

Media coverage as a risk factor in suicide

S Stack

J Epidemiol Community Health 2003;**57**:238–240

See end of article for author's affiliation

Correspondence to:
Dr S Stack, Department of Criminal Justice, Wayne State University, Detroit, MI 48202, USA;
aa1051@wayne.edu

A total of 293 findings from 42 studies on the impact of publicized suicide stories in the media on the incidence of suicide in the real world were analyzed by logistic regression analysis. Studies measuring the effect of either an entertainment or political celebrity suicide story were 14.3 times more likely to find a copycat effect than studies that did not. Studies based on a real as opposed to fictional story were 4.03 times more likely to uncover a copycat effect. Research based on televised stories was 82% less likely to report a copycat effect than research based on newspapers. A review of recent events in Austria and Switzerland indicates that suicide prevention organizations can successfully convince the media to change the frequency and content of their suicide coverage in an effort to reduce copycat effects.

Widespread coverage of a suicide in the media has long been thought to be capable of triggering copycat suicides in the mass public. In 1774, Goethe's *The Sorrows of Young Man Werther*, a novel where the hero commits suicide due to a failed love affair, was banned in many European locations. It was perceived as responsible for imitative suicides in such places as Italy, Leipzig, and Copenhagen.

Systematic scientific investigations on copycat suicide began with the work of David Phillips in the 1970s. The largest possible copycat effect found was for the well known movie star Marilyn Monroe. During the month of her suicide in August 1962 there were an additional 303 suicides, an increase of 12%. In general, however, highly publicized stories increase the national suicide rate by only 2.51% in the month of media coverage.¹

More than 40 scientific papers have been published on the impact of suicide stories in the media on suicide in the real world. However, there have been some inconsistencies in the findings of this research. Some studies find significant increases in suicide after a widely publicized suicide story, while other research finds no effect.¹ The present study reviews this research evidence with four goals in mind. First, what hard evidence is there for a copycat effect—do suicidal people actually imitate suicides in the media? Second, how can this association be interpreted? What are the major theories that have been used? Third, what scientific generalizations can we now construct from the existing studies through meta analysis? Finally, implications for data driven, media suicide guidelines are discussed for the purposes of suicide prevention.

DIRECT EVIDENCE FOR A MEDIA IMPACT

Most of the evidence to date for a copycat suicide effect is very indirect and not fully satisfactory. That is, associations are drawn between the presence of a suicide story and a rise in the social suicide rate. It typically is not known to what extent the people committing suicide are aware of the suicide story.

Nevertheless, there is some convincing evidence for a direct copycat effect. For example, in the book, *Final Exit*, a guide to suicide for terminally ill persons, asphyxiation is the recommended means of suicide. In the year that *Final Exit* was published, the number of suicides by asphyxiation in New York City rose by 313% from eight to 33. Furthermore, a copy of *Final Exit* was found at the scene of 27% of these suicides.¹ A study of Quebec by Tousignant and his colleagues² of 71 coroners reports determined that at least 14% of the suicides

in the month following a widely publicized suicide of a popular Quebec journalist were at least partially linked to the story. Ninety percent of the suicides used the same method (hanging) as the role model in the story.

EXPLANATIONS OF MEDIA IMPACTS ON SUICIDE

Explanations of media impacts on suicide have generally been framed in terms of social learning theory. Basically one learns that there are troubled people who solve their life's problems (for example, divorce, terminal illness, dishonor) through suicide. Mentally troubled persons in society may simply copy the behavior of troubled people in the suicide stories.

A more complex set of explanations revolves around the learning process of differential identification. To the extent that people identify with a type of story, that type would be expected to have more of an impact. For example, if people tend to copycat the suicides of superior people, they would be expected to copy the ones of famous celebrities more than the suicides of ordinary people.

A third variety of explanation focuses not on story characteristics but on audience mood. The central thesis is that stories which appear when suicidogenic conditions are high in society (for example, high unemployment, high divorce rates, low church attendance rates) will have more of a copycat effect since more people are on the verge of suicide. This is the most understudied explanation.

EMPIRICAL GENERALIZATIONS ABOUT MEDIA IMPACTS ON SUICIDAL BEHAVIOR

Stack¹ provides the only quantitative analysis of the findings of research studies to date. Stack's review is based on 293 findings contained in 42 scientific articles on the subject. There are few generalizations that can be made about the conditions that maximize the relation between the media coverage of suicide and suicidal behavior.

