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IMITATIVE SUICIDE ON THE VIENNESE SUBWAY

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Abstract—The number of subway suicides in Vienna increased dramatically between 1984 and mid-1987. In the second-half of 1987 there was a decrease of 75% which has been sustained for 5 yr. This reduction in subway suicides began when a working group of the Austrian Association for Suicide Prevention developed media guidelines and initiated discussions with the media which culminated with an agreement to abstain from reporting on cases of suicide. The characteristics of suicide and attempted suicide on the Viennese subway are discussed and appropriate guidelines for media coverage of suicidal acts are presented.

Key words—suicide, imitation, subway

INTRODUCTION

The term 'Werther-Effect' has been proposed to describe the influence of suggestion on suicidal behaviour [1]. The romantic novel "*The Sorrows of Young Werther*" was published by Johann Wolfgang von Goethe in 1774. It is the story of a young man "gifted with deep, pure sentiment and penetrating intelligence who loses himself in speculative dreams and undermines himself with speculative thought, until finally, torn by hopeless passions, especially by infinite love, he shoots himself in the head" [2].

The book was a great success and was widely read in Europe, but soon after its publication many young men committed suicide by shooting themselves and the book was blamed for having led these impressionable young people to suicide. The book was the subject of great debate and in some cities its sale was forbidden. Some commentators proposed a change to the book, "...But for that such a warm product will not cause more mischief than good: don't you think, it should have a small, cold closing speech?" [3].

There are other examples of possible imitative suicides in literature and in mythology (for example the mass suicide of the Milesian virgins), but there is also empirical evidence of the possible impact of suggestion. In 1841 it was postulated that, "No fact is better established in science than that suicide is often committed from imitation" [4]. Durkheim devoted a whole chapter of his influential book on suicide to the effect of imitation, although he came to the conclusion that there was no such effect. He believed that, at most, the effect was nothing more than the earlier precipitation of a suicide destined to occur in any event [5].

The question of whether an imitative effect exists in suicide behaviour, remains controversial. Investigations have focused upon several topics. Firstly the influence of newspaper stories on suicidal behaviour [1, 6–8]. The results of these studies were inconclusive. However it was suggested that a newspaper strike in Detroit led to a decrease in the suicide rate which correlated with the lack of press reports on suicide during that time. After the strike had ended the rate increased to the former level again [9]. A correlation was also found between reports about suicide in newspaper headlines and suicide rates [1].

Another focus was the investigation of suicide rates after reports on suicide on TV and after fictional television suicide stories [10–15]. A fictional TV-story, which showed the railway suicide of a young man, resulted in a subsequent increase in suicides committed using the same method in the comparable age-group of males but did not lead to a significant increase of suicides in women and also not in men of other age groups [16].

Recently a third focus has been the investigation of possible imitative effects on 'suicide epidemics' in psychiatric hospitals [17, 18].

METHOD

All suicide cases (not only subway-suicides and attempts) reported in the two largest Austrian daily newspapers were surveyed and analysed in connection with subway suicide.

RESULTS

Since the opening of the first sections of the Viennese subway system in 1978 the subway has been used as a method of committing or attempting suicide. The number of suicides, however, remained very low in the early years. Beginning in 1984 and lasting until mid-1987 however, a significant increase of suicides and suicide attempts was observed (Table 1).

This trend is remarkable considering the fact, that the Viennese subway system had not been extended

Table 1. Subway suicides and attempts 1980–1992

Year	Suicides	Suicide attempts
1980	1	0
1981	0	1
1982	1	3
1983	0	1
1984	7	1
1985	10	3
1986	13	6
1987	11	11
1988	6	1
1989	3	4
1990	4	2
1991	8	3
1992	5	3
Total	56	33

during this period, nor had the number of passengers risen in a comparable way (Fig. 1). The increase in the number of suicide cases in 1984 was also noticed by the print media which published accordingly.

Until 1986 the subway was increasingly used as a method of committing suicide. Starting in 1987 this trend decreased and the decrease has continued through to 1992. It is clear that the decrease began in mid-1987 (Fig. 2). It was at this time also, that suicide attempts, which were extremely high in the first half of 1987, decreased dramatically.

Day

The weekday with the most subway-suicides was Monday (Fig. 3) with 28.1% ($n = 25$) of all incidents. A peak at the beginning of the week was also found for other suicides in Vienna.

