## **BMJ Christmas editorial December 2021**

A song of hope <a href="https://www.bmj.com/content/375/bmj.n2964">https://www.bmj.com/content/375/bmj.n2964</a>

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Linked article: Niederkrotenthaler et al 2021 Association of Logic's Hip Hop Song 1-800-273-8255 with Lifeline Calls and Suicides in the United States <a href="https://www.bmj.com/content/375/bmj-2021-067726">https://www.bmj.com/content/375/bmj-2021-067726</a>

Mobilising the creative arts to help prevent suicide

Some readers may feel that the Christmas edition of the BMJ, known for its quirkier and sometimes humorous content, is not the appropriate setting for a research article evaluating a suicide prevention intervention(1). Yet it is the characteristically creative content of this edition that makes it the perfect vehicle for conveying the key message of the research article: that major media coverage of a creative suicide prevention intervention was associated with an increase in calls to a suicide prevention helpline and a reduction in population suicides. How this reduction was achieved, through a collaboration between a US hip hop artist and a national suicide prevention support helpline, is instructive to other countries seeking to reduce incidence of suicide in groups that are hard to reach with traditional messaging.

Niederkrotenthaler and colleagues were investigating the Papageno effect; the theory that media reports of someone overcoming a suicidal crisis are protective against suicide(2), referencing the character Papageno in Mozart's 1791 opera *The Magic Flute*. Mourning the apparent death of his love, Papageno contemplates suicide but is encouraged to consider alternatives by three guardian spirits. The Papageno effect is the counterpoint to the Werther effect, in which irresponsible media reporting of a suicide is associated with a rise in population suicides. This takes its name from the suicides that followed the publication of Goethe's 1775 novel *The Sorrows of Young Werther*, portraying the protagonist ending his life in a state of unrequited love. The WHO media guidelines on reporting suicide (3) are intended to limit the Werther effect and promote the Papageno effect, with some evidence to support their effectiveness(4).

Niederkrotenthaler and colleagues' time series analysis(1) further supports the Papageno effect. Using Twitter posts as a proxy for audience attention over one month, they report associations between spikes in public attention to a particular hip hop song and two important outcomes: calls to the US National Suicide Prevention Lifeline and incidence of suicide. During periods of intensive Twitter activity about the song, calls to the helpline rose by 6.9% (95% confidence interval 4.6% to 9.2%) and suicides fell by 5.5% (0.8% to 10.1%).

For this phenomenon to be replicated, it is important to understand the intervention's likely mechanism of action through its context, content and likely impact on beliefs, attitudes and behaviour. At the song's release in 2017, suicide was the second leading cause of death in US individuals aged 10-34 years, and fourth among 35-54 year olds(5). Rates were higher in men than women(5), and highest for both men and women in non-Hispanic American Indian or Alaska Native groups, followed by White groups(6). Logic, a biracial artist signed to the iconic hip hop label Def Jam, had become aware of his influence on fans and his power to effect change, and had struggled with suicidal thoughts himself(7). He decided to write a song expressing the reality of suicidal thoughts, but not one merely providing bland reassurance.

The song, released in association with the US National Suicide Prevention Lifeline, is called 1-800-273-8255 but does not include this Lifeline number in its lyrics. We cannot therefore infer a simple "earworm" effect whereby the song's influence operated through fragments of the tune and lyrics becoming stuck in listeners' minds(8). The song starts with Logic describing his suicidal distress, before switching to the crisis counsellor he contacts via the Lifeline, who validates his experiences, acknowledges his distress and instils hope. Finally, Logic expresses his new perspective on life and his motivation to stay alive(9).

Featuring the artists Alessia Cara and Khalid, the Grammy-nominated song reached number 3 in the US Billboard charts, and was performed at the 2017 MTV Music Awards and the 2018 Grammy Awards(1). These events drew intense public attention to the message that help is available and can be lifesaving, with additional potential for strong audience identification with Logic's expressed distress, further reinforced by social modelling of his help-seeking strategy.

Given the study design, ecological fallacy is possible, whereby the reported associations might have arisen from a drop in suicide rates among people not exposed to the song. Further information is needed on the age, gender and ethnicity of the song's audience (collected from Twitter or downloads) to determine if their profile matches that of the groups in which suicide rates dropped.

Logic has shown the potential of the creative arts to disseminate constructive coping strategies for people in mental distress. Future plans for similar interventions should attempt to measure attitudes to suicide in the target audience to help us understand the mechanisms of action. Until then, the commitment of key cultural influencers is welcome to help amplify public health interventions intended to strengthen protective factors against suicide in specific vulnerable groups.

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