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Delays in seeking treatment for mental disorders in the Belgian general population

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Abstract *Objectives* To provide data on rates and predictors of lifetime treatment for mental disorders in Belgium from the European Study on the Epidemiology of Mental Disorders (ESEMED). *Material and method* This is a cross-sectional population study of 1,043 non-institutionalized adult (18+) inhabitants from Belgium. The third version of the Composite International Diagnostic Interview (CIDI-3.0) was administered to assess lifetime mental disorders according to the Diagnostic and Statistical Manual, 4th version (DSM-IV), failure and delay of treatment for mental disorders, the duration of the delay between onset of the disorder and first treatment contact, and the proportion of persons seeking help in the same year as the onset of the disorder. *Results* Cumulative lifetime probability curves show that the vast majority of persons with mental disorders will eventually make a first treatment contact, although more so for mood (93.7%) and anxiety disorders (84.5%) than for alcohol disorders (61.2%). Median duration of delay in treatment was lowest for mood disorders (1 year), but peaked for anxiety (16 years) and alcohol disorders (18 years). Both older cohorts and late age of onset of the disorder predicted a higher probability of lifetime treatment. *Conclusion* Although most disorders are eventually treated, the delays between onset of the disorder and first treatment contact are impressive, despite the high-density and high accessibility of primary and specialized care in Belgium.

Key words lifetime treatment – mental disorders – delay – Belgium

Introduction

One of the most pressing health policy issues in industrialized countries is how to provide access to adequate mental health care for people with emotional problems [12, 39]. Large population-based cross-national studies investigating the use of services for mental disorders systematically lead to the consistent finding that in the Americas, Europe, the Middle-East, Africa, and Asia most people (about 2 out of 3) with mental disorders do not receive professional help [11, 22]. These studies systematically lead to a concern with a lack of treatment for persons with mental disorders. There is, however, one important limitation in existing literature: previous studies focused almost entirely on estimating the number of persons seeking help in the past 12 months (“12-month treatment”). Consequently, it is unknown to what extent treatment rates are also related to a delay in seeking professional care. There is only one population representative study that investigated this. Using data from the National Comorbidity Survey Replication ($N = 9282$), Wang and colleagues [37] found that, although the majority of persons with mental disorders will eventually make treatment contacts, the duration of delay between the onset of the disorder and the first treatment contact ranges between 6 and 8 years for mood, and even between 9 and 23 years for anxiety disorders. Gaining knowledge on the durations of delay in treatment would be a crucial source of knowledge of the pathways that persons with mental disorders use to seek treatment, with many implications for both clinicians and mental health care policy makers. This is especially of importance within the Belgian mental health care situation,

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where a high density of services is combined with a high accessible care.

In this report we use data from the European Study on the Epidemiology of Mental Disorders (ESEMeD). This study is the first European report that assesses rates and predictors of failure and delay of lifetime treatment in a general population. The aims of the paper were: (a) to report upon the lifetime treatment of persons with mental disorders, (b) to describe the proportion of persons with mental disorders seeking professional help in the year of onset of the disorder, (c) to provide the median duration of delay between the onset of the disorder and treatment contact, and (d) to investigate which factors predict the lifetime treatment for mental disorders.

Materials and methods

Sample

The data provided in this study stem from the European Study on the Epidemiology of Mental Disorders (ESEMeD), a part of the World Mental Health Surveys (WMH) by the World Health Organization (<http://www.hcp.med.harvard.edu/wmh/index.php>). The study was cross-sectional in nature and individuals were interviewed in person at their homes using computer-assisted interview (CAPI) techniques. The Belgian target population was the non-institutionalized adult population (aged 18 years or older), representing a total of 7,900,000 inhabitants. In total, 2,419 respondents from Belgium provided data for this study. Interviews were performed between April 2001 and June 2002. A stratified, multistage, clustered area, probability sample design was used. The initial response rate in Belgium was 47.5%. In order to increase this moderate rate, 20% of the initial refusers was reapproached, of which 25.4% did participate to the study. Weights were applied to these initial refusers to optimize representativity of the study. This conversion resulted in a final response rate of 50.6%.