Age

The average age of those committing suicide in subways (37 yr) lay significantly below that of the other suicides in Vienna (55 yr). The majority of subway-suicides were committed by 20–29 yr olds. (Fig. 4). Most of the subway-suicide-attempts were committed by young men and women (Fig. 5). There was only one attempt by a person aged over 50 yr.

Sex

The ratio of men to women in subway-suicides was 2.1:1. It was 1.6:1 for the total suicides in Vienna. The subway suicide-attempts ratio of 1.1:1 was similar to the ratio of the total in Vienna which was 0.9:1.

During 1984–1985 suicide cases occurred at rather long intervals (ave. = 50 days). Beginning with June 1985, groups of suicides could be identified, where numerous suicides were committed within a short period of time (2–5 suicides within 1–7 days) followed by a longer break. These clusters were initiated more often by women than men (7 times by women, 5 times by men).

A temporal connection between reports in the press and subsequent subway-suicides could not be proven. Even though clusters and reports in the press do coincide, the fact that clusters of suicides occurred with long intervals between (sometimes several months) cannot be explained.

Usually the number of subway-suicides greatly exceeded the number of suicide attempts. In 1987 there were equal numbers of attempts and suicides (11 of each). A closer analysis of these 22 cases in 1987 showed that three of these suicide attempts involved the same person (male, aged 40 yr), two of them in the same station.

The method varied: in an attempt to commit suicide the person either fell upon the tracks at the beginning or the middle of the station or they lay on the rails in the tunnel or station. Attempts usually occurred when the person was standing on the rails in the station. Only one suicide was carried out in this way. These findings correspond with those of other authors [19–21] who suggest different 'types' of suicidal behaviour in connection with the subway and maybe different intentions.

Time

It was not possible to find a concentration of suicides at any time of the day, although subway-

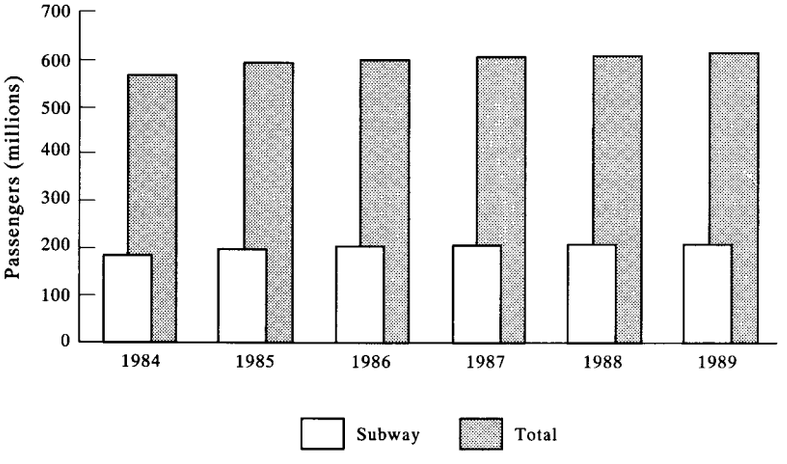

Fig. 1. Public means of transport in Vienna 1984–89.

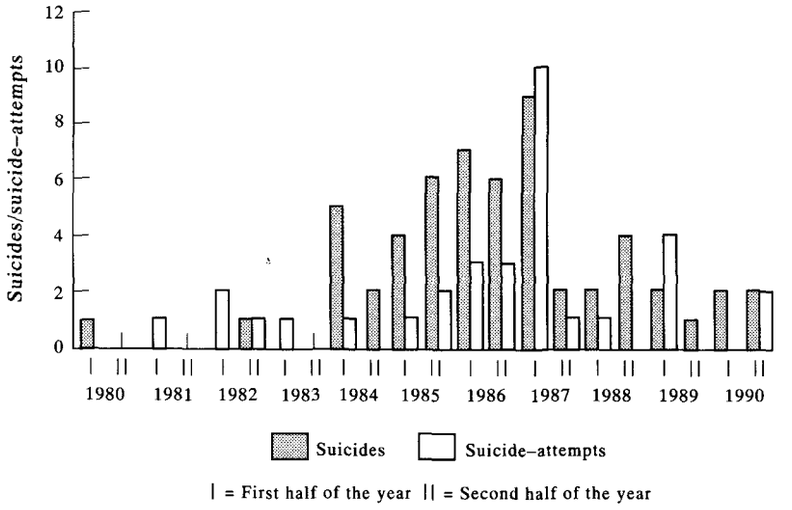

Fig. 2. Subway-suicides and attempts 1980–90 (half-years).

suicide-attempts occurred more often in the second half of the day (9/17 cases between 1984 and 1990). The subway-system does not operate 24 hr a day, being closed between 0.30 and 4.30 a.m.

