Suicidal behaviour is a persistent and lethal public health problem. Worldwide, suicide is among the leading causes of death. Prevention programmes have been established over the years, several of which have shown some effectiveness in decreasing the risk of suicide. Only a few psychological treatments have demonstrated an ability to decrease the risk of suicidal behaviour. Unfortunately, available data suggest that many people who are suicidal do not seek treatment. Although there is widespread agreement on the importance of suicide prevention efforts, basic information about the treatment of people who are suicidal is not available. For instance, there are no cross-national data available that document the proportion of suicidal people who actually receive treatment or the reasons why some of them do not seek treatment. This is a consistent and pervasive finding, especially in low-income countries. Improving the receipt of treatment worldwide will have to take into account culture-specific factors that may influence the process of help-seeking.

### Method

The World Mental Health surveys were carried out in 21 countries in six continents, including Africa (Nigeria, South Africa), Asia (India, Israel, Japan, Lebanon, China – Beijing, Shanghai and Shenzhen), Australasia (New Zealand), Europe (Belgium, Bulgaria, France, Germany, Italy, The Netherlands, Romania, Spain, Ukraine) and North and South America (Brazil, Colombia, Mexico, USA). Respondents were selected using a stratified multistage clustered-area probability sampling strategy, apart from Japan where an unclustered two-stage probability sampling method was used. The total sample size was 109381 with individual country sample sizes ranging from 2357 in Romania to 12790 in New Zealand. The weighted average response rate across all countries was 72.1%. Using World Bank criteria, countries were classified as low-income (Colombia, India, Nigeria, China and Ukraine), middle-income (Brazil, Bulgaria, Lebanon, Mexico, Romania and South Africa) and high-income (all other survey countries) (see online Table DS1). Surveys were conducted face-to-face by trained lay interviewers. Informed consent was obtained face-to-face by trained lay interviewers. Informed consent was obtained from each respondent.

### Results

Two-fifths of the suicidal respondents had received treatment (from 17% in low-income countries to 56% in high-income countries), mostly from a general medical practitioner (22%), psychiatrist (15%) or non-psychiatrist (13%). Those who had actually attempted suicide were more likely to receive care.
the problem on their own). Participants who responded that they
inconveniences) and attitudinal barriers (i.e. the presence of
structural barriers (i.e. lack of financial means, available
for
affirmatively were asked to indicate which of the following reasons
a time in the past year when they had felt that they might have
reported no use of health services were asked whether there was
given to respondents as a visual recall aid. Respondents who
healers, complementary or alternative medicine practitioners).

The WHO translation–back translation protocol was used to
translate instruments and training materials. Translations were
made by bilingual individuals with consultation to expert panels
(with psychiatrists, psychologists and mental health researchers).
The following steps were performed: translation from the original
English version into the target language by two independent
translators; review of these translations by a bilingual group and
production of a revised version; translation of the revised
version back into English by two different translators; and review
of the back translations and production of the final version by the
bilingual group. This protocol was followed in order to obtain
instruments with acceptable cross-cultural validity for use
worldwide.17

Classification of suicidality
Suicidality was assessed using the Composite International
Diagnostic Interview (CIDI) 3.0 suicidality module.18 Based
on their responses to questions about the experience of suicide
ideation, plans and attempts (both planned and unplanned) in
the preceding 12 months, respondents who endorsed a history
of any suicidal thought or behaviour were classified into one of
four groups of increasing severity: suicide ideation only, suicide
plan, unplanned suicide attempt and planned suicide attempt.

