



**A review of the literature
regarding film and television
drama portrayals of suicide**

Jane Pirkis¹, R Warwick Blood², Catherine Francis¹ and Kerry McCallum²

- 1. Program Evaluation Unit, School of Population Health, The University of Melbourne**
- 2. School of Professional Communication, The University of Canberra**

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Executive summary

Background

A number of studies have considered the portrayal of suicide in television dramas and films and its potential consequences. The current report reviews these studies, with a view to answering the following research questions:

1. What is the extent and nature of suicide portrayal in film and television dramas?
2. Is there evidence that such portrayals can have harmful imitative effects?
3. Is there evidence that such portrayals can have positive preventive effects?

Method

Searches were conducted of key reference databases and the Internet, using search terms relating to suicide, imitation and media. Potentially relevant articles were retrieved, and their reference lists were scanned for further salient texts. Later articles that cited the original articles were also retrieved. Studies reported in these articles were critically appraised, and the findings were synthesised.

Key findings

The literature on the nature and extent of portrayal of suicide in films suggests that such portrayal is widespread. It has increased over time, and depictions of the act have become lengthier, more extensively modelled, more likely to involve firearms, and more romanticised, glorified and condoned. Young people are disproportionately represented in films with a suicide theme.

The literature on the impact of fictional on-screen suicides on actual suicidal behaviour is equivocal, but provides some support for an imitation effect. The majority of studies have demonstrated that completed and attempted suicide rates show unexpected rises after such screenings, or have reported mixed results (e.g., increases in some locations and not others, or for some sub-groups and not others), but some have found no evidence of any effect. The literature on the impact of video footage of fictional suicidal characters on attitudes and opinions regarding suicide produces contradictory findings.

The majority of the above studies have focused on the potential for harm, rather than the potential for good. However, there are a few that have considered whether fictional portrayals of suicide can have positive preventive effects. Once again, the evidence from these studies is equivocal.

Conclusions

Further research in this area is warranted but, in the meantime, there is a need to err on the side of caution. Mental health professionals and suicide experts should collaborate with film makers and television producers to try to balance entertainment against the risk of harm, and to promote opportunities for education. Sensitive portrayal of suicide that does not glorify or romanticise it and does not provide visual detail of the exact method is likely to be preferable, as are depictions that stress consequences for others, potential hazards of particular methods, and sources of help for vulnerable viewers.

Chapter 1: Setting the context

Background

Debate about whether fictional portrayal of suicide can lead to imitation began in the late 18th century, when Goethe released his 1774 novel entitled *The Sorrows of Young Werther*. In this novel, the protagonist fell in love with a woman who was beyond his reach, and consequently decided to end his own life. He dressed in boots, a blue coat and a yellow vest, sat at his desk with an open book and shot himself. The launch of the novel was followed by a spate of suicides across Europe, with strong evidence that at least some of those who died by suicide were influenced by the book – they were dressed in a similar fashion to Werther, adopted his method, and/or the book was found at the scene of death. For example, one young man killed himself with a pistol and was found with a copy of the book lying by his side, another young man threw himself out of a window with a copy of the book in his vest, a young woman drowned herself with a copy of the book in her pocket, and another young woman took her own life in bed with a copy of the book under her pillow. The book was banned in various European countries, including Italy, Germany and Denmark, despite a disclaimer included in later editions in which concluded, ‘Be a man, he said; do not follow my example’.¹

Phillips² coined the term ‘Werther effect’ to describe the posited association between portrayal of suicide and imitation acts, where an observer copies behaviour he/she has seen modelled in the media. He intended the term to be used broadly, referring to both fiction and non-fiction media, and to imitation acts across the spectrum from completed suicide through attempted suicide to suicidal ideation. In the remainder of this report, the terms ‘Werther effect’, ‘imitation’ and ‘suicide contagion’ are used interchangeably, although it is acknowledged that in the wider suicide literature the latter terms can also be used to refer to ‘copy-cat’ behaviours where the model is not observed via a media source (e.g., he or she may be a friend or relative of the observer).

Since the 1960s, debate over the Werther effect has spawned a number of studies to investigate the existence of the phenomenon. The majority of these studies have been concerned with non-fiction media, primarily investigating the link between reportage of suicides in print and broadcast news, and any observed increases in rates of completed and attempted suicide. Pirkis and Blood^{3,4} reviewed these studies and concluded that, on balance, there was evidence of a causal relationship between media reporting of suicide and actual suicidal behaviour. On the basis of this demonstrated causal association, a number of countries have developed guidelines for media reporting of suicide, designed to encourage responsible reporting among news editors and journalists.

Far fewer studies have been conducted that examine the association between portrayal of suicide in fictional media, such as films and television dramas. This research question is no less important, and may be of particular relevance in the area of youth suicide. There is evidence that young people are highly exposed to entertainment media,⁵ and that vulnerable young people may specifically seek out films and television programs with suicide themes.⁵ There is a clear need to further explore the impact of fictional portrayals of suicide, since, if a relationship emerges between such portrayals and actual suicidal behaviour, there may be scope for mental health professionals and suicide experts to work with film makers and television producers to minimise the likelihood of imitation. There are precedents for this in Australia, with organisations like SANE being involved with the development of mental health- and suicide-related storylines in soap operas such as *Home and Away*.⁶

Purpose and scope of the review

The current review was undertaken in order to examine the hypothesis that film and television drama portrayals of suicide can result in imitative suicidal behaviour. The review concentrated exclusively on fictional film and television depictions of suicide, ignoring portrayals in non-fiction media and in other fictional media (e.g., novels and music).

