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How does news coverage of suicide affect suicidal behaviour at a high-frequency location? A 7-year time series analysis

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ABSTRACT

Introduction News reporting of suicide can have a significant influence on suicidal behaviour in the general population, especially following the death of a well-known individual. By comparison, the impact of reporting on suicides at well-known, 'high-frequency' locations is less well understood. We investigated the relationship between news coverage of suicide and incidents at a high-frequency coastal location in the UK over a 7-year period.

Methods We analysed bidirectional associations (with daily and weekly lags) and Granger causality between suicide-related news in the UK (n=38 595, of which 789 focused on cliff locations) and suspected suicides (n=278) and crisis interventions (n=3050) at the site between 1 January 2017 and 31 December 2023. Separate subanalyses explored associations with repeat coverage and with headlines featuring explicit location/method details.

Results While coverage of incidents at the study site and other coastal locations represents a small and decreasing proportion of all UK news of suicide, 51% of all cliff-related news focused on the study site, often explicitly identified in the story's headline (81%). There were significant but small (r<0.3) correlations between the volume of news coverage (particularly when method-specific and location-specific) and suicidal behaviour at the site, with fatalities increasing in the immediate aftermath of reporting. This effect was strongest in 2018–2019 (which had the greatest volume of reporting and repeat coverage) but failed to reach significance in 2020–2023, when there were fewer reports, less repeat coverage and no headlines referring to multiple deaths at the site.

Conclusions Findings underscore the importance of continued efforts to monitor and improve the quality of news and other media portrayals of suicide. Follow-up studies, including qualitative research with people with lived/living experiences of suicide, could further explore how different types of news stories and wider narratives might contribute to increases—and potentially decreases—in suicides at high-frequency locations.

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Associations between news coverage of suicide and increases in suicidal behaviour have been well documented. However, recent evidence suggests that their relationship may be more complex than originally thought and limited to specific types of reports.
⇒ A recent meta-analysis found that reporting of celebrity suicides can have a meaningful influence on suicides in the general population. In contrast, general reporting of suicides appears not to be associated with suicide—but fewer studies have investigated their impact.
⇒ Media portrayals that describe suicide methods have been associated with increases in suicides, but the impact of reports focusing on suicide locations—including 'high-frequency' locations—is less well understood.
⇒ We therefore investigated associations between general reporting of suicide as well as method-specific and location-specific news coverage, on fatal and non-fatal suicidal behaviour at a high-frequency location in the UK.

WHAT THIS STUDY ADDS

⇒ We identified small but significant associations (all r<0.3) between news coverage of suicide (particularly when method-specific and location-specific) and suicidal behaviour at the study site. This includes increases in suspected suicides in the immediate aftermath of reporting (generally within a day or 2 and no more than a week later) and in crisis interventions in response to increased general reporting (regardless of method/location details).
⇒ Our findings also point to the importance of the volume of reporting and repeat coverage of 'high-impact' stories in assessing the potential impact of news coverage. When reports of 'murder suicides' were excluded from the analysis, associations between the volume of coverage and incidents at the site remained significant but over a shorter time span.

INTRODUCTION

Research has repeatedly shown that media reporting of suicide can influence suicidal

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ Guidelines on responsible reporting of suicides are an important component of national suicide prevention strategies worldwide. It is therefore crucial that these reflect high-quality, up-to-date evidence, relating to a range of reporting.

⇒ Our findings have implications for reporting on suicides at high-risk locations, and follow-up studies to better understand the influence of different story types and wider narratives on different audiences.

behaviour and lead to imitative acts, particularly when the coverage is extensive and sensationalist and when overt description of the method(s) of suicide is included.[1]

The association between suicide reporting in the media and suicide appears to be particularly strong following coverage of a celebrity suicide, especially when the suicide method used by the celebrity is reported.[2] By comparison, the impact of reports focusing on well-known locations (as opposed to well-known individuals) has received less attention in the literature. An important exception is an Austrian study (and follow-up research) which highlighted significant decreases in suicides and attempts on the Vienna underground railway system following the introduction of guidance on responsible reporting of such deaths.[3–5]

