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Title

Calls to helplines in Australia following media reports of Robin Williams' suicide

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Abstract

Objective

In the US, there was an increase in calls to helplines following media reporting of Robin Williams' suicide. We aimed to determine whether this was the case in Australia.

Method

The helpline services Lifeline and Beyond Blue provided us with weekly data on calls received for 2013-2015. We conducted interrupted time series regression analyses to determine whether there was an increase in the average weekly number of calls received by each helpline in two periods after the story about Williams' suicide broke (one week and four weeks).

Results

We found strong evidence of an increase in calls to Lifeline (Incident Rate Ratio [IRR]=1.13; 95% Confidence Interval [CI]=1.02-1.25; $p=0.016$) and Beyond Blue (IRR=1.32; 95%CI=1.09-1.59; $p=0.004$) in the week after Williams' suicide was first reported. We found no evidence of higher-than-normal call volumes for Lifeline (IRR=1.04; 95%CI=0.99-1.10; $p=0.104$) or Beyond Blue (IRR=1.10; 95%CI=1.00-1.22; $p=0.058$) over the four weeks following Williams' death, however, suggesting that calls levelled out over this period.

Conclusion

Suicide prevention experts and media professionals must work together to minimise the negative impacts of reports on suicide and maximise their positive ones. In cases where the story is likely to receive extensive international coverage, it may be important for local media to encourage help-seeking.

Keywords

Media, reporting, suicide, Robin Williams, helplines

Introduction

There is strong international evidence that prominent and explicit media reports of individual suicides can lead to so-called 'copycat' acts (Pirkis, Blood, Sutherland, & Currier, 2018; Sisask & Varnik, 2012), particularly when the subject of the report is a celebrity (Niederkrotenthaler et al., 2012). The reporting of Robin Williams' suicide is a case in point. When the famous actor and comedian took his life by hanging on 11 August 2014, the US reporting was extensive and of variable quality, with a significant amount of coverage sensationalising his suicide and describing the method he used in detail (Carmichael & Whitley, 2019). Fink, Santaella-Tenorio, and Keyes (2018) showed that there were 10% more suicides in the US in the subsequent five months that would have been expected on the basis of pre-existing trends, and Ramchand et al. (2019) reported similar findings over one month. This evidence suggests that the reporting of Williams' death contributed to these excess suicides (Fink et al., 2018; Ramchand et al., 2019).

Suicide is not the only endpoint that has been considered in studies looking at the impact of the media reporting of Robin Williams' suicide. Ramchand et al. (2019) also considered a second set of outcomes related to help-seeking. They observed increases in calls to two major US helplines (the National Suicide Prevention Lifeline and the Veterans Crisis Line) and visits to two prominent US suicide prevention websites (the Suicide Prevention Resource Centre [SPRC] and Suicide Awareness Voices of Education [SAVE]) in the month after Williams' suicide. An increase in suicides is indisputably a bad outcome of sub-optimal reporting, but an increase in help-seeking could be regarded as negative or positive. In line with the findings on suicide, it might suggest that reporting has led to additional people reaching a point of suicidal crisis. However, it might also indicate that at least some people may have been prompted to reach out for help rather than act on their suicidal thoughts.

In Australia, we found that the reporting was far more considered and generally in line with the local *Mindframe* guidelines on media reporting of suicide (Pirkis et al., Forthcoming), but we still found an increase in suicides of the same magnitude to that observed in the US (10% over five months) (Pirkis et al., 2019). Likewise, Whitley and colleagues found that reporting in Canada largely showed good adherence to the Canadian *Mindset* guidelines on responsible reporting of suicide (Creed & Whitley, 2017), but that, despite this, there was a demonstrable increase in suicides (16% over five months) (Whitley, Fink, Santaella-Tenorio, & Keyes, 2019).