Research questions

The review was designed to answer three research questions:

1. What is the extent and nature of suicide portrayal in film and television dramas?
2. Is there evidence that such portrayals can have harmful imitative effects?
3. Is there evidence that such portrayals can have positive preventive effects?

These research questions reflect the dominant approaches used in the studies that were available for review. The limited scope of this international body of research is noted in the 'Theoretical explanations' and 'Future directions' sub-sections within the 'Discussion' section. Similar comment has previously been made on research exploring the relationship between media portrayals of suicide in non-fiction media and actual suicidal behaviour.⁷

Chapter 2: Method

Search strategy

Searches of Medline, Psychinfo, Australian Public Affairs, Cambridge Scientific Abstracts (Communication Studies, SAGE, Sociological Abstracts), EBSCOhost (Communication and Mass Media Complete, Academic Search Premier) Dissertation Abstracts, WARC (World Advertising Research Center) and Emerald Full Text (Health, Sociology, Social Policy) were conducted from their respective years of inception to January 2005. A comprehensive Internet search was also conducted.

In conducting these searches, the following search terms were used:

- SUICIDE (SUICID*) or IMITATION (WERTHER, COPYCAT, IMITAT*, CONTAGIO*); and
- MEDIA (MEDIA, TELEVIS*, FILM*, MOVIE*, PLAY*)

Potentially relevant articles were retrieved using this strategy, and their reference lists were scanned for any further salient texts, published prior to the article in question. In addition, the ISI Web of Science Citation Index was used to find subsequent texts that referenced the given article.

Critical analysis of the literature

Studies reported in papers were critically appraised, with a view to determining whether they provided descriptive information on the extent and nature of suicide portrayal in film and television dramas, and/or evaluative evidence that such portrayals can have harmful imitative effects or positive preventive effects. The methodological limitations of each study were taken into account in this appraisal process. The findings from the individual studies were then synthesised, in order to formulate conclusions about the overall body of the evidence.

Chapter 3: Key findings

What is the extent and nature of suicide portrayal in film and television dramas?

Until recently, there had been no systematic analysis of the extent and nature of suicide portrayal in film and television dramas. Jamieson⁵ rectified this in 2003, through general analyses of all films and the top 30 films from each year between 1950 and 2000, and more detailed analyses of the top five films from every second year during the same period. In terms of extent, Jamieson identified 1090 films depicting suicide, noting that the absolute number (and adjusted rate) of films doing so increased over time. He found no significant increase in the number of top 30 films involving suicide, but did find a significant increase in multiple depictions of suicide in top 30 films. He also found that access to cable had increased access to fictional portrayals of suicide, demonstrating that on any given day it was possible to view programming that included such portrayals.

Using the same set of films, Jamieson⁵ went on to consider the nature of portrayal, observing that the portrayal of suicide acts became lengthier over time (i.e., the number of seconds devoted to showing acts of suicide). He found that suicide became more extensively modelled, as evidenced by increasing scores on a 5-point rating scale where 1 equated to 'no visuals of act, shows body or method' and 5 equated to 'shows act until completion and in detail'. He found that the tenor of disapproval of the act of suicide, evident in earlier films, shifted to a non-judgemental or even approving stance in later films where there was a greater tendency to romanticise or glorify suicide. He found that the number of depictions of suicide by firearms increased in later films. He also found that young people were disproportionately represented in films depicting suicide, although the degree of over-representation did not increase over time.

Using a case study approach, Jamieson⁵ provided further evidence of changes in portrayal of suicide over time by considering four film versions of *Romeo and Juliet*, released in 1936, 1954, 1969 and 1996, respectively. He found that the age of the lead actors decreased dramatically from 1936 to 1954, continued to decline to 1969, and then rose again slightly in 1996. He demonstrated that the length of the suicide act decreased from 1936 to 1954, but rose again in 1969 and then again in 1996. He found that in the 1968 and 1996 versions, suicide was more extensively modelled (according to a slightly modified version of the rating scale described above), and that the dagger that kills Juliet became more explicit over time until in 1996 it was replaced by a firearm. He also observed that, contrary to the original intentions of Shakespeare's play, the suicide pact is romanticised and a reunion in the afterlife is implied.

Is there evidence that such portrayals can have harmful imitative effects?

In total, 24 studies have been conducted in the United States, the United Kingdom and Germany in order to test the hypothesis that the Werther effect exists (i.e., that there is a causal association between portrayal of suicide in film and television and actual suicidal behaviour).

