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Measuring professional stigma toward patients with a forensic mental health status: protocol for a Delphi consensus study on the design of a questionnaire

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Measuring professional stigma toward patients with a forensic mental health status: protocol for a Delphi consensus study on the design of a questionnaire

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ABSTRACT:

Introduction: Negative attitudes towards individuals with a mental illness and/or criminal background are widely studied, but empirical interest in the attitudes toward patients with a forensic mental health status is lacking. Negative attitudes among mental health care (MHC) professionals can have a significant impact on treatment outcomes and hence, affect patients' rehabilitation. This study will elaborate an instrument to assess stigmatizing attitudes among MHC professionals towards patients with a forensic mental health status.

Methods and analysis: The instrument will be developed by means of a Delphi study and depart from pre-existing instruments that assess public and professional stigma towards individuals with a mental illness and/or criminal background. Relevant instruments were identified through a targeted literature review. A longlist of items has been selected for the online Delphi survey. Four expert panels (i.e. academic experience in stigma or forensic MHC, or clinical experience in community or forensic MHC) will be asked to score the relevance of each item on a 7-point Likert scale and to agree on the wording (Yes/No). Participants will be provided with the option to suggest additional items or alternative wording. Adapted Delphi methodology will be applied with an expectation of at least 3 rounds to achieve consensus: $\geq 60\%$ of the participants of at least three of four expert panels rank the item in the top three (for inclusion) or bottom three (for exclusion). Items will be reworded for a consecutive round based on a "yes minus no" score and participants' suggestions.

Ethics and dissemination: This study has been approved by the ethics committee of Fundaci3n Sant Joan de D3u. Dissemination of the results will be through peer-reviewed publications, presentations and (inter-) national academic conferences. A summary of the results will be shared with the participants and key persons in community as well as forensic MHC.

ARTICLE SUMMARY:

- A targeted literature review revealed an absolute gap in the literature on stigma towards forensic mental health patients
- The online Delphi survey will facilitate the involvement of experts from various disciplines and geographical areas, and will reduce the impact of dominant individuals as all responses (i.e. anonymous) will be weighted equally
- To make the survey manageable in terms of total items to evaluate, the authors had to create a longlist; hence make a preselection of relevant items
- Each round will require considerable time investment from both the participants (i.e. to evaluate all items) and the researchers (i.e. to consolidate all outcomes)
- The Delphi technique allows reaching consensus on item selection but further research will be needed to validate the questionnaire

INTRODUCTION

Forensic mental health care (FMHC) is aimed at improving patients’ mental health, reducing their risk of recidivism, and ultimately a secure reintegration into society. In general terms, FMHC offers treatment to individuals who are both mentally disordered and whose behaviour has led or could lead again to offending [1]. FMHC focuses on rehabilitative activities, as well as individualized care pathways, in order to increase the possibilities of a successful reintegration and return to their social environment [2]. Treatment is typically provided on a continuum from highly specialized FMHC wards (within penitentiary settings) to (supported) community mental health care services. Community mental health care (CMHC) services, however, seem reluctant to admit patients stigmatized by the label “forensic” [3]. As a consequence, patients in FMHC may become subject to prolonged inpatient admissions, fostered institutionalization and eventually a frustrated rehabilitation. To improve the rehabilitation options for patients in FMHC, a better liaison and understanding between FMHC and CMHC is needed. A first step in this direction could be to understand the attitudes CMHC professionals have toward patients with a forensic status. Research has shown, for instance, that CMHC professionals mention stereotypical pictures of “criminals” and “dangerous criminals” when asked about patients with a forensic status [4]. Others found that patients with a history of offending were particularly associated with stereotypes of dangerousness and aggression [5], and they could count on less public sympathy than non-offending patients [6]. Further believed most of the public (including police officers and psychiatrists) that these patients would not voluntarily undergo treatment and they were opposed to the idea to let them receive community-based treatment [7].

Stigma and stigmatizing attitudes are widespread. It involves stereotyping and devaluing individuals based on their belonging to a certain social group [8, 9]. In this regard, individuals with a mental illness are often associated with dangerousness, rarity, responsibility, incompetence, weakness of character, dependence, unpredictability, inferiority, and vulnerability [5, 10, 11]. Patients with a forensic status may be subject to *simultaneous* or *multiple stigmas* [12], as they also have a history of criminal offending. Hence, they further may be considered evil, mean, unintelligent, psychologically maladjusted, immature, inconsiderate and dishonest [13]. *Stereotypes* refer to the beliefs or “knowledge” structures about the characteristics and behaviours of a group of people [14, 15]. They are the cognitive component underlying stigma and stigmatizing attitudes. *Prejudice*, understood as “the emotional reaction or feelings that people have toward a group or member of a group” [16], is the affective component. For instance, the stereotype of dangerousness may lead to feelings of fear or may be experienced as anxiety. Prejudice toward individuals with a mental illness includes fear, pity, and anger [11], but this may vary per mental illness disorder [10]. For instance, the majority of the public feel sorry for individuals with mental illness, particularly for those with depression; however, they report uneasiness, uncertainty and fear toward individuals with schizophrenia and rejection toward individuals with drug abuse and alcoholism. Importantly, prejudice involves an active (cognitively and affectively) evaluative response, resulting in a negative emotional reaction. This means that people can be aware of stereotypes but not endorse them. This is especially important when fighting discrimination, the behavioural component of stigma. *Discrimination* is the unfair or unjust behaviours towards a social group or its member(s) (out-group) or exclusively favourable behaviour towards the members of one’s own group (in-group) [11, 14]. Discriminatory behaviours exist along a continuum from subtle to overt and when it concerns individuals with a mental illness, withholding help, avoidance, segregation, and

coercion are most often described [11]. Others also mentioned rejection, social distance [10], and exclusion [17].

Although mental health care professionals might be expected to have more positive attitudes towards individuals with a mental illness, research has shown that they too are susceptible to the negative attitudes endorsed in the general public [15, 18–23]. Despite their training, professional knowledge and experience with people with mental illness, they report, for instance, a desire for social distance comparable to the public [24–26]. Psychiatrists seem to have more negative attitudes than general practitioners and clinical psychologists [27]; however, when comparing the attitudes of students, doctors and nurses, the nurses held the least favourable attitudes towards patients with a mental illness [17]. Regarding long-term treatment outcomes, psychiatrists seem more pessimistic than the general public [27], and also other medical professionals express low expectations of recovery [24]. Lammie and colleagues [28] assessed practitioner attitudes towards patients in medium and low secure forensic mental health settings. Even though the overall responses were positive, a significant minority of professionals reported to hold negative attitudes like recovery pessimism, pity, fear, anger, a desire for social distance, avoidance and blame. Notably, the negative attitudes were expressed more subtle. Meaning that professionals with mental health training seem to show positive explicit attitudes, but negative implicit attitudes, which may reflect unconscious emotions related to mental illness [29].

Stigmatizing attitudes towards individuals with mental illness have been associated with negative outcomes such as reduced self-esteem [30], social isolation [31], chronic stress [32], delayed help-seeking [33] and loss of personal relationships [5]. Also a history of criminal offending may have negative consequences including hindered access to services like housing and education, fewer employment opportunities [34], and reduced social networks and supports [5]. Of note, reverse outcomes have been shown to decrease the likelihood of recidivism and increase the likelihood of successful community re-entry [34, 35]. Here it is important to distinguish *public stigma* - which refers to the reaction of the general population or large social groups towards another or smaller social group, thereby endorsing stereotypes about and acting against them [36, 37] from *self- or internalized stigma* - which refers to the extent to which an individual turns negative stereotypes and prejudice against oneself [11, 37]. Stigmatization of a group of people can thus result in the internalization of the stigmatizing beliefs. This on its turn can affect recovery and negatively impact mental illness coping mechanisms and treatment engagement [5]. *Self-stigma* has, furthermore, been associated with more severe psychiatric symptoms and a history of incarceration and homelessness [38], reduced coping strategies and feelings of shame, guilt, anger and distrust of others [39], as well as a risk factor for re-offending [40]. Stigmatization among professionals or *professional stigma* can be even more detrimental than by the public. It can have a significant impact on treatment outcomes and the patient's quality of life [5, 41]. Among long-term patients with impoverished relationships, 76% named their healthcare professional as the most important person in their lives [42].

Professionals' negative attitudes may reduce treatment-seeking behaviours because patients anticipate their discrimination towards them [9, 19], and the negative affective reactions and desire of social distance can lead to augmented disempowerment [43]. The distinction between *public/professional* and *self-stigma* is important for understanding, explaining, and building strategies to change stigmatizing attitudes [36]. Increased awareness of stereotypes or knowledge about FMHC, for instance, might be instrumental in combating prejudice or discrimination. A better understanding of CMHC professionals' attitudes towards patients with a forensic status may therefore give indications on how to improve the liaison between FMHC and CMHC. Measures such as education programmes and awareness-raising events can be

suggested to reduce stigmatizing attitudes, and eventually increase the rehabilitation options for patients with a forensic status.

To the author’s knowledge, there is no instrument specifically designed for the assessment of professional stigma toward patients with a forensic mental health status. Stigma assessment is complex as it involves an individual’s attitude towards a target population, and this attitude might be influenced by experiences, prejudices, stereotypes, and knowledge. A Delphi study, as means for consensus building, allows to consider this interplay of factors through the involvement of experts that understand 1) the perspective of the perceiver (i.e., professionals working in CMHC), 2) the target population (i.e., professionals and academics specialized in FMHC), and 3) stigma as an empirical construct (i.e., academics investigating stigma). Departing from the many instruments that assess the attitudes towards individuals with mental illnesses, and in a lesser extent towards individuals with a history of criminal offending, this method enables to utilize the knowledge from international experts to select the most relevant items for the assessment of CMHC professionals’ attitudes toward patients with a forensic status.