We and our Canadian colleagues interpreted our respective findings as suggesting that the Australian and Canadian public may have been exposed to extensive reports from US media outlets via the Internet, as

well as to coverage on social media, and that these may have ‘swamped’ the relatively good reporting in our countries (Pirkis et al., 2019; Whitley et al., 2019). We also noted that although newspaper reports of Williams’ death generally adhered to the *Mindframe* guidelines, they performed relatively poorly against the criteria to do with pointing vulnerable readers to sources of help, with only two fifths provided information on help services (Pirkis et al., Forthcoming). Creed and Whitley (2017) made a similar observation in Canada, finding that information a recommendation about telling suicidal individuals where to go for help was only adhered to in one quarter of all reports. Other contextual influences may also have been at play in Australia and Canada. Hanging (the method of suicide used by Williams) is the most common suicide method in these two countries but relatively less common in the United States (where firearm suicides dominate), so reports of Williams’ suicide which may otherwise have been may have exerted a proportionally greater influence in Australia and Canada, even if they were otherwise guideline-adherent.

On the positive side, however, a number of the Australian reports that did offer information on help services not only provided helpline numbers but also presented the viewpoints of personnel from two of our most prominent helplines, Lifeline (<https://www.lifeline.org.au/>) and Beyond Blue (<https://www.beyondblue.org.au/>), all of which made reference to these services being available to anyone who might be struggling. Lifeline is Australia’s largest telephone helpline. Its vision is *‘for an Australia free of suicide’*, its tagline is *‘Crisis Support. Suicide Prevention’* and it provides *‘... all Australians experiencing a personal crisis with access to 24-hour crisis support and suicide prevention services.’* Beyond Blue’s vision is that *‘all people in Australia achieve their best possible mental health’*, its Support Service tagline is *‘Support. Advice. Action’* and it indicates that *‘We’ll be there to listen, provide information and advice, and point you in the right direction so you can seek further support ...’* The reports that mentioned Lifeline typically noted that there had been an increase in calls to the organisation immediately after the story about Williams’ suicide broke. The reports that mentioned Beyond Blue often included direct quotes from Georgie Harman, the organisation’s Chief Executive Officer, who is well-known and well-respected (Pirkis et al., Forthcoming).

We undertook the current study in order to verify whether there was in fact an increase in calls to both Lifeline and Beyond Blue in the aftermath of the reporting of Robin Williams’ suicide, and, assuming there was, to quantify that increase.

Method

Lifeline and Beyond Blue both provided us with weekly data on the numbers of calls they received for 2013, 2014 and 2015. Lifeline provided us with data from 7 January 2013 (the beginning of the first full week of that year) to 28 December 2015 (the end of the last full week of that year). For procedural reasons, Beyond Blue provided us with data for a period that began and ended slightly later (4 February 2013 to 25 January 2016). Because calls to both of these helpline services are anonymous, no information was available on the age and sex of callers.

We used a standard approach to model the effects of events (interventions, or, in this case, exposures) in time (Bernal, Cummins, & Gasparrini, 2017). We conducted interrupted time series regression analyses where the outcome was the number of calls received separately by Lifeline and Beyond Blue each week, and the exposure was the reporting that occurred during two different time periods after the date of Robin Williams' suicide. The first period was one week (11 August – 17 August 2014; total calls received by each service for that week) and the second was four weeks (11 August – 8 September 2014; average weekly calls received by each service over those four weeks). In each case, dates before and after this period range were coded 0 and dates within the range were coded 1, so all of the available data contributed to determining whether there was an excess in the number of calls in the one-week and four-week period after Williams' death. The model included terms for time (entered as a fractional polynomial to model any possible non-linear long-term trends) and for short-term seasonality trends (entered as Fourier terms – i.e., pairs of sine and cosine functions). This was fit using a generalised linear model using the Poisson family with a log-link function. After fitting models for the overall number of weekly calls for each period, the model parameters were used to estimate the excess calls during the given period. For models of the one week period, this was estimated using marginal effects. Specifically, all observations retained their observed values except the one week exposure period, which was initially set to 0 for all observations, and a prediction was made of the expected number of calls using the model coefficients. This process was repeated with this variable then set to 1. The difference between the two predicted number of calls was our estimate of the excess calls in the one week period. We repeated this for the four week exposure period, scaling up the estimated number of excess calls per week so that it represented the excess calls over the four weeks.

