Slide 1

MEDICAL UNIVERSITY OF VIENNA

Media & suicide: Roles of the narrative and updates to media guidelines

Thomas Niederkrotenthaler, MD PhD MMSc
Associate Professor, Medical University Vienna, Austria

ImpleMENTAL
October 19, 2023

Slide 2

National Recommendations for Depicting Suicide

Guidance to help content creators craft stories about survival, hope, and healing—aimed at saving lives and restoring hope

Preventing suicide: a resource for media professionals
Update 2023

National Action Alliance for Suicide Prevention, 2018

www.who.int
www.reportingonsuicide.org

Slide 3

ELSEVIER

SOCIAL SCIENCE & MEDICINE

Social Science & Medicine 62 (2006) 2874–2886

www.elsevier.com/locate/socscimed

The relationship between media reporting of suicide and actual suicide in Australia

Jane E. Pirkis[a,*], Philip M. Burgess[b], Catherine Francis[a], R. Warwick Blood[c], Damien J. Jolley[d]

[a]University of Melbourne, Melbourne, Victoria, Australia
[b]University of Queensland, Brisbane, Queensland, Australia
[c]University of Canberra, Canberra, Australian Capital Territory, Australia
[d]Monash University, Melbourne, Victoria, Australia

Available online 4 January 2006

Abstract

This study aimed to determine whether media items about suicide were associated with differential increases in actual suicides. Data were available on 4635 suicide-related items appearing in Australian newspapers and on radio and television news and current affairs shows between March 2000 and February 2001. These data were combined with national data on completed suicides occurring during the same period, by a process that involved identifying the date and geographical reach of the media items and determining the number of suicides occurring in the same location in selected weeks pre- and post-item. Regression analyses were conducted to determine whether the likelihood of an increase in post-item suicides could be explained by particular item characteristics. We found that 39% of media items were followed by an increase in male suicides, and 31% by an increase in female suicides. Media items were more likely to be associated with increases in both male and female suicides if they occurred in the context of multiple other reports on suicide (versus occurring in isolation), if they were broadcast on television (versus other media), and if they were about completed suicide (versus attempted suicide or suicidal ideation). Different item content appeared to be influential for males and females, with an increase in male suicides being associated with items about an individual's experience of suicide and opinion pieces, and an increase in female suicides being associated with items about mass or murder-suicide. Item prominence and quality were

Slide 4

Association story contents with suicides

- 4635 suicide-related items appearing in national and regional Australian newspapers and on radio and television news, Mar 2000 to Feb 2001.
- Content analysis: Reporting characteristics as outlined in media guidelines
- Pre / after design:

Slide 5

BJPsych

The British Journal of Psychiatry (2010)
197, 234–243. doi: 10.1192/bjp.bp.109.074633

Role of media reports in completed and prevented suicide: Werther v. Papageno effects

Thomas Niederkrotenthaler, Martin Voracek, Arno Herberth, Benedikt Till, Markus Strauss, Elmar Etzersdorfer, Brigitte Eisenwort and Gernot Sonneck

Background
Media reporting of suicide has repeatedly been shown to trigger suicidal behaviour. Few studies have investigated the associations between specific media content and suicide rates. Even less is known about the possible preventive effects of suicide-related media content.

Aims
To test the hypotheses that certain media content is associated with an increase in suicide, suggesting a so-called Werther effect, and that other media content is associated with a decrease in suicide, conceptualised as a Papageno effect. Further, to identify classes of media articles with similar reporting profiles and to test for associations between these classes and suicide.
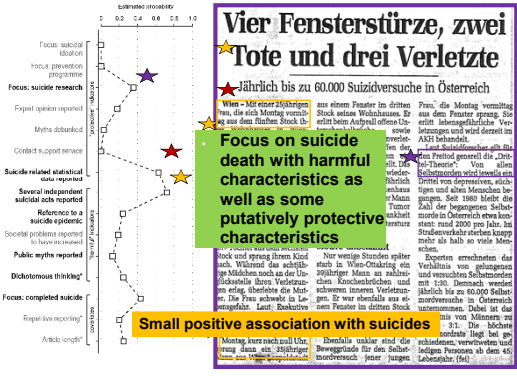
Method
Content analysis and latent class analysis (LCA) of 497 suicide-related print media reports published in Austria between 1 January and 30 June 2005. Ecological study to identify associations between media item content and short-term changes in suicide rates.

