



Priority setting in mental health research: a scoping review of participatory methods

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ABSTRACT

Background: Since mental disorders represent a significant burden of disease, prevention programs are critical. Participatory methods have the potential to improve the value of health research by increasing our understanding of user needs. We present a scoping review of participatory methods in mental health research priority setting for the period 2010-2020. The objective is to analyse participatory methods spread and characteristics and its use for mental disorders prevention.

Material and method: After applying controlled terms of search, we selected peer-reviewed documents using MEDLINE/PubMed, PsycINFO, the Core Collection of the Web of Science and Scopus. We initially identified 330 documents from which we selected 74 articles. We noted and classified the stakeholder groups, the participatory methods applied and the mental health research priorities.

Results: We identify regional differences in applying participatory methods in mental health research prioritisation; the majority of studies are led by the UK, USA, Australia and The Netherlands. We identified differences among stakeholder groups priorities: when research beneficiaries participate in priority setting, research focuses on therapy, standards, education and psychology of mental disorders; on the other hand, when participation is limited to scientists, therapy, diagnosis, methods and standards receive more attention.

Discussion and conclusions: We categorised ten participatory methods, twenty-three mental health research priorities and five stakeholder groups. We conclude there is a change in the prioritisation of mental disorders research that opens the way to participatory methods combining a participatory strategy with other sources. Interventions focused on mental disorders prevention could benefit from a participatory mixed approach.

1. Introduction

There is a growing trend to move away from traditional research processes, and engage citizens in all stages of the research process with the aim of enhancing research outcomes. Citizen involvement in part or in the entire course of scientific inquiries has been described through concepts like "participatory research", "research partnerships" (Hoekstra et al., 2018), "integrated knowledge translation" (Gagliardi et al., 2016), "participatory action research" (Baum, MacDougall & Smith, 2006), and "community academic partnership" (Drahota et al., 2016) among others. A significant number of initiatives promoting participatory approaches have emerged: the INVOLVE Program of the UK National Institute of Health Research established in 1996, the James Lind Alliance Priority Setting Partnerships (Chalmers, 2003) in 2004, the Patient-Centered Outcomes Research Institute in 2010 (Frank, Basch & Selby, 2014), the Canada's Strategy for Patient-Oriented Research in

2011, and the International Collaboration for Participatory Health Research in 2013 (Wright et al., 2013).

Despite some criticism (Staley, 2015, Hoekstra et al., 2020), participatory approaches have been found to improve the value of health research by shaping and informing the purpose and scope of research with a deeper understanding of user needs (Tallon, Chard & Dieppe, 2000). According to these approaches, patients' and other stakeholders' participation enriches not only the interpretation and translation of research results but also leads to research results better tailored to user needs (Cargo & Mercer, 2008). In addition, co-governance with users can open information flows about barriers and resources needed for health research (Wright et al., 2013). Similar conclusions are reported by the systematic review by Brett et al. (2014) (Brett et al., 2014).

The degree of involvement in research processes ranges from non-participation, to symbolic participation and engaged participation (Goodman & Sanders Thompson, 2017). In the highest level of

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involvement (“engaged participation”), patients, caregivers and other stakeholder groups dictate research priority choices, influence the design of the project activities and participate in the interpretation of research findings and their implications. Thus, the participation of social groups and communities adds different perspectives on identifying research gaps, determining priorities in health research (Kelber et al., 2019), and adjusting research initiatives to users’ needs (Chalmers et al., 2014). Under this framework, participation is not only rational, since it provides information helping to reduce the gap between knowledge and social needs, but it follows the ethical mandate of democratising research by changing the role of patients and stakeholders.

Participatory approaches have also been found to improve mental health promotion and prevention interventions (Orlowski et al., 2015). Community interventions through participatory methods can produce complementary functions and extend the reach of mental health research programmes (Wells et al., 2004, Vargo, Sharrock, Johnson & Armstrong, 2013). Participatory methods can be a valuable instrument for health promotion and prevention for three main reasons: (1) Participatory methods can empower (Rifkin, 1996, Wallerstein & Duran, 2006) individuals and communities by building trust, improving communication, and increasing ownership of the health initiatives being developed; (2) Participatory methods can lead to increase research relevance by improving the effectiveness of the programmes (Cargo & Mercer, 2008); (3) Participatory methods can facilitate collaboration (Israel, Schulz, Parker & Becker, 1998) between different stakeholders, including community members, health professionals, and policymakers.

