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The Blue Whale Challenge, Social Media, Self-Harm, and Suicide Contagion

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The Blue Whale Challenge is a suicide “game” that first appeared on social media platforms like Facebook, Twitter, and Instagram in 2017.¹ Apparently originating in Russia, the fad became a worldwide phenomenon in subsequent years. The challenge occurs over the course of 50 days, during which “players” are instructed by “administrators” to engage in daily tasks involving increasingly injurious forms of self-harm. The name of the challenge originates from an unexplained phenomenon wherein whales, highly social animals that travel in herds, stray from the herd and beach themselves in a seemingly deliberate manner, causing their demise.²

During the initial days of the challenge, a participant might be given a task like “watch a horror movie.”^{2–4} Then, they may be asked to “drink coffee and stay up all night,” followed by “put on headphones and listen to heavy metal music at the highest volume until your ears bleed.” Subsequent tasks might include pulling off dangerous stunts in traffic, ingesting poisonous liquids, cutting or burning skin, and deliberately fracturing bones. The final task, on the 50th day, is to commit suicide, usually in a public setting. Participants are encouraged to make videos of themselves completing their daily tasks and post these videos on social media, with the inclusion of certain hashtags allowing videos to be found and identified with the challenge. Given the popularity of this challenge, participants are frequently motivated by the social media followers they accumulate as they progress through the 50 days and the number of views their videos receive. They frequently complete suicide by jumping off the balcony of a high-rise building, often yelling, screaming, and causing a commotion to attract a crowd, with the expectation an onlooker will take a video of the spectacle and post it on social media, so the final “feat” might have an even larger audience.

In this report, we describe an adolescent patient with a history of self-injurious behavior who was hospitalized for suicidal ideation. Though she never formally partook in the Blue Whale Challenge, she followed the phenomenon on

social media, interacted with participants as they progressed through their 50 days, and was inspired by the challenge to engage in self-injurious behavior and post it on social media.

Case Report

Miss A is a 15-year-old Hispanic girl with a past psychiatric history of major depressive disorder, generalized anxiety disorder, and borderline personality disorder and no significant past medical history, who was hospitalized for depressed mood and suicidal ideation. This was her eighth psychiatric hospitalization in the past 2 years. Her most recent hospitalization was 2 weeks prior for engaging in self-injurious behavior by “burning” the dorsal aspect of her hand by putting salt on her skin, then holding an ice cube over the salt, leaving a bruise similar to frostbite. After discharge from that hospitalization, she spoke to a social worker from the hospital who called her for routine follow-up. During that phone call, the patient endorsed continued depressed mood, suicidal ideation, and self-injurious behavior. The social worker spoke to the patient’s family and advised them to take the patient to the nearest hospital for psychiatric evaluation. She was taken to the emergency department at a local hospital, from which she was admitted to an inpatient psychiatric hospital.

During the first encounter, Miss A appeared inappropriately elated, smiling and giggling at times, restraining herself from laughing out loud, and struggling to maintain a serious demeanor. She had dozens of cuts on her arms, mostly superficial; some appeared to be recent, while others were in various stages of healing. Without being asked a question, she said, “I think I should be sent back to residential,” referring to the long-term residential treatment center where she recently spent 3 months. Miss A complained of persistent depressed mood, suicidal ideation, and desire for self-injury but had little to say about recent or ongoing stressors, past trauma, or other explanations for her condition. “There isn’t really a reason for it,” she said. “I can be perfectly happy, and then a switch just goes off in my brain, and I feel like I have to hurt myself or that I should die.”

In the inpatient unit, Miss A was continued on her home medication, which included escitalopram, bupropion, and trazodone. For nearly the first week she was hospitalized, the patient was adamant about her continued depression and desire to end her life. Each day, she would enthusiastically show off new scratches and superficial lacerations she had made on her arms, using sharp objects she found on the unit. She was started on close observation, barred from

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leaving the unit, and restricted from using pens, pencils, or eating utensils. Regardless, she still managed to find random objects with which to scratch and cut herself. Miss A insisted her medication regimen and the milieu therapy offered in the unit were not enough to improve her mood and quell her injurious desires and that the only way she might be helped was if she were transferred to long-term residential treatment.

As part of inpatient protocol, Miss A was required to relinquish her cell phone when she first arrived. Her phone was given to her mother. One week into the patient's hospitalization, the patient's mother contacted the treatment team to inform them that she had conducted a thorough investigation of the patient's phone, including her e-mails, text messages, and postings on various social media platforms, and was mortified by what she found. Over at least the past few months, Miss A had been following multiple participants of the Blue Whale Challenge on social media. She looked at their posts as they completed the tasks assigned to them during the course of 50 days and showed her support by giving the post a star, "thumbs up," or whatever other method a given platform used to track the number of views and patronage. She often left messages on these postings, saying things like "great job," "you're so brave," and "I love you." Miss A even struck up personal relationships with participants of the Challenge. Most appalling for Miss A's mother was a video she found on the patient's cell phone of her daughter burning her skin with salt and ice in the bathroom of their home. There were text messages between her and a Blue Whale Challenge participant in which she asked about posting the video on social media and including the same hashtags used by participants to attract the attention of Challenge enthusiasts.