Results
Repetitive reporting of the same suicide and the reporting of suicide myths were positively associated with suicide rates. Coverage of individual suicidal ideation not accompanied by suicidal behaviour was negatively associated with suicide rates. The LCA yielded four classes of media reports, of which the mastery of crisis class articles on individuals who adopted coping strategies other than suicidal behaviour in adverse circumstances) was negatively associated with suicide, whereas the expert opinion class and the epidemiological facts class were positively associated with suicide.

Conclusions
The impact of suicide reporting may not be restricted to harmful effects; rather, coverage of positive coping in adverse circumstances, as covered in media items about suicidal ideation, may have protective effects.

Declaration of interest
None.

Slide 6

RESEARCH | MENTAL HEALTH

The association between suicide deaths and putatively harmful and protective factors in media reports

Mark Sinyor MSc MD, Ayal Schaffer MD, Yasunori Nishikawa, Donald A. Redelmeier MD, Thomas Niederkrotenthaler MD PhD, Jitender Sareen MD, Anthony J. Levitt MD, Alex Kiss PhD, Jane Pirkis PhD

Cite as: CMAJ 2018 July 30;190:E900-7. doi: 10.1503/cmaj.170698

See related article at www.cmaj.ca/lookup/doi/10.1503/cmaj.180900

ABSTRACT

BACKGROUND: Exposure to media reporting on suicide can lead to suicide contagion and, in some circumstances, may also lead to help-seeking behaviour. There is limited evidence for which specific characteristics of media reports mediate these phenomena.

METHODS: This observational study examined associations between putatively harmful and protective elements of

deaths in the 7 days after publication, compared with a control window.

RESULTS: From 2011 to 2014, there were 6367 articles with suicide as the major focus and 947 suicide deaths. Elements most strongly and independently associated with increased suicides were a statement about the inevitability of suicide (odds ratio [OR] 1.97, confidence interval [CI] 1.07–3.62), about asphyxia

independently associated with decreased suicides were unfavourable characteristics (negative judgments about the deceased; OR 1.85, CI 1.20–2.84), or mentions of railway (OR 1.61, CI 1.10–2.36) and cutting or stabbing (OR 1.59, CI 1.19–2.13) deaths, and individual murder-suicide (OR 1.50, CI 1.23–1.84).

INTERPRETATION: This large study identified significant associations between sev-

Associations story contents with suicides

- Associations with increases in suicides:
  - Some specific methods such as hanging and jumping
  - Headline about suicide
  - Celebrity suicide reporting

- Associations with decreases in suicides:
  - Homicide-suicide items
  - Reporting on suicidal thoughts as opposed to behaviours

- Some inconsistencies across studies

The British Journal of Psychiatry (2010)
197, 234–243. doi: 10.1192/bjp.bp.109.074633

Role of media reports in completed and prevented suicide: Werther v. Papageno effects

Thomas Niederkrotenthaler, Martin Voracek, Arno Herberth, Benedikt Till, Markus Strauss, Elmar Etzersdorfer, Brigitte Eisenwort and Gernot Sonneck

Background
Media reporting of suicide has repeatedly been shown to trigger suicidal behaviour. Few studies have investigated the associations between specific media content and suicide rates. Even less is known about the possible preventive effects of suicide-related media content.

Aims
To test the hypotheses that certain media content is associated with an increase in suicide, suggesting a so-called Werther effect, and that other content is associated with a decrease in suicide, conceptualised as a Papageno effect. Further, to identify classes of media articles with similar reporting profiles and to test for associations between these classes and suicide.

Method
Content analysis and latent class analysis (LCA) of 497 suicide-related print media reports published in Austria between 1 January and 30 June 2005. Ecological study to identify associations between media item content and short-term changes in suicide rates.

