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ORIGINAL PAPER

Are attitudes towards mental health help-seeking associated with service use? Results from the European Study of Epidemiology of Mental Disorders

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Abstract
Objective To investigate the prevailing attitudes towards mental health help-seeking in Europe, their correlates, and whether these attitudes are associated with actual service use for mental health problems.
Method Data were derived from the European Study of Epidemiology of Mental Disorders, a survey representative of the adult population of six countries: Belgium, France, Germany, Italy, the Netherlands and Spain ($n = 8{,}796$). The World Mental Health Composite International Diagnostic Interview was used to assess attitudes and DSM-IV diagnoses. The attitudes referred to beliefs that the respondents would seek professional help when faced with a serious emotional problem, would feel comfortable talking about personal problems with a professional, would not be embarrassed if friends knew about the professional help, and respondents' perceived effectiveness of mental health care.
Results Almost a third of the respondents held the view that professional care was worse than or equal to no help when faced with serious emotional problems. Female gender, being younger than 65 years of age, high income, living in Spain or Italy, presence of mood disorder and previous service use were associated with at least two of the four assessed attitudes towards mental health help-seeking. All four attitudes were significantly associated with mental health care use, also after adjustment for previous service use.
Conclusion The low perceived effectiveness of professional care calls for serious action aiming to improve the visibility and credibility of the mental health care sector.

Keywords Public opinion · Mental health services · Epidemiology · Cultural differences · Population study

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Introduction

Since 1990 several population studies, mostly performed in Germany and the United Kingdom, have investigated beliefs about mental disorders and psychiatric patients; see for a review: [1]. These studies focussed on to what extent mental disorders are recognised as such and examined the prevailing beliefs about the causes and treatment of these illnesses among the public. The majority of these studies

used case vignettes describing a person with either depression or schizophrenia. Five major findings can be concluded from these population studies. First, many members of the general public could not correctly recognise mental disorders [2–4]. Second, public beliefs about the causes of mental disorders and the effectiveness of various treatments differed greatly from those of mental health professionals [5–7]. Third, a widespread stigma was found towards those who suffer from a mental disorder, especially people with schizophrenia [8–11]. Four, in the majority of studies where the influence of socio-demographic characteristics on beliefs about psychiatric patients was examined, older age, lower education and less familiarity with mental illness were associated with lower tolerance [12, 13]. The studies did not focus on correlates of a positive attitude towards various treatment options. Five, the few which examined comparisons within and between countries revealed cultural differences in beliefs about mental disorders and psychiatric patients [13–15]. However, the comparisons made focussed on different cultures, resulting in a fragmented and incomplete picture of these differences.

The public's beliefs about the helpfulness of interventions for mental disorders and about psychiatric patients, such as perceiving the mentally ill as dangerous, untrustworthy or having poor social skills, may affect people's perception of mental health services and the sorts of help they would seek in case of mental health problems [16–18]. It is definitely not enough to have evidence-based treatments available if the public does not perceive mental health care as an effective means in dealing with emotional problems or alcohol or drugs problems. However, the prevailing attitudes towards seeking professional help for such problems and to what extent these beliefs actually influence service use for mental health problems are, to our knowledge, not yet investigated on a large scale in Europe.

The studies that focussed on correlates of a positive attitude towards seeking professional help for mental health problems are limited, and were mostly performed in the USA and Canada. They found that prior experience with the mental health care system was associated with a more positive attitude towards help-seeking [19–21]. More favourable attitudes were also found among women [22, 23] and younger people [23, 24]. The studies that investigated to what extent attitudes play a role in the use of services for mental health problems in the general population are also limited, and were mostly performed in Australia. One study found that belief in professional help was a significant predictor of actually seeking help for mental health problems [25, 26]. Another study reported that beliefs about the helpfulness of an intervention did not always predict actual use of that intervention. It depended upon the particular intervention. Beliefs did predict use of antidepressants, but not counselling by a general practitioner or mental health professional in case of a mental health problem, even after adjustment for socio-demographic characteristics, previous depression and number of anxiety and depression symptoms [27]. In contrast, a third study among young adults found that beliefs about the effectiveness of mental health treatment were associated with use of mental health services, after controlling for socio-demographic characteristics, mental health symptoms and subjective need [28].

