BMJ Open

BMJ Open is committed to open peer review. As part of this commitment we make the peer review history of every article we publish publicly available.

When an article is published we post the peer reviewers' comments and the authors' responses online. We also post the versions of the paper that were used during peer review. These are the versions that the peer review comments apply to.

The versions of the paper that follow are the versions that were submitted during the peer review process. They are not the versions of record or the final published versions. They should not be cited or distributed as the published version of this manuscript.

BMJ Open is an open access journal and the full, final, typeset and author-corrected version of record of the manuscript is available on our site with no access controls, subscription charges or pay-per-view fees (http://bmjopen.bmj.com).

If you have any questions on BMJ Open's open peer review process please email info.bmjopen@bmj.com

BMJ Open: first published as 10.1136/bmjopen-2022-061227 on 24 August 2022. Downloaded from http://bmjopen.bmj.com/ on October 30, 2023 by guest. Protected by copyright.

BMJ Open

Experiences and perceptions of managing patients with co-morbid mental health illness and physiotherapeutic presentation: Protocol for a systematic review and meta-ethnography

Journal:	*BMJ Open*
Manuscript ID	bmjopen-2022-061227
Article Type:	Protocol
Date Submitted by the Author:	19-Jan-2022
Complete List of Authors:	Hemmings, Laura; University of Birmingham Heneghan, Nicola; University of Birmingham, School of Sport, Exercise and Rehabilitation Sciences Stubbs, B; King's College London Byrd, Erin; Oxford Brookes University Soundy, Andrew; University of Birmingham
Keywords:	MENTAL HEALTH, Back pain < ORTHOPAEDIC & TRAUMA SURGERY, Musculoskeletal disorders < ORTHOPAEDIC & TRAUMA SURGERY, PAIN MANAGEMENT, PSYCHIATRY

SCHOLARONE™
Manuscripts

BMJ Open: first published as 10.1136/bmjopen-2022-061227 on 24 August 2022. Downloaded from http://bmjopen.bmj.com/ on October 30, 2023 by guest. Protected by copyright.

Experiences and Perceptions of managing patients with co-morbid mental health illness and physiotherapeutic presentation: protocol for a systematic review and meta-ethnography

Hemmings, L[1], Heneghan, NR[1], Byrd, E[2], Stubbs, B[3], Soundy, A[1]

Author affiliations

[1] School of sport exercise and rehabilitation sciences, University of Birmingham, Edgbaston, B15 2TT

[2]Oxford Brookes University, Gipsy Lane, Oxford, OX3 OBP

[3]Kings College London, Strand, London WC2R 2LS

Hemmings, L
Teaching fellow and PhD student

Heneghan, NR
Honorary senior lecturer

Stubbs, B
Senior clinical lecturer

Byrd, E
Senior lecturer in exercise and health physiology

Soundy, A
Lecturer in physiotherapy

Correspondence to Laura Hemmings at L.hemmings@bham.ac.uk

For peer review only

Keywords: physiotherapy, mental health, holistic, integrated care, comorbidities

Wordcount: 3022

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

Abstract

Introduction: There is a high global prevalence of patients presenting with physical and mental health co-morbidities. Physiotherapy has a central role in prevention of physical and mental health complaints and in aiding rehabilitation for patients with mental health illness. However, poor accessibility and negative experiences have been consistently observed, within literature, as being linked with physiotherapy services for people with co-morbid mental health conditions. One way to help improve physiotherapy services for this population is to understand the personal experiences and perceptions of healthcare professionals (HCP) towards working with patients with mental health illness (MHI). Qualitative based evidence syntheses are suited to bring this data together with the aim of improving physiotherapy services for patients with MHI. This review will systematically search and synthesise existing evidence around HCP experiences and perceptions of benefits and barriers to physiotherapy for patients with MHI.

Methods and analysis: A systematic search and six-phase meta-ethnography review will be undertaken. A comprehensive search of electronic databases (CINAHL plus, Medline, Pubmed, OVID and Psychinfo) and search engines as well as grey literature will be completed. Eligibility criteria include; (a) qualitative data, (b) perceptions identified from HCP, including physiotherapists, assistants and HCP referring into physiotherapy, about physiotherapy for patients with MHI, and (c) are primary studies.

Ethics and Dissemination: This work is exempt from requiring ethical approval due to review methodology with data accessed from published works. This systematic review is expected to provide insight into experiences and perceptions of HCP around benefits and barriers to accessing physiotherapy for patients with mental health illness. Findings will be used to inform further research and co-develop recommendations to overcome barriers and optimise facilitators to care for this population. Findings will be disseminated via peer-reviewed journal, conference presentations and to key stakeholder groups.

Registration

In accordance with guidelines, this systematic review is registered with the International Prospective Register of Systematic Reviews (PROSPERO) as of [24th November 2021].

Article summary

Strengths and limitations of this study:

- Protocol for a meta-ethnography to develop understanding of HCP perceptions of benefits and barriers to physiotherapy for patients with mental health illness.
- Comprehensive search strategy informed by pilot scoping of MEDLINE database.

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

- Utilising a meta-ethnographic review will enable clear understanding around experiences and perceptions of these factors across physiotherapy pathways.
- This approach will allow consideration of evidence which can help further current knowledge through the proposal of models, processes or theory.
- This review is reliant on existing qualitative data to inform findings and may highlight further gaps in the literature which require further investigation or consideration.

Background

Physical and Mental Health and the Challenge of Co-morbidities

Links between physical and mental health are widely recognised[1, 2] with evidence supporting a bidirectional link between the two[3, 4]. Evidence shows a decreased life expectancy for those with mental health illness (MHI) of up to 30 years[1]. Increased physical health comorbidities and difficulty accessing physical health care[5] are strongly associated with these stark figures[1]. Lifestyle, medication and maladaptive coping strategies are all seen to impact the physical health of those with MHI and, who experience an estimated 40% increased risk of stroke, diabetes and cardiovascular disease[1] and up to 50% greater risk of complaints of pain and arthritis[6, 7].

Due to the high prevalence and inter-relationship of such co-morbidities, integration of physical and mental health within healthcare services is vital[2, 8]. Integration of these complex needs is called upon, globally, across physiotherapy services[9-12] with growing recognition that physiotherapists will work with this patient group irrespective of professional speciality [12].

The COVID-19 pandemic has brought the importance of integrating physical and mental health to the forefront within rehabilitation services such as physiotherapy[13]. Predicted increases in global prevalence of MHI[14-16]. has resulted in calls for strategies to promote integration of physical and mental health across rehabilitation services[13]. Achieving optimal integrated physical and mental health care requires a multi-disciplinary approach[17,18] with communication and referrals between different professionals; something perceived by patients to be lacking within physiotherapy pathways[12]. Understanding barriers from the perceptions of the wider MDT is therefore deemed vital to develop awareness around processes and barriers across pathways.

Physiotherapists can have an integral role in prevention and rehabilitation of physical and mental health[11, 12, 19]. This professional group have skills in management of musculoskeletal, neurological, respiratory and functional presentations all of which are found to be highly prevalent in those with MHI[1, 6]. Their role within the multi-disciplinary team addressing a multitude of comorbidities experienced by those with MHI is therefore of great importance across specialities[12, 19, 20]. Furthermore, exercise is the cornerstone of physiotherapy and widely identified as beneficial in the prevention and treatment of MHI[4, 21, 22]. This professional group therefore also have potential to help address this increasingly prevalent global health

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

challenge[1, 23]. The role of the physiotherapist for patients with MHI is therefore multifactorial and access for this population crucial.

Poor access and negative experiences of physiotherapy for those with MHI have however been reported[12]. Barriers to access and experience have been linked with reduced rehabilitation outcomes, decreased compliance and exacerbated symptoms[12]. Four major factors have been identified as impacting negatively on accessing physical healthcare for those with MHI, 1) prolonged waiting times and lack of integration between services[12]; 2) diagnostic overshadowing, where an assumption is made that the physical complaint is a result of mental health[12,24]; 3) negative attitudes towards MHI, such as patients lacking rehabilitation potential[25]; and, 4) Perceived, potentially misunderstood, lack of motivation or compliance leading to premature discharge from physiotherapy[12]. These barriers have been seen to occur at multiple stages of healthcare pathways and can involve a number of different HCP's. To understand barriers across pathways, it is therefore vital to understand the perceptions of those referring into services as well as those working in physiotherapy services.

Looking more broadly, different HCP groups' experiences and perceptions of access to care for patients with MHI supports further investigation of access into other services including physiotherapy. A number of potential barriers and facilitators are found to exist which impact upon healthcare delivery and experience of services for those with MHI. Major barriers identified include poor awareness, negative attitudes and ongoing stigma towards mental health[18, 24, 26]. All of these factors are perceived within physiotherapy-focussed literature to have a negative impact upon patient experience and outcomes[10, 12]. In contrast there is evidence that illustrates facilitators to care include positive experiences leading to reinforced behaviour[24], patient empowerment[24,27] and staff awareness of both physical and mental health needs[10, 24, 28].

Due to service user reports of poor access to physiotherapy care[12] it is now vital to understand HCP perceptions of barriers, facilitators and experiences specific to physiotherapy care. Understanding physiotherapist and HCP experiences of working with patients with presentations requiring physiotherapy input and MHI is vital to enable identification of barriers and facilitators to physiotherapeutic management. This understanding will enable development of further research and recommendations to promote access to holistic physiotherapy services to optimise outcomes for patients presenting with co-morbid physiotherapeutic need and MHI.

Study Aim

Review based research is needed which can bring together understanding of experiences and perceptions of physiotherapy management or referral for patients with MHI. A qualitative based review that can consolidate knowledge and seek to further understanding is best situated to achieve this. A meta-ethnographic review will allow for identification and a clear understanding around the benefits and barriers to physiotherapy care for this population.

The aim of the current review is to explore HCP's experiences and perceptions of barriers and facilitators to physiotherapy for patients with MHI.

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

Research Objectives:

1) To explore HCP experiences of delivering/referring into physiotherapy services for patients with MHI
2) To explore HCP perceptions of the role and benefit of physiotherapy for patients with MHI
3) To identify perceived barriers and facilitators faced by HCPs when managing/referring patients with comorbid physiotherapeutic presentation and MHI.
4) Use the evidence to consider processes and models for supporting patients with MHI to access physiotherapy care.

Methods

Patient and public involvement

Patient, carer and public involvement (PCPI) has been used to guide the rationale for this study. The research topic has been discussed with patients, carers and public and experts by experience within focus group discussions. Within discussions, the importance of this area of work has been recognised and the need to improve integration, access and experience of physiotherapy for those with MHI identified. Those involved in discussions recognised the need to integrate physical and mental health considerations and discussed personal experiences of physiotherapy adding weight to the rationale and need for this research.

For peer review only

Research Design

The review will follow a six-phase meta-ethnography design[29] (see figure 1). The protocol for this review has been developed using three principle guidance documents; Noblit and Hare's original proposal[30], the recent eMERge guidance[29] for meta-ethnographies and the Preferred Reporting Items for Systematic review and Meta-Analysis Protocols (PRISMA-P) checklist [31]. The JBI manual for evidence synthesis [32] also been used as a supporting document. The phases of the meta-ethnography can be seen below in Figure 1.

Phase 1: Selecting meta-ethnography

The review will follow a subtle-realist meta-ethnography approach with both first and second order data being collated and third order data constructed. This approach allows for theory development through consideration of the original data across studies[29] as opposed to simply aggregation of themes from eligible studies[33].

Eligibility Criteria

The SPIDER concept tool[34] has been used to develop eligibility criteria, where S is sample, Pi is phenomenon of interest, D is design, E is evaluation and R is Research types.

