Institution: University of Exeter

Unit of Assessment: UoA 2 Public Health, Health Services and Primary Care

Title of case study: Preventing suicides in non-clinical populations and settings

1. Summary of the impact (indicative maximum 100 words)

Our work on suicide prevention, led by Christabel Owens of the University of Exeter in conjunction with Devon Partnership NHS Trust, has led to environmental changes to improve safety at public locations worldwide. The work has been recognised by ministries of health and cited in national suicide prevention strategies and guidance documents worldwide, and is associated with demonstrable benefits at specific high-risk sites. Ground-breaking research into the role of family members and friends in suicide prevention has led to a strategic partnership with all the major suicide prevention charities that are leading the way in public education in England.

2. Underpinning research (indicative maximum 500 words)

Around one million people take their own lives each year, approximately 4,500 of them in England, where three-quarters are not in contact with mental health services, and half have not had recent contact with a general practitioner, so opportunities for clinical intervention are limited. Our research programme has concentrated on non-clinical approaches, with two aims: to promote public involvement in suicide prevention, and to prevent suicides in public places.

1) Public involvement in suicide prevention

Christabel Owens and her team have been studying suicide among those who are outside the care of mental health services since the Medical School was established in 2000, beginning with a psychological autopsy study. They went on to pioneer the use of qualitative methods to gain insight into lay perspectives [1]. This led in 2006 to an MRC grant to learn more about the role that lay people can play in preventing suicides and the resources they need in order to do so. They found that:

- signs of suicidal despair can be oblique, ambiguous and difficult to interpret; individuals who are intent on suicide employ a range of face-saving strategies when communicating with those around them, which make it difficult for listeners to judge the intention behind their words [2,3];
- family members and friends are predisposed to disregard warning signs and focus instead on positive 'countersigns';
- even when relatives and friends are aware that something is seriously wrong, taking any action at all involves considerable personal risk;
- proximity to the suicidal person and emotional investment in the relationship make it difficult for them to see, say or do anything at all [2].

The team concluded that efforts to strengthen the capacity of lay people to play a role in preventing suicide should focus on helping people to recognise communications of suicidal intent for what they are and to acknowledge and overcome their fears about intervening.

2) *Preventing suicides in public places*

Restricting access to lethal means is one of the most effective approaches to suicide prevention. In pursuit of this goal, the first *National Suicide Prevention Strategy for England* (2002) pledged to produce guidance on action to be taken at suicide 'hotspots', i.e. bridges and other public locations that offer means and opportunity for suicide. In 2006, Christabel Owens' team were awarded a grant to develop the guidance.

The team collected data on locations of suicidal acts and found that nearly a third (31%) were

carried out in public places [4]. They then:

- reviewed the evidence for interventions to prevent suicides at high-risk locations [5];
- outlined a process for identifying high-risk locations at local level and piloted it;
- outlined a multi-agency approach to managing high-risk locations and piloted it.

They produced a simple practical handbook with guidance to support local efforts to prevent suicides in public places [6].

Grants: 1) Owens C and Aitken P – Development of national guidance on action to be taken at suicide hotspots – NIMHE, 2006, £9,916. 2) Owens C et al – Public involvement in suicide prevention – MRC, 2006, £280,200.

3. References to the research (indicative maximum of six references)

Evidence for the quality of the research is apparent from the fact that the first five of the six listed references are to articles published in high impact peer review journals, and the sixth to the resultant guidance:

1. Owens C, Lambert H, Lloyd K, Donovan J. Tales of biographical disintegration: how parents make sense of their sons' suicides. *Sociology of Health & Illness* 2008;30(2):237-54.
2. Owens C, Owen G, Belam J, Rapport F, Lloyd K, Donovan J, et al. Recognising and responding to a suicidal crisis in the family and social network: qualitative study. *BMJ* 2011;343:d5801. doi: 10.1136/bmj.d5801.
3. Owen G, Belam J, Lambert H, Donovan J, Rapport F, Owens C. Suicide Communication Events: Lay interpretation of the communication of suicidal ideation and intent. *Social Science & Medicine* 2012;75(2):419-28.
4. Owens C, Lloyd-Tomlins S, Emmens T, Aitken P. Suicides in public places: findings from one English county. *European Journal of Public Health* 2009;19(6):580-2.
5. Cox G, Owens C, Robinson J, Nicholas A, Lockley A, Williamson M, Cheung YTD, Pirkis J. Interventions to reduce suicides at suicide hotspots: A systematic review. *BMC Public Health* 2013. 9;13:214. doi: 10.1186/1471-2458-13-214.
6. National Institute for Mental Health in England (Authors: Aitken P, Owens C, Lloyd-Tomlins S *et al*). *Guidance on action to be taken at suicide hotspots*. Leeds: National Institute for Mental Health in England, 2006.

4. Details of the impact (indicative maximum 750 words)

1) Public involvement in suicide prevention

This research is highlighted in the new national suicide prevention strategy for England [1](p.41). It took centre stage at a National Experts' Consensus Meeting on Suicide Prevention in 2011, where Owens was invited to deliver the opening presentation. Recommendations from the meeting fed into a Call to Action, spearheaded jointly by Samaritans and the Department of Health, which is driving forward implementation of the national strategy.

This has resulted in a strategic partnership with The Alliance of Suicide Prevention Charities (TASC), which appointed Owens as its scientific advisor in 2012 with a view to collaborating on a public education programme. In 2013, agreement was reached with IPC Media to run a series of articles in leading magazines to raise awareness and break the taboo surrounding suicide. The first of these appeared in the September 2013 issue of *Marie Claire*, using scientific content provided by the Exeter group. The Exeter/TASC partnership is now developing a range of multi-media materials (including booklets, videos and an interactive web resource) designed to equip members of the public with the confidence to talk openly about suicide and to intervene in a crisis.

