

## RESEARCH REPORT

# Public attitudes towards psychiatry and psychiatric treatment at the beginning of the 21st century: a systematic review and meta-analysis of population surveys

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*Public attitudes towards psychiatry are crucial determinants of help-seeking for mental illness. It has been argued that psychiatry as a discipline enjoys low esteem among the public, and a “crisis” of psychiatry has been noted. We conducted a systematic review and meta-analysis of population studies examining public attitudes towards various aspects of psychiatric care. Our search in PubMed, Web of Science, PsychINFO and bibliographies yielded 162 papers based on population surveys conducted since 2000 and published no later than 2015. We found that professional help for mental disorders generally enjoys high esteem. While general practitioners are the preferred source of help for depression, mental health professionals are the most trusted helpers for schizophrenia. If respondents have to rank sources of help, they tend to favor mental health professionals, while open questions yield results more favorable to general practitioners. Psychiatrists and psychologists/psychotherapists are equally recommended for the treatment of schizophrenia, while for depression psychologists/psychotherapists are more recommended, at least in Europe and America. Psychotherapy is consistently preferred over medication. Attitudes towards seeking help from psychiatrists or psychologists/psychotherapists as well as towards medication and psychotherapy have markedly improved over the last twenty-five years. Biological concepts of mental illness are associated with stronger approval of psychiatric help, particularly medication. Self-stigma and negative attitudes towards persons with mental illness decrease the likelihood of personally considering psychiatric help. In conclusion, the public readily recommends psychiatric help for the treatment of mental disorders. Psychotherapy is the most popular method of psychiatric treatment. A useful strategy to further improve the public image of psychiatry could be to stress that listening and understanding are at the core of psychiatric care.*

**Key words:** Public attitudes, psychiatry, psychotherapy, psychotropic medication, depression, schizophrenia, systematic review, meta-analysis

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In recent years, the notion of a crisis of psychiatry has spread in professional circles. In scientific journals, the question has been asked whether psychiatry is “on the ropes”<sup>1</sup> and “psychiatrists are an endangered species”<sup>2</sup>. Numerous internal threats to psychiatry (e.g., feeling of loss of autonomy, competing views which highlight biological or social factors, or tension between generalists and specialists) as well as external threats (e.g., changes related to health care and medical education policies, intrusion of other health professional groups into the territory which psychiatry claims for itself) have been identified<sup>1,2</sup>.

There is also growing concern about the poor image of the discipline in the eyes of the general public as well as of medical students, health professionals and the media<sup>3,4</sup>. Psychiatrists increasingly feel underestimated as well as stigmatized and discriminated against<sup>5</sup>. In a recent online survey across twelve countries around the globe, psychiatrists reported significantly higher perceived stigma and discrimination experiences than general practitioners. About 17% of the psychiatrists perceived stigma as a serious problem, with a higher rate among younger participants<sup>6</sup>. In response to this problem, the World Psychiatric Association established a task force and entrusted it with the development of a “guidance on how to combat stigmatization of psychiatry and psychiatrists”<sup>7</sup>. A few years later, the European Psychiatric Association followed with the publication of a “guidance on improving the image of psychiatry and of the psychiatrist”<sup>5</sup>.

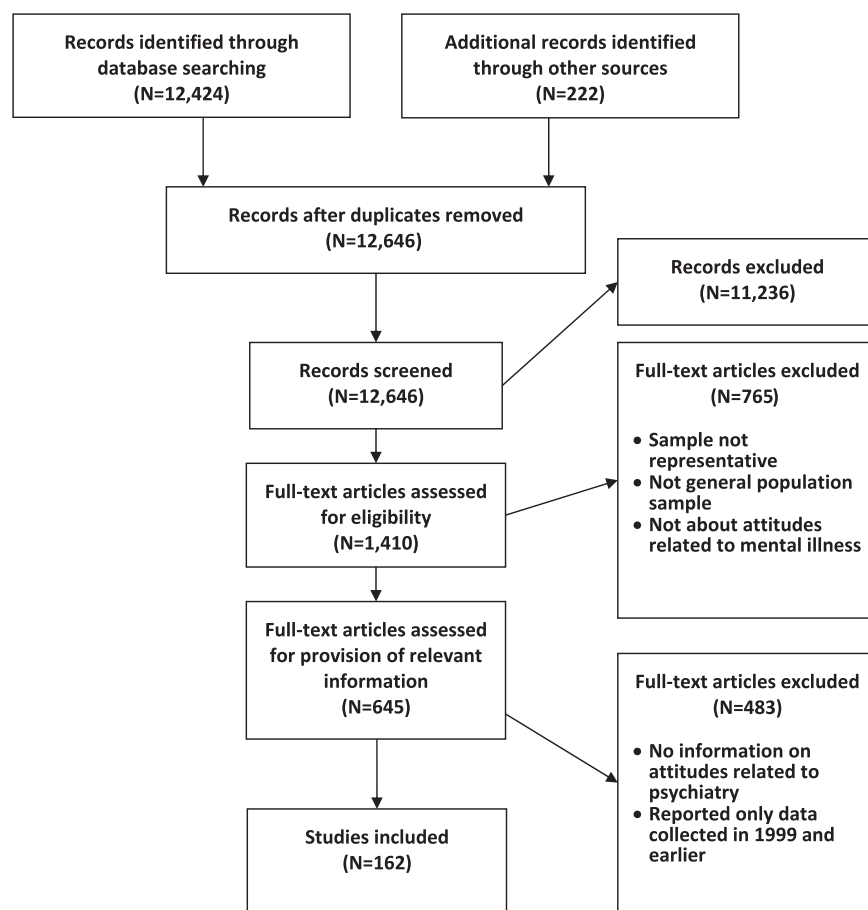
The question arises as to whether this negative image perceived by the profession actually reflects attitudes towards