AIMS

The aim of this study is to reach expert consensus on items to assess stigmatizing attitudes among community mental health care professionals toward patients with a forensic mental health status. By means of a modified Delphi approach, consensus is sought on items that were selected and adapted from instruments that assess stigma towards individuals with either a mental illness or a history of criminal offending.

METHODS AND DESIGN

This study will be conducted using a modified version of the Delphi technique. The Delphi technique is an iterative multistage approach to seek consensus among “experts” on a certain subject [44]. Rather than having experts to meet physically, the Delphi technique can be conducted online, which allows the involvement of international experts. Contrary to a classical Delphi study, the first stage will not consist of a complete open round to obtain all qualitative input. Instead, we will depart from a pre-selected longlist of items drawn from various stigma assessment instruments, and ask the experts to complete the list in case important items are missing. This is referred to in the literature as a modified Delphi study [45]. The anticipated rounds for achieving consensus are presented in **Error! Reference source not found..**

Development of the Delphi questionnaire

Literature review – search strategy and study selection

To identify the instruments that measure stigma among the public, health professionals and students, a targeted literature review was conducted in PubMed using the following terms "stigma*" OR "stereotyp*" OR "prejud*" OR "attitude" OR "discrim*". The search strategy was further constructed by combining these with terms related to mental illness (i.e. “mental* OR psychiatr* OR psychol*AND (disorder* OR illness*)”) or criminal background (i.e. "offend*" OR "forensic" OR "prison*" OR "secure unit" OR "crim*" OR "justice"), and assessment (i.e. “assess* OR measure* OR question* OR instrument”). Finally, a third search included all

terms. To obtain the most recent scientific evidence, the search was limited to studies published in 2011 or later. Additionally, we reviewed related papers referenced in selected studies, especially development articles, and consulted websites (i.e., Indigo Network, www.indigo-group.org) related to stigma assessment.

The study eligibility criteria were:

1. *Type of studies*: Quantitative studies with statistical analysis and with a validated measurement instrument, including papers on the development and psychometric evaluation of instruments relevant to our study.
2. *Construct of interest*: only studies measuring *public stigma* or *professional stigma* were eligible. Stigma could be measured in a broad sense, so measures of beliefs, attitudes and behaviours were included.
3. *Target population*: samples composed of Mental Health Practitioners (psychiatrists, psychologists), General Practitioners, Primary care and/or medical students. The population stigmatized had to be adults with mental illness a/o a history of criminal offending.
4. *Language*: only English and Spanish papers were selected.

Excluded were studies with non-validated or non-specified measurement instruments, studies focussing on the assessment of perceived stigma, associative stigma, and stigma toward specific disorders, or studies assessing the impact of an intervention aimed at reducing stigma. Finally, also studies whose sample were children or adolescents, or whose stigma was directed towards this type of population were discarded of the eligibility process.

Literature review – results

The three searches together yielded 6939 articles, after removing duplicates. Inspection of abstracts and titles found that 6769 did not fulfil the inclusion criteria. A total of 170 articles were identified as potentially relevant, but 13 articles could not be retrieved and 79 were later excluded on closer examination of the full text as they did not match the inclusion criteria. Thus, a total of 78 articles were finally included. A PRISMA flow chart reflecting the study selection is presented in Figure 2.

Among the selected studies, 47 measured *professional stigma*, 15 measured *public stigma* and 4 measured both; 6 articles were psychometric evaluations and the rest (6) were instrument development or validation papers. The target populations were mainly patients with mental illness, and only one paper studied stigma towards forensic psychiatric patients; highlighting the gap of literature in this field.

The most used scales were Community Attitudes towards Mental Illness Scale [46], followed by The Mental Illness: Clinicians' Attitude and its different versions [47, 48], Opinions About Mental Illness Scale [49] and Opening Minds Stigma Scale for Health Care Providers [50]. The Attribution Questionnaire-27 [51] and modified versions of Bogardus Social Distance Scale [52] were also commonly used, but these scales were discarded because of the use of vignettes (AQ-27) and because the factor "Social Distance" was already included in other questionnaires considered more appropriate for the purpose of our study (i.e., Community Attitudes towards Mental Illness Scale). An overview of the instruments that were considered for the development of our Delphi questionnaire is presented in Supplementary Material, indicating also the respective items that were selected and/or adapted.

Structure of the Delphi questionnaire

For the structure of the questionnaire, we followed the conceptualization as proposed by Fox et al. (2018), taking into account items related to stereotypes, prejudices and discrimination. All

items of the identified instruments were listed and categorized accordingly. Subsequently, all items were put in random order. To shorten the initial list of 468 items, each of the authors scored on a 7-point scale how relevant each item was for the purpose of the Delphi study. Overall, 79 items were selected (mean score of 5.33 or higher). To have a list with consistent wording (e.g. type of care or patients), 70 items were reworded. Six items were rephrased; basically, these entailed comparisons between patients with a mental illness and “normal people”, we changed them to compare patients with a mental illness and patients with a forensic status. For 1 item (i.e. ATP 36), we included two rephrased items. Finally, 5 items were added by the authors; these items were based on experiences in daily practice and considered missing in the existing instruments.

Participants

Our general approach is to invite four categories of experts: academics with knowledge about stigma assessment, healthcare professionals (e.g., psychiatrists, nurses, psychologists, social workers, general practitioners) working in CMHC, healthcare professionals working in FMHC, and academics with knowledge about patients with a forensic mental health status. An initial list of potential participants has been created following the purposive sampling approach [44]. The authors (i.e. G.E. and E.V.) approached their contacts in the field of FMHC in Europe and the CMHC in Catalonia, Spain. All contacts were asked to present 5 more potential candidates that met one or more of the following inclusion criteria:

- either a listed author in at least one publication related to 1) Stigma towards patients with a forensic status; 2) Stigma towards patients with a mental illness; 3) Stigma towards (ex-) offenders; 4) Stigma assessment; 5) Conceptualization of stigma; 6) Care pathways or treatment in FMHC;
- and/or with clinical experience in Patient care in 1) CMHC or 2) FMHC.

For the identification of the stigma academics, (recurrent) authors of publications about stigma towards individuals with mental illness, (ex-) offenders, or patients with forensic mental health status were listed. Although there is no widespread consensus about the appropriate sample size per participant category [53], a sample of 10 to 18 participants has been suggested [54]. On the other hand, the more participants the higher the reliability of the composite consensus [55]. We will therefore aim for a minimum overall participation of 40 experts.

Recruitment

Potential participants will be contacted via their work email address, which is either publicly available or provided by the authors’ contacts. They will receive an email explaining the purpose of the Delphi study and an invitation to participate. Experts who confirm their willingness to participate, receive a second email with a link to the internet-based questionnaire and an explanatory letter with instructions on how to complete the questionnaire.

The questionnaire is completely web-based. The introductory page includes a consent clause, explaining that by clicking the “I agree” button, they consent to participate in the Delphi study. In all communications, we will explain the voluntary nature of the study, state that withdrawal is allowed at any time without any consequence for the participant and how personal data protection rights can be exercised. Confidentiality will be protected and individual data will not be shared with other participants or third parties. Each participant will be allocated an automatic random identification number, which will enable us to include the participant’s individual

results in the feedback rounds. All other feedback will contain aggregate data to protect the participants' identities and opinions.

Structure of the Delphi procedure

The Delphi method will consist of several iterative rounds in order to reach consensus, with different activities taking place in each of the consecutive rounds (see Figure 1).

Round 1

In the first round, participants will receive a web-based questionnaire with a list of potential items ($i=85$) randomly ordered to avoid biases [56]. They will be asked to indicate the relevance of each item for the assessment of stigma by CMHC professionals toward patients with a forensic status, by giving a score on a 7-point Likert scale (1=not important at all to 7=extremely important [57]). They will further be asked if they agree with the wording of the items (yes/no/don't know); thereby providing the opportunity to make suggestions for alternative wording. Finally, we will ask the participants to add important items that they consider missing and to include any additional comments in an open text box. Round 1 is foreseen to start in March 2022. Participants will be given 4 weeks to complete round 1. Reminders will be sent to non-responders every week following distribution.

Round 2

The responses from round 1 will be aggregated and analysed (cf. data analysis). The aggregated anonymous results (i.e. group median and interquartile range), the participant's own responses and a narrative summary of the suggestions for rephrasing and additional comments will be sent as feedback together with an explanatory introduction for the second round. Items with consensus on inclusion or exclusion will be identified. Newly suggested items (i.e. considered missing), newly reworded items and the remaining items will be presented using the same method as in round 1 (i.e. 7-point Likert scale). Participants will again be asked if the rewording is adequate (yes/no/don't know) and to make suggestions for improvement. Participants will have the opportunity to leave additional comments. Of note, we will no longer ask for missing items.

Round 3

After analysis of the responses of round 2, participants will receive feedback from rounds 1 and 2 (i.e. aggregated anonymous results, narrative summary and own responses), indicating the items that reached consensus on inclusion or exclusion. The items will again be presented on a 7-point Likert scale for reconsideration. Additional comments will be allowed but improvement of phrasing will no longer be sought.

