



Suicide Prevention by Internet and Media Based Mental Health Promotion

Deliverable 9

Report on mapping of media based suicide preventive interventions



Executive
Agency for
Health and
Consumers

Introduction

More than one million people die every year by suicide (WHO, 2003). Furthermore, worldwide suicide rates have increased by 45 per cent for men and 33 percent for women in the past 45 years. In the year 2000, suicide represented 1.5 percent of the global burden of disease or more than 20 million disability-adjusted life-years (years of healthy life lost through premature death or disability) (Bertolote & Fleischmann, 2002).

Suicide is a serious but preventable public health problem that can have lasting harmful effects on individuals, families, and communities. Suicide is a complex problem for which there is no single cause (WHO, 2000). To prevent suicide there is a need to reduce risk factors and increase factors that promote coping and empowerment.

Media plays an important role in society, where it influences community attitudes, beliefs, knowledge and behaviour.

The internet is the one most researched media in relation to suicidal behaviour.

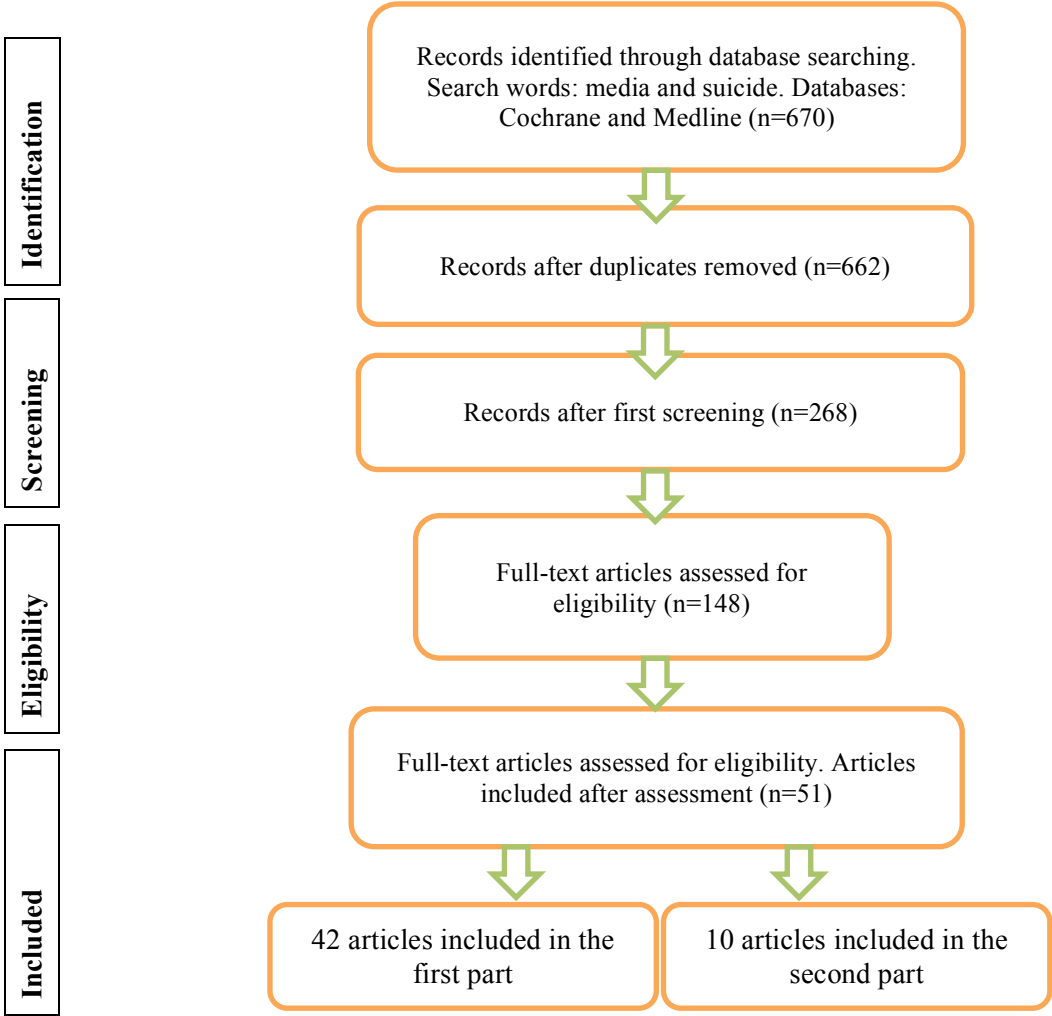
One of the first observed cases of the effect of mass media on suicide is the novel 'The Sorrows of Young Werther' by Goethe. The book was published in 1774 and the main character shoots himself after losing his love. Shortly after the publication of the book, an increase in suicides occurred among young men with the same method and it was concluded that it was due to the novel. The novel was banned, and an increase in suicides after a widely published suicide is now known as the 'Werther effect'.

Research on media and its effects on suicide have shown inconsistent findings.

The aim of this study is to review the literature on the association between mass media and suicidal behaviour. The second part of this study is to go through the literature on using media as a tool in suicide prevention. This study has been conducted by reviewing the literature in Cochrane and Medline database.