psychiatry that are prevalent among the general public. Therefore we decided to investigate, based on a systematic review and meta-analysis of pertinent studies, to what extent psychiatric care is accepted (or rejected) by the public. More specifically, we wanted to explore to what extent the public sees seeking help from a psychiatrist (in comparison to the help provided by a psychologist/psychotherapist or a general practitioner) as useful and does recommend it, or instead considers it as harmful and advises against it. We were also interested in attitudes towards various psychiatric treatments, with special focus on psychotropic medication and psychotherapy. In addition, we wanted to examine how attitudes towards psychiatric treatments are influenced by mental health literacy and stigmatizing attitudes. Since attitudes do not necessarily remain stable over time, we focused on the current situation, including only studies conducted since the turn of the century, but also considered time-trend studies exploring how attitudes have developed over the last decades.

## METHODS

### Systematic review

We first systematically reviewed all papers reporting results of representative population-based studies on beliefs and attitudes about mental disorders published in peer-reviewed journals between January 2000 and December 2015. To search for



**Figure 1** PRISMA diagram of the literature search

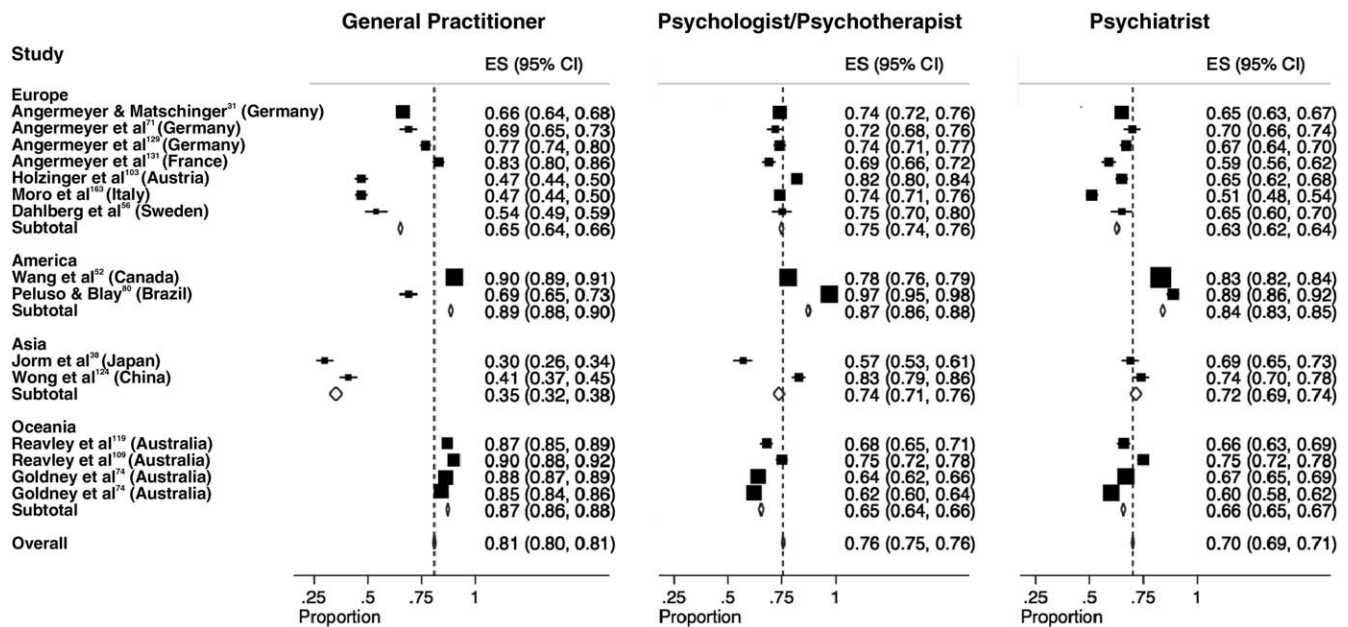
relevant papers, we took a stepwise approach according to the systematic literature review guidelines of the Centre for Reviews and Dissemination<sup>8</sup> and the Cochrane Collaboration<sup>9</sup>. As a starting point, we conducted a literature search in PubMed, Web of Science and PsychINFO using the terms: (population OR representative) AND (depression OR schizophrenia OR “mental disorder” OR alcohol OR “substance abuse” OR “bipolar disorder” OR “obsessive compulsive disorder” OR suicide OR “anxiety disorder” OR “dementia” OR “eating disorder” OR “attention deficit hyperactive disorder” OR “post-traumatic stress disorder”) AND (knowledge OR attitude OR stigma OR stereotype OR discrimination OR “mental health literacy”). We used MeSH terms and truncations according to the properties of each database. We included all papers written in any of the European languages.

