

## An Exercise in Improving Suicide Reporting in Print Media

*Konrad Michel, Conrad Frey,  
Kathrin Wyss, Ladislav Valach*

*This study was conducted to support the publication of guidelines for media reporting on suicide. First, quantitative and qualitative aspects of suicide reporting in Swiss print media were surveyed over a time span of 8 months. The results were presented at a national press conference, and written guidelines for suicide reporting were sent out to all newspaper editors. The results of the survey and the guidelines were discussed in a personal meeting with the Editor-in-Chief of the main tabloid. After the publication of the guidelines a second, identical survey was conducted. The main variables regarding frequency, form, and content of the newspaper reports before and after the press conference were compared. The number of articles, on the one hand, increased over the 3 years between the first and second survey, but the quality of reporting clearly improved on the other. The personal contact with the editor of the tabloid was probably the most effective means of intervention.*

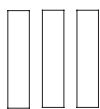
*Keywords: Suicide, prevention, media.*

Media reporting about suicide is a public health issue. Numerous studies have demonstrated a relationship between suicide reporting or fiction and subsequent self-injurious behavior [for an overview, see Schmidtkne & Schaller, 1998]. Early studies reporting an increase of suicides due to newspaper reports about suicide were those by Motto [1970], Blumenthal and Berger [1973], and Phillips [1974]. The relationship between nonfictional suicide stories and suicidal behavior was further supported by Jonas [1992], Wasserman [1992], and Stack [1988, 1996]. The fact that some investigators found contradictory evidence [e. g., Kessler et al., 1988; Littmann, 1985] raises the question of which reports cause additional suicides and which do not. Of special interest are some reports that give insight into the pos-

sible mechanisms involved. For instance, Fekete and Macsai in Hungary [1990] reported a dramatic increase of suicides with lidocain after the widely published suicide of a beauty-queen with this drug. The effect was most pronounced among females ages 15 to 39, i. e., among those individuals considered most similar to the model with respect to age and gender. The authors assumed that giving the exact details of the method used and the romanticizing of this suicide were among the possible reasons for the contagious effect of the reporting. In Vienna, Sonneck et al. [1990] showed that after newspaper editors were contacted and provided with guidelines for reporting on suicide, the number of suicides in the Viennese Metro dropped by more than 70% and remained low during the following

years [see also Etzersdorfer et al., 1992; Sonneck et al., 1994]. The suicide of Kurt Cobain, which was widely covered by the media, was another recent "natural experiment," where the reporting in both print and visual media was considered responsible and where no "Werther effect" was subsequently observed [Jobes et al., 1996]. It is likely that in this case the active role of the Seattle Crisis Clinic in advising journalists had a considerable influence on the reporting. Taken together, these natural experiments clearly suggest that if the quality of suicide reporting can be improved, the risk of contagion will be reduced.

In 1992, the Swiss Medical Association in conjunction with the Swiss Federal Office for Health launched a suicide prevention campaign covering several areas of preventive work [Frey & Michel, 1991]. Switzerland traditionally has a relatively high suicide rate (20/100,000 in 1992), the rate being especially high among young Swiss men aged 15–24 [Lester, 1991; Michaud, 1993]. The working group responsible for the campaign decided that suicide reporting in Swiss newspapers should be critically evaluated and guidelines for media coverage of suicide issued based on this survey. Although Switzerland is a small country with only 7 million inhabitants, an effect similar to the one found by Sonneck et al. could not be expected, a disadvantage being that Switzerland has three different languages and a large number of local newspapers. However, the working group decided that a second survey should be conducted after the publication of the guidelines to monitor the changes in suicide reporting.



## Method

### First Survey

Over a time span of 8 months all daily, weekly, and monthly papers and magazines published in Switzerland (except for professional publications) in German, French, and Italian were screened by a professional media monitoring agency for words such as "suicide" and "attempted suicide." Altogether some 400 newspapers and magazines were examined. The collected newspaper clippings were carefully read by the authors and coded for statistical analysis.

