Improving Health Outcomes

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Suicides in Avon

Geographical Area covered: Avon
Focus: Case studies focusing on subdistrict variation in health outcome

Contributors:

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Editorial comments on how case study is linked to improving health outcomes: (also published in Volume 1)

There was substantial small area variation in suicides in Bristol. They undertook a literature review on the available evidence on suicide prevention with the help of their local University department. A number of areas were suggested as being suitable for local implementation. These were: ensuring an audit of suicides recently in contact with psychiatric services; identifying and improving safety measures at the Clifton Suspension Bridge; and reinforcement of media guidelines on the reporting of suicides.

They used a local database as a source of information, previously set up by interested psychiatrists. It formed the basis of a case control study which provided persuasive evidence that the presence of the Bridge contributes significantly to the local pattern of suicides. Kammerling concludes this to have been instrumental in the decision by the Trustees of the Bridge to run a national competition seeking ways of making the Bridge safer.

They also used the database as the source of information for the audit of suicides. The generation of discussion between the clinical audit leads of the four local Trusts led to a more focused approach to the audit.

Some of the practical lessons learnt are that: working with the enthusiasms of a number of respected professionals offers the easiest entry into difficult areas; and that rigorous scientific research is persuasive, if well presented. Kammerling concludes that using the focus on a population health outcome, and working in co-operation with local clinicians and academics, they were able to bring about changes in the quality of audit of suicides and in the provision of safety measures at a local suicide hot-spot, both of which had been attempted less successfully on previous occasions.

Abstract (also published in Volume 1)

The reduction of the suicide rate is a key health target in Health of the Nation. In 1992, a number of approaches to tackling this target were identified from the literature, Bristol has a specific suicide “hot-spot” in the Clifton Suspension Bridge and there is evidence to suggest that improving safety at such sites can help reduce the number of suicides. We anticipated the possibility of local opposition to the provision of any safety measures which could change the look of this local landmark and tourist attraction. A case-control study of suicides from the Bridge was carried out. This showed that, in Bristol, people were twice as likely to commit suicide by jumping as elsewhere, and that safety measures at the Bridge might help prevent this. This argument was persuasive, and active attempts to identify appropriate safety measures are now in hand. A number of more traditional approaches to suicide prevention, such as audit of the care received by successful suicides and guidelines for media reporting ran in parallel to this process.

Introduction:

Why this clinical area was choosen:
A reduction in the suicide rate was chosen as a key indicator within Health of the Nation. Although the rates in the Bristol and District area were not exceptional (age standardised mortality rate in 1990-1992 was 11.2, as compared to an England and Wales rate of 11.77 and a South western RHA rate of 13.47), there was substantial small area variation, with some areas having a suicide rate nearly two and a half times the District average (Gunnell et al. 1995). There was also a great deal of local interest in the topic. The Professor of Psychiatry at Bristol University was an acknowledged expert in the field and another local psychiatrist also had a specific interest in suicides amongst the elderly.

The presence of the Clifton Suspension Bridge within the District boundaries acted as focus for these activities. The bridge, designed by Isambard Kingdom Brunel, crosses the River Avon, joining Clifton on one side to Leigh Woods on the other. It is visually striking, easy to walk across, with a drop of 245 feet to the river below. The river is tidal at this point, and at low tide, is very shallow. A road runs alongside the river, under the bridge, and is covered by a concrete shelter. The walkway across the bridge is bounded by a low barrier with metal castellations on top. Although this may offer discouragement, it is easily scalable with limited discomfort. A small ledge on the outside of the barrier allows potential suicides to stand looking down at the river and the road.

Around 6 people a year die as a result of jumping from the bridge.

Over a period of several years, attempts had been made to encourage the trustees of the bridge to improve the safety barriers. The presence of the metal castellations and signs advising people with suicidal thoughts to phone the Samaritans were some practical results of these attempts, but, in the professional opinion of the local medical experts, there was still more that could be done.