Using the a priori established consensus thresholds (cf. data analysis), we will decide if a fourth round will be needed to reach consensus. If indicated, round 3 will be repeated; otherwise, the Delphi study will end with the consolidated list based on the outcomes of round 3.

Data analysis

To determine consensus, we will use the quantitative data obtained from the 7-point Likert scale. We will calculate descriptive statistics, including central tendency (median) and distribution (IQR) for all participants and per expert category. The consensus thresholds will be defined as $\geq 60\%$ of the participants of at least three of the four expert groups ranked the item in the top three (5–7; i.e. inclusion) or bottom three (1–3; i.e. exclusion) Likert categories [58]. As a secondary measure, we will use the total number of items on which consensus on inclusion has been reached. For the stigma assessment questionnaire to be manageable, we will use a threshold of 30 items.

For the reworded items, a “yes minus no” score will be calculated (i.e. the number of participants who answered a “yes” on a specific item minus the number of participants who answered a “no”). For the modified items with low scores on “yes minus no”, new formulations will be proposed based on the suggestions from the participants. These will be included in the questionnaire of the following round (until round 3).

We will conduct thematic content analyses for the qualitative data (i.e. the missing items and additional comments). Similar newly suggested items will be combined or reformulated to avoid duplicates.

Data collection and management

All rounds will be conducted using Qualtrics software [59]. Qualtrics is a secure web application for developing surveys with more complex response formats, methods of distribution, or data management. The software complies with the General Data Protection Regulation (GDPR) and with the regulations necessary to process and store protected health information. Qualtrics is ISO 27001 certified and FredRAMP licensed. Qualtrics is a SaaS (software as a service), the software and data are hosted on ICT servers that are accessed via the Internet. Databases extracted from Qualtrics software will be securely stored on the server of Parc Sanitari Sant Joan de Déu (PSSJD). Only pseudonymized data will be exported to SPSS and Excel for further quantitative and qualitative analyses.

Patient and public involvement

No patients involved.

ETHICS AND DISSEMINATION

The Delphi consensus study has received ethical approval from the ethics committee of Fundació Sant Joan de Déu (reference number C.I. PIC-186-21) and the institutional research board of Parc Sanitari Sant Joan de Déu (reference number C.R. 66-2021-09). Dissemination of the results will be through peer-reviewed publications, presentations, symposiums and workshops at (inter-) national academic conferences, and a summary of the results will be shared with the participants, and key persons in community as well as forensic mental health care.

AUTHOR CONTRIBUTIONS

All authors shared the study conception. EV led the detailed protocol planning and drafted together with RM the manuscript. All authors critically reviewed the study protocol, and will

1
2
3 assist in the development and implementation of the study. All authors read, revised and
4 accepted the final draft.
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16 All authors report no conflict of interest.
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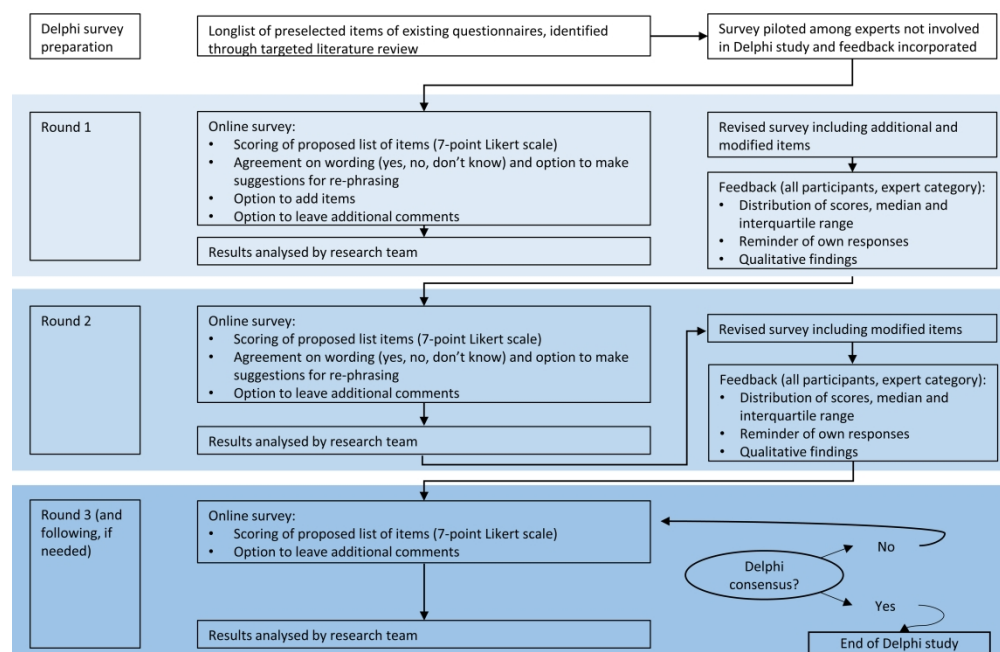
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FIGURE LEGEND:

Figure 1 - Structure of the Delphi procedure

Figure 2 - PRISMA flow diagram of the study selection procedure for literature reviews



Structure of the Delphi procedure

235x153mm (600 x 600 DPI)

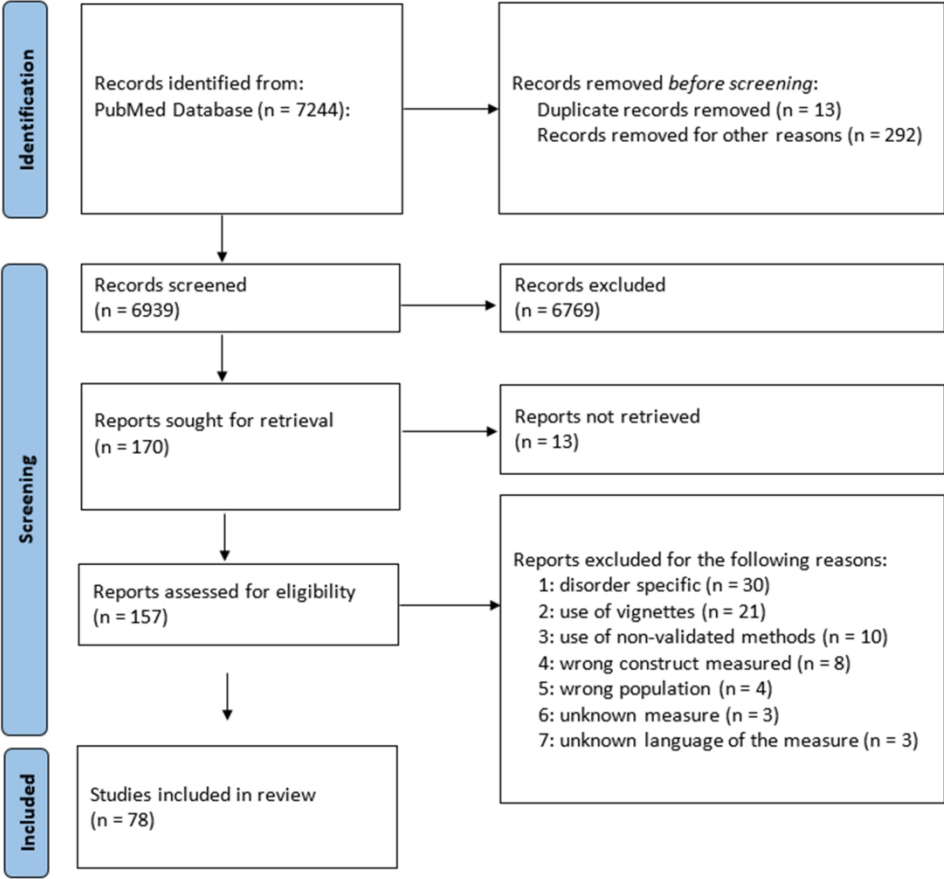


Figure 2 - PRISMA flow diagram of the study selection procedure for literature reviews

139x149mm (600 x 600 DPI)

Supplementary Material – Identified questionnaires and selection and modification of relevant items

Questionnaire	Total items	Number of items selected	Original item	Modified item
Attitudes Towards Acute Mental Health Scale (ATAMHS)[60]	33	2	Mental illness is the result of adverse social circumstances	N/A
			Violence mostly results from mental illness	N/A
Attitudes toward Mental Illness (AMI)[61]	24	4	The mentally ill, with a number of exceptions, cannot tell the difference between good and bad	FMH patients, with a number of exceptions, cannot tell the difference between good and bad
			Mentally ill people should be prevented from walking freely in public places	FMH patients should be prevented from walking freely in public places
			The mentally ill should not be allowed to make decisions, even those concerning routine events	FMH patients should not be allowed to make decisions, even those concerning routine events
			Every mentally ill person should be in an institution where he/she will be under supervision and control	Every FMH patients should be in an institution where he/she will be under supervision and control
Attitudes Toward Prisoners (ATP)[62]	36	14 ^a	Only a few prisoners are really dangerous*	Only a few FMH patients are really dangerous*
			Prisoners never change	FMH patients never change
			Most prisoners are victims of circumstance and deserve to be helped*	Most FMH patients are victims of circumstance and deserve to be helped*
			Prisoners have feelings like the rest of us*	FMH patients have feelings like the rest of us*
			It is not wise to trust a prisoner too far	It is not wise to trust a FMH patient too far
			Prisoners need affection and praise just like anybody else*	FMH patients need affection and praise just like anybody else*
			Trying to rehabilitate prisoners is a waste of time and money	Trying to rehabilitate FMH patients is a waste of time and money
			You have to be constantly on your guard with prisoners	You have to be constantly on your guard with FMH patients
			Most prisoners are too lazy to earn an honest living	Most FMH patients are too lazy to earn an honest living
			Prisoners are just plain mean at heart	FMH patients are just plain mean at heart
			Prisoners are just plain immoral	FMH patients are just plain immoral
			Prisoners should be under strict, harsh discipline	FMH patients should be under strict, harsh discipline
			Most prisoners can be rehabilitated*	FMH patients can be rehabilitated*
			If a person does well in prison, he should be let out on parole	If a FMH patient does well in CMHCare, he should be let out in the community
				If a FMH patient does well in FMHCare, he should be transferred to CMHCare