It is worth noting here that we chose to use the absolute number of calls as our outcome measure, rather than trying to calculate a call rate. To do the latter would have required us to combine a population denominator with our event-based numerator, which would have created issues. In any case, the underlying population size did not change markedly in the three year study period, and, as noted above, our statistical approach controlled for time trends.

Results

Figure 1 shows that, in total, Lifeline received 3,108,638 calls between 7 January 2013 and 28 December 2015 and Beyond Blue received 271,073 calls between 4 February 2013 and 25 January 2016. Figure 1 also shows that there was an increase in the number of calls received by both helpline services in the week immediately after the story about Robin Williams' suicide was first reported. The total number of calls received by Lifeline that week was 22,940, which was higher than the average weekly number of calls in the pre-period (18,971) and the post-period (20,972). The total number of calls received by Beyond Blue that week was 2,482, which was also higher than the average weekly number of calls in the pre- and post-periods (1,452 and 2,022, respectively). Figure 1 also provides suggestive evidence of an increase in the average number of weekly calls in the four weeks after Williams' suicide, with the number for Lifeline being 21,497 (compared with 18,971 and 20,979 in the pre- and post-periods) and the number for Beyond Blue being 2,129 (compared with 1,452 and 2,023). The apparent increase in the average number of weekly calls in the week-long and four week-long periods following Williams' suicide requires careful interpretation in the context of existing trends.

Our interrupted time series regression enabled us to examine the evidence for any increase in calls to each of the helplines in a more controlled way because it included non-linear terms for time and seasonality. Table 1 shows the results of this analysis. It indicates that there were significant increases in calls received by Lifeline (Incident Rate Ratio [IRR]=1.13; 95% Confidence Interval [CI]=1.02-1.25; $p=0.016$) and Beyond Blue (IRR=1.32; 95%CI=1.09-1.59; $p=0.004$) in the week after Robin Williams' suicide was first reported. This equated to 2,568 additional calls being received by Lifeline, and 547 additional calls being received by Beyond Blue. The apparent increase in calls over the full four weeks after Williams' suicide was not statistically significant for Lifeline (IRR=1.04; 95%CI=0.99-1.10; $p=0.104$) or Beyond Blue (IRR=1.10; 95%CI=1.00-1.22; $p=0.058$).

Discussion

We observed statistically significant increases in calls to Australia's two best-known helplines in the week after Robin Williams' suicide was first reported; calls to Lifeline increased by 13% and calls to Beyond Blue increased by 32% over that period. When we looked at the average number over the four weeks following Williams' death, however, we found that it was not significantly higher than normal, suggesting that the increase in calls levelled out over this longer period.

There may be several explanations for these findings. These reflect the potential influence of Australian and other media and relate to calls to helplines as negative or positive outcomes. The first explanation is that Australian media reporting of Robin Williams' suicide led to heightened levels of distress and prompted some people to reach a point of crisis. The increase in calls to helplines could have been a proxy for this outcome. We believe that this is unlikely to be the full reason, given that Australian newspaper reports were largely consistent with our *Mindframe* guidelines (Pirkis et al., Forthcoming), although we acknowledge that certain elements of these reports that are not reflected in the guidelines may have had an influence. The guidelines make quite concrete suggestions about avoiding discussing the method of suicide, using non-stigmatising language, making sure that the story is not prominently placed and so on. They are silent, however, on the kinds of narratives that may be helpful or unhelpful. We observed that a common narrative was that Williams, despite his successes, was battling mental illness and other major life challenges and therefore took his own life. Less common, although not completely absent, was the narrative that older men who are struggling don't always feel able to reach out to others and encouraging them to do so can prevent unnecessary deaths. The former may have been less helpful than the latter and may have contributed to community distress.