For coding purposes, a list of 50 items was de-

signed. The items were derived from the Center for Disease Control (CDC) recommendations for reporting of suicide [1994] and took into account quantitative as well as qualitative aspects of reporting. The recommendations are based on the assumption that the risk of contagion will be higher the more attention an article receives (e. g., report on front page, the word "suicide" appears in the heading, picture(s) of the person or the scene appear, the victim is glorified, etc.), the more specific details on how and where the suicide occurred are given, and the more the suicide is romanticized (see Appendix for the guidelines on suicide reporting). Quantitative aspects included the length of an article and its position in the newspaper, the size and the words in the headline, pictures, etc., as well as the frequency of reporting. Qualitative aspects referred to the contents of the reporting, above all the question of how much an article might serve as a model for susceptible persons and how much weight is given to measures of prevention. Coding criteria were formulated. If a potentially dangerous aspect of reporting was present, the item was given a positive score. Most items were coded as "present" (score = 1) or "not present" (score = 0), some had graded scores. Sum scores for heading, text, and pictures were calculated from the 50 items. A so-called Imitation Risk Score was calculated by simple addition of the sum scores.

### Press Conference and Publication of Guidelines

The results of the first investigation [Michel et al., 1995; Frey et al., 1997] were presented in a national press conference organized by the Swiss Medical Association. Guidelines for responsible suicide reporting were issued in three languages, distributed to journalists attending the conference and sent to all the newspaper editors (see Appendix). As a consequence of the press conference, most newspapers reported about the results of the study and the risk of imitation ("Medical Doctors Issue a Warning about the Danger of Sensational Reports on Suicide"). An interview with the authors was shown in the evening news on Swiss national television on the day of the press conference. In addition, the authors met with the Editor-in-Chief of the main Swiss tabloid, who agreed in writing as well as on television that his newspaper would stop reporting on suicides of adolescents and young adults in a

sensational way (oversized heading on first page, explicit picture of method, etc.).

## Second Survey

Immediately after the press conference, the second analysis of suicide reporting, over a similar time span, was carried out. The results were compared with the first evaluation. It must be pointed out that, because of the lengthy coding procedure (every article had to be read and coded in detail), nearly three years elapsed between the first analysis at the press conference (and thus the second analysis) and the planning of the press conference.

## Reliability of Data Collection

The media-monitoring office claims an average hit rate of 85% of articles containing a target word. We have no means to determine the actual rate of missed articles in our study, but we assume that missed articles mainly were those where suicide and attempted suicide were not major keywords and therefore more difficult to identify. The suicide reporting in such articles is unlikely to have much impact on the reader.

## Reliability of Rating

The ratings were done by the C.F. and K.M., later by K.W. In 20 randomly selected articles of the first analysis (9% of the total) the complete rating was done independently by C.F. and K.M. It was not possible to design a blind study protocol, as the identification of

the newspapers (especially the tabloid press) from which the articles originated was easily possible. The main tabloid, because of its form and style of writing and presentation, would have been easy to recognize even if the texts had been transcribed. The inter-rater reliability was satisfactory with a kappa of 0.74 ( $p < 0.05$ ). Later, critical articles were analyzed by a conference rating procedure. This was the case in 60 articles.



## Results

### First Survey

During the 8 months of monitoring, a total of 74 newspapers and magazines were found to have articles with at least one of the key words. Altogether 208 articles were collected. Over half of the articles appeared in only 10 of the 74 newspapers. In 151 articles suicide or attempted suicide was the main or one of the main topics. These articles were selected for analysis.

Table 1 shows the frequencies of suicide articles and circulation figures of the main newspapers. The two newspapers with the highest numbers of articles are both German-Swiss, followed by two French-Swiss newspapers. The two German-Swiss newspapers most frequently reporting about suicide happen to be the two daily papers with the highest circulation figures, though this is not the case for French-Swiss publications, where the topic is hardly covered by the three largest newspapers. None of the Italian-Swiss papers had frequent coverage.