Current international media guidelines explicitly warn against 'naming or providing details of the site/location [of a suicide]',[6] as this is feared to affect the number of subsequent suicides at the same location. As recommended by the Samaritans' media guidelines for reporting suicide, 'don't refer to a specific site or location as popular or known for suicides, for example, 'notorious site' or 'hot spot' and refrain from providing information, such as the height of a bridge or cliff'.[7]

These and equivalent guidelines in other countries do not, however, suggest a blanket ban on media coverage of suicide. A growing body of evidence suggests that media reports can (also) have beneficial effects, when focused on stories of hope and recovery.[8] In other words, 'media reporting of suicide can lead to subsequent increases in suicidal behaviours *if* the reporting is not consistent with best practices' ([6]; emphasis added).

The current study aimed to further understand the relationship between news reports and suicidal behaviour at the location with the highest frequency of suicides in the UK. Using suicide news data and information about suspected suicides and crisis interventions at this coastal site, we explored daily and weekly associations over a 7-year period. In addition to analyses based on the volume of reporting, we investigated associations with coastal suicide news stories featuring explicit method and/or location details in the headline and following extensive coverage of single, high-profile incidents. Both types of reporting are actively discouraged in national and international media guidelines[6 7] and were therefore hypothesised to have a greater impact on suicides and life-saving interventions at the location. Finally, following evidence that 'murder suicides' are especially likely to receive extensive and sensationalised coverage,[9–11] we explored the impact of news coverage excluding such reports, to distinguish their influence from that of other news stories.

MATERIALS AND METHODS

Data sources

Our data set comprised daily time series data from 1 January 2017 to 31 December 2023, pertaining to:

News of suicides and suicide attempts in the UK press (both print and online)

To extract this information, we used the Samaritans' media monitoring database which since 2012 records items in the UK online and print news featuring the word suicide and related key terms (eg, attempted suicide and self-harm but excluding suicide bombings) based on electronic press clippings supplied on a daily basis by a specialised news monitoring service. Each item is then coded by trained staff for identifying information (eg, the name of the specific newspaper and article title) and descriptive information (eg, the date of the article; details of its content and genre, including method of suicide). Based on adherence to media guidelines (eg, whether the article includes excessive detail of the method or methods used), each item is also rated for quality. We have shown such ratings to have good inter-rater reliability in a previously published report.[9]

For the current study, we carried out some additional coding of this database, to identify all news stories relating to cliff suicides and to specific coastal locations in the UK and internationally. We also recoded the headlines of all coastal suicide news to identify those which included explicit method and/or location details and examined patterns of repeat coverage in relation to the study location, based on both the weekly volume of stories and repeat coverage of specific incidents.

Suicidal incidents at the study site

We were granted access to anonymised information about cliff-related incidents at the study site, by the date of the incident. This included data on suspected suicides (as recorded in the County's Real-Time Surveillance System[12]) as well as information about crisis interventions. The latter were made and recorded by an established search and rescue charity which regularly patrols the site and responds to emergency calls locating anyone at risk and individuals who present to the location in distress.

Data analysis

Following initial descriptive analyses (eg, to identify the yearly number and percentage of news items on (1) all suicidal behaviour, (2) all cliff suicides and (3) suicidal behaviour at the study site and (4) immediately neighbouring cliffs), we conducted a series of correlations (with daily and weekly lags) to explore the relationship

between news coverage of suicide and (1) suspected suicides at the study site and immediately adjacent cliffs and (2) crisis interventions at the study site.

We conducted tests of seasonality and autocorrelation of the data, to ensure the time series data were stationary and suitable for using Granger causality tests.[13]

Finally, we used Granger causality to assess whether temporal changes in suspected suicides, crisis interventions and media reporting predicted subsequent temporal changes in each other. Granger causality is a statistical hypothesis test to determine whether time series Y can be better predicted using the histories of both time series X and Y than it can by using the history of Y alone (ie, whether time series X 'Granger-causes' Y). The analysis gives a p value and a lag value which is the number of time intervals of a specified unit (eg, days, weeks) after which changes in X are seen in Y. A 0.05 significance level (ie, $p<0.05$) was adopted in all statistical tests. We corrected for multiple testing using the Benjamini-Yekutieli correction, to control for the false discovery rate in multiple hypothesis testing when the tested hypotheses are not independent.

