okay to not be okay. Everyone encounters the hardships of life from time to time. *Empowered* to discuss the topics that society tries so hard to avoid. For, if these difficult conversations could become not so unacceptable, then maybe a change could be made to where less and less young people are taking their lives each day. After proposing this, I subsequently transitioned to give the audience permission to excuse themselves from the theater if they deemed it necessary. Although, as the choreographer, I felt it imperative to make this statement, it was not needed, for no one left their seat. I desired to give this introduction before the dance was presented to offer the audience a

sense of what was to come and what I hoped they would take away from this piece. I did not want there to be any negative association with this performance. Once I finished my address, the audience was engulfed into the realistic story that is *In Loving Memory*.

As the stage is lit, the audience sees a single dancer, dressed in white, lying flat on her back. A heartbeat brings her to life, leading her to begin moving about the stage. After she gets up from the ground, she is pulled in different directions and motions as if she is taking her heart out of her body but then returns it a moment later. This sets up the scene for the audience to know that this single dancer is in trouble with herself. As the dance progresses, she contemplates committing suicide in a variety of ways. The first that is presented is hanging followed by suffocation, cutting, firearm, and falling from heights.[3] As these different methods are shown, other dancers, dressed in black with yellow ribbons in their hair, enter the stage and try to diverge her. These dancers can be thought of as her friends or people who care deeply about her. At almost every instant, they are trying to help the suicidal dancer. However, she continues to push them away, insisting that she does not need their help. She is fine, or, at least, so she thinks. She is then encircled by her fellow dancers, where she feels that she is trapped and past the point of no return. Not knowing what else to do, she resorts to the sixth and final suicidal method presented in this piece—stabbing.[3] One of her friends begins to reenter the stage casually but rushes to the body once she notices it. She calls the other dancers over for help, but, alas, they are too late. Her final heartbeat is felt followed by a heart rate monitor flatline and the passing sirens of an ambulance, signaling a time change. The stage goes black.

A high school bell rings, indicating the beginning of a passing period. The stage is slowly lit, where a single chair has now replaced the body of the suicidal dancer. Her friends appear on the stage, one by one, individually interacting with this empty chair. Once they are all seated

around the chair, the bell rings again, representing the end of this passing period. The audience then hears a voice state: “Everyone says destroy what destroys you. Right? But what if the thing destroying you is yourself?” This leads to a very powerful narrative that is spoken overtop of a compelling instrumental score. Throughout this section, the dancers dressed in black interact with this chair, emphasizing that it is more than just an empty chair. After a period of time, the suicidal dancer in white reappears, but she is no longer physically present with her friends. She is watching them from above. It is here that she realizes how much sadness and hurt she has brought upon her friends and how much they truly cared about her. While time cannot be reversed, she wants her fellow dancers to know that she will always be with them wherever they go, but it is time for her to move on to a better place. Towards the end of this realization, the voice says: “Don’t let there be another empty chair.” with the final statement of “It’s not just a chair. That was my friend’s chair.” Altogether, this ending leaves the audience with a more positive and hopeful perspective.

Addressing Suicide in Patients

According to data collected from the Centers for Disease Control and Prevention and a study from PubMed, approximately 45,000 people in the United States commit suicide each year with that totaling to more than 800,000 worldwide.[4,5] These numbers are quite startling and continue to be on the rise year after year. However, primary care providers might be in the ideal position to better prevent suicide due to their frequent interactions with suicidal patients.[6] One study found that, among patients who committed suicide, 80% had contact with primary care clinicians within one year of their death.[6] These physicians examine a significant number of the patients who eventually die by suicide. This finding emphasizes the importance of placing suicide prevention strategies and interventions within the primary healthcare setting.

A common fear among many clinicians is that asking about suicide will lead to suicidal thoughts and actions. However, there appears to be no data to support this. From one 2014 study, the findings suggested that acknowledging and talking about suicide may in fact reduce, rather than increase suicidal ideation, and may lead to improvements in mental health in treatment-seeking populations.[7] Although many patients may not verbalize that they have experienced suicidal thoughts on their own, they greatly appreciate the opportunity to discuss these issues when the conversation is physician-led. Considering that a numerous amount of patients who commit suicide have seen or been in contact with their primary care physician within a year of their death, it is believed that these patients are seeking help. However, the physicians may be unaware of this, especially if the patient is unwilling to speak up on their own. More often than not, patients who have contemplated suicide will generally inform their doctors of such ideas when prompted.