Our search on May 25, 2016 resulted in 4,399 articles from PubMed, 8,912 articles from PsycINFO, and 14,033 articles from Web of Science. After manually removing all duplicates, this resulted in 12,424 references. Two independent researchers screened titles, abstracts and (where appropriate) the full text of all identified papers. All reports on studies meeting the following inclusion criteria were retained: a) the focus of the study was on the general public (studies investigating beliefs and attitudes of particular subgroups such as consumers, health

professionals or students were excluded); b) samples were obtained by either random or quota sampling methods; c) while we included studies focusing on attitudes about substance-related disorders, those merely dealing with attitudes toward substance use and not referring to any disorder were excluded.

After exclusion of papers not meeting those criteria, we ended up with 423 papers. We then hand-searched the identified literature for relevant citations and searched electronically for other relevant publications by authors of papers thus far identified. By this method we identified 222 further papers that met our inclusion criteria. Our search strategy then yielded in total 645 papers (see Figure 1), 65 of which (10.1%) were written in languages other than English.

A full-text analysis of all these papers was carried out independently by two researchers. Only papers reporting results from population surveys conducted since the turn of the century were included in the review. We excluded studies investigating attitudes prevalent among youth or attitudes towards mentally ill youth. Studies on help-seeking from mental health professionals in general without specification of psychiatrists were also excluded. The following data were extracted from each paper: a) attitudes towards seeking help from a psychiatrist (as compared to a psychologist/psychotherapist or a gen-



**Figure 2** Forest plots for recommendations of different sources of help for depression (proportion of respondents recommending a particular source of help). Studies 31,71,103,129 and 131 examined the recommendation of a psychotherapist; the other studies of a psychologist. ES – estimated proportion

eral practitioner); b) attitudes towards psychiatric treatments, particularly psychotropic medication and psychotherapy; c) evolution of attitudes over time; d) association of these attitudes with mental health literacy and stigma.

In total, 162 papers containing relevant information could be identified<sup>10-171</sup>. If necessary, native speakers were contacted to provide translations. Disagreement about inclusion of individual papers into the review or about the allocation to the various analytic categories was resolved by discussion.

## Meta-analysis

Three main methodological approaches can be distinguished when evaluating attitudes towards psychiatric treatment: a) rating of different sources of help (respondents are usually presented with a case vignette or an illness label, and offered a list of possible help-seeking strategies; they are then asked to indicate for each source of help how likely they would recommend it for the problem described); b) ranking of these sources of help (first choice, second choice, etc.); c) open-ended questions (asking for unprompted recommendation or help-seeking intentions). We chose the largest group of methodologically similar papers: those eliciting help-seeking attitudes via rating of different sources or methods of treatment for either depression or schizophrenia.

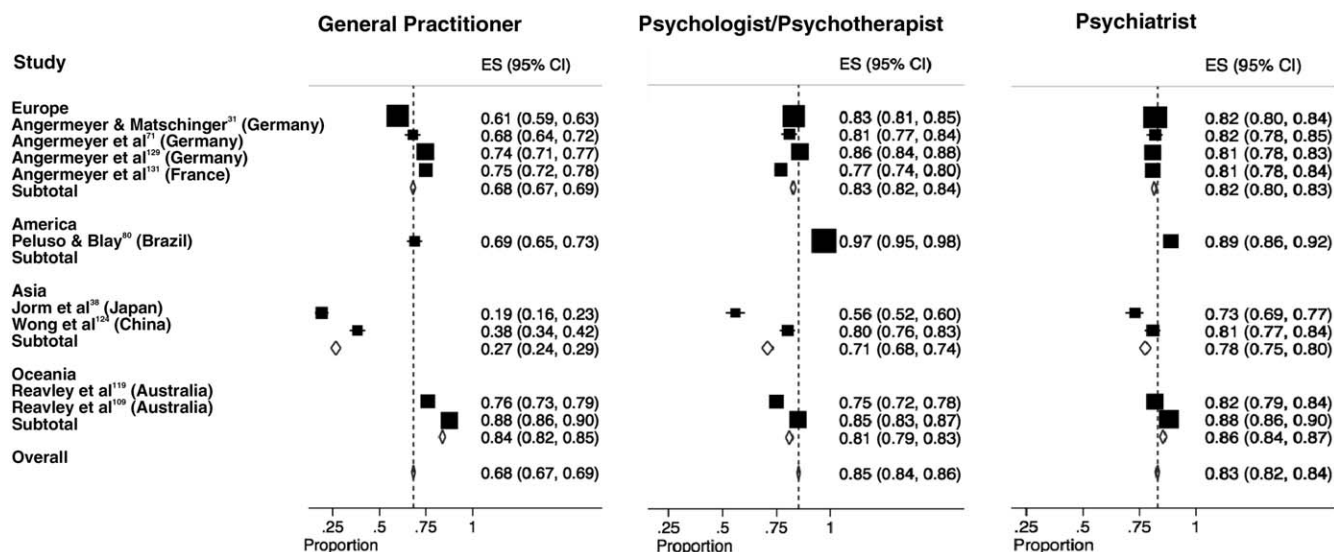
We distinguished three sources of professional help: general practitioners, psychiatrists and psychologists/psychotherapists. The term “psychotherapist” has slightly different meanings in the various countries of the world, being applied to people with different professional training and affiliation. In this review, the

term is used in the sense of “provider of psychotherapy”. We grouped psychotherapists and psychologists together as the latter also offer primarily psychotherapy, and contrast them with psychiatrists, who offer pharmacotherapy and, to a varying degree, psychotherapy.