Separate subanalyses were then carried out to explore associations (1) with reports which included explicit method and/or location details in headlines; (2) over periods of greater and lesser repeat coverage (2018–2019 vs 2020–2023); and (3) excluding reports of murder suicides.

Patient and public involvement

Patients and the public were not involved in the design, conduct or dissemination of the study.

RESULTS

Descriptive analysis of yearly news and incident data

Table 1 below provides a yearly breakdown of the number of suspected suicides and crisis interventions at the study site and immediately adjacent cliffs, along with the volume of UK news of suicidal behaviour (by all methods; at coastal locations; and specifically at the study site and surrounding cliffs). While reports of suicides at coastal locations account for a relatively small proportion of all UK news relating to suicide (ranging from 3.3% in 2018 to 0.6% in 2023), it is notable that just over half of these stories focused specifically on the study site (with yearly variations).

Of note is also the substantial decrease in the number and percentage of news reports of suicides at cliff locations and especially the study site, over the study period—despite higher-than-average suspected suicides (in 2022) and interventions (in 2022 and 2023).

However, the proportion of stories featuring location and/or method details in the headlines remained considerably high throughout. 192 of the 403 news stories focusing on the study site (47.6%) featured the cliff's name in the headline itself; 72 made explicit reference to a nearby town; 14 named nearby specific locations within the cliff itself, while a smaller number of reports referred to incidents at a 'notorious suicide (n=6) or beauty (n=4) spot'.

Reporting of suicidal behaviour at the study site

Most reports relating to the study site featured online (327/403, 81% vs 76.19% in print news), in local and regional press (267/403, 66.3%, of which almost half (129/267, 48.3%) from a single publication), followed by tabloid news (109/403, 27%). Approximately half the stories were reported at the time of the incident (198/403, 49.1%; vs inquest (159, 39.5%) or other (46, 11.4%)) and nearly all were reports of fatalities (389, 96.5% vs 14 (3.5%) stories of non-fatal suicidal behaviour).

Almost a quarter of all stories (91, 22.6%) focused on 1 of 2 'murder-suicides' which took place in 2018; 26 were reports of multiple (but apparently unrelated) suicides; 1 focused on a suspected suicide pact in 2020 (later found to have been deaths by misadventure); and the remaining 285 (70.7%) on individual deaths (271) or attempts (14).

Suspected suicides and crisis interventions at the study site

Our analysis suggests small but significant correlations between suicides and crisis interventions at the study site, indicating that an above-average number of suicides at the site and immediately adjacent cliffs is significantly associated with an above-average value of interventions at the same time (r=0.33), a month later (r=0.38) or 2 months later (r=0.36) (see figure 1 in online supplemental appendix 1).

A Granger causality test with a month lag suggests that knowing the number of suicides is useful for predicting the future number of interventions (F=7.23, p=0.008). However, knowing the number of interventions did not appear to be useful for predicting the future number of suicides (F=0.51, p=0.48).

The number of suicides at the study site was also not significantly predicted by earlier suicides at the location and we found no evidence of 'seasonality' in the data, despite some evidence of there being more suicides in May and June.

Relationship between media reports and suicidal behaviour at the study site

Figure 1 below displays monthly counts of suicide news (by all methods), cliff suicide news (including specifically of suicides and attempts at the study site) and the volume of interventions and suspected suicides at the study site and immediately adjacent cliffs, between 1 January 2017 and 31 December 2023.

We tested bidirectional lagged relationships between media reports of suicidal behaviour and suicide-related incidents over the study period (please see online supplemental appendices for full details). Table 2 summarises significant and non-significant associations between daily and weekly news reports and suspected suicides at the study site and immediately adjacent cliffs (n=278) and crisis interventions at the site (n=3050). Please note that,

Table 1 News reports of suicidal behaviour and suspected suicides and crisis interventions* at the study site, by year