Sample

Participants that are HCP, including student HCP, working/studying in any country. Studies should include a population of any HCP group that either directly deliver physiotherapy care

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

(physiotherapists or support workers) or refer into physiotherapy services (e.g. doctors, nurses, occupational therapists, dieticians). HCP included within studies must have a clinical or clinical management role. Staff working in academia will be included if they also have a clinical role (clinical academics).

Phenomenon of interest

To be included articles must focus on identifying the experiences of healthcare professionals referring into/delivering physiotherapy services for patients with MHI. Patient perceived barriers and barriers to other healthcare services have been identified at different levels of the referral pathway, both by HCP referring into a service and those working within the service itself [12,24,27]. To obtain insight into barriers throughout the pathway, literature considering the perceptions of all HCP will be considered. Studies exploring experiences of delivering/referring into non-physiotherapeutic services, novel interventions or complementary therapies (e.g., acupuncture, massage) will be excluded.

Design

Studies which include qualitative data, including but not limited to different types of grounded theory, phenomenology, ethnography, narrative, action research and case studies. Mixed method designs will be included if there is clear inclusion of qualitative data including qualitative data collection, analysis and interpretation.

Evaluation

Qualitative methods including survey, interviews, field diaries, and vignettes. These methods should capture the unique experiences and perceptions of physiotherapists working with patients with MHI or of other HCPs referring into/working alongside physiotherapists within this population.

Research type:

Only primary research will be included in this review and opinion pieces editorials, conference proceedings will be excluded.

Exclusion Criteria:

Studies not written or interpreted into English will be excluded.

Studies exploring only patient perceptions of physiotherapy will be excluded.

Phase 2: Deciding what is relevant

Search Strategy

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

The comprehensive search strategy has been informed by an initial scoping search of the MEDLINE database alongside methodological and subject specific expertise within the research team and previous studies [32,35].

A draft search strategy, comprising four facets, as written for MEDLINE has been developed:

(physiotherap* OR physical therap* OR healthcare professional OR allied health professional)

AND (attitude* OR perception* OR experience* OR perspective OR confidence)

AND (mental health OR mental illness OR mental disorder OR psychiatric illness OR psychological illness OR depression OR schizophrenia OR bipolar OR dementia OR mood disorder)

AND qualitative OR narrative OR grounded theory OR phenomenology

All search terms will be searched for in title and abstract fields with Boolean operators AND or OR alongside truncation (*). No date limits will be included. [See appendix 1 for pilot search using Medline].

Electronic databases will include: CINAHL plus, Medline, Pubmed, OVID and Psychinfo will be searched from inception to present. The review will seek to identify both published and unpublished data, as grey literature may provide valuable insights[33,36]. (Grey literature will be searched via NICE Evidence search[36]. ProQuest dissertation and thesis will be searched from inception to present. Reference lists of all eligible studies will be scanned for further eligible studies. Electronic search engines (ScienceDirect and Google Scholar) will be searched for the first 300 results[37]. Key journals (the three most common journals in which included studies are published) will be searched via contents pages for relevant studies. Searches will be completed independently by the lead author (LH) and co-author (EB).

For peer review only

Phase 3- Reading included studies

Screening of articles

All studies will be screened following a two-stage process by two independent reviewers (LH, EB).

1) Titles and abstracts will first be screened for relevance and any duplicates removed. This will be completed by one reviewer (LH) with 10% of records excluded checked by a second reviewer (EB)[35]. Full-texts will be accessed once eligibility criteria (above) are met or it is not possible to establish whether this is met via the title and abstract alone. Authors will be contacted if there is insufficient information to establish whether a study meets criteria. The lead author will make two attempts to contact these authors, via email, across a four-week interval.

2) All relevant full texts will be screened to identify those for inclusion in the final review. Study selection within this stage will be decided by two reviewers (LH and EB) with discussion and involvement of a third reviewer (AS) as required.

Data Management

A PRISMA flow diagram will be completed to record the process and records of studies excluded and reasons for this. Any disagreements between reviewers will be resolved through discussion or involvement of a third reviewer (AS). The bibliographic tool, Endnote (Clarivate Web of Science) and Microsoft Excel 2010 will be used to organise and store literature within this review.

Quality Appraisal

Following screening, all included studies will undergo quality check using JBI Checklist for Qualitative Research[38]. This tool has high levels of validity and coherence[39] and good applicability to qualitative reviews[33]. The quality assessment process will be completed by two reviewers independently (LH and EB) with a third reviewer (AS) to resolve disagreements remaining after discussion. Studies will not be excluded based on quality[40] with the purpose of appraisal being to identify the quality of available evidence and direct future recommendation via the certainty assessment.

Data Extraction

Data on study characteristics including study sample, data collection methods, data analysis methods, study outcomes and study conclusions will be extracted[41]. A second data extraction tool (JBI QARI) will record first and second order constructs (themes, quotes and original author interpretations), including verbatim quotes, with data extracted from all sections of each of the primary studies[29]. This data extraction sheet from JBI QARI will be used due to its validity and recommended use within qualitative reviews[33]. This process will be completed by the lead researcher (LH) and checked for accuracy by a second reviewer (EB).

Phase 4: Determining how studies are related

Phase 4 will examine how the studies are related to provide context for the meta-ethnography. A grid process, with consideration of information within the data extraction table, will be used to highlight similarities and differences across studies to determine how the primary studies relate to each other. This will consider relations between findings, methods and other contextual findings[29]. This phase will be led by the lead researcher (LH) with discussion with the second reviewer (EB) and wider research team (LH, EB, AS, NH) throughout to aid credibility.

Phase 5: Translating studies into one another

Themes from the primary studies will be compared with other themes across studies[29]; this stage differentiating a meta-ethnography from other forms of qualitative synthesis[29].

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Similarities/matching themes (reciprocal translations) and contradictory findings (refutable translations) will be considered and recorded across all studies[30]. First, second and third order constructs will be tabulated to enable clear and transparent development of interpretations and themes.

Phase 6: Synthesising Translations

This phase will consist of synthesis of translations and reviewer interpretations to enable development of final themes. These interpretations will be discussed in depth within the review team (LH, EB, AS, NH) to allow multiple perspectives and decrease any bias[29]. Transcripts will be re-read to ensure sound interpretations which are grounded within the original studies. Final themes will be recorded in tables including first, second and third order constructs and explained alongside these constructs within the results and discussion sections of the final write up.

Confidence in Cumulative Evidence

The Confidence in the Evidence from Reviews of Qualitative Research (CERQual) Framework will be used to evaluate the strength in review findings[42]. The quality of the findings will be considered across all four CERQual components: methodological limitations; relevance; coherence; and adequacy of data.

Discussion

Physiotherapy for patients with MHI is recognised as important for both physical and mental health[12,19]. However patients report barriers to access and experience within this service[12]. This lack of access has potential to negatively impact on the physical and mental health of this population, who already experience substantial disparities in physical health outcomes and life expectancy[1,5]. Where physiotherapists are ideally placed to promote physical and mental health for this population[19,43,44] it is now vital that we develop our understanding of the benefits and barriers to physiotherapy for those with MHI. This understanding will inform development of strategies to promote equitable access to physiotherapy for this group.

Previous research identifies patient perceptions of barriers to physiotherapy to exist across pathways and amongst different professional groups[12]. This review seeks to add depth to this previous work and expand our understanding of barriers to physiotherapy by bringing together perceptions and experiences of HCP. Through a review of qualitative data, we hope to broaden our awareness of how physiotherapy for patients with MHI is perceived across the MDT and the barriers experienced when managing patients with complaints conducive to management through physiotherapy and comorbid MHI.

Strengths and Limitations of this study

Utilising a meta-ethnographic review will enable clear understanding around experiences and perceptions of these factors across physiotherapy pathways. This approach will allow consideration of evidence which can help further current knowledge through the proposal of

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

For peer review only

models, processes or theory[29]. This review is reliant on existing qualitative data to inform findings and may highlight further gaps in the literature which require further investigation or consideration.

Ethics and Dissemination

Understanding the barriers to physiotherapy for this population will allow us to identify strategies for improving access for this at-risk group; a current research priority within physiotherapy[45]. Findings from this review will be used to inform processes and co-produce models and recommendations to improve access and experience of physiotherapy for patients with co-morbid MHI. To optimise impact of the study, a multifaceted dissemination plan will ensure maximise reach. This will include submission to a peer review journal and presentation at a national or international conference (Physio UK or International Conference of Physiotherapy in Mental Health. Findings will be widely disseminated and used to develop future research via journal publications, conference presentations and sharing of findings with key stakeholders. Due to the review nature of this research, there are no ethical issues identified.

Author Contributions

All named authors have contributed to the paper meeting all four of the International Committee of Medical Journal Editors' recommendations for authorship[46]. LH is the guarantor. LH, AS and NH drafted the manuscript with critical revisions from BS and EB. All authors contributed to methodological design including methodological framework consideration, selection criteria, data extraction strategy and extraction criteria. LH developed the search strategy. AS and NH provided methodological input and support. LH, BS and EB provided expertise around physiotherapy and mental health. All authors read, provided feedback and approved the final manuscript.

Funding

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests

none declared

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

References

1. Firth, J. et al. (2019) The Lancet Psychiatry Commission: A Blueprint for Protecting Physical Health in People with Mental Illness

2. Naylor,C., Das, P, Ross, S. et al (2016) Bringing together physical and mental health: A new frontier for integrated care.

3. Bullmore, E (2019) The Inflamed Mind: A radical new approach to depression. Short Books. UK

4. Kandola, A., Ashdown-Franks, G., Stubbs, B. et al (2019) Physical Activity and Depression: Towards understanding the antidepressant mechanisms of physical activity. Neuroscience and biobehavioural reviews. 107: 525-539

5. Solmi M, Firth J, Miola A, et al Disparities in cancer screening in people with mental illness across the world versus the general population: prevalence and comparative meta-analysis including 4 717 839 people.
.Lancet Psychiatry. 2020 Jan;7(1):52-63

6. Arthritis and Musculoskeletal Alliance (2019). Mental Health and Musculoskeletal Conditions. Report of the Roundtable

7. Stubbs, B., Vancompfort, D., Veronese, N. et al (2017) Depression and pain: primary data and meta-analysis among 237 952 people across 47 low- and middle-income countries. Psychological Medicine 47(16):1-12

8. Mental Health Taskforce (2016) The Five Year Forward for Mental Health.

9. WCPT, 2019 Description of Physiotherapy: Policy Statement Online Available at https://world.physio/sites/default/files/2020-07/PS-2019-Description-of-physical-therapy.pdf. Accessed on 19/11/21

10. Andrew,E., Briffa, K., Waters et al (2019) Physiotherapist views about providing physiotherapy services to people with SPMI. Physiotherapy 65(4):222-229

11. Driver, C. Kean, B., Oprescu, F & Lovell, G.P (2016): Knowledge, behaviors, attitudes and beliefs of physiotherapists towards the use of psychological interventions in physiotherapy practice: a systematic review, Disability and Rehabilitation, DOI: 10.1080/09638288.2016.1223176

12. Hemmings, L., Soundy, A.(2020).Experiences of Physiotherapy in Mental Health: An IPA of Barriers and Facilitators to Care. Physiotherapy

13. Barker-Davies,R., O'Sullivan,O et al. (2020) The Stanford Hall consensus statement for post-COVID-19 rehabilitation

For peer review only

14. Vindegaard, N. and Benros, M. (2020) COVID-19 pandemic and mental health consequences: Systematic review of the current evidence. Brain Behav Immun. 89:531-542

15. Rajkumar, P (2020) COVID-19 and mental health: A review of the existing literature. Asian Journal of Psychiatry. 52: 102066.