To account for cultural differences, we performed separate meta-analyses for different geographical regions, and then combined these into an overall meta-analysis. Because we were interested not only in the absolute proportion of respondents recommending different treatment modalities, but also in their relative importance compared to other sources of help, we included only those studies that simultaneously examined recommendations of either psychiatrist, psychologist/psychotherapist and general practitioner as sources of help, or medication and psychotherapy as treatment methods for depression or schizophrenia.

All statistical analyses were performed using Stata/MP software, release 13.1<sup>172</sup>. Meta-analyses of treatment recommendations were performed using the *metaprop* package<sup>173</sup>. An inverse variance weighted fixed-effects meta-analysis was performed using score test-based confidence intervals on the proportions of recommendation for general practitioner, psychiatrist, psychologist/psychotherapist, medication and psychotherapy in schizophrenia and depression respectively. In all meta-analyses, the  $I^2$  statistic indicated no significant heterogeneity between studies ( $I^2=0.0\%$ ).

In contrast to common meta-analysis, a meta-regression focuses on the annual change of the treatment and help-seeking recommendation (rather than on the overall recommendation). Therefore, only studies reporting results for at least two time



**Figure 3** Forest plots for recommendations of different sources of help for schizophrenia (proportion of respondents recommending a particular source of help). Studies 31,71,129 and 131 examined the recommendation of a psychotherapist; the other studies of a psychologist. ES – estimated proportion

points were chosen. Each time point of each study was taken as one observation with its independent proportion of respondents endorsing a specific recommendation in one survey. To estimate the overall recommendation change per year, we used the revised version of the *metareg* command<sup>174</sup>, which performs a random effect meta-regression analysis using aggregated-level data. For each recommendation (general practitioner, psychiatrist, psychologist/psychotherapist, medication and psychotherapy for schizophrenia and depression, respectively), change was adjusted for country, allowing for differing country-specific baselines for any recommendation change.

All reported p values are two sided. For our figures and tables, proportions (values between 0 and 1) were transformed into percent (0-100) to reflect the reported percentages in the single studies.

## RESULTS

### Attitudes towards seeking help from a psychiatrist or psychologist/psychotherapist

Figures 2 and 3 show the results of meta-analyses of studies eliciting recommendations of different health professionals for depression and schizophrenia. Overall, the proportion of respondents recommending professional help was high (68 to 85%). For depression, general practitioners were recommended by 81%, followed by psychologists/psychotherapists (76%) and psychiatrists (70%). For schizophrenia, psychologists/psychotherapists were recommended by 85% and psychiatrists by 83%, followed by general practitioners with 68%.

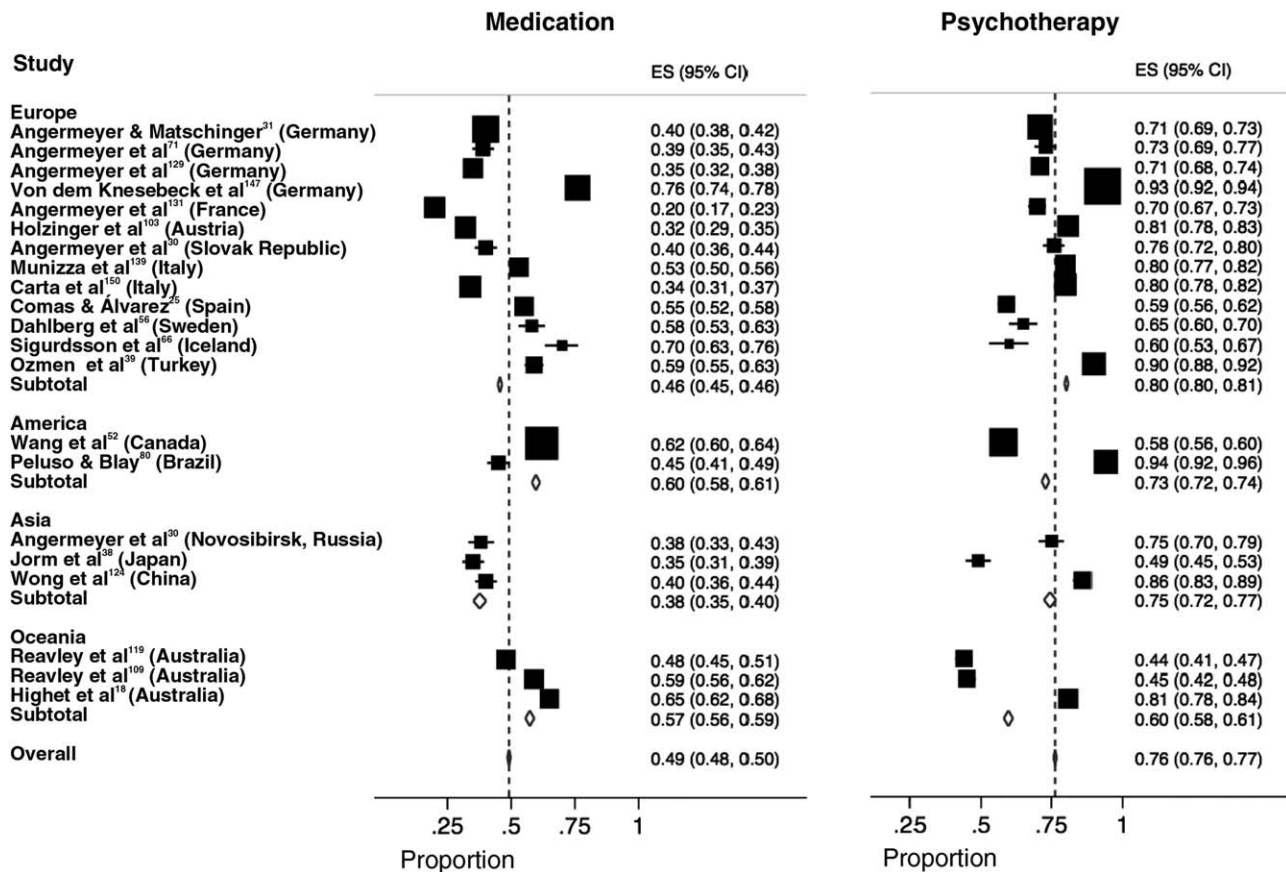
In all regions, specialist mental health care was more frequently recommended for schizophrenia than for depression. Looking