Method

Figure 1. A flow diagram—Identification, screening, eligibility assessment, and inclusion of the articles



A literature search was conducted. The databases included were Medline and Cochrane database. The search words were suicide and media, where the combination of the words needed to be included either in the title, abstract or in the keywords of the publications. After this search 670 articles were found in the two databases and after duplicates were removed 662 were left. The criteria for inclusion in the first study was: availability in English, the article is a research article, the mass media studied was not internet, the articles were linked to some suicidality related outcome measure such as suicide rate and non-fatal suicidal behaviour, and that it focused on trends of suicidal behaviour without any intervention. The criteria for inclusion in the second study was: availability in English, the article is a research article, the mass media studied was not internet, suicide prevention through media, the articles were linked to some suicidality related outcome measure or attitudes, awareness, knowledge or help-seeking behaviour. One study fits both part one and part two and is therefore included in both parts.

Part 1

Results and discussion

The main demographic factors and findings from the 42 articles included in the first part of this study are presented in Table 1. Included in this study are 6 reviews, 3 meta-analyses and 33 research articles.

TABLE 2

Article	Association mass media and suicide, and mass media studied	Country and article type	Exposure Celebrity suicide Fictional/no n-fictional etc	Main findings
Philips 1977	Yes Newspaper	USA, research	Non-fiction	Fatal vehicle incidents increased after publicized suicide stories
Philips 1979	Yes Newspaper	USA, research	Non-fiction	The number of motor vehicle fatalities (especially single-vehicle crashes) increased significantly shortly after publicized suicide stories
Bollen & Philips 1982	Yes Television	USA, research	Non-fiction	Suicides increased shortly after the publication of a suicide story
Philips & Carstensen 1986	Yes Television	USA, research	Non-fiction	The more networks that carried a story about suicide, the greater was the increase in suicides thereafter. Teenage suicides increased more than adult suicides
Stack 1988	Yes No significance during World War I. During peace significant impact Newspaper	USA, research	Non-fictional	Publicized suicide stories during peacetime had a significant impact on suicides

Article	Association mass media and suicide, and mass media studied	Country and article type	Exposure Celebrity suicide Fictional/non -fictional	Main findings
Schmidtke and Häfner 1988	Yes Television	Germany, Research	Fictional	Broadcasted fictional suicide stories had significant impact on suicides, most clearly among those who has the same sex and age.
Kessler et al. 1988	Unclear Yes - teenagers Television	USA, research	Non-fictional	No significant association between network television news stories and suicide among adults, but significant association among teenagers
Kessler et al. 1989	Unclear Significant among teenagers but not adults. Television	USA, research	Non-fictional	No significant association between television news stories and suicide among adults, but significant association among teenagers
Centerwall 1990	No Television	USA, research		Non-specific exposure to television is not a risk factor for young adult suicide.
Stack 1990	Yes	USA, research	Non- celebrities	Suicides of non- celebrities had a significant increase in suicide rate, however the association was weaker than for celebrity suicide stories

Article	Association	Country and article type	Exposure	Main findings
	mass media and suicide, and mass media studied		Celebrity suicide Fictional/non-fictional etc	
Stack 1990	Yes	USA, research	Celebrity and non-celebrity Non-fictional	Stories of celebrity suicides and elderly suicides were related to elderly suicide. No significant relation was found between non-celebrity suicide stories and elderly suicide. An effect was found for both females and males.
Stack 1990	Yes	USA, research	Non-fictional	Stories with a victim with marital stress were significantly associated with suicide.
Stack 1992	Unclear Yes Subsequent suicides, for others little supporting evidence Newspaper	USA, research	Non-fictional Political leaders	Reporting of political leaders' suicides were associated with an increase of suicide, for others there was little supporting evidence
Marzuk et al 1993	No Book	USA, research		After the publication of the final exit, which covers aspects of planning and carrying out "self-deliverance", there was an increase in promoted method in New York the year after. No significant change in suicide in general.

Article	Association mass media and suicide, and mass media studied	Country and article type	Exposure Celebrity suicide Fictional/non-fictional etc	Main findings
Stack 1993	Yes	USA, research	Non-fictional	Publicized suicide stories influences suicides independent of economic conditions
Hassan 1995	Yes Newspaper	Australia, research	Non-fictional	Media coverage of suicide was followed with a significant increase of suicides
Jobes <i>et al</i> 1996	No No significant increase in suicides however increase in suicide crises calls.	USA, research	Non-fictional Celebrity suicide	After celebrity suicide there was not significant increase in suicides, however suicide crisis calls increased significantly
Stack 1996	Yes	Japan, research	Non-fictional	There is an association between media and suicide similar to that reported in the USA, but imitative effect is restricted to stories about Japanese suicides
Hawton & Keith 2001	Yes	Review, several	Both fictional and non-fictional	Increases in suicidal behaviour can follow both nonfictional and fictional reporting and portrayal of suicidal behaviour,