The majority of these (21) have been ecological studies, which have used before-and-after designs to observe rates of completed or attempted suicide in a given location, prior to and subsequent to the screening of the particular television program in that location. These studies, undertaken by Phillips,⁸ Kessler and Stipp,⁹ Gould and Shaffer,¹⁰ Philips and Paight,¹¹ Gould, Shaffer and Kleinman,¹² Berman,¹³ Stack,¹⁴ Ostroff and colleagues,^{15,16} Holding,^{17,18} Ellis and Walsh,¹⁹ Sandler, Connell and Welsh²⁰, Fowler,²¹, Williams et al,²² Platt,²³ Collins,²⁴ Waldron, Walton and Helowicz,²⁵, Simkin et al,²⁶ Hawton and colleagues,^{27,28} Pell and Murdoch,²⁹ Vesey,

Kamanyire and Volans,³⁰ and Schmidtke and Hafner,³¹ are summarised in Table 1. Each of these studies has examined the impact of one or more television programs (films, dramas and soap operas),^a including:

- An unnamed television film about a pact between two high school students, one of whom eventually suicided (United States);¹⁰⁻¹²
- An unnamed television film that depicted a troubled high school student who suicided, and dealt with the effects for those around him (United States);¹⁰⁻¹²
- *A Reason to Live*, a television film which dealt with a teenage boy's attempts to stop his father suiciding (United States);¹⁰⁻¹³
- *Surviving*, a television film which described a suicide pact between two teenagers (United States);^{10-13, 15, 16}
- *A Desperate Exit*, a television film which dealt with the aftermath of a teenage boy's suicide (United States);¹³
- Episodes of unnamed soap operas with a suicide theme, identified from summaries listed in a newspaper column called 'The Soaps' (United States);^{8, 9}
- A series called *The Befrienders*, which was based on the Samaritans (United Kingdom);^{17, 18}
- An episode of the soap opera *EastEnders*, in which a popular character named Angie attempted suicide by overdose (United Kingdom);¹⁹⁻²³
- Three separate episodes of the television drama *Casualty*, one in which a 15-year-old girl attempted suicide by ingesting 50 paracetamol tablets,²⁴⁻²⁶ one in which a disturbed RAF pilot attempted suicide (again by ingesting paracetamols),²⁷⁻²⁹ and one which depicted a suicide attempt by ingestion of antifreeze (United Kingdom);³⁰
- *Death of a Student*, a six episode series depicting the railway suicide of a 19-year-old male student (Germany).³¹

Aside from the specific television program of focus, they differ only in small ways. Firstly, some have specifically examined rates of completed or attempted suicide by the particular method depicted in the television program of interest (e.g., Veysey et al³⁰ considered cases of self-harm due to ingestion of antifreeze, following the screening of the episode of *Casualty* depicting a suicide attempt by this method). Secondly, some have considered impacts for the population group most closely represented by the model in the television program of interest (e.g., Platt²³ considered whether increases in suicide attempt rates were more likely for women in Angie's age group (mid- to late-30s) following exposure to the relevant episode of *EastEnders*. Finally, some have expanded on the traditional before-and-after approach and adopted more sophisticated design or analysis techniques (e.g., Schmitke and Hafner³¹ took advantage of the fact that *Death of a Student* was televised twice to examine whether any increase in completed suicide observed after the first screening dissipated between screenings and then recurred after the second screening).

These studies are complemented by three individual-level studies which have examined the impact of film and television portrayal of suicide on attitudes towards suicide in the general population (see Table 2). Conducted by Range and colleagues,^{32, 33} and Biblarz et al,³⁴ these studies have employed designs that involve randomising participants (typically university students) into groups that are exposed to video or film stimuli that vary in terms of content and administered pre- and post- questionnaires on attitudes towards suicide or opinions about the likelihood of suicide contagion. Biblarz et al,³⁴ for example, examined the impact of films depicting suicide and violence on attitudes towards suicide, by showing participants a film about suicide (*Surviving*), a film about violence (*Death Wish*) and a film with neutral content (*That's Entertainment*).

^a To the authors' knowledge, no studies have examined the impact of films shown in cinemas.

Taken together, the findings from these 24 studies are equivocal. The majority (15, or 63%) have demonstrated a relationship between fictional portrayal of suicide and actual suicidal behaviour (or attitudes towards suicide),^{8, 10, 15, 16, 19-21, 24, 27, 28, 30-32} or produced mixed findings,^{12, 23, 25, 33} suggesting that the Werther Effect is real. The remainder have found no relationship.^{9, 11, 13, 14, 22, 26, 29, 34}

Is there evidence that such portrayals can have positive preventive effects?

Not all of the above studies have focused exclusively on the possible negative impacts of suicide in film and on television. Some have hypothesised that films and television dramas can have a preventive role – educating viewers about the consequences of suicide for family members and friends, alerting them to the hazardous effects of particular methods of suicide, and providing them with advice about avenues for help.

For example, Holding^{17, 18} observed that the screening of *The Befrienders* was associated with increased awareness of, and referrals to, the Samaritans. Similarly, in an extension of the study by Hawton et al,²⁷ O'Connor et al²⁸ demonstrated that the stimulus episode of *Casualty*, which explicitly dealt with the risk of liver damage following survival of a suicide attempt by paracetamol overdose, increased community knowledge about paracetamol and its effects. Hawton et al²⁷ found that suicide attempters' knowledge was also increased, and that this sometimes had positive effects (e.g., some attempters avoided using paracetamol). These findings are consistent with an anecdotal report by Stinson et al,³⁵ which concerned someone whose viewing of the particular *Casualty* episode led them to advise a friend who had overdosed on paracetamol to seek urgent medical help.