2) Preventing suicides in public places

This work has achieved international reach and made an important contribution to public safety at high-risk locations.

England: The *Guidance on action to be taken at suicide hotspots* is highlighted in the new national suicide prevention strategy [1](p.37), and cited in local strategies nationwide. There is good evidence that the processes for identifying and managing high-risk locations have been implemented. For example, in 2009 the NW Public Health Observatory identified 49 locations that had been used for two or more suicidal acts. Signs encouraging suicidal individuals to call Samaritans were installed at several of these locations; at one of them, an average of 2 suicides per year has been reduced to only 2 suicides in the last 3 years [2]. Placing of Samaritans signs on the Tyne Bridge in December 2007 led to a reduction in the number of call-outs by police negotiators to deal with individuals threatening suicide, from 131 in 2007 to 47 in 2008, and 30 in 2009. Further benefits have been reported there, including improved information sharing between police and mental health trusts about high-risk individuals [3]. In 2011, an NHS Trust agreed to increase the height of the parapets around the top floor of a new multi-storey hospital car park, after the *Guidance* was brought to its attention by a member of the public [4]. These impacts have been acknowledged by NIHR [5](p.16).

Scotland: In 2010 NHS Health Scotland requested permission to adapt the *Guidance* for use in the Scottish context. It was subsequently instrumental in persuading Transport Scotland to install fencing to prevent jumping from the Erskine Bridge. In the two years prior to installation (Aug 2011) there were 16 suicides from the bridge; in the two years after installation this reduced to only 3 [6].

Northern Ireland: The *Guidance* was cited in support of recommendations to improve public safety at the Langan Weir Bridge in 2012 [7].

Japan: The *Guidance* was translated into Japanese in 2007. Two thousand copies were disseminated to prefectural governments, mental health and welfare centres and other agencies, and are believed to have contributed to local suicide prevention initiatives.

Australia: In 2011 the Government of Australia sought consent to use the *Guidance* as the model for the development of their own, and the authors of the Australian guidance worked closely with the Exeter team [8a]. The Australian Government has subsequently committed $12 million funding to capital works to improve safety at identified hotspots [8b].

The USA is home to the world's number one suicide site, the Golden Gate Bridge, estimated to be responsible for around 24 deaths per year. Installation of barriers to prevent individuals from jumping had been strenuously resisted for many years, but a Physical Suicide Deterrent System has now been given the go-ahead. The English *Guidance* is cited in support of the scheme [9]. The $5m design stage is due for completion in 2013. Safety nets are also being installed on seven bridges across Fall Creek Gorge, following the deaths of Cornell University students. Again, the *Guidance* is cited as a key resource [10].

There is strong evidence to suggest that an individual who is prevented from carrying out a suicidal plan at one location, e.g. by the erection of a physical barrier, is unlikely to seek out another location or another method of suicide.

5. Sources to corroborate the impact (indicative maximum of 10 references)

[S1] Department of Health. *Preventing suicide in England: A cross-government outcomes strategy to save lives*. London: Department of Health; 2012. http://www.dh.gov.uk/health/files/2012/09/Preventing-Suicide-in-England-A-cross-government-outcomes-strategy-to-save-lives.pdf

[S2] Hannon K, Giles S, Deacon L, Tocque K. *Suicide in the North West: A review of non-residential and outdoor suicide locations*. Liverpool: North West Public Health Observatory; 2009. http://www.nwph.net/nwpho/publications/SuicideintheNW.pdf. Contact details and personal correspondence available.

[S3] Taylor S, Napier J, Turkington D, Gray A, Hume K. Hotspot signage reduces calls to police negotiators. *BMJ* 2010;340:c3054, doi:10.1136/bmjc3054. http://www.bmj.com/rapid-response/2011/11/03/hotspot-signage-reduces-calls-police-negotiators. Contact details and personal correspondence available.

[S4] http://www.thisisgloucestershire.co.uk/Suicide-prevention-fences-hospital-car-park/story-12859923-detail/story.html. Contact details and personal correspondence available.

[S5] National Institute for Health Research. *Embedding Health Research: National Institute for Health Research Annual Report 2009/10*. London: Department of Health; 2010. http://www.selcrn.nhs.uk/wp-content/themes/selcrn/uploads/2012/03/149_NIHR_Annual_Report_2009-2010.pdf

[S6] http://www.healthscotland.com/documents/4880.aspx. http://www.transportscotland.gov.uk/news/Erskine-Bridge-parapet-work-moves-forward Contact details and personal correspondence available.

[S7] Department for Social Development. *Lagan Weir Footbridge: Assessment of Existing Safety Arrangements*. Ireland: RPS Group; 2012. http://www.dsdni.gov.uk/lagan-weir-footbridge-march12.pdf. Contact details and personal correspondence available.

[S8a] University of Melbourne. *Preventing suicide at suicide hotspots*. Canberra: Government of Australia Department of Health and Ageing; 2012. http://livingisforeveryone.com.au/Uploads/docs/Hotspots%20Prevention.pdf

[S8b] Government of Australia. *Funding Available to Improve Safety at Suicide 'Hotspots'*. Media Release. 2012; http://www.health.gov.au/internet/ministers/publishing.nsf/Content/93160F90537CE78ACA2579D700101207/$File/MB025.pdf

[S9] http://www.ggbsuicidebarrier.org; http://www.ggbsuicidebarrier.org/documents/feir_chapter7.pdf

[S10] http://meansrestrictionstudy.fs.cornell.edu; http://meansrestrictionstudy.fs.cornell.edu/resources.cfm