The few studies which have examined correlates of a positive attitude towards seeking professional help for mental health problems and to what extent such attitude actually influences mental health care use have two major limitations. They were not based on a large representative sample of the general population, and the findings were not controlled for the presence of a mental disorder. It is conceivable, however, that persons with a mental disorder differ in their opinion towards mental health care based on their experience or mental state. To effectively organise health education campaigns, more information is needed about how the general public and certain patient groups differ in their perception of the mental health care sector as an effective means in dealing with emotional problems, and subsequently to what extent attitude towards mental health care is a significant predictor of service use.

This paper attempts to fill this lack of knowledge by addressing three questions in a general population study performed in six European countries, using the Composite International Diagnostic Interview to determine attitudes towards health care and psychiatric diagnoses:

1) What are the prevailing attitudes towards mental health help-seeking in Europe?
2) What are correlates of these attitudes?
3) To what extent are these attitudes associated with actual service use for mental health problems?

Methods

Sample

Data were derived from the European Study of Epidemiology of Mental Disorders (ESEMeD). Methods have been reported elsewhere [29]. Briefly, ESEMeD is a cross-sectional survey representative of the adult population of six European countries: Belgium, France, Germany, Italy, the Netherlands and Spain ($N = 21{,}425$). It is based on a multistage, stratified, random sampling procedure of households. Respondents were contacted and one respondent was randomly chosen in each household on the condition that she/he was 18 years of age or older, and

sufficiently fluent in the language of assessment, to be interviewed. Face-to-face interviews took place between January 2001 and July 2003 and the overall response rate of the study was 61.2%. Men and the youngest age groups (18–34 years of age) were somewhat under-represented.

The ethics committees in each participating country approved the survey procedures. An informed consent was obtained from all respondents after having been informed about the aims of the study.

Diagnostic interview

The World Mental Health Composite International Diagnostic Interview (CIDI version 3.0) [30], computerised version was used to determine DSM-IV diagnoses. The CIDI 3.0 is a fully structured interview developed and adapted by the Coordinating Committee of the World Health Organization World Mental Health 2000 Initiative. The CIDI 3.0 is designed for use by trained non-clinicians. Research has demonstrated acceptable reliability and validity [31] for virtually all CIDI diagnoses.

The CIDI 3.0 was first produced in English and underwent a rigorous process of adaptation in order to obtain conceptually and cross-culturally comparable versions in each of the target countries and languages. This process included forward and backward translations, a review by a panel of experts, pretesting using cognitive interview and debriefing techniques and the intervention of focus groups.

The interview schedule consists of two parts. All respondents completed Part I, which contained core diagnostic assessments, service use, and socio-demographics. All Part I respondents who met criteria for any of these core disorders plus a 25% probability sub-sample of other Part I respondents were administered Part II, which assessed disorders of secondary interest (the less prevalent disorders such as post-traumatic stress disorder and obsessive–compulsive disorder) and a wide range of correlates. Attitudes towards mental health help-seeking were assessed in Part II. For this reason, the data presented here are from the subsample of respondents who completed Part II ($n = 8{,}796$).

Mental disorders

In this paper the following 12-months DSM-IV diagnoses of Part I were included: mood disorders (depression, dysthymia), anxiety disorders (panic disorder, agoraphobia, social phobia, simple phobia, generalised anxiety disorder), and alcohol disorders (abuse, dependence). Any previous mental disorder, based on the above-mentioned disorders, was assessed in the period before the past 12 months. The hierarchical rules as prescribed by DSM-IV were applied in the analyses reported here.

Attitudes towards mental health help-seeking

In the WMH-CIDI Part II five questions concerning the respondent's attitudes towards mental health help-seeking were asked, based on previous population studies explaining variations in service use [32–35] such as the National Comorbidity Survey [36].