The first step that primary care physicians should conduct in evaluating suicide risk is to verify if suicidal thoughts are present or not, and, if so, which form does it take—active or passive. Active suicidal ideation is defined as the thoughts of taking action to kill oneself, such as in the statement "I want to end my life and die."[8] On the other hand, passive suicidal ideation is the wish or hope that death will overtake oneself, as in "I hope I go to sleep and never wake up."[8] If it is determined that suicidal ideation is present, then the physician needs to address this concern by asking a series of questions to learn more about the patient's history with suicide. According to Schreiber and Culpepper, the following questions are some that should be asked:

- *Has a specific plan been formulated or implemented, including a specific method, place, and time? What is the anticipated outcome of the plan?*

- *Are the means of committing suicide available or readily accessible? Does the patient know how to use these means?*
- *What is the lethality of the plan? What is the patient's conception of lethality versus the objective lethality?*
- *What is the likelihood of rescue?*
- *Have any preparations been made (such as gathering pills, changing wills, suicide notes) or how close has the patient come to completing the plan? Has the patient practiced the suicidal act or has an actual attempt already been made?*
- *What is the strength of the intent to carry out suicidal thoughts and plans?*
- *Is there a history of impulsive behaviors or substance use that might increase impulsivity? What is the ability to control impulsivity?*
- *What is the accessibility of support systems and recent stressors that may threaten the patient's ability to cope with difficulties and ability to participate in treatment planning?*[8]

It is also highly recommended that the physician asks about the patient's individual past history of suicidal thoughts and the patient's family history of suicidal thoughts. By engaging in open dialogue between patients and physicians when it comes to the major issue that is suicide, a trusting physician-patient alliance can be created, which could lead to a reduction in suicide risk over time.

Suicide: A Public Health Issue

According to the Centers for Disease Control and Prevention, data indicates that suicide rates have jumped 30% in the United States since 1999.[9] This is a significant increase for the past 20 years. Despite this statistic and many others indicating the rise of suicide rates, the topic seems to remain impermissible. Some of the complications arising because of the nature of

suicide itself. Seen by many as a personal "choice," the combination of ingrained religious attitudes, social mores, and the wide variety of psychological predictors and drivers for suicidal behavior make the topic difficult and mitigating to study.[10] However, with suicide rates continuing to increase and suicide, itself, being seen as preventable, public health officials have an important role to play in the study and implementation of more effective treatment options.

It has been highly suggested that suicide prevention efforts be combined into public health. However, suicide has an incredibly high cost. In the Centers for Disease Control and Prevention's 2015 publication "Preventing Suicide: A Comprehensive Public Health Approach," it presented data showing that, between medical costs and lost wages, suicide costs $51 billion annually.[10] While this is a hefty fee, the publication later goes onto indicate that this greatly underestimates the severity of the problem. Therefore, how do we address it? According to the former NIMH Director, Thomas Insel, he stated," To reduce suicide, we need to know how to target our efforts: to be able to reliably identify who is at risk, how to reach them, and how to deter them from acting on suicidal thoughts."[10] This strategy is a great idea, but how can one identify who is at risk for committing suicide?

The risk for suicidal behavior is complex. Research suggests that people who attempt suicide differ from others in many aspects of how they think, react to events, and make decisions.[11] There are many differences that can occur on top of mental disorders that are associated with a high suicide risk. In order to be able to detect those at risk and prevent suicide, it is crucial that we understand the role of both long-term factors—such as experiences in childhood—and more immediate factors like mental health and recent life events.[11] This is important because both long-term memories and short-term experiences have an impact on the

psychological aspects of the brain. Effective suicide prevention programs consider a set of risk factors and promote interventions that are aligned towards specific groups of people.

As suicide rates continue to be on the rise, it is time to tackle suicide like the public health crisis it truly is. Those who are the most influential in causing this turnabout are the healthcare leaders and the executives. It is up to them to lead the supportive efforts that will increase access to behavioral healthcare and reduce the stigma of mental illness. In order to do this, a community approach to education is required, along with the ability to enable early detection and intervention. The path to zero suicides requires that healthcare leaders—and the nation as a whole—treat suicide as a public health issue and that we normalize discussion around mental health, suicide, and treatment.[9] The only way that this is going to happen is if each person begins to share the feelings that they are hiding within themselves.

Conclusion

Overall, it can be seen that suicide is a pressing health concern in today's society. With suicide being the second leading cause of death among those aged 15-24 and knowing that my main audience for this Honors Project would be the college community, I wanted to directly address this issue. I implemented the use of the art of dance in order to capture my audience on an emotional level. After watching the performance, I wanted the members of the audience to leave impacted. Impacted in such a manner that they, too, would like to break the societal stigma that comes with suicide. I, then, transitioned to the scientific aspect of the project, where I addressed suicide within the healthcare system focusing on how physicians should be more aware of the warning signs that lead to suicide within their patients and how the current public health issue of suicide needs to be more aggressively attacked.

Both the artistic side and the scientific aspect of this Honors Project faced the same fear—that bringing about the topic of suicide would lead to suicidal thoughts and actions. I, as the choreographer, felt this concern for my dancers and audience members in the same manner that physicians are worried for their patients. However, this need not be a matter of concern anymore. As suicide rates continue to rise, more awareness and action needs to take place in the healthcare system as well as in society. In hopes that, if this can be done, a positive shift could be made to where we see suicide impacting the lives of our loved ones less and less.

Appendix: *In Loving Memory* Video

The performance of the dance component of this Final Honors Project entitled *In Loving Memory* can be viewed at the following YouTube link:

https://www.youtube.com/watch?v=R7TsT4qv1vY

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