

Crisis: The Journal of Crisis Intervention and Suicide Prevention

“Breaking the Silence” Suicide Prevention Media Campaign in Oregon, April 7-14, 2019: Content Analysis of Broadcast, Print and Online Media Items, and Social Media Footprint

Thomas Niederkrotenthaler, Hannah Metzler, Zrinka Laido, Benedikt Till, Alison H. Lake, Emily Noble, Saba Chowdhury, Frances Gonzalez, David Garcia, John Draper, Sean Murphy, and Madelyn Gould

Online First Publication, March 18, 2024. <https://dx.doi.org/10.1027/0227-5910/a000955>







CITATION

Niederkrotenthaler, T., Metzler, H., Laido, Z., Till, B., Lake, A. H., Noble, E., Chowdhury, S., Gonzalez, F., Garcia, D., Draper, J., Murphy, S., & Gould, M. (2024). “Breaking the Silence” suicide prevention media campaign in Oregon, April 7–14, 2019: Content analysis of broadcast, print and online media items, and social media footprint.. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*. Advance online publication. <https://dx.doi.org/10.1027/0227-5910/a000955>



“Breaking the Silence” Suicide Prevention Media Campaign in Oregon, April 7–14, 2019

Content Analysis of Broadcast, Print and Online Media Items, and Social Media Footprint

Thomas Niederkrotenthaler^{1,2} , Hannah Metzler^{1,3,4} , Zrinka Laido^{1,2} , Benedikt Till^{1,2} , Alison H. Lake⁵ , Emily Noble⁵, Saba Chowdhury⁵, Frances Gonzalez⁶, David Garcia^{3,4}, John Draper⁶, Sean Murphy⁶, and Madelyn Gould⁵ 

¹Unit Suicide Research & Mental Health Promotion, Department of Social and Preventive Medicine, Center for Public Health, Medical University of Vienna, Austria

²Wiener Werkstaette for Suicide Research, Vienna, Austria

³Complexity Science Hub Vienna, Austria

⁴Institute of Interactive Systems and Data Science, Faculty of Computer Science and Biomedical Engineering, Graz University of Technology, Austria

⁵New York State Psychiatric Institute, Columbia University, New York, NY, USA

⁶Vibrant Emotional Health, National Suicide Prevention Lifeline, New York, NY, USA

Abstract: *Background:* Between April 7 and 14, 2019, the “Breaking the Silence” media engagement campaign was launched in Oregon. *Aims:* We aimed to assess the consistency of media content related to the campaign with media guidelines and the quantitative footprint on Twitter (now X) over time. *Method:* Media items related to the campaign were analyzed regarding focus and consistency with media guidelines for suicide reporting and compared with other suicide-related reports published in the same time frame, as well as with reporting in Washington, the control region. Tweets related to the campaign were retrieved to assess the social media footprint. *Results:* There were $n = 104$ media items in the campaign month, mainly in the campaign week. Items typically used a narrative featuring suicide advocacy or policy/prevention programs. As compared to other items with a similar focus, they scored better on several protective characteristics listed in media recommendations. Stories of coping with adversity, however, were scarce. The social media footprint on Twitter was small. *Limitations:* Inability to make causal claims about campaign impact. *Conclusion:* Media items from the Breaking the Silence campaign appeared mainly consistent with media guidelines, but some aspects, such as stories of recovery, were under-represented.

Keywords: suicide prevention, media campaign, media guidelines, broadcast, Twitter (X)

According to the Centers for Disease Control and Prevention (CDC), Oregon had a suicide rate of 20.4 per 100,000 in 2019, which made it the US state with the 10th highest suicide rates in that year, with an increasing trend (CDC, 2023). Therefore, in April 2019, newsrooms across Oregon joined together to “put a spotlight on the problem of suicide in Oregon, and to help build the momentum for reporting that emphasizes prevention and research that is relevant to prevent suicide” (<https://www.breakingthesilenceor.com>).

“Breaking the Silence” was unique in terms of a suicide prevention campaign. First, the campaign was carried by 30 newsrooms across Oregon (Zimmerman, 2019). The

impetus for this collaboration came from a series of roundtables between Oregon media organizations and Lines for Life, a suicide prevention nonprofit organization that also runs a number of crisis lines. The discussions emphasized the need to reduce stigma surrounding suicide and how to safely report on suicide using media guidelines. The campaign was led by the newsrooms themselves, and stories were conceptualized and crafted independent from Lines for Life. Twitter (now X) was selected to help disseminate campaign-related media stories. Comprehensive evaluations of media campaigns are scarce (Pirkis et al., 2016, 2019; Torok et al., 2017). Those that have been done

have typically focused on a limited number of outcomes (see Pirkis et al., 2019; Torok et al., 2017). Pirkis et al. (2019) identified 20 studies evaluating either entire media campaigns or specific campaign components, such as public service announcements (PSAs), used in the campaigns. Some of these campaigns targeted suicidal individuals, others those who might be in a position to assist them. Most of the studies included only one or two outcome measures, most commonly some measure of help-seeking and, less frequently, suicide, with some promising results.