A second possible explanation is that the increased calls to helplines did reflect a heightened level of community distress, but that this was caused by mass exposure to much poorer reporting in traditional media from the US and potentially other countries, and unfettered, unhelpful discussions on social media (Creed & Whitley, 2017). There were certainly multiple opportunities for Australians to access online reports of the kind that have been shown to lead to adverse outcomes. As noted above, we hypothesised that this may have been responsible for the observed increase in suicides in Australia in the aftermath of Robin Williams' suicide (Pirkis et al., 2019), and Whitley et al. (2019) put forward a similar explanation for their parallel findings in Canada. In Canada, other factors may also have been in play, given that the magnitude of the increase was higher than that in the US or Australia (16% versus 10% and 11%, respectively).

A third explanation is that the generally positive Australian media reporting of Robin Williams' suicide prompted some people who had already been struggling with suicidal thoughts themselves to take constructive action and call a helpline. Again, there are reasons to suggest that this may at best only partially explain the findings because, as noted above, only two fifths of all reports provided information on help services (Pirkis et al., Forthcoming). Having said this, those that did may have had a positive impact. Those that mentioned the increase in calls to Lifeline immediately after the story about Williams' suicide may have normalised the action of calling the service, and those that quoted Beyond Blue's Chief Executive Officer, Georgie Harman, may have encouraged help-seeking among readers who viewed her as a trusted voice (Pirkis et al., Forthcoming).

A fourth explanation is analogous to the third except that it was the international media reporting rather than the Australian reporting that prompted people to seek help. We believe that this is unlikely, partly because of the demonstrably poorer quality of international reporting (Carmichael & Whitley, 2019), and partly because the international reports would not have included reference to Lifeline or Beyond Blue but rather to US or other international helplines. We know that reporting of other events in Australian media has led to increases in calls to Lifeline and Beyond Blue (Thienel, Bryant, Skehan, Hazel, & Tynan, 2019), but it is difficult to see how international reports would have had this direct impact.

On balance, it seems more likely that the first three of these explanations contributed to our findings in some way. It is plausible that the Australian media exerted both negative and positive impacts, and likely that US media and online activity exerted negative ones. This is consistent with findings from a study by Hoffner and Cohen (2017) which showed that the nature of specific stories about Robin Williams' suicide determined their impact. They found that exposure to stories about Williams' suicide that contained 'informational' content (e.g., content that described the treatment of depression or the prevention of suicide) were associated with help-seeking intentions whereas those with 'stigmatising' content (e.g., content that suggested that suicide is a selfish act or that people with depression should be able to 'snap out of it') were not.

It is worth reiterating here that we used data on the number of calls received by helplines, rather than the number of calls answered. This is important because many helplines (including Lifeline and Beyond Blue) are unable to answer all of the calls they receive. The media has a role to play in mitigating the risk of copycat acts associated with reporting of suicide, and it is positive if this role is being realised through by stories that include helpline contact details. However, this positive impact may be reduced if a demand is generated that helpline services then cannot meet. Indeed, those who are at heightened risk of suicide may reach a 'tipping point' if their calls are unanswered. Ramchand et al. (2019) commented on this when they reported their findings on increases in calls to major helplines in the US, noting that the number of calls rose by up to 300% but that the average number of calls that could be answered decreased from 71% to 57%. In our study we reported on the number of calls received for consistency because we had these data for both Lifeline and Beyond Blue. We did, however, have additional data on calls answered for Beyond Blue. Beyond Blue's calls answered also showed an increasing trend in the week following the media's reporting of Williams' suicide, but this increase was not statistically significant (IRR=1.18; 95%CI=0.99-1.40; p=0.073).