Article	Association	Country and article type	Exposure	Main findings
	mass media and suicide, and mass media studied		Celebrity suicide Fictional/non-fictional etc	
Mercy <i>et al.</i> 2001	Yes, inversely	USA, research		Exposure to suicidal behaviour in the media significantly decreases nearly lethal suicide attempts
Etzersdorfer <i>et al.</i> 2001	Yes Newspaper	Austria, research	Celebrity Non-fictional	Suicides increased slightly after reporting of celebrity suicide, suicides by reported method increased significantly
Pirkis & Blood 2001	Yes	Several, review	Non-fictional	There is an association between suicidal behaviour and nonfictional media reporting
Pirkis & Blood 2001	Yes	Several, review	Fictional	There is an association between fictional portrayals of suicide on suicidal behaviour. However the evidence was less clear than was the case for nonfictional reporting

Article	Association	Country and article type	Exposure	Main findings
	mass media and suicide, and mass media studied		Celebrity suicide Fictional/non-fictional etc	
Stack 2003	Yes The greater the media coverage the greater the suicide increase. Especially if covered in newspapers	Several, Meta-analysis	Non-fictional Both celebrity and non-celebrity suicide	There was a dose response association between media and suicide, the greater the amount of media coverage on suicide the greater the increase in suicide rate, especially if celebrity suicides and non-fictional stories were reported in newspapers
Shoval et al. 2005	No Documentary Television	Israel, research	Non-fictional	No significant difference in the rates of completed and attempted suicides before and after a documentary on suicide. However there was a significant decrease in age of suicide

Article	Association mass media and suicide, and mass media studied	Country and article type	Exposure Celebrity suicide Fictional/non- fictional etc	Main findings
Stack 2005	Yes Television vs Newspaper	Several, Meta- analysis	Both celebrity and non-celebrity	The werther effect was more likely to occur after celebrity suicides and female suicides and less likely if studies were based on television stories and stressed negative definitions of suicide
Sudak & Sudak 2005	Yes, if media glamorized and sensationalized the suicide	Several, review	Non-fictional	The number of suicides increased, if the media glamorized and sensationalized the suicide
Tousignant <i>et al.</i> 2005	Yes	Canada, research	Non-fictional Celebrity suicide	After a celebrity's suicide there was an increase of suicide in the period immediately following the event
Pirkis <i>et al.</i> 2006	Yes, the amount of media reporting and suicide	Australia, research	Non-fictional	There was an association between the amount of media reporting and the number of preceding suicides

Article	Association mass media and suicide, and mass media studied	Country and article type	Exposure Celebrity suicide Fictional/non- fictional etc	Main findings
Yip <i>et al.</i> 2006	Yes Television	Hong Kong, research	Non-fictional Celebrity suicide	Significant increase in suicides following a celebrity suicide, particularly in males aged 25–39 years
Cheng <i>et al.</i> 2007	Yes	Taiwan, research	Non-fictional	Number of suicide attempts increased markedly after media reporting
Cheng <i>et al.</i> 2007	Yes	Taiwan, research	Non-fictional	Number of suicides increased markedly and strong modelling effect occurred in sex and method after media reporting
Hagihara <i>et al.</i> 2007	Yes Increase in suicide Newspaper	Japan, research	Non-fictional	Newspaper articles about suicide was associated with an increase of suicide for both males and females
Huh <i>et al.</i> 2009	Yes Increase in suicidal acts	Korea, research	Non-fictional	Reporting of both unusual accidental deaths and specific suicide methods may lead younger people to imitative suicidal acts
Niederkröten- haler <i>et al.</i> 2010	Yes	Australia, research	Non-fictional	Repetitive reporting of the same suicide and the reporting of suicide myths were associated with suicide rates

Article	Association mass media and suicide, and mass media studied	Country and article type	Exposure Celebrity suicide Fictional/non- fictional etc	Main findings
Tsai 2010	Unclear The density of newspapers was significantly inversely associated with suicide. Television was not associated.	Taiwan, research		The regional density of newspapers was significantly inversely related to both male and female suicide rates, while television sets was not.
Hamilton <i>et al.</i> 2011	No No evidence	UK, research		No evidence that media reports provoked suicide
Sisak & Värnik 2012	Yes Most studies support an association	Several, review	Non-fictional	Most studies support that media reporting and suicidality are associated.
Niederkröten- haler <i>et al.</i> 2012	Yes	Metaanalysis	Non-fictional Celebrity	Reports on celebrity suicide are associated with increases in suicides.
Nakamura <i>et al.</i> 2012	Yes Newspaper	Japan, research	Non-fictional	The number of newspaper articles on hydrogen sulfide suicide (HSS) significantly increased the number of suicides.
Biddle <i>et al.</i> 2012	Yes	UK, research	Fictional/ non-fictional	Television, films and news stories influences the awareness of suicide method and also direct imitation.

Article	Association mass media and suicide, and mass media studied	Country and article type	Exposure Celebrity suicide Fictional/non- fictional etc	Main findings
Yip <i>et al.</i> 2012	Yes	Review	Non-fictional	The media can point vulnerable people towards a certain method and influence suicide.