16. Ettman, C., Abdalla, S., Cohen, G et al (2020) Prevalence of Depression Symptoms in US Adults Before and During the COVID-19 Pandemic Jama Network Open 3(9): 1-12

17. Stubbs et al, 2014 Understanding the role of physiotherapists in schizophrenia: an international perspective from members of the International Organisation of Physical Therapists in Mental Health (IOPTMH) Journal of Mental Health. http://dx.doi.org/10.3109/09638237.2013.869574

18. Happel, B., Scott, D., Platania-Phung, C.(2012)Perceptions of Barriers to Physical Health Care for People with Serious Mental Illness:A Review of International Literature. Issues in Mental Health Nursing 33:752-761

19. Probst, M. (2017) Physiotherapy and Mental Health. Clinical Physical Therapy. InTech. Available at http://dx.doi.org/10.5772/67595

20. Filipic, I, Sartorius, N. (2018) Patterns of Chronic Physical Multimobidity in Psychiatric and General Population. Journal of Psychomatic Research

21. Erickson, K., Voss, M., Prakash, R.S. et al (2011) Exercise training increases size of hippocampus and improves memory. PNAS 108 (7) 3017-3022

22. Herold, F., Muller, P., Gronwald, T. et al, (2019) Dose–Response Matters! – A Perspective on the Exercise Prescription in Exercise–Cognition Research. Frontiers in Psychology. 10: 2338.

23. Stubbs, B., Vancompfort, D., Hallgren, M. et al, 2018 EPA guidance on physical activity as a treatment for severe mental illness: a meta-review of the evidence and Position Statement from the European Psychiatric Association (EPA), supported by the International Organization of Physical Therapists in Mental Health (IOPTMH). European Journal of Psychiatry 54:124-144

24. DeCoux, M. (2005) 'Acute Versus Primary Care: The Health decision Making Process for Individuals with Severe Mental Illness'. Issues in Mental Health Nursing 26:935-951

25. Hall, A.J., Watkin, R., Goodwin, V.A et al. (2017) The experiences of physiotherapists treating people with dementia who fracture their hip. BMC Geriatrics

For peer review only

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

26. Nankivell, J., Happell, B., Scott, D. (2013) Access to Physical Health Care for People with Serious Mental Illness: A Nursing Perspective and a Human Rights Perspective-Common Ground? Issues in Mental Health Nursing 34:442-450

27. Lester, H.E., Tritter, J.Q., Sorohan, H. (2005) Patients' and health professionals' views on primary care for people with serious mental illness: focus group study. British Medical Journal; 330(7500): 1122.

28. Mesidor, M., Gidugu, V., Rogers, E.S., Kash-Macdonald, V.M., Boardman, J.B. (2011) A qualitative study: barriers and facilitators to health care access for individuals with psychiatric disabilities Psychiatric Rehabilitation Journal. 34(4):285-94

29. France, E., Cunningham, M. et al, 2019 Improving reporting of meta-ethnography: the eMERGe reporting guidance. BMC Medical Research Methodology 19(1):1-13

30. Noblit GW, Hare RD. Meta-ethnography: synthesizing qualitative studies, vol. 11. California: Sage Publications; 1988.

31. Moher, D., Shamseer, L., Clarke, M. et al. Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. Syst Rev 4, 1 (2015). https://doi.org/10.1186/2046-4053-4-1

32. Aromataris E, Munn Z. (2020) Chapter 1: JBI Systematic Reviews. In: Aromataris E, Munn Z (Editors). JBI Manual for Evidence Synthesis. JBI, 2020.

33. Munn et al, 2014 Search strategy - JBI Manual for Evidence Synthesis. Available at https://wiki.jbi.global/display/MANUAL/2.6.5+Search+strategy

34. Cooke, A., Smith, D., Booth, A. (2012) Beyond PICO: the SPIDER tool for qualitative evidence synthesis. Qualitative Health Research 22(10):1435-43.

35. Quirk, H., Hock, E, Copeland, R (2020) Understanding the experience of initiating community-based group physical activity by people with serious mental illness: A systematic review using a meta-ethnographic approach | European Psychiatry | Cambridge Core 63(1)

36. Booth, A., Sutton, A., Papaioannou, D. 2015 Systematic Approaches to a Successful Literature Review

37. Haddaway, NR., Collins, AM., Coughlin, D. et al, (2015) The Role of Google Scholar in Evidence Reviews and Its Applicability to Grey Literature Searching. Plos One https://doi.org/10.1371/journal.pone.0138237

38. JBI, 2017 The Joanna Briggs Institute Critical Appraisal tools for use in JBI Systematic Reviews: Checklist for Qualitative Research. Online. Available at http://joannabriggs.org/research/critical-appraisal-tools.html

For peer review only

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

39. Hannes et al, 2010 A comparative analysis of three online appraisal instruments' ability to assess validity in qualitative research. Qualitative Health Research 20(12):1736-43.

40. Thomas, J., Harden, A. (2008) Methods for the thematic synthesis of qualitative research in systematic reviews. BMC Medical Research Methodology. 8(45) https://doi.org/10.1186/1471-2288-8-45

41. Sattar, R., Lawton, R., Panagioti, M et al (2021) Meta-ethnography in healthcare research: a guide to using a meta-ethnographic approach for literature synthesis. BMC Health Services 21(1):1-13

42. Lewin, S., Bohren, M., Rashidian, A et al, (2018) Applying GRADE-CERQual to qualitative evidence synthesis findings—paper 2: how to make an overall CERQual assessment of confidence and create a Summary of Qualitative Findings table Implementation Science 13(1):11-23

43. Stubbs, B., Vancompfort, D., Smith, L. Rosenbaum, S., Schuh, F., Firth, J. (2018) Physical activity and mental health. The Lancet Psychiatry. 5(11): 873

44. Chartered Society of Physiotherapists (2008) Recovering Mind and Body. London: The Chartered Society of Physiotherapists

45. Rankin, G. et al (2020) Identifying Priorities for Physiotherapy Research in the UK: the James Lind Alliance Physiotherapy Priority Setting Partnership. Physiotherapy. 107(161-168)

46. International committee medical journal editors. (2010) Uniform requirements for manuscripts submitted to biomedical journals: writing and editing for biomedical publication. [Online] Available at www.ICMJE.org

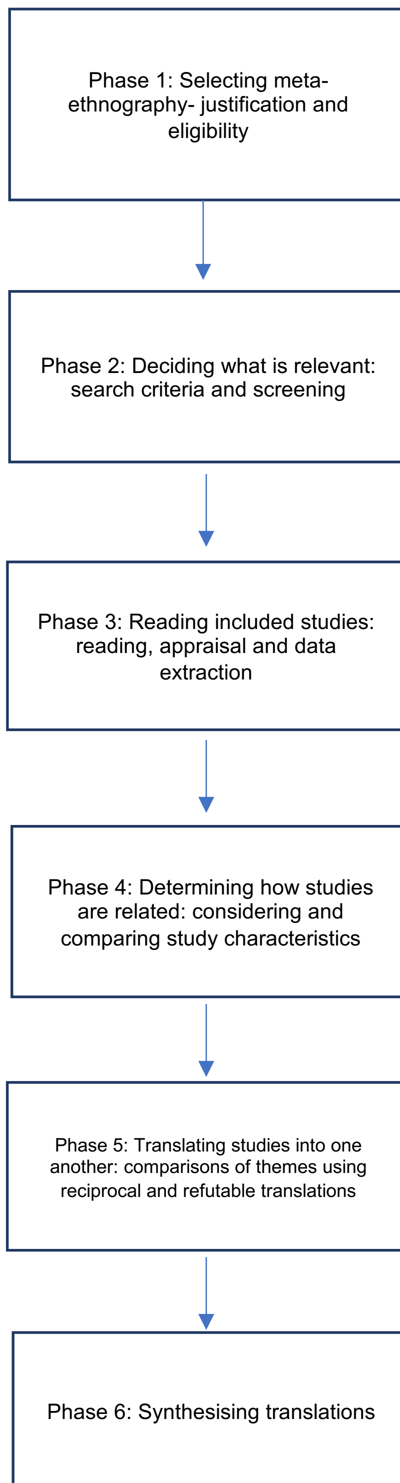
For peer review only

Figure Captions

Figure 1: Meta-ethnography six-stage process adapted from France et al[29].

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Appendix 1

Table detailing pilot search for search strategy development carried out in OVID Medline on 6/1/2022

No.	Search term	Results
1	Physiotherap* .mp. [mp=title, abstract, original title, name of substance word, subject heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]	24976
2	Physical therap*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]	55038
3	1 OR 2	68933
4	Healthcare professional*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]	23728
5	Allied health professional*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]	1896
6	3 OR 4 OR 5	93838
7	Attitude.mp. [mp=title, abstract, original title, name of substance word, subject heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]	431059
8	Perception.mp. [mp=title, abstract, original title, name of substance word, subject heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]	435369
9	Experience.mp. [mp=title, abstract, original title, name of substance word, subject heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]	1041085
10	Confidence.mp. [mp=title, abstract, original title, name of substance word, subject heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]	523088
11	7 OR 8 OR 9 OR 10 OR 11	2185824
12	Mental health.mp. [mp=title, abstract, original title, name of substance word, subject heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]	195028
13	Mental illness.mp. [mp=title, abstract, original title, name of substance word, subject heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]	27785
14	Psychiatric illness.mp. [mp=title, abstract, original title, name of substance word, subject heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]	6303

For peer review only

15	Mental disorder*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]	206203
16	Psychological illness*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]	314
17	13 OR 13 OR 15 OR 16	359782
18	Depression.mp. [mp=title, abstract, original title, name of substance word, subject heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]	394577
19	Schizophrenia.mp. [mp=title, abstract, original title, name of substance word, subject heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]	137486
20	Bipolar.mp. [mp=title, abstract, original title, name of substance word, subject heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]	75095
21	Dementia.mp. [mp=title, abstract, original title, name of substance word, subject heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]	125190
22	Mood disorder.mp. [mp=title, abstract, original title, name of substance word, subject heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]	5168
23	18, 19, 20, 21 OR 22	678839
24	17 OR 23	947188
25	Qualitative.mp. [mp=title, abstract, original title, name of substance word, subject heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]	243117
26	Grounded theory.mp. [mp=title, abstract, original title, name of substance word, subject heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]	11799
27	Phenomenology.mp. [mp=title, abstract, original title, name of substance word, subject heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]	8058
28	25 OR 26 OR 27	253613
29	6 AND 12 AND 24 AND 28	494
30	29 with English language limits	488

For peer review only

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

PRISMA P Checklist

Moher D, Shamseer L, Clarke M, Ghersi D, Liberati A, Petticrew M, Shekelle P, Stewart LA. Preferred Reporting Items for Systematic Review and Meta-Analysis Protocols (PRISMA-P) 2015 statement. Syst Rev. 2015;4(1):1.