Having said this, the evidence is again equivocal. Collins,²⁴ for example, observed that the *Casualty* episode he studied was exemplary in terms of its educational message. It depicting a 15-year-old girl with typical teenage home and school stressors who presented to hospital with abdominal pain and vomiting, developed liver damage, and lapsed into a coma. The episode concluded with the clear implication that she would not survive. Despite its clear intention to act as a deterrent to adolescents contemplating self harm, Collins demonstrated that it was followed by an increase in presentations for overdose among teenage girls, some of whom confirmed having seen the episode.

Table 1: Ecological studies examining the relationship between television portrayal of suicide and actual suicidal behaviour

INVESTIGATORS	COUNTRY	OUTCOME VARIABLE	METHOD	KEY FINDINGS	EVIDENCE FOR HARMFUL IMITATION EFFECTS	EVIDENCE FOR POSITIVE PREVENTIVE EFFECTS
Phillips (1982) ⁸	United States	Completed suicide	Determined national number of suicides and motor vehicle deaths in 1977. Identified weeks in which any soap opera was screened in which there was a suicide theme, using summaries listed in a newspaper column called 'The Soaps'. After controlling for a range of factors, examined trends in suicide rates in the latter half of any week in which a relevant soap opera episode was screened.	Significant increase in number of suicides immediately following soap opera stories.	Yes	Not examined
Kessler and Stipp (1984) ⁹	United States	Completed suicide	Replication of Phillips (1982). ⁸ Observed that Phillips had misclassified date of more than half of the screenings and had failed to include a number of soap opera stories. Corrected these errors and reanalysed data.	No increase in number of suicides immediately following soap opera stories.	No	Not examined
Ostroff et al (1985) ¹⁵ and Ostroff and Boyd (1987) ¹⁶	United States	Attempted suicide	Examined effect of <i>Surviving</i> , a television movie concerning the effect of suicides of an adolescent couple on their parents screened on 10 February 1985. Considered number of overdose presentations to psychiatric and paediatric services at Waterbury Hospital Health Center pre- and post-broadcast. Asked those who attempted suicide post-broadcast whether they had seen the programme.	Increase in overdose presentations in two weeks after broadcast. Overall, number of suicides in month of broadcast was higher than in other months during 1985 and than in February 1984. All those asked confirmed that they had seen the programme.	Yes	Not examined
Gould and Shaffer (1986) ¹⁰	United States	Attempted suicide and completed suicide	Examined effect of four television movies screened in 1984-85: <i>Broadcast 1:</i> Concerned suicide pact between two high schools students, one of whom eventually completed suicide; <i>Broadcast 2:</i> Concerned a high school student with multiple problems who completed suicide, and described the	Significant increase in mean number of suicides and suicide attempts by young people in two weeks post-broadcasts compared with two weeks pre-broadcasts.	Yes	Not examined

INVESTIGATORS	COUNTRY	OUTCOME VARIABLE	METHOD	KEY FINDINGS	EVIDENCE FOR HARMFUL IMITATION EFFECTS	EVIDENCE FOR POSITIVE PREVENTIVE EFFECTS
			<p>reactions of those around him;</p> <p><i>Broadcast 3:</i> Concerned a teenager's attempts to prevent his father completing suicide; and</p> <p><i>Broadcast 4:</i> Concerned the joint suicides of an adolescent boy and girl.</p> <p>Considered numbers of completed and attempted suicides by young people in the New York area in two weeks before and two weeks after each broadcast. Broadcast 2 included in attempts analysis but excluded from completed suicide analysis because it was accompanied by educational and preventive material.</p>			
Phillips and Paight (1987) ¹¹	United States	Completed suicide	Replication of Gould and Shaffer (1986). ¹⁰ Examined effects of <i>Broadcasts 1, 3 and 4</i> in different geographical areas (Pennsylvania and California). Considered number of completed suicides by young people in these areas during two weeks before and two weeks after each broadcast.	No significant increase in mean number of suicides by young people after screening of films.	No	Not examined
Gould, Shaffer and Kleinman (1988) ¹²	United States	Attempted suicide and completed suicide	Replication of Gould and Shaffer (1986). ¹⁰ Examined effects of <i>Broadcasts 1, 3 and 4</i> in different geographical areas (Cleveland, Dallas and Los Angeles). Considered numbers of completed and attempted suicides by young people in these areas in the two weeks before and two weeks after each broadcast.	No significant increase in mean number of suicides by young people after screening of films in Dallas or Los Angeles. Significant increase in mean number of suicides by young people in Cleveland in two weeks after screening of films, compared with two weeks before screening of films.	Mixed	Not examined
Berman (1988) ¹³	United States	Completed suicide	Replication of Gould and Shaffer (1986). ¹⁰ Examined effects of <i>Broadcasts 3 and 4</i> , as well as an additional film, <i>Broadcast 5 – A Desperate Exit</i> – which dealt with the impact of an adolescent male's suicide and was screened in 1986. Excluded <i>Broadcasts 1 and 2</i> on the	No overall increase in total national suicides by young people after screening of films. However, after the only film to depict a suicide method (carbon monoxide poisoning in <i>Broadcast 4 – Surviving</i>), there was a significant increase	No	Not examined