In this study 42 articles have been included, with studies from North America being over-represented (n=17). Before 1995, all studies (n=14) were from North America except for one European study: Schmidtke & Häfner, 1988. However, the latest research study conducted in North America, included in this study, was from year 2005. The next most common region of performed studies was Asia (n=9), after that Europe (n=5) and 2 studies were performed in Australia. All meta-analyses (n=3) and systematic reviews (n=6) included studies from several regions.

Most studies included in this review studied the association between media reporting of suicide and possible effects on suicidal behaviour. Two studies (Centerwall, 1990; Tsai, 2010) looked at the density of newspapers and/or televisions and its association to suicidal behaviour, where no association was found. 5 studies found there to be no association between media and suicidal behaviour (Centerwall, 1990; Marzuk *et al.*, 1993; Jobes *et al.*, 1996; Shoval *et al.*, 2005; Hamilton *et al.*, 2011). Further, 4 studies expressed incoherent results, one of these studies (Tsai, 2010) found there to be an inversely association between the density of newspapers and suicide but no association between the density of television and suicide. Two of the studies with incoherent results found media reporting to have a significant association with teenagers suicide, however no significant association was found between media reporting and adult suicide (Kessler, 1988; Kessler, 1989). Another study by Stack, (1992) with unclear results found there to be an association between media reporting and subsequent suicide. As many as 31 studies found there to be an association between media reporting of suicidal behaviour and an increase in suicidal behaviour. To further support mass media influence on suicidal behaviour, it has been repeatedly concluded that the more reporting of a suicidal story in the media the greater the increase in suicidal behaviour thereafter (Philips & Carstensen, 1986; Stack, 2003; Pirkis *et al.*, 2006). Conversely, Mercy (2001) found there to be a significant association between exposure to suicidal behaviour in media and a decrease in nearly lethal suicide attempts and so suggesting that the reporting of suicidal behaviour can also lower the amount of suicidal behaviour. Media reporting has been understood to be a complex phenomenon, where a 'contagious effect' is evident in many studies. However, although suicide reporting is known to have an effect on suicide through normalizing suicide as a solution to a crises (WHO, 2008) it is not known to what extent that media is causing suicidal behaviour (Pirkis & Blood, 2001).

Most studies (n=33) focused on non-fictional (e.g reporting of real events) imitative effects. Two studies (Pirkis & Blood, 2001; Schmidtke & Häfner, 1988) focused on the impact of fictional suicide (e.g. novels, stories, films etc) on suicidal behaviour. Both of these reported

an association between media reporting of suicide and an increase in suicide. Though, in the review conducted by Pirkis & Blood (2001) it was concluded that these associations are not as clear as associations between non-fictional reporting and suicidal behaviour. Meanwhile among those studies that only focused on non-fictional reporting, 27 of the studies found there to be an association between an increase of suicidal behaviour and reporting of suicide in media. No significant association was shown in the studies conducted by Jobes *et al.* (1996) and Shoval *et al.* (2005) and, Kessler (1988; 1989) and Stack (1992) found an unclear association.

In the articles included in this review, newspaper and television reporting and its effects on suicidal behaviours were more frequently analysed than books, music, radio or other mass media. From the 43 studies included in this study, television was discussed in 11 of the studies (Bollen & Philips, 1982; Philips & Carstensen, 1986; Kessler, 1988; Schmidtke & Häfner, 1988; Centerwall, 1989; Kessler, 1989; Stack, 2003; Shoval *et al.*, 2005; Stack, 2005; Yip *et al.*, 2006; Tsai, 2010) and newspapers in 11 studies (Philips, 1977; Philips, 1979; Stack, 1988; Stack, 1992; Hassan, 1995; Etzerdorfer, 2001; Stack, 2003; Stack, 2005; Hagihara, 2007; Tsai, 2010; Yasunaga, 2012). Studies comparing newspapers and televisions impact on suicidal behaviour found newspapers to have a greater impact on suicidality than television regardless if the association was that suicidal behaviour increased (Stack, 2003; Stack 2005) or if the association was with a decrease in suicidal behaviour (Tsai 2010). No studies found television to have a greater impact than newspapers on suicidality. Two studies (Centerwall 1989, Tsai 2010) reported no association between the density of television devices and suicidal behaviour and one of the studies found there to be no association between televised reporting of suicide and suicidal behaviour (Shoval *et al.* 2005). In two of the studies (Kessler 1988, Kessler 1989) the association was unclear, they found evidence for televised reporting of suicidal behaviour to be associated with teenagers' suicidal behaviour, but not adults. Four studies found reporting of suicidal behaviour on television to have a significant impact on the suicidal behaviour in the community (Bollen 1982, Philips 1986, Schmidtke 1988 and Yip 2006).

In the studies on newspapers and suicidal behaviour 10 of the 11 studies found there to be a significant association meanwhile one found unclear results (Stack, 1992). Stack (1992) found an association between reporting of political leader's suicides and imitating suicides, but there was no supporting evidence for other imitation effects.