Internal sub-sampling was used to reduce respondent burden by dividing the interview into two parts. Part 1 included the core diagnostic assessment of mental disorders. Part 2 included additional information relevant to a wide range of survey aims, including assessment of chronic physical conditions. All respondents completed part 1. All part-1 respondents ($N = 2419$) who met criteria for any mental disorder and a probability sample of other respondents were administered part-2. Part-2 ($N = 1043$) respondents were weighted by the inverse of their probability of selection for part-2 of the interview to adjust for differential sampling. Analyses in this article were based on the weighted part-2 sample. Additional weights were used to adjust for differential probabilities of selection within households and for post-stratification (i.e., to match the samples to population socio-demographic distributions). A more in-depth description of the sampling frame and selection has been published elsewhere [1, 2].

Standardized descriptions of the goals and procedures of the study, data uses and protection, and the rights of respondents were provided to all predesignated respondents before obtaining verbal informed consent for participation in the survey. Quality control protocols, described in more detail elsewhere [23] were standardized to check on interviewer accuracy and to specify data cleaning and coding procedures. The institutional review board of the organization that coordinated the survey in each country approved the procedures for obtaining informed consent and protecting human subjects. Prevalence estimates were weighted to account for the known probability of selection as well as to restore the distribution of the population within each country. In addition, overall estimates were weighted to restore the relative dimension of the population across countries.

Measures

Lifetime prevalence of mental disorders

Data were gathered by means of the 3rd version of the Composite International Diagnostic Interview (CIDI 3.0) of the World Health Surveys (WMH) of the World Health Organization (WHO), which was developed and adapted by the WHO Coordinating Committee for their WMH initiative. The questionnaire consisted of a screening section that was given at the beginning of the questionnaire to each respondent. All participants responding positively to a specific screening question were eligible to complete the corresponding sections of the questionnaire. Lifetime prevalence of mental disorders was determined by whether respondents' symptomatology met the lifetime diagnostic criteria for this disorder. Disorders were assessed using the criteria of the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) [4]. Mental disorders included mood disorders (major depressive episode [MDE], dysthymia), anxiety disorders (generalized anxiety disorder [GAD], social phobia, specific phobia, post traumatic stress disorder [PTSD], agoraphobia, panic disorder) and alcohol disorders (alcohol abuse, alcohol dependence). CIDI 3.0 organic exclusion rules were imposed in making all diagnoses. Methodological evidence collected in the WHO CIDI 3.0 Field Trials and later clinical calibration studies showed that all the disorders considered herein were assessed with acceptable reliability and validity in the original CIDI [38]. The recent clinical reappraisal studies carried out in four WMH countries (in the US, Italy, Spain, and France, with total $N = 468$) have provided evidence for a good concordance between CIDI-3.0 diagnoses and diagnoses based on blinded re-interviews, with area under the receiver operator characteristics curve ranging between 0.73 and 0.93 for lifetime mood/anxiety disorders, and 0.83–0.88 for 12-month mood/anxiety disorders [17].

Lifetime treatment access

In order to assess lifetime treatment, respondents were asked the following: "Did you ever in your life talk to a medical doctor or other professional about your [SYMPTOM]? (By other professional we mean psychologists, counselors, spiritual advisors, herbalists, acupuncturists, and other healing professionals.)". Respondents who reported that they ever sought professional help were then investigated how old they were when they first sought help. This response was used to define age of first treatment.

The Belgian mental health care delivery system

The Belgian health care system has a universal health insurance covering mental health and substance abuse treatment. It does not put limits on the number of contacts with primary care physicians or mental health specialists (medical doctors nor psychologists). Moreover, there are no limits concerning the number of prescribed medications by medical doctors. Consumers have up to 80% public coverage of mental health treatment, psychotherapy, and medication consumption provided or prescribed by medical doctors [29]. In descending order, the primary sources of financing mental health treatment are the universal health insurance, private insurances, and out of pocket expenditures by the patient [40]. It is only recently that policy makers gained more attention on rising health care costs for healthcare [25].