	2017 N (%)	2018 N (%)	2019 N (%)	2020 N (%)	2021 N (%)	2022 N (%)	2023 N (%)	Total N (100%)
Suspected suicides at the study site and surrounding cliffs	37	54	38	28	32	54	35	278
of which n at immediately adjacent cliffs	(1)	(4)	(4)	(2)	(1)	(2)	(1)	(15)
Crisis interventions* at the study site	461	501	460	335	322	485	486	3050
Reports of suicidal behaviour (all methods)	6270	5678	5680	5612	4777	5893	4685	38595
of which n (%) focusing on murder suicide	465 (7.4)	289 (5.1)	289 (5.1)	336 (6.0)	282 (5.9)	107 (1.8)	165 (3.5)	1933 (5.0)
News reports of all cliff suicides (% of all suicide news reports)	134 (2.1)	190 (3.3)	176 (3.1)	100 (1.8)	81 (1.7)	80 (1.4)	28 (0.6%)	789 (2.0)
of which n (%) including method and/or location details in the headline	113 (84.3)	151 (79.5)	123 (69.9)	71 (71.0)	55 (67.9)	56 (70.0)	19 (67.9%)	588 (74.5)
of which n (%) focusing on murder suicide	2 (1.7)	64 (54.2)	45 (38.1)	0 (0)	1 (0.8)	6 (5.1)	0 (0)	118 (15.0)
News reports of suicides at the study site (% of all cliff suicide reports)	53 (39.6)	151 (79.5)	96 (54.5)	26 (26)	46 (56.8)	23 (28.8)	8 (28.6)	403 (51.1)
of which n (%) including method and/or location details in the headline	44 (83.0)	123 (81.5)	74 (77.1)	21 (80.8)	34 (73.9)	23 (100)	7 (87.5)	326 (80.9)
of which n (%) focusing on murder suicide	0 (0)	61 (40.4)	30 (31.3)	0 (0)	0 (0)	0 (0)	0 (0)	91 (22.6)
Suicide reports at cliffs adjacent to the study site	0	0	9	21	0	0	0	30
of which n (%) including method and/or location details in the headline	0 (0)	0 (0)	6 (66.7)	18 (85.7)	0 (0)	0 (0)	0 (0)	24 (80)
of which n (%) focusing on murder suicide	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

*All interventions were made and recorded by an established search and rescue charity which patrols the site and responds to emergency calls and people presenting to the location in apparent distress.