Social participation is particularly relevant in the field of mental disorders, which represent a significant burden of disease at a global scale (The Institute for Health Metrics and Evaluation, 2021). Mental disorders are socially identified, have social antecedents or causes, and they have comprehensive social consequences (Aneshensel, Phelan & Bierman, 2013). Consequently, the WHO addresses the need to redirect funding to community-based approaches in the Comprehensive Mental Health Action Plan 2013-2030 (Comprehensive Mental Health Action Plan 2013-2030, 2023). There is an important gap between the problems posed by mental disorders and the resources and knowledge available to tackle them. According to the WHO, the annual spending on mental health is less than US\$ 2 per person and less than US\$ 0.25 per person in low-income countries, with 67% of these financial resources allocated to stand-alone mental hospitals. The growing burden of mental disorders, estimated at 418 million disability-adjusted life years (DALYs) in 2019 (16% of global DALYs) and its economic value estimated at USD 5 trillion (Arias, Saxena & Verguet, 2022), currently represents one of the largest causes of disability worldwide. This gap between health needs and research effort is illustrative of what Sarewitz and Pielke (Sarewitz & Pielke, 2007) defined as a misalignment between demand and supply in science.

Therefore, there is a growing pressure to increase the promotion of mental health and the prevention of mental disorders across the lifespan beyond the stand-alone hospital approach. The related social aspects suggest a special rationale for the use of participatory methods in research priority setting that potentially can lead to a shift in funding direction by giving more prevalence to community-based research.

Literature on participatory priority-setting reviews is ample (Brett et al., 2014, Manafó, Petermann, Vandall-Walker & Mason-Lai, 2018, Hollis et al., 2018, Obeid et al., 2020, Ghisoni et al., 2017, Domecq et al., 2014, Corbière, Shen, Rouleau & Dewa, 2009), however there is a lack of comprehension on to what extent participatory methods have been used to prioritise mental disorders research during the last decade, on which kind of stakeholders are involved on those participatory experiences, which methods are being used and which kind of priorities and prevention interventions are being identified through them. For these reasons, a scoping review was conducted in order to systematically map participatory methods in mental disorders research, as well as to identify any existing gaps in knowledge.

1.1. Research questions

Have participatory approaches been applied to priority setting in mental health research? If so, which participatory methods and approaches have been used? What type of priorities do they identify? Who are the most frequent stakeholders, consumers or groups consulted? Does the participation of different groups make a difference? We provide an answer to these questions through a scoping review of recent articles, following the PRISMA approach proposed by Tricco et al. (2018) (Tricco et al., 2018). A better understanding of those questions would help global research agencies on mental disorders prevention by gaining participatory tools to address the significant mental health global challenge.

2. Material and methods

This study presents a scoping review of participatory methods in mental health research priority setting. There is a growing number of scoping reviews on social engagement in priority setting (Manafó, Petermann, Vandall-Walker & Mason-Lai, 2018, Grill, 2021, Mitton et al., 2009), and its results show the majority of priority setting projects involving stakeholders are health related. However, there is a lack of scoping reviews focused on participatory methods and mental health research priority setting. Following Tricco et al. (2018) and taking into account a scoping review protocol on stakeholders involvement in priority setting (Grill, 2021), we first describe the documents’ eligibility criteria and select the bibliographic sources to determine the search strategy used. Our first intention is to identify the variables extracted from each selected source. Following a conceptual framework (Priority setting: what constitutes success? A conceptual framework for successful priority setting, 2023), we operationalise the concept of “research priority” in order to structure the subsequent search. “Research priority” refers to the importance, the feasibility, the urgency and the novelty of a health research topic or question. Research priority importance is measured by factors such as the potential impact on public health or the environment, the relevance to current societal issues, the potential for scientific breakthroughs. Research priority feasibility is measured by factors such as the availability of funding or resources, the potential for collaboration with other researchers, or the level of interest from stakeholders. Research priority urgency is measured by factors such as the current rate of incidence or prevalence of a disease, the potential for a looming crisis, or the need for immediate action to address a pressing issue. Finally, research priority novelty is measured by factors such as the potential for advancing scientific knowledge or filling a gap in the literature. This operationalisation clarified the extent of the search strategy.

2.1. Eligibility criteria

We selected peer-reviewed articles published in English between 2010-2020 covering participatory priority setting in the area of mental health research. The ten-years period of time was chosen for three main reasons: 1) to increase the availability of sources of relevant methods; 2) for the newness of the cases in order to better inform current research agencies’ decisions; 3) to not include the COVID-19 pandemic starting period since there is evidence (Pfefferbaum & North, 2020, Akinin et al., 2022, Usher, Durkin & Bhullar, 2020, Robinson, Sutin, Daly & Jones, 2022) suggesting mental health practices have changed as a result of the increased burden of disease (Moreno et al., 2020). Our interest is to study the COVID-19 pandemic effects on participatory methods for prioritising mental health research in a separate study.

