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the question with an existing scale and not a semi-struc-
tured interview." Such a subjective question requires
further rigorous evaluation before we advocate its
widespread application to screen for depression in
patients with advanced cancer.

Contributors: ML-W and MD designed and developed the study.
ML-W, FT, and IB carried out the study. ML-W, MD, and FT
analysed the data. ML-W and MD drafted the paper; all authors
revised and approved the final version. ML-W and MD are
 guarantors.

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Competing interests: None declared.

Ethical approval: Leicestershire Health Authority.

1 Hotopf M, Chidgey J, Addington-Hall J, Lan L Y K. Depression in
2 Lloyd-Williams M, Friedmann T, Rudd N. A survey of antidepressant pre-
3 Clochon V, Wilson K, Enns M, Lander S. "Are you depressed?" Screen-
4 Mahoney J, Drinka TJ, Adler R, Gunter-Hunt G, Matthews C, Graevenstein
S, et al. Screening for depression: single question versus GDS. * J Am Ger-
5 Watkins C, Daniels L, Jack C, Dickinson H, van den Broek M. Accuracy of
a single question in screening for depression in a cohort of patients after

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Risk of suicide in twins: 51 year follow up study

Cecilia Tomassini, Knud Juel, Niels V Holm, Axel Skytthe, Kaare Christensen

Strong family ties and commitments are known to be
important in the prevention of suicide. Having parents
alive and together, being married, and having young
children are negatively correlated with risk of suicide.1-3
The presence of siblings, however, has rarely been
looked at in studies of suicide or attempted suicide. A
Danish register study found no protective effect associ-
ated with having siblings,1 but neither the age nor the
sex of siblings was considered. Twins represent a
unique sibling relationship. They not only share the
same family and social environment at least for the first
part of their lives, but they also show a higher level of
closeness both in terms of the number of years spent
together before leaving the parental home and in the
frequency of contacts afterwards. We investigated
whether the suicide rate in twins was different to that in
the general population.

Participants, methods, and results

Through the population based Danish twin registry we
identified same sex twins born from 1870 to 1930 and
established date and cause of death from 1943 to 1993
through the Danish registry of causes of death (this
register linkage has previously been described in more
detail). We included 21 635 individual twins alive on 1
January 1943, 13 318 (62%) of whom died during the
follow up.

From 1951 we coded the cause of death according to
the ICD-6, ICD-7, and ICD-8 (international classifi-
cation of diseases, sixth, seventh, and eighth editions).
For deaths from before 1951 we used the coding system of the Danish registry of causes of death. Here
we report on the deaths coded as suicide (1943-50:
Danish registry codes 900-930; 1951-68: ICD-6 and 7
codes 970-979; 1969-93: ICD-8 codes 950-969). We
calculated the expected number suicides in the twin
population by multiplying the observed person years
with suicide rates for Denmark stratified for sex, one
year age group, and five year calendar period (source:
the Danish registry of causes of death). Standardised
suicide rates were calculated as the observed number of
suicides divided by the expected number of suicides.

As previously reported4 the twin cohorts had a
mortality pattern similar to that in the general popula-
tion (standardised mortality 0.95 for men and 0.98 for
women). However, twins had a substantially lower
suicide rate compared with the general population,
with 211 observed suicides versus 292.8 expected, cor-
responding to a standardised suicide rate of 0.74 for
men (95% confidence interval 0.62 to 0.88) and 0.69
for women (0.55 to 0.86) (table). The suicide risk for
twins was consistently lower for both men and women in all six 10 year birth cohorts. We also considered the
risk of suicide stratified by cohorts and follow up time
(1-25 years and ≥25 years). All strata consistently
showed a reduced suicide risk for twins, indicating
no age or cohort differences. Furthermore, the suicide
rate was of similar size in monogygotic and dizygotic
twins.