Treatment and barriers to care
Treatment use was assessed by the CIDI-3.0 treatment module
regarding past year receipt of treatment from any type of
professional, either as an out-patient or in-patient, for problems
with emotion regulation, anxiety, psychological distress or use of
alcohol or drugs.11,18 Included were mental health professionals
(e.g. psychiatrists, psychologists), general medical professionals
(e.g. general practitioners, occupational therapists) and other
non-healthcare professionals (e.g. religious counsellors, traditional
healers, complementary or alternative medicine practitioners).
Examples of these types of providers were presented in a booklet
given to respondents as a visual recall aid. Respondents who
reported no use of health services were asked whether there was
a time in the past year when they had felt that they might have
needed to see a professional for problems with their emotion
regulation, anxiety or psychological distress. Those who answered
affirmatively were asked to indicate which of the following reasons
for not seeing a professional applied to them: low perceived need,
structural barriers (i.e. lack of financial means, available
treatments, personnel or transportation, or the presence of other
inconveniences) and attitudinal barriers (i.e. the presence of
stigma, low perceived efficacy of treatments or the desire to handle
the problem on their own). Participants who responded that they
did not need treatment in the past 12 months (i.e. they endorsed
the statement, ‘The problem went away by itself, and I did not
really need help’ as a reason for not seeking treatment) were not
asked about structural or attitudinal barriers and were coded as
respondents with low perceived need (see Appendix for specific
items).

Statistical analysis
Descriptive statistics were used to estimate the prevalence of
past-year treatment use and barriers to care among suicidal
respondents. Multivariate logistic regression models examined
variations in treatment use associated with sociodemographic
variables, suicidality severity, treatment history and lifetime
history of respondents’ mental disorders (mood, anxiety,
and substance use or impulse control disorders) as assessed by
the CIDI version 3.0. Four main effect models were run, one for each
of the three healthcare sectors (any mental health treatment,
general medical treatment and any non-healthcare) and one for
the entire sample. A similar approach was used to study barriers
to treatment. In the logistic regression models, coefficients and
standard errors were exponentiated for ease of interpretation
and are reported as odds ratios with 95% confidence intervals.
Multivariate predictors for either seeking treatment or barriers
to treatment were adjusted for the possible influence of national
differences, sociodemographic characteristics, suicidality severity,
time (in years) since onset of suicidal ideation, treatment history
and presence of DSM–IV lifetime mental disorders. Standard
errors were estimated with the Taylor series method,19 using
SUDAAN software (Software for Survey Data Analysis, version
8.1 on UNIX-Solaris/SUN operating system; www.rti.org/
SUDAAN), to adjust for weighting and clustering.20 Multivariate
significance was evaluated with Wald chi-squared tests based
on design-corrected coefficient variance-covariance matrices.
Statistical significance was evaluated using two-sided design-based
tests and the P<0.05 level of significance.

Results
Treatment of suicidal people
Thirty-nine per cent of people who had engaged in suicidal
behaviour in the past year had received some form of treatment
for emotional difficulties in the past year (Table 1). Those with
higher severity of suicidality accessed care at higher rates: 34–
42% of those with suicidal thoughts (i.e. suicide ideation or
plan) received care compared with 49–55% of those who made
a suicide attempt. The type of care received most often by suicidal
respondents was mental healthcare (23% of all suicidal
respondents) followed by general medical care (22%) and non-
healthcare services (11%). Receiving some form of treatment
was predicted by higher education and income, married status,
a past history of treatment and the presence of a mood or anxiety
disorder (Table DS2). In addition, greater severity of suicidal
behaviour and shorter time since first onset of suicidal ideation
were associated with higher odds of receiving treatment. None
of these clinical characteristics (suicidality severity, time since
onset of the suicide ideation or lifetime mental disorders) or
service use characteristics (history of treatment) was associated
with higher odds of receiving specific types of treatment (Table
DS2). In contrast, those with higher education, higher income
and those who were never married had significantly higher odds
of receiving mental health treatment; whereas those who were
older, had lower education levels and were married had
significantly higher odds of receiving general health treatment.

An analysis of differences in the receipt of care among high-
income, middle- and low-income countries (see Table DS3a–d for data
reported separately for each country) revealed that the treatment

https://doi.org/10.1192/bjp.bp.110.084129 Published online by Cambridge University Press
of suicidal behaviour was most prevalent in high-income countries (56% of those experiencing any suicidal outcome received some form of treatment in the past 12 months) and less prevalent in middle-income (28%) and low-income (17%) countries for each of the suicidal outcomes examined (see Table DS4a–c for more detail).