Attitudes toward Severe Mental Illness (ASMI)[63]	30	3	In spite of any efforts they are making, people with severe mental illness will never be like other people	In spite of any efforts they are making, FMH patients will never be like other people
			People with severe mental illness are not able to acquire new skills	FMH patients are not able to acquire new skills
			People with severe mental illness can cope with life difficulties*	FMH patients can cope with life difficulties*
Believes toward Mental Illness Scale (BMI)[64]	21	3	A mentally ill person is more likely to harm others than a normal person	A FMH patient is more likely to harm others than a non-forensic patient with a mental illness
			Mental disorders would require a much longer period of time to be cured than would other general diseases	FMH patients would require a much longer period of time to be cured than would non-forensic patients with a mental illness
			Mentally-ill people are unlikely to be able to live by themselves because they are unable to assume responsibilities	FMH patients are unlikely to be able to live by themselves because they are unable to assume responsibilities
Community Attitudes Towards Mental Illness (CAMI)[46]	40	8	One of the main causes of mental illness is a lack of self-discipline and will power	One of the main causes of becoming a FMH patient is a lack of self-discipline and will power
			The mentally ill should not be treated as outcasts of society*	FMH patients should not be treated as outcasts of society*
			Virtually anyone can become mentally ill*	Virtually anyone can become a FMH patient*
			We need to adopt a far more tolerant attitude toward the mentally ill in our society*	We need to adopt a far more tolerant attitude toward FMH patients in our society*
			We have a responsibility to provide the best possible care for the mentally ill*	We have a responsibility to provide the best possible care for FMH patients*
			The mentally ill should not be given any responsibility	FMH patients should not be given any responsibility
			The mentally ill should be isolated from the rest of the community	FMH patients should be isolated from the rest of the community
Community attitudes toward sex offenders (CATSO)[65]	18	2	As far as possible, mental health services should be provided through community based facilities	As far as possible, FMH care should be provided through community based facilities
			With support and therapy, someone who committed a sexual offense can learn to change their behaviour*	With support and therapy, a FMH patient can learn to change their behaviour*
			The prison sentences sex offenders receive are much too long when compared to the sentence lengths for other crimes*	The prison sentences FMH patients receive are much too short when compared to the sentence lengths for those without a mental illness*
Escala de Estigma y Salud Mental (EESMPR) [Mental Health Stigma Scale][66]	12	-		
Evaluación del Estigma de	20	9	People with a mental disorder are a burden on their family and society	FMH patients are a burden on their family and society

Enfermedad Mental en Enfermería (EVEPEM) [Evaluation of Stigma of Mental Illness in Nursing][67]			People with a mental disorder are more likely to behave violently than are other people	FMH patients are more likely to behave violently than are other people
			In general, people with a mental disorder refuse therapeutic help	In general, FMH patients refuse therapeutic help
			People with a mental disorder can lead a normal life*	FMH patients can lead a normal life*
			Patients with a mental disorder have the same rights as everybody*	FMH patients have the same rights as everybody*
			I feel afraid when caring for people with a mental disorder	I feel afraid when caring for FMH patients
			Patients with a mental disorder should be isolated from other patients	FMH patients should be isolated from other patients
			All patients with a mental disorder end up being readmitted	All FMH patients end up being readmitted
			All patients admitted to a mental health unit need to be physically restrained	All FMH patients admitted to a mental health unit need to be physically restrained
Mental Health Attitude Questionnaire (MHAQ)[68]	21	-		
Mental Health Provider Self-Assessment of Stigma Scale (MHPASS)[69]	20	1	Clients with serious mental illnesses have a hard time making good choices for themselves, so service providers need to help them	FMH patients have a hard time making good choices for themselves, so service providers need to help them
Mental Illness Attitudes Questionnaire [70]	30	7	Mental illness patients often threaten or harm the people around	FMH patients often threaten or harm the people around them
			Mental illness patients often lose their temper with no reason	FMH patients often lose their temper with no reason
			Mental illness patients often show unexpected impulsive behaviours	FMH patients often show unexpected impulsive behaviours
			Violence of mental illness patients is as much as that of others	Violence of FMH patients is as much as that of other patients with a mental illness
			Mental illness patients can contribute to society*	FMH patients can contribute to society*
			Mental illness patients violate social and moral rules as much as other people do	FMH patients violate social and moral rules as much as other people do
			Discharged mental illness patients should be allowed to return to society*	Discharged FMH patients should be allowed to return to society*
Mental Illness: Clinicians'	16	2	People with severe mental illness can never recover enough to have a good quality of life	FMH patients can never recover enough to have a good quality of life

Attitudes (MICAv4)[47, 48]			I feel as comfortable talking to a person with mental illness as I do talking to a person with physical illness	I feel as comfortable talking to a FMH patient as I do talking to a non-forensic patient with a mental illness
Opening Mind Stigma Scale for Health Care Practitioners (OMS-HC)[50]	20	5	Despite my professional beliefs, I have negative reactions towards people who have mental illness	Despite my professional beliefs, I have negative reactions towards FMH patients
			There is little I can do to help people with mental illness	There is little I can do to help FMH patients
			More than half of people with mental illness don't try hard enough to get better	More than half of FMH patients don't try hard enough to get better
			The best treatment for mental illness is medication	The best treatment for FMH patients is medication
			I struggle to feel compassion for a person with a mental illness	I struggle to feel compassion for a FMH patient
Opinions About Mental Illness (OMI)[49]	51	5	To become a patient in a mental hospital is to become a failure in life	To become a patient in FMHCare is to become a failure in life
			Although some mental patients seem all right, it is dangerous to forget for a moment that they are mentally ill	Although some FMH patients seem all right, it is dangerous to forget for a moment that they are mentally ill
			If our hospitals had enough well trained doctors, nurses, and aides, many of the patients would get well enough to live outside the hospital*	If our hospitals had enough well trained doctors, nurses, and aides, many of the FMH patients would get well enough to live outside the hospital*
			The best way to handle patients in mental hospitals is to keep them behind locked doors	The best way to handle FMH patients is to keep them behind locked doors
			There is little that can be done for patients in a mental hospital except to see that they are comfortable and well fed	There is little that can be done for FMH patients in CMHCare except to see that they are comfortable and well fed
Public Attitudes Towards Offenders with Mental Illness (PATOMI)[71]	28	7	As soon as an offender shows signs of mental disturbance, he should be hospitalised	As soon as a FMH patient shows signs of mental disturbance, he should be readmitted to FMHCare
			The best therapy for many offenders with mental illness is to be part of a normal community*	The best therapy for many FMH patients is to be part of a normal community*
			Offenders with a mental illness are far less of a danger than most people suppose*	FMH patients are far less of a danger than most people suppose*
			Less emphasis should be placed on protecting the public from FPPs*	Less emphasis should be placed on protecting the public from FMH patients*
			Increased spending on forensic mental health services is a waste of tax money	N/A
Prejudice towards People with Mental Illness	28	6	Offenders with mental illness need the same kind of control and discipline as a young child	FMH patients need the same kind of control and discipline as a young child
			Offenders with mental illness should be encouraged to assume the responsibilities of normal life	FMH patients should be encouraged to assume the responsibilities of normal life
			I am not scared of people with mental illness*	I am not scared of FMH patients*
			People with mental illness should support themselves and not expect handouts	FMH patients should support themselves and not expect handouts

(PPMI)[72]			People with mental illness do not deserve our sympathy	FMH patients do not deserve our sympathy
			The behaviour of people with mental illness is unpredictable	The behaviour of FMH patients is unpredictable
			In general, you cannot predict how people with mental illness will behave	In general, you cannot predict how FMH patients will behave
			I usually find people with mental illness to be consistent in their behaviour*	I usually find FMH patients to be consistent in their behaviour*
Recovery Knowledge Inventory (RKI)[73]	20	1	Not everyone is capable of actively participating in the recovery process	Not all FMH patients are capable of actively participating in the recovery process
b				FMH patients should be visited with more than one professional at the same time, for our own safety
				Higher doses of psychotropic drugs should be used in FMH patients than non-forensic patients
				FMH patients have a more violent personality than non-forensic patients with a mental illness
				FMH patients should not share therapeutic groups or therapeutic activities with non-forensic patients
				It is frightening to think of FMH patients living in the same facility as non-forensic patients

N/A – items were included without any modification; ^a selected items resulted in 15 modified items; * positively formulated items; ^b items created by the authors.

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Measuring professional stigma toward patients with a forensic mental health status: protocol for a Delphi consensus study on the design of a questionnaire

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ABSTRACT:

Introduction: Negative attitudes towards individuals with a mental illness and/or criminal background are widely studied, but empirical interest in the attitudes toward patients with a forensic mental health status is lacking. Negative attitudes among mental health care (MHC) professionals can have a significant impact on treatment outcomes and hence, affect patients' rehabilitation. This study will elaborate an instrument to assess stigmatizing attitudes among community MHC professionals towards patients with a forensic mental health status.