In this work, we present an evaluation of proximal outcomes of the Breaking the Silence campaign in Oregon in terms of quality of resulting media items.

We hypothesized that the content of media items from the campaign is in accordance with the specific recommendations made in media guidelines in terms of both putatively harmful and protective characteristics. To assess this, we compared the campaign items (1) with reports from Oregon that had a similar focus to campaign items but were not related to the campaign and (2) with similar-focused media items published in a control region, Washington. We also compared them with (3) suicide reporting, in general, in Oregon. Because online reporting has been found to be less consistent with media guidelines as compared to other media reporting (Utterson et al., 2017), we explored whether campaign items published online differed from other campaign items in terms of quality. With regard to the social media footprint on Twitter, we explored the quantity of campaign-related posts around the campaign, and also the frequency of tweets including the National Suicide Prevention Lifeline (Lifeline) number. This study is part of a larger evaluation that also considered more distal outcomes including Google searches for suicide methods and help, calls to the Lifeline, and suicides (Gould et al., 2024). Because methodological approaches to evaluate distal outcomes are quite different, they are presented in the other paper (Gould et al., 2024).

Methods

The Campaign in Traditional Media

Media Monitoring

We retrieved 628 media items for Oregon and Washington for April 2019 as part of a larger dataset (Niederkrotenthaler, Laido et al., 2022). These reports form the basis of the present analysis. Broadcast, print, and online media items were provided by the media screening company Infomart/Meltwater. This included six print sources, 44 broadcast sources, and 251 online sources across both states (see Table E1 for media sources in Electronic

Supplementary Material 1 [ESM 1]). Only items with a *major focus* on suicide/suicidal ideation/suicide prevention (i.e., more than just a short paragraph about the topic) were preselected by the company for the analysis; other items were excluded similar to previous research (Sinyor et al., 2018). For an overview of the search and selection strategy used by Infomart/Meltwater, see Text E1 in ESM 1. Full transcripts of broadcast and print sources were provided to the researchers. Regarding online sources, headlines, source, and time of release were provided and items were then manually retrieved by the researchers.

Content Analysis of Media Stories

The content analysis was based on the most current versions of media recommendations at the time of the campaign (Suicide Awareness Voices of Education, 2019; World Health Organization, 2017).

A codebook capturing a wide variety of codes (reporting characteristics) listed in guidelines was developed. The codes range from general item characteristics such as the main focus of the item to putatively harmful characteristics (e.g., mentions details of a suicide method) and a range of potentially protective characteristics (e.g., the reporting on support services). Several codes were taken directly from related content analyses and were tested on the retrieved media items (Niederkrotenthaler et al., 2010; Sinyor et al., 2018). Authors ZL, BT, and TN were actively involved in the coding. An initial familiarization phase involved several rounds of discussing media items and resulted in a number of refinements of the code descriptions (see Table E2 for the code book in ESM 1). Additional codes were added based on our reading of the transcripts (i.e., inductive and deductive approaches were used to develop the coding system; Mayring, 2010). The codes added were specifically (1) *solution versus problem focus* and (2) suicide prevention individual level and population level.

Intercoder Reliability

After the initial familiarization phase, authors ZL and BT coded a random selection of items for each code independent of each other. Their intercoder reliability for each code was assessed in terms of percent agreement and Cohen's kappa coefficients. Discrepancies were resolved, and additional rounds of intercoder testing were made for codes that did not reach substantial agreement. By the end of the process, all codes had substantial agreement (minimum percent agreement: 85%; minimum $\kappa = 0.62$). Mean percent agreement was 92.4%, $M \kappa = 0.87$ (Table E2 in ESM 1).

Comparison of Campaign Content With Other Media Items

We compared items referencing Breaking the Silence in Oregon in April 2019 with three different sets of news items

using chi-square tests. First, we compared campaign items with other items published in Oregon in the same time period, which had a focus that was similar to campaign items. Specifically, these “similar focus” items had their focus in suicide policy/prevention, advocacy, or research, or they were healing stories. We deemed this comparison most relevant to evaluate the campaign as a comparison with items applying a very different focus (e.g., suicides by a celebrity) than the prevention campaign would almost certainly result in better quality characteristics of campaign items due to the sheer difference in overall focus and narrative. Furthermore, we compared the campaign items with similar-focused items published in the state of Washington (i.e., the control region). We did this because some of the items with similar focus in Oregon might have benefitted from the campaign even if they did not mention the campaign (e.g., if they were written by journalists involved in the campaign). Therefore, a comparison with similar-focused items in the control region Washington was deemed relevant. Third, to complement the picture, we also provide a comparison with suicide-related reports of any focus in Oregon. To assess if broadcast (i.e., TV and radio) reporting about Breaking the Silence was different to online reporting, we used another round of chi-square tests to assess related differences.

The Campaign on Social Media – Tweets

Dataset

To track the social media response to the campaign, we used the ForSight Platform of the company Brandwatch (formerly, Crimson Hexagon) to search for tweets that contained at least one keyword related to the campaign. We downloaded tweets in English from users in either Oregon or Washington.