Mental health treatment makes part of both the primary care and the specialized care delivery system. Effective treatment of acute and/or severe mental disorders is available at the primary care level. Moreover, there are continuous trainings carried out for primary care physicians concerning mental health issues [40]. Although the primary care physician takes a crucial role in detecting, referring, and treating patients with mental disorders, persons seeking help have no constraints on access to any level of care.

Table 1 Sociodemographic characteristics of the respondents of the ESEMeD study in Belgium

	Totale sample N = 1043	% (SE)
Age		
18–34	254	29.0 (2.0)
35–49	331	28.5 (1.7)
50–64	278	21.2 (1.5)
65+	180	21.2 (1.4)
Gender		
Male	466	48.3 (2.4)
Female	577	51.7 (2.4)
Marital Status		
Never married	167	19.1 (1.7)
Previously married	173	11.1 (1.2)
Married/cohabiting	703	69.8 (1.7)
Employment		
Homemaker	69	5.4 (1.0)
Retired	233	24.1 (1.5)
Other	120	9.5 (1.0)
Working/student	621	61.0 (1.2)
Educational level		
Low	163	17.0 (3.8)
Low/median	152	13.4 (1.5)
Median/High	411	39.3 (3.9)
High	317	30.4 (2.9)

Indeed, patients may follow direct pathways from the community to a primary care physician, a psychiatrist, a psychologist, a hospital, a community service, or a combination of these services.

Contrary to the Americas and most of the European countries, deinstitutionalizing of mental health care in Belgium did not start before the mid-seventies. Consequently, in the current Belgian mental health care, there are still a considerable number of inpatient facilities. In more detail, there are about 22.1 psychiatric beds per 10,000 inhabitants [40]. Compared to other countries, the Belgian mental healthcare system peaks in the number of inpatient facilities [8]. Apart from the overall high availability of psychiatric beds, there are also many outpatient mental health providers: per 10,000 inhabitants there are 1.4 psychiatrists, 3.2 psychologists, and 15.3 general practitioners [8]. Features on the number of psychiatric nurses or social workers are not provided here because these care providers in Belgium are, contrary to other European countries, not entitled to provide mental health care unless they work within a hospital-based setting. There are also numerous subsidized community care facilities serving outpatient care. By and large, there is approximately one community centre per 10,000 inhabitants, providing specialized outpatient treatment and counselling for mental disorders, drug related disorders, and psychosocial problems [4].

Statistical analyses

All analyses were performed using version 8 of the SAS System for Windows [35] and SUDAAN, a statistical package used to analyse data from complex sample surveys (i.e., multi-stage, stratified, unequally weighted, or clustered). Standard errors of ratio estimates, means, regression coefficients and other statistics were estimated taking into account the sample design, by using the Taylor series linearization method implemented in SUDAAN, version 8.01 [16]. Cumulative lifetime probabilities for lifetime treatment contact was estimated using the two-part actuarial method implemented in SAS software. The actuarial method differs from the more familiar Kaplan-Meier method [18] in using a more accurate way of estimating the cumulative probabilities of lifetime treatment. For each of the disorders assessed, we provide separate survival curves. Survival curves were used to make two estimates: (a) the proportion of cases that made treatment contact by 50 years from the year of first onset of the disorder, and (b) the duration of the delay in initial treatment contact was defined as the median

number of years between disorder onset and the first treatment contact among those persons that eventually made contact. The cumulative probabilities were standardized and analyzed for fixed years since onset of the disorder. Dysthymia was not included since there were too many missing values in the age of onset for this disorder. This implies that all data provided for the category 'any mood disorder' are the same as for the category 'MDE'.