**Table 1**  
**Circulation Figures of Selected Swiss Newspapers and Numbers of Articles with the Target Words ("suicide/attempted suicide") Found in 8 Months' Monitoring**

	Circulation	No. of articles	% of all articles
<i>Blick</i> (daily)	364,700	35	16.8
<i>Tages-Anzeiger Zürich</i> (daily)	261,369	23	11.1
<i>La Suisse</i> (daily)	70,032	13	6.3
<i>Le Matin</i> (daily)	53,774	11	5.3
<i>Die Wochenzeitung</i> (weekly)	18,500	9	4.3
<i>Corriere del Ticino</i> (daily)	35,225	7	3.4
<i>L'Impartial</i> (daily)	31,072	4	1.9
<i>Solothurner Zeitung</i> (daily)	45,542	4	1.9
<i>Der Landbote</i> (daily)	40,775	3	1.4
<i>Der Schweiz. Beobachter</i> (monthly)	407,669	4	1.9

### Quantitative Aspects of Reporting

The length of the articles varied from 5 to 380 lines, with a median of 55 lines. The longest articles were covering overdoses taken by celebrities. A picture accompanied 59 articles (39%), of which 13 appeared on the front page. The article or the headline appeared on the front page in 22 articles (15%). The main tabloid in the German language alone had 15 articles on the front page. In 74 cases (49%) the headline print was rated as oversized, mainly in cases of shooting and hanging (46 articles).

### Qualitative Aspects of Reporting

The headline in 71 of the 151 suicide articles (47%) was considered to be sensational ("eye-catcher"). In 54 cases, the text was considered sensational (36%). In 59 articles (39%) one or more pictures of the victim or the circumstances of the suicide were shown, at least 13 of which (9%) were on the front page. In 20 articles the heading (13%) and in 39 articles the text (26%) was judged as romanticizing the event or glorifying the person, and a high sum score for headline was given in 62 (41%) and for text in 47 (31%) articles. Inappropriate pictures were found in 30 articles (20%).

For the Imitation Risk Score a cut-off score of 6 (maximum = 22) was used, which left 67 articles (44%) in the high imitation risk group. A first spontaneous evaluation of the raters considering each article as

harmless or harmful gave an almost identical result, with at least two fifths of the articles carrying the risk of an imitation effect.

### Content

In 139 articles details of the person involved were given; 102 thereof (73%) were male and 37 (27%) were female. In 86 cases (62%) the person was a noncelebrity, in 30 cases (22%) an international celebrity, and in 23 cases (16%) a local celebrity. The method used for the suicidal act was mentioned in 104 (75%) of the person-centered articles: shooting (52 cases, 37%) was most frequent, followed by hanging (12 cases, 9%), overdosing (15 cases, 11%), jumping (12 cases, 9%), and gassing (6 cases, 4%). Shooting and jumping were associated with noncelebrity status, overdosing with celebrity status ( $\chi^2 = 20.32$ ,  $df = 4$ ,  $p < .001$ ). The age range was from 20 to 80 years, the median being 35 years. Twenty-one persons (24%) were 25 years old or younger. Of these, the majority (91%) were noncelebrities. Most of them shot (53%) or hanged themselves (21%), none overdosed.

### Differences Between Newspapers

Considering the uneven distribution of the number of suicide reports in the different papers, we were interested in whether those papers frequently reporting suicides differ from others in their dealing with suicide as

**Table 2**  
**Comparisons of Articles from Newspapers with Frequent Suicide Reporting**  
**(more than 10 Articles) with Those from Papers with Infrequent Suicide**  
**Reporting (10 Articles or Less)**

	Frequent reporting ( $n = 68$ )	Infrequent reporting ( $n = 71$ )
Length of article (over 62 lines)	24 (34%)	40 (59%)
Headline on front page	20 (28%)	3 (4%)
Picture on front page	20 (18%)	2 (3%)
Headline large print	48 (68%)	22 (32%)
News character	36 (51%)	16 (24%)
Method named	61 (86%)	43 (63%)
Method in headline	22 (31%)	11 (16%)
Shooting as method	36 (51%)	3 (4%)
Circumstances described	56 (79%)	38 (56%)
Same case more than once	17 (24%)	6 (9%)

Differences are all significant at a 5% level ( $\chi^2$  test). No significant differences were found for the following variables: Hanging as method, name of person mentioned, number of pictures.