The geolocation algorithm manages to match 90% of all posts to specific US states (Crimson Hexagon, 2020). The Brandwatch algorithm also removes duplicate tweets (not to be confused with retweets; Brandwatch, 2023).

Tweets that contained (1) the word suicide or suicidal, and (2) at least one keyword from one of two different keyword lists were downloaded. The sets of keywords aimed to capture tweets directly related to the campaign or a wider range of Lifeline-related tweets, respectively. For a full overview of keywords and validation measures, see Text E2 in ESM 1.

Analysis Method for Tweets

We analyzed a total number of 174,794 and 248,382 suicide-related tweets posted by users in Oregon and Washington, respectively, from January 1, 2018, to November 30, 2019. We calculated the daily percentage of

tweets containing campaign or Lifeline-related terms, including the year 2018 as a baseline.

We tested if campaign-related tweets and Lifeline tweets before, during the campaign, and afterward differed significantly between Oregon and the control region, Washington. For this purpose, we used two-sample proportions chi-square tests for each of the two weeks before, the week during, and for each of the two weeks after the campaign.

Results

The Campaign in Traditional Media

Of the 628 media items retrieved for Oregon and Washington for April 2019, 13 (2.1%) were duplicates and excluded. Of the remaining 615 media items, 368 (59.8%) were published in Oregon and 247 (40.2%) in Washington. In Oregon, 104 (28.3%) were related to the Breaking the Silence campaign. Four items referencing the campaign were published in Washington. Of the campaign-related items, 51 (49.0%) were broadcast TV items, 13 (12.5%) were broadcast radio items, and 40 (38.5) were online.

Quantity of Reporting and Timing of Campaign-Related Reporting

The campaign month April 2019 was the month with the greatest number of suicide-related reports across the 1-year period April 2019–March 2020 in Oregon. The number was above the average of 237.2 ($SD = 70.2$) media items per month. In the control region, Washington, no similar peak in April was observed, with the number of April items ($n = 247$) close to the monthly mean (214.6, $SD = 63.0$). Campaign-related items were mainly published in the campaign week, with a total of 89 items (85.6%) of all campaign-related items.

Main Focus of Campaign Items

Regarding the main focus of campaign items (not shown in Table A1), 40 items (38.4%) had a focus on suicide advocacy efforts, and 32 items (30.8%) were about policy/prevention programs. Nine stories (8.7%) were about suicide death, general suicide prevention, and healing stories. For an overview of all focal areas represented in media items, see Table A1.

Reporting Quality of Campaign Items

Compared to other suicide-related media items with a similar focus (Table A1, column 2, in the Appendix), campaign items were more likely to include a solution-oriented narrative in addition to highlighting the problem of suicide. With regard to putatively harmful characteristics,

campaign items were not different from other items with a similar focus, except that campaign items were less frequently giving details about suicide methods, and using stigmatizing language. But regarding protective characteristics, Breaking the Silence items were more frequently debunking suicide myths, addressing suicide prevention on a population level, and they provided more references to support services including the Lifeline, as well as reports about how support services work. Expert opinions were less frequently included in campaign items.

Very similar findings were apparent if the comparison was made with similarly focused items published in the control region, Washington (Table A1, column 3, in the Appendix).

Unsurprisingly, if the comparison was made with any suicide-related report in Oregon, irrespective of focus, there were many more significant differences indicating better quality of campaign items for both putatively harmful and protective reporting characteristics (Table A1, column 4, in the Appendix).

In spite of outperforming other suicide-related reports on these characteristics, the prevalence of many important protective characteristics was still quite low in campaign items. In particular, only 16 items (15.4%) reported on a positive outcome of a suicidal crisis. Furthermore, in spite of the collaboration with the Lifeline, about 30% did not provide any contact to a support service.

Comparison Between Campaign-Related Online and Broadcast Reports

There were no differences between campaign-related online and broadcast items for most reporting characteristics. A focus on suicide death, however, was more common in online items as compared to broadcast ($n = 34$, 85.0% vs. $n = 40$, 62.5%). Online items also focused more strongly on solutions in the absence of highlighting suicide as a problem ($n = 25$, 62.5% vs. $n = 12$, 18.8%), whereas broadcast items more frequently highlighted both aspects ($n = 49$, 76.6% vs. $n = 13$, 32.5%). Online items used wording suggestive of a suicide wave or epidemic more frequently ($n = 12$, 30.0% vs. $n = 3$, 4.7%). Expert opinions ($n = 21$, 52.5% vs. $n = 14$, 21.9%) and statistical data ($n = 32$, 80.0% vs. $n = 30$, 46.8%) were more frequently included online.

The Campaign on Social Media – Tweets

With regard to tweet content, campaign-specific tweets either promoted the Breaking the Silence campaign as an innovative collaboration between newsrooms or spread news about specific media items related to the campaign. This was typically done by highlighting the headline or as brief summary of the respective media item. Figure E1 in ESM 1 shows the word cloud for campaign-related tweets.