Our study had certain limitations which must be acknowledged. Firstly, and most importantly, the ecological nature of the current study means that we cannot make causal claims, although it should be

noted that we used various statistical refinements to allow us to eliminate some competing explanations. For example, we controlled for seasonality and longer term time trends in our statistical approach. We have presented some potential explanations that might underpin our findings above, but these should be interpreted in the light of the fact that we cannot determine whether those who made calls to the two helplines following the reporting of Robin Williams' suicide had seen the relevant reports in local or international media.

Secondly, and on a related note, we are unable to say anything about other spikes in calls to the two helplines that may have occurred during our study period. There may have been other instances where calls increased significantly after a particular event, but we did not have specific hypotheses about these so we felt that identifying them and looking for explanations in a post-hoc way would have been inappropriate.

Thirdly, we are unable to say anything about the characteristics of callers to Lifeline or Beyond Blue. We know that certain sociodemographic characteristics confer risk for suicide (e.g., being male) (Huang, Ribeiro, Musacchio, & Franklin, 2017), and that others (e.g., being female) increase the likelihood of help-seeking (Nam et al., 2010). It was not possible for us to take these sorts of characteristics into account in our analyses because the calls data that were available to us were anonymous.

Finally, caution should be exercised in generalising our findings on the media reporting of a single celebrity's suicide to reporting on other suicides. However, we note that our study adds to a body of literature that suggests that reporting of suicide in general can have an impact on the behaviours of others (Pirkis et al., 2018; Sisask & Varnik, 2012), and that reporting of suicides by celebrities is particularly influential in this regard (Niederkrotenthaler et al., 2012). It has been argued that it may be the extent and prominence of coverage that underpins the 'celebrity effect' (Phillips, Carstensen, & Paight, 1989) but it is difficult to disentangle this because celebrity suicides are inevitably more likely to be reported, and reported widely, than suicides by non-celebrities. It should also be noted that Robin Williams was a particular type of celebrity – an actor and comedian – and that reporting of suicides by those who have attained fame as entertainers and politicians is more likely to be associated with suicidal behaviour than that of suicides by other types of celebrities (Stack, 2005). In addition, our outcome of interest was calls to helplines, not suicides, and reports of celebrity suicides may play out differently here.

These limitations aside, our study provides evidence that there was an increase in calls received by two of Australia's best-known helpline services in the immediate aftermath of Robin Williams' suicide. We know from elsewhere that media reports of celebrity suicides are particularly influential, and that they can

trigger imitative acts of self-harm. We also know that they are highly likely to be reported, and reported prominently, because they are 'in the public interest'. Messages that encourage help-seeking and point distressed individuals to helpline services may be particularly important in mitigating this risk, although we acknowledge that studies in this area have not yet demonstrated that media reports that encourage help-seeking are associated with a reduction (or even no increase) in suicide rates (Niederkröthaler et al., 2010; Sinyor et al., 2018). In cases where the story is likely to receive extensive international coverage, and – as in the case of Robin Williams' suicide – is likely to cause significant levels of community distress, it may be doubly important for local media to deliver these sorts of messages, assuming that helpline services have the capacity to cope with an increase in calls.