Results
Repetitive reporting of the same suicide and the reporting of suicide myths were positively associated with suicide rates. Coverage of individual suicidal ideation not accompanied by suicidal behaviour was negatively associated with suicide rates. The LCA yielded four classes of media reports, of which the mastery of crisis class articles on individuals who adopted coping strategies other than suicidal behaviour in adverse circumstances) was negatively associated with suicide, whereas the expert opinion class and the epidemiological facts class were positively associated with suicide.
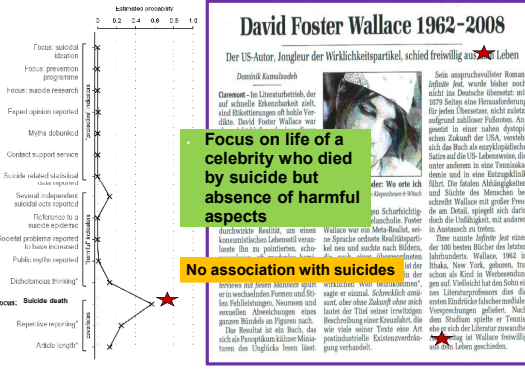
Conclusions
The impact of suicide reporting may not be restricted to harmful effects; rather, coverage of positive coping in adverse circumstances, as covered in media items about suicidal ideation, may have protective effects.
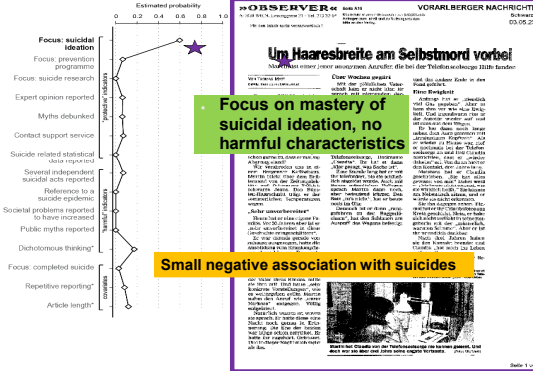
Declaration of interest
None.

Sensationalist class (20%)

Focus on suicide death with harmful characteristics as well as some putatively protective characteristics

Small positive association with suicides

Suicide case class (72%)

Focus on life of a celebrity who died by suicide but absence of harmful aspects

No association with suicides

Mastery of crisis class (8%)

Focus on mastery of suicidal ideation, no harmful characteristics

Small negative association with suicides

Werther and Papageno narratives

Chodowiecki, Berlin, 1775

Papageno, Salzburg 2019

Slide 1

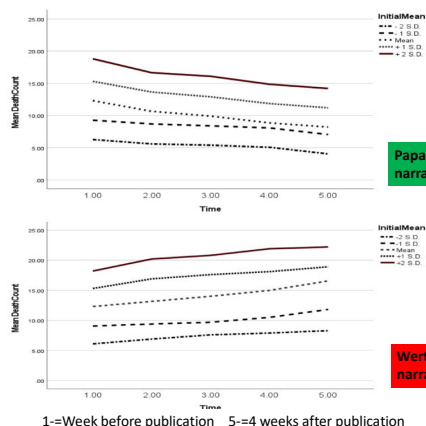### *Is* the narrative the message?

- Hawley et al. (2023): Content analysis of 13 Canadian media outlets 2011 to 2014, n=6367 articles on suicide.
- Potentially **harmful narrative** described suicide in a celebrity or a suicide in a non-celebrity including the suicide method.
- Potentially **protective narrative** included some protective content (e.g. alternatives to suicide) without any information on suicidal behaviour
- Latent difference score longitudinal multigroup analyses

- **Dose-response relationship in which the trajectory of suicides following 'Werther' narratives increased over time, while there was a decline of suicides for protective 'Papageno' narratives**.

Hawley LL, Niederkrotenthaler T, Zaheer R, Schaffer A, Redelmeier DA, Levitt AJ, Sareen J, Pirkis J, Sinyor M. Is the narrative the message? The relationship between suicide-related narratives in media reports and subsequent suicides. Aust N Z J Psychiatry. 2023 May;57(5):758-766.

Slide 2

Papageno narratives

Werther narratives

1-=Week before publication   5-=4 weeks after publication

Slide 3

Effects of media stories of hope and recovery on suicidal ideation and help-seeking attitudes and intentions: systematic review and meta-analysis

Thomas Niederkrotenthaler, Benedikt Till, Stefanie Kirchner, Mark Sinyor, Marlies Braun, Jane Pirkis, Ulrich S Tran, Martin Voracek, Florian Arendt, Maria Ftanou, Reka Kovacs, Kylie King, Marisa Schlichthorst, Steven Stack, Matthew J Spittal