During the campaign week from April 7 to 14, 2019, Breaking the Silence and Lifeline tweets increased in Oregon (Figure 1, section A) but not in the control region, Washington (Figure 1, section B). Specifically, Breaking the Silence tweets increased up to a peak of 32.0% (113 tweets) of all suicide-related tweets in Oregon, or a median of 22.5% (58 tweets per day). The change was smaller for Lifeline tweets, which increased from a baseline of 3.41% of suicide-related tweets to a peak of 10.78%, or a median of 5.28% (21 tweets per day) in Oregon. The pattern of differences (Figure 1, section C) highlights that the social media response was entirely driven by tweets in Oregon. Table E3 in ESM 1 shows the proportional change in both states with regard to campaign-specific tweets and Lifeline tweets in the weeks before, during, and after the campaign. The results indicate that, with regard to campaign specific tweets, a significantly greater number of tweets in Oregon compared to Washington was present already in the week before the campaign [$\chi^2(1) = 67.81$, $p < .001$]. The difference, however, was much greater during the campaign week [$\chi^2(1) = 379.78$, $p < .001$] and slowly leveled off in the subsequent week [$\chi^2(1) = 47.99$, $p < .001$]. With regard to Lifeline tweets, there was only a significantly higher level of tweets during the campaign week, as compared to the control region [$\chi^2(1) = 13.97$, $p < .001$].

Discussion

The typical narrative in Breaking the Silence media items was not focused on individual suicidal behavior but emphasized advocacy events, suicide prevention, and policy. Breaking the Silence items were more likely than other media items to balance the focus on the problem of suicide with possible solutions. Solution-focused messaging has been found to be closely related to better accessibility of help-related concepts in readers' memories, whereas problem-focused messaging appears to trigger thoughts about death and suicide (Till et al., 2023).

Compared to similarly focused items unrelated to the campaign, campaign items scored better on protective characteristics, as listed in media guidelines (World Health Organization, 2017; Suicide Awareness Voices of Education, 2019). Specifically, they were more frequently debunking suicide myths and providing references to help services, including descriptions of how such services work. This appears consistent with the campaign goal to “offer readers, listeners and viewers resources to help” (<https://www.breakingthesilenceor.com>). These differences remained also when comparisons were made to similar-focused media items in the control region, Washington. Thus, a possible

influence from the campaign on other media reports about prevention in Oregon (which might be inferred if there were no differences compared to similarly focused items in Washington) did not appear to explain the differences observed.

In spite of the better scoring on several protective characteristics, a few concerning aspects in campaign items were present as well. In particular, online items quite frequently used wording suggesting an epidemic of suicide. Also, the reporting on several suicides in the same media item was relatively common in campaign items. There is some evidence from an earlier study of a small significant association of these characteristics with increases in subsequent suicides (Niederkrotenthaler et al., 2010). Furthermore, it appears noteworthy that, although campaign items scored relatively well in terms of referencing support services, still about 30% of campaign items did not provide any contact to support services.

Stories of suicidal ideation and healing and recovery from suicidal crises were quite rare in campaign items. There is increasing evidence that such narratives have a positive potential for suicide-protective effects (Niederkrotenthaler

et al., 2010, 2022). The scarcity of this type of narrative is therefore a missed opportunity. Overall, a fundamental change in the narrative to focus on healing and recovery (instead of suicide death) did not occur.

Online reporting might be particularly problematic and media guidelines more difficult to implement online (Utterson et al., 2017), but in the present study, a mixed picture emerged when comparing online and broadcast reporting about the campaign. Online items scored better in terms of highlighting solutions in the absence of highlighting the problem of suicide, but they also used more sensationalized wording.

Regarding the social media impact, most of the Twitter discourse about the campaign was restricted to the campaign week, and the overall quantity of tweets was low. With regard to tweets featuring the Lifeline, the effect was even smaller. To foster more enduring changes, strategies need to carefully consider how a longer-term impact can be reached. Entertainment media events, such as the rap song 1-800-273-8255 by US hip hop artist Logic, resulted in a stronger impact on social media (Niederkrotenthaler et al., 2021). Involvement of celebrities and individuals