at differences between continents, it appears that general practitioners are less popular in Asia (being recommended by a subtotal of 27% and 35% for treating schizophrenia and depression).

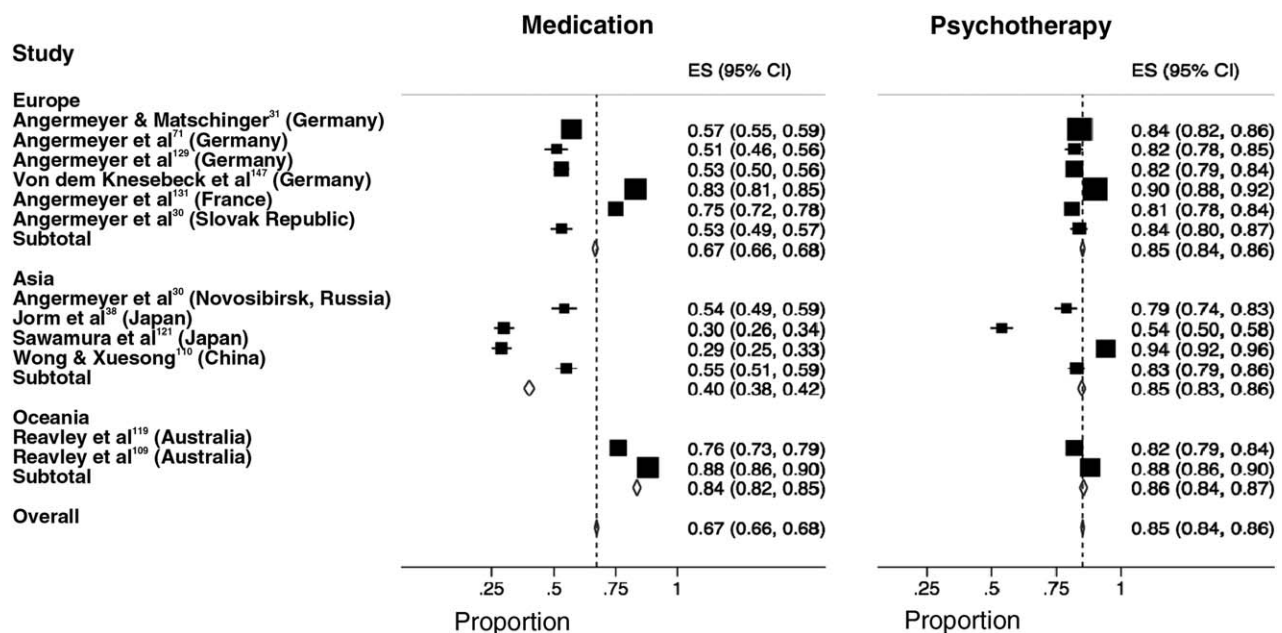
A number of studies enquired recommendation of a general practitioner, psychiatrist and “other mental health worker”, most notably the Stigma in Global Context – Mental Health Study<sup>142</sup>, which itself comprised surveys in 16 countries, and the Mental Health Module of the US General Social Survey<sup>65</sup>. These studies used four-point Likert scales to elicit recommendations without a neutral midpoint, resulting in generally higher rates of recommendations. We performed a separate meta-analysis of these studies. Here, psychiatrists were recommended more often than “other mental health workers” for treating both schizophrenia (95% vs. 93%) and depression (91% vs. 87%). For both disorders, general practitioners were recommended by 92%, which again positioned them above mental health specialists for depression, and below them for treating schizophrenia.