1) If you had a serious emotional problem, would you go for professional help? Answer categories were: definitively not go, probably not go, probably go and definitively go.
2) How comfortable would you feel talking about personal problems with a professional? Answer categories were: not at all, not very, somewhat and very comfortable.
3) How embarrassed would you be if your friends knew you were getting professional help for an emotional problem? Answer categories were: very, somewhat, not very and not at all embarrassed.
4) Of the people who see a professional for serious emotional problems, what percent do you think are helped? Answers could vary between 0 and 100%.
5) Of those with serious emotional problems who do not get professional help, what percent do you think get better even without it? Answers could vary between 0 and 100%.

To get a constructed variable with the meaning 'perceived effectiveness of professional help', the percentages on the last two questions were subtracted (question 4 minus question 5) and then these answers were divided into four categories: (1) worse than or equal to no help, (2) somewhat, the first 33% that indicated that professional help was, better than no help, (3) considerable, the second 33% that indicated that professional help was, better than no help and (4) much, the third 33% that indicated that professional help was, better than no help.

Service use

Service use refers to at least one contact made in the general health care sector or the mental health care sector for problems with one's emotions or mental health in the past 12 months. General health care includes general practitioners, medical specialists and other health care professionals working in this sector, such as nurses and nutritionists. Mental health care includes psychiatrists, and other mental health care professionals working in this sector, such as psychologists, psychotherapists and social workers. Because correlates of service use vary according to the sector in which help is sought [37], we defined two types of service users: those using general health care only, and those using mental health care with or without general health care.

Correlates of attitudes towards mental health help-seeking and service use.

The following correlates of attitudes and service use were recorded:

- Socio-demographic characteristics: gender, age (in six categories), education (in two categories), living with partner, paid employment, income (in four categories), urbanicity of place of residence (three categories: low = less than 10,000 inhabitants; middle = between 10,000 and 100,000 inhabitants; high = more than 100,000 inhabitants), and country (6).
- Mental disorders: any mood disorder, any anxiety disorder and any alcohol disorder (all assessed in the past 12 months), and any previous mental disorder.
- Emotional role impairments were assessed in the past 4 weeks with the mental component summary (MCS) scale of the Short-Form 12 (SF-12) [38]. This scale was dichotomised using the cut-off point, which is available for the MCS of the Short-Form 36 (SF-36) (lowest through 42 = 1; 43 through highest = 0) [see 39]. Given the fact that the SF-12 is the short version of the SF-36 and that the MCS of the SF-12 reproduces more than 90% of the MCS's variance based on the SF-36 [40], the same cut-off point was used.
- Parental psychiatric history was assessed by asking respondents whether one or both parents had ever exhibited major depression, generalised anxiety disorder, panic disorder or alcohol disorder.
- Service use: see above (this variable was included as a correlate of attitudes).

Statistical analyses

All analyses were weighted to account for the different probabilities of selection within households and for the selection of individuals in the Part II sample, as well as to restore the age and gender distribution of the population within each country and the relative dimension of the population across countries. All parameters were estimated using the Taylor-series linearisation method [41] for complex sample design, implemented in STATA 9.1, in order to obtain correct 95% confidence intervals and *P* values.

The first research question, 'what are the prevailing attitudes towards mental health help-seeking in Europe?' was addressed by performing descriptive analyses (calculating percentages; see Table 1). The second research question, 'what are the correlates of these attitudes?' was addressed by performing multivariate regression analyses (Table 2). For the testing of country effects, effect coding was used, which allows one to test the deviation of each country from an ''average European'' effect, the so-called grand mean. Because the grand mean functions as a reference category, one of the six country effects does not have to be omitted during the presentation of the regression models in Table 2, as dummy coding would stipulate. The third research question, 'to what extent are these attitudes associated with actual service use for mental health problems?' was addressed by performing multivariate multinomial logistic regression analyses (Table 3). These analyses compared the two groups of service users with the respondents reporting no use of either type of care for mental health problems in the past 12 months.

Results

Attitudes towards mental health help-seeking

A total of 88.2% of the Spanish and 80.5% of the Italian respondents would probably or definitively go for professional help in case a serious emotional problem arose. In the other countries this was considerably lower, ranging from 56.8% (Belgium) to 65.4% (Germany).