Methods and analysis: The instrument will be developed by means of a Delphi study and depart from pre-existing instruments that assess public and professional stigma towards individuals with a mental illness and/or criminal background. Relevant instruments were identified through a targeted literature review. A longlist of items has been selected for the Delphi survey. Five expert panels (i.e. academic experience in stigma or forensic MHC, clinical experience in community or forensic MHC, or patient experience in forensic and community MHC) will be asked to score the relevance of each item on a 7-point Likert scale and to agree on the wording (Yes/No). Participants will be provided with the option to suggest additional items or alternative wording. Adapted Delphi methodology will be applied with an expectation of at least 3 rounds to achieve consensus: $\geq 60\%$ of the participants of at least four of five expert panels rank the item in the top three (inclusion) or bottom three (exclusion). Items will be reworded for a consecutive round based on a "yes minus no" score and participants' suggestions.

Ethics and dissemination: This study has been approved by the ethics committee of Fundación Sant Joan de Déu. Dissemination of results will be through peer-reviewed publications, presentations and (inter-) national academic conferences. A summary of the results will be shared with the participants and key persons in community and forensic MHC.

STRENGTHS AND LIMITATIONS OF THIS STUDY:

- Patients' experiential knowledge on professional stigma is incorporated through a patient expert panel; this may improve the credibility of the outcomes and offer invaluable additional insights
- The online Delphi survey will facilitate the involvement of experts from various disciplines and geographical areas, and will reduce the impact of dominant individuals as all responses (i.e. anonymous) will be weighted equally
- To make the survey manageable in terms of total items to evaluate, the authors had to create a longlist; hence make a preselection of relevant items
- Each round will require considerable time investment from both the participants (i.e. to evaluate all items) and the researchers (i.e. to consolidate all outcomes)
- The Delphi technique allows reaching consensus on item selection but further research will be needed to develop the questionnaire and assess the psychometric properties

INTRODUCTION

Forensic mental health care (FMHC) is aimed at improving patients’ mental health, reducing their risk of recidivism, and ultimately a secure reintegration into society. In general terms, FMHC offers treatment to individuals who are both mentally disordered and whose behaviour has led or could lead again to offending [1]. FMHC focuses on rehabilitative activities, as well as individualized care pathways, in order to increase the possibilities of a successful reintegration and return to their social environment [2]. Treatment is typically provided on a continuum from highly specialized FMHC wards (within penitentiary settings) to (supported) community mental health care services. Community mental health care (CMHC) services, however, seem reluctant to admit patients stigmatized by the label “forensic” [3]. As a consequence, patients in FMHC may become subject to prolonged inpatient admissions, fostered institutionalization and eventually a frustrated rehabilitation. To improve the rehabilitation options for patients in FMHC, a better liaison and understanding between FMHC and CMHC is needed. A first step in this direction could be to understand the attitudes CMHC professionals have toward patients with a forensic status. Research has shown, for instance, that CMHC professionals mention stereotypical pictures of “criminals” and “dangerous criminals” when asked about patients with a forensic status [4]. Others found that patients with a history of offending were particularly associated with stereotypes of dangerousness and aggression [5], and they could count on less public sympathy than non-offending patients [6]. Further believed most of the public (including police officers and psychiatrists) that these patients would not voluntarily undergo treatment and they were opposed to the idea to let them receive community-based treatment [7].

Stigma and stigmatizing attitudes are widespread. It involves stereotyping and devaluing individuals based on their belonging to a certain social group [8, 9]. In this regard, individuals with a mental illness are often associated with dangerousness, rarity, responsibility, incompetence, weakness of character, dependence, unpredictability, inferiority, and vulnerability [5, 10, 11]. Patients with a forensic status may be subject to *simultaneous* or *multiple stigmas* [12], as they also have a history of criminal offending. Hence, they further may be considered evil, mean, unintelligent, psychologically maladjusted, immature, inconsiderate and dishonest [13]. *Stereotypes* refer to the beliefs or “knowledge” structures about the characteristics and behaviours of a group of people [14, 15]. They are the cognitive component underlying stigma and stigmatizing attitudes. *Prejudice*, understood as “the emotional reaction or feelings that people have toward a group or member of a group” [16], is the affective component. For instance, the stereotype of dangerousness may lead to feelings of fear or may be experienced as anxiety. Prejudice toward individuals with a mental illness includes fear, pity, and anger [11], but this may vary per mental illness disorder [10]. For instance, the majority of the public feel sorry for individuals with mental illness, particularly for those with depression; however, they report uneasiness, uncertainty and fear toward individuals with schizophrenia and rejection toward individuals with drug abuse and alcoholism. Importantly, prejudice involves an active (cognitively and affectively) evaluative response, resulting in a negative emotional reaction. This means that people can be aware of stereotypes but not endorse them. This is especially important when fighting discrimination, the behavioural component of stigma. *Discrimination* is the unfair or unjust behaviours towards a social group or its member(s) (out-group) or exclusively favourable behaviour towards the members of one’s own group (in-group) [11, 14]. Discriminatory behaviours exist along a continuum from subtle to overt and when it concerns individuals with a mental illness, withholding help, avoidance, segregation, and

coercion are most often described [11]. Others also mentioned rejection, social distance [10], and exclusion [17].

Although mental health care professionals might be expected to have more positive attitudes towards individuals with a mental illness, research has shown that they too are susceptible to the negative attitudes endorsed in the general public [15, 18–23]. Despite their training, professional knowledge and experience with people with mental illness, they report, for instance, a desire for social distance comparable to the public [24–26]. Psychiatrists seem to have more negative attitudes than general practitioners and clinical psychologists [27]; however, when comparing the attitudes of students, doctors and nurses, the nurses held the least favourable attitudes towards patients with a mental illness [17]. Regarding long-term treatment outcomes, psychiatrists seem more pessimistic than the general public [27], and also other medical professionals express low expectations of recovery [24]. Lammie and colleagues [28] assessed practitioner attitudes towards patients in medium and low secure forensic mental health settings. Even though the overall responses were positive, a significant minority of professionals reported to hold negative attitudes like recovery pessimism, pity, fear, anger, a desire for social distance, avoidance and blame. Notably, the negative attitudes were expressed more subtle. Meaning that professionals with mental health training seem to show positive explicit attitudes, but negative implicit attitudes, which may reflect unconscious emotions related to mental illness [29].

Stigmatizing attitudes towards individuals with mental illness have been associated with negative outcomes such as reduced self-esteem [30], social isolation [31], chronic stress [32], delayed help-seeking [33] and loss of personal relationships [5]. Also a history of criminal offending may have negative consequences including hindered access to services like housing and education, fewer employment opportunities [34], and reduced social networks and supports [5]. Of note, reverse outcomes have been shown to decrease the likelihood of recidivism and increase the likelihood of successful community re-entry [34, 35]. Here it is important to distinguish *public stigma* - which refers to the reaction of the general population or large social groups towards another or smaller social group, thereby endorsing stereotypes about and acting against them [36, 37] from *self- or internalized stigma* – which refers to the extent to which an individual turns negative stereotypes and prejudice against oneself [11, 37]. Stigmatization of a group of people can thus result in the internalization of the stigmatizing beliefs. This on its turn can affect recovery and negatively impact mental illness coping mechanisms and treatment engagement [5]. *Self-stigma* has, furthermore, been associated with more severe psychiatric symptoms and a history of incarceration and homelessness [38], reduced coping strategies and feelings of shame, guilt, anger and distrust of others [39], as well as a risk factor for re-offending [40]. Stigmatization among professionals or *professional stigma* can be even more detrimental than by the public. It can have a significant impact on treatment outcomes and the patient's quality of life [5, 41]. Among long-term patients with impoverished relationships, 76% named their healthcare professional as the most important person in their lives [42].

Professionals' negative attitudes may reduce treatment-seeking behaviours because patients anticipate their discrimination towards them [9, 19], and the negative affective reactions and desire of social distance can lead to augmented disempowerment [43]. The distinction between *public/professional* and *self-stigma* is important for understanding, explaining, and building strategies to change stigmatizing attitudes [36]. Increased awareness of stereotypes or knowledge about FMHC, for instance, might be instrumental in combating prejudice or discrimination. A better understanding of CMHC professionals' attitudes towards patients with a forensic status may therefore give indications on how to improve the liaison between FMHC and CMHC. Measures such as education programmes and awareness-raising events can be

suggested to reduce stigmatizing attitudes, and eventually increase the rehabilitation options for patients with a forensic status.

To the author’s knowledge, there is no instrument specifically designed for the assessment of professional stigma toward patients with a forensic mental health status. Stigma assessment is complex as it involves an individual’s attitude towards a target population, and this attitude might be influenced by experiences, prejudices, stereotypes, and knowledge. A Delphi study, as means for consensus building, allows to consider this interplay of factors through the involvement of experts that understand 1) the perspective of the perceiver (i.e., professionals working in CMHC), 2) the target population (i.e., patients, professionals and academics experienced in FMHC), and 3) stigma as an empirical construct (i.e., academics investigating stigma). Departing from the many instruments that assess the attitudes towards individuals with mental illnesses, and in a lesser extent towards individuals with a history of criminal offending, this method enables to utilize the knowledge from international experts to select the most relevant items for the assessment of CMHC professionals’ attitudes toward patients with a forensic status.