For this study, the selected peer-reviewed articles were included if either a) they considered participatory methods for setting priorities in mental disorders research, or b) they defined research priorities. Meeting abstracts were excluded from the results, although proceedings papers, later published as journal articles, were considered eligible.

2.2. Data extraction

We searched the following bibliographic databases: MEDLINE/PubMed, PsycINFO, and the Core Collection of the Web of Science and Scopus. We adjusted search strategies for every database, taking into account that specialised databases have a controlled vocabulary. We then drew a combination of descriptors from the controlled vocabularies and from terms in articles' titles. Further, journal subjects of classification were taken as the research context and combined with terms from the papers titles. Searches were performed by a member of the team experienced in information retrieval from bibliographic databases.

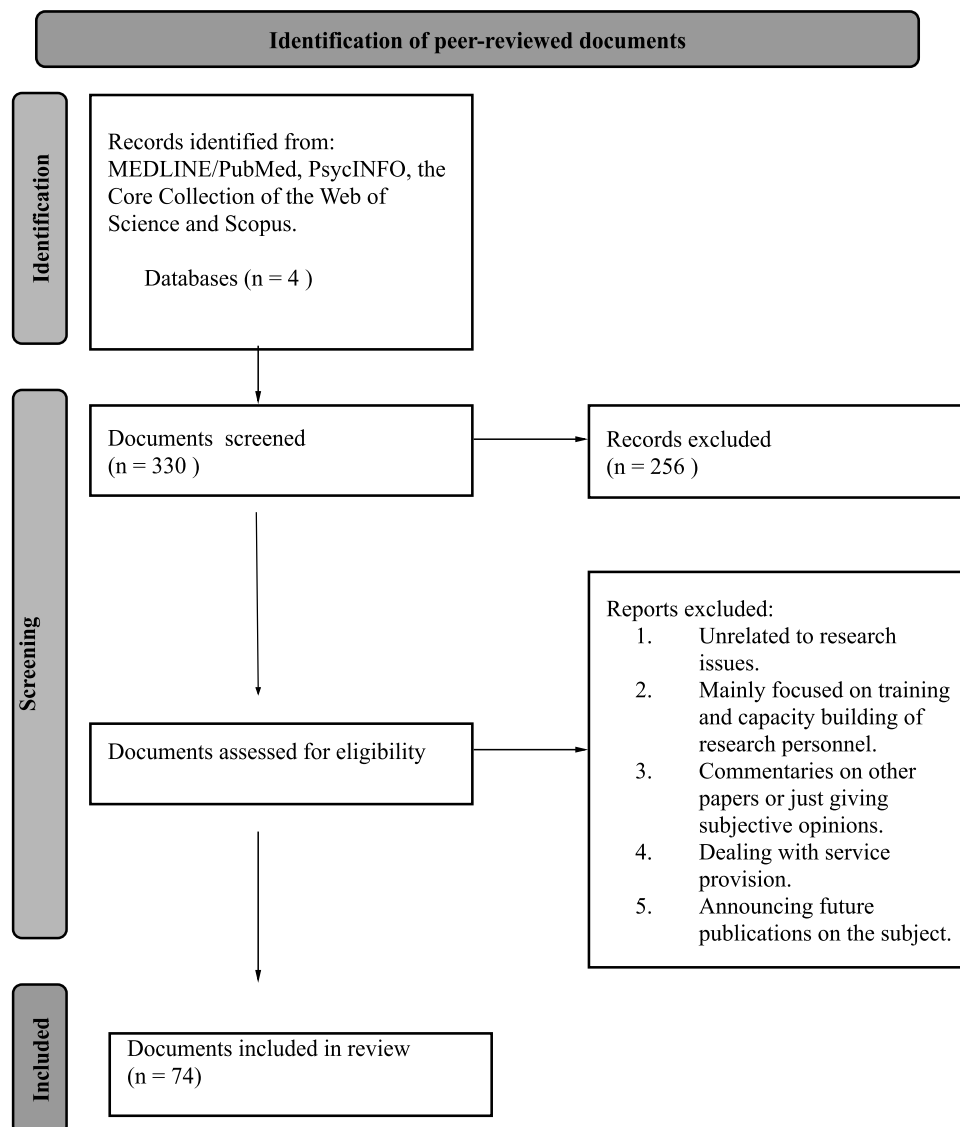
First, we used the category "Mental disorders" in MEDLINE/PubMed (F03 in the Medical Subject Heading (MeSH) tree), with more than 200 specific terms. For PsycINFO we used the title term "research priorit*". In addition, the natural language terms used in the previous MEDLINE search were combined with the entry "3200: Psychological & Physical Disorders" of the PsycINFO Classification Code System. Articles were retrieved through Web of Science from journals classified under the subject categories *Psychiatry* and *Substance abuse*. The average annual number of papers published by the combined set of about 170 journals in the period covered by our study (2010-2020) is 18,000. Subject categories were combined with the title terms list. Finally, Scopus had no

subject categories specific enough for setting a context for mental disorders research. Therefore, we added the title terms used in the MEDLINE search with journal titles bearing the terms "addict*", "Psychiatry" or "Mental".