A total of 73.0% of the Spanish respondents would feel somewhat or very comfortable talking about personal problems with a professional. In the other countries this varied between 43.4% (Germany) and 67.5% (the Netherlands).

A total of 90.3% of the Spanish respondents would not be very or at all embarrassed if their friends knew they were getting professional help for an emotional problem. In the other countries this ranged from 73.1% (Italy) to 81.5% (Belgium).

The respondents were less favourable about the effectiveness of professional help for serious emotional problems. Only in Spain the majority of respondents (61.4%) held the view that professional help was considerable or much better than no help. In Italy 45.2% shared this view, and in the other countries this varied between 15.8% (the Netherlands) and 27.7% (France). Stated differently, almost a third of all respondents believed that professional care was worse than or equal to no help when faced with a serious emotional problem.

Correlates of attitudes towards mental health help-seeking

The female gender, being younger than 65 years of age, higher income, and living in Spain or Italy were significantly associated with at least two of the four attitudes towards mental health help-seeking. To be more specific, the belief that respondents would seek help when faced with a serious emotional problem was more often reported by women (compared to men), by those younger than

Table 1 Attitudes towards mental health help-seeking in six European countries (part II sample, $N = 8{,}796$), in percentages (weighted data)

	Belgium ($n = 1{,}043$) %	France ($n = 1{,}436$) %	Germany ($n = 1{,}323$) %	Italy ($n = 1{,}779$) %	The Netherlands ($n = 1{,}094$) %	Spain ($n = 2{,}121$) %	Total ($n = 8{,}796$) %
Would go for professional help in case of a serious emotional problem							
Definitively not go	23.9	22.8	10.2	10.0	13.8	6.1	12.8
Probably not go	19.4	17.4	24.4	9.6	21.6	5.6	16.3
Probably go	28.4	28.5	41.3	37.7	37.9	24.2	34.5
Definitively go	28.4	31.3	24.1	42.8	26.8	64.0	36.4
Would feel comfortable talking about personal problems							
Not at all comfortable	15.9	15.9	16.0	15.5	8.0	7.4	14.0
Not very comfortable	19.1	22.5	40.6	17.7	24.5	19.6	26.6
Somewhat comfortable	37.8	37.4	33.2	41.9	53.5	37.2	38.1
Very comfortable	27.3	24.2	10.2	24.9	14.0	35.8	21.3
Would be embarrassed if friends knew about professional help							
Very embarrassed	3.8	5.8	5.8	7.5	2.6	1.6	5.3
Somewhat embarrassed	14.8	14.7	13.3	19.4	17.4	8.1	14.4
Not very embarrassed	23.5	22.4	35.7	27.8	20.3	20.2	27.4
Not at all embarrassed	58.0	57.1	45.3	45.3	59.7	70.1	52.9
Perceived effectiveness of professional help							
Worse than or equal to no help	34.3	38.9	36.5	23.6	45.6	19.1	32.2
Somewhat better than no help	38.9	33.5	37.4	31.3	38.6	19.5	32.8
Considerable better than no help	20.8	22.3	23.1	32.7	14.2	34.9	26.1
Much better than no help	6.0	5.4	3.0	12.5	1.6	26.5	8.9

65 years of age (compared to those being 65 years or older), by higher income groups (compared to lower income groups), and by those living in Spain or Italy (compared to the "average" European).

These groups, except for the higher income groups, also believed professional help to be more effective in dealing with emotional problems.

The belief that respondents would feel comfortable talking about personal problems with a professional, was more often reported by higher income groups (compared to lower income groups), and by those living in Spain or Italy (compared to the "average" European).

The belief that they would not be embarrassed if friends knew about the professional help was more often reported by women (compared to men), by the highest income group (compared to the lowest income group), and by those living in Spain (compared to the "average" European). The Italian respondents were less likely than the "average" European to report that they would not be embarrassed if friends knew about the professional help, despite their positive beliefs on the other three aspects towards mental health help-seeking.

Two socio-demographic correlates were not associated with all four assessed attitudes towards mental health help-seeking: years of education and paid employment.