AIMS

The aim of this study is to reach expert consensus on items to assess stigmatizing attitudes among community mental health care professionals toward patients with a forensic mental health status. By means of a modified Delphi approach, consensus is sought on items that were selected and adapted from instruments that assess stigma towards individuals with either a mental illness or a history of criminal offending.

METHODS AND DESIGN

This study will be conducted using a modified version of the Delphi technique. The Delphi technique is an iterative multistage approach to seek consensus among “experts” on a certain subject [44]. Rather than having experts to meet physically, the Delphi technique can be conducted online, which allows the involvement of international experts. Within the context of mental health research, the Delphi technique has been applied for a great variety of purposes, amongst which the development of questionnaires [45]. Contrary to a classical Delphi study, the first stage will not consist of a complete open round to obtain all qualitative input. Instead, we will apply a modified Delphi study [46], meaning that we will depart from a pre-selected longlist of items drawn from various stigma assessment instruments, and ask the experts to complete the list in case important items are missing. The anticipated rounds for achieving consensus are presented in Figure 1.

Development of the Delphi questionnaire

Literature review – search strategy and study selection

To identify the instruments that measure stigma among the public, health professionals and students, a targeted literature review was conducted in PubMed using the following terms "stigma*" OR "stereotyp*" OR "prejud*" OR "attitude" OR "discrim*". The search strategy was further constructed by combining these with terms related to mental illness (i.e. “mental* OR psychiatr* OR psychol*AND (disorder* OR illness*)”) or criminal background (i.e. "offend*"

OR "forensic" OR "prison*" OR "secure unit" OR "crim*" OR "justice"), and assessment (i.e. "assess*" OR measure* OR question* OR instrument"). Finally, a third search included all terms. To obtain the most recent scientific evidence, the search was limited to studies published in 2011 or later. Additionally, we reviewed related papers referenced in selected studies, especially development articles, and consulted websites (i.e., Indigo Network, www.indigo-group.org) related to stigma assessment.

The study eligibility criteria were:

1. *Type of studies*: Quantitative studies with statistical analysis and with a validated measurement instrument, including papers on the development and psychometric evaluation of instruments relevant to our study.
2. *Construct of interest*: only studies measuring *public stigma* or *professional stigma* were eligible. Stigma could be measured in a broad sense, so measures of beliefs, attitudes and behaviours were included.
3. *Target population*: samples composed of Mental Health Practitioners (psychiatrists, psychologists), General Practitioners, Primary care and/or medical students. The population stigmatized had to be adults with mental illness a/o a history of criminal offending.
4. *Language*: only English and Spanish papers were selected.

Excluded were studies with non-validated or non-specified measurement instruments, studies focussing on the assessment of perceived stigma, associative stigma, and stigma toward specific disorders, or studies assessing the impact of an intervention aimed at reducing stigma. Finally, also studies whose sample were children or adolescents, or whose stigma was directed towards this type of population were discarded of the eligibility process.

Literature review – results

The three searches together yielded 6939 articles, after removing duplicates. Inspection of abstracts and titles found that 6769 did not fulfil the inclusion criteria. A total of 170 articles were identified as potentially relevant, but 13 articles could not be retrieved and 79 were later excluded on closer examination of the full text as they did not match the inclusion criteria. Thus, a total of 78 articles were finally included. A PRISMA flow chart reflecting the study selection is presented in Figure 2.

Among the selected studies, 47 measured *professional stigma*, 15 measured *public stigma* and 4 measured both; 6 articles were psychometric evaluations and the rest (6) were instrument development or validation papers. The target populations were mainly patients with mental illness, and only one paper studied stigma towards forensic psychiatric patients; highlighting the gap of literature in this field.

The most used scales were Community Attitudes towards Mental Illness Scale [47], followed by The Mental Illness: Clinicians' Attitude and its different versions [48, 49], Opinions About Mental Illness Scale [50] and Opening Minds Stigma Scale for Health Care Providers [51]. The Attribution Questionnaire-27 [52] and modified versions of Bogardus Social Distance Scale [53] were also commonly used, but these scales were discarded because of the use of vignettes (AQ-27) and because the factor "Social Distance" was already included in other questionnaires considered more appropriate for the purpose of our study (i.e., Community Attitudes towards Mental Illness Scale). An overview of the instruments that were considered for the development of our Delphi questionnaire is presented in Supplementary Material, indicating also the respective items that were selected and/or adapted.

Structure of the Delphi questionnaire

For the structure of the questionnaire, we followed the conceptualization as proposed by Fox et al. (2018), taking into account items related to stereotypes, prejudices and discrimination. All items of the identified instruments were listed and categorized accordingly. Subsequently, all items were put in random order. To shorten the initial list of 468 items, each of the authors scored on a 7-point scale how relevant each item was for the purpose of the Delphi study. Overall, 79 items were selected (mean score of 5.33 or higher). To have a list with consistent wording (e.g. type of care or patients), 70 items were reworded. Six items were rephrased; basically, these entailed comparisons between patients with a mental illness and “normal people”, we changed them to compare patients with a mental illness and patients with a forensic status. For 1 item (i.e. ATP 36), we included two rephrased items. Finally, 5 items were added by the authors; these items were based on experiences in daily practice and considered missing in the existing instruments.

Participants

Our general approach is to invite five categories of experts: academics with knowledge about stigma assessment, academics with knowledge about patients with a forensic mental health status, healthcare professionals (e.g., psychiatrists, nurses, psychologists, social workers, general practitioners) working in CMHC, healthcare professionals working in FMHC, and patients who are in the position of being or have been transferred from FMHC to CMHC. With regard to the groups of academics and professionals, an initial list of potential participants has been created following the purposive sampling approach [44]. The authors (i.e. G.E. and E.V.) approached their contacts in the field of FMHC in Europe and the CMHC in Catalonia, Spain. All contacts were asked to present 5 more potential candidates that met one or more of the following inclusion criteria:

- either a listed author in at least one publication related to 1) Stigma towards patients with a forensic status; 2) Stigma towards patients with a mental illness; 3) Stigma towards (ex-) offenders; 4) Stigma assessment; 5) Conceptualization of stigma; 6) Care pathways or treatment in FMHC;
- and/or with clinical experience in Patient care in 1) CMHC or 2) FMHC.

For the identification of the stigma academics, (recurrent) authors of publications about stigma towards individuals with mental illness, (ex-) offenders, or patients with forensic mental health status were listed. With respect to the group of patients, an initial list of potential candidates has been created based on their transfer (history) of FMHC to CMHC. Although there is no widespread consensus about the appropriate sample size per participant category [54], a sample of 10 to 18 participants has been suggested [55]. On the other hand, the more participants the higher the reliability of the composite consensus [56]. We will therefore aim for a minimum overall participation of 50 experts.

Recruitment

Except for the patients, potential participants will be contacted via their work email address, which is either publicly available or provided by the authors' contacts. They will receive an email explaining the purpose of the Delphi study and an invitation to participate. Experts who confirm their willingness to participate, receive a second email with a link to the internet-based questionnaire and an explanatory letter with instructions on how to complete the questionnaire. The patient candidates will be approached by their (former) treating psychologist (author G.E.), who will explain the purpose of the study and invite the patients to participate, stressing the

completely voluntary nature of participation. Patients who confirm to participate will receive the questionnaire and the instructions printed on paper.

The introductory page of the questionnaire includes a consent clause, explaining that by clicking/marketing the “I agree” button, they consent to participate in the Delphi study. In all communications, we will explain the voluntary nature of the study, state that withdrawal is allowed at any time without any consequence for the participant and how personal data protection rights can be exercised. Confidentiality will be protected and individual data will not be shared with other participants or third parties. Each participant will be allocated an automatic random identification number, which will enable us to include the participant’s individual results in the feedback rounds. All other feedback will contain aggregate data to protect the participants’ identities and opinions.

Structure of the Delphi procedure

The Delphi method will consist of several iterative rounds in order to reach consensus, with different activities taking place in each of the consecutive rounds (see Figure 1).

Round 1

In the first round, participants will receive a web-based or printed questionnaire with a list of potential items ($i=85$) randomly ordered to avoid biases [57]. They will be asked to indicate the relevance of each item for the assessment of stigma by CMHC professionals toward patients with a forensic status, by giving a score on a 7-point Likert scale (1=not important at all to 7=extremely important [58]. They will further be asked if they agree with the wording of the items (yes/no/don’t know); thereby providing the opportunity to make suggestions for alternative wording. Finally, we will ask the participants to add important items that they consider missing and to include any additional comments in an open text box. Round 1 is foreseen to start in March 2022. Participants will be given 4 weeks to complete round 1. Reminders will be sent to non-responders every week following distribution.

Round 2

The responses from round 1 will be aggregated and analysed (cf. data analysis). The aggregated anonymous results (i.e. group median and interquartile range), the participant’s own responses and a narrative summary of the suggestions for rephrasing and additional comments will be sent as feedback together with an explanatory introduction for the second round. Items with consensus on inclusion or exclusion will be identified. Newly suggested items (i.e. considered missing), newly reworded items and the remaining items will be presented using the same method as in round 1 (i.e. 7-point Likert scale). Participants will again be asked if the rewording is adequate (yes/no/don’t know) and to make suggestions for improvement. Participants will have the opportunity to leave additional comments. Of note, we will no longer ask for missing items.