For each disorders separately, discrete-time survival analysis with person-year as the unit of analysis was used to investigate correlates of treatment contact. Predictors included age of onset of disorders, cohort, and gender. We included only these three variables since sparse data and small cell sizes for the remaining variables (i.e., number of years since the onset of the disorder, education, marital status). The latter variables were included as controls in the prediction model. The Taylor linearization method implemented in SUDAAN software was used to adjust for the effects of the weighting and clustering of the ESEMeD/WMH data on significance tests. We used Wald χ^2 tests to detect significance in the discrete-time survival analyses using Taylor series design-based coefficient variance-covariance matrices. Statistical significance was set at .05, two-sided tests.

Results

Sample characteristics

The mean age of the study sample was 47 years, with the majority of respondents between 18 and 34 years old. In total, 52% of the respondents was female (Table 1). About seven in ten was married or cohabiting. The majority of respondents were in paid employment at the time they participated in the study. A more elaborate description of the sample is described elsewhere [2].

Lifetime treatment and duration of delay

The results of the survival curves investigating lifetime treatment and duration of delay could be summarized in four main findings. First, most persons with mental disorders eventually seek treatment: 93.7% for mood disorders, 84.5% for anxiety, and 61.2% for alcohol disorders (Table 2). Within the group of anxiety disorders, panic disorder, GAD, and social phobia had markedly higher lifetime treatment rates (between 81.6% and 91.0%) compared to specific phobias (65.9%). Second, relatively few persons with a mental disorder seek help in the first year of the disorder onset: 47.8% for mood disorders, 19.8% for anxiety disorders, and 12.8% for alcohol disorders. There were also considerable differences in the individual anxiety disorders: persons with either panic disorder or GAD were much more likely to make treatment contact within the first year of onset of these disorders (56.4% and 46.8%, respectively) than persons with either specific or social phobia (5.4% and 0%, respectively). Third, the slopes of the cumulative probability curves (Fig. 1) also indicate that persons with alcohol disorders who will eventually seek help were more likely to do so within a shorter timespan than those with either mood or anxiety disorders. Fourth, the median

Table 2 Proportional treatment contact in the year of disorder onset, median duration of the delay, and proportion of persons making treatment contact 50 years after the onset of the disorder

	% Making treatment contact in the year of the onset of the disorder	% Making treatment contact 50 years after the onset of the disorder	Median duration of delay (years)
Any mood disorder	47.8	93.7	1
Any anxiety disorder	19.8	84.5	16
Panic disorder	56.4	91.0	1
GAD	46.8	81.6	1
Specific phobia	5.4	65.9	21
Social phobia	0.0	81.6	23
Any alcohol disorder	12.8	61.2	18
Alcohol abuse disorder	13.4	58.0	18
Alcohol dependence disorder	— ^a	—	—

^aDisorder was omitted due to insufficient number of respondents with lifetime alcohol dependence disorder ($n < 30$). This disorder, however, was included as one of the disorders in the 'any alcohol disorder' category

duration between disorder onset and first treatment contact varies widely: 18 years in persons with alcohol disorders, 16 years in persons with anxiety disorders, and only 1 year for mood disorders. Moreover, within the category of anxiety disorders, panic disorders and GAD had a rather low duration of delay (1 year) whereas median delays in specific and social phobias were rather high (21 and 23 years, respectively).

Predictors of lifetime treatment

As shown in Table 3, cohort and age of onset were consistent predictors of lifetime treatment. For the majority of disorders assessed, we systematically found that the odds of lifetime treatment increases in more recent cohorts. Similarly, the association between the odds of lifetime treatment and age of

onset shows that a higher age of onset was consistently related to higher odds of lifetime treatment. The only disorder for which lifetime treatment could not be predicted by both cohort or age of onset, was GAD. Furthermore, women did not have higher odds of treatment contact in every disorder assessed.