There was no statistically significant accumulation of incidents at any single station or on any particular line. However, a comparison of the ratio of the number of suicides to the average daily number of passengers at each station showed differences between suicides and suicide-attempts. The probability of a suicide-attempt in a certain station rose with the number of passengers using the station. There was no such relationship for suicides. These findings may indicate that suicide-attempters in the subway system are different from those who actually commit suicide and that the number of passengers is irrelevant if someone decides to commit suicide in a certain station. The crowded, bigger stations (which are frequented by alcoholics and drug addicts) do have a higher number of suicides and suicide-attempts in relation to the smaller stations, but if the ratios (number of suicides/suicide attempts per average daily number of passengers) are computed the bigger stations have the lowest ratios. Terminal stations on the subway seemed to be used less often than the others.

In 1987 the suicide rate in Vienna dropped by 7.4%. 1988 showed another decrease of 9.1%, 1989 another of 2.8% and 1990 again a decrease of 1.6%. The overall decrease between 1986 and 1990 was 19.5%. The second half of 1987, however showed a slight increase in the total number of suicides from 207 (first half) to 220 (second half), whereas the number of subway-suicides decreased by 75%. In the second half of 1987 there were two subway-suicides and one attempt as compared to nine suicides and 10 attempts in the first half of this year (Fig. 2).

The reduction in subway suicides remained stable throughout 1988, 1989, 1990, 1991 and 1992. It is known that a decrease in the number of suicides committed by a particular method may sometimes lead to the substitution of other methods thus leading to no decrease in the overall suicide rate [22, 23]. In the second half of 1987 the suicide method of 'getting

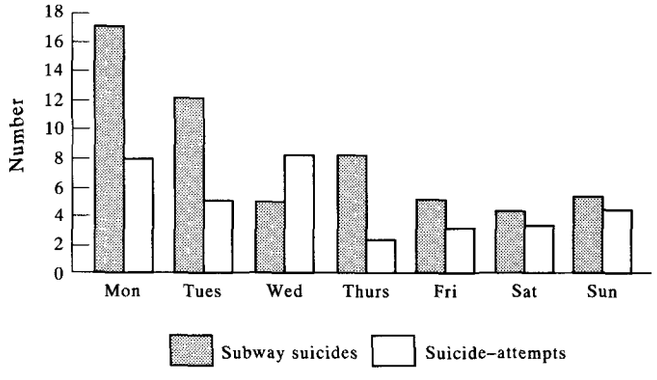

Fig. 3. Subway-suicides and attempts: day of the week.

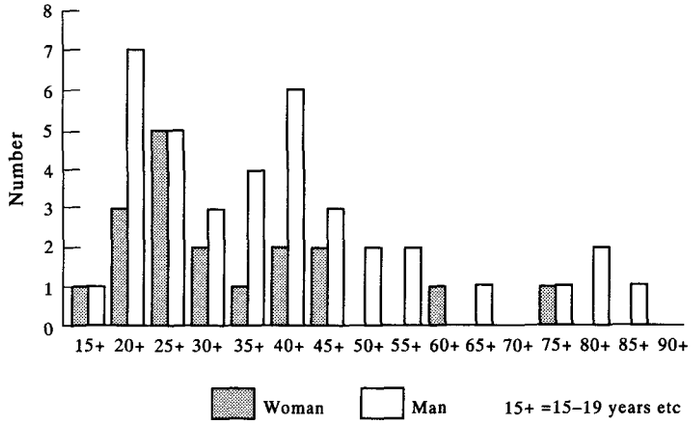

Fig. 4. Subway-suicides: age groups.

run over' decreased from 6 to 1% of all suicides in Vienna. This was perhaps compensated for by an increase in the suicide method of 'jumping from great heights' (which increased 15% to 19%) and 'hanging and strangulation' (which increased from 30 to 33%) but the overall suicide rate decreased to 80.5% (from 1986 to 1990).

DISCUSSION

In the first years after the opening of the Viennese Subway-system, suicidal behaviour on the subway was rare. Beginning in 1984 the subway became more and more accepted as a method of committing suicide and this led to a dramatic increase in the following years. Based upon the literature dealing with imitative effects in suicidal behaviour and because of the fact that there had been very dramatic reports on these suicides in the major Austrian newspapers (in 1986 only one case of subway suicide was left unmentioned) it was hypothesised that there was a connection between this style of reporting and the increase in suicides and suicide-attempts.