Summary

Background There is strong evidence that suicides increase after media stories about suicides by celebrities, particularly those that highlight the suicide method (the Werther effect). Much less is known about the Papageno effect—the protective effects of media stories of hope and recovery from suicidal crises. A synthesis of the retrievable evidence is lacking. We aim to summarise findings from randomised controlled trials about the effects of stories of hope and recovery on individuals with some degree of vulnerability to suicide.
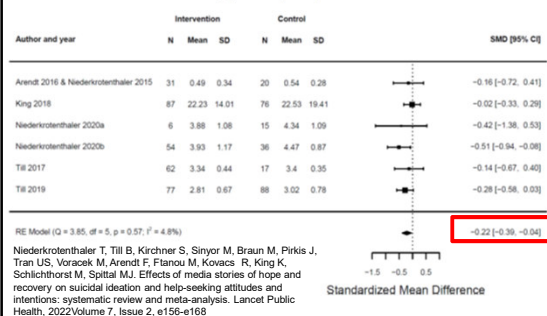
Methods For this systematic review and individual participant data meta-analysis, we searched PubMed (including MEDLINE), Scopus, Embase, PsycInfo, Web of Science, and Google Scholar published from inception to Sept 6, 2021, without language restrictions. We included studies that reported suicidal ideation (the primary outcome) or help-seeking attitudes or intentions (the secondary outcome) and tested a media narrative of hope and recovery. Studies were excluded if they did not feature a clearly positive story of hope and recovery, or had a control group exposed to suicide-related stimulus material. We contacted the lead or senior authors of all original studies to obtain participant-level data for this study. The primary analysis was restricted to individuals with some vulnerability to suicide. Risk of bias was assessed using the Cochrane risk-of-bias tool for randomised trials. The study is registered with PROSPERO, number CRD42020221341.

Findings Our search yielded 7347 records. 3920 records were screened by title and abstract, and 25 full-text records assessed for eligibility. There were eight eligible studies with 2350 participants for which individual participant data were sought. For suicidal ideation, six studies met the inclusion criteria for the primary analysis. Follow-up responses were available for 569 (90%) of 633 participants who were randomised with high vulnerability (345 [55%] allocated to the intervention group and 288 [45%] to the control group). The pooled standardised mean difference (SMD) indicated a small reduction in suicidal ideation of −0·22 (95% CI −0·39 to −0·04, p=0·017; six studies) in the intervention group. For help-seeking attitudes and intentions, four studies met the inclusion criteria and follow-up data were available for 362 (86%) of 420 participants (247 [59%] allocated to the intervention group and 173 [41%] to the control group). The pooled SMD showed no evidence of a difference between the groups (SMD=0·14, 95% CI −0·15 to 0·43, p=0·35; four studies). Low levels of cross-study heterogeneity effects were observed for both analyses (I^2=5% [suicidal ideation] and I^2=36% [help-seeking attitudes and intentions]). We found no evidence of publication bi...

Lancet Public Health 2022; 7: e156-68

Unit Suicide Research & Mental Health Promotion, Department of Social and Preventive Medicine, Center for Public Health, Medical University of Vienna, Vienna, Austria (T Niederkrotenthaler PhD, B Till DSc, S Kirchner MPH, M Braun MPH); Wiener Werkstaette for Suicide Research, Vienna, Austria (T Niederkrotenthaler, B Till, S Kirchner, M Braun, U S Tran DSc, Prof M Voracek PhD, F Arendt PhD, R Kovacs MSc); Department of Psychiatry, Sunnybrook Health Sciences Centre, Toronto, ON, Canada (M Sinyor MD); Department of Psychiatry, University of Toronto, Toronto, ON, Canada (M Sinyor); Centre for Mental Health, Melbourne School of Population and Global Health, The University of Melbourne, Melbourne, VIC, Australia (Prof J Pirkis PhD, M Ftanou PhD, M Schlichthorst PhD, Prof M J Spittal PhD); School of Psychology, Department of Cognition, Emotion, and

Slide 4

- We identified six trials for the outcome suicidal ideation (n=569 participants with some vulnerability to suicide).
- Mean age of participants: 32 years (SD:14: range 18-97). 60% were female.
- Interventions included exposure to video messages (1 study); a TV documentary (1 study); newspaper articles (3 studies); a prevention website (1 study).