Discussion

Lifetime treatment and duration of delay

There were two major findings in this study. First, the vast majority of persons with lifetime mental disorders in Belgium eventually make a first treatment contact: about 9 of 10 of those with a mood disorder will eventually get treatment, 8 of 10 of

Fig 1 Cumulative lifetime probabilities of treatment contact for DSM-IV mood, anxiety, and alcohol disorders among those persons who will eventually seek treatment

Table 3 Sociodemographic predictors of lifetime treatment contact for DSM-IV mood, anxiety, and alcohol disorders in the Belgian general population

	Any mood disorder	Any anxiety disorder	Any alcohol disorder	Panic disorder	GAD	Specific phobia	Social phobia	Alcohol abuse disorder	Alcohol dependence disorder
Cohort									
18–34	3.9 (1.2–12.5)	4.7 (1.6–13.6)	35.9 (1.1–1163.4)	2.3 (0.5–12.0)	1.5 (0.2–10.3)	3.3 (0.9–12.2)	4.1 (0.7–24.3)	36.2 (1.0–1312.5)	– ^a
35–49	3.9 (1.5–10.5)	3.0 (1.2–7.5)	35.9 (1.1–1163.4)	1.1 (0.3–3.3)	3.3 (0.9–13.0)	2.8 (0.8–10.5)	4.1 (0.7–24.3)	36.2 (1.0–1312.5)	–
50–64	1.7 (0.7–4.0)	1.3 (0.6–2.8)	35.9 (1.1–1163.4)	1.0 (ref)	1.4 (0.3–5.8)	0.7 (0.2–2.8)	1.0 (ref)	36.2 (1.0–1312.5)	–
64+	1.0 (ref)	1.0 (ref)	1.0 (ref)	– ^b	1.0 (ref)	1.0 (ref)	– ^b	1.0 (ref)	–
χ^2	14.5, $P < .05$	14.8, $P < .05$	4.5, $P < .05$	1.2, $P > .05$	4.5, $P > .05$	17.5, $P < .05$	14.8, $P < .05$	4.3, $P < .05$	–
Age of onset									
0–12	0.2 (0.1–0.6)	0.1 (0.0–0.3)	0.1 (0.0–0.2)	0.1 (0.0–0.7)	0.4 (0.0–3.1)	0.3 (0.1–0.9)	0.3 (0.1–0.8)	0.1 (0.0–0.2)	–
13–19	0.4 (0.2–0.9)	0.1 (0.0–0.3)	0.1 (0.0–0.2)	0.3 (0.0–4.7)	1.0 (0.3–3.6)	0.4 (0.2–2.1)	0.1 (0.0–0.7)	0.1 (0.0–0.2)	–
20–29	0.6 (0.4–0.9)	0.2 (0.1–0.5)	0.1 (0.0–0.2)	0.7 (0.1–5.5)	0.8 (0.1–6.2)	0.2 (0.1–0.6)	0.4 (0.2–0.8)	0.1 (0.0–0.2)	–
29+	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	–
χ^2	14.2, $P < .05$	63.5, $P < .05$	25.7, $P < .05$	17.2, $P < .05$	4.6, $P > .05$	9.3, $P < .05$	10.3, $P < .05$	18.8, $P < .05$	–
Sex									
Female	1.4 (0.9–2.1)	1.2 (0.7–2.1)	0.7 (0.1–8.3)	0.7 (0.1–3.3)	1.5 (0.7–2.9)	1.2 (0.5–3.0)	1.3 (0.4–4.2)	0.8 (0.1–11.9)	–
Male	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)	–
χ^2	2.5, $P > .05$	0.4, $P > .05$	0.1, $P > .05$	0.2, $P > .05$	1.3, $P > .05$	0.2, $P > .05$	0.2, $P > .05$	0.0, $P > .05$	–

^aSince there were less than 30 persons older than 64 with either panic disorder or social phobia, the age group 50–64 was set as the reference group