**Table 3**  
**Items Showing Statistically Significant Differences ( $\chi^2$  test,  $p < .001$ ) in the Number of Dangerousness Ratings Before and After Publication of Guidelines, All 74 Newspapers**

	Before (151 articles)	After (468 articles)
Headline on front page	30 (20%)	19 (4%)
Headline sensational	94 (62%)	117 (25%)
Headline glorifying	26 (17%)	14 (3%)
Article with picture	65 (43%)	38 (8%)
Picture inadequate	38 (25%)	14 (3%)
Text sensational	74 (49%)	66 (14%)
Text as glorifying	50 (33%)	28 (6%)

Items such as the following showed no statistically significant changes: name of person mentioned, time and place of event mentioned, mention of "suicide" in headline, method mentioned in headline, text on front page, repeated articles about the same case.

**Table 4**  
**Items Showing Statistically Significant Differences ( $\chi^2$  test,  $p < .001$ ) in the Number of Dangerousness Ratings Before and After Publication of Guidelines, Main Tabloid**

	Before (151 articles)	After (468 articles)
Headline sensational	31 (76%)	63 (47%)
Headline glorifying	12 (29%)	8 (6%)
Article with picture	22 (54%)	11 (8%)
Picture inadequate	13 (32%)	3 (2%)
Text sensational	31 (76%)	47 (35%)
Text as glorifying	19 (46%)	16 (12%)
Shooting as method	15 (36%)	27 (20%)

Items such as the following showed no statistically significant changes: time and place of event mentioned, headline oversize, mention of "suicide" in headline, method mentioned in headline, text on front page, picture on front page.

a topic. We divided the 139 articles into (a) 68 articles from the papers with frequent and (b) 71 articles from papers with less frequent reporting of suicide. The first group of articles came from only four, the second group from 67 papers. Table 2 shows the main differences between the two groups.

The articles in newspapers with frequent suicide reporting are written more often in a sensational (heading: 77%,  $\chi^2 = 38.8$ ,  $df = 1$ ,  $p < .0001$ ; text: 63%,  $\chi^2 = 35.0$ ,  $df = 1$ ,  $p < .0001$ ) and glorifying way (heading: 22%;  $\chi^2 = 5.6$ ,  $df = 1$ ,  $p < .02$ ; text: 37%  $\chi^2 = 6.4$ ,  $df = 1$ ,  $p < .02$ ) compared with newspapers with infrequent reporting. It is evident that the main tabloid (*Blick*) has a more prominent and sensational reporting style on suicide than the other newspapers. In addition, the tabloid has more repeated reporting (19% vs 5%;  $p < .05$ ); more often the reports refer to successful suicides than suicide attempts (69% vs 34%;  $p < .001$ ); and the method used for the suicidal act is usually violent, such as shooting (47% vs 14%;  $p < .001$ ).

General remarks about suicide prevention were found in 40 suicide articles (27%), about two thirds of them ( $n = 28$ ) in articles with a background character. The topic of prevention was covered in a more detailed manner only in about one of ten articles (16; 11%). The

same picture is true for therapeutic advice (9% general advice; 7% specific advice).

### Second Survey and Comparison

The second analysis was carried out in order to assess the effect of the press conference and the issuing of guidelines for suicide reporting on the actual practice of reporting in Swiss print media. Here, only the main results that are of interest for the comparison of the two evaluation periods are presented.

#### Number of Articles

Altogether 468 newspaper clippings were collected from the same 74 newspapers in the second period. This is a fourfold increase from the first period. In the tabloid (*Blick*) alone there was an increase from 31 to 115 articles (+270%), while in the main nontabloid newspaper (*Tages-Anzeiger*) the increase was from 13 to 35 (+170%).

#### Comparison of 74 newspapers

The percentage of ratings expressing unsuitable aspects of suicide reporting was consistently lower in the