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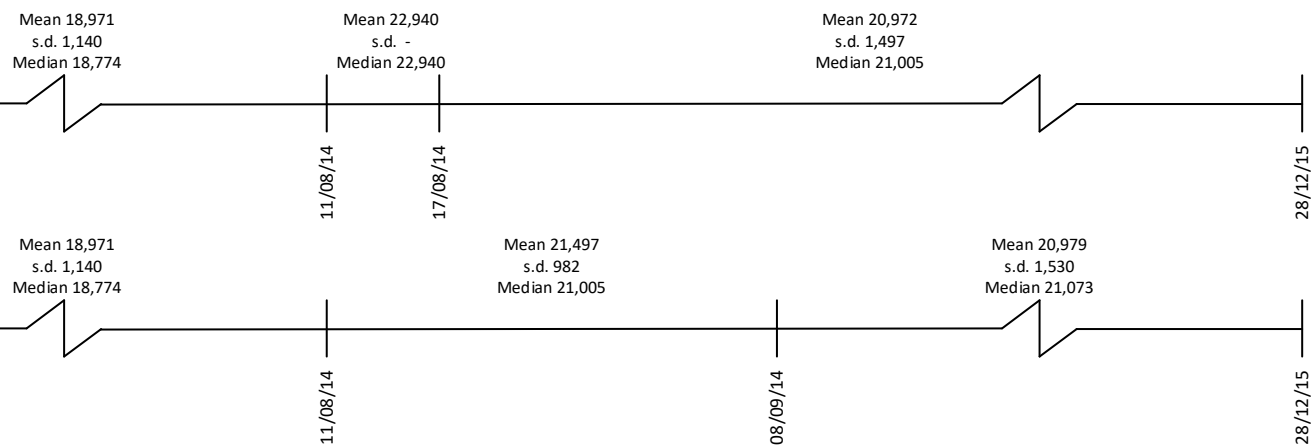
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Figure 1: Mean number of weekly calls received by Lifeline and Beyond Blue in the one week and four week periods following Robin Williams's suicide, compared with pre- and post- periods

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LIFELINE



BEYOND BLUE

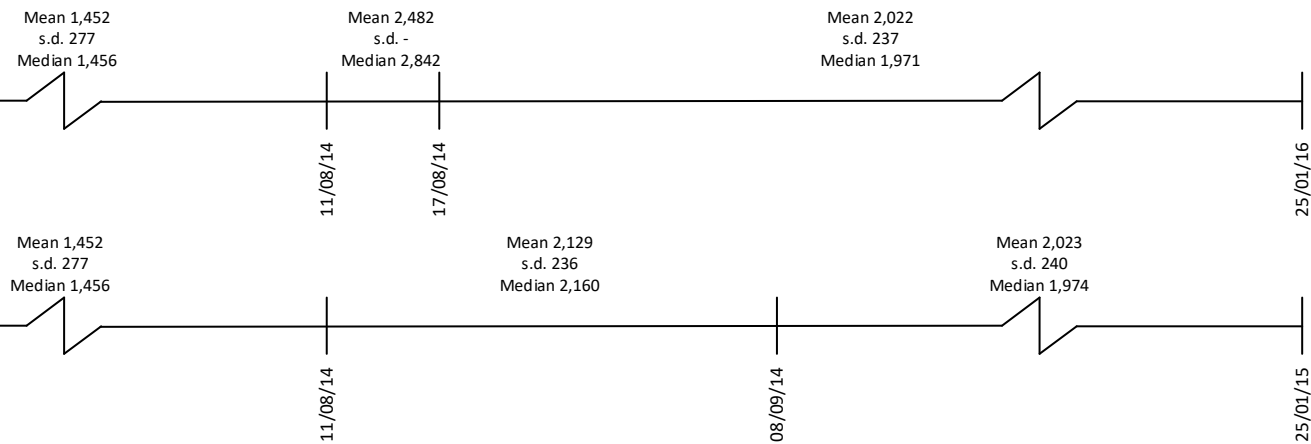


Table 1: Change in calls received by Lifeline and Beyond Blue following Robin Williams' suicide^a

		Relative change in calls received in the week/month following Robin Williams' suicide IRR^c (95% CI^d)	Absolute change^b in calls received in the week/month following Robin Williams' suicide Number (95% CI^d)
Lifeline	One week	1.13 (1.02 to 1.25)	2,568 (354 to 4,781)
	Four weeks	1.04 (0.99 to 1.10)	3,398 (-773 to 7,568)
Beyond Blue	One week	1.32 (1.09 to 1.59)	547 (119 to 976)
	Four weeks	1.10 (1.00 to 1.22)	709 (-59 to 1,476)

- a. Models controlled for long term time trends and seasonality
- b. Absolute change extrapolated from relative change in the regression model
- c. Incident Rate Ratio
- d. Confidence Interval