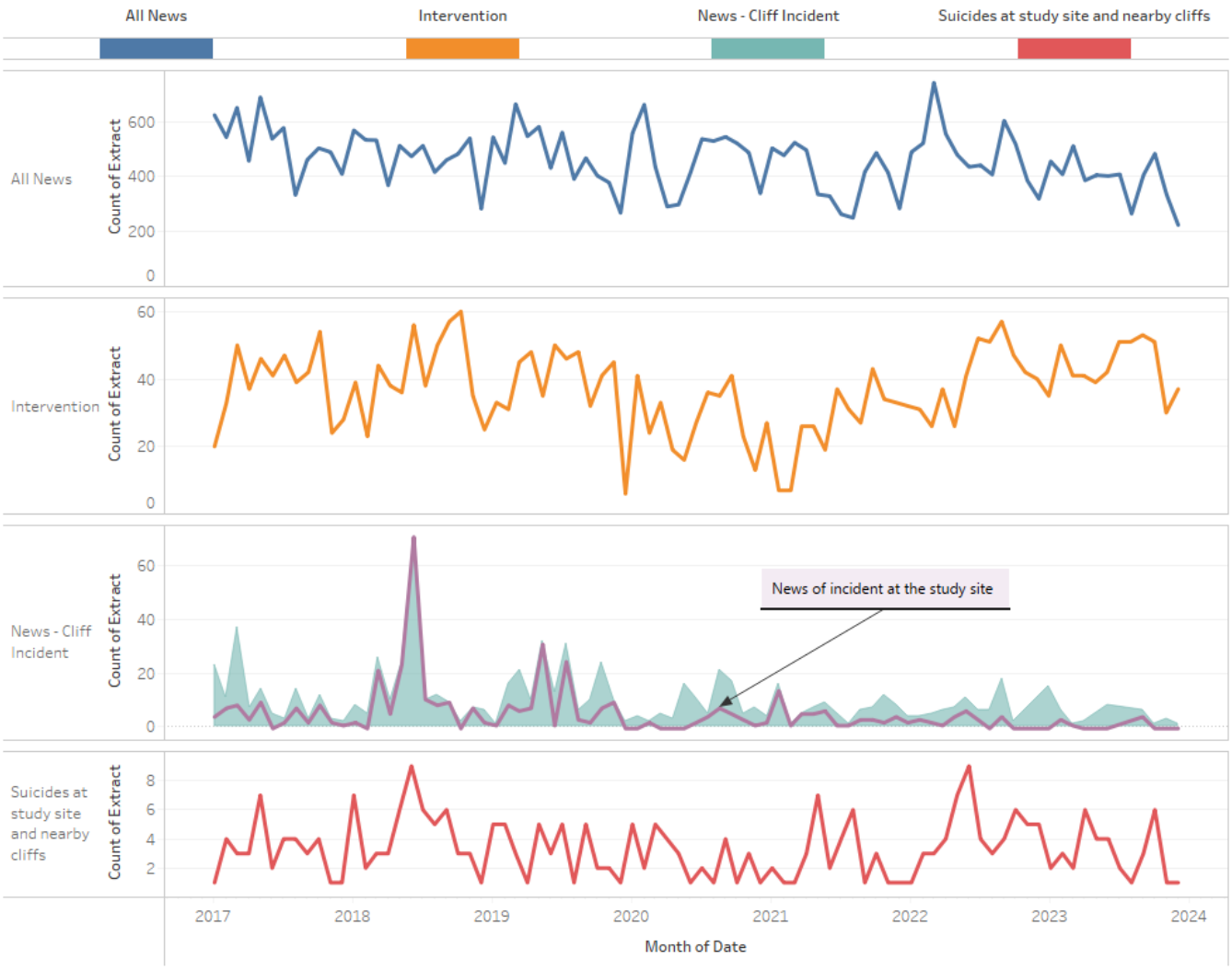

Figure 1 Monthly count of UK suicide news (by all methods), cliff suicide news (including specifically of suicides and attempts at the study site), crisis interventions and suspected suicides at the study site and immediately adjacent cliffs (2017–2023).

even when reaching the threshold of statistical significance ($p<0.05$), all tested correlations were 'weak' or 'very weak' ($r<0.4$).

News headlines with explicit method and/or location details

We repeated these analyses with a focus on news stories of suicides at all cliff locations and at the study site (and nearby cliffs) where explicit method and/or location details were included in the headline (as a proxy for poor-quality reporting). The results of these tests are summarised in table 3 below (see online supplemental appendix for full details). Once again, statistical associations were found to be weak or very weak.

Repeat coverage of suicides at the study site

Between 1 January 2017 and 31 December 2023, there were 6 weeks when stories of suicides at the study site were featured in the news 10 times or over (range: 10–48). These included two consecutive weeks in 2018 (total reports=58) and a further 4 weeks between March 2018 and July 2019 (with 16, 17, 26 and 18 weekly reports). In contrast, there were never more than 4 weekly reports in 2020, 2022 and 2023 or 5 in 2021. In 2017, a single week saw the publication of seven stories relating to suicidal behaviour at the study site and another of eight news reports.

This pattern of repeat reporting over individual weeks reflects the repeat coverage of specific incidents (in two cases murder-suicides) at the study site and related coroner's inquiries. In total, five incidents featured in the news over 10 times (range: 15–59 news items relating to a single incident, total news items=140, 34.7% of all study site news in this period). All of these 140 news stories were published in 2018 (n=85) and 2019 (n=55). In subsequent years, no individual was named in the news of suicides at the study site more than three times (except for a woman named in seven reports in 2021).

After 2017 and 2018 (when respectively 2 and 24 news stories were reported on multiple, apparently disconnected suicides at the study site (eg, 'Ten deaths in a fortnight at beauty spot')), there were also no headlines making explicit reference to multiple deaths at the site.