		Reporting Item	Page Number
Title			
Identification	#1a	Identify the report as a protocol of a systematic review	1
Update	#1b	If the protocol is for an update of a previous systematic review, identify as such	n/a
Registration			
	#2	If registered, provide the name of the registry (such as PROSPERO) and registration number	1
Authors			
Contact	#3a	Provide name, institutional affiliation, e-mail address of all protocol authors; provide physical mailing address of corresponding author	1
Contribution	#3b	Describe contributions of protocol authors and identify the guarantor of the review	10&11
Amendments			
	#4	If the protocol represents an amendment of a previously completed or published protocol, identify as such and list changes; otherwise, state plan for documenting important protocol amendments	n/a
Support			
Sources	#5a	Indicate sources of financial or other support for the review	10
Sponsor	#5b	Provide name for the review funder and / or sponsor	n/a
Role of sponsor or funder	#5c	Describe roles of funder(s), sponsor(s), and / or institution(s), if any, in developing the protocol	n/a
Introduction			

For peer review only

BMJ Open: first published as 10.1136/bmjopen-2022-061227 on 24 August 2022. Downloaded from http://bmjopen.bmj.com/ on October 30, 2023 by guest. Protected by copyright.

Rationale	#6	Describe the rationale for the review in the context of what is already known	3&4
Objectives	#7	Provide an explicit statement of the question(s) the review will address with reference to participants, interventions, comparators, and outcomes (PICO)	4
Methods			
Eligibility criteria	#8	Specify the study characteristics (such as PICO, study design, setting, time frame) and report characteristics (such as years considered, language, publication status) to be used as criteria for eligibility for the review	6
Information sources	#9	Describe all intended information sources (such as electronic databases, contact with study authors, trial registers or other grey literature sources) with planned dates of coverage	7
Search strategy	#10	Present draft of search strategy to be used for at least one electronic database, including planned limits, such that it could be repeated	17
Study records - data management	#11a	Describe the mechanism(s) that will be used to manage records and data throughout the review	8
Study records - selection process	#11b	State the process that will be used for selecting studies (such as two independent reviewers) through each phase of the review (that is, screening, eligibility and inclusion in meta-analysis)	8&9
Study records - data collection process	#11c	Describe planned method of extracting data from reports (such as piloting forms, done independently, in duplicate), any processes for obtaining and confirming data from investigators	8&9
Data items	#12	List and define all variables for which data will be sought (such as PICO items, funding sources), any pre-planned data assumptions and simplifications	9
Outcomes and prioritization	#13	List and define all outcomes for which data will be sought, including prioritization of main and additional outcomes, with rationale	9
Risk of bias in individual studies	#14	Describe anticipated methods for assessing risk of bias of individual studies, including whether this will be done at the outcome or study level, or both; state how this information will be used in data synthesis	8

For peer review only

BMJ Open: first published as 10.1136/bmjopen-2022-061227 on 24 August 2022. Downloaded from http://bmjopen.bmj.com/ on October 30, 2023 by guest. Protected by copyright.

Data synthesis	#15a	Describe criteria under which study data will be quantitatively synthesised	n/a
Data synthesis	#15b	If data are appropriate for quantitative synthesis, describe planned summary measures, methods of handling data and methods of combining data from studies, including any planned exploration of consistency (such as I2, Kendall's τ)	n/a
Data synthesis	#15c	Describe any proposed additional analyses (such as sensitivity or subgroup analyses, meta-regression)	9
Data synthesis	#15d	If quantitative synthesis is not appropriate, describe the type of summary planned	8&9
Meta-bias(es)	#16	Specify any planned assessment of meta-bias(es) (such as publication bias across studies, selective reporting within studies)	n/a
Confidence in cumulative evidence	#17	Describe how the strength of the body of evidence will be assessed (such as GRADE)	9

None The PRISMA-P elaboration and explanation paper is distributed under the terms of the Creative Commons Attribution License CC-BY. This checklist can be completed online using https://www.goodreports.org/, a tool made by the EQUATOR Network in collaboration with Penelope.ai

For peer review only

BMJ Open: first published as 10.1136/bmjopen-2022-061227 on 24 August 2022. Downloaded from http://bmjopen.bmj.com/ on October 30, 2023 by guest. Protected by copyright.

BMJ Open

Healthcare Professionals Perceptions and Experiences of Physiotherapy for people with mental illness: A protocol for a systematic review and meta-ethnography

Journal:	*BMJ Open*
Manuscript ID	bmjopen-2022-061227.R1
Article Type:	Protocol
Date Submitted by the Author:	25-Jun-2022
Complete List of Authors:	Hemmings, Laura; University of Birmingham Heneghan, Nicola; University of Birmingham, School of Sport, Exercise and Rehabilitation Sciences Byrd, Erin; Oxford Brookes University Stubbs, B; King's College London Soundy, Andrew; University of Birmingham
Primary Subject Heading:	Mental health
Secondary Subject Heading:	Patient-centred medicine, Qualitative research, Rehabilitation medicine, Research methods
Keywords:	MENTAL HEALTH, Musculoskeletal disorders < ORTHOPAEDIC & TRAUMA SURGERY, PAIN MANAGEMENT, PSYCHIATRY, REHABILITATION MEDICINE

SCHOLARONE™ Manuscripts

BMJ Open: first published as 10.1136/bmjopen-2022-061227 on 24 August 2022. Downloaded from http://bmjopen.bmj.com/ on October 30, 2023 by guest. Protected by copyright.

Healthcare Professionals Perceptions and Experiences of Physiotherapy for people with mental illness – A protocol for a systematic review and meta-ethnography

Hemmings, L[1], Heneghan, NR[1], Byrd, E[2], Stubbs, B[3], Soundy, A[1]

Author affiliations
[1] School of sport exercise and rehabilitation sciences, University of Birmingham, Edgbaston, B15 2TT
[2]Oxford Brookes University, Gipsy Lane, Oxford, OX3 OBP
[3]Kings College London, Strand, London WC2R 2LS

Hemmings, L
Teaching fellow and PhD student

Heneghan, NR
Honorary senior lecturer

Byrd, E
Senior lecturer in exercise and health physiology

Stubbs, B
Senior clinical lecturer

Soundy, A
Lecturer in physiotherapy

Correspondence to Laura Hemmings at L.hemmings@bham.ac.uk

For peer review only

Keywords: physiotherapy, mental health, holistic, integrated care, comorbidities

Wordcount: 3304

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

Abstract

Introduction: There is a high global prevalence of patients presenting with physical and mental health co-morbidities. Physiotherapeutic interventions, such as exercise, have a central role in prevention of physical and mental health complaints and in aiding rehabilitation for patients with mental health illness. However, poor accessibility and negative experiences of healthcare services for those with mental illness have been consistently observed within literature with recent research identifying poor experiences of physiotherapeutic interactions and processes such as referrals and discharges. One way to help improve physiotherapy services for this population is to understand the personal experiences and perceptions of healthcare professionals (HCP) towards physiotherapy for patients with mental illness (MI). Qualitative based evidence syntheses are suited to bring this data together with the aim of improving physiotherapy services for patients with MI. This review will systematically search and synthesise existing evidence around HCP experiences and perceptions of physiotherapy for people with MI.

Methods and analysis: A systematic search and six-phase meta-ethnography will be undertaken. A comprehensive search of electronic databases (CINAHL plus, Medline, Pubmed, Embase and Psychinfo) and search engines as well as grey literature will be completed. Searches are planned to take place in July'22. Eligibility criteria include; (a)qualitative data, (b)perceptions identified from HCP, including physiotherapists, assistants and HCP referring into physiotherapy, about physiotherapy for patients with MI, and (c)are primary studies.

Ethics and Dissemination: This work is exempt from requiring ethical approval due to review methodology with data accessed from published works. This systematic review is expected to provide insight into experiences and perceptions of HCP around benefits and barriers to accessing physiotherapy for patients with mental health illness. Findings will be used to inform further research and co-develop recommendations to overcome barriers and optimise facilitators to care for this population. Findings will be disseminated via peer-reviewed journal, conference presentations and to key stakeholder groups.

Registration

In accordance with guidelines, this systematic review is registered with the International Prospective Register of Systematic Reviews (PROSPERO) as of [24th November 2021]. Registration number: CRD42021293035

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Article summary

Strengths and limitations of this study:

- Protocol for a meta-ethnography to develop understanding of HCP perceptions of benefits and barriers to physiotherapy for patients with mental health illness using a comprehensive search strategy informed by pilot scoping of MEDLINE database.
- Utilising a meta-ethnography will enable consolidation of knowledge and an ability to provide clarity through synthesis of original data exploring experience and perceptions of HCPs.
- This approach will allow consideration of evidence which can help further current knowledge through the proposal of processes and models.
- Qualitative synthesis and meta-ethnographies solely explore previous qualitative literature and therefore any quantitative findings will not be included within the synthesis which may present a gap in findings and this review is reliant on existing qualitative data to inform findings and may highlight further gaps in the literature which require further investigation or consideration.
- The meta-ethnography will focus on establishing inferential generalisation and/or theoretical generalisation rather than establishing the representativeness of findings. It is recognised within our stance and approach that all perspectives are subjective and we are hereby seeking to synthesise multiple subjective perspectives to increase confidence in findings as opposed to identification of a firm truth.

Background

Physical and Mental Health and the Challenge of Co-morbidities

Links between physical and mental health are widely recognised[1, 2] with evidence supporting a bidirectional link between the two[3, 4]. Evidence shows a decreased life expectancy for those with mental illness (MI) of up to 30 years[1]. Increased physical health comorbidities and difficulty accessing physical health care[5] are strongly associated with these stark figures[1]. Lifestyle, medication and maladaptive coping strategies are all seen to impact the physical health of those with MI and, who experience an estimated 40% increased risk of stroke, diabetes and cardiovascular disease[1] and up to 50% greater risk of complaints of pain and arthritis[6, 7].

Due to the high prevalence and inter-relationship of such co-morbidities, integration of physical and mental health within healthcare services is vital[2, 8]. Integration of these complex needs is called upon, globally, across physiotherapy services[9-12] with recognition of a role in promoting quality of life and movement potential encompassing physical, psychological, social and emotional wellbeing [9]. Due to respiratory, neurological and musculoskeletal comorbidities being of high prevalence for those with mental illness, there is also a growing acceptance that physiotherapists will work with this patient group irrespective of professional speciality [12].

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

The COVID-19 pandemic has brought the importance of integrating physical and mental health to the forefront within rehabilitation services such as physiotherapy[13]. Predicted increases in global prevalence of MI[14-16] has resulted in calls for strategies to promote integration of physical and mental health across rehabilitation services[13]. Achieving optimal integrated physical and mental health care requires a multi-disciplinary approach[17,18] with communication and referrals between different professionals; something perceived by patients to be lacking within physiotherapy services[12]. Understanding barriers from the perceptions of the wider multi-disciplinary team (MDT) is therefore deemed vital to develop awareness around processes and barriers across care pathways. The importance of integrating physiotherapists and other allied health professionals into mental health MDTs is recognised within literature [1]. Understanding of HCP experiences and perceptions will help identify recommendations to drive integration in clinical practice.

Physiotherapists can have an integral role in prevention and rehabilitation of physical and mental health[11, 12, 19]. This professional group have skills in management of musculoskeletal, neurological, respiratory and functional presentations all of which are found to be highly prevalent in those with MI[1, 6]. Their role within the multi-disciplinary team addressing a multitude of comorbidities experienced by those with MI is therefore of great importance across specialities[12, 19, 20]. Furthermore, exercise is the cornerstone of physiotherapy and widely identified as beneficial in the prevention and treatment of MI[4, 21, 22]. This professional group therefore also have potential to help address this increasingly prevalent global health challenge[1, 23]. The role of the physiotherapist for patients with MI is therefore multifactorial and access for this population crucial.