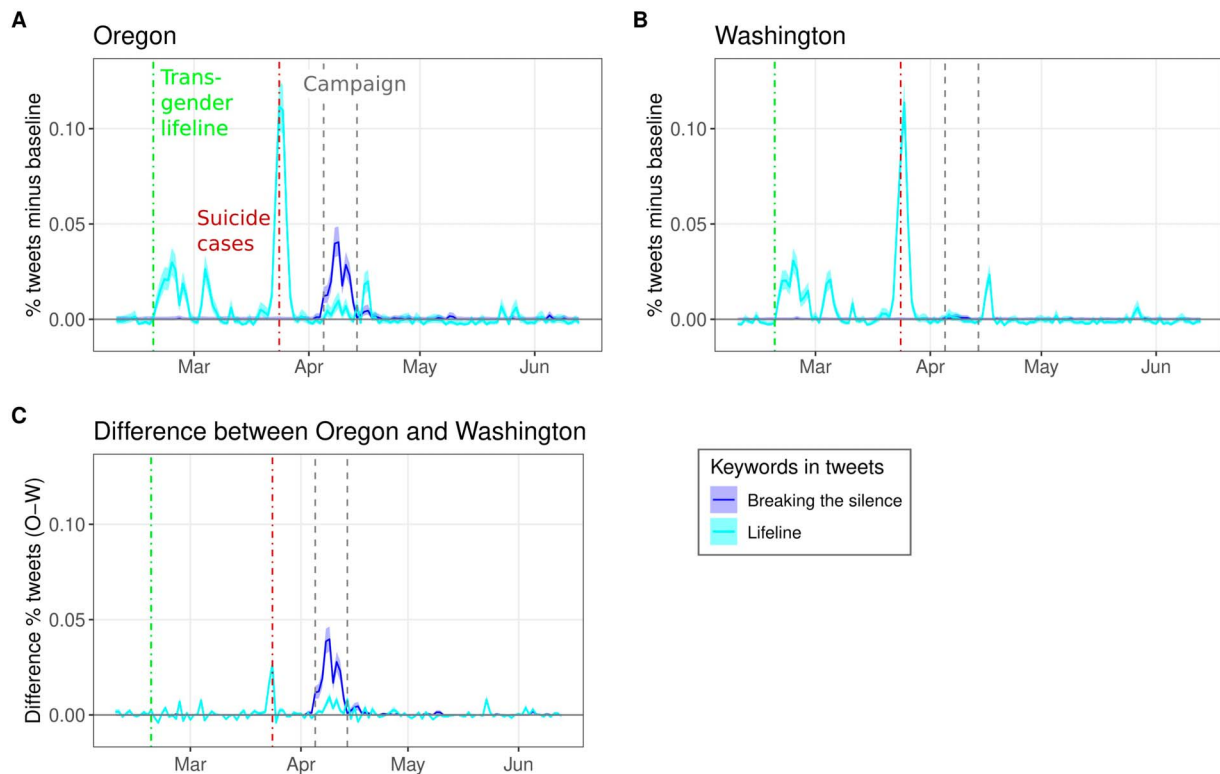


Figure 1. Changes in the percentage of tweets containing the Breaking the Silence campaign slogan or Lifeline-related keywords out of all tweets per federal state. Note. Panels A and B display the baseline-corrected percentage in Oregon and Washington, respectively, while panel C displays the difference between the two. Shaded areas around the lines are 95% binomial confidence intervals. The vertical gray dashed lines located between April and May indicate the week of the campaign (April 7–14, 2019), while the other vertical lines indicate other events that were frequently mentioned in the tweets (as verified with word clouds for these dates). Specifically, the line on February 19, 2019, indicates the introduction of the transgender Lifeline. The line marked with suicide cases indicates reports about the suicides of two survivors of the school shooting in Parkland on March 23, and of a father of the Sandy Hook school shooting victim on March 25.

with lived experience might also help to enhance social media discourse.

Strengths and Limitations

Study strengths include the concise coding of media items with high intercoder reliability. Limitations include our inability to make causal claims about the immediate impact of the campaign on suicide reporting or to assess its longer-term impact. Furthermore, a small number of counties in Washington are part of the Oregon media market, which might have had introduced contamination bias. This bias, however, was negligible as there was basically zero response to the campaign on Twitter in Washington, and only four media items referencing the campaign were retrieved for Washington.

Conclusions

The Breaking the Silence campaign scored better than items with a similar focus in terms of several putatively protective reporting characteristics listed in media recommendations. Nevertheless, the campaign did not offer a fundamental change in the narrative, which would have been suggested by a clear uptick in stories of overcoming suicidal crises.

Electronic Supplementary Material

The electronic supplementary material is available with the online version of the article at <https://doi.org/10.1027/0227-5910/a000955>

ESM 1. This file includes an overview of the sources of materials, the coding scheme, detailed search terms and eligibility criteria for article inclusion, a word cloud of campaign related tweets, data on campaign and Lifeline-related tweets, as well as keywords for Twitter searches and validation measures.