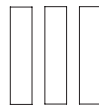
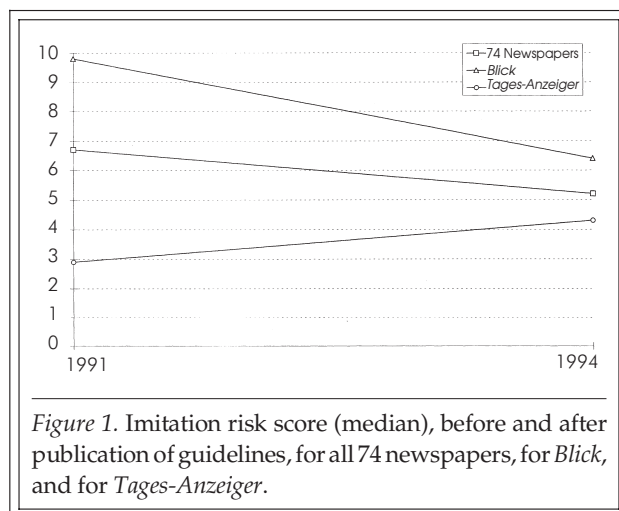
second period. A comparison of the main items is shown in Table 3. The percentage of headlines placed on the front page was lower, and these were rated less often as sensational or glorifying. There were relatively fewer articles with pictures. A smaller proportion of texts was considered sensational or glorifying. Furthermore, the median length of the articles was shorter (51 vs. 32 lines,  $p < .001$ , Mann-Whitney U-test).

### Comparison: Main Tabloid

In the tabloid the median length of the articles dropped from 60 lines to 20 lines ( $p < .001$ , Mann-Whitney U-test). Table 4 shows the changes in the dangerous items. Whereas 54% of articles had previously been accompanied with pictures, now it was only 8%. The percentage of inadequate pictures dropped from 32 to 2. Whereas 29% of headlines had previously been scored as glorifying, this was now the case in only 6%, and the percentage of articles considered to be highly suggestible dropped from 24 to 6. Generally, it appears that the style of reporting indeed changed dramatically. However, headlines and articles continued to appear on the front page, although less frequently.

### Comparison: Imitation Risk Score

In the second analysis the median Imitation Risk Score (Figure 1) was significantly lower for the 74 newspapers ( $\chi^2 = 17.82$ ,  $df = 1$ ,  $p < .000$ ), as well as for *Blick* ( $\chi^2 = 8.53$ ,  $df = 1$ ,  $p < .005$ ). In the *Tages-Anzeiger* articles the Imitation Risk Score was slightly higher (n.s.).



## Discussion

The aim of our study was to improve the quality of suicide reporting in the printed media. Natural experiments such as those described by Sonneck et al. [1990] and Jobes et al. [1996] indicate that improving media reporting on suicide is likely to reduce the risk of the "Werther effect." However, the communication between suicidologists and media professionals is not easy. Health professionals often consider suicide reporting irresponsible and determined by what might increase attention and circulation of a product. Journalists, on the other hand, usually claim that they have their internal standards of reporting, although in recent years some of them have become more aware of the effect suicide reporting may indeed have [Knickmeyer, 1996]. Therefore, one of the objectives of our survey was to establish a dialog with newspaper editors and thus to achieve at least some improvement in the standards of suicide reporting. It was also clear that, in view of the numerous factors influencing the frequency of suicide, we could not expect to be able to demonstrate any direct effect of the guidelines for suicide reporting on national suicide rates.

Given these objectives, we decided that a large-scale experiment that tries to answer the question whether suicide reporting in Switzerland is one of the causal factors of the high suicide rate was neither possible nor necessary. We therefore chose rather a field study based on an integrated intervention. The results of the first survey were used as a means to gain the attention of media professionals and to launch the guidelines for suicide reporting. This was done in a national press conference, which was followed by a second survey. To our knowledge, thus far no evaluations of the effect of guidelines have been published.

We are aware of a number of methodological limitations regarding the evaluation of suicide reporting before and after the publication of the guidelines. First, for the collection of articles containing keywords, we depended on a professional media monitoring firm. We had no means of establishing the proportion of missed articles and of determining whether the proportions were the same in the first and the second survey. Second, the ratings were not done blindly, one reason being that the size of headings, pictures, etc., had to be rated. Furthermore, we cannot exclude a bias in

the rating procedure before and after. However, in view of the 3 years between the first and the second analysis, as well as the fact that K.W., who had participated neither in the first analysis nor in the press conference, did most of the second survey ratings, it is unlikely that our interest in demonstrating an effect of the guidelines had a major influence. Also, the majority of items that had to be rated is of objective nature (e. g., length of article, description of suicide method in title, picture showing details of method, etc.).