Miss A's mother showed the various text message threads and self-injury video to the treatment team and indicated she was eager to confront Miss A about what she had been doing on social media. The treatment team spoke to Miss A first. To limit embarrassment, they chose not to reveal they had seen these text threads and video and only admitted to knowing they existed. When the subject of Miss A's cell phone was broached, she was humiliated and said, "You bringing this up makes me want to kill myself." Although there was no insinuation of the kind, Miss A said she was "insulted" by the notion she made the self-injury video for fame or notoriety. Instead, she indicated her goal was "for other people to know [her] pain."

Miss A admitted to knowing about the Blue Whale Challenge and following several of its participants but adamantly denied taking part in it or having any desire to. However, after that discussion, and being told she did not meet criteria for long-term residential treatment, she quickly stopped self-harming and reported feeling less depressed. The patient also let it slip that she pushed for transfer to residential treatment because they permit cell phones there, allowing her to communicate with friends. She was discharged home 2 days later with oral medication and appropriate follow-up appointments. Additionally, she

left knowing her mother would be keeping close track of her cell phone use, and social media apps would no longer be allowed.

Discussion

Impulsive self-injurious behavior in an adolescent with major depressive disorder and borderline personality traits is commonplace in inpatient psychiatric units.⁵ Also prevalent is the way in which cell phone use plays at least some role in the story of how a given adolescent was hospitalized. What is novel is the way in which these phenomena combine to form a troubling modern trend.

Suicide is the second leading cause of death in the United States among people aged 10 to 24 years, accounting for 19.2% of all deaths.⁶ Widespread media depiction of suicide can potentiate imitative effects, leading to additional suicides.⁷ The publicized suicide serves as a trigger, in the absence of protective factors, for the next suicide by a suggestible person. This pattern, known as either suicide contagion or the "Werther effect," was first documented in the 1970s, and subsequent research indicates it is far more powerful than when originally proposed, particularly among children and adolescents.⁸ Contagion is believed to be implicated in 5% of all adolescent suicides. It can spread through a school or community and with the advent of social media can very rapidly disseminate internationally. The Blue Whale Challenge is linked to suicides in virtually every part of the world.¹

Recent research into the correlation between viewing self-harm content on social media and actual self-injurious behavior suggests 32.5% of people between the ages of 18 and 29 years who viewed such content engaged in some form of self-injury.⁹ While it cannot be assumed that all self-harm in this population is attributable to social media, it is clearly an influential component. This same research found that only 20.1% of people who viewed self-harm on social media did it intentionally.⁹ The vast majority inadvertently stumbled onto it. While there is no research to quantify this phenomenon, it is clear that a percentage of individuals who self-harm would not do so if not for a chance encounter on social media. It is also reasonable to assume those who view this content are more likely to suffer from psychiatric conditions that precede self-harm, such as depression and anxiety. While these data were derived from research conducted among adults,⁹ a similar study conducted with younger subjects might yield starker results, given children and adolescents are more impressionable.

Social media will evolve and continue to give rise to cultural trends and fads of all kinds; all of these are forms of contagion. But clearly, contagion promoting self-harm and suicidality cannot be tolerated. The onus to protect impressionable people, particularly children and adolescents, is on 2 entities. First, parents must keep close watch on the way in which their children use technology like cell phones and computers, particularly regarding social media. There must be regular discussion about what material is permissible and parental monitoring to make certain rules are enforced.

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Second, companies that run social media platforms should continue to evolve in their ability to filter objectionable material, including videos depicting self-harm and suicide. However, this should not bar healthy dialogue about these topics. Best practices should be followed by all media when broaching these issues, including avoiding details about how a specific suicide took place, sharing the content of a suicide note, or providing personal details about the individual who died.¹⁰ Most importantly, self-harm and suicide should never be glamorized or romanticized. Additionally, all discussion of suicide in the media should reinforce that coping skills, support, and treatment are effective tools to thwart this behavior.

Conclusion

The Blue Whale Challenge is an example of how modern constructs like social media can glorify self-harm and suicide, thereby perpetuating an age-old problem like suicide contagion. Young people are particularly vulnerable. Safeguards must be in place to prevent children and adolescents from viewing this content on social media and to stop it from being posted in the first place.

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