Dates of publication vary between 1977 and 2012. During this period there has been a technological revolution where more television channels, computers and handheld media devices are common. Although studies that are focusing on internet and suicidal behaviour are excluded from this review, television broadcasting and newspaper content are also available online. This means that news stories are available at all times. It is important to point out that in ecologic research it is difficult to directly measure whether the actual suicide victims were exposed to stories about real or fictional suicides and which mass media that they have come across or been influenced by.

Vulnerable groups

Some groups appear to be more vulnerable to media reporting of suicide than others. Although teenagers seem to be a reoccurring vulnerable group (Philips, 1986; Kessler, 1988;

Kessler, 1989; Shoval, 2005; Huh, 2009) other studies have found other vulnerable groups. Yip and colleagues (2006) found males between the age of 25 and 39 to be particularly affected by reporting of suicidal behaviour. Another study found there to be a strong modelling effect where suicides caused a copycat effect among people within the same sex and age category as the model (Cheng, 2007), similar conclusions were drawn in the study by Schmidtke (1988). Stack (1996) found a significant copycat effect in Japan however the imitative effect was restricted to Japanese suicides.

Pirkis and his colleagues (2006) explain the differences in vulnerable groups in different studies with differences in how suicide is reported. Multiple occurrences of suicide reports in the media has been suggested to be more associated with increases in both male and female suicides, also television broadcasting and reporting of completed suicide was suggested to be associated with increase in both male and female suicide. An increase in male suicide seem to be associated with individual's experience of suicide, and an increase in female suicides associated with reporting on items about mass- or murder-suicide (Pirkis et al 2006).

Method

Limitation of access to lethal methods, used to commit suicide, is an important population strategy for suicide prevention (Mann *et al.* 2005). Mann and colleagues (2005) found in their review that such means restriction is effective. Although some individuals might seek other methods to commit suicide, many do not, when they do the means chosen are less lethal and are associated with fewer deaths than when more dangerous ones are available (Yip *et al.* 2012). The spread of information about suicide methods through media seems to affect the choices that people make when attempting suicide. Mass media influences the awareness of suicide method and also direct imitation (Marzuk *et al.* 1993; Etzersdorfer *et al.* 2001; Yasunaga *et al.* 2012; Biddle *et al.* 2012; Yip *et al.* 2012).

Huh (2009) goes further to suggest that exposure to information about suicide methods and portrayals of suicidal behaviours can increase the risk of suicidal behaviour in the population and then especially among vulnerable individuals. Media can make vulnerable people more aware of certain methods and therefore influence suicide through their frequent reporting of completed suicides; hence it is “successful” methods they report about (Yip *et al.* 2012).

Mass media reporting of suicidal behaviour is a risk factor for imitating effects. However, it seems that it sometimes serves as a protective factor. On the basis of these conflicting results, part two of this study will explore whether mass media also can be used and work as a preventive mean for suicidal behaviour. As opposed to the “Werther effect” the “Papageno effect”, (a term, coined by Niederkrotenthaler and colleagues), indicates the suicide preventing effects of media. Mass media imitation theory presumes that if mass media can trigger suicidal behaviour, it could also work as a preventive tool.

Part two

Result and discussion

Table 3

Article	Country	Article type	Outcome measure	Main findings
Etzersdorfer <i>et al.</i> 1992	Austria	Research	Subway suicides and suicide attempts	After changing the quality of media reporting the number of suicides and suicide attempts in subway decreased
Mann <i>et al.</i> 2005	several	Review	Suicide	Periods of not reporting on suicide in media, led to decrease in suicide rates
Pirkis <i>et al.</i> 2006	Several	Review	Suicide	The evaluation of media guidelines on suicide rates is too limited to draw any conclusions
Daigle <i>et al.</i> 2006	Canada	Research	Knowledge, attitudes and intention to seek help	After exposure to media campaign there was an increase in knowledge, however the attitudes and intention to seek help were not influenced. The campaign was low in intensity so more research is needed

Article	Country	Article type	Outcome measure	Main findings
Niederkrötenthal er & Sonneck 2007	Austria	Research	Suicides and subway suicides	The media guidelines had an impact on the quality of media reporting and on suicidal behaviour for both subway suicides and overall suicides
Oliver <i>et al.</i> 2008	USA	Research	Awareness and help seeking behaviour	Awareness media campaign significantly increased the telephone calls to the emergency service. No gender or age differences
Klimes-Dougan <i>et al.</i> 2009	USA	Research	Help seeking attitudes and awareness	Billboard simulation had limited benefits and decreased the help-seeking attitudes in high- risk adolescents. Television ads increased knowledge of depression and suicide but seemed to decrease help- seeking attitudes among high-risk adolescents

Article	Country	Article type	Outcome measure	Main findings
Klimes-Dougan & Lee 2010	USA	Research	Help seeking attitudes and awareness	Viewers of a billboard simulation were less likely to endorse help-seeking strategies, especially among vulnerable individuals. Television ads increased knowledge and were perceived as useful
Niederkrötenenthaler <i>et al.</i> 2010	Austria	Research	Suicides	Coverage on positive coping in adverse circumstances in media may have protective effect and decrease suicide rates.
Jenner <i>et al.</i> 2010	USA	Research	Awareness	Media campaigns are an effective tool to increase awareness of a hotline. Movie advertisements are most effective, followed by bus boards, print advertisements and billboards.