When asked to rank different sources of help, respondents tended to prefer specialist care over general medical care. For schizophrenia, psychiatrists and psychologists/psychotherapists were consistently named more frequently as first choice than general practitioners<sup>40,80,148</sup>. For depression, studies from Germany<sup>40</sup>, Australia<sup>18</sup>, Hong Kong<sup>111</sup>, Jordan<sup>125</sup>, Pakistan<sup>41</sup> and China<sup>148</sup> found psychiatrists and psychologists/psychotherapists as popular or even more popular for treating this disorder compared to general practitioners. When comparing the ranking of psychologists/psychotherapists and psychiatrists, 6 out of 9 studies found the former being preferred over the latter<sup>41,80,103,139,148,163</sup>, only one study found the opposite<sup>125</sup>, and two studies found no difference<sup>18,40</sup>.

When using open ended questions, general medical care was mentioned more often than specialist care. Studies from Germany,



**Figure 4** Recommendation of psychotropic medication and psychotherapy for depression (proportion of respondents recommending a particular treatment method). ES – Estimated proportion



**Figure 5** Recommendation of psychotropic medication and psychotherapy for schizophrenia (proportion of respondents recommending a particular treatment method). ES – Estimated proportion

**Table 1** Meta-regression analyses of time trends in recommendations of sources of help and treatments in studies using case vignettes (1990-2011)

Recommendations	Change per year adjusted for country, depression					Change per year adjusted for country, schizophrenia				
	%	95% CI	p	N studies	N sites	%	95% CI	p	N studies	N sites
Psychiatrist	0.77	0.27-1.27	0.007	14	5	0.65	0.20-1.12	0.013	11	4
Psychologist/Psychotherapist	0.86	0.31-1.41	0.007	14	5	0.94	0.47-1.41	0.003	11	4
General practitioner	0.47	0.01-0.93	0.045	14	5	0.70	0.01-1.40	0.048	11	4
Medication	1.10	0.38-1.83	0.007	15	5	1.45	0.78-2.12	0.001	12	4
Psychotherapy	0.97	0.001-1.93	0.049	10	3	0.81	0.19-1.44	0.019	10	3

Belgium, Sweden and Australia found general practitioners being named more frequently than psychiatrists or psychologists/psychotherapists for treating both depression and schizophrenia<sup>44,47,56,141</sup>. Only a study from Japan found psychiatrists mentioned more frequently than a general practitioner for both depression and schizophrenia<sup>38</sup>.

### Attitudes towards psychiatric medication and psychotherapy

Figures 4 and 5 show forest plots for psychiatric treatments, namely psychotherapy and medication. Again, only studies eliciting both treatment modalities for either schizophrenia or depression are included, to enable a direct comparison of the subtotal and overall recommendation rates within one disorder. Medication was recommended by 49% for depression and 67% for schizophrenia. Psychotherapy was clearly more popular, being recommended by 76% for depression and 85% for schizophrenia. The general preference for psychotherapy was thus even more marked for schizophrenia than for depression. Only studies from Canada<sup>52,109,119</sup> found medication being slightly more popular than psychotherapy for treating depression.

Using a ranking approach, a similar picture emerged for both depression and schizophrenia: psychotherapy was more frequently than medication named as first choice<sup>30,40,80,103</sup>.

### Attitudes towards psychiatric inpatient care

Few studies examined attitudes towards psychiatric inpatient care. Generally, inpatient care was more accepted for schizophrenia than for depression or other mental disorders, that were perceived as less severe<sup>38,80,92</sup>. For example, in the US, inpatient care was recommended by 66% for a person with schizophrenia and by 27% for a person with depression<sup>92</sup>.

Findings on whether psychiatric hospitals or psychiatric wards at general hospitals are preferred were inconsistent, with some studies showing a preference for specialized hospitals, particularly for patients with schizophrenia<sup>80</sup>, others showing preferences for general hospitals<sup>67</sup>, and still others demonstrat-

ing similar attitudes towards both forms of psychiatric inpatient care<sup>146</sup>.

### Evolution of attitudes towards psychiatrists and psychiatric treatments

Table 1 shows the results of our meta-regression analyses of time trends in recommending different sources of help. Trend data from vignette-based studies were available from Germany, Australia and the US<sup>65,71,74,109,129</sup>. All analyses showed a significant increase in treatment recommendations over time for medication and psychotherapy as well as for general practitioners, psychiatrists and psychologists/psychotherapists. The strongest increase in recommendations was visible for medication, increasing by 1.10% per year for depression (95% CI: 0.38-1.83) and 1.45% per year for schizophrenia (95% CI: 0.78-2.12).

Other studies specifically examined the evolution of attitudes towards psychiatric medication without using a case vignette. In the US, attitudes towards psychotropic medication generally became more favorable between 1998 and 2006<sup>78</sup>. A study from Germany, covering the time period 1990-2001, showed a similar trend, with increasingly positive attitudes towards medication<sup>24</sup>. The same holds for a study in a Swedish community, where between 1976 and 2003 a marked improvement of attitudes towards medication was observed<sup>59</sup>.

A trend analysis of attitudes towards psychotherapy in Germany showed growing positive outcome expectations and a decline in negative evaluations between 2003 and 2012 also for this treatment modality<sup>126</sup>.