Two clinical correlates were significantly associated with at least two of the four attitudes towards mental health help-seeking: respondents with a mood disorder (compared to ones without such disorder) and those who had previously used care for their mental health problems (compared to ones without previous service use) more often held the beliefs that they would seek help when faced with a serious emotional problem and that they would feel comfortable talking about personal problems with a professional.

The diagnosed group also believed professional help to be more effective in dealing with emotional problems. Surprisingly, previous service use was not associated with perceived effectiveness of professional help. Additional descriptive analyses (not tabulated) revealed that the respondents with previous mental health care use experiences were more sceptical about professional help compared to the actual mental health care users: respectively 30 and 19% hold the view that professional help was worse than or equal to no help.

The respondents who had previously used mental health care, more often held the belief that they would not be embarrassed if friends knew about the professional help sought.

Four clinical correlates were not associated with all four assessed attitudes towards mental health help-seeking:

Table 2 Socio-demographic and clinical characteristics as correlates of attitudes towards mental health help-seeking in six European countries (part II sample, $N = 8{,}796$), in percentages, adjusted regression coefficients and 95% confidence intervals (weighted data)

	%	Would go for professional help in case of a serious emotional problem[d] Adjusted coefficient[e] (95% CI)	Would feel comfortable talking about personal problems[d] Adjusted coefficient[e] (95% CI)	Would be embarrassed if friends knew about professional help[d] Adjusted coefficient[e] (95% CI)	Perceived effectiveness of professional help[d] Adjusted coefficient[e] (95% CI)
Socio-demographic characteristics					
Female (ref. = male)	51.8	**0.17 (0.10, 0.23)**	0.01 (−0.05, 0.07)	**0.08 (0.02, 0.14)**	**0.08 (0.02, 0.15)**
Age (in years)					
18–24	11.4	**0.16 (0.02, 0.30)**	−0.12 (−0.25, 0.02)	−0.09 (−0.22, 0.04)	**0.16 (0.02, 0.30)**
25–34	18.4	**0.23 (0.10, 0.35)**	−0.00 (−0.12, 0.11)	−0.02 (−0.13, 0.09)	**0.19 (0.07, 0.31)**
35–44	19.6	**0.29 (0.16, 0.41)**	0.04 (−0.08, 0.15)	0.01 (−0.10, 0.12)	**0.20 (0.07, 0.32)**
45–54	16.0	**0.24 (0.12, 0.36)**	0.09 (−0.02, 0.21)	0.02 (−0.09, 0.13)	**0.20 (0.08, 0.32)**
54–64	14.0	**0.13 (0.00, 0.25)**	0.02 (−0.09, 0.13)	0.08 (−0.03, 0.18)	**0.18 (0.06, 0.30)**
65 or older	20.6	Ref.	Ref.	Ref.	Ref.
P for trend		**0.001**	NS	NS	**0.013**
At least 13 years of education (ref. = other)	34.6	0.03 (−0.04, 0.11)	0.02 (−0.05, 0.08)	0.01 (−0.05, 0.08)	−0.02 (−0.09, 0.05)
Living with partner (ref. = other)	66.8	**0.10 (0.03, 0.18)**	0.04 (−0.03, 0.11)	0.02 (−0.05, 0.09)	0.06 (−0.01, 0.14)
Paid employment (ref. = other)	56.5	−0.02 (−0.10, 0.06)	0.01 (−0.07, 0.09)	−0.03 (−0.11, 0.05)	0.05 (−0.03, 0.14)
Income[a]					
Low	19.0	Ref.	Ref.	Ref.	Ref.
Low-middle	32.1	0.07 (−0.03, 0.16)	0.06 (−0.02, 0.15)	0.08 (−0.00, 0.17)	0.01 (−0.08, 0.11)
High-middle	33.2	**0.13 (0.03, 0.22)**	0.08 (−0.00, 0.17)	0.05 (−0.04, 0.14)	0.01 (−0.08, 0.10)
High	15.7	**0.20 (0.09, 0.31)**	**0.15 (0.05, 0.26)**	**0.12 (0.02, 0.22)**	−0.01 (−0.12, 0.10)
P for trend		**0.000**	**0.002**	NS	NS
Urbanicity of place of residence					
Low	33.2	−0.02 (−0.11, 0.07)	−0.04 (−0.12, 0.05)	**−0.08 (−0.17, −0.00)**	0.03 (−0.06, 0.12)
Middle	38.7	0.04 (−0.04, 0.12)	0.01 (−0.06, 0.09)	−0.01 (−0.08, 0.07)	0.07 (−0.01, 0.15)
High	28.1	Ref.	Ref.	Ref.	Ref.
P for trend		NS	NS	**0.034**	NS
Country[b]					
Belgium	3.8	**−0.32 (−0.42, −0.22)**	0.02 (−0.08, 0.12)	0.02 (−0.05, 0.09)	**−0.14 (−0.22, −0.05)**
France	20.6	**−0.24 (−0.32, −0.16)**	−0.03 (−0.11, 0.04)	−0.01 (−0.07, 0.06)	**−0.16 (−0.24, −0.09)**
Germany	31.5	**−0.10 (−0.16, −0.03)**	**−0.34 (−0.40, −0.28)**	**−0.12 (−0.18, −0.06)**	**−0.16 (−0.22, −0.10)**
Italy	22.4	**0.26 (0.20, 0.32)**	**0.07 (0.01, 0.13)**	**−0.19 (−0.25, −0.13)**	**0.26 (0.20, 0.32)**
The Netherlands	6.1	**−0.18 (−0.25, −0.10)**	−0.02 (−0.09, 0.05)	0.02 (−0.06, 0.10)	**−0.40 (−0.47, −0.33)**
Spain	15.6	**0.58 (0.51, 0.64)**	**0.31 (0.25, 0.37)**	**0.28 (0.22, 0.33)**	**0.60 (0.53, 0.68)**
Clinical characteristics					