Second, we selected the following terms together with its term variants: "research priorities", "research agenda", "research portfolio", "research framework", "participation in research" or "stakeholders". After removing duplicate entries, we first chose 330 documents published from 2010 onwards.

2.3. Review procedures

A two-round selection process was then used to select publications from this initial set of documents. In the first round, titles and abstracts were examined by two members of the team, who judged their relevance. A first group of articles clearly addressed the topic of setting priorities on mental disorders research and were consequently selected. We rejected a second group of articles either because they were 1) unrelated to research issues; 2) mainly focused on training and capacity building of research personnel; 3) commentaries on other papers or just giving subjective opinions; 4) dealing with service provision, or 5) announcing future publications on the subject. Finally, we selected for



further examination a third group of articles whose abstracts did not provide enough information. In a second round, we examined the full text of all selected studies as well as those with ambiguous abstracts, adding new relevant publications to the selected group. Inconsistencies between reviewers detected after the first round were solved through this second round. A total of seventy-four sources were finally selected.

2.4. Prisma flow diagram (Page et al., 2021)

2.5. Data analysis

We downloaded the study references in a bibliographic management system (Zotero), and we imported them into relational data tables to process and collect the data. One reviewer collected the data and submitted the tables to a second reviewer, who proposed additions or amendments. Relational data tables describe a listing of data establishing a connection between two independent variables (e.g. Table 3). It allowed us to capture interactions between two categories.

We used an abridged version of the reporting guideline for priority setting of health research (REPRISE) proposed by Tong et al. (2019) (Tong et al., 2019) to identify useful variables in the selected documents. With regard to the context and scope of the studies, we analysed the geographical scope, the health area and focus, the intended beneficiaries, and the research area. In addition, we collected the priorities list proposed by the stakeholders.

2.6. Data charting

Since not all articles mention their geographical scope, we derived it from the author's affiliation data, noting each author's country or countries. To determine the articles' focus, we used the controlled set of terms offered by the US National Library of Medicine (NLM), the Medical Subject Headings (MeSH), and its hierarchical structure to classify the conditions into groups.

We characterised the research beneficiaries according to age, gender and ethnic group of the individuals targeted by the study. The methods used to elucidate stakeholders' views were also registered along with the protocols or frameworks employed.

We noted and classified the stakeholder groups participating in every study. Finally, we recorded the research priorities identified in every paper grouping them also under the MeSH subheadings that MEDLINE applies to the mental disorders literature. We extended the definition of the subheading "Psychology" to include references to the psycho-social aspects of the diseases. Several examples of this procedure are given in Table 1.

3. Results

The seventy-four selected articles are listed in the Supplementary Material. They can be classified into two main groups: (1) fifty-five original studies whose results are lists of research priorities; and (2) nineteen articles that either review other studies or apply an authoritative method to recommend adopting priorities in the research of a given condition.

3.1. Geographical scope of the studies

The fifty-five original studies have been contributed by authors from forty-two different countries (see map in Fig. 1). The United Kingdom leads with twenty contributed papers, followed by the USA (16), Australia (15) and the Netherlands (11). Two thirds of the fifty-five studies are produced by authors from a single country. These are mainly consensus building papers, produced through research consortia or collaborative projects. There are, however, some important

Table 1

Article's research objectives classified by class.