In order to promote safe media content the world health organization (WHO, 2008) has provided recommended guidelines for media professionals. 10 articles are included in the gathering of research on suicide prevention through mass media. Two research studies (Etzendorfer, 1992; Niederkraterhaler, 2007) looked at the effects of media guidelines on suicidal behaviour. Both of these studies found a significant decrease of suicidal behaviour after implementing guidelines in mass media. Mann *et al* (2005) found that no reporting on suicidal behaviour also decreased the number of suicides. A review of the evidence by Pirkis *et al* (2006) did not find there to be enough studies to draw any conclusions. Reporting of completed suicide in media might normalize suicide as a solution to a crisis, yet it has also been found by Niederkraterhaler and colleagues (2010) that media coverage on positive coping and reporting on suicidal ideation without a deadly ending has a protective effect. On the other hand, repetitive reporting of a suicide, writing of suicidal 'myths' both are associated with an increase of suicide. Further, reporting of expert opinion and epidemiology also increases suicidal behaviour (Niederkraterhaler *et al.* 2010).

Five of the articles included in this study evaluate suicide preventive media campaigns. 4 of these studies measure help seeking behaviour. One of the studies (Oliver *et al.* 2008) found an increase in help seeking behaviour and 3 of the studies (Daigle 2006, Klimes-Dougan, 2009; Klimes-Dougan, 2010) did not find any significant change in this behaviour. The two studies conducted by Klimes-Dougan even found there to be a decrease in help-seeking behaviour among high-risk individuals, and especially billboards seemed to have limited benefits and lead to contra productive effects. Meanwhile informative televised advertisement seemed to have a more positive effect, mainly on knowledge. Also Jenner (2010) found media campaigns to increase awareness where movie advertisements were found to be most effective, followed by bus boards, print advertisements and billboards. Also, Daigle (2006) found in his study that it was possible to increase knowledge of depression even though the campaign was low in intensity.

Conclusion

Mass media reporting of suicidal behaviour seem to be associated with suicidal behaviour in the community. When there is repetitive reporting of in real life suicidal behaviour, there seem to be an increase in suicide among vulnerable groups, mainly among teenager. To report on method used to commit suicide in media, is a risk factor for use of that method among people who commit suicide, which often leads to an increase in suicides.

There are too few studies to draw any certain conclusions on the possibility to use mass media as a tool to prevent suicidal behaviour. However, it seems as if guidelines for media, if properly used and implemented, are a possible protective factor for suicidal behaviour. Since irresponsible reporting of suicide is a risk factor for suicide there is a need to at least decrease the damages. Suicidal preventive campaigns via media can serve as future way of increasing the awareness and maybe the help seeking behaviour in the future. However, there is no certain evidence yet that this is an effective model to prevent suicide. It could even be so that it could decrease help-seeking behaviour in certain groups. This means that we need to be careful when we are carrying out these interventions, not to cause more damage than good. More research is needed to find out how to use media in the best way for suicide preventive purposes.

References

- Bertolote, J.M., Fleischmann, A. A. (2002). Global perspective in the epidemiology of suicide. *Suicidologi*, 7(2), 6-8.
- Biddle, L., Gunnell, D., Owen-Smith, A., Potokar, J., Longson, D., Hawton, K., Kapur, N., et al. (2012). Information sources used by the suicidal to inform choice of method. *Journal of affective disorders*, 136(3), 702–9.
- Bollen, K. A., & Phillips, D. P. (1982). Imitative suicides: A national study of the effects of television news stories. *AmSociolRev*, 47(6), 802–809.
- Centerwall, B. S. (1990). Young adult suicide and exposure to television. *Social psychiatry and psychiatric epidemiology*. GERMANY, WEST: Department of Psychiatry, School of Medicine, University of Washington, Seattle.
- Cheng, A. T., Hawton, K., Chen, T. H., Yen, A. M., Chen, C. Y., Chen, L. C., & Teng, P. R. (2007). The influence of media coverage of a celebrity suicide on subsequent suicide attempts. *J Clin Psychiatry*, 68(6), 862–866.
- Cheng, A. T., Hawton, K., Lee, C. T., & Chen, T. H. (2007). The influence of media reporting of the suicide of a celebrity on suicide rates: a population-based study. *Int J Epidemiol*, 36(6), 1229–1234.
- Daigle, M., Beausoleil, L., Brisoux, J., Raymond, S., Charbonneau, L., & Desaulniers, J. (2006). Reaching suicidal people with media campaigns: new challenges for a new century. *Crisis*.
- Etzersdorfer, E., Sonneck, G., & Nagel-Kuess, S. (1992). Newspaper reports and suicide. *N Engl J Med*, 327(7), 502–503.
- Etzersdorfer, E., Voracek, M., & Sonneck, G. (2001). A dose-response relationship of imitational suicides with newspaper distribution. *Aust N Z J Psychiatr*, 35(2), 251.
- Hagihara, A., Tarumi, K., & Abe, T. (2007). Media suicide-reports, Internet use and the occurrence of suicides between 1987 and 2005 in Japan. *BMC Public Health*, 7, 321.
- Hamilton, S., Metcalfe, C., & Gunnell, D. (2011). Media reporting and suicide: a time-series study of suicide from Clifton Suspension Bridge, UK, 1974-2007. *Journal of public health (Oxford, England)*, 33(4), 511–7.
- Hassan, R. (1995). Effects of newspaper stories on the incidence of suicide in Australia: a research note. *Aust N Z J Psychiatry*, 29(3), 480–483.
- Hawton, K., & Williams, K. (2001). The connection between media and suicidal behavior warrants serious attention. *Crisis*, 22(4), 137–140.
- Huh, G. Y., Jo, G. R., Kim, K. H., Ahn, Y. W., & Lee, S. Y. (2009). Imitative suicide by burning charcoal in the southeastern region of Korea: the influence of mass media reporting. *Leg Med (Tokyo)*, 11 Suppl 1, S563–564.