Table 2 continued

	%	Would go for professional help in case of a serious emotional problem[d] Adjusted coefficient[e] (95% CI)	Would feel comfortable talking about personal problems[d] Adjusted coefficient[e] (95% CI)	Would be embarrassed if friends knew about professional help[d] Adjusted coefficient[e] (95% CI)	Perceived effectiveness of professional help[d] Adjusted coefficient[e] (95% CI)
Mood disorder (ref. = no)	4.5	**0.13 (0.02, 0.24)**	**0.19 (0.08, 0.30)**	0.04 (−0.07, 0.14)	**0.16 (0.04, 0.29)**
Anxiety disorder (ref. = no)	7.9	0.00 (−0.12, 0.13)	−0.05 (−0.16, 0.07)	−0.00 (−0.11, 0.10)	−0.03 (−0.14, 0.09)
Alcohol disorder (ref. = no)	0.7	**−0.57 (−0.93, −0.22)**	−0.26 (−0.56, 0.04)	−0.31 (−0.89, 0.27)	−0.18 (−0.50, 0.15)
Previous mental disorder (ref. = no)	13.9	−0.08 (−0.17, 0.00)	0.01 (−0.07, 0.09)	0.00 (−0.07, 0.08)	0.02 (−0.06, 0.11)
Emotional role impairments (ref. = no)	9.3	−0.01 (−0.12, 0.10)	−0.00 (−0.11, 0.10)	−0.08 (−0.18, 0.03)	−0.06 (−0.17, 0.06)
Parental psychiatric history (ref. = no)	9.3	0.11 (−0.00, 0.21)	0.05 (−0.05, 0.15)	0.05 (−0.03, 0.13)	0.05 (−0.05, 0.15)
Previous service use[c]					
None	84.8	Ref.	Ref.	Ref.	Ref.
General health care only	6.0	**0.27 (0.14, 0.41)**	**0.22 (0.10, 0.33)**	**0.19 (0.09, 0.29)**	0.06 (−0.07, 0.20)
Mental health care	9.2	**0.36 (0.27, 0.46)**	**0.33 (0.24, 0.42)**	**0.24 (0.17, 0.32)**	0.09 (−0.01, 0.19)

Significant coefficients are shown in bold

Ref refers to reference category, *NS* refers to non significant

[a] Income with respect to the median value income of the country

[b] The reference category is the grand mean, which allows one to test the deviation of each country from an "average European" effect