Recent research demonstrates poor access and negative experiences of physiotherapy processes and interactions for those with MI [12] and supports previous findings around experiences of wider physical health care for those with MI [10, 24, 25, 27, 28]. Barriers to access and experience have been linked with decreased adherence to treatment and exacerbated symptoms of both physical and mental illness[12]. Four major factors have been identified as impacting negatively on accessing physical healthcare for those with MI, 1) prolonged waiting times and lack of integration between services[12]; 2) diagnostic overshadowing, where an assumption is made that the physical complaint is a result of mental health[12,24]; 3) negative attitudes towards MI, such as patients lacking rehabilitation potential[26]; and, 4) Perceived, potentially misunderstood, lack of patient motivation or adherence leading to premature discharge from physiotherapy[12]. These barriers have been seen to occur at multiple stages of healthcare pathways and can involve a number of different HCP's. To understand barriers across pathways, it is therefore vital to understand the perceptions of those referring into services as well as those working in physiotherapy services.

Looking more broadly, different HCP groups' experiences and perceptions of access to care for patients with MI supports further investigation of access into other services including physiotherapy. A number of potential barriers and facilitators are found to exist which impact upon healthcare delivery and experience of services for those with MI. Major barriers identified include poor awareness, negative attitudes and ongoing stigma within society and healthcare

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

towards mental health[18, 24, 25]. All of these factors are perceived within physiotherapy-focussed literature to have a negative impact upon patient experience and outcomes[10, 12]. In contrast there is evidence that illustrates facilitators to care include positive experiences leading to reinforced behaviour[24], patient empowerment[24,27] and staff awareness of both physical and mental health needs[10, 24, 28].

Due to service user reports of poor access to physiotherapy care[12] it is now vital to understand HCP perceptions of barriers, facilitators and experiences specific to physiotherapy care. Understanding physiotherapist and HCP experiences of working with patients with presentations requiring physiotherapy input and MI is vital to enable identification of barriers and facilitators to physiotherapeutic management.

This understanding will enable development of further research and recommendations to promote access to integrated physiotherapy services where staff are able to consider symptoms of both physical and mental health in a holistic manner, rather than delivering a siloed care approach. It is hoped that this, in turn, will optimise healthcare outcomes for patients presenting with co-morbid physiotherapeutic need and MI.

Study Aim

Review based research is needed which can bring together understanding of experiences and perceptions of physiotherapy management or referral for patients with MHI. A qualitative based review that can consolidate knowledge and seek to further understanding is best situated to achieve this aim. A meta-ethnography will allow for identification and understanding around the benefits and barriers to physiotherapy care for this population.

The aim of the current review is to explore HCP's experiences and perceptions of physiotherapy for people with mental illness.

Research Objectives:

1) To explore HCP experiences of delivering/referring into physiotherapy services for patients with MI
2) To explore HCP perceptions of the role and benefit of physiotherapy for patients with MI
3) To identify perceived barriers and facilitators faced by HCPs when managing/referring patients with comorbid physiotherapeutic presentation and MI.
4) Use the evidence to consider processes and models for supporting patients with MI to access physiotherapy care.

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Methods

Patient and public involvement

Patient, carer and public involvement (PCPI) has been used to guide the rationale for this study. The research topic has been discussed with patients, carers and public and experts by experience within three focus group discussions involving males and females between the ages of 30 and 80 years. Within discussions, people with lived experience and carers for people with mental illness discussed the importance of this area of work and highlighted the need to improve integration, access and experience of physiotherapy for those with MI. Those involved in discussions recognised the need to integrate physical and mental health considerations and discussed personal experiences of physiotherapy adding weight to the rationale and need for this research.

Research Design

The review will follow a six-phase meta-ethnography design[29] (see figure 1). The protocol for this review has been developed using three principle guidance documents; Noblit and Hare's original proposal[30], the recent eMERge guidance[29] for meta-ethnographies and the Preferred Reporting Items for Systematic review and Meta-Analysis Protocols (PRISMA-P) checklist [31]. The JBI manual for evidence synthesis [32] has also been used as a supporting document. The phases of the meta-ethnography can be seen below in Figure 1.

Phase 1: Selecting meta-ethnography

The review will follow a subtle-realist meta-ethnography approach with both first order data (original comments and quotes) and second order data (author interpretations and themes) being collated and third order data (synthesis team interpretations) constructed. A subtle realist believes an external reality exists (objective ontology) but is understood from the perspective of individuals involved (subjective epistemology). One important part of this world view is that it attempts to represent a common reality rather than obtain 'a single truth' [33]. This meta-ethnography with seek to identify common realities within first and second construct data across studies, finding common ground across the data analysed [34]. A meta-ethnography approach also allows for theory development through consideration of the original data across studies[29] as opposed to simply aggregation of themes from eligible studies[35].

Eligibility Criteria

The SPIDER concept tool[36] has been used to develop eligibility criteria, where S is sample, Pi is phenomenon of interest, D is design, E is evaluation and R is Research types, due to its relevance for studies considering qualitative data sets [36].

Sample

Participants that are HCP, including student HCP, working/studying in any country. Studies should include a population of any HCP group that either directly deliver physiotherapy care (physiotherapists or support workers) or refer into physiotherapy services (e.g. doctors, nurses,

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

occupational therapists, dieticians). HCP included within studies must have a clinical or clinical management role. Staff working in academia will be included if they also have a clinical role (clinical academics).

Phenomenon of interest

To be included articles must focus on identifying healthcare professionals' experiences and perspectives of physiotherapy for patients with mental illness. Patient perceived benefits and barriers to other healthcare services have been identified at different levels of the referral pathway, both by HCP referring into a service and those working within the service itself [12,24,27]. To obtain insight into barriers throughout the pathway, literature considering the perceptions of all HCP will be considered. Due to potential differences in treatment approaches across countries, all physiotherapeutic input and interventions will be considered including psychodynamic physiotherapeutic approaches and body awareness techniques. However, interventions must be delivered by a physiotherapist to be included. Studies exploring experiences involving non-physiotherapeutic interventions or those not delivered by a physiotherapist will be excluded.

Design

Studies which include qualitative data, including but not limited to different types of grounded theory, phenomenology, ethnography, narrative, action research and case studies. Mixed method designs will be included if there is clear inclusion of qualitative data including qualitative data collection, analysis and interpretation.

Evaluation

Qualitative methods including survey with open ended questions, interviews, field diaries, and vignettes. These methods should capture the unique experiences and perceptions of physiotherapists working with patients with MHI or of other HCPs referring into/working alongside physiotherapists within this population.

Research type:

Only primary research will be included in this review and opinion pieces editorials, conference proceedings will be excluded.

Exclusion Criteria:

Studies not written or interpreted into English will be excluded.

Studies exploring only patient perceptions of physiotherapy will be excluded.

For peer review only

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Phase 2: Deciding what is relevant

Search Strategy

The comprehensive search strategy has been informed by an initial scoping search of the MEDLINE database alongside methodological and subject specific expertise within the research team and previous studies [32,37].

A draft search strategy, comprising four facets, as written for MEDLINE has been developed:

(Physiotherap*.mp. OR Physical Therapy Specialty/ OR Exercise Therapy/ OR Allied Health Personnel/ Physical Therapists/ OR Physical Therapy Modalities/ OR physical therap*.mp.

AND

"Attitude of Health Personnel"/ OR experience*.mp. OR perception*.mp. OR perspective*.mp. OR confidence.mp. OR Attitude/ OR Health Knowledge, Attitudes, Practice/

AND

Qualitative Research/ OR narrative.mp. OR grounded theory/ OR ethnography.mp. OR phenomenology.mp. OR thematic analysis.mp. OR qualitative.mp. OR theme.mp.

AND

Mental Health/ OR Mental Disorders/ OR psychiatric illness.mp. OR Anxiety/ OR Depression/ OR Schizophrenia/ OR Bipolar Disorder/ OR Psychological Distress/ OR Dementia/ OR Mood Disorders/ OR Psychotic Disorders/ OR mental health.mp. OR mental illness.mp.)af

Medical Subject Headings (MeSH) terms (/) will be searched for alongside keywords in title and abstract fields with Boolean operators AND or OR and truncation (*). No date limits will be included. [See appendix 1 for pilot search using Medline].

Electronic databases will include CINAHL plus, Ovid Medline, Embase, Pubmed and Psychinfo [38] which will be searched from inception to present [see appendix 2 for search strategies for these databases]. The review will seek to identify both published and unpublished data, as grey literature may provide valuable insights[33,39]. ProQuest dissertation and thesis will be searched from inception to present. Reference lists of all eligible studies will be scanned for further eligible studies. Electronic search engines (ScienceDirect and Google Scholar) will be searched for the first 300 results[40]. Key journals (the three most common journals in which included studies are published) will be searched via contents pages for relevant studies. Searches will be completed independently by the lead author (LH) and co-author (EB) in July 2022.

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Phase 3- Reading included studies

Screening of articles

All studies will be screened following a two-stage process by two independent reviewers (LH, EB).

1) Titles and abstracts will first be screened for relevance and any duplicates removed. This will be completed by one reviewer (LH) with 10% of records excluded checked by a second reviewer (EB)[37]. Full-texts will be accessed once eligibility criteria (above) are met or it is not possible to establish whether this is met via the title and abstract alone. Authors will be contacted if there is insufficient information to establish whether a study meets criteria. The lead author will make two attempts to contact these authors, via email, across a four-week interval.
2) All relevant full texts will be screened to identify those for inclusion in the final review. Study selection within this stage will be decided by two reviewers (LH and EB) with discussion and involvement of a third reviewer (AS) as required.

Data Management

A PRISMA flow diagram will be completed to record the process and records of studies excluded and reasons for this. Any disagreements between reviewers will be resolved through discussion or involvement of a third reviewer (AS). The bibliographic tool, Endnote (Clarivate Web of Science) and Microsoft Excel 2010 will be used to organise and store literature within this review.

Quality Appraisal

Following screening, all included studies will undergo quality check using JBI Checklist for Qualitative Research[41]. This tool has high levels of validity and coherence[39, 42] and good applicability to qualitative reviews[35]. The quality assessment process will be completed by two reviewers independently (LH and EB) with a third reviewer (AS) to resolve disagreements remaining after discussion. Studies will not be excluded based on quality[43] with the purpose of appraisal being to identify the quality of available evidence and direct future recommendation via the certainty assessment.

Data Extraction

Data on study characteristics including study sample, data collection methods, data analysis methods, study outcomes and study conclusions will be extracted[44]. A second data extraction tool (JBI QARI) will record first and second order constructs (themes, quotes and original author interpretations), including verbatim quotes, with data extracted from all sections of each of the primary studies[29]. This data extraction sheet from JBI QARI will be used due to its validity and recommended use within qualitative reviews[35]. This process will be completed by the lead researcher (LH) and checked for accuracy by a second reviewer (EB).

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

For peer review only

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Phase 4: Determining how studies are related

Phase 4 will examine how the studies are related to provide context for the meta-ethnography. A grid process, with consideration of information within the data extraction table, will be used to highlight similarities and differences across studies to determine how the primary studies relate to each other. This will consider relations between findings, methods and other contextual findings[29]. This phase will be led by the lead researcher (LH) with discussion with the second reviewer (EB) and wider research team (LH, EB, AS, NH) throughout to aid credibility.

Phase 5: Translating studies into one another

Themes from the primary studies will be compared with other themes across studies[29]; this stage hereby differentiating a meta-ethnography from other forms of qualitative synthesis[29]. Similarities/matching themes (reciprocal translations) and contradictory findings (refutable translations) will be considered and recorded across all studies[30]. First, second and third order constructs will be tabulated to enable clear and transparent development of interpretations and themes.

