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HELEN GOSNEY AND KEITH HAWTON

Inquest verdicts: youth suicides lost

AIMS AND METHOD

To investigate how much reliance on suicide verdicts underestimates probable suicides. All unnatural deaths of those 8–18 years of age in West Yorkshire during a 6-year period were identified from the death register. Deaths which had verdicts other than killed him- or herself and were not obviously accidental were reviewed by a panel of three consultant child and adolescent psychiatrists to determine whether they were probable suicides.

RESULTS

Of 40 deaths reviewed by the panel, 13 were identified as probable suicides, of which 6 had an open verdict, 6 were death by self-hanging classified as misadventure and 1 was an overdose with a verdict of accidental death. These 13 deaths and the 7 with a coroner's verdict of suicide gave a total of 20 probable suicides.

CLINICAL IMPLICATIONS

Suicide statistics and targets need to take into account the fact that by current methods a significant proportion of suicides by adolescents will not be included in official figures. This underestimation would have been 65% if only suicides were identified and 35% when open verdicts were combined with suicides. Underestimating the youth suicide rate has consequences for the priority and resources allocated to preventing these deaths, and suicide deaths that are not recognised as such will not be included in relevant research and audit.

Suicide is a relatively rare event among young people but is none the less in the top three causes of death for this age group. In 1992 the Government recognised suicide as a major public health concern in its policy document *The Health of the Nation* (Department of Health, 1992) and in 2002 launched England's first ever National Suicide Prevention Strategy (Department of Health, 2003) as part of *Saving Lives: Our Healthier Nation* (Department of Health, 1999). Suicide rates among younger males receive particular attention, as this group has the highest suicide rate, and in men under 35 suicide is the most common cause of death. The Office for National Statistics defines suicides as deaths where the coroner has given a verdict of suicide or where an open verdict (undetermined cause) was reached in a death from injury or poisoning (Office for National Statistics, 2006). Open verdicts are included because of recognition that the majority of these are likely to be suicides (Charlton *et al*, 1994). Official suicide rates are calculated on this basis.

The inquest into death has a very limited role. It has to provide the particulars needed to register a death and aims to answer four questions: who the deceased was, and how, when, and where the deceased came by his or her death. The registration particulars are the date and place of death, the name and surname, the gender, date and place of birth, the occupation and usual address of the deceased. The answers to the four questions are all set out on the written record of the inquest, which is called the inquisition, and is signed by the coroner and the jury if there is one. The short-form summary of the category of death, such as killed him- or herself or open, is usually referred to as the verdict of the inquest. Possible inquest verdicts include natural causes, accident, lawful killing, unlawful killing, industrial disease, suicide, misadventure and open verdict. Misadventure is the unintended outcome of an intentional act. An open verdict is reached when there is insufficient evidence for any other verdict.

The handbook for coroners in England and Wales states that 'suicide must never be presumed but must always be based upon some evidence that the deceased intended to take his own life' (Matthews & Foreman, 1993). The coroners have a very high threshold for giving suicide verdicts, particularly for young people (Madge & Harvey, 1999). Hence the true suicide rate is underestimated and many suicides receive other verdicts at inquest (Neeleman & Wessely, 1997). Therefore to meaningfully study suicides it is necessary to include deaths that probably represent suicide but received other verdicts.

There is a lack of evidence about youth suicide, particularly among those under 15 years, and this could lead to the assumption that there are no suicides in this age group. It is therefore important to undertake research to identify all youth suicides, and to study these deaths to create a robust body of evidence concerning this neglected group.

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Method

The county of West Yorkshire covers about 200 km^2 and has a population of approximately 2 million. It has two coroners who sit in the east and west divisions of the county and have a total of four offices.

All unnatural deaths of persons aged between 8 and 18 years in West Yorkshire between 1996 and 2002 were identified from the death register. This age range was chosen because age 8 is generally held as the youngest age at which a child may have the level of cognitive development required to formulate genuine suicidal ideation and age 18 is the upper age limit for many child and adolescent mental health service teams. For the deaths with verdicts other than suicide, a judgement was made based on the available information as to whether there was any possibility that the death was suicide. At this point there was a very low threshold for inclusion. The full coroner's records for all of these deaths were reviewed to gain as much information as possible.

The majority decision of a panel of three consultant child and adolescent psychiatrists was used to decide which were deaths by suicide on the balance of probabilities. The panel members were each given a copy of the form summarising the coroner's records, although the amount of information available was highly variable. The coroner has to have evidence of suicide 'beyond all reasonable doubt', and be completely satisfied that the death was not an accidentally completed parasuicide, but for this research the level of proof required for inclusion was much lower. In keeping with the method of Houston *et al* (2001) deaths were given a suicidal probability rating of probable (>50% likelihood) or unlikely based on the following information from the inquest notes: apparent planning, intent, suicidal communication and lethality of method. A majority decision would have been used in the case of any disagreement among the panel members, but this was not necessary.

Results

The panel reviewed data on 40 deaths without suicide verdicts, and agreed that 13 were probable suicides. When combined with the 7 deaths which had received an inquest verdict of killed him- or herself there was a total of 20 (see Table 1).

Thus reliance on suicide verdicts alone would have underestimated the number of suicides by 65%. Use of the suicide and open verdict categories would have underestimated the number by 35%. Of the seven other deaths included as probable suicides, six were deaths by hanging which received a verdict of death by misadventure.