Approval of restrictions for persons with mental illness – such as compulsory admission in Germany<sup>149</sup> and involuntary medication in the US<sup>106</sup> – remained largely stable over the last years, with three out of four respondents endorsing compulsory admission and one in four endorsing involuntary medication. However, closer examination of accepted reasons for compulsory admission showed a remarkable lowering of thresholds for admitting persons with mental illness in those who generally approved of compulsory admission. For example, while 29% recommended compulsory admission if a per-

son did not take prescribed medication in 1993, this proportion rose to 40% in 2011<sup>149</sup>.

The image of the psychiatric hospital improved considerably between 1990 and 2011 in Germany<sup>130</sup>. Both in the US and Australia, the proportion recommending hospital care for schizophrenia or depression increased in recent years<sup>65,92,119</sup>. In contrast, approval of community services, such as group homes in one's neighborhood, decreased between 1990 and 2011 in Germany, with 35% welcoming such a service in their neighborhood in 1990, compared to 24% in 2011<sup>128</sup>, while it remained stable in the UK<sup>135</sup>.

### **Mental health literacy and attitudes towards seeking help from a psychiatrist and psychiatric treatments**

Studies conducted in Germany, Belgium, Slovak Republic, Russia and Japan examined the relationship between identifying symptoms of schizophrenia or depression and help-seeking attitudes. Across all studies, recognition of a mental disorder or correct identification of the specific diagnosis was accompanied by a greater willingness to recommend visiting a psychiatrist<sup>31,40,71,141</sup> or higher expectations for the effectiveness of the treatment offered by a psychiatrist<sup>121</sup>. With one exception, in all Western countries participating in the Stigma in Global Context – Mental Health Study, the lay diagnosis of schizophrenic symptoms as “mental illness” increased the likelihood that seeking psychiatric help was considered important<sup>107</sup>.

The picture concerning attitudes towards psychiatric treatments was rather mixed. In Germany, Slovak Republic and Russia, seeing symptoms of schizophrenia or depression as indicating mental illness was associated with recommending psychotherapy but not with recommending psychotropic medication<sup>31,40,71</sup>. Similarly, in Belgium and Turkey, recognition of mental illness increased the likelihood that psychotherapy was seen more favorably<sup>66,166</sup>. By contrast, in Japan, the lay diagnosis of depression was significantly associated with a high expectation of the effectiveness of antidepressants<sup>121</sup>, and in Australia accurate recognition of depression or schizophrenia was associated with a stronger belief in helpfulness of antidepressants or antipsychotics, respectively<sup>109,119</sup>.

In Germany, Slovak Republic and Russia, the attribution of mental disorder to biogenetic causes was associated to recommending a psychiatrist<sup>31,40,71</sup>. In the US, a neurobiological conceptualization of mental illness, i.e., attributing its cause to either chemical imbalance or a genetic problem, tended to increase the odds of endorsing help from a psychiatrist<sup>92</sup>. Only in Belgium no such relationship was observed<sup>141</sup>.

Across all studies, attributing mental illness to biogenetic causes<sup>31,40,71,120,143</sup>, holding a neurobiological conceptualization<sup>92</sup> or endorsing a biomedical illness representation model<sup>100</sup> were associated with more favorable attitudes towards psychotropic medication. As regards attitudes towards psychotherapy, results were less consistent: in two studies endorsement of brain disease was associated with lower readiness to recommend psychotherapy for the treatment of depression,

but not schizophrenia<sup>31</sup>; in one study it was associated with even stronger recommendation of psychotherapy for the treatment of both disorders<sup>40</sup>.

### **Stigma and attitudes towards seeking help from a psychiatrist and psychiatric treatments**

Among the different stigma components, self-stigma – i.e., negative attitudes about oneself as a result of internalizing stigmatizing ideas held by society – seems of particular importance for attitudes towards seeking help from a psychiatrist. In a study in Australia, 44% of respondents reported they would feel embarrassed to see a psychiatrist, and there was a significant negative association between self-stigma and help-seeking<sup>42</sup>. Similarly, in studies from the Netherlands and Belgium, self-stigma was negatively related to the intention to seek help from a psychiatrist<sup>155,158</sup>.

In addition, anticipated shame tends to decrease the likelihood of endorsing a psychiatrist as source of help<sup>81,158</sup>. Not only the application of negative stereotypes to oneself, but also negative attitudes towards other people with mental illness seem to play a role, as shown in a study from Germany, where greater desire for social distance was associated with weaker intentions to see a psychiatrist<sup>81</sup>.

In contrast to self-stigma, perceived stigma – i.e., the awareness of negative stereotypes held by the general public about people receiving psychiatric help – and the anticipation of discrimination seem to have less impact on help-seeking. Only in an Australian study<sup>42</sup> perceived stigma had a negative effect, while in Germany<sup>81</sup>, Belgium<sup>155</sup>, the Netherlands and Flanders<sup>158</sup> no association with help-seeking was observed.

The relationship between stigma and attitudes towards medication did not show a consistent pattern. In Germany, Slovak Republic and Russia, endorsing lack of will power as cause of schizophrenia or depression had no effect on the recommendation of psychotropic medication. The same applied to the treatment of depression, with the exception of Slovak Republic, where lack of will power was related to greater reluctance to recommend drugs<sup>31,40</sup>. In Flanders and the Netherlands, self-stigma and perceived stigma were unrelated to the willingness to take medication<sup>158</sup>. In a study from the US, perceived stigma had also no impact on the preference for medication only<sup>100</sup>.