References

- Brandwatch [formerly CrimsonHexagon]. (2023). *ForSight: User guide*. <https://www.brandwatch.com/wp-content/uploads/2020/10/Crimson-Hexagon-ForSight-User-Guide.pdf>
- Centers for Disease Control and Prevention. (CDC) (2023). *Suicide mortality by state*. <https://www.cdc.gov/nchs/pressroom/sosmap/suicide-mortality/suicide.htm>
- Crimson Hexagon. (2020). *Methodology. Location information*. https://web.archive.org/web/20210527091937/https://www.brandwatch.com/wp-content/uploads/2020/10/CrimsonHexagon_Location_Methodology.pdf
- Gould, M., Lake, A. M., Chowdhury, S., Noble, E., Keyes, K. M., Gimbrone, C., & Niederkroenthaler, T. (2024). "Breaking the Silence" suicide prevention media campaign in Oregon: Evaluation of impact on help-seeking and suicide mortality. *Suicide and Life-Threatening Behavior*. Advance online publication. <https://doi.org/10.1111/sltb.13047>
- Mayring, P. (2010). *Qualitative Inhaltsanalyse. Grundlagen und Techniken [Qualitative content analysis. Foundations and techniques]*. Beltz.
- Niederkroenthaler, T., Laido, Z., Gould, M., Lake, A. M., Sinyor, M., Kirchner, S., Braun, M., Chowdhury, S., Gonzalez, F., Draper, J., Murphy, S., & Till, B. (2022). Associations of suicide-related media reporting characteristics with help-seeking and suicide in Oregon and Washington. *Australian & New Zealand Journal of Psychiatry*, 57(7), 1004–1015. <https://doi.org/10.1177/00048674221146474>
- Niederkroenthaler, T., Till, B., Kirchner, S., Sinyor, M., Braun, M., Pirkis, J., Tran, U. S., Voracek, M., Arendt, F., Ftanou, M., Kovacs, R., King, K., Schlichthorst, M., Stack, S., & Spittal, M. J. (2022). Effects of media stories of hope and recovery on suicidal ideation and help-seeking attitudes and intentions: Systematic review and meta-analysis. *Lancet Public Health*, 7(2), e156–e168. [https://doi.org/10.1016/S2468-2667\(21\)00274-7](https://doi.org/10.1016/S2468-2667(21)00274-7)
- Niederkroenthaler, T., Tran, U., Gould, M., Sinyor, M., Sumner, S., Strauss, M. J., Voracek, M., Till, B., Murphy, S., Gonzalez, F., Spittal, M. J., & Draper, J. (2021). Association of Logic's hip hop song 1-800-273-8255 with lifeline calls and suicides in the United States: Interrupted time-series analysis. *BMJ*, 375, Article e067726. <https://doi.org/10.1136/bmj-2021-067726>
- Niederkroenthaler, T., Voracek, M., Herberth, A., Till, B., Strauss, M., Etzersdorfer, E., Eisenwort, B., & Sonneck, G. (2010). Role of media reports in completed and prevented suicide: Werther v. Papageno effects. *The British Journal of Psychiatry*, 197(3), 234–243. <https://doi.org/10.1192/bjp.bp.109.074633>
- Pirkis, J., Rossetto, A., Nicholas, A., & Ftanou, M. (2016). Advancing knowledge about suicide prevention media campaigns. *Crisis*, 37(5), 319–322. <https://doi.org/10.1027/0227-5910/a000441>
- Pirkis, J., Rossetto, A., Nicholas, A., Ftanou, M., Robinson, J., & Reavley, N. (2019). Suicide prevention media campaigns: A systematic literature review. *Health Communication*, 34(4), 402–414. <https://doi.org/10.1080/10410236.2017.1405484>
- Sinyor, M., Schaffer, A., Nishikawa, Y., Redelmeier, D. A., Niederkroenthaler, T., Sareen, J., Levitt, A. J., Kiss, A., & Pirkis, J. (2018). The association between suicide deaths and putatively harmful and protective factors in media reports. *CMAJ*, 190, e900–e907. <https://doi.org/10.1503/cmaj.170698>
- Suicide Awareness Voices of Education. (2019). *Best practices and recommendations for reporting on suicide*. <https://reportingonsuicide.org/wp-content/uploads/2022/12/ROS-One-PageUpdated2022.pdf>
- Till, B., Arendt, F., Rothauer, P., & Niederkroenthaler, T. (2023). The role of the narrative in educative suicide awareness materials: A randomized controlled trial. *Health Communication*, 39(2), 403–416. <https://doi.org/10.1080/10410236.2023.2167580>
- Torok, M., Calear, A., Shand, F., & Christensen, H. (2017). A systematic review of mass media campaigns for suicide prevention: Understanding their efficacy and the mechanisms needed for successful behavioral and literacy change. *Suicide and Life-Threatening Behavior*, 47(6), 672–687. <https://doi.org/10.1111/sltb.12324>
- Utterson, M., Daoud, J., & Dutta, R. (2017). Online media reporting of suicides: Analysis of adherence to existing guidelines. *BJPsych Bulletin*, 41(2), 83–86. <https://doi.org/10.1192/pb.bp.115.052761>

World Health Organization. (2017). *Preventing suicide: A resource for media professionals*. <https://www.who.int/publications/item/WHO-MSD-MER-17.5>

Zimmerman, S. (2019, April 4). *Oregon newsrooms team up to 'break silence' around suicide*. Associated Press. <https://apnews.com/9aeeade140e6401cbbf28c7748245ce4>

History

Received May 10, 2023

Revision received February 7, 2024

Accepted February 22, 2024

Published online March 18, 2024

Funding

The authors would like to acknowledge that this work was supported by the project Vibrant Emotional Health grant "Suicide prevention media campaign Oregon" to Thomas Niederkrotenthaler.