INVESTIGATORS	COUNTRY	OUTCOME VARIABLE	METHOD	KEY FINDINGS	EVIDENCE FOR HARMFUL IMITATION EFFECTS	EVIDENCE FOR POSITIVE PREVENTIVE EFFECTS
			grounds that there was overlap between the two week period pre- <i>Broadcast 2</i> and post- <i>Broadcast 1</i> . Considered total number of suicides, number of adolescent suicides, and adolescent suicides as a proportion of total suicides.	in youth suicides by carbon monoxide poisoning		
Stack (1990) ¹⁴	United States	Completed suicide	Replication of Gould and Shaffer (1986). Gould, 1986 #1354} Examined effects of <i>Broadcasts 1, 2, 3 and 4</i> on national daily teenage suicide rates, using lagged film variables to cater for delay in any effect, controlling for temporal variation and secular trends, and considering television news stories and specials on teenage suicide.	No significant increase in mean rates of youth suicide after screening of films.	No	Not examined
Holding (1974) ¹⁷ and Holding (1975) ¹⁸	United Kingdom	Attempted suicide, completed suicide and referrals to suicide prevention service	Examined effects of <i>The Befrienders</i> – an 11-episode weekly series based on the Samaritans and shown on the BBC in Edinburgh in 1972. Considered (a) number of suicides in Edinburgh, (b) number of parasuicide presentations to the Regional Poisoning Treatment Centre at Edinburgh's Royal Infirmary, and (c) number of referrals to the Samaritans during the three 10-week periods prior to, during and after the screening of the series. Adjusted for seasonal effects and trends by making comparisons with corresponding periods in three previous years and the subsequent year.	No increase in number of suicides or parasuicides, after screening, but significant increase in number of referrals to the Samaritans.	No	Yes
Ellis and Walsh (1986) ¹⁹	United Kingdom	Attempted suicide	Examined effects of an episode of <i>EastEnders</i> in which character called Angie (aged 30-40ish) attempted suicide by overdose, screened on 2 March 1986. Considered number of patients attending accident and emergency department at Hackney Hospital for overdose in the week after the episode, the 10 weeks before, and the same week in	Increase in number of overdose presentations in week after episode compared with mean number in previous 10 weeks and mean number in the same week in the previous 10 years.	Yes	Not examined

INVESTIGATORS	COUNTRY	OUTCOME VARIABLE	METHOD	KEY FINDINGS	EVIDENCE FOR HARMFUL IMITATION EFFECTS	EVIDENCE FOR POSITIVE PREVENTIVE EFFECTS
			the previous 10 years.			
Sandler, Connell and Welsh (1986) ²⁰	United Kingdom	Attempted suicide	Examined effects of same episode of <i>EastEnders</i> as Ellis and Walsh (1986). ¹⁹ Considered number of patients attending accident and emergency department at Queens Medical Centre in Nottingham for self-poisoning in the week after the episode, the 10 weeks before, and the same week in the previous 10 years.	Increase in number of overdose presentations in week after episode compared with mean number in previous 10 weeks and mean number in the same week in the previous six years.	Yes	Not examined
Fowler (1986) ²¹	United Kingdom	Attempted suicide	Examined effects of same episode of <i>EastEnders</i> as Ellis and Walsh (1986). ¹⁹ Considered number of patients attending three hospitals in Newcastle-upon-Tyne for overdose in the week of the episode, the eight weeks before and the five weeks after the program.	Increase in number of overdose presentations in the week of the episode compared with mean number in previous eight weeks. This increase dropped off during the subsequent five weeks.	Yes	Not examined
Williams et al (1987) ²²	United Kingdom	Attempted suicide	Examined effects of same episode of <i>EastEnders</i> as Ellis and Walsh (1986). ¹⁹ Considered number of patients attending Hackney and St Bartholomew's Hospitals in London for deliberate self-poisoning in two weeks pre- and post- screening of episode, and in the corresponding periods in two control years. Examined file notes of cases who had overdosed during the experimental period and controls who had overdosed in a period not less than a month after the episode.	Increase in number of deliberate self-poisoning presentations after screening of episode, but at both hospitals increase began before the episode. Controls more likely to have made previous attempts, but cases more likely to have used analgesics as Angie did.	No	Not examined
Platt (1987) ²³	United Kingdom	Attempted suicide	Examined effects of same episode of <i>EastEnders</i> as Ellis and Walsh (1986). ¹⁹ Considered number of patients attending accident and emergency departments in 63 UK hospitals for deliberate overdose in the weeks pre- and post- screening of episode, and in the corresponding periods in the	No overall significant increase in number of deliberate overdose presentations after screening of episode, but a significant increase in such presentations by women (though not particularly for women in Angie's age group.	Mixed	Not examined