The results of the first survey make it clear that there are enormous differences in the frequency of articles among the various print media. For some newspapers suicide is obviously a frequent topic, while others hardly ever cover it. The main German-Swiss tabloid paper was found to cover the topic on average once a week. We can assume that the two main papers reach at least 35% of all households in the German-speaking population (population 4.4 million, 2.5 persons per household). But not only the tabloids frequently have suicide articles: The second paper frequently reporting suicide (*Tages-Anzeiger*) can be considered responsible in its style of reporting. Obviously, the decision about how much weight should be given to suicide coverage must be made by the editors, and we can only speculate as to what their motives are.

In the newspapers with frequent suicide reporting the articles usually have news character and are often placed on the front page. Analysis of the content reveals that these papers have a preference for suicides through violent methods and for explicit description of the suicide methods and the circumstances of the act (including explicit pictures), even though the articles are generally shorter than those in newspapers with less frequent covering of the topic. It therefore becomes evident that certain papers indeed use suicide and attempted suicide events as sensational news items. Therefore, for preventive action it is necessary above all to concentrate on the few newspapers with frequent suicide reporting.

A further aspect is that suicide reporting obviously does not reflect reality. In newspapers, attempted suicide is rare and completed suicide is frequent. The reality is, of course, much different: In Switzerland there are estimated to be over 8000 suicide attempts that come to medical attention per year [Michel et al., 1991], and approximately 1500 completed suicides are officially reported. The picture given in newspapers is that most

people kill themselves is by shooting, though in Switzerland shooting represents no more than 28% of all suicides [BFS, 1992]. Overdoses, it would appear from the newspapers, are the domain of persons with celebrity status and are not taken by young persons, a total contrast to reality, where the highest rates for attempted suicide are in the age group 15 to 34 years [Michel et al., 1991]. The most disturbing finding is that the persons reported to have killed themselves by shooting or hanging are usually young and as it were "average" persons, i. e., persons with whom most young readers can easily identify. Stack's [1991] differential identification showed that noncelebrity status of the person who committed suicide was of similar importance, and that identification seemed to work upwards and laterally, especially in the young and in the elderly, but not in the middle aged. For young males, he found that the greater the coverage of noncelebrity suicides, the higher the suicide rate. It seems obvious that suicides of public persons and suicides occurring in public places should be reported and may even justify a prominent place in the newspapers. In our view, however, there is no justification for prominent coverage of the suicides of private persons occurring in private places.

Overall, we found that 40% to 45% of all suicide articles must be considered inappropriate, overall or at least in some aspects (e. g., heading), and thus potentially dangerous for imitation effect.

In the second survey, the press-monitoring firm provided many more suicide articles than in the first survey, although the selection criteria for the collection of articles were the same. It is difficult to interpret the fourfold increase, but it is possible that the increase, coming 3 years after the first analysis, truly reflects a higher interest of the media in suicide. This may be related to value changes in the society, but the question remains open if it could be connected to publicity due to the press conference. The increase in the number of articles was not associated with an increase of the actual suicide rate in Switzerland—on the contrary, the rate decreased from 20.7/100,000 in 1991 to 19.6/100,000 in 1994. This may indicate that it is not the *number* of articles that matters, but the *quality of reporting*.

The good news, however, is that the quality of the reporting—according to our definitions—has clearly improved, i. e., the percentages of negative aspects of reporting in these newspapers were all lower in the second period of analysis. Articles were significantly

shorter, headlines, pictures, and text were generally less sensational or glorifying. The changes were especially prominent in the main tabloid paper. The sum score ("Imitation Risk Score") showed the same changes and was consistent with the (independent) suggestibility score. The range of the scores was much smaller in the second analysis.

Because there is no way of knowing what the changes in suicide reporting would be without our survey and intervention, it is not possible to claim that the press conference and publication of the guidelines for suicide reporting indeed resulted in an improvement of the quality of reporting. However, in the case of the tabloid paper, the personal meeting with the Editor-in-Chief had a clearly noticeable and immediate effect. This underlines what Sonneck et al. reported in Vienna—that the personal contact between suicidologists and newspaper editors is probably the most effective

means of improving the quality of suicide reporting. The same point has been made by O'Carroll [1996] and Knickmeyer [1996].

We believe that large-scale surveys of suicide reporting such as ours are helpful in establishing the communication between suicidologists and media editors. It is evident, however, that we have to gain more experience in how to work together with media professionals to improve the quality of suicide reporting.