Story characteristics 1: celebrity suicides

Studies that measured the presence of stories regarding well known entertainment and political celebrities were 14.3 times more likely to uncover a copycat effect than studies which did not do so. It is argued that suicide stories about such well known people (for example, Marilyn Monroe, US senators and

Reproduced in full with permission from *Injury Prevention* 2002;**8**(Suppl IV):iv30–iv32

cabinet members), spark a greater degree of identification than stories about the suicides of other persons. The entertainment celebrity, in particular, has the greatest impact on copycat suicide. According to a reference group approach, if a Marilyn Monroe with all her fame and fortune cannot endure life, the suicidal person may say "Why should I?". Along these same lines, a recent study of a well known and respected journalist in Quebec has been associated with a substantial rise in suicide rate.²

Story characteristics 2: real versus fictional

The meta analysis found that studies based on real suicide stories are 4.03 times more likely to report copycat effects than studies based on fictional suicides. For example, the several works on the four television movies about teenage suicide which aired in 1984 generally found no imitative effect. People may identify with true to life suicides rather than make believe suicides in movies or soap operas.

Medium of coverage

Unlike televised suicide stories, newspaper suicide stories can be saved, reread, displayed on one's wall or mirror, and studied. Television based stories on suicide typically last less than 20 seconds and can be quickly forgotten or even unnoticed. Detailed studies of suicides occurring during media coverage of suicide have often found copies of suicide news stories near the body of the victim. The meta analysis found that research based on televised stories was 82% less likely to report a copycat effect than research based on newspaper stories.

Dependent variable

While the models in suicide stories are almost always completers, the meta analysis found that studies based on completed suicides as the dependent variables were 94% less likely to find a copycat effect than studies based on suicide attempts as the dependent variable. This unanticipated finding deserves more research. Possibly those persons most susceptible to copycat effects are those who are less determined to die.

Period effects

Research has been based on three principal historical periods: 1910–1920, 1929–1939, and 1948 to present. Research based on the 1930s is 93% less likely than current day research to find a copycat effect. This may be due to the lack of television to echo the stories covered in the radio and print media. However, it may also be due to the presence of massive social movements for social and economic change (for example, labor movement) that may have distracted otherwise suicidal people from thoughts about suicide. Finally, newspaper circulation declined in the depression, a factor which could also diminish the impact of media stories on the social suicide rate.

Amount of suicide coverage

Generally speaking research has found that the greater the coverage of a suicide story the greater the chances of finding a copycat effect. The meta analysis distinguished between studies based on one network (for example, ABC, CBS, NBC) coverage of suicides versus studies based on two or three network stories. The former were 84% less likely to find a copycat effect.

Age specific suicide rates

Hypothetically, certain audiences (for example, the very young and impressionable or the high suicide risk group of elderly white males) may respond more to publicized suicide stories than their counterparts. The meta analysis distinguished between studies based on a dependent variable measuring youth suicide risk (ages 10–34), middle aged suicide risk (ages 35–64), and elderly suicide risk (65 and over). Studies based on young people were no more likely than studies based on the

Table 1 Percentage of newspaper stories containing dangerous stimuli before and after dissemination of media guidelines for suicide reporting in Switzerland⁴

Dangerous characteristic	1991	1994
Front page stories	20%	4%
Sensational headlines	62%	25%
Pictures	43%	8%
Sensational text	48%	14%
Number of suicide stories	151	468
Suicide rate	20.7/100K	19.6/100K
Implied lives saved: 77		

elderly to find a copycat effect. Further, studies based on middle aged people were also not any more likely to find a copycat effect. However, nearly all studies in this vein did not match the age of the suicide victims in the stories with the age of the victims in the suicide rate being analyzed. Further work will be needed in order to systematically assess the impact of age identification on age specific suicide rates.

SUICIDE PREVENTION: MEDIA GUIDELINES

Professional organizations have often prepared guidelines for the media to follow in presenting suicide story content.³ These guidelines stress such considerations as limiting the amount of coverage, avoiding sensationalism in coverage, deleting any detailed information on the method of suicide, and avoiding positive definitions of the deceased. Two important issues are: (1) Under what conditions, if any, can suicide professionals influence the way in which the media reports suicide? (2) Which aspects of media reporting, if any, make a difference in generating copycat effects?

Influencing the media's presentation of suicide

A Swiss study explored the impact of a 1992 press conference between the media, suicidologists, and the Swiss Medical Association. Officials from the media were urged to follow guidelines for reporting suicide.⁴

A content analysis of stories over an eight month period before and an eight month period after distribution of the guidelines illustrated a substantial increase in the responsible reporting of suicide. For example, the data in table 1 indicate that the percentage of suicide stories on page one declined from 20% to 4%. Further the proportion of stories with sensational headlines declined from 62 to 25%.

However, at the same time, the media tripled the number of suicide stories covered, evidently ignoring the guideline for less coverage of suicide. Further, there is no rigorous information on the extent to which the change in the presentation of suicide in the media had any effect on the Swiss social suicide rate.

Turning from Switzerland to the United States, a number of American Associations (for example, Centers for Disease Control, American Association of Suicidology) have published media guidelines. However, according to the US Surgeon General's Report, *National Strategy for Suicide Prevention*,⁵ there is no evidence that these guidelines have changed the way the American media report on suicide.