Table 2 Associations between news reports and suspected suicides* (n=278) and crisis interventions (n=3050) at the study site and immediately adjacent cliffs (2017–2023)

Associations between news coverage and suspected suicides	
Significant associations (adjusted p<0.05)	**R range**
Daily coverage	
Higher volume of all UK suicide news (by all methods)	
⇒ Increase in suicides 2 days later	0.05
Higher volume of **cliff suicide news**	
⇒ Increase in suicides on the same day, the next day and 6 days day later	0.09–0.11
Higher volume of **study site and nearby cliffs suicide news**	
⇒ Increase in suicides on the same day, 1, 2 and 6 days later	0.05–0.13
Higher volume of **study site suicide news (excluding nearby cliffs)**	
⇒ Increase in suicides the same day, 1, 2 and 6 days later	0.06–0.14
Weekly coverage	
More cliff suicides news	
⇒ Increase in suicides on the same week	0.24
More study site and nearby cliffs suicide news	
⇒ Increase in suicides on the same week and a week later	0.11–0.27
More study site suicide news (excluding nearby cliffs)	
⇒ Increase in suicides on the same week and a week later	0.11–0.27
Non-significant associations	
Weekly volume of all UK suicide news (by all methods)	
Associations between news coverage and crisis interventions†	
Significant associations (adjusted p<0.05)	**R range**
All UK suicide news (by all methods)	
Higher daily volume	
⇒ Increase in interventions on the same day, 1, 3 and 7 days later	0.04–0.05
Higher weekly volume	
⇒ Increase in interventions on the same week, the one after and 3 weeks later	0.12–0.19
Non-significant associations	
Cliff suicide news (weekly and daily volume)	
Study site and nearby cliffs suicide news (weekly and daily volume)	
Study site only suicide news (weekly and daily volume)	

*Bolded headline types were found in Granger causality tests to significantly predict values of suicide in the future (adjusted p<0.05) (No headline types were found in Granger causality tests to significantly predict values of interventions in the future).
†All interventions were made and recorded by an established search and rescue charity which patrols the site and responds to emergency calls and people presenting to the location in apparent distress.

Table 3 Associations between news headlines featuring explicit method and/or location details and suicide-related incidents (2017–2023)

Significant associations (adjusted p<0.05)*	**R range**
Daily news all cliff suicide (n=588)	
Increase in suspected suicides on the day and a day later	0.10-0.12
Daily news of suicides at the study site and nearby cliffs (n=350)	
Increase in suspected suicides on the same day, the next day and 5–7 days later	0.07-0.14
Non-significant associations	
Daily volume of headlines on suicides at all cliff locations and specifically at the study site and nearby cliffs	
No significant association with crisis interventions	

*Bolded headline types were found in Granger causality tests to significantly predict values of suicide in the future (adjusted p<0.05).

Given the marked reduction in repeat coverage of suicides at the study site from 2020 (both multiple reports of a single incident and single news items reporting on multiple incidents) and the particularly high volume of reporting in 2018–2019 (see table 1), we conducted a separate analysis of the relationship between daily news reports of suicides at the study sites and incidents at the location in 2018–2019 and then during 2020–2023. A summary of results is displayed in table 4 below (please see online supplemental appendix for further detail, including a visualisation of the weekly volume of suicide news, suspected suicides and interventions relating specifically to the study site between 5 March 2018 and 7 July 2019, the period with the highest volume of reporting (n=221, 54.8% of all study site news stories between 2017 and 2023) and repeat coverage).

Associations between news coverage and suicidal behaviour at the study site during 2018–2019 remained significant (including in Granger causality tests) when

Table 4 Associations between daily news reports of suicidal behaviour at the study sites and incidents at the location (2018–2019 vs 2020–2023)

2018–2019	**R range**
More daily reports of suicides at the study site (n=247)	
Significant increase in suicides at the study site and immediately adjacent cliffs on the day and 1, 2 and 6 days later*	0.09-0.18
No association with crisis interventions	
2020–2023	
More daily reports of suicides at the study site (n=103)	
Significantly more suicides at the study site and immediately adjacent cliffs on the same day only	0.18
No association with crisis interventions	

*Daily values of news stories of suicides at the study site in 2018–2019 were found in Granger causality tests to significantly predict values of suicide in the near future (adjusted p<0.05).

excluding reports of murder suicides at the site (n=61 in 2018 and n=30 in 2019 vs none in other years).

Associations with news coverage, excluding reports of murder suicides

Excluding news of murder suicides from the analysis did not substantially alter the study findings (eg, the results of the Granger causality tests conducted; see online supplemental appendix 2 for full details). However, the exclusion of such stories appeared to shorten the impact (if any) of news coverage to a smaller time frame, with significant correlations with daily news lasting a maximum of 2 days (as opposed to 7) and increases in weekly coverage only associated with suspected suicides at the site on the same week (and not also a week later in relation to news of suicides at the location and nearby cliffs).