Class	Article's DOI	Research topics to be prioritised
Education	10.1002/eat.23234	What are the best ways to educate healthcare professionals (e.g., medical students, primary care, mental health specialists, etc.) and educators about anorexia nervosa?
	10.1186/s12961-018-0395-9	How mental health-aware are GPs?
Diagnosis	10.1002/gps.4868	Develop relevant pathways and outcome measures for a timely and quality diagnosis, against which diagnostic and support services can be assessed, supporting consistency across the United Kingdom
	10.1016/S1474-4422(16)30235-6	Identify clinical practice and health system-based interventions that would promote a timely and accurate diagnosis of dementia in primary health-care practices
Complications	10.1002/eat.23172	Suicidality & comorbidity
	10.1111/epi.13201	Identify factors leading to cognitive impairment or behavioral and psychiatric comorbidities in patients with epilepsy
Economics	10.2147/NDT.S59958	Funding for independent (multinational) clinical trials in Horizon 2020
	10.1111/epi.13201	Monitor the impact of funded actions
Ethnology	10.1177/1039856218758543	A qualitative study exploring personal and cultural narratives from persons placed on CTOs.
	10.1186/s12961-018-0395-9	Culturally and linguistically diverse perspectives within mainstream mental health system
Legislation	10.1186/s12961-018-0395-9	Over-representation of mental illness in the justice system
	10.1111/epi.13201	Address legislation discriminating against people with epilepsy
Organisation	10.1111/jgs.15453	How can the health system build and sustain the capacity to meet the health and social care needs of persons with dementia and their friend or family caregivers/care partners?
	10.1136/bmjgh-2018-000970	How do contextual factors such as institutional arrangements, governance arrangements, democratic values and partnership experiences affect the success (or failure) of multisectoral collaborations?
Psychology	10.1186/s12961-018-0395-9	Stigma by health providers (mental health and others) – What do they believe and how does it impact?
	10.1097/DBP.0b013e31825a7101	Identify child, family, or community factors that promote or interfere with family's ability to implement recommendations from DBP evaluations
Standards	10.1111/jgs.15453	What can be done to support emotional well-being, including maintaining a sense of dignity, for persons with dementia?
	10.1007/s10803-017-3320-0	To validate existing standardised anxiety measures to address the

(continued on next page)

Table 1 (continued)

Class	Article's DOI	Research topics to be prioritised
Supply and distribution	10.3389/fpsy.2018.00151	overlap between ASD and anxiety symptoms Validation studies on questionnaires or semi-structured interviews that assess chronic medical conditions in this context
	10.1002/eat.23234	What are the wait times across Canada for adolescent girls and women suffering from anorexia nervosa?
	10.1186/s13033-017-0168-9	What are the determining factors of the unchanging and unequal geographic distribution of specialised mental health human resources?

exceptions. Eighteen countries are listed in the affiliation data of the article by Khandelwal and cols. (2010) (Khandelwal et al., 2010), a consensus building paper related to the Global Network for Research in Mental and Neurological Health. The ROAMER (Road Map for Mental Health Research in Europe) provides the background for Forsman (2015) (Forsman et al., 2015), and Wykes (2015) (Wykes et al., 2015) contributed by collaborators from fourteen and nine different countries, respectively. The Mental Health and Psychosocial Support in Humanitarian Settings (Tol et al., 2012), the European Forum for Epilepsy Research (Baulac et al., 2015), and the European Association of Psychosomatic Medicine (van der Feltz-Cornelis et al., 2018) are supranational efforts.

3.2. Health area and focus

Thirty-nine studies set research priorities on twenty-seven specific disorders. (see Table 2 and the online Supplementary Material).

Dementia is the most frequently prioritised specific condition, included in nine articles followed by autistic disorder (7). Using the MeSH hierarchical organisation we can identify several major areas: neurodevelopmental disorders (autism, disabilities, attention disorder) are addressed by roughly one third of the studies (N=12), dementia (N=11), and neurobehavioral manifestations (intellectual and learning disabilities) (N=6).

3.3. Stakeholder groups

We identified eleven stakeholder groups participating in priority setting. The leading groups are health practitioners (identified through textual expressions like “Paediatric neurologists”, “Emergency

Physicians”, “Health professionals”, “Health and social care providers” and related terms) who participated in thirty-three original studies; public actors (community members, community/ public, parents, teachers, school counsellors, etc.) appear in twenty-six studies, and patients in twenty-four articles. Other groups include academics, experts (including legal professionals), policy makers, funders and service providers.

We classified the identified stakeholder groups into five main categories: public (N=35), clinicians (N=34), researchers and academics (N=28), authorities (funders, representatives from public and private organisations) (N=19), and other stakeholders (see Table S2 online Supplementary Material).

Table 3 shows whether the different stakeholder groups participated in priority setting participatory methods in conjunction with other groups or not. The group that interacted the most has been the one composed by clinicians. More than one third of the studies (N=21) only included participants from a single group.