Phase 6: Synthesising Translations

This phase will consist of synthesis of translations and reviewer interpretations to enable development of final themes. These interpretations will be discussed in depth within the review team (LH, EB, AS, NH) to allow multiple perspectives and decrease any bias[29]. Transcripts will be re-read to ensure sound interpretations which are grounded within the original studies. Final themes will be recorded in tables including first, second and third order constructs and explained alongside these constructs within the results and discussion sections of the final write up.

Confidence in Synthesised Evidence

The Confidence in the Evidence from Reviews of Qualitative Research (CERQual) Framework will be used to evaluate the strength in review findings[45]. The quality of the findings will be considered across all four CERQual components: methodological limitations; relevance; coherence; and adequacy of data.

Discussion

Physiotherapy for patients with MHI is recognised as important for both physical and mental health[12,19]. However patients report barriers to access and experience within this service[12]. This lack of access has potential to negatively impact on the physical and mental health of this population, who already experience substantial disparities in physical health outcomes and life expectancy[1,5]. Where physiotherapists are ideally placed to promote physical and mental health for this population[19,46,47] it is now vital that we develop our understanding of the benefits and barriers to physiotherapy for those with MHI. This understanding will inform development of strategies to promote equitable access to physiotherapy for this group.

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

Previous research identifies patient perceptions of barriers to physiotherapy to exist across pathways and amongst different professional groups[12]. This review seeks to add depth to this previous work and expand our understanding of barriers to physiotherapy by bringing together perceptions and experiences of HCP. Through a review of qualitative data, we hope to broaden our awareness of how physiotherapy for patients with MHI is perceived across the MDT and the barriers experienced when managing patients with complaints conducive to management through physiotherapy and comorbid MHI.

Strengths and Limitations of this study

Utilising a meta-ethnographic review will enable clear understanding around experiences and perceptions of these factors across physiotherapy pathways. This approach will allow consideration of evidence which can help further current knowledge through the proposal of models, processes or theory[29]. This review is reliant on existing qualitative data to inform findings and may highlight further gaps in the literature which require further investigation or consideration. The meta-ethnography will focus on establishing inferential generalisation and/or theoretical generalisation rather than establishing the representativeness of findings.
It is recognised within our stance and approach that all perspectives are subjective and we are hereby seeking to synthesise multiple subjective perspectives to increase confidence in findings as opposed to identification of a firm truth.

Ethics and Dissemination

Understanding the barriers to physiotherapy for this population will allow us to identify strategies for improving access for this at-risk group; a current research priority within physiotherapy[48]. Findings from this review will be used to inform processes and co-produce models and recommendations to improve access and experience of physiotherapy for patients with co-morbid MHI. To optimise impact of the study, a multifaceted dissemination plan will ensure maximise reach. This will include submission to a peer review journal and presentation at a national or international conference (Physio UK or International Conference of Physiotherapy in Mental Health. Findings will be widely disseminated and used to develop future research via journal publications, conference presentations and sharing of findings with key stakeholders. Due to the review nature of this research, there are no ethical issues identified and ethics approval is not required. All named authors have contributed to the paper meeting all four of the International Committee of Medical Journal Editors' recommendations for authorship[49] and will support dissemination of findings.

Author Contributions

All named authors have contributed to the paper meeting all four of the International Committee of Medical Journal Editors' recommendations for authorship[49]. LH is the guarantor. LH, AS and NH drafted the manuscript with critical revisions from BS and EB. All authors contributed to methodological design including methodological framework consideration, selection criteria, data extraction strategy and extraction criteria. LH developed the search strategy. AS and NH provided methodological input and support. LH, BS and EB

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

provided expertise around physiotherapy and mental health. All authors read, provided feedback and approved the final manuscript.

Funding

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests

none declared

For peer review only

References

1. Firth J, Siddiqi N, Koyanagi A, et al. The Lancet Psychiatry Commission: a blueprint for protecting physical health in people with mental illness. Lancet Psychiatry. 2019 Aug;6(8):675-712. doi: 10.1016/S2215-0366(19)30132-4.

2. Das P, Naylor C, Majeed A. Bringing together physical and mental health within primary care: a new frontier for integrated care. J R Soc Med. 2016 Oct;109(10):364-366. doi: 10.1177/0141076816665270.

3. Bullmore, Edward (2018) *The Inflamed Mind: A Radical New Approach to Depression*. London: Short Books.

4. Kandola A, Ashdown-Franks G, Hendrikse J, Sabiston CM, Stubbs B. Physical activity and depression: Towards understanding the antidepressant mechanisms of physical activity. Neurosci Biobehav Rev. 2019 Dec;107:525-539. doi: 10.1016/j.neubiorev.2019.09.040.

5. Solmi M, Firth J, Miola A, Fornaro M, Frison E, Fusar-Poli P, Dragioti E, Shin JI, Carvalho AF, Stubbs B, Koyanagi A, Kisely S, Correll CU. Disparities in cancer screening in people with mental illness across the world versus the general population: prevalence and comparative meta-analysis including 4 717 839 people. Lancet Psychiatry. 2020 Jan;7(1):52-63. doi: 10.1016/S2215-0366(19)30414-6.

6. Arthritis and Musculoskeletal Alliance. Mental Health and Musculoskeletal Conditions: Report of Roundtable.2019 [online] Available at: <http://arma.uk.net/wp-content/uploads/2019/05/Mental-Health-Roundtable-report.pdf>

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

7. Stubbs B, Vancampfort D, Veronese N, Thompson T, Fornaro M, Schofield P, Solmi M, Mugisha J, Carvalho AF, Koyanagi A. Depression and pain: primary data and meta-analysis among 237 952 people across 47 low- and middle-income countries. Psychol Med. 2017 Dec;47(16):2906-2917. doi: 10.1017/S0033291717001477.

8. Independent Mental Health Taskforce. *The Five Year Forward View for Mental Health* NHS England, 2016. (https://www.england.nhs.uk/wp-content/uploads/2016/02/Mental-Health-Taskforce-FYFV-final.pdf).

9. World Confederation for Physical Therapy (2019) Description of Physiotherapy: Policy Statement [Online] Available at https://world.physio/sites/default/files/2020-07/PS-2019-Description-of-physical-therapy.pdf. Accessed on 19/11/21

10. Andrew E, Briffa K, Waters F, Lee S, Fary R. Physiotherapists' views about providing physiotherapy services to people with severe and persistent mental illness: a mixed methods study. J Physiother. 2019 Oct;65(4):222-229. doi: 10.1016/j.jphys.2019.08.001.

11. Driver C, Kean B, Oprescu F, Lovell GP. Knowledge, behaviors, attitudes and beliefs of physiotherapists towards the use of psychological interventions in physiotherapy practice: a systematic review. Disabil Rehabil. 2017 Nov;39(22):2237-2249. doi: 10.1080/09638288.2016.1223176.

12. Hemmings L, Soundy A. Experiences of physiotherapy in mental health: an interpretative phenomenological analysis of barriers and facilitators to care. Physiotherapy. 2020 Dec;109:94-101. doi: 10.1016/j.physio.2020.01.001.

13. Barker-Davies RM, O'Sullivan O. et al. The Stanford Hall consensus statement for post-COVID-19 rehabilitation. Br J Sports Med. 2020 Aug;54(16):949-959. doi: 10.1136/bjsports-2020-102596.

14. Vindegaard N, Benros ME. COVID-19 pandemic and mental health consequences: Systematic review of the current evidence. *Brain Behav Immun*. 2020;89:531-542. doi:10.1016/j.bbi.2020.05.048

15. Rajkumar RP. COVID-19 and mental health: A review of the existing literature. *Asian J Psychiatr*. 2020;52:102066. doi:10.1016/j.ajp.2020.102066

16. Ettman CK, Abdalla SM, Cohen GH, Sampson L, Vivier PM, Galea S. Prevalence of Depression Symptoms in US Adults Before and During the COVID-19 Pandemic. *JAMA Netw Open.* 2020;3(9):e2019686. doi:10.1001/jamanetworkopen.2020.19686

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

17. Stubbs B, Soundy A, Probst M. et al.Understanding the role of physiotherapists in schizophrenia: an international perspective from members of the International Organisation of Physical Therapists in Mental Health (IOPTMH). J Ment Health. 2014 Jun;23(3):125-9. doi: 10.3109/09638237.2013.869574.

18. Happell B, Scott D, Platania-Phung C. Perceptions of barriers to physical health care for people with serious mental illness: a review of the international literature. Issues Ment Health Nurs. 2012 Nov;33(11):752-61. doi: 10.3109/01612840.2012.708099.

19. Probst, M. . Physiotherapy and Mental Health. In: Suzuki, T. , editor. Clinical Physical Therapy [Internet]. London: IntechOpen; 2017 [cited 2022 Jun 23]. Available from: https://www.intechopen.com/chapters/54472 doi: 10.5772/6759

20. Filipčić I, Šimunović Filipčić I, Grošić V, Bakija I, Šago D, Benjak T, Uglešić B, Bajić Ž, Sartorius N. Patterns of chronic physical multimorbidity in psychiatric and general population. J Psychosom Res. 2018 Nov;114:72-80. doi: 10.1016/j.jpsychores.2018.09.011.

21. Erickson KI, Voss MW, Prakash RS, Basak C, Szabo A, Chaddock L, Kim JS, Heo S, Alves H, White SM, Wojcicki TR, Mailey E, Vieira VJ, Martin SA, Pence BD, Woods JA, McAuley E, Kramer AF. Exercise training increases size of hippocampus and improves memory. Proc Natl Acad Sci U S A. 2011 Feb 15;108(7):3017-22. doi: 10.1073/pnas.1015950108.

22. Herold, F., Muller, P., Gronwald, T. et al,.Dose–Response Matters! – A Perspective on the Exercise Prescription in Exercise–Cognition Research. Frontiers in Psychology. 2019. Front. Psychol., 01 November 2019 | https://doi.org/10.3389/fpsyg.2019.02338

23. Stubbs B, Vancampfort D, Hallgren M et al. EPA guidance on physical activity as a treatment for severe mental illness: a meta-review of the evidence and Position Statement from the European Psychiatric Association (EPA), supported by the International Organization of Physical Therapists in Mental Health (IOPTMH). Eur Psychiatry. 2018 Oct;54:124-144. doi: 10.1016/j.eurpsy.2018.07.004.

24. Decoux M. Acute versus primary care: the health care decision making process for individuals with severe mental illness. Issues Ment Health Nurs. 2005 Nov;26(9):935-51. doi: 10.1080/01612840500248221.

25. Nankivell J, Platania-Phung C, Happell B, Scott D. Access to physical health care for people with serious mental illness: a nursing perspective and a human rights perspective-common ground? Issues Ment Health Nurs. 2013 Jun;34(6):442-50. doi: 10.3109/01612840.2012.754974.

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

26. Hall, A., Watkins, R., Lang, I. *et al.* The experiences of physiotherapists treating people with dementia who fracture their hip. *BMC Geriatr* **17,** 91 (2017). https://doi.org/10.1186/s12877-017-0474-8

27. Lester H, Tritter JQ, Sorohan H. Patients' and health professionals' views on primary care for people with serious mental illness: focus group study. BMJ. 2005 May 14;330(7500):1122. doi: 10.1136/bmj.38440.418426.8F.

28. Mesidor M, Gidugu V, Rogers ES, et al. A qualitative study: barriers and facilitators to health care access for individuals with psychiatric disabilities. Psychiatr Rehabil J. 2011 Spring;34(4):285-294. doi: 10.2975/34.4.2011.285.294.