The Bridge is a local landmark and its engineering qualities and its visual qualities add to the appeal of Bristol to tourists. Any change to the Bridge was likely to raise substantial local interest, and, if it made the Bridge less attractive, could arouse resistance. It was felt that a number of specific factors needed to be addressed. In particular, there was a widespread local view that suicides who jumped from the bridge were people who would commit suicide in alternative ways if this avenue was closed to them - i.e that the Bridge itself had no actual influence on suicide rates. The evidence that making commonly used methods of suicide less accessible reduces not only the method specific but also the overall suicide rates was not seen as applicable in the local situation (Kreitman 1976).

It was important to us not to focus exclusively on the Bridge. If we wished to actively address the suicide problem, we needed a broad approach across a range of areas, of which the Bridge would be only one, albeit of particular importance.

**Further information that was required:**

We needed an understanding of the available evidence in order to inform us about actions in the field of suicide prevention that were supported by a sound scientific base. We were fortunate to have working with us a lecturer in the local University department who was one of the authors of a review of this field, and were able to access this information before it was published in the literature.

We decided to concentrate on a number of areas suggested by the literature review that were suitable for local implementation. These were:

- Ensuring audit of suicides recently in contact with psychiatric services to identify any specific local factors in the care of patients at risk of suicide that were amenable to intervention;
- Identifying and improving safety measures at Clifton Suspension Bridge;
- Reinforcement of media guidelines on the reporting of suicides.

We were fortunate that both local psychiatrists with interests in suicides had been collecting data from the coroners office on all suicides reported in the area for several years. One used the information to identify those suicides who had prior contact with psychiatric services and initiate an audit, whereas the other had a detailed database which was used for research purposes. Each collected similar (but not identical) information independently from the coroners office. As a result of these efforts, a very substantial database was available to us for further analysis.

A case control study was carried out by the lecturer working with us and a consultant psychiatrist (Nowers and Gunnell 1996) looking at all suicides who jumped from the Bridge between 1974 and 1993 and selecting as controls, the next suicide death occurring matched for age, sex and coroners verdict.

Using OPCS mortality statistics for the period 1982-1991, it was shown that suicides in the Bristol
area were twice as likely to commit suicide by jumping than people in England and Wales as a whole (9.3% v. 4.9%), and that this difference was almost entirely due to jumping from man-made structures.

People who jumped from the Bridge did not appear different from people who committed suicide by other means across the range of parameters measured. These included age, proportion with a psychiatric history, proportion who had been psychiatric inpatients or who had a recorded psychiatric history.

Nearly 30% of the successful suicides lived outside the District, and, of those who lived within the District, people who jumped from the Bridge lived, on average, no closer to the Bridge than people who committed suicide by different methods.

The conclusions from the study were that the presence of the Bridge contributes significantly to the local pattern of suicide. Local residents are twice as likely to commit suicide by jumping than are other residents in England and Wales. People who jumped from the Bridge had similar psychiatric histories to other suicides.

Because of these similarities, there is no reason to suppose that jumpers from the Bridge are any less amenable to suicide prevention by removal of access to means than other people. This is the one area of suicide prevention for which there is reasonable evidence of effectiveness. It was therefore likely that protective barriers on the Bridge might prevent some suicides. The potential reduction in mortality was around two prevented suicides a year.

Data validity studies:

Summary findings from initial work:

Changes which were made:

Ensuring the audit of suicides recently in contact with psychiatric services
Clinical audit of suicide was put onto a more substantial footing. There were four NHS Trusts providing mental health services in the area. Although the requirement to undertake such audits had been part of the mental health contract with each of them, it was not evident how this had effected clinical practice.

The suicide database collected from coroners records was intended to act as a basis from which these audits could take place. The suicides relating to each individual Trust were sent to the audit co-ordinator within that Trust. If the suicide had recent contact with the mental health services, a clinical audit relating to that suicide would be instigated.

The suicide database had originally been funded from research monies. The Health Authority was asked to pick up this funding when it expired, in order to allow the suicide database to continue. We agreed to make some of the money available on a recurring basis to support clinical audit for this purpose, but suggested it would be appropriate to ensure the information was being used as intended.

With support from the department of Public Health, a group of the clinical audit leads from each of the Trusts was set up. It was apparent at the first meeting that each of the Trusts was at a different stage with undertaking the audits, and that the information produced from the suicide database was not used in the manner intended. Indeed, at least one of the audit leads was not aware who within the Trust, actually received the information or what use was made of it.