3.4. Methods, protocols and frameworks

Some studies used several techniques for requesting participants’ views while others use consensual criteria or standard protocols to determine research priorities. The dominant approach was the use of interviews and surveys (face-to-face and online). Group decision-making, i.e workshops, meetings, and discussions, were also common. Methods to reach decisions included consensus decision making processes (different Delphi variants were the most common, also James Lind Alliance protocols) and the nominal group technique. Literature reviews have been extensively used in combination with participative methods and authoritative resources. Table 4 shows the frequency of these associations. A definition on “consensual criteria” and “theory of change methodology” has been added to clarify these techniques’ extent used in the scoping review.

3.5. Consensual criteria and Theory of Change techniques definition

Consensual criteria refers to a set of standards or principles that are agreed upon by a group of individuals or experts through a process of consensus building (Guba & Lincoln, 1994). It may be used to define and assess the quality of a study or intervention. In this case, a group of experts in mental disorders research develops consensual criteria for evaluating the effectiveness of a health promotion program. These criteria may include specific indicators or benchmarks that are considered important for measuring program success, such as changes in health behaviour or health outcomes.

Theory of change methodology involves a participatory process of identifying the desired outcomes of a program, as well as the specific steps that will be taken to achieve those outcomes (Yatirajula et al.,

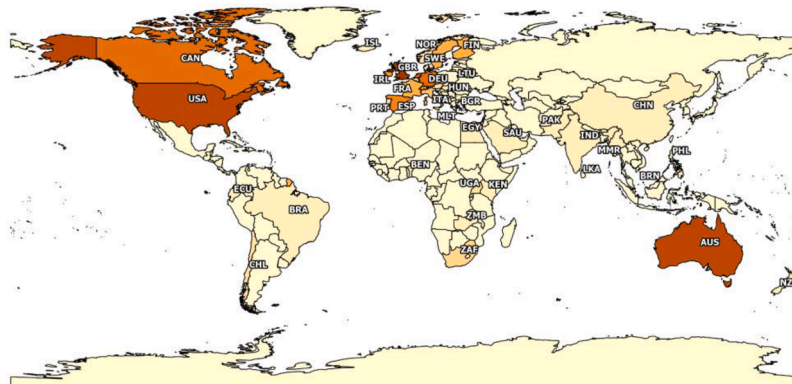


Fig. 1. Geographical distribution of the studies.

Table 2
List of prioritised mental disorders.

Disorders	Studies
Alzheimer Disease	Gove, Dianne (2018); Liggins, Charlene (2014)
Anorexia Nervosa	Obeid, Nicole (2020)
Attention Deficit Disorder with Hyperactivity	Gaynes, Bradley N. (2014); Jacobson, Stella (2016)
Autistic Disorder	Clark, Megan (2020); Frazier, Thomas W. (2018); Pellicano, Elizabeth (2014); Russell, Ginny (2018); Shattuck, Paul T. (2018); Tomlinson, Mark (2014); Vasa, Roma A. (2018)
Bipolar Disorder	Banfield, Michelle A. (2011); Banfield, Michelle A. (2014); Maassen, Eva F. (2018)
Brain Injuries, Traumatic	Clavisi, Ornella (2013)
Delirium	Pandharipande, Pratik (2017)
Dementia	Bethell, Jennifer (2018); Iliffe, Steve (2013); Kelly, Sarah (2015); Law, Emma (2013); Leroi, Iracema (2019); Miah, Jahanara (2019); Pickett, James (2018); Schneider, Lon S. (2016); Shah, Hiral (2016)
Depressive Disorder	Banfield, Michelle A. (2011); Banfield, Michelle A. (2014); Hitch, Danielle (2015); Topooco, Naira (2017)
Developmental Disabilities	Blum, Nathan J. (2012); Camden, Chantal (2019); Kramer, Jessica M. (2019)
Dyssomnias	Bassetti, C. L. (2015)
Epilepsy	Baulac, Michel (2015); Furyk, Jeremy (2018)
Feeding and Eating Disorders	Davison, Karen M. (2017); Furth, Eric F. van (2016); Hart, Laura M. (2019)
Intellectual Disability	Johnson, Kelley (2014); Kramer, Jessica M. (2019); Tomlinson, Mark (2014); Tuffrey-Wijne, I. (2016)
Learning Disabilities	Lim, Ai Keow (2019); Paul, C. (2017)
Neurodegenerative Diseases	Iliffe, Steve (2013)
Nutrition Therapy	Davison, Karen M. (2017)
Obsessive-Compulsive Disorder	Kühne, F. (2019); McKay, Dean (2019)
Patient Safety	Dewa, Lindsay H. (2018)
Psychological Distress	Bell, Sigall K. (2018)
Psychophysiologic Disorders	van der Feltz-Cornelis, C.M. (2018); Zeigler, Vicki L. (2010)
Schizophrenia	Faulkner, Sophie (2017); McGurk, Susan R. (2013)
Stroke	Turner, Grace M. (2018)
Substance-Related Disorders	Clark, Kristen D. (2019); Kelber, Marija Spanovic (2019); Makeen, Anwar M. (2020)
Suicide	Booth, Chelsea L. (2014); Reifels, Lennart (2018); Roy, Kallol (2019)
Tobacco Use Disorder	Lindson, Nicola (2017); Makeen, Anwar M. (2020)

Table 3
Stakeholder groups interactions.