29. France, E.F., Cunningham, M., Ring, N. *et al.* Improving reporting of meta-ethnography: the eMERGe reporting guidance. *BMC Med Res Methodol* **19,** 25 (2019). https://doi.org/10.1186/s12874-018-0600-0

30. Noblit, G.W. and Hare, R.D. Meta-Ethnography: Synthesizing Qualitative studies. Sage Publications, 1988. Newbury Park. https://doi.org/10.4135/9781412985000

31. Moher, D., Shamseer, L., Clarke, M. *et al.* Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. *Syst Rev* **4,** 1 (2015). https://doi.org/10.1186/2046-4053-4-1

32. Aromataris E, Munn Z. Chapter 1: JBI Systematic Reviews. In: Aromataris E, Munn Z (Editors). *JBI Manual for Evidence Synthesis.* JBI, 2020. Available from https://synthesismanual.jbi.global.. https://doi.org/10.46658/JBIMES-20-02

33. Mays N, Pope C. Qualitative research in health care. Assessing quality in qualitative research. *BMJ*. 2000;320(7226):50-52. doi:10.1136/bmj.320.7226.50

34. Duncan EAS, Nicol MM. Subtle Realism and Occupational Therapy: An Alternative Approach to Knowledge Generation and Evaluation. *British Journal of Occupational Therapy*. 2004;67(10):453-456. doi:10.1177/030802260406701006

35. Lockwood C, Porrit K, Munn Z, Rittenmeyer L, Salmond S, Bjerrum M, Loveday H, Carrier J, Stannard D. Chapter 2: Systematic reviews of qualitative evidence. In: Aromataris E, Munn Z (Editors). *JBI Manual for Evidence Synthesis.* JBI, 2020. Available from https://synthesismanual.jbi.global. https://doi.org/10.46658/JBIMES-20-03

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

36. Cooke A, Smith D, Booth A. Beyond PICO: the SPIDER tool for qualitative evidence synthesis. Qual Health Res. 2012 Oct;22(10):1435-43. doi: 10.1177/1049732312452938.

37. Quirk, H., Crank, H., Harrop, D. *et al.* Understanding the experience of initiating community-based physical activity and social support by people with serious mental illness: a systematic review using a meta-ethnographic approach. *Syst Rev* **6,** 214 (2017). https://doi.org/10.1186/s13643-017-0596-2

38. Bramer, W.M., Rethlefsen, M.L., Kleijnen, J. *et al.* Optimal database combinations for literature searches in systematic reviews: a prospective exploratory study. *Syst Rev* **6,** 245 (2017). https://doi.org/10.1186/s13643-017-0644-y

39. Booth, A., Sutton, A. and Papaioannou, D., 2016. *Systematic approaches to a successful literature review*. Los Angeles: SAGE.

40. Haddaway NR, Collins AM, Coughlin D, Kirk S. The Role of Google Scholar in Evidence Reviews and Its Applicability to Grey Literature Searching. PLOS ONE 2015. 10(9): e0138237. https://doi.org/10.1371/journal.pone.0138237

41. Joanna Briggs Institute, The Joanna Briggs Institute Critical Appraisal tools for use in JBI Systematic Reviews: Checklist for Qualitative Research. Online. Available at [http://joannabriggs.org/research/critical-appraisal-tools.html]

42. Hannes K, Lockwood C, Pearson A. A comparative analysis of three online appraisal instruments' ability to assess validity in qualitative research. Qual Health Res. 2010 Dec;20(12):1736-43. doi: 10.1177/1049732310378656.

43. Thomas, J., Harden, A. Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Med Res Methodol* **8,** 45 2008. https://doi.org/10.1186/1471-2288-8-45

44. Sattar, R., Lawton, R., Panagioti, M. *et al.* Meta-ethnography in healthcare research: a guide to using a meta-ethnographic approach for literature synthesis. *BMC Health Serv Res* **21,** 50 (2021). https://doi.org/10.1186/s12913-020-06049-w

45. Lewin, S., Bohren, M., Rashidian, A. *et al.* Applying GRADE-CERQual to qualitative evidence synthesis findings—paper 2: how to make an overall CERQual assessment of confidence and create a Summary of Qualitative Findings table. *Implementation Sci* **13,** 10 (2018). https://doi.org/10.1186/s13012-017-0689-2

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

46. Stubbs B, Vancampfort D, Smith L, Rosenbaum S, Schuch F, Firth J. Physical activity and mental health. Lancet Psychiatry. 2018 Nov;5(11):873. doi: 10.1016/S2215-0366(18)30343-2.

47. Chartered Society of Physiotherapists (2008) Recovering Mind and Body. London: The Chartered Society of Physiotherapists

48. Rankin G, Summers R, Cowan K, et al.; James Lind Alliance (JLA) Physiotherapy Priority Setting Partnership (PSP) Steering Group. Identifying Priorities for Physiotherapy Research in the UK: the James Lind Alliance Physiotherapy Priority Setting Partnership. Physiotherapy. 2020 Jun;107:161-168. doi: 10.1016/j.physio.2019.07.006.

49. Uniform requirements for manuscripts submitted to biomedical journals: Writing and editing for biomedical publication. *J Pharmacol Pharmacother*. 2010;1(1):42-58.

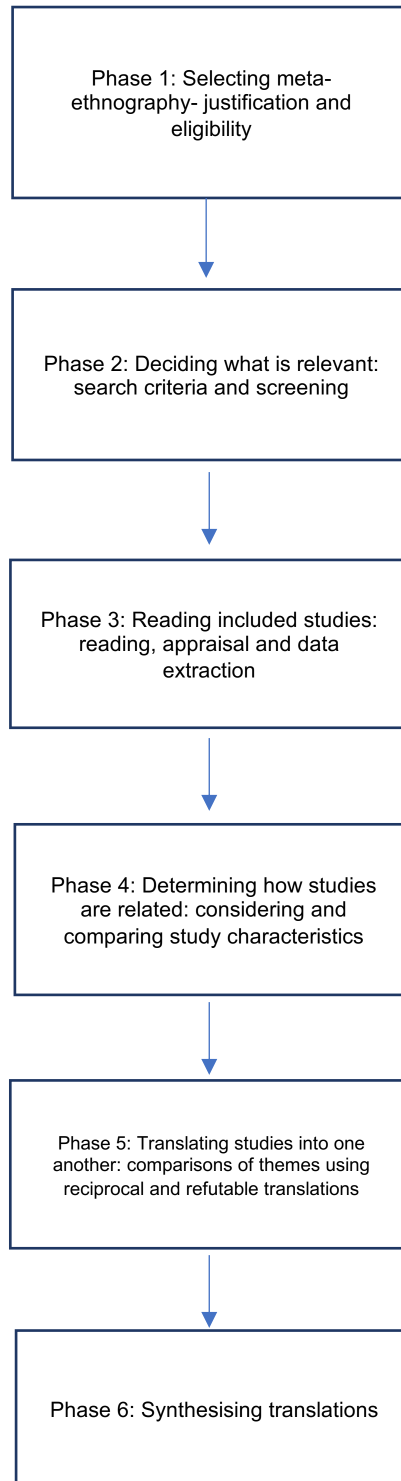
Figure Captions

Figure 1: Meta-ethnography six-stage process adapted from France et al[29].

For peer review only

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

#	Query	Results from 20 Jun 2022
1	physiotherap*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]	26,089
2	Physical Therapy Specialty/	2,957
3	Exercise Therapy/	46,670
4	Allied Health Personnel/	12,711
5	"Attitude of Health Personnel"/	129,598
6	experience*.mp.	1,083,040
7	perception*.mp.	448,724
8	perspective*.mp.	321,326
9	confidence.mp.	551,316
10	Qualitative Research/	74,539
11	narrative.mp.	45,127
12	grounded theory/	2,446
13	ethnography.mp.	3,385
14	phenomenology.mp.	8,399
15	thematic analysis.mp.	24,611
16	Health Knowledge, Attitudes, Practice/	123,669
17	Mental Health/	53,586
18	Mental Disorders/	173,654
19	psychiatric illness.mp.	6,482
20	Anxiety/	98,679
21	Depression/	141,467
22	Schizophrenia/	108,195
23	Bipolar Disorder/	43,800
24	Psychological Distress/	3,310
25	Dementia/	58,346
26	Mood Disorders/	15,530
27	Psychotic Disorders/	50,405
28	Physical Therapists/	2,737
29	Physical Therapy Modalities/	39,584
30	physical therap*.mp.	56,540
31	Attitude/	51,826
32	qualitative.mp.	256,930
33	theme.mp.	23,212
34	mental health.mp.	205,950
35	mental illness.mp.	29,049

For peer review only

36	1 or 2 or 3 or 4 or 28 or 29 or 30	123,528
37	10 or 11 or 12 or 13 or 14 or 15 or 32 or 33	327,920
38	5 or 6 or 7 or 8 or 9 or 16 or 31	2,412,538
39	17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 34 or 35	720,685
40	36 and 37 and 38 and 39	212

Final search terms across four facets:

Physiotherap*.mp. OR Physical Therapy Specialty/ OR Exercise Therapy/ OR Allied Health Personnel/ Physical Therapists/ OR Physical Therapy Modalities/ OR physical therap*.mp.

AND

"Attitude of Health Personnel"/ OR experience*.mp. OR perception*.mp. OR perspective*.mp. OR confidence.mp. OR Attitude/ OR Health Knowledge, Attitudes, Practice/

AND

Qualitative Research/ OR narrative.mp. OR grounded theory/ OR ethnography.mp. OR phenomenology.mp. OR thematic analysis.mp. OR qualitative.mp. OR theme.mp.

AND

Mental Health/ OR Mental Disorders/ OR psychiatric illness.mp. OR Anxiety/ OR Depression/ OR Schizophrenia/ OR Bipolar Disorder/ OR Psychological Distress/ OR Dementia/ OR Mood Disorders/ OR Psychotic Disorders/ OR mental health.mp. OR mental illness.mp.

For peer review only

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Appendix 2: Search database strategies for all databases to be used

Pubmed: 1,780

Limiters: none

(((((("Depression"[Mesh]) OR "Anxiety"[Mesh]) OR "Psychotic Disorders"[Mesh]) OR "Bipolar Disorder"[Mesh]) OR "Mental Disorders"[Mesh]) OR "Mental Health"[Mesh]) OR "Psychological Distress"[Mesh]) OR "Schizophrenia Spectrum and Other Psychotic Disorders"[Mesh]) OR "Dementia"[Mesh]) OR ‘’Mental Disorders’’) OR “Schizophren*”)

AND

((((Physiotherap* OR physical therap* OR “Allied health personnel”[Mesh] OR “physical therapy modalities”[Mesh] OR “physical health speciality” OR “exercise therapy”)

AND

((((((“Attitude*”) OR “Perception*”) OR “Experience*”) OR “Perspective*”) OR “Confidence”) OR “Attitude of health personnel”[Mesh])

AND

(((((((“Qualitative”) OR “narrative”) OR “grounded theory”) OR “phenomenology”) OR “ethnography”) OR “thematic analysis”) OR theme)

CINAHL Plus:

Limiters: none
Expanders - Apply equivalent subjects
Search modes - Boolean/Phrase

(MH "Mental Disorders/ED/PF/RH/TH") OR "(((((((("Depression"/) OR "Anxiety"/) OR "Psychotic Disorders"/) OR "Bipolar Disorder"/) OR "Mental Disorders"/) OR "Mental Health"/) OR "Psychological Distress"/) OR "Schizophrenia Spectrum and Other Psychotic Disorders"/) OR "Dementia"/) OR ‘’Mental Disorders’’) OR “Schizophren*”))

AND (Physiotherap* OR physical therap* OR “Allied health professional” OR “allied health personnel” “physical therapy modalities/ OR “exercise therapy”)

AND (“Attitude*” OR “Perception*” OR “Experience*” OR “Perspective*” OR “Confidence” OR “Attitude of health personnel”/)

For peer review only

AND (Qualitative” OR “narrative” OR “grounded theory” OR “phenomenology” OR “ethnography" OR “thematic analysis” OR themes)"

Medline:

Limiters: none

(physiotherap*.mp. OR Physical Therapy Specialty/ OR Exercise Therapy/ OR Allied Health Personnel/ Physical Therapists/ OR Physical Therapy Modalities/ OR physical therap*.mp.