- Jenner, E., Jenner, L. W., Matthews-Sterling, M., Butts, J. K., & Williams, T. E. (2010). Awareness effects of a youth suicide prevention media campaign in Louisiana. *Suicide & life-threatening behavior*. United States: The Policy & Research Group, New Orleans, LA 70118, USA.
- Jobs, D. A., Berman, A. L., O'Carroll, P. W., & Eastgard, S. (1996). The Kurt Cobain suicide crisis: Perspectives from research, public health and the news media. *Suicide Life Threat Behav*, 26(3), 260–271.
- Kessler, R C, Downey, G., Milavsky, J. R., & Stipp, H. (1988). Clustering of teenage suicides after television news stories about suicides: a reconsideration. *Am J Psychiatry*, 145(11), 1379–1383.
- Kessler, Ronald C, Downey, G., Stipp, H., & Milavsky, J. R. (1989). Network television news stories about suicide and short-term changes in total U.S. suicides. *J Nerv Ment Dis*, 177(9), 551–555.
- Klimes-Dougan, B., & Lee, C.-Y. S. (2010). Suicide prevention public service announcements: perceptions of young adults. *Crisis*. Canada: Department of Psychology, University of Minnesota.
- Klimes-Dougan, B., Yuan, C.-, Lee, S., & Hour, A. K. (2009). Suicide prevention with adolescents: considering potential benefits and untoward effects of public service announcements. *Crisis*. Canada: Division of Child and Adolescent Psychiatry, University of Minnesota.
- Mann, J. J., Apter, A., Bertolote, J., Beautrais, A., Currier, D., Haas, A., Hegerl, U., et al. (2005). Suicide prevention strategies: a systematic review. *JAMA*, 294(16), 2064–2074.
- Marzuk, P. M., Tardiff, K., Hirsch, C. S., Leon, A. C., Stajic, M., Hartwell, N., & Portera, L. (1993). Increase in suicide by asphyxiation in New York City after the publication of Final Exit. *The New England journal of medicine*. UNITED STATES: Department of Psychiatry, Cornell University Medical College.
- Mercy, J. A., Kresnow, M. J., O'Carroll, P. W., Lee, R. K., Powell, K. E., Potter, L. B., Swann, A. C., et al. (2001). Is suicide contagious? A study of the relation between exposure to the suicidal behavior of others and nearly lethal suicide attempts. *Am J Epidemiol*, 154(2), 120–127.
- Nakamura, M., Yasunaga, H., Toda, A. A., Sugihara, T., & Imamura, T. (2012). The impact of media reports on the 2008 outbreak of hydrogen sulfide suicides in Japan. *International journal of psychiatry in medicine*, 44(2), 133–40.
- Niederkröthaler, T., Fu, K., Yip, P. S. F., Fong, D. Y. T., Stack, S., Cheng, Q., & Pirkis, J. (2012). Changes in suicide rates following media reports on celebrity suicide: a meta-analysis. *Journal of epidemiology and community health*, 66(11), 1037–42.
- Niederkröthaler, T., & Sonneck, G. (2007). Assessing the impact of media guidelines for reporting on suicides in Austria: Interrupted time series analysis. *Aust N Z J Psychiatr*, 41(5), 419–428.
- Niederkröthaler, T., Voracek, M., Herberth, A., Till, B., Strauss, M., Etzersdorfer, E., Eisenwort, B., et al. (2010). Media and suicide. Papageno v Werther effect. *BMJ (Clinical research ed.)*. England.
- Oliver, R. J., Spilsbury, J. C., Osiecki, S. S., Denihan, W. M., Zureick, J. L., & Friedman, S. (2008). Brief report: preliminary results of a suicide awareness mass media campaign in Cuyahoga County, Ohio. *Suicide & life-threatening behavior*. United States: Mental Health Services for Homeless Persons, Inc., Cleveland.