<table>
<thead>
<tr>
<th>Birth cohort</th>
<th>Alive on 1 January</th>
<th>Suicides</th>
<th>Standardised suicide rates (95% CI)a</th>
</tr>
</thead>
<tbody>
<tr>
<td>1870-9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>663</td>
<td>0</td>
<td>4.4</td>
</tr>
<tr>
<td>Women</td>
<td>799</td>
<td>2</td>
<td>2.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.64 (0.50 to 0.30)</td>
</tr>
<tr>
<td>1880-9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>1021</td>
<td>9</td>
<td>10.1</td>
</tr>
<tr>
<td>Women</td>
<td>1158</td>
<td>2</td>
<td>6.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.31 (0.24 to 1.13)</td>
</tr>
<tr>
<td>1890-9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>1390</td>
<td>15</td>
<td>20.4</td>
</tr>
<tr>
<td>Women</td>
<td>1483</td>
<td>4</td>
<td>12.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.73 (0.41 to 1.21)</td>
</tr>
<tr>
<td>1900-9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>1888</td>
<td>25</td>
<td>34.7</td>
</tr>
<tr>
<td>Women</td>
<td>2048</td>
<td>16</td>
<td>23.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.68 (0.39 to 1.10)</td>
</tr>
<tr>
<td>1910-9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>2301</td>
<td>42</td>
<td>47.0</td>
</tr>
<tr>
<td>Women</td>
<td>2736</td>
<td>26</td>
<td>35.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.72 (0.47 to 1.06)</td>
</tr>
<tr>
<td>1920-30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>2933</td>
<td>37</td>
<td>56.3</td>
</tr>
<tr>
<td>Women</td>
<td>3241</td>
<td>33</td>
<td>38.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.84 (0.58 to 1.18)</td>
</tr>
<tr>
<td>All</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>10 196</td>
<td>128</td>
<td>173.0</td>
</tr>
<tr>
<td>Women</td>
<td>11 457</td>
<td>83</td>
<td>119.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.69 (0.55 to 0.86)</td>
</tr>
</tbody>
</table>

*For 1951 and 1952 suicides were not coded separately and therefore both observed and expected suicides
in these two years are omitted from calculations.
†Based on Poisson distribution.

45
45
Comment

Twins have a reduced risk of suicide, which supports the hypothesis that strong family ties reduce the risk for suicidal behaviour. This finding was consistent across cohorts, sex, and zygosity. As we used population based register data there was little room for selection bias. The strongest risk factor for suicide is mental illness, but other Danish register studies have found mental illness to be slightly more common among twins than among singletons. This should lead to a higher proportion of twins committing suicide compared with the general population, but our findings show exactly the opposite, further underscoring the importance of strong family ties.

Contributors: CT and KC proposed the current use of already existing data on Danish twins’ mortality. These data were collected by NVH and AS and analysed by KJ. CT prepared the first draft of the paper. All authors took part in discussions about the design, analyses, and reporting of the study, made individual contributions to the final content of the paper, and approved the final version for publication. KC is the guarantor.

Funding: The US National Institute on Aging research grant NIA-PO1-AG058761, the Danish Cancer Society (56/79), and the National Cancer Institute (R35 CA 42581). The guarantor accepts full responsibility for the conduct of the study, had access to the data, and controlled the decision to publish.

Competing interests: None declared.


(Accepted & June 2003)

A memorable exam

On moving from the primarily English speaking Canadian province of Ontario to predominantly francophone Quebec in the late 1970s, I had to pass a French language proficiency test in order to receive my medical licence. I was already bilingual (native English and reasonable Hebrew) and had studied French in high school. However, nearly 15 years had passed since I had last said “bien sûr” to my teacher, and so I had to go back to night school.

In addition to my formal language studies, I watched cartoons on television, perused the French press, and studied the television news “en français” (after learning the main facts on the English version, which came on earlier). I assiduously studied, practised in front of a mirror, and tortured my poor French speaking patients, who were both enormously kind and helpful.

We “immigrant” physicians had one year to prove our linguistic competency, with an option for another year of study should one fail the initial test. Until receiving a certificate of language competency, with an option for another year of study should one fail the initial test. Until receiving a certificate of language competency, our medical licences were deemed “temporaries” only. The exam comprised two parts: the first, taken in a language laboratory, involved reading and listening comprehension. Always pretty good at exams, I passed this one with relative ease. But it was the viva which frightened me to death.

Apparently, I belong to one of those rare breeds which finds it easier in the early stages of language acquisition to speak than to understand. (My wife claims I frequently suffer from the same syndrome even in English.) As such, I was afraid that I might not understand something my examiner asked me. But that was not to be the problem.

On the day of my oral exam, I arrived at the headquarters of the “Office de la langue francaise” (what we Anglos called the headquarters of the language cops). The examiner, about 10 years my senior, was polished, polite, and spoke French clearly and precisely. Phew, no problem with comprehension. And as the exam went forward, we seemed to get on famously.

It looked as if things were winding down and that my ordeal was nearing its end. I felt an enormous sense of relief creeping into my veins. As I walked down the corridor on the way to the elevator, the examiner called out to me, this time in perfect unaccented French. “By the way,” he informed me, “the proper French word for spleen is “la rate.”

“Oh,” I turned, fearing the worst. “By the way,” he informed me, “the proper French word for spleen is “la rate.”

“Merci beaucoup” was all I could think to say.

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We welcome articles up to 600 words on topics such as A memorable patient, A paper that changed my practice, My most unfortunate mistake, or any other piece conveying instruction, pathos, or humour. Please submit the article on http:// submit.bmj.com Permission is needed from the patient or a relative if an identifiable patient is referred to. We also welcome contributions for “Endpieces,” consisting of quotations of up to 80 words (but most are considerably shorter) from any source, ancient or modern, which have appealed to the reader.