### Acknowledgments

This study was part of the suicide-prevention program ("Krise und Suizid") of the Swiss Medical Association and the Swiss Federal Office of Health. The authors thank Mrs. Barbara Weil for her assistance in data analysis.

### Appendix

Guidelines for suicide reporting distributed to all newspaper editors in Switzerland. Based on recommendations from a workshop on suicide contagion and the reporting of suicide, Maternal and Child Health Bureau, Health Resources and Service Administration, March 1991, U. S. Department of Health and Human Services.

*The attention an article receives and thus the risk of contagion will be higher, if*

- A sensational placard refers to the suicide.
- The report is on the front page, particularly on the upper half.
- The word "suicide" appears in the heading.
- Picture(s) of the person or the scene appear.
- The victim is glorified, or the act described as heroic or understandable ("... under these circumstances it was obvious that...").

*The effect on susceptible persons will be larger, the more*

- Specific details on how and where the suicide occurred are given.
- The suicide is described as unexplainable (e. g., "He had everything going for him").
- The reasons for the suicide are romanticized (e. g., "... to be united in eternity")
- The reasons are simplistic (e. g., "The boy committed suicide because of bad marks at school").

*Note:* Articles can encourage the prevention of sui-

cide by pointing out ways to cope with a suicidal crisis.

*The risk of contagion will be lower if*

- Alternatives to suicide are presented (e. g., where could the person have found help?).
- Examples are given of positive outcomes.
- Information is provided on community resources for people who may be suicidal.
- A list of clues to suicidal behavior is given.

*Warning signs*

- Direct or indirect suicide threats.
- Previous suicide attempts.
- Changes in behavior (withdrawal, apathy, moodiness).
- Depression (sleeplessness, loss of appetite, hopelessness, worrying, loss of initiative and interests, lack of concentration).
- Possible final arrangements (such as giving away personal belongings).



## References

- BFS. Bern, Bundesamt für Statistik, 1992.
- Blumenthal S, Bergner L. Suicide and newspapers: A replicated study. *American Journal of Psychiatry* 1973; 130:468–471.
- Centers for Disease Control and Prevention, US Department of Health and Human Services. Suicide contagion and the reporting of suicide: Recommendations from a national workshop. *Morbidity and Mortality Weekly Report* 1994; 43:13–18.
- Etzersdorfer E, Sonneck G, Nagel-Kuess S. Newspaper reports and suicide. *New England Journal of Medicine* 1992; 327:502–503.
- Fekete S, Macsai E. Hungarian suicidal models: Past and present. In Ferrari G, Bellini M, Crepet P (Eds.), *Suicidal behavior and risk factors*. Bologna: Monduzzi Editore, 1990.
- Frey C, Michel K. Suizidverhütung. Projektunterlagen einer Aktion der Verbindung der Schweizer Ärzte und des Bundesamtes für Gesundheitswesen [Suicide prevention: Project description, Swiss Medical Association and Swiss Federal Office of Health]. *Sozial- und Präventivmedizin* 1991; 36:346–50.
- Frey C, Valach L, Michel K. Suicide Reporting in Swiss Print Media—Responsible or irresponsible? *European Journal of Public Health* 1997; 7:15–19.
- Jobs DA, Berman AL, O'Carroll PW, Eastgard S, Knickmeyer S. The Kurt Cobain suicide crisis: Perspectives from research, public health, and the news media. *Suicide and Life-Threatening Behavior* 1996; 26:260–271.
- Kessler RC, Downey G, Milavski JR, Stipp H. Clustering of teenage suicides after television news stories about suicides: A reconsideration. *American Journal of Psychiatry* 1988; 145:1379–1383.
- Knickmeyer S. Commentary. *Suicide and Life-Threatening Behavior* 1996; 26:269–271.
- Lester D. Suicide across the life span. A look at international trends. In Leenars AA (Ed.), *Life span perspectives of suicide*. New York: Plenum Press, 1991.
- Littman SK. Suicide epidemics and suicide reporting. *Suicide and Life-Threatening Behavior* 1985; 15:43–50.
- Michaud PA. Jugendalter [Adolescence]. In Weiss W (Ed.), *Gesundheit in der Schweiz* [Health in Switzerland]. Zürich: Bundesamt für Gesundheitswesen, Seismo-Verlag, 1993.
- Michel K, Frey C, Schlaepfer T, Weil B, Valach L. Suicide reporting in the Swiss print media. I. Frequency, form and content of articles. *European Journal of Public Health* 1995; 5:199–203.
- Michel K, Knecht C, Kohler I, Sturzenegger M. Suizidversuche in der Agglomeration Bern [Attempted suicide in the agglomeration of Bern]. *Schweizerische medizinische Wochenschrift* 1991; 121:1133–1139.
- Motto JA. Newspaper influence on suicide. *Archive of General Psychiatry* 1970; 23:143–148.
- O'Carroll PW. Commentary. *Suicide and Life-Threatening Behavior* 1977; 26:264–269.
- Phillips, D.P. The influence of suggestion on suicide: Substantive and theoretical implications of the Werther effect. *American Sociological Review* 1974; 39:340–354.
- Schmidtke A, Schaller S. What do we know about media effects on imitation of suicidal behavior? State of the art. In De Leo D, Schmidtke A, Diekstra RFW (Eds.), *Suicide prevention* (pp. 121–137) Dordrecht: Kluwer Academic Publications, 1998.
- Sonneck G, Etzersdorfer E, Nagel-Kuess S. Imitative suicide on the Viennese subway. *Social Science and Medicine* 1994; 38:453–457.
- Sonneck G, Nagel-Kuess S, Etzersdorfer E, Smeh E, Hauer B. Subway suicide in Vienna: A contribution to the imitation effect in suicidal behavior 1984–1988. In Ferrari G, Bellini M, Crepet P (Eds.), *Suicidal behavior and risk factors*. Bologna: Monduzzi Editore, 1990.
- Stack S. Suicide: Media impacts in war and peace, 1910–1920. *Suicide and Life-Threatening Behavior* 1988; 18:342–357.
- Stack S. Social correlates of suicide by age. Media impacts. In Leenars AA (Ed.), *Life span perspectives of suicide*. New York: Plenum Press, 1991.
- Stack S. The effect of the media on suicide: Evidence from Japan, 1955–1985. *Suicide and Life-Threatening Behavior* 1996; 26:63–66.
- Wasserman IM. The impact of epidemic, war, prohibition and media on suicide: United States, 1910–1920. *Suicide and Life-Threatening Behavior* 1992; 22:240–254.