INVESTIGATORS	COUNTRY	OUTCOME VARIABLE	METHOD	KEY FINDINGS	EVIDENCE FOR HARMFUL IMITATION EFFECTS	EVIDENCE FOR POSITIVE PREVENTIVE EFFECTS
			previous year.			
Collins (1993) ²⁴	United Kingdom	Attempted suicide	Examined effects of an episode of <i>Casualty</i> in which a 15 year old girl ingested 50 paracetamol tablets, screened on 9 January 1993. Considered number of teenage girls presenting to Alexandra Hospital in Redditch in the 10 weeks prior to the episode and the eight weeks subsequent to it. Interviewed 4 of 11 girls presenting in the fortnight after the episode.	Increase in presentations in the weeks immediately following the episode. All four girls who were interviewed admitted to having seen the episode.	Yes	No
Waldron, Walton and Helowicz (1993) ²⁵	United Kingdom	Attempted suicide	Examined effects of same episode of <i>Casualty</i> as Collins (1993). ²⁴ Considered number of women (all ages) presenting to South West Thames Region in the 10 weeks prior to the episode and the eight weeks subsequent to it. Also examined the same periods for 1990-91 and 1991-92.	Significant increase in presentations in the weeks immediately following the episode. However, significant increases at other times, which could not be attributed to <i>Casualty</i> .	Mixed	Not examined
Simkin et al (1995) ²⁶	United Kingdom	Attempted suicide	Examined effects of same episode of <i>Casualty</i> as Collins (1993) ²⁴ when it was repeated on 16 July 1993. Considered all cases of deliberate self-poisoning or self-injury presenting to the general hospital in Oxford in the three weeks prior to the episode and the three weeks subsequent to it. Used a log-linear model that controlled for gender, age group, time, season, year and drug. Administered questionnaire to those who presented after episode asking if they had seen the programme and, if so, whether they were influenced by it.	Raw numbers suggested increase in presentations in the three weeks immediately following the episode, but this effect was not statistically significant. Very few of those who responded to the questionnaire had seen the programme, and still fewer had been influenced by it.	No	Not examined
Hawton et al (1999) ²⁷ and O'Connor et al (1999) ²⁸	United Kingdom	Attempted suicide and completed suicide	Hawton et al (1999) examined effects of a different episode of <i>Casualty</i> (screened on 2 November 1996) in which an RAF pilot with multiple problems attempted suicide by ingesting 50 paracetamols. Considered all	Significant increase in presentations in the weeks immediately following the episode. Of those who presented in the three weeks after the episode, 20% had seen the broadcast and 4% said it had	Yes	Yes

INVESTIGATORS	COUNTRY	OUTCOME VARIABLE	METHOD	KEY FINDINGS	EVIDENCE FOR HARMFUL IMITATION EFFECTS	EVIDENCE FOR POSITIVE PREVENTIVE EFFECTS
			<p>cases of self poisoning presenting to accident and emergency services or psychiatric services in 49 UK hospitals in the three weeks prior to the episode (baseline period) and the three weeks subsequent to it (experimental period). Administered questionnaire that determined whether patients were <i>Casualty</i> viewers. <i>Casualty</i> viewers who presented during the experimental period were asked whether viewing the episode in question had influenced their knowledge and behaviour. Also considered completed suicides (including deaths due to undetermined cause and accidental deaths involving self-poisoning with paracetamol) that occurred in England and Wales during 1996.</p> <p>In an extension of this study, O'Connor et al (1999) sent questionnaires to a sample of the adult UK population one week after the broadcast and again 32 weeks later to test their knowledge of the effects of paracetamol.</p>	<p>influenced their behaviour. For some, the effect was positive (e.g. some patients avoided using paracetamol because the episode highlighted the risk of liver damage).</p> <p>No increase in completed suicides after the broadcast.</p> <p>Episode of <i>Casualty</i> increased the general public's knowledge of the effects of paracetamol.</p>		
Pell and Murdoch (1999) ²⁹	United Kingdom	Attempted suicide	Examined effects of same episode of <i>Casualty</i> as Hawton et al (1999) ²⁷ and O'Connor et al (1999). ²⁸ Considered trends in admissions and deaths attributed to all self-poisoning and paracetamol overdoses in Scotland (1995-1997).	Number of admissions for all self-poisonings decreased in November 1996. Number of admissions for paracetamol poisonings rose slightly, as did the number of deaths from self-poisoning, but both could be explained by chance variation. Deaths attributed to all self-poisonings and paracetamol poisonings varied widely by month.	No	Not examined
Veysey, Kamanyire and Volans (1999) ³⁰	United Kingdom	Attempted suicide	Examined effects of an episode of <i>Casualty</i> (screened on 15 February 1997) which depicted an incident of self-harm with ingestion of antifreeze. Considered suicide attempts reported to the National Poisons Information Service in London in month of	Significant increase in cases of self-harm with ingestion of antifreeze in the month in which the episode was shown.	Yes	Not examined

INVESTIGATORS	COUNTRY	OUTCOME VARIABLE	METHOD	KEY FINDINGS	EVIDENCE FOR HARMFUL IMITATION EFFECTS	EVIDENCE FOR POSITIVE PREVENTIVE EFFECTS
Schmidtke and Hafner (1988) ³¹	Germany	Completed suicide	episode and in each month of prior year. Used an ABA design to examine effects of 6-episode series depicting the railway suicide of a 19 year old male student, broadcast once in 1981 and again in 1982. Considered actual railway suicides in Germany between 1976 and 1984.	After each series, there was a significant increase in suicides involving the same method as that used by the student (jumping in front of a train). Effect lasted for at least 70 days, and was most marked among 15-19 year old males.	Yes	Not examined