DISCUSSION

We investigated the relationship between news coverage of suicide and incidents at a high-frequency location in the UK, with an average of almost 40 suicides per year (over the past 7 years). Using data from the Samaritans' media monitoring database between 1 January 2017 and 31 December 2023, we found that reports of suicides at the study site and other cliff locations represent a small proportion of all UK news pertaining to suicides and suicide attempts (by all methods). Overall, reports of suicidal behaviour at this specific location represented 1% of all UK news coverage of suicide between 2017 and 2023 and around 50% of all reports relating to cliff suicides. Of note is the decreasing volume of news stories focusing on cliff suicides and specifically deaths at the study site (eg, there were 8 news stories of suicides at this location in 2023 vs a peak of 151 in 2018) and the decrease in repeat coverage of specific incidents in 2020–2023 compared with earlier years (50% of all news stories pertaining to the study site in 2017–2019 (150/300) focused on six specific incidents, including two murder-suicides featuring, respectively, in 32 and 59 individual news items). However, the proportion of headlines including explicit reference to method and/or location details remained high throughout the study period (featuring, on average, in 74.5% of all cliff suicide news stories and 80.9% of all news relating to suicides at the study site).

Our analysis suggests statistically significant but very small correlations between suicides at the study site and immediately adjacent cliffs and reports of (1) all suicide news, (2) all cliff news and (3) site-specific news (except for weekly coverage of all suicide news), with the latter predicting daily values of subsequent suicides (generally within a day or 2 and no more than 9 days later). These associations were slightly stronger (but nonetheless 'weak' to 'very weak' in statistical terms) on a weekly (as opposed to daily) basis; for reports focusing specifically on suicides at the study site and other cliffs (as opposed to all suicide methods); and in 2018–2019, the years with the greatest volume of reporting and repeat coverage.

In contrast, news of suicides at the study site was not associated with the number of suicides in the immediate aftermath of reporting in 2020–2023, when there were fewer reports, fewer stories being covered in the news on multiple occasions and no headlines making explicit reference to multiple deaths at the site.

Contrary to our predictions, subanalyses focusing on news stories that included method and/or location details in the headline did not have a significantly stronger association with incidents at the study site. Their relationship, although statistically significant, was also 'very weak'.

Similarly to the current study, previous research has shown (significant) associations between the characteristics of suicide news reports and subsequent changes in suicide rates to be weak or very weak.[14] Furthermore, a recent meta-analysis of 31 studies examining the association between reporting on suicides and subsequent suicides in the general population concluded that only certain types of reports, most notably news of celebrity suicides, had 'a meaningful impact on total suicides in the general population'. In contrast, 'general reporting of suicide did not appear to be associated with suicide, although associations for certain types of reporting cannot be excluded'.[2]

While fewer studies have explored the impact of suicide news on non-fatal suicidal behaviour, the available evidence points to a negative influence of such media.[15] Our study suggests that, compared with suspected suicides, the number of crisis interventions at a high-frequency location may be less influenced by the volume and content of suicide reporting. Their relationship appears to follow a somewhat different pattern:

1. The number of crisis interventions at the study site was only significantly associated with daily and weekly news coverage of all suicides (irrespective of the reports' suicide methods or locations)—but the volume of suicide news did not significantly predict the values of future interventions at the location.
2. Reporting of cliff suicides and incidents at the study site was not significantly associated with the number of interventions at the site—even when only taking into account data from 2018 to 2019 (the years with the greatest volume of reporting and repeat coverage).

Strengths and limitations of the research

Our findings are based on a well-established, evidence-informed media monitoring database which captures media reports of suicides and attempted suicides in the UK.[16] This was carefully adapted for use in this study. However, our database may not capture all relevant reports or all important aspects of reporting. Also, our focus did not extend to broadcasts or other media formats and we did not estimate the impact or reach of different news reports or types of reports (including the circulation rate of different story types, in news as well as social media channels). The nature and 'newsworthiness'

of different incidents being reported at different times (eg, the death of a well-known individual) are likely confounders for the volume and quality of associated news coverage. It is notable that the exclusion of murder suicides news did not significantly alter the study's findings, although associations between media reports and incidents at the study location had a shorter time span when such stories were excluded from the analysis.