[c] Previous service use assessed in the period before the past 12 months

[d] A higher score, ranging from 1 to 4, indicates a more positive attitude towards mental health help-seeking

[e] Adjusted for all variables in the table

Table 3 Attitudes towards mental health help-seeking as correlates of service use for mental health problems in six European countries (part II sample, $N = 8{,}796$), in adjusted relative risk ratios and 95% confidence intervals (weighted data)

	Service use for mental health problems	
	General health care only Adjusted RRR (95% CI)[b]	Mental health care Adjusted RRR (95% CI)[b]
Would go for professional help in case of a serious emotional problem[a]	**1.34 (1.13, 1.60)**	**2.97 (2.11, 4.19)**
Would feel comfortable talking about personal problems[a]	**1.22 (1.02, 1.47)**	**1.88 (1.52, 2.32)**
Would be embarrassed if friends knew about professional help[a]	1.14 (0.94, 1.38)	**1.31 (1.04, 1.65)**
Perceived effectiveness of professional help[a]	1.24 (1.00, 1.54)	**1.62 (1.35, 1.94)**

The reference category is no help sought in health care. Results of four separately performed regression analyses. Significant relative risk ratios are shown in bold

Ref refers to reference category

[a] A higher score, ranging from 1 to 4, indicates a more positive attitude towards mental health help-seeking

[b] Adjusted for socio-demographic variables (gender, age, education, partner status, employment status, income, urbanicity of place of residence) and clinical characteristics (12 months mood disorder, 12 months anxiety disorder, 12 months alcohol disorder, previous mental disorder, emotional role impairments, parental psychiatric history, previous service use)

having an anxiety disorder, having a previous mental disorder, experiencing emotional role impairments, and having at least one parent with a psychiatric history.

Attitudes towards mental health help-seeking as correlates of actual service use

Attitudes towards mental health help-seeking were found to be significantly associated with service use. After adjustment for socio-demographics and clinical characteristics, such as presence of a mental disorder and previous service use, two of the four attitudes were associated with general health care use: beliefs that respondents would seek help when faced with a serious emotional problem and that they would feel comfortable talking about personal problems with a professional significantly increased the chance of using general health care only. The associated relative risk ratios varied between 1.22 and 1.34.

All four attitudes were associated with mental health care use. The adjusted relative risk ratios varied from 1.31 (for the belief that they would not be embarrassed if friends knew about the professional help) to 2.97 (for the belief that respondents would seek help when faced with a serious emotional problem) for the use of mental health care.

Discussion

Strengths and limitations

This population study is the first that investigated attitudes towards mental health help-seeking on a large scale in Europe, and to what extent such attitudes are associated with variations in service use, after controlling for mental disorder, previous service use and various other correlates of service use.

Although the study was representative for the general population, non-responders may have different attitudes towards mental health help-seeking and may use health care services differently from responders. It is however difficult to guess how this might have affected the results.

A universal standard for how attitudes towards mental health help-seeking can best be measured is not available. In the present study questions on this topic were used which were developed for the WMH-CIDI and were based on previous population studies explaining variations in service use [32–35] such as the National Comorbidity Survey [36]. Despite that these questions are frequently used in various countries all over the world, research on the validity and reliability of these questions is still in development.

It goes without saying that the cross-sectional nature of the data does not allow a strict causal interpretation of the results. The association found between previous service use and attitude towards mental health help-seeking supports the hypothesis that experience with health care influences people's attitude towards it. Longitudinal studies are needed to confirm the theoretical notion that service use (behaviour) is also influenced by people's prior attitude towards mental health help-seeking. Indications for this relationship were found in the present study: after adjustment for previous service use and other variables, all four attitudes were still associated with mental health care use.

Discussion of findings

To our knowledge, only few studies have been published on correlates of attitudes towards mental health help-

seeking and to what extent such attitudes are associated with service use. In addition, the majority used different definitions of attitudes and were not based on a large representative sample, which makes comparison between these studies and with our findings difficult.