Source: Pirkis and Blood (2001)^{4,36} and Gould (2001)³⁷

Table 2: Individual-level studies examining the relationship between video/film portrayal of suicide and opinions/attitudes regarding suicide

INVESTIGATORS	COUNTRY	OUTCOME VARIABLE	METHOD	KEY FINDINGS	EVIDENCE FOR HARMFUL IMITATION EFFECTS	EVIDENCE FOR POSITIVE PREVENTIVE EFFECTS
Steede and Range (1989) ³²	United States	Opinion re. likelihood of imitation	Presented 116 high school students with a videotaped vignette of a distressed high school student and asked them to put themselves in her position. Varied circumstances: (a) girl had friends who had recently died by suicide; (b) girl had friends who had recently died in a plane crash; (c) no details of extenuating circumstances. Asked to rate likelihood of various behaviours and complete Reasons for Living Inventory (RFL).	Only significant difference was that suicide group scored higher on the fear of social disapproval scale of the RFL.	Mixed	Not examined
Range, Goggin and Steede (1988) ³⁸	United States	Opinion re. likelihood of imitation	Presented 142 college students with a videotaped vignette of a distressed female high school student. Varied circumstances: (a) contagion group (told girl knew of two suicides in the community); (b) non-contagion group (not told of any extenuating circumstances). Asked to rate likelihood of various behaviours, either as actors (instructed to imagine that they were the girl) or as observers (instructed to rate the girl on the tape).	Those in the contagion group were more inclined to rate the girl as likely to commit suicide or run away than those in the non-contagion group. Actors were more likely to blame situational factors (especially the girl's parents) than observers. Contagion/actors more likely to rate suicide as the outcome than any other group.	Yes	Not examined
Biblarz et al (1991) ³⁴	United States	Attitudes towards suicide	Presented 119 non-suicidal university students with one of three films: (a) suicidal content; (b) violent content; (c) neutral content. Assessed attitudes towards suicide and arousal levels pre- and post- viewing.	Participants no more likely to have positive attitudes towards suicide as a result of watching the suicide film, although their arousal levels were temporarily increased after doing so.	No	Not examined

Source: Pirkis and Blood (2001)^{4,36} and Gould (2001)³⁷

Chapter 4: Discussion

Summary of findings

The literature on the nature and extent of suicide portrayal in films suggests that such portrayal is widespread. It has increased over time, and depictions of the act have become lengthier, more extensively modelled, more likely to involve firearms, and more romanticised, glorified and condoned. Young people are disproportionately represented in films with a suicide theme.

The literature on the impact of fictional on-screen suicides on actual suicidal behaviour is equivocal, but provides some support for the Werther effect. Although the majority of studies have demonstrated that completed and attempted suicide rates show unexpected rises after such screenings, or have reported mixed results (e.g., increases in some locations and not others, or for some sub-groups and not others), some have found no evidence of any effect. The literature on the impact of video footage of fictional suicidal characters on attitudes and opinions regarding suicide produces contradictory findings.

The majority of the above studies have focused on the potential for harm, rather than the potential for good. However, there are a few that have considered whether fictional portrayals of suicide can have positive preventive effects. Once again, the evidence from these studies is equivocal.

Interpreting the findings

The equivocal results described above beg the question of how these findings can be reconciled. One explanation for the variable findings may lie in the subtle methodological differences between studies. As noted earlier, the ecological studies have adopted essentially the same design, but some are methodologically stronger than others. For example, replication studies have often improved on the design of original studies (e.g., Berman's¹³ replication of Gould and Shaffer's¹⁰ study excluded two of the original films, on the grounds that the post- period for one overlapped with the pre- period for the other, and Kessler and Stipp⁹ reclassified the date of screening of soap operas in their replication of Phillips's⁸ study, having observed problems with the initial classification). Similarly, most studies have used aggregated weekly or monthly before-and-after data and failed to control for seasonal and other effects, rendering it difficult to determine the chronology of events and/or to infer a causal relationship,^{9, 39} but there are some exceptions (e.g., Hawton et al²⁷ used a more sophisticated time-series regression analyses to deal with these issues). Likewise, many of these studies are subject to the 'ecological fallacy', or the inability to determine whether any increase in completed or attempted suicide rates occurring at group level can be explained by such behaviour occurring in individuals who actually viewed the given program^{13, 26, 27, 40} (exceptions are the studies by Hawton et al²⁷, Ostroff and colleagues,^{15, 16} and Simkin et al,²⁶ all of which made an effort to determine whether those identified as suicide attempters actually saw the relevant stimulus program).

Some of these problems are overcome in the individual-level studies,³²⁻³⁴ where, for example, the experimental design affords certainty that participants have seen the relevant film. However, the individual-level studies face methodological problems of their own, the most significant of which is that they consider attitudes and opinions only, rather than actual suicidal behaviour. To this extent, they can at best provide answers regarding the influence of fictional media on suicidal intent.

A more likely explanation for differences in the studies' findings than methodological nuances, however, is that under some circumstances on-screen portrayals of suicide do have an impact and under some circumstances they do not. Such a position is consistent with decades of research which finds media effects only for some people under some circumstances or contexts at some times. As Gould³⁷ says, 'It is unrealistic to expect a monolithic effect from a heterogeneous set of broadcasts' (p. 209).