Media guidelines were created by the Austrian Association for Suicide Prevention, Crisis Intervention and Conflict Resolution and the press were requested to follow them. It was neither the aim of the guidelines to blame the journalists for reporting on suicidal behaviour nor to force them to stop reporting on that subject, as journalists often stress their obligation to do so. On the contrary the working group that created the guidelines emphasised the way of reporting as essential for a possible imitative effect and tried to create hypotheses regarding factors that minimise or increase that effect.

These media guidelines were based on the assumption that a certain kind of reporting on suicide may trigger suicidal behaviour [12]. The hypothesis was that reports on suicide may lead someone who is despairing to believe that committing suicide is the best and maybe only way out of his or her situation.

It was supposed that the trigger-effect will be bigger:

- the more details of the special methods that are reported
- the more suicide is reported as being inconceivable ('he had everything life can give')
- the more the motives are reported to be romantic ('to be forever united')

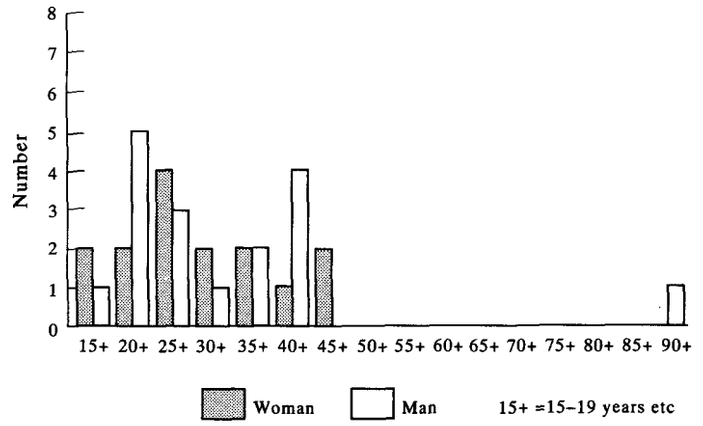

Fig. 5. Subway-suicide attempts: age groups

- the more simplifications are used ('suicide because of bad news')

It was also assumed that attention will be bigger:

- If the report is printed on the front page
- If the term 'suicide' is used in the headline
- If there is a photograph of the person, who committed suicide
- If the attitude of the person is implicitly described as being heroic and desirable ('he had to do that in this situation')

It was assumed that the effect will be smaller:

- if more alternatives are shown (where is it possible to find help in such a situation?)
- if there are reports about a crisis that was overcome and did not result in suicide
- if readers are provided with background information on suicidal behaviour and suicide in general (such as what to do with someone who expresses suicidal ideation).

This campaign was strongly supported by many psychosocial agencies. In 1988 no subway suicide was mentioned, with the exception of an article about a girl who apparently fell on the rails in an accident and was injured (8th October). This case is not represented in our numbers. Two days later, however, and again 1 day later, subway suicides were committed—the first group since June 1987.

Surprisingly the quality of reporting changed markedly in mid-1987. Instead of the previous scandalising and dramatic articles, the papers then issued only short notes, which were rarely published on the front page, and sometimes suicides were not reported at all. At the same time the number of suicides decreased by 75% and this decrease has remained stable now for more than 5 yr. This result suggests that reports on suicides may trigger additional suicides, though it was not possible to prove a casual connection between a single article and a subsequent suicide or suicide attempt.

Of course this decrease in subway suicides also had an effect on overall numbers of suicides in Vienna, but it is interesting that the total number of suicides in Vienna also decreased in this period. The result supports the assumption, that it is possible to contribute to suicide-prevention by working with the media as well as by working with the individual (and their significant others), as is usually the case in this field. Therefore the creation and use of similar guidelines should be encouraged.

There are other reasons that justify trying to reduce suicidal behaviour in subways: every subway suicide causes misery not only for the relatives but also for the driver and the passengers standing on the platform, who have to watch the suicide and are unable to help. This particular suicidal behaviour also causes delays, so there is an economic incentive to reduce the number of these events.

Finally, it is not sufficient to give the guidelines to the media on only one occasion. It is necessary to monitor the media very carefully and if they resume reporting on suicidal behaviour in a sensational manner, to react by once more contacting them and again presenting the media guidelines to them.

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