	Other	Authorities	Public	Clinicians	Researchers/ Ac.
Researchers/ Academics	6	14	14	15	5
Clinicians	4	11	26	4	
Public	3	11	9		
Authorities	4	2			
Other	1				

2022). The process involves engaging stakeholders in discussions about the underlying assumptions and causal relationships that link program activities to desired outcomes.

3.6. Priorities identified

In the scoping review, research priority is operationalised as the result of any identified activity conducted to decide the questions or research topics on mental disorders which are agreed to be the priority. Research priorities can be complete areas of study (e.g. economics,

epidemiology), measures (e.g. prevention) or activities (e.g. rehabilitation).

We transcribed, normalised and categorised 722 mental health research priorities using MeSH subheadings. We offer a classification on the most cited categories. On average, an academic article contains thirteen potential research priorities. The most comprehensive study (Banfield, Morse, Gulliver & Griffiths, 2018) was developed in Australia and it includes eighty-seven potential research topics to be prioritised. The full list of the priorities is available upon request.

Overall (see Table 5) all stakeholder groups emphasise the need for research on therapy, standards, education and psychology of mental disorders. The latter includes the psycho-social aspects of the diseases. Nonetheless, different interest group categories favour different priorities. That is, while therapy, diagnosis, methods and standards-related priorities rank highly among clinicians, public and researchers, the latter do differentiate from the others. Scientists do select education-, rehabilitation-, and complications-related priorities, less frequently than clinicians and public. It is interesting to note researchers do not prioritise social aspects as clinicians and public, and scientists tend to prioritise more the methodological aspects of mental disorders. A definition on “education” and “therapy” has been added to clarify these categories’ extent used in the scoping review.

3.7. Education and Therapy categories definition

The education category refers to educational interventions in promoting mental health and preventing mental illness. This category encompasses interventions on the relationship between educational attainment and mental health outcomes, such as the impact of education on the development of mental illness, the prevalence of mental illness among different levels of educational attainment, and the potential benefits of education in recovery from mental illness.

The therapy category refers to the effectiveness of different forms of therapy for treating mental illness and promoting mental health. Therapy encompasses a range of approaches and techniques, including cognitive-behavioural therapy, psychodynamic therapy, and interpersonal therapy.

4. Discussion and conclusions

The scoping review shows participatory approaches that have been applied to priority setting in mental health research on a global scale. However, according to our results, the geographical scope of the studies is not well distributed since it is concentrated in a small number of countries. Furthermore, it lacks international collaboration: the United Kingdom, USA, Australia and the Netherlands concentrate the majority of the original studies, two thirds of which are produced by authors from a single country. It is worth noting that geographic coding based on authorship may be different from stakeholder’s representation.

While a significant body of literature exists on participatory priority-setting reviews, there remains a paucity of knowledge on the extent to which participatory methods have been employed to prioritise research on mental disorders in the past decade. In light of these knowledge gaps, the presented scoping review offers a new classification on stakeholders who have been engaged in such participatory experiences, which methods have been utilised, and which priorities and prevention interventions have been identified through these efforts. This scoping review is a contribution on the use of participatory methods in mental disorders research.

The scoping review shows which health areas are the most common mental disorders conducive to the application of participatory priority setting methods: neurodevelopmental disorders and dementia, followed by neurobehavioral manifestations. From all generated data, we categorised ten participatory methods, twenty-three mental health research priorities and five stakeholder groups. These classifications on methods, priorities and interest groups are a useful tool to understand how the

Table 4
Methods combined in the studies on priorities setting.

	Theory of change methodology	Other	Priority Setting Partnership	Mixed methods research	Meetings and workshops	Literature review	Interview	Group decision-making	Focus group	Consensual criteria
Consensual criteria			1		1	1	2			
Focus group	1	2		1		1	9	1		
Group decision-making	1	1	2		9	2	6			
Interview and consulting	2	4	5	1	10	9				
Literature review			5	1	6					
Meetings and workshops			5							
Mixed methods research			1							
Priority Setting Partnership										
Other	1									
Theory of change methodology										

Table 5
Priorities selected by the stakeholders.