**Barriers to treatment**

Among those who had engaged in suicidal behaviour in the past year but had not received treatment, low perceived need was consistently the most common barrier reported (58% of respondents with any suicidal outcome). This was the highest barrier endorsed among respondents with ideation (58%) and plan (63%), as well as those with planned (57%) and unplanned (40%) suicide attempts. The next most commonly reported barriers were those related to attitudes about seeking treatment. Of those who were suicidal in the past year but did not receive treatment, 27% said that they wanted to handle the problem on their own, 12% believed the problem would get better without treatment, 9% said the problem was not that severe, 8% believed that treatment would not be effective and only 7% reported stigma as the reason for not seeking treatment. The least-often endorsed barriers were structural barriers, which included limited finances (12%), lack of availability of treatment (11%), problems with transportation (4%) and the inconvenience of attending treatment (4%) (Table 2). Respondents with a history of receiving prior treatment were less likely to have a low perceived need for treatment but more likely to report the experience of structural barriers to treatment (Table DS5). In addition, greater respondent age was associated with the experience of fewer structural barriers. No other clinical or service use characteristics predicted the type of barriers to treatment experienced. Cross-national comparisons of the data revealed that low perceived need for treatment was the most often endorsed reason for not seeking treatment in low-income (67%) and middle-income (62%) countries. In high-income countries low perceived need (45%) was surpassed by attitudinal barriers (54%) as the primary reason for not seeking care for suicidal thoughts and behaviours (Table DS6a–c).

**Discussion**

This cross-national, population-based survey revealed that most people with suicidal thoughts, plans or attempts do not receive mental health treatment in any form. The rate of treatment was low across each of the 21 countries examined, but was especially low in middle- and low-income countries. Receipt of care was higher among those with more severe suicidality and among those with mood or anxiety disorders. Among suicidal respondents who did not receive any care, the most frequently endorsed reason for failure to seek treatment was low perceived need, followed by other attitudinal and structural barriers.

**Limitations**

Our results should be interpreted in the light of several important limitations. First, our study had a moderate response rate (73%). Non-responders in population surveys are likely to have higher rates of mental disorders than respondents. Second, respondents who did not speak the primary language of the country sufficiently, those resident in institutions and those without a fixed address were not included in this study. It may be that such people are more likely to be suicidal. Moreover, against the background that suicide risk is elevated among in-patients and specific respondent groups (such as those with psychotic disorder or borderline personality disorder), we might assume that the
prevalence of suicidal behaviour is higher among psychiatric in-patients than among people living in the community. Third, the CIDI 3.0 treatment module asks for treatment for emotional or substance misuse problems, not for suicidality specifically, and hence not as a specific behaviour to seek care for. Although we did control for national differences, suicidal behaviour may not always be considered as an emotional or psychological problem, and hence may not be considered a reason to seek help in mental healthcare. Moreover, the information on treatment access did not include information about the adequacy or effectiveness of the treatment received. Indeed, despite some evidence that treatments for mental disorders are also helpful in reducing suicidality, we cannot estimate to what extent treatments obtained in this study for mental disorders were adequate for treating suicidal behaviours. Further research should therefore focus in more detail on received treatment for both mental disorders and suicidal behaviour and criteria defining treatment adequacy/effectiveness. Fourth, because we used a 12-month time frame, we were unable to examine delays in the help-seeking process in the current study. Fifth, responses to the survey may have been biased by the use of retrospective self-report. Previous studies have shown that the validity of the assessment of service use could be biased dependent upon recall time periods, or frequency of service use, all leading to a modest underestimation of more recent service use. Sixth, respondents who did not feel a need for treatment were not asked about structural or attitudinal barriers, possibly leading to an under-estimate of stigma. Moreover, we treated stigma as an independent reason for not seeking help, whereas it might be a function of attitudinal or structural barriers.