There were seven further deaths identified from the death register for which the records could not be reviewed as they were archived at a distant site; one of these was a death from hanging with an inquest verdict of misadventure.

Discussion

Main findings

As expected, probable suicides received a variety of verdicts at inquest, with less than half receiving a verdict of killed him- or herself. This verdict seemed mainly to be reserved for deaths where there was very clear evidence, usually in the form of a note, that death was the intended outcome of the act. This is consistent with the judgment in R v. Huntbach, ex parte Lockley [1944] that

> 'suicide is not to be presumed. It must be affirmatively proved to justify the finding. Suicide requires an intention'.

Of the 13 extra deaths rated as probable suicide by the panel, 6 had received open verdicts, 6 misadventure verdicts and 1 an accidental verdict. Of the total 20 deaths, the official statistics will have only included the 7 with suicide verdicts and the 6 deaths by injury that received open verdicts. Therefore the official suicide statistics have excluded a third of the deaths of interest in this series. In particular, youth deaths by hanging will have been underestimated by 42%. The inclusion of accidental poisonings with suicide and open verdicts in the estimated suicide rate, as described in other studies (Houston *et al*, 2001), would have included just 1 extra death from this series.

The 2001 Census showed that there were 340 444 8- to 19-year-olds living in West Yorkshire during the period of this study. This gives an approximate suicide rate of 1 per 100 000 per year for the study population. This is compatible with rates published by the Office for National Statistics of 0.18 per 100 000 for 10- to 14-year-old males and 3.90 per 100 000 for 15- to 19-year-olds. The rate in this series might be lower than these national figures because this study includes males and females

Table 1. Methods and verdicts of 20 deaths included as suicides

	Verdict of death			
Method of death	Killed him- or herself *n*	Open *n*	Misadventure *n*	Accidental *n*
Decapitation on railway line	1			
Hanging	3	5	6	
Carbon monoxide poisoning	3			
Overdose of analgesics				1
Gunshot wound		1		

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and young people from the age of 8 years, although the age distribution is skewed towards older adolescents.

The panel in this study did not believe that any of the deaths receiving a verdict of 'abuse of drugs' were probable suicides. This is in keeping with research showing that the majority of overdose deaths in young drug addicts are accidental poisonings and not misclassified suicides (Kjelsberg *et al*, 1995).

Other studies

Although this is a small study it confirms the findings of Madge & Harvey (1999) that the real rate of non-accidental self-injurious fatal behaviour may be up to three times the official recorded level. The methodology used was very similar to that of Madge & Harvey who studied 0- to 19-year-olds in North London between 1980 and 1996. This work also confirms their finding that approximately a third (39.2% in this study) of probable suicides received a verdict of misadventure, although in their series only one-third of these were deaths by hanging; and deaths by drowning, overdose, jumping from a height and 1 death from jumping in front of a train also received misadventure verdicts. The rates of suicide and open verdicts in England and Wales for males aged 15–24 were rising during the period of the study by Madge & Harvey (1999), they peaked in 1998 and have fallen since then, the period of this study, but the rate of deaths receiving misadventure verdicts and the extent of underestimation of suicides seems stable.

Implications

The annual report on the National Suicide Prevention Strategy for England for 2005 reported that the suicide rate for young men had fallen to its lowest level for almost 20 years, having dropped almost 30% from its peak in 1998 (National Institute for Mental Health in England, 2006), which is the first downward trend since the problem of suicide in this group started to escalate 25 years ago. If the underestimate in the number of deaths has remained at a constant level, as this work suggests, then the downward trend is a valid finding. However, since there has been a shift in the methods used for suicide over this period, with a marked increase in hangings (National Institute for Mental Health in England, 2006), then part of the reduction in rate seen could be a result of more deaths being lost to the statistics, especially as a sizeable proportion of hanging deaths by young people receive verdicts of misadventure.

The underestimation in official statistics leads to youth suicide not being specifically targeted in policies and guidelines. For example, the toolkit for the National Suicide Prevention Strategy for England has little to say about children and adolescents. If not identified as suicides these deaths will not be subject to the local audits that each primary care trust must undertake, and so any learning points or resource implications highlighted by the deaths will be lost.

It is clearly of the utmost importance for a number of reasons that deaths due to probable suicide can be identified, but the only method currently available is to examine the records of all violent or unnatural deaths. A verdict of killed him- or herself can have legal, financial and emotional implications for the surviving family members, and many would say that it is correct that the standard of proof required is 'beyond all reasonable doubt' and not the 'balance of probabilities' as used in Norway and Hungary. Unless the burden of proof required is reduced or a more accurate way is found of estimating these deaths, a proportion of youth suicides will be lost to national statistics and the prevention of these deaths will not be given the priority or resources that it deserves.

Declaration of interest

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***Helen Gosney** Specialist Registrar in Child and Adolescent Psychiatry, Highfield Family and Adolescent Unit, Warneford Hospital, Warneford Lane, Oxford OX3 7JX, email: helengosney@fsmail.net, **Keith Hawton** Director, Centre for Suicide Research, University Department of Psychiatry, Oxford and Consultant Psychiatrist, Oxfordshire and Buckinghamshire Mental Health Partnership NHS Trust

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