Research priorities group	Clinicians	Public	Authorities	Researchers/Ac.	Other
Classification	1,93%	1,73%	1,82%	2,58%	0%
Complications	5,80%	5,19%	1,82%	5,16%	6,52%
Diagnosis	5,31%	6,49%	4,55%	7,10%	4,35%
Diagnostic imaging	0,48%	0,43%	0,91%	0%	0%
Diet therapy	0,97%	0,87%	0,91%	0,65%	2,17%
Drug therapy	2,42%	4,76%	0,91%	1,94%	0%
Economics	3,38%	3,46%	3,64%	3,23%	0%
Education	9,66%	9,96%	6,36%	5,81%	6,52%
Epidemiology	2,42%	1,30%	5,45%	2,58%	2,17%
Ethnology	1,45%	1,73%	4,55%	2,58%	4,35%
Etiology	3,86%	3,46%	3,64%	4,52%	6,52%
Genetics	1,45%	1,30%	0,91%	0,65%	0%
Legislation & jurisprudence	0,97%	1,30%	0,91%	1,29%	0%
Methods	6,76%	6,49%	10,00%	9,03%	6,52%
Organization & administration	2,90%	3,46%	4,55%	4,52%	0%
Physiopathology	2,90%	2,16%	3,64%	2,58%	0%
Prevention & control	5,80%	6,06%	9,09%	7,10%	13,04%
Psychology	7,25%	7,36%	9,09%	7,74%	15,22%
Rehabilitation	7,25%	6,93%	2,73%	3,87%	6,52%
Standards	8,70%	7,79%	9,09%	9,03%	10,87%
Statistics & numerical data	0,97%	0,87%	0,91%	0,65%	0%
Supply & distribution	7,25%	6,93%	6,36%	8,39%	8,70%
Therapy	10,14%	9,96%	8,18%	9,03%	6,52%

object of this article operates, that is, the establishment of mental health research priorities. Research agencies can use these categories and classification to structure participatory methods when prioritising mental health research.

The scoping review shows different stakeholder groups prioritise slightly different health areas. Scientists prioritise less education-related and rehabilitation research, in comparison to clinicians, public (patients, communities) and authorities. At the same time, authorities prioritise higher health research than researchers and clinicians. Differences are not pronounced since all stakeholders tend to align their criteria when jointly prioritising research. We noted it is uncommon for members of different groups to participate in the same priority setting processes; more than one third of the studies only included participants from a single stakeholder group. Patients and communities (i.e. “public” category) participated in most of the priority setting studies reviewed. Most frequent participative methods included interviews, workshops and roundtable discussions. Delphi method and James Lind Alliance protocols have been collected too.

Larger discrepancies among stakeholder groups were expected since their interests can collide (e.g. as noted in the introduction, community-

based approaches are not common, and that could imply differences between clinicians, authorities and patients and communities. These findings open the way to explore further on the interaction of different groups to assess on research priorities. At the same time, participatory priority setting should be promoted to regions where it is not generally practised in order to reduce the gap on stand-alone hospitals funding and community-based approaches. This gap has been proven problematic to thoroughly tackle the growing social burden of mental disorders.

4.1. Limitations

The scoping review faced some limitations affecting the extent of articles analysed. The first limitation is the use of only one language, English, in the search strategy. This could have affected the geographical representation of the studies, overrepresenting anglophone authorship. Another limitation is derived from the inclusion criteria and the controlled terms of search which inherently excluded potential relevant studies; mental disorders terms contain nuances depending on the different cultural backgrounds. Finally, it is worth noting that the provided classifications and the scoping review results can incur in selection

bias.

4.2. Further research

Scoping reviews are recommended for examining the extent, variety and nature of an ill-defined and broad research topic, and they are considered a previous step to conducting more detailed synthesis studies. There is sufficient data suggesting a shift in mental disorders research prioritisation led by the communities and the UN mandate, opening the way to participatory methods and approaches combining a participatory strategy with other sources. The increased mental disorders burden of disease as a consequence of the COVID-19 pandemic indicates research agencies would strengthen their efforts to gain evidence on research interventions focused on prevention and mental health promotion.

In view of our results, it seems a logical follow up to develop a systematic review through literature on priority setting in mental disorders research once there is sufficient evidence after the first COVID-19 variant globally spread. The subsequent systematic review would be built on this work and using the same updated sources of data. The new review would benefit from more search languages (i.e. firstly Spanish and French due to authors' knowledge; a collaboration with international scholars would be sought), and more terms of search will be added with a prevention focus.

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Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at [doi:10.1016/j.mhp.2023.200279](https://doi.org/10.1016/j.mhp.2023.200279).

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