ORCID

Thomas Niederkrotenthaler

 <https://orcid.org/0000-0001-9550-628X>

Hannah Metzler

 <https://orcid.org/0000-0001-9254-3675>

Zrinka Laido

 <https://orcid.org/0000-0002-8329-3202>

Benedikt Till

 <https://orcid.org/0000-0002-2099-5469>

Alison H. Lake

 <https://orcid.org/0000-0002-3288-722X>

Madelyn Gould

 <https://orcid.org/0000-0002-2881-9152>

Thomas Niederkrotenthaler

Unit Suicide Research & Mental Health Promotion
Department of Social and Preventive Medicine
Center for Public Health
Medical University of Vienna
Kinderspitalgasse 15
A-1090 Vienna
Austria
thomas.niederkrotenthaler@meduniwien.ac.at

Thomas Niederkrotenthaler, MD, PhD, MMSc, is a professor of public mental health at the Medical University of Vienna, Austria. He is an internationally recognized expert in the area of media and suicide and currently a vice president of IASP.

Alison M. Lake, MA, is a consulting project director in the Community Suicide Prevention Group at the New York State Psychiatric Institute, NY, USA. She has a background in cultural anthropology and interests in instrument development, mixed-methods, and qualitative research.

Saba J. Chowdhury, MPH, is a data analyst in the Community Suicide Prevention Group at the New York State Psychiatric

Institute, NY, USA. She thrives to help disseminate mental health knowledge to disadvantaged communities and make a positive impact in suicide prevention research through the mediums of academic research and the arts.

Sean Murphy, PhD, is a senior data scientist at Vibrant Emotional Health, NY, USA.

Madelyn S. Gould, PhD, MPH, is the Irving Philips Professor of Epidemiology in Psychiatry at the Columbia University Irving Medical Center in the US and a research scientist at the New York State Psychiatric Institute. She has been leading the evaluation of the National Suicide Prevention Lifeline since its inception.

John Draper, PhD, is an international expert in behavioral health crisis services. Between 2004 and 2022 he served as the Executive Director of the National Suicide Prevention Lifeline. In October 2022, he joined Behavioral Health Link, Inc., a national leader in crisis services, as President of Research and Development.

David Garcia, PhD, is a professor of social and behavioral data science at the University of Konstanz in Germany and holds different computer science degrees. His research focuses on computational social science, designing models and analyzing human behavior through digital traces.

Frances Gonzalez is a marketing and communication expert and, during the time of the study, served as the Senior Director of Marketing and Communication for the National Suicide Prevention Lifeline and SAMHSA Disaster Distress Helpline.

Emily Noble, MPH, is a data scientist at Spring Health with background in data analysis, research, coordination, and healthcare. Emily previously worked at the New York State Psychiatric Institute, where she contributed to time series analyses of suicide-related Google Trends data and coded counselor behavior in crisis chat transcripts.

Hannah Metzler, PhD, is a postdoctoral scientist with a background in psychology and social and affective neuroscience, and currently a member of the Computational Social Science lab at the Complexity Science Hub Vienna, Austria. Her research focuses on social media as a tool to better understand social behavior, emotions, and mental health.

Zrinka Laido, MD, PhD, is country coordinator for JA-ImpleMENTAL for Estonia, a project dedicated to improving suicide prevention and mental health across Europe. She is affiliated with the Mental Health Department of the Ministry of Social Affairs in Tallinn, Estonia. Before that, she worked at the Medical University of Vienna, Austria.

Benedikt Till, DSc, is a psychologist and associate professor at the Unit Public Mental Health, Center for Public Health, Medical University of Vienna, Austria. He is board member of the Wiener Werkstaette for Suicide Research and an internationally recognized expert in the field of media psychology and suicide research.

Appendix

Table A1. Overview of characteristics of media compared to the Breaking the Silence campaign in Oregon, from April 1 to 30, 2019