In the present study, taking all six countries together, the majority of respondents would probably or definitively go for professional help in case a serious emotional problem would arise (70.9%), would feel reasonably comfortable talking about personal problems with a professional (59.4%) and would not be embarrassed if their friends knew they were getting professional help for an emotional problem (80.3%). However, they were less favourable about the effectiveness of professional help for serious emotional problems. 32.2% indicated that professional help was worse than or equal to no help. These findings must be taken as a very serious public health issue. We will discuss this issue below.

These attitudes towards mental health help-seeking differed significantly between the six European countries. The Spanish respondents were the most positive with respect to all four attitudes towards mental health help-seeking, whereas those living in Germany were the least positive on all aspects of seeking mental health care. It is difficult to explain these differences. One possible explanation is that the Spanish reported a lower level of unmet need compared to all respondents in the six countries together [42], implying that in Spain the more serious cases had a higher chance of receiving mental health care. But this cannot explain all differences found, because the majority of the respondents had never received mental health care at the time of the interview.

In the multivariate analysis four socio-demographic characteristics were associated with at least two of the four attitudes towards mental health help-seeking: female gender, being younger than 65 years of age, higher income and living in Spain or Italy. Earlier studies also found more favourable attitudes among women [22, 23], and younger people [23, 24]. Higher education was not associated with more favourable attitudes towards mental health help-seeking. This seemed to contrast with studies, which found lower levels of tolerance towards psychiatric patients among lower educated people [12, 13]. However, in these studies the analyses were not adjusted for the influence of other socio-demographic variables and clinical characteristics.

Certain patient groups did differ in their attitudes towards mental health help-seeking compared to healthy individuals. This was true for respondents with a mood disorder and for those with previous (mental) health care experiences, but not for those with an anxiety disorder. Previous studies also found more positive beliefs among people who had prior experience with mental health care [19–21]. The respondents with an alcohol disorder held significantly less often the belief that they would seek help when faced with a serious emotional problem compared to those without an alcohol disorder. The ones with an alcohol disorder would also feel less comfortable talking about personal problems with a professional, would be more often embarrassed if friends knew about the help, and were less positive about the effectiveness of professional help compared to those without an alcohol disorder, although these differences did not reach significance. These negative attitudes towards mental health help-seeking of those with an alcohol disorder are in line with the finding that adults with an alcohol disorder avoid consulting a general practitioner and use mental health care equally often compared to those without such disorder [43, 44].

Previous studies found more positive beliefs among people who were more familiar with mental illness [12, 13]. In the present study, previous mental disorder as well as parental psychiatric history, which could be seen as indications that the respondent is more familiar with mental health problems were not associated with one of the attitudes towards mental health help-seeking.

All four attitudes were associated with mental health care use, also after adjustment for the presence of a mental disorder, previous service use and other correlates of service use. This is in line with three of four previous studies [25, 28, 36] we found on this subject, and with studies which focussed on reasons given by people with emotional problems for not seeking professional help, even though they felt they needed it [32, 33, 35, 45]. These studies found that people mainly tend to offer attitude-related reasons for foregoing care, such as: (1) I wanted to solve my problems on my own, (2) I thought the problem would go away by itself, (3) I had no confidence in the care providers I would have had to go to and (4) I thought no one could help me anyway. Practical considerations, such as lack of time or money, were less likely mentioned.

Implications

Almost a third of all respondents believed that professional care was worse than or equal to no help when faced with a serious emotional problem. This rather negative belief is in line with previous research [9, 46]. In the present study, respondents with previous mental health care experiences were equally sceptical, but actual mental health care users were more positive; 30% respectively 19% hold the view that professional help was worse than or equal to no help. One explanation for these figures is that patients do not always receive appropriate treatment. Another paper based on ESEMeD-data revealed that the diagnosis and treatment of mood and anxiety disorders in the six European countries remain suboptimal [47].

This calls for serious action aimed to improve the visibility and credibility of the mental health care sector. First, public health campaigns are needed to inform the public about the treatments available for mental health problems. In Germany, a campaign informing the public about the causes and treatments of depression showed some limited but promising results [48]. Second, more research is needed to determine the evidence-base of all treatments applied in the mental health care sector. Third, health care managers and professionals should be stimulated to actually apply the evidence-based treatments available, and to learn from patients' experiences with the care provided.

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