Impact of Austrian media guidelines on suicide

From 1983 to 1986 a sharp increase in the number of subway suicides in Vienna was linked to a dramatic increase in their coverage in the media. In 1987 the Austrian Association for Suicide Prevention launched a media campaign to change the amount and the nature of press coverage of subway suicide. After June 1987 the Austrian press either did not report the subway suicides at all or covered them in short reports in the inside pages.

Table 2 Differences between mean reductions in teenage suicides for stories with and without dangerous characteristics (corrected for the amount of publicity accorded each story) (n=32 televised stories)⁸

Story characteristic	t test	Probability
No motive stated v motive stated	1.41	0.17
Method reported v method not reported	-0.84	0.42
Photo of model v no photo of model	-1.29	0.21
No mention family/friends v mention of family/friends	-1.40	0.26
"Definite suicide" v apparent suicide	-1.21	0.24

During the years of sensational news coverage there were up to nine subway suicides per six months. After the sensational coverage ceased, there were between one and four subway suicides per six month interval.^{6,7}

However, it is not clear how much of the drop in subway suicides was due to (1) the decline in the quantity, including the reduction in page one coverage, or (2) the quality or framing of the stories—to what extent did they follow the guidelines?

Impact of American media guidelines on teenage suicide

Phillips and colleagues⁸ studied characteristics of 32 televised suicide stories and their impact on teenage suicide in the US. Twelve aspects of story content were measured, including mention of the method of suicide, picture of the victim in normal life, picture of the victim's body or coffin, and whether or not the motive was specified. None of these characteristics of the stories were associated with significant increases or decreases in suicide risk (see table 2). From the present review of empirical generalizations, media guidelines might best focus on limiting the amount of coverage given to the story.

However, the findings of Phillips *et al* should be taken with caution. First, they are corrected for the amount of coverage. Without a control for coverage some of the media guidelines might be related to suicide. Second, some aspects of suicide guidelines (for example, suicide mentioned in headlines, degree of sensationalism) were not coded. Future work should do this. Third, these findings are only for teenagers. Replication is needed for other age groups. Nevertheless, results suggest that media guidelines might best focus on limiting the amount of coverage given to the story.

CONCLUSION

As anticipated from social learning theory, the greater the amount of coverage of suicide in the media, the greater the increase in suicide rate. The meta analysis showed: (1) studies including stories airing on just one TV network were 84% less apt to find a copycat effect; (2) studies based on television stories, which contain less detail than newspaper stories, were 87% less likely to report a copycat effect than studies based on newspapers.

Differential identification theory received strong support: (1) studies measuring the presence of stories concerning entertainers and political celebrities are more than 14 times more likely to find a copycat effect than their counterparts; (B) studies based on real suicides are 4.03 times more likely to uncover copycat effects than studies based on fictional stories.

The degree of copycat effects may be seriously underestimated in most research since most research has not: (1) matched the age/gender of the model with the age/gender of the observer; (2) controlled for nationality of model and observer; and (3) controlled for marital status of the model.

Prevention

Recent events in Austria and Switzerland show that suicide prevention organizations can change the quantity and/or quality of news reporting on suicide. Hence the media may contribute to the reduction of suicide. However, it appears that the greatest reduction in copycat suicide may sometimes come from reducing the sheer quantity of news on suicide as opposed to the perceived quality of news reporting.⁸

Author's affiliation

S Stack, Wayne State University, Detroit, Michigan, USA

REFERENCES

- 1 Stack S. Media impacts on suicide: a quantitative review of 293 findings. *Social Science Quarterly* 2000;**81**:957-71.
- 2 Tousignant M, Mishara B, St-Laurent D, *et al*. The impact of the suicide of a hero journalist: the case of Gaetan Girouard in Quebec. Paper read at the annual meetings of the American Association of Suicidology, Atlanta, GA, April 21, 2001.
- 3 Maris R, Berman A, Silverman MM, eds. *Comprehensive textbook of suicidology*. New York: Guilford, 2000.
- 4 Michel K, Frey C, Wyss K, *et al*. An exercise in improving suicide reporting in the print media. *Crisis* 2000;**21**:71-9.
- 5 Satcher D. *National strategy for suicide prevention: goals and objectives for action*. Washington: Government Printing Office, 2001.
- 6 Sonneck G, Etzersdorfer E, Nagel-Kuess S. Imitative suicide on the Viennese subway. *Soc Sci Med* 1994;**38**:453-7.
- 7 Etzersdorfer E, Sonneck G. Preventing suicide by influencing the mass media reporting: the Viennese experience, 1980-1996. *Archives of Suicide Research* 1998;**4**:67-74.
- 8 Phillips DP, Carstensen LL, Paight D. Effects of mass media news stories on suicide, with new evidence on story content. In: Pfeiffer C, ed. *Suicide among youth: perspectives on risk and prevention*. Washington, DC: American Psychiatric Press, 1989:101-16.