Slide 5

Suicidal ideation

(A) Primary analysis

Author and year	Intervention N	Mean	SD	Control N	Mean	SD	SMD [95% CI]
Arendt 2016 & Niederkrotenthaler 2015	31	0.49	0.34	20	0.54	0.28	−0.16 [−0.72, 0.41]
King 2018	87	22.23	14.01	76	22.53	19.41	−0.02 [−0.33, 0.29]
Niederkrotenthaler 2020a	6	3.88	1.06	15	4.34	1.09	−0.42 [−1.38, 0.53]
Niederkrotenthaler 2020b	54	3.93	1.17	36	4.47	0.87	−0.51 [−0.94, −0.08]
Till 2017	62	3.34	0.44	17	3.4	0.35	−0.14 [−0.67, 0.40]
Till 2019	77	2.81	0.67	88	3.02	0.78	−0.28 [−0.58, 0.03]
RE Model (Q = 3.85, df = 5, p = 0.57; I^2 = 4.8%)							−0.22 [−0.39, −0.04]

Standardized Mean Difference

Niederkrotenthaler T, Till B, Kirchner S, Sinyor M, Braun M, Pirkis J, Tran US, Voracek M, Arendt F, Ftanou M, Kovacs R, King K, Schlichthorst M, Spittal MJ. 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, 2022 Volume 7, Issue 2, e156-e168

Slide 6

Entertainment media: 13 Reasons Why

Netflix, 2017
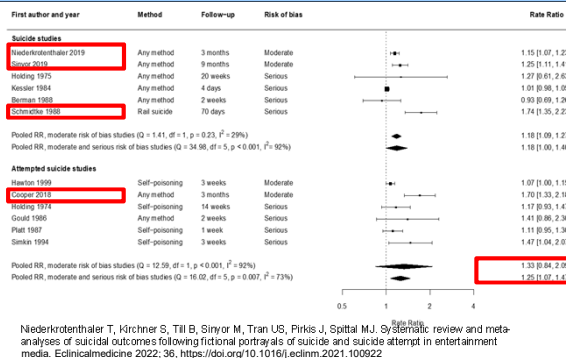
IASP, 2017

Slide 1

Suicide rates after 13RW

Niederkrotenthaler T, Stack S, Till B, Sinyor M, Pirkis J, Garcia D, Rockett IRH, Tran US. Association of Increased Youth Suicides in the United States With the Release of 13 Reasons Why. JAMA Psychiatry. 2019 May 29.

Bridge JA, Greenhouse JB, Ruch D, Stevens J, Ackerman J, Sheftall AH, Horowitz LM, Kelleher KJ, Campo JV. Association Between the Release of Netflix's 13 Reasons Why and Suicide Rates in the United States: An Interrupted Times Series Analysis. J Am Acad Child Adolesc Psychiatry. 2019 Apr 28. pii: S0890-8567(19)30288-6.

Sinyor M, Williams M, Tran US, Schaffer A, Kurdyak P, Pirkis J, Niederkrotenthaler T. Suicides in Young People in Ontario Following the Release of "13 Reasons Why'". Can J Psychiatry. 2019 Aug 21:706743719870507.

Slide 2

Meta-Analysis: Suicide in entertainment media

Niederkrotenthaler T, Kirchner S, Till B, Sinyor M, Tran US, Pirkis J, Spittal MJ. Systematic review and meta-analyses of suicidal outcomes following fictional portrayals of suicide and suicide attempt in entertainment media. Eclinicalmedicine 2022; 36, https://doi.org/10.1016/j.eclinm.2021.100922

Slide 3

Logic with 50 suicide attempt and loss survivors; MTV Video Music Awards 2018, August 2017, New York

Slide 4

Association of Logic's Hip Hop Song 1-800-273-8255 with Lifeline Calls and Suicides in the United States: A Time-Series Analysis

Niederkrotenthaler T, Tran U, Gould M, Sinyor M, Sumner S, Strauss MJ, Voracek M, Till B, Murphy S, Gonzalez F, Spittal MJ, Draper J. BMJ 2021;375:e067726

Slide 5

Tweets related to the Logic song

Slide 6
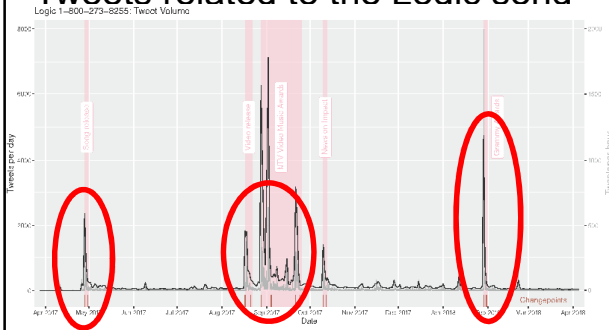
Fitted ARIMA time series models to daily calls to the Lifeline