The conclusions that may be drawn based on this analysis may also be limited by the speed at which trends in media (especially 'new' media) change and the complex and dynamic ways in which their influence and effects manifest themselves in relation to different audiences and individuals. These were beyond the scope of the current investigation but would benefit from further research.

In addition, our analyses were based on suspected suicides. Although research suggests that suspected suicide data from established real-time surveillance systems can accurately reflect suicide rates confirmed by official statistics,[17] any inferences or conclusions about suicides should be made cautiously. Similarly, not all individuals presenting in distress at the study site may be captured in the crisis intervention database we analysed, so the possibility of missing data should also be taken into account (but with no reason to believe this would follow a non-random pattern and therefore introduce significant bias in the analysis).

Implications and recommendations

The factors influencing increases—or indeed decreases—in suicides and interventions at specific locations (and more generally) are known to be complex, dynamic and multifaceted. Therefore, it is perhaps unsurprising that the observed media effects were very small—particularly over what was a fairly long time frame, affected by significant events such as the COVID-19 pandemic and associated restrictions and the subsequent cost of living crisis. Even key population-level variables such as country-level economic uncertainty, unemployment and depression rates have been shown to be weakly or very weakly ($r<0.4$) associated with suicide rates (at bivariate level),[18] although stronger correlations have also been reported in relation to economic indices.[19]

Our finding that media reports of suicide-related incidents can predict (however modestly) increases in suicide at a high-risk location underscores the importance of continued efforts to monitor and improve the quality of news and other media reports of suicide. This remains a key priority in national efforts to reduce suicides[20] and may include reducing sensationalist, detailed and repeated coverage of suicides and ensuring that articles relating to suicides include messages of hope and recovery and signposting to help and support.[21]

Our data suggests some marked improvements in the reporting of deaths at this high-frequency location in recent years (specifically in the volume of such reports and reduction in repeat coverage) but also some areas which would benefit from further attention (notably the continued use of exact and explicit location details in headlines).

Further research is needed for a more nuanced understanding of the impact of different news reports—and wider stories/narratives—surrounding suicides and the study site in different spaces, including in online and 'pro-choice' spaces.[22] For example, it is possible that specific narratives which might deter individuals from specific methods or locations (such as concern about the impact of suicide on others and fear of survival with injuries[23]) in news stories might dissuade people from choosing the location as a site/method of suicide—but also carry considerable risks and unintended consequences. How 'mainstream' news stories circulate through various social media channels, their reach and impact, is another potential area of research.

Qualitative research with people with lived/living experiences could provide useful means to explore these questions. For example, the perspectives of people who have travelled or considered travelling from afar to attempt suicide at the study site could offer some crucial insights into the 'stories' attracting them to this location, the origin of these stories and the role of the news and other media in 'implanting', reinforcing and/or challenging them. In turn, this could inform a more nuanced analysis of the impact of different types of news stories/messages on incidents at this high-frequency site and influence changes in reporting and communications to reduce the cognitive availability and 'attractiveness' of coastal methods/locations of suicide.

CONCLUSIONS

This study is the first systematic analysis of the relationship between news coverage of suicide and suicidal behaviour at a high-frequency location. Our results, based on data collected over 7 years, suggest that there is a small but significant association between daily and weekly news coverage of all suicides (irrespective of the reports' suicide methods or locations) and crisis interventions at the study site and between volume of reporting and increases in suspected suicides in the immediate aftermath of reporting (generally within a day or 2 and no more than a week later). The latter association was more marked (although statistically 'weak') in 2018–2019, the years with the greatest volume of reporting and repeat coverage of 'high-impact' stories (even when excluding reports of 'murder suicide') and following coverage of method-specific and location-specific suicides (ie, of incidents at cliff locations and at the study site vs reporting of suicides by all methods). In contrast in 2020–2023, when there were fewer reports of suicides at the study site, fewer such stories being covered in the news on multiple occasions and no headlines making explicit reference to multiple deaths at the site, this association was no longer significant. These findings underscore the importance

of responsible portrayal of suicide in the news and other media.

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