*Konrad Michel, MD, PhD, is a clinical psychiatrist at the Psychiatric Outpatient Clinic of the University Hospital, Bern, Switzerland. He also has a private practice in Thun. He is past president of the Schweizerische Gesellschaft für Krisenintervention und Suizidprophylaxe (Swiss Society for Crisis Intervention and Suicide Prevention). He has been active in training general practitioners in suicide prevention and was a member of the working group "Krise und Suizid" (Crisis and Suicide), a suicide-prevention program launched by the Swiss Medical Association and Federal Health Office.*

*Conrad Frey, MD, is a child and adolescent psychiatrist who at the time of the study was head of the Psychosomatic Unit of the University Children's Hospital in Bern, Switzerland. He was also Chairman of the Prevention Committee of the Swiss Medical Association from 1990–1995. He is now Director of the Swiss Red Cross Therapy Center for Torture Victims in Bern.*

*Kathrin Wyss, MD, is a pediatrician who now works at the Children's Hospital in Luzern, Switzerland. She did the ratings of the second survey of newspaper articles when she was in training at the University Children's Hospital of Bern.*

*Ladislav Valach, PhD, was at the time of the study a research psychologist at the Psychiatric Outpatient Clinic of the University Hospital in Bern, Switzerland. He now works as a clinical and research psychologist at the Department of Rehabilitation and Geriatrics of the Bürgerspital in Solothurn, Switzerland. Most of his publications have been in the field of health psychology, with a special interest in action theory and its practical application. He is a member of the Editorial Board of the Journal of Health Psychology and a committee member of the European Health Psychology Society.*

*Send correspondence to PD Dr. Konrad Michel, Psychiatrische Poliklinik, University Hospital, CH-3010 Bern, Switzerland (tel +41 31 632-8811, fax +41 31 632-8950, E-mail konrad.michel@pupk.unibe.ch).*