Table 2

<table>
<thead>
<tr>
<th>Reason for not seeking</th>
<th>12-month treatment</th>
<th>Suicidal-plan treatment</th>
<th>Unplanned suicide attempt</th>
<th>Planned suicide attempt</th>
<th>Any suicidal behaviour</th>
<th>n</th>
<th>%</th>
<th>s.e.</th>
<th>n</th>
<th>%</th>
<th>s.e.</th>
<th>n</th>
<th>%</th>
<th>s.e.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low perceived need for treatment</td>
<td>55.6</td>
<td>2.8</td>
<td>62.6</td>
<td>3.8</td>
<td>155</td>
<td>40.0</td>
<td>155</td>
<td>40.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial</td>
<td>15.4</td>
<td>2.5</td>
<td>114</td>
<td>21.0</td>
<td>38</td>
<td>16.7</td>
<td>4</td>
<td>9.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability</td>
<td>11.9</td>
<td>2.5</td>
<td>82</td>
<td>14.9</td>
<td>27</td>
<td>11.1</td>
<td>4</td>
<td>9.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>10.6</td>
<td>2.4</td>
<td>77</td>
<td>14.9</td>
<td>24</td>
<td>11.3</td>
<td>5</td>
<td>10.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any attitudinal barrier</td>
<td>10.6</td>
<td>2.4</td>
<td>77</td>
<td>14.9</td>
<td>24</td>
<td>11.3</td>
<td>5</td>
<td>10.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inconvenient</td>
<td>10.6</td>
<td>2.4</td>
<td>77</td>
<td>14.9</td>
<td>24</td>
<td>11.3</td>
<td>5</td>
<td>10.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any structural barrier</td>
<td>15.4</td>
<td>2.5</td>
<td>114</td>
<td>21.0</td>
<td>38</td>
<td>16.7</td>
<td>4</td>
<td>9.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wanted to handle on own</td>
<td>27.1</td>
<td>2.8</td>
<td>20</td>
<td>32.3</td>
<td>32</td>
<td>19.7</td>
<td>4</td>
<td>8.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stigma</td>
<td>27.1</td>
<td>2.8</td>
<td>20</td>
<td>32.3</td>
<td>32</td>
<td>19.7</td>
<td>4</td>
<td>8.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thought would get better</td>
<td>27.1</td>
<td>2.8</td>
<td>20</td>
<td>32.3</td>
<td>32</td>
<td>19.7</td>
<td>4</td>
<td>8.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem was not severe</td>
<td>27.1</td>
<td>2.8</td>
<td>20</td>
<td>32.3</td>
<td>32</td>
<td>19.7</td>
<td>4</td>
<td>8.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Countries included are Belgium, Brazil, Bulgaria, China, Colombia, France, Germany, India, Israel, Italy, Japan, Lebanon, Mexico, The Netherlands, New Zealand, Nigeria, Romania, South Africa, Spain, Russia, Ukraine and the USA.
income and greater clinical severity serving as core predictors. However, greater severity of suicidal behaviour was unrelated to the use of the mental healthcare over the use of other treatment. This suggests that although those who make actual suicide attempts are more likely to be treated than those who only think about suicide, they are not more likely to be referred for care from a mental health specialist.

The help-seeking process of suicidal people is complex. Once people have decided to seek treatment, they seem to wait and see whether the problem independently subsides and whether they can rid themselves of the behaviour. Attitudinal factors may be especially likely among people with suicidal thoughts and behaviours. Such thoughts and behaviours typically are transient in nature, coming and going repeatedly over time. As a result, those experiencing a suicidal crisis may simply try to ‘ride it out’ until the crisis abates. In addition, those experiencing suicidal thoughts and behaviours typically feel pessimistic and hopeless and so may not have positive expectations that treatment will help them. The fact that four in ten respondents report attitudinal barriers (e.g. trying to solve the problem on their own) is a crucial finding because these attitudes may be implicated in delaying access to treatment and thus could result in progression of the problem. Attitudinal barriers also may place considerable limits on implementation of evidence-based mental health treatment and prevention programmes. One way to address these issues is to initiate public awareness programmes about suicide and its appropriate available treatments, as well as the value of educational programmes in suicide prevention, because time becomes even more complicated and difficult because of the cultural and contextual meaning of suicidality. Research has demonstrated the impact of specific cultural attitudes towards suicide rates and help-seeking behaviours. This suggests that barriers to treatment may not be tackled easily, since barriers may reflect deeply rooted cultural ethics that influence different stages of the help-seeking process.