- Phillips, D P, & Carstensen, L. L. (1986). Clustering of teenage suicides after television news stories about suicide. *The New England journal of medicine*. UNITED STATES.
- Phillips, David P. (1977). Motor vehicle fatalities increase just after publicized suicide stories. *Science*, 196(4297), 1464–1465.
- Phillips, David P. (1979). Suicide, motor vehicle fatalities, and the mass media: Evidence toward a theory of suggestion. *AmJ Sociol*, 84(5), 1150–1174.
- Pirkis, J, & Blood, R. W. (2001). Suicide and the media. Part II: Portrayal in fictional media. *Crisis*. Canada: University of Melbourne, Australia.
- Pirkis, J. E., Burgess, P. M., Francis, C., Blood, R. W., & Jolley, D. J. (2006). The relationship between media reporting of suicide and actual suicide in Australia. *Soc Sci Med*, 62(11), 2874–2886.
- Pirkis, Jane, & Blood, R. W. (2001). Suicide and the media: Part I. Reportage in nonfictional media. *Crisis*, 22(4), 146–154.
- Pirkis, Jane, Blood, R. W., Beautrais, A., Burgess, P., & Skehan, J. (2006). Media guidelines on the reporting of suicide. *Crisis*, 27(2), 82–87.
- Schmidtke, A., & Hafner, H. (1988). The Werther effect after television films: new evidence for an old hypothesis. *Psychological medicine*. ENGLAND: Central Institute of Mental Health, Mannheim, FRG.
- Shoval, G., Zalsman, G., Polakevitch, J., Shtein, N., Sommerfeld, E., Berger, E., & Apter, A. (2005). Effect of the Broadcast of a Television Documentary About a Teenager’s Suicide in Israel on Suicidal Behavior and Methods. *Crisis*, 26(1),
- Sisask, M., & Varnik, A. (2012). Media roles in suicide prevention: a systematic review. *International journal of environmental research and public health*. Switzerland: Central Behavior & Health Science, Estonian-Swedish Mental Health and Suicidology Institute (ERSI), 39 Oie, Tallinn 11615, Estonia.
- Stack, S. (1990). A reanalysis of the impact of non celebrity suicides: A research note. *SocPsychPsychEpid*, 25(5), 269–273.
- Stack, S. (2003). Media coverage as a risk factor in suicide. *J Epidemiol Community Health*, 57(4), 238–240.
- Stack, Steven. (1988). Suicide: Media impacts in war and peace, 1910-1920. *Suicide Life Threat Behav*, 18(4), 342–357.
- Stack, Steven. (1990a). Divorce, suicide, and the mass media: An analysis of differential identification, 1948-1980. *J Marriage Fam*, 52(2), 553–560.
- Stack, Steven. (1990b). Audience receptiveness, the media, and aged suicide, 1968-1980. *J Aging Stud*, 4(2), 195–209.
- Stack, Steven. (1992). The effect of the media on suicide: The Great Depression. *Suicide Life Threat Behav*, 22(2), 255–267.

- Stack, Steven. (1993). The media and suicide: A nonadditive model, 1968-1980. *Suicide Life Threat Behav*, 23(1), 63–66.
- Stack, Steven. (1996). The effect of the media on suicide: Evidence from Japan, 1955-1985. *Suicide Life Threat Behav*, 26(2), 132–142.
- Stack, Steven. (2005). Suicide in the Media: A Quantitative Review of Studies Based on Nonfictional Stories. *Suicide Life Threat Behav*, 35(2), 121–133.
- Sudak, H. S., & Sudak, D. M. (2005). The media and suicide. *Acad Psychiatr*, 29(5), 495–499.
- Tousignant, M., Mishara, B. L., Caillaud, A., Fortin, V., & St-Laurent, D. (2005). The impact of media coverage of the suicide of a well-known Quebec reporter: The case of Gaëtan Girouard. *Soc Sci Med*, 60(9), 1919–1926.
- Tsai, J.-F. (2010). The media and suicide: Evidence-based on population data over 9 years in Taiwan. *Suicide and Life-Threatening Behavior*, 40(1), 81.
- Yip, P. S. F., Caine, E., Yousuf, S., Chang, S.-S., Wu, K. C.-C., & Chen, Y.-Y. (2012). Means restriction for suicide prevention. *Lancet*, 379(9834), 2393–9. doi:10.1016/S0140-6736(12)60521-2
- Yip, P. S. F., Fu, K. W., Yang, K. C. T., Ip, B. Y. T., Chan, C. L. W., Chen, E. Y. H., Lee, D. T. S., et al. (2006). The effects of a celebrity suicide on suicide rates in Hong Kong. *J Affect Disorders*, 93(1-3), 245–252.
- World Health Organisation. (2008). Preventing Suicide A Resource for Media Professionals. WHO; Geneva.
- World Health Organization. (2003). World Health Report 2003: Shaping the Future. WHO; Geneva.
- World Health Organization. (2000). Preventing suicide: a resource for general physicians. WHO; Geneva.