Round 3

After analysis of the responses of round 2, participants will receive feedback from rounds 1 and 2 (i.e. aggregated anonymous results, narrative summary and own responses), indicating the items that reached consensus on inclusion or exclusion. The items will again be presented on a

7-point Likert scale for reconsideration. Additional comments will be allowed but improvement of phrasing will no longer be sought.

Using the a priori established consensus thresholds (cf. data analysis), we will decide if a fourth round will be needed to reach consensus. If indicated, round 3 will be repeated; otherwise, the Delphi study will end with the consolidated list based on the outcomes of round 3. The Delphi study is foreseen to be finished by December 2022; notwithstanding, this will depend on the number of rounds needed to reach consensus.

Data analysis

To determine consensus, we will use the quantitative data obtained from the 7-point Likert scale. We will calculate descriptive statistics, including central tendency (median) and distribution (IQR) for all participants and per expert category. Following a multi-group consensus approach [59], the consensus thresholds will be defined as $\geq 60\%$ of the participants of at least four of the five expert groups ranked the item in the top three (5–7; i.e. inclusion) or bottom three (1–3; i.e. exclusion) Likert categories. As a secondary measure, we will use the total number of items on which consensus on inclusion has been reached. For the stigma assessment questionnaire to be manageable, we will use a threshold of 30 items.

For the reworded items, a “yes minus no” score will be calculated (i.e. the number of participants who answered a “yes” on a specific item minus the number of participants who answered a “no”). For the modified items with low scores on “yes minus no”, new formulations will be proposed based on the suggestions from the participants. These will be included in the questionnaire of the following round (until round 3).

We will conduct thematic content analyses for the qualitative data (i.e. the missing items and additional comments). Similar newly suggested items will be combined or reformulated to avoid duplicates.

Data collection and management

All rounds will be conducted using Qualtrics software [60]. Qualtrics is a secure web application for developing surveys with more complex response formats, methods of distribution, or data management. The software complies with the General Data Protection Regulation (GDPR) and with the regulations necessary to process and store protected health information. Qualtrics is ISO 27001 certified and FredRAMP licensed. Qualtrics is a SaaS (software as a service), the software and data are hosted on ICT servers that are accessed via the Internet. Databases extracted from Qualtrics software will be securely stored on the server of Parc Sanitari Sant Joan de Déu (PSSJD). Only pseudonymized data will be exported to SPSS and Excel for further quantitative and qualitative analyses.

Patient and public involvement

Patients will participate as an expert panel in the Delphi study.

ETHICS AND DISSEMINATION

The Delphi consensus study has received ethical approval from the ethics committee of Fundació Sant Joan de Déu (reference number C.I. PIC-186-21) and the institutional research board of Parc Sanitari Sant Joan de Déu (reference number C.R. 66-2021-09). Dissemination of the results will be through peer-reviewed publications, presentations, symposiums and workshops at (inter-) national academic conferences, and a summary of the results will be shared with the participants, and key persons in community as well as forensic mental health care.

AUTHOR CONTRIBUTIONS

GE and EV shared the study conception. EV led the detailed protocol planning and drafted together with RM the manuscript. GE will assist EV in the development and implementation of the study. All authors wrote, reviewed, edited and approved this final manuscript.

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CONFLICTS OF INTEREST

All authors report no conflict of interest.

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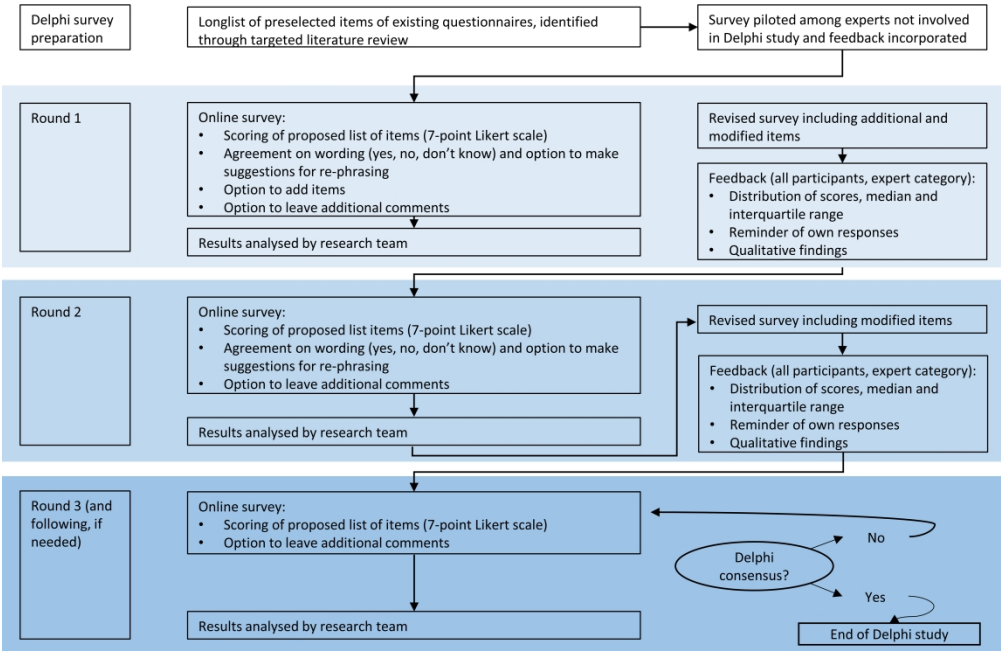
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FIGURE LEGEND:

Figure 1 - Structure of the Delphi procedure

Figure 2 - PRISMA flow diagram of the study selection procedure for literature reviews



Structure of the Delphi procedure

235x153mm (768 x 768 DPI)

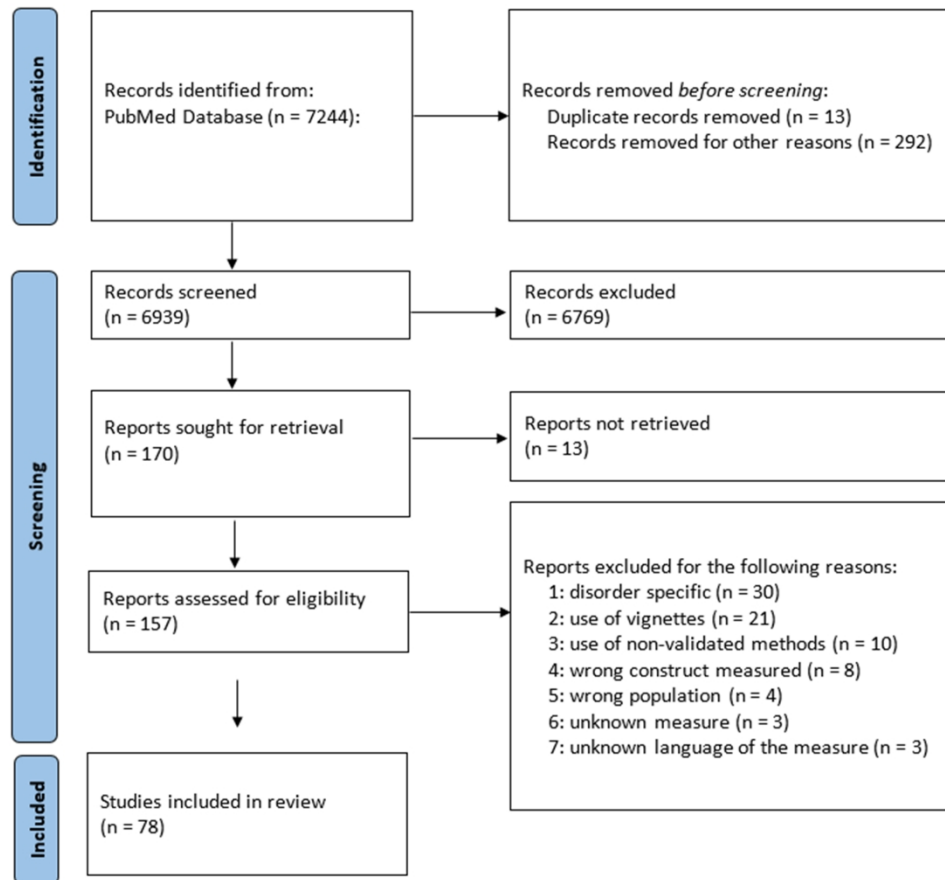


Figure 2 - PRISMA flow diagram of the study selection procedure for literature reviews

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Supplementary Material – Identified questionnaires and selection and modification of relevant items

Questionnaire	Total items	Number of items selected	Original item	Modified item
Attitudes Towards Acute Mental Health Scale (ATAMHS)[1]	33	2	Mental illness is the result of adverse social circumstances	N/A
			Violence mostly results from mental illness	N/A
Attitudes toward Mental Illness (AMI)[2]	24	4	The mentally ill, with a number of exceptions, cannot tell the difference between good and bad	FMH patients, with a number of exceptions, cannot tell the difference between good and bad
			Mentally ill people should be prevented from walking freely in public places	FMH patients should be prevented from walking freely in public places
			The mentally ill should not be allowed to make decisions, even those concerning routine events	FMH patients should not be allowed to make decisions, even those concerning routine events
			Every mentally ill person should be in an institution where he/she will be under supervision and control	Every FMH patients should be in an institution where he/she will be under supervision and control
Attitudes Toward Prisoners (ATP)[3]	36	14 ^a	Only a few prisoners are really dangerous*	Only a few FMH patients are really dangerous*
			Prisoners never change	FMH patients never change
			Most prisoners are victims of circumstance and deserve to be helped*	Most FMH patients are victims of circumstance and deserve to be helped*
			Prisoners have feelings like the rest of us*	FMH patients have feelings like the rest of us*