The idea is widely accepted that both stigma and financial barriers interfere considerably with mental health treatment. Our findings challenge this conventional wisdom and show that across income categories, stigma and financial barriers were reported by a minority of suicidal people (less than a fifth of all conditions studied). This suggests that stigma and financial barriers may not be as important as previously suggested and that prevention efforts may be most effective by targeting other attitudinal barriers. However, as this is the first study that has addressed this question, future research may focus on possible interactions between different kinds of barriers. Further research may also focus on the cultural diversity of the interplay between cultural ethics and barriers to treatment. For instance, one area that might be a focus of further study is the effect of family and/or community reactions after a suicide attempt on the process of seeking help.

Implications

In an era where great emphasis lies on the prevention of suicidal worldwide, this first cross-national, population-based study of the patterns of treatment for suicidal behaviours holds some important implications. Clinicians, policy-makers and healthcare planners should be aware of the significance of the degree of unmet need and the broad range of barriers that prevent suicidal people from seeking treatment, and specific effects of cultural differences on the help-seeking process. To decrease the large proportions of untreated suicidal behaviour, stakeholders may need to expand or reallocate treatment resources, especially in countries with lower access to treatment. Acknowledging that it may not be feasible to provide treatment to everyone who needs it in every country, a more efficient strategy – perhaps implemented in tandem with increased treatment resources – would be to target the barriers that are preventing people from receiving available care. Toward this end, our findings suggest that these barriers most often are not structural, or stigma-related, but instead concerns that people hold toward seeking treatment for suicidal behaviours.
The problem didn’t bother me very much.
I was not satisfied with available services.
I was scared about being put into a hospital against my will.
I didn’t think treatment would work.
I thought the problem would get better by itself.
I could not get an appointment.
I thought it would take too much time or be inconvenient.
I was unsure about where to go or who to see.
I was concerned about how much money it would cost.
My health insurance would not cover this type of treatment.
The problem went away by itself, and I did not really need help.
Low perceived need

Acknowledgements
This report was carried out in conjunction with the World Health Organization’s World Mental Health (WMH) Survey Initiative. We thank the staff of the WMH Data Collection and Data Analysis Coordination Centers for assistance with instrumentation, fieldwork, and data analysis.

Appendix

Barriers to treatment assessed in the World Mental Health Surveys

Low perceived need
The problem went away by itself, and I did not really need help.

Structural barriers
My health insurance would not cover this type of treatment.
I was unsure about where to go or who to see.
I thought it would take too much time or be inconvenient.
I could not get an appointment.
I had problems with things like transportation, childcare or scheduling that would have made it hard to get to treatment.

Attitudinal barriers
I thought the problem would get better by itself.
I didn’t think treatment would work.
I was concerned about what others might think if they found out I was in treatment.
I wanted to handle the problem on my own.
I was scared about being put into a hospital against my will.
I was not satisfied with available services.
I received treatment before and it did not work.
The problem didn’t bother me very much.

References


30 Mojtabai R, Gilson M, Mechanic D. Perceived need and help-seeking in adults with mood, anxiety, or substance use disorders. *Arch Gen Psychiatry* 2002; **59**: 77–84.


32 Jorm AF, Angermeyer MC, Katschnig H. Public knowledge of and attitudes to mental disorders: a limiting factor in the optimal use of treatment services.