Most studies have taken a very blunt approach, treating people exposed to film or television portrayals of suicide as passive audiences, failing to explore issues such as how people extract meaning from information, and ignoring the way in which interactions between characteristics of the screening, characteristics of the audience and characteristics of the social environment may influence the likelihood of imitation¹³ or what the longer-term consequences might be. Without further work to explicate these characteristics and the interactions between them, it is difficult to be clear about the circumstances that promote harmful imitative behaviours or have a positive preventive impact. The ways in which various audiences – particularly those who may be said to be at risk – might interpret, misinterpret, ignore or resist information about suicide portrayed in fictional cultural forms remains relatively unexplored.

Theoretical explanations

To the extent that the evidence suggests that, under certain circumstances, film and television portrayals of suicide can have imitative or preventive effects, it is worth considering the mechanism by which these effects might occur. Various theories have been posited to explain the phenomenon, but the most widely accepted of these is social learning theory.⁴¹

Under social learning theory, the imitator identifies with the model because the two are similar ('horizontal identification') or because the model is revered in some way ('vertical imitation'). The imitator may also be influenced by the degree of reality of the portrayal. He or she may also be influenced by the extent to which the model's behaviour is reinforced. Accordingly, if a fictional suicide is glamorised, romanticised or condoned, copy-cat events may be triggered. Conversely, if the consequences of the suicide for the family are described in detail, or if the potential negative side-effects of a particular method are shown, there may be opportunities for preventive education.^{42,43}

Future directions

There is a clear need for further research in this area. It would be desirable to conduct a formal meta-analysis of the studies that have been conducted to date, pooling their results to reach a definitive conclusion about the strength of any relationship between fictional portrayal of suicide and actual suicidal behaviour. Ideally, the meta-analysis should involve closer consideration of the stimulus film and television dramas, such that each is viewed and systematically rated on criteria related to characteristics of the portrayal (e.g., how the model is represented, the extent to which the suicide act is modelled, glamorised, romanticised, approved and/or otherwise positively reinforced, whether any consequences of the suicide are depicted). In this way, the meta-analysis could consider the impact of particular variables associated with evidence of imitation. In this review, however, classification of the film and television dramas by these characteristics was not possible because the papers describing the relevant studies do not give sufficient detail about the broadcast stimuli. Some precedents exist for this sort of classification work, including the descriptive work of Jamieson⁵ (described above), and a study by Castellanos et al⁴⁴ (cited in Gould³⁷), which involved a content analysis of the four televised suicide dramatisations used in the original study by Gould and Shaffer.¹⁰

In addition to synthesising the findings of overseas studies, it would also be useful to explore the extent to which these findings can be generalised to Australia. While there is no reason to believe there would be vast differences in reception across Western cultures, especially given the global nature of contemporary film and television products, Australian research would add to the cumulative knowledge base. This research would involve replicating some of the more methodologically robust descriptive and analytical studies in this country and adapting them to the Australian context.

Finally, it would be useful to move beyond the media 'effects tradition', to broaden the scope of research. Socio-cultural approaches to health communication have much to offer in this regard, since they recognise that individuals' understandings of issues such as suicide are constructed as part of social and cultural practices, and have a historical dimension.⁴⁵ The fundamental concern with the body of studies reviewed here relates to the dominant perspective of viewing communication as a process of linear transmission of information (sender to receiver). Contemporary media research goes beyond looking at effects to consider the production of meaning, sub-textual discourses and the sometimes unpredictable responses of various audiences in differing contexts. It relies primarily on qualitative methods such as discourse analysis to explore meanings.⁴⁶ Investment in research that is underpinned by the cultural studies paradigm could help to clarify the interactions between characteristics of the screening and characteristics of the audience which may influence the likelihood of harmful imitation or positive preventive impacts. Quantitative survey research, content analysis and experimental methods alone cannot explore these understandings. As a consequence, the studies that have been conducted to date reveal little about the complex and often changing dynamics of how various audiences interpret and negotiate meanings about suicide presented in fictional television broadcasts and films.

Conclusions

According to social learning theory, there is good reason to expect that film and television dramas depicting suicide could lead to imitation acts: such portrayals are widespread, often send a message reinforcing suicide as a course of action, often include graphic footage of the method of suicide, and often appeal to young audiences. Scientific studies that have explored the hypothesis that such a relationship exists have produced equivocal results, but over half of these studies have suggested that there is evidence of a harmful imitation effect. Not all studies have limited themselves to considering negative consequences; some have also explored whether film and television portrayals of suicide could have an educative or preventive effect, and again the findings are equivocal. Methodological differences may explain some of the contradictory findings, but the real explanation probably lies in the interaction between the characteristics of different screenings and the characteristics of different audiences and the social environment.

Further research in this area is warranted but, in the meantime, there is a need to err on the side of caution. Mental health professionals and suicide experts should collaborate with film makers and television producers to try to balance entertainment against the risk of harm, and to promote opportunities for education. Sensitive portrayal of suicide that does not glorify or romanticise it and does not provide visual detail of the exact method is likely to be preferable, as are depictions that stress consequences for others, potential hazards of particular methods, and sources of help for vulnerable viewers.

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