Dummy variable	Raw association		Adjusted for 13RW		Excess calls n (95% CI)	% Increase (95% CI)
	Estimate (*SE*)	*P*	Estimate (*SE*)	*p*		
Release	191.59 (96.69)	.048	205.84 (94.45)	.029	617.52 (62.15, 1172.89)	5.25 (0.53, 9.97)
MTV Music Awards	373.34 (77.97)	<.001	364.82 (74.76)	<.001	10214.96 (6112.13, 14317.79)	8.46 (5.06, 11.86)
Grammy Awards	263.16 (95.51)	.006	252.88 (95.00)	.008	758.64 (200.04, 1317.24)	6.45 (1.70, 11.22)
Video release	76.29 (92.46)	.41	60.27 (90.51)	.51	301.35 (-585.65, 1188.35)	1.67 (-3.25, 6.60)
News Impact	152.67 (96.33)	.11	158.71 (95.15)	.10	476.13 (-83.35, 1.035,61)	3.57 (-0.62, 7.75)
Logic main events	256.65 (51.81)	<.001	291.62 (49.83)	<.001	9915.08 (6594.41, 13235.75)	6.87 (4.57, 9.18)

MEDICAL UNIVERSITY OF VIENNA

Slide 1: Fitted ARIMA time series models to daily suicides

	Raw association		Adjusted for 13RW		Excess suicides n (95% CI)	% Decrease (95% CI)
Dummy variable	Estimate (SE)	p	Estimate (SE)	p		
Release	-10.62 (7.53)	.16	-11.02 (7.55)	.15	-33.06 (-77.45, 11.33)	-9.29 (-21.76, 3.18)
MTV Music Awards	-4.12 (3.72)	.27	-5.37 (3.89)	.16	-150.36 (-363.84, 63.12)	-4.03 (-9.75, 1.69)
Grammy Awards	-10.22 (7.54)	.18	-10.12 (7.54)	.18	-30.36 (-74.70, 13.98)	-7.93 (-19.50, 3.65)
Video release	7.90 (6.17)	.20	7.41 (6.19)	.23	37.05 (-23.61, 97.71)	5.23 (-3.33, 13.80)
News Impact	11.29 (7.53)	.13	11.76 (7.54)	.12	35.28 (-9.06, 79.62)	8.07 (-2.07, 18.22)
Logic main events	**-6.23 (3.06)**	**.042**	**-7.20 (3.13)**	**.021**	**-244.80 (-453.38, -36.22)**	**-5.48 (-10.14, -0.81)**

MEDICAL UNIVERSITY OF VIENNA

Slide 2: Role of Awareness vs. Prevention Narratives

HEALTH COMMUNICATION
https://doi.org/10.1080/10410236.2023.2167580

Routledge
Taylor & Francis Group

The Role of the Narrative in Educative Suicide Awareness Materials: A Randomized Controlled Trial

Benedikt Till, Florian Arendt, Pascal Rothauer, and Thomas Niederkrotenthaler

Slide 3

- Till et al. (2023) did a randomized controlled trial with n=334 adults, reading either an article focused on (I) the prevalence of suicide, (II) professional help resources, (III) how everyone can help to prevent suicide, or a (IV) control article.

- Implicit measures to assess mental accessibility of concepts related to suicide and suicide prevention.
  - Word puzzles: task to insert common German words. For example: item "s t _ _ _ e n" can be completed with "s t e r b e n" (English: dying), but also with "s t a u n e n" (English: marveling) or "s t i n k e n" (English: stinking). 10 puzzles overall.
  - Open-ended summaries of text

Till B, Arendt F, Rothauer P, Niederkrotenthaler T. The Role of the Narrative in Educative Suicide Awareness Materials: A Randomized Controlled Trial, Health Communication, 2023. doi.org/10.1080/10410236.2023.2167580

Slide 4

- Participants reading article highlighting the prevalence of suicide tended to show a higher accessibility of concepts related to suicide, as compared to controls.