As a result of the discussions between the audit leads, a more focused approach to the audit was taken. Shared protocols for audit and similar data collection forms across all Trusts were used. These forms also collected sufficient data to provide to the national confidential enquiry into suicides, and should therefore increase the completeness of reporting to the national audit. The group made a commitment to sharing the results of the local audits, and to consider mutually any lessons that needed to be learnt across the whole of the District.

Identifying and improving safety measures at Clifton Suspension Bridge
We approached the Trustees of the Bridge and a number of discussions were held. They received a presentation outlining the findings of the case control study, with its clear scientific exposition of the evidence that the Bridge acted as a magnet for potential suicides, a proportion of who would not commit suicide if the act of jumping off the Bridge was made harder. Subsequent to this, a decision was taken to run a national competition, seeking ways of making the Bridge safer which were in keeping with its overall architectural style.

**Reinforcement of media guidelines on the reporting of suicides**

We wrote to all the local news media, reiterating well established guidelines for reporting suicides developed and used by the BBC. Although most editors responded to us in a very positive fashion, and stating that they already worked within these guidelines or ones that were very similar, there were examples of editors denying categorically any relationship between reporting of suicides and the subsequent suicide rate. These denials were not supported by any evidence other than strong assertion.

**How changes will be monitored:**

Monitoring the effects of any attempt to reduce suicide rates is made difficult by the relatively small numbers committing suicide by any specific method. It will take several years to accumulate sufficient data on methods of suicide after any changes to the safety measures at the Bridge are implemented to allow a valid comparison to be made with the situation beforehand.

The changes in audit will be monitored through reporting of the process and changes implemented as a result of reporting through the District audit contract.

**Resource Implication:**

The main resource implication was the commitment of staff in the Health Authority, local NHS Trusts and the University to address and progress this issue as part of their normal work.

**Practical lessons learnt:**

- Working with the enthusiasms of a number of respected professionals offers the easiest entry into difficult areas. It is unlikely that an approach by the Health Authority directly to the Bridge trustees would have been successful without the whole hearted support of local clinicians. Similarly, an attempt to improve the quality of suicide audit by the Health Authority would be likely to be seen as an unwarranted interference by the psychiatrists if it was not in line with the commitment of a senior colleague.

- Rigorous scientific research is persuasive, if well presented. The case control study carried out by an academic and a practising psychiatrist was a powerful lever for change. It concentrated on the key local questions about the benefit of additional safety measures - is it reasonable to assume that people who jump off the Bridge are sufficiently similar to other groups of suicidal people that making access to this method of suicide harder would result in a reduction of suicides, in line with other reported studies. By providing strong evidence in support of this position, arguments opposing additional safety measures became hard to sustain.

- Any such scientific research needs to be very specifically focused at the local situation. The study here addressed a very precise question detailed above. In other areas, the questions needing answering are likely to be very different - perhaps relating to quality of care. Different methodologies would need to be used to answer such questions.

- Some people are not open to rational argument. When we identified the editor of a newspaper whose response to scientific evidence on the effect of reporting on suicides was simple denial, we felt that pursuing the issue with him would be of no benefit. Whilst it was possible that a major effort could have brought about a change of heart, we judged that the benefits were unlikely to justify the attempt, particularly when working with the Bridge trustees offered a more concrete and quantifiable benefit.

- Some baseline data, in this case, the suicide database, is necessary to act as a focus to local activity. We used this because it was already in place and by so doing, we were following our first lesson - working with the enthusiasms of local professionals. Although it is
hard to see how good quality audit of suicides can be undertaken without such a database, we might not have given this area such priority if there had been alternative approaches which harnessed pre-existing commitments.

- A co-operative approach is more likely to lead to changes which are maintained.

**Conclusion:**

Using the focus on a population health outcome, and working in co-operation with local clinicians and academics, we were able to bring about changes in the quality of audit of suicides and in the provision of safety measures at a local suicide hot-spot, both of which had been attempted less successfully on previous occasions.

**References:**


**Organisational Context:**