^bDisorder was omitted due to insufficient number of respondents with lifetime alcohol dependence disorder ($n < 30$). This disorder, however, was included in the prediction model of lifetime treatment of persons with 'any alcohol disorder'

those with an anxiety disorder, and 6 of 10 of persons with a alcohol disorder. The lowest lifetime treatment contact was found in persons with alcohol disorders: only 6 of 10 will eventually make a treatment contact. That persons with mental disorder show very low treatment rates is a consistent finding in previous population studies [3, 22, 37], but higher than in treatment settings. For example, in primary care, Kisely and colleagues [27] found a mean delay of about 4 months between the onset of psychiatric symptoms and a first treatment contact. The low lifetime treatment rates in persons with alcohol disorders are also consistent with epidemiological and clinical studies that suggest that persons with alcohol disorders are oftentimes lacking a need for treatment until their disorders become highly debilitating [19]. Second, we found a low proportion of persons making treatment contact in the same year of the onset of the disorder, in combination with impressive median durations of delay between the onset of the disorder and the first treatment contact. This was especially the case for persons with either anxiety or alcohol disorders. One explanation for the finding that only 1 in 5 persons with an anxiety disorder made a first treatment contact in the year of the onset of the disorder could be that these disorders (and especially the phobic disorders) have their onset in childhood or adolescence [7, 24]. This could imply, for example, that persons with an anxiety disorder are less likely to interpret their emotional problems in mental health terms. Following the early age of onset, anxious behaviour can thus be interpreted as a normal behavioural standard with, accordingly, a very low need for treatment. One explanation for the low treatment rates of persons with alcohol disorders may be methodological. It might be, for example, that persons with alcohol disorders were more likely to seek help in self-help groups, who are more involved in the treatment of alcohol disorders than of other disorders.

We also found considerable inter-disorder variation in lifetime treatment, duration of delay, and the proportion of persons making contact in the year of the onset of the disorder. These variations were more or less consistent with existing studies [9, 21, 28, 36]. Persons with either MDE or panic disorders were most likely (i.e., more than 91% of the cases) to receive lifetime treatment. One explanation may be that, at least for MDE, this disorder has gained more public attention throughout the past years. Another explanation may be that public beliefs tend to be milder for persons with depression, compared to other disorders [5]. One explanation for the high lifetime treatment estimates for panic disorders, compared to the other anxiety disorders, may be that this disorder is characterized by pronounced somatic symptoms, such as heart palpitations, racing heart, shortness of breath, nausea, shaking, etc. [4].

■ Predictors of lifetime treatment

Our findings demonstrated that most persons with mental disorders eventually seek treatment. Hence, from a general health perspective, the major concern is not the lack of seeking treatment as such, but rather the low proportion of persons seeking help in due time, and, consequently, the impressive delays in doing so. After all, delaying the process of help seeking when having mental disorders may have considerable consequences. Longer waits for treatment were related to a worsening of both anxiety and depression symptoms 1 year after the initial assessment. The longer psychiatric symptoms last, the more difficult it is to initiate appropriate intervention strategies [20, 27]. One possible policy implication may thus be that more attention is needed to identify factors that may explain this enormous duration of delay. These data are even more pronounced against the background that the Belgian mental health care system is a provider-rich environment [1, 30]. Moreover, there is no limit on the number of treatment contacts, and all treatment contacts with a medical doctor are reimbursed. Indeed, it is an interesting and challenging finding that both the number of persons seeking professional help in the first year of disorder and the delays in first treatment contact approximate these from the United States, despite the fact that there are considerably fewer treatment facilities in the US. This suggests that other factors than these related to the availability and accessibility of treatment facilities, possibly explain the delays in seeking professional help. One explanation may be that stigma may play a more crucial role in seeking professional help for mental disorders than the availability or accessibility of services. Another explanation could be that not all persons with mental disorders experience a need for treatment within a short-term (i.e., 12-month) perspective [11], but will eventually in a longer-term perspective. Persons from more recent cohorts systematically had higher odds for lifetime treatment. We found that this was a consistent pattern for each of the categories of disorders assessed. This suggests that help-seeking behaviour for a broad range of mental disorders has improved in the recent past. Especially in the light of the structure of the Belgian mental health care, our findings are because it may be that younger persons are more aware of the possible pathways that could lead them to professional care for emotional problems. This provides in itself a ground for some optimism since there seems to be a certain mismatch in the process of help-seeking in patients with mental disorders or emotional crisis in Belgium: patients do not find their way to a treatment setting easily despite the fact that this setting is available and accessible. In contrast to Wang and colleagues [37], our data show that younger cohorts with alcohol disorders were also more likely to seek help for their problems. One explanation for this may be that, especially in the Americas, younger persons with alcohol disorders