General characteristics	Breaking the Silence Oregon (<i>n</i> = 104)	Media items Oregon, similar focus [§] (<i>n</i> = 125)	Media items Washington, similar focus [§] (<i>n</i> = 132)	Other media items Oregon* (<i>n</i> = 264)
Source				
Broadcast TV	51 (49.0)	59 (47.2)	29 (22.0) ^{***}	90 (34.1) ^{**}
Broadcast radio	13 (12.5)	22 (17.6)	28 (21.2)	70 (26.5) ^{**}
Print	0 (0.0)	0 (0.0)	4 (3.0)	1 (0.4)
Online	40 (38.5)	44 (35.2)	71 (53.8) [*]	103 (39.0)
Individual versus general focus				
Individual focus	9 (8.7)	17 (13.6) ^a	19 (14.4) ^a	119 (45.1) ^{****a}
General focus	89 (85.6)	86 (68.8) ^{***a}	76 (57.6) ^{****a}	116 (43.9) ^{****a}
Focus area				
Suicide death	74 (71.2)	77 (61.6) ^a	104 (78.8) ^a	136 (51.5) ^{***a}
Attempted suicide	29 (27.9)	21 (16.8) ^a	32 (24.2) ^a	24 (9.1) ^{****a}
Suicidal ideation	17 (16.3)	25 (20.0) ^a	32 (24.2) ^a	27 (10.2) ^a
Cluster/community crisis	12 (11.5)	15 (12.0) ^a	22 (16.7) ^a	21 (8.0) ^a
Policy or prevention program	53 (51.0)	63 (50.4) ^a	52 (39.4) ^a	63 (23.9) ^{****a}
Advocacy effort	89 (85.6)	46 (36.8) ^{****a}	64 (48.5) ^{****a}	46 (17.4) ^{****a}
Suicide research	12 (11.5)	43 (34.4) ^{****a}	46 (34.8) ^{****a}	43 (16.3) ^a
Legal issues	11 (10.6)	20 (16.0) ^a	13 (9.8) ^a	75 (28.4) ^{****a}
Healing story	17 (16.3)	16 (12.8) ^a	38 (28.8) ^a	16 (6.1) ^{***a}
Solution versus problem				
Narrative: problem of suicide	5 (4.8)	38 (30.4) ^{****a}	44 (33.3) ^{****a}	155 (58.7) ^{****a}
Narrative: solution/suicide prevention	37 (35.6)	29 (23.2) ^a	38 (28.8) ^a	30 (11.4) ^{****a}
Narrative: both	62 (59.6)	58 (46.4) ^a	50 (37.9) ^{****a}	61 (23.1) ^{****a}
Harmful characteristics:				
Method in headline [§]	1 (2.5)	1 (2.3) ^b	7 (9.3) ^b	16 (15.4) ^{***b}
Details about suicide method	1 (1.0)	10 (8.0) ^{***b}	9 (6.8) ^{***b}	30 (11.4) ^{****b}
Several suicide acts reported	16 (15.4)	11 (8.8) ^a	17 (12.9) ^a	16 (6.1) ^{***a}
Spreading false myths about suicide	4 (3.8)	3 (2.4) ^b	2 (1.5) ^b	8 (3.0) ^b
Celebrity suicide	5 (4.8)	5 (4.0) ^a	11 (8.3) ^a	20 (7.6) ^a
Stigmatizing language	0 (0.0)	6 (4.8) ^{***b}	15 (11.4) ^{****b}	22 (8.3) ^{****b}
Suggesting a suicide epidemic or wave	15 (14.4)	14 (11.2) ^a	15 (11.4) ^a	15 (5.7) ^{***a}
Suggesting inevitability of suicide	0 (0.0)	4 (3.2) ^b	2 (1.5) ^b	6 (2.3) ^b

(Continued on next page)

Table A1. (Continued)

General characteristics	Breaking the Silence Oregon (n = 104)	Media items Oregon, similar focus [§] (n = 125)	Media items Washington, similar focus [§] (n = 132)	Other media items Oregon [*] (n = 264)
Suggesting monocausality of suicide	8 (7.7)	14 (11.2) ^a	20 (15.2) ^a	67 (25.4) ^{***a}
Protective characteristics				
Celebrity role in suicide prevention	13 (12.5)	11 (8.8) ^a	4 (3.0) ^{**b}	11 (4.2) ^{***a}
Debunking false myths about suicide	62 (59.6)	35 (28.0) ^{***a}	41 (31.1) ^{***a}	38 (14.4) ^{***a}
Suicide related to mental health problems	45 (43.3)	55 (44.0) ^a	65 (49.2) ^a	64 (24.2) ^{***a}
Alternative to suicidal behavior	34 (32.7)	30 (24.0) ^a	44 (33.3) ^a	32 (12.1) ^{***a}
Expert opinion	35 (33.7)	66 (52.8) ^{***a}	59 (44.7) ^a	151 (57.2) ^{***a}
Statistical data	62 (59.6)	84 (67.2) ^a	82 (62.1) ^a	96 (36.4) ^{***a}
Warnings signs	17 (16.3)	16 (12.8) ^a	23 (17.4) ^a	23 (8.7) ^{***a}
Positive outcome of suicidal crisis	16 (15.4)	17 (13.6) ^a	27 (20.5) ^a	17 (6.4) ^{***a}
Healing story bereaved individual	10 (9.6)	7 (5.6) ^a	22 (16.7) ^a	7 (2.7) ^{***a}
Suicide prevention individual level	54 (51.9)	51 (40.8) ^a	49 (37.1) ^{***a}	52 (19.7) ^{***a}
Suicide prevention population level	93 (89.4)	77 (61.6) ^{***a}	80 (60.6) ^{***a}	86 (32.6) ^{***a}
Contact support service	73 (70.2)	52 (41.6) ^{***a}	44 (33.3) ^{***a}	63 (23.9) ^{***a}
Reference to lifeline	65 (62.5)	51 (40.8) ^{***a}	36 (27.3) ^{***a}	61 (23.1) ^{***a}
Description of how support services work	27 (26.0)	16 (12.8) ^{***a}	8 (6.1) ^{***a}	19 (7.2) ^{***a}

Note. Values are presented as frequencies with percentages given in parentheses. Symbols (*) indicate significant differences. ^aResults of the χ^2 test. ^bResults of Fisher's exact test. ^{*}Defined as any other items irrespective of focus from the same time period (April 2019) but not referencing Breaking the Silence. [§]Defined as items from the same time period (April 2019) with focus areas either on suicide policy/prevention, advocacy, research, or healing stories. These focal areas are similar to the focal areas of campaign-related items. [§]Code applies to print and online items only. Numbers and percentages refer to print plus online items.

* $p < .05$. ** $p < .01$. *** $p < .001$ (two-tailed).