Only three studies examined the association between stigma and attitudes towards psychotherapy. In one study the endorsement of lack of will power as cause of schizophrenia or depression was related to less readiness to recommend psychotherapy<sup>40</sup>; in the other two studies no such relationship was observed<sup>31</sup>.

## **DISCUSSION**

Some limitations of the present study should be acknowledged. First, our systematic review focused on depression and schizophrenia, as we were unable to identify sufficient num-

bers of research reports focusing on other mental disorders. Second, our review only included papers written in English or other European languages, which may have resulted in an underrepresentation of countries where other languages are used for disseminating research results. Third, in order to ensure a minimum quality of selected studies, we only included peer-reviewed papers and excluded grey literature, online research reports and doctoral theses. Having said that, our review comprises the largest body of population studies on attitudes towards help-seeking so far analyzed, and our meta-analyses allow identification of both different and similar patterns of attitudes across the world.

From a global perspective, our results suggest that the help provided by psychiatrists is held in high esteem by the public, being recommended by over 80 percent of respondents for the treatment of schizophrenia and by 70 percent for the treatment of depression. In the sixteen countries participating in the Stigma in Global Context – Mental Health Study, the proportion of those opting for psychiatric treatment in case of schizophrenia or depression amounted even to over 90 percent. Psychiatrists are slightly preferred over general practitioners for the treatment of schizophrenia, while the opposite holds for the treatment of depression. The public's readiness to recommend seeking help from a psychiatrist has increased over the past 25 years. Thus, our findings do not support the notion that psychiatry is currently exposed to strong discrimination and, as a consequence, shunned by the public. The gap between the attitudes of the public and those perceived by psychiatrists could be seen as an indication of psychiatrists' inclination to self-stigmatization<sup>175</sup>, which, in the end, may result in low morale and a sense of entrapment<sup>1</sup>.

However, this rather optimistic appraisal needs some qualification when comparing attitudes towards psychiatrists with those towards psychologists/psychotherapists. These groups of professionals work closely together and, with doctors working as psychotherapists in several countries, the line between them is not always clear cut. However, in some instances the public seems to prefer one group over the other. Psychologists/psychotherapists are more recommended than psychiatrists for the treatment of depression, at least in Europe and America. According to our meta-analysis, psychologists/psychotherapists are recommended as much as psychiatrists even for the treatment of schizophrenia – a disorder which is at the heart of psychiatry. This high standing of psychologists/psychotherapists seems to mirror the fact that, as our meta-analysis has shown, psychotherapy is the favorite treatment method among the general public, while pharmacotherapy, which is considered to be the main treatment offered by psychiatrists<sup>89,176</sup>, is less appreciated. Although medication has gained popularity in recent years, there remains a large gap in public acceptance between the two treatment options.

The public's preference for psychotherapy is in sharp contrast to real-world clinical practice in many countries, where pharmacotherapy is the primary treatment for most mental disorders and psychotherapy is rather on the decline<sup>177</sup>. In the

US, for instance, from 1998 to 2007, there was a significant increase in the percentage of outpatients who received pharmacotherapy alone to treat their mental disorder, which was mirrored by a significant decline in the use of psychotherapy alone as well as psychotherapy in combination with pharmacotherapy. By 2007, over half of outpatients, regardless of their mental health condition, received only pharmacotherapy<sup>178</sup>.

The general public prefers psychotherapy not only for treating depression but also for treating schizophrenia, which might seem counterintuitive and conflicting with professional treatment recommendations. A possible explanation for this rather surprising result may be that the term "psychotherapy" does not necessarily mean the same for lay people as it does for mental health professionals. In a study from Austria, respondents who had endorsed psychotherapy were asked what kind of psychotherapy they had in mind. Two thirds of them mentioned "talk therapy" or simply "talking", and only a tiny minority named established forms of psychotherapy like cognitive behavioral or psychodynamic psychotherapy<sup>179</sup>.

This indifference to the specific forms of psychotherapy might indicate that, instead of being treated by means of a certain technique, people have the (quite legitimate) need to be listened to by someone who takes them seriously and who is trying to understand them with their problem. Accordingly, the reason why psychologists/psychotherapists are in some instances preferred over psychiatrists could be that, in the eyes of the public, psychologists and psychotherapists are more ready to provide patients with an opportunity to talk over their problems<sup>89,176</sup>. As M. Maj<sup>180</sup> has recently pointed out, the role of empathetic communication in psychiatry has been underestimated in the past few decades, "ignoring the fact that without communicative interaction no person will allow any professional to genuinely access his/her personal world". A good strategy to improve the public image of psychiatry would thus be to point out that, of course, personal interaction, talking and empathetic understanding are at the core of psychiatric care, and not just prescribing medication.

Although we found no indication that psychiatry as a medical discipline is stigmatized, stigma is still a relevant problem for help-seeking. Similar to a recent extensive review of stigma and help-seeking<sup>181</sup>, the studies included in our analyses point out that particularly self-stigma and individual stigmatizing attitudes are a prominent barrier to seeking help. It is our contention that, rather than seeing themselves as victims and spending their scarce resources on combating the stigma allegedly attached to their profession, psychiatrists would be better advised to fully engage in the fight against the stigma attached to those suffering from mental illness<sup>182</sup>.

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