- Concept of "helping" and that "suicide is preventable" was higher in participants' memory when exposed to materials focusing on help, as compared to controls.

- Prevention messages appear better at triggering thoughts about help-seeking.

Till B, Arendt F, Rothauer P, Niederkrotenthaler T. The Role of the Narrative in Educative Suicide Awareness Materials: A Randomized Controlled Trial, Health Communication, 2023. doi.org/10.1080/10410236.2023.2167580

Slide 5

Journal of Communication, 2023, 73–85
https://doi.org/10.1093/joc/qac039
Advance access publication 28 November 2022
Original Article

News for life: improving the quality of journalistic news reporting to prevent suicides

Florian Arendt, Antonia Markiewitz and Sebastian Scherr

Slide 6: Promoting good-quality reporting

Arendt et al (2023) developed a web-based campaign promoting good quality suicide reporting, targeting newsrooms in Germany.

Intervention: Short video message about Werther and Papageno effects and how to minimize risk, developed with feedback from journalists.
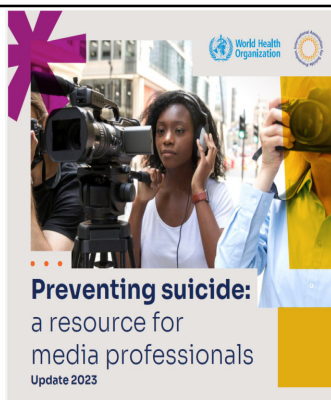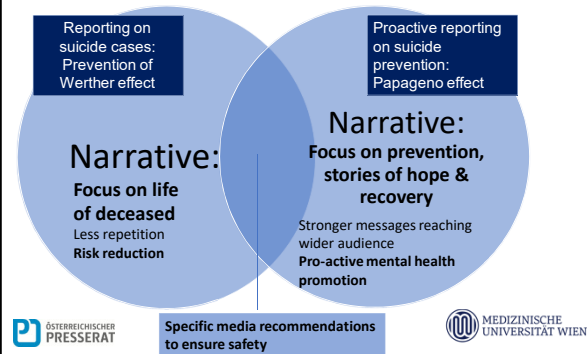
Twenty-two newsrooms participated.

Arendt F, Markiewitz A, Scherr S. News for life: improving the quality of journalistic news reporting to prevent suicides, Journal of Communication, 73 (1): 73–85.

Promoting good-quality reporting

- Content analysis (N = 4,015 articles; from December 2018 to March 2020); comparison of items from participating newsrooms and other newsrooms.

- Interrupted time series analysis to investigate effect on suicide rates in areas served by participating newsrooms vs. other areas.

- Evidence for an **increase in good-quality reporting** in intervention newsrooms.
- Tentative evidence for a **reduction in suicides** in intervention regions.
- **Change in narrative was scarce** (Papageno stories made up only 3% of stories overall).

Suicide reporting guidelines revisited:

Reporting on suicide cases: Prevention of Werther effect

Proactive reporting on suicide prevention: Papageno effect

Narrative:
Focus on life of deceased
Less repetition
Risk reduction

Narrative:
Focus on prevention, stories of hope & recovery
Stronger messages reaching wider audience
Pro-active mental health promotion

Specific media recommendations to ensure safety

ÖSTERREICHISCHER PRESSERAT

MEDIZINISCHE UNIVERSITÄT WIEN

Preventing suicide: a resource for media professionals
Update 2023

https://www.who.int/publications/i/item/9789240076846

+43 1 406 95 95
www.kriseninterventionszentrum.at

Leitfaden zur Berichterstattung über Suizid

Mag. Gerald Tomandl
Prim. Dr. Thomas Kapitany
Dr. Claudius Stein
em. o. Univ.-Prof. Dr. Gernot Sonneck
Kriseninterventionszentrum Wien

unter Mitarbeit von
Assoc. Prof. Dr. Thomas Niederkrotenthaler
Zentrum für Public Health der MedUni Wien

Golli Marboe
Verein VsUM

Mag.ª Eva Liebentritt
ORF

Silvi Muehringer
IdEE-Austria

SUPRA
Suizidprävention Austria

Austrian media guidelines, 2023

MEDICAL UNIVERSITY OF VIENNA

WIENER WERKSTÄTTE FOR SUICIDE RESEARCH

thomas.niederkrotenthaler@meduniwien.ac.at