		It is not wise to trust a prisoner too far	It is not wise to trust a FMH patient too far
		Prisoners need affection and praise just like anybody else*	FMH patients need affection and praise just like anybody else*
		Trying to rehabilitate prisoners is a waste of time and money	Trying to rehabilitate FMH patients is a waste of time and money
		You have to be constantly on your guard with prisoners	You have to be constantly on your guard with FMH patients
		Most prisoners are too lazy to earn an honest living	Most FMH patients are too lazy to earn an honest living
		Prisoners are just plain mean at heart	FMH patients are just plain mean at heart
		Prisoners are just plain immoral	FMH patients are just plain immoral
		Prisoners should be under strict, harsh discipline	FMH patients should be under strict, harsh discipline
		Most prisoners can be rehabilitated*	FMH patients can be rehabilitated*
		If a person does well in prison, he should be let out on parole	If a FMH patient does well in CMHCare, he should be let out in the community
			If a FMH patient does well in FMHCare, he should be transferred to CMHCare
30	3	In spite of any efforts they are making, people with severe mental illness will never be like other people	In spite of any efforts they are making, FMH patients will never be like other people

Attitudes toward Severe Mental Illness (ASMI)[4]			People with severe mental illness are not able to acquire new skills	FMH patients are not able to acquire new skills
			People with severe mental illness can cope with life difficulties*	FMH patients can cope with life difficulties*
Believes toward Mental Illness Scale (BMI)[5]	21	3	A mentally ill person is more likely to harm others than a normal person	A FMH patient is more likely to harm others than a non-forensic patient with a mental illness
			Mental disorders would require a much longer period of time to be cured than would other general diseases	FMH patients would require a much longer period of time to be cured than would non-forensic patients with a mental illness
			Mentally-ill people are unlikely to be able to live by themselves because they are unable to assume responsibilities	FMH patients are unlikely to be able to live by themselves because they are unable to assume responsibilities
Community Attitudes Towards Mental Illness (CAMI)[6]	40	8	One of the main causes of mental illness is a lack of self-discipline and will power	One of the main causes of becoming a FMH patient is a lack of self-discipline and will power
			The mentally ill should not be treated as outcasts of society*	FMH patients should not be treated as outcasts of society*
			Virtually anyone can become mentally ill*	Virtually anyone can become a FMH patient*
			We need to adopt a far more tolerant attitude toward the mentally ill in our society*	We need to adopt a far more tolerant attitude toward FMH patients in our society*
			We have a responsibility to provide the best possible care for the mentally ill*	We have a responsibility to provide the best possible care for FMH patients*
			The mentally ill should not be given any responsibility	FMH patients should not be given any responsibility

			The mentally ill should be isolated from the rest of the community	FMH patients should be isolated from the rest of the community
			As far as possible, mental health services should be provided through community based facilities	As far as possible, FMH care should be provided through community based facilities
Community attitudes toward sex offenders (CATSO)[7]	18	2	With support and therapy, someone who committed a sexual offense can learn to change their behaviour*	With support and therapy, a FMH patient can learn to change their behaviour*
			The prison sentences sex offenders receive are much too long when compared to the sentence lengths for other crimes*	The prison sentences FMH patients receive are much too short when compared to the sentence lengths for those without a mental illness*
Escala de Estigma y Salud Mental (EESMPR) [Mental Health Stigma Scale][8]	12	-		
Evaluación del Estigma de Enfermedad Mental en Enfermería (EVEPEM) [Evaluation of Stigma of Mental	20	9	People with a mental disorder are a burden on their family and society	FMH patients are a burden on their family and society
			People with a mental disorder are more likely to behave violently than are other people	FMH patients are more likely to behave violently than are other people
			In general, people with a mental disorder refuse therapeutic help	In general, FMH patients refuse therapeutic help
			People with a mental disorder can lead a normal life*	FMH patients can lead a normal life*

Illness in Nursing][9]			Patients with a mental disorder have the same rights as everybody*	FMH patients have the same rights as everybody*
			I feel afraid when caring for people with a mental disorder	I feel afraid when caring for FMH patients
			Patients with a mental disorder should be isolated from other patients	FMH patients should be isolated from other patients
			All patients with a mental disorder end up being readmitted	All FMH patients end up being readmitted
			All patients admitted to a mental health unit need to be physically restrained	All FMH patients admitted to a mental health unit need to be physically restrained
Mental Health Attitude Questionnaire (MHAQ)[10]	21	-		
Mental Health Provider Self-Assessment of Stigma Scale (MHPASS)[11]	20	1	Clients with serious mental illnesses have a hard time making good choices for themselves, so service providers need to help them	FMH patients have a hard time making good choices for themselves, so service providers need to help them
Mental Illness Attitudes Questionnaire [12]	30	7	Mental illness patients often threaten or harm the people around	FMH patients often threaten or harm the people around them
			Mental illness patients often lose their temper with no reason	FMH patients often lose their temper with no reason

			Mental illness patients often show unexpected impulsive behaviours	FMH patients often show unexpected impulsive behaviours
			Violence of mental illness patients is as much as that of others	Violence of FMH patients is as much as that of other patients with a mental illness
			Mental illness patients can contribute to society*	FMH patients can contribute to society*
			Mental illness patients violate social and moral rules as much as other people do	FMH patients violate social and moral rules as much as other people do
			Discharged mental illness patients should be allowed to return to society*	Discharged FMH patients should be allowed to return to society*
Mental Illness: Clinicians' Attitudes (MICA v4)[13, 14]	16	2	People with severe mental illness can never recover enough to have a good quality of life	FMH patients can never recover enough to have a good quality of life
			I feel as comfortable talking to a person with mental illness as I do talking to a person with physical illness	I feel as comfortable talking to a FMH patient as I do talking to a non-forensic patient with a mental illness
Opening Mind Stigma Scale for Health Care Practitioners (OMS-HC)[15]	20	5	Despite my professional beliefs, I have negative reactions towards people who have mental illness	Despite my professional beliefs, I have negative reactions towards FMH patients
			There is little I can do to help people with mental illness	There is little I can do to help FMH patients
			More than half of people with mental illness don't try hard enough to get better	More than half of FMH patients don't try hard enough to get better
			The best treatment for mental illness is medication	The best treatment for FMH patients is medication

			I struggle to feel compassion for a person with a mental illness	I struggle to feel compassion for a FMH patient
Opinions About Mental Illness (OMI)[16]	51	5	To become a patient in a mental hospital is to become a failure in life	To become a patient in FMHCare is to become a failure in life
			Although some mental patients seem all right, it is dangerous to forget for a moment that they are mentally ill	Although some FMH patients seem all right, it is dangerous to forget for a moment that they are mentally ill
			If our hospitals had enough well trained doctors, nurses, and aides, many of the patients would get well enough to live outside the hospital*	If our hospitals had enough well trained doctors, nurses, and aides, many of the FMH patients would get well enough to live outside the hospital*
			The best way to handle patients in mental hospitals is to keep them behind locked doors	The best way to handle FMH patients is to keep them behind locked doors
			There is little that can be done for patients in a mental hospital except to see that they are comfortable and well fed	There is little that can be done for FMH patients in CMHCare except to see that they are comfortable and well fed
Public Attitudes Towards Offenders with Mental Illness (PATOMI)[17]	28	7	As soon as an offender shows signs of mental disturbance, he should be hospitalised	As soon as a FMH patient shows signs of mental disturbance, he should be readmitted to FMHCare
			The best therapy for many offenders with mental illness is to be part of a normal community*	The best therapy for many FMH patients is to be part of a normal community*
			Offenders with a mental illness are far less of a danger than most people suppose*	FMH patients are far less of a danger than most people suppose*
			Less emphasis should be placed on protecting the public from FPPs*	Less emphasis should be placed on protecting the public from FMH patients*

			Increased spending on forensic mental health services is a waste of tax money	N/A
			Offenders with mental illness need the same kind of control and discipline as a young child	FMH patients need the same kind of control and discipline as a young child
			Offenders with mental illness should be encouraged to assume the responsibilities of normal life	FMH patients should be encouraged to assume the responsibilities of normal life
Prejudice towards People with Mental Illness (PPMI)[18]	28	6	I am not scared of people with mental illness*	I am not scared of FMH patients*
			People with mental illness should support themselves and not expect handouts	FMH patients should support themselves and not expect handouts
			People with mental illness do not deserve our sympathy	FMH patients do not deserve our sympathy
			The behaviour of people with mental illness is unpredictable	The behaviour of FMH patients is unpredictable
			In general, you cannot predict how people with mental illness will behave	In general, you cannot predict how FMH patients will behave
			I usually find people with mental illness to be consistent in their behaviour*	I usually find FMH patients to be consistent in their behaviour*
Recovery Knowledge Inventory (RKI)[19]	20	1	Not everyone is capable of actively participating in the recovery process	Not all FMH patients are capable of actively participating in the recovery process

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b	FMH patients should be visited with more than one professional at the same time, for our own safety
	Higher doses of psychotropic drugs should be used in FMH patients than non-forensic patients
	FMH patients have a more violent personality than non-forensic patients with a mental illness
	FMH patients should not share therapeutic groups or therapeutic activities with non-forensic patients
	It is frightening to think of FMH patients living in the same facility as non-forensic patients

N/A – items were included without any modification; ^a selected items resulted in 15 modified items; * positively formulated items; ^b items created by the authors.

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