could be more likely to seek treatment in non-mental health care or complementary treatments. It may also be that Belgian mental health facilities are more likely to treat persons with alcohol disorders because the widespread availability of specialized services for both emotional problems and alcohol abuse or dependence. We also found that late onset was systematically associated with a higher likelihood of first treatment contact, a pattern that is more or less consistent with established literature [21, 31]. This is a finding with considerable implications because many mental disorders, and especially anxiety disorders, have their onset in childhood or adolescence [24]. Minors could therefore be less likely to receive timely treatment because persons with early onset disorders may not interpret emotional problems or disturbances as emotionally deviating, or the recognition of a disorder may be dependent upon a parent.

■ Limitations

This study had several methodological weaknesses that should be considered in interpreting the findings. First, it is plausible that our results could be biased because persons with a history of mental disorders might have been less likely to participate in this study. Indeed, it has been mentioned that persons with mental disorders were less likely to participate in community mental health surveys [10, 13]. However, analyses of the association between response rates and 12-month or lifetime estimates of the prevalence mental disorders have shown that, in the six ESEMeD countries (Belgium, the Netherlands, France, Spain, Italy, and Germany) higher estimates were found in countries with lower response rates. Second, we assumed that our assessment of lifetime mental disorders were valid and reliable. However, it has been reported in previous studies that recall of symptoms could be biased by respondents' age at the moment of the interview [15, 33]. We may assume that telescoping (i.e., recalling past experiences as having occurred more recently than they actually did occur) may be one possible effect that possibly biased our estimates lifetime mental disorders [32]. Similarly, we also assumed that our assessments of lifetime treatment were valid and accurate. However, previous studies have shown that the validity of the assessment of service use could be biased dependent upon recall time periods, salience of service, frequency of service (i.e., 12-month versus lifetime treatment) [26], or the use of psychoactive substances [34]. However, special efforts were made in order to help respondents in recalling ages of onset of disorders and ages of first treatment contact [23]. A third limitation of this study is that the information on first treatment contact did not include information about whether treatment was actually obtained, or, in the case that it was obtained, whether the treatment was adequate or not. This is especially important since it has been

suggested in previous studies that treatment for mental disorders oftentimes did not meet criteria for adequacy [6]. Further study may therefore focus in more detail on criteria defining treatment adequacy. A last limitation is that the limited sample size implies that some disorders were not included in our analyses: agoraphobia, separation anxiety disorder, post-traumatic stress disorder, and alcohol dependence disorder. Moreover, dysthymia was not included in our analyses because there were too many missing values in the age of onset variable for this disorder. This implies that our reported findings are only valid for the individual disorders included in the broad categories of mental disorders we included in this study.

Conclusions

The originality and enduring significance of our data deserve some attention. This study is the first European population-representative study that pointed to rates and predictors of lifetime treatment, and delays in treatment. To investigate this, well-validated and structured instruments were used to diagnose mental disorders, age of disorder onset, and age of first treatment contact. Advanced statistical methods were used to calculate the proportion of persons who will eventually make treatment contact for their mental disorder. A major improvement in this study is that it focuses on lifetime treatment contact, whereas the majority of published studies focus on 12-month treatment for mental disorders.

We found that the majority of persons with a mental disorder will eventually get treated, but with dramatic delays between the disorder onset and the first treatment contact. These data are even more pronounced against the background that the Belgian mental health care system is a provider-rich environment, with a high density of primary care and specialized services. Indeed, it is an interesting and challenging finding that both the number of persons seeking professional help in the first year of disorder and the delays in first treatment contact approximate these from the United States, despite the fact that there are considerably fewer treatment facilities in the US. This suggests that other factors than these related to the availability and accessibility of treatment facilities, possibly explain the delays in seeking professional help.

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