AND

"Attitude of Health Personnel"/ OR experience*.mp. OR perception*.mp. OR perspective*.mp. OR confidence.mp. OR Attitude/ OR Health Knowledge, Attitudes, Practice/

AND

Qualitative Research/ OR narrative.mp. OR grounded theory/ OR ethnography.mp. OR phenomenology.mp. OR thematic analysis.mp. OR qualitative.mp. OR theme.mp.

AND

Mental Health/ OR Mental Disorders/ OR psychiatric illness.mp. OR Anxiety/ OR Depression/ OR Schizophrenia/ OR Bipolar Disorder/ OR Psychological Distress/ OR Dementia/ OR Mood Disorders/ OR Psychotic Disorders/ OR mental health.mp. OR mental illness.mp.).af

Psychinfo:

Limiters: none

(physiotherap*.mp. OR Physical Therapy Specialty/ OR Exercise Therapy/ OR Allied Health Personnel/ Physical Therapists/ OR Physical Therapy Modalities/ OR physical therap*.mp.

AND

"Attitude of Health Personnel"/ OR experience*.mp. OR perception*.mp. OR perspective*.mp. OR confidence.mp. OR Attitude/ OR Health Knowledge, Attitudes, Practice/

AND

Qualitative Research/ OR narrative.mp. OR grounded theory/ OR ethnography.mp. OR phenomenology.mp. OR thematic analysis.mp. OR qualitative.mp. OR theme.mp.

For peer review only

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

AND

Mental Health/ OR Mental Disorders/ OR psychiatric illness.mp. OR Anxiety/ OR Depression/ OR Schizophrenia/ OR Bipolar Disorder/ OR Psychological Distress/ OR Dementia/ OR Mood Disorders/ OR Psychotic Disorders/ OR mental health.mp. OR mental illness.mp.).

Embase:

((physiotherap* mp or Physical Therapy Specialty or Exercise Therapy or Allied Health Personnel or Physical Therapists or Physical Therapy Modalities or physical therap*) and ("Attitude of Health Personnel" or experience* or perception* or perspective* or confidence or Attitude or Health Knowledge, Attitudes, Practice) and (Qualitative Research or narrative or grounded theory or ethnography or phenomenology or thematic analysis or qualitative or theme) and (Mental Health or Mental Disorders or psychiatric illness or Anxiety or Depression or Schizophrenia or Bipolar Disorder or Psychological Distress or Dementia or Mood Disorders or Psychotic Disorders or mental health or mental illness)).af.

Google scholar:

(physiotherapy* OR physical therap*) AND experience OR perception OR confidence OR Attitude AND (Qualitative Research) AND (Mental Health OR Mental Disorders)

Science direct:

(physiotherapy OR physical therapy) AND experience OR perception OR confidence OR Attitude AND (Qualitative Research) AND (Mental Health OR Mental Disorders)

PROQuest:

noft(physiotherap* OR Physical Therapy Specialty OR Exercise Therapy OR Allied Health Personnel OR Physical Therapists OR Physical Therapy Modalities OR physical therap*) AND noft(experience* OR perception* OR perspective* OR confidence OR Attitude OR Health Knowledge, Attitudes, Practice) AND noft(Qualitative Research OR narrative OR grounded theory OR ethnography OR phenomenology OR thematic analysis OR qualitative or theme) AND noft(Mental Disorders OR psychiatric illness OR Anxiety OR Depression OR Schizophrenia OR Bipolar Disorder OR Psychological Distress OR Dementia OR Mood Disorders OR Psychotic Disorders OR mental health OR mental illness)

For peer review only

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Dear Editor(s) and reviewers,

Thank you for your reviews and comments on our article. We have considered these carefully and responded below. I hope we have addressed your comments to a satisfactory standard and feel that these have been greatly constructive and supported the development of this protocol.

Editor(s)' Comments to Author and responses:

1. Please include the PROSPERO registration number in the relevant section of your abstract.
Thank you for highlighting this as missing- this has now been updated to include.
2. Please update your ethics statement in the 'Ethics and Dissemination' section in the main text to explicitly state that ethics approval was not required.
This has now been done.
3. Please include the planned search dates in the abstract.
This has been edited to include search dates of July 2022
4. Please ensure that you have highlighted the key methodological limitations of the study in the 'Strengths and limitations of this study' section.
This has now been expanded upon with addition of the following:

- Qualitative synthesis and meta-ethnographies solely explore previous qualitative literature and therefore any quantitative findings will not be included within the synthesis which may present a gap in findings.
- The meta-ethnography will focus on establishing inferential generalisation and/or theoretical generalisation rather than establishing the representativeness of findings.
- It is recognised within our stance and approach that all perspectives are subjective and we are hereby seeking to synthesise multiple subjective perspectives to increase confidence in findings as opposed to identification of a firm truth.

5. Please include, as a supplementary file, the precise, full search strategy (or strategies) for all databases, registers and websites, including any filters and limits used.
This is now available as a supplementary file.

Reviewer 1 comments and responses:

Abstract:

In abstract (page 2, line 9) you write that physiotherapy has a central role in prevention of mental health complaints. I have never heard this before, and please refine the sentence, unless you provide references for this claim.
Thank you for this comment which has now been re-considered and replaced with 'Physiotherapeutic interventions, such as exercise, have a central role in prevention of physical and mental health complaints and in aiding rehabilitation for patients with mental health illness.'

For peer review only

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

We hope this provides further clarification around the particular emphasis of the physiotherapist's role in prescribing exercise which is found to have a role in prevention and treatment of mental health alongside the more accepted roles of the physiotherapist in preventing and treating physical health needs. This is referenced within the main body of text however not referenced here due to being part of the abstract.

In several sentences you refer to 'negative experiences' (page 2, line 10) -Negative experiences of what? Whose negative experiences do you mean?

Page 2 line 10 has now been edited to read: 'However, poor accessibility and negative experiences of healthcare services for those with mental illness have been consistently observed within literature with recent research identifying poor experiences of physiotherapeutic interactions and processes such as referrals and discharges.'

We now feel the sentence has a better structure to support the clarity of the person for whom the negative experience is a factor and clarifies what the negative experience refers to. Thank you for this comment. We have also considered this within the text and ensured more clarity by stating 'negative experience of healthcare/physiotherapy'.

The title could be refined, eg why use the concept "managing patients", when it is more about the perceptions of health care professionals?

Thank you very much for this comment as this is an important point and has been considered in depth. The title has been changed to address this and to reflect the focus of the study to a greater extent and allow exploration beyond 'management'. The title now reads: **'Healthcare Professionals' Perceptions and Experiences of Physiotherapy for people with mental illness: A protocol for a systematic review and meta-ethnography'**

The keywords: I wonder why you use 'back pain', as it was not mentioned as such in the text? And why did you not include physiotherapy?:

These may have differed across locations as within the main text submission (page 2, line 43) the keywords read as follows: Keywords: physiotherapy, mental health, holistic, integrated care, comorbidities. Within the online submission, keywords are chosen from selected options of which physiotherapy is not one but back pain is- back pain was therefore chosen within this selection due to being deemed most fitting from the options.

Could 'metaethnographic review' be replaced with 'metaethnographic synthesis' or 'metaethnography', as the speciality of this review type is to synthesise existing knowledge (and not solely to summarise data) (page 3, line 4)

This has now been edited to 'meta-ethnography' where identified within article and also within abstract under 'methods and analysis'.

Whether the synthesis will 'enable a clear understanding' (page 3, line 4) is unclear and may be challenging considering the complexity of the topic.

The line in question has now been edited to read as follows:

For peer review only

Utilising a meta-ethnography will enable consolidation of knowledge and an ability to provide clarity through synthesis of original data exploring experience and perceptions of HCPs.

'Physiotherapy pathways' was interesting, as those with mental ill health are usually considered in relation to their 'care pathways' -perhaps this wording could be exchanged with a more precise wording? (page 3, line 5)

Thank you for this comment. We no longer refer to physiotherapy pathways here but simply physiotherapy services throughout as within above sentence.

I wonder, whether it would help the article to choose a clear definition of physiotherapy, if such exists?
The question of 'professional speciality' (page 3, line 35) remained unclear to me in relation to physiotherapy?

Reference to the definition of physiotherapy is now integrated using a description from WCPT regarding this and I have developed upon the sentence referring to professional specialty to include reference to respiratory, neurological, musculoskeletal areas of practice. These lines now read as follows:

'Integration of these complex needs is called upon, globally, across physiotherapy services[9-12] with recognition of a role in promoting quality of life and movement potential encompassing physical, psychological, social and emotional wellbeing [9]. Due to respiratory, neurological and musculoskeletal comorbidities being of high prevalence for those with mental illness, there is also a growing acceptance that physiotherapists will work with this patient group irrespective of professional speciality [12].'

Is there more evidence re. negative experience of physio?
To the best of our knowledge, this is the only UK based research highlighting negative experience of physiotherapy from a patient perspective. However findings support literature focusing on this populations' experiences of physical health care (e.g: Happel et al, 2012 [18]) which is discussed later within this section.

As to the goal of the synthesis, is it for developing a model, process or theory? (page 3, line 8) -in comparison with the goal of the reviews (page 4, line 56-58 and page 5, objective 4 line 14-15) -these should be in line. See page 4, line 39-44, as the goal-setting seems to differ? And page 5, line 47-48? and also page 10, line 4)

Thank you for this comment and identification around some lack of consistency. This has now been edited across the text to focus on models and processes.

What is MDT? (page 3, 47; page 9, line 52) Please spell out the first time.
Thank you for highlighting- this has now been corrected and written in full.

'decreased compliance' (page 4, line 10) in relation to what?
This has been edited to read 'reduced adherence to treatment'

'exacerbated symptoms' (page 4, line 10) -what kind, or in relation to what?
This has now been expanded upon within the text to read 'exacerbated symptoms of both physical and mental illness'

Empowerment (page 4, line 35) , please see the contrast to negative experiences on line 7-8 on same page?
I believe this contrast is apparent as on line 35 we are describing a facilitator as opposed to on line 7-8 where we introduce barriers. I.e: Poor access and negative experience of physiotherapy have been reported [12] however a facilitator to physical health care has been identified as patient empowerment [24, 27].

Stigma in society, among HCP's or among patients? (page 4, line 30)
Edited within text for clarity to read:

'barriers identified include poor awareness, negative attitudes and ongoing stigma within society and healthcare towards mental health[18, 24, 26].'

The methods and analysis:
The public involvement was very positive ☺

Thank you for this comment- we have a wonderful PCPI group who support our work and help ensure we are completing work which can have positive impact where it is needed.

For the Spider tool (page 5, line 54-55), could you say a little more of your choices?
Thank you for this comment- we have developed upon this with consideration of your further comments, with steps taken as follows:

Opening and justification for Spider tool edited to read as: The SPIDER concept tool[34] has been used to develop eligibility criteria, where S is sample, Pi is phenomenon of interest, D is design, E is evaluation and R is Research types, due to its relevance for studies considering qualitative data sets [34].

Specific elements within the Spider tool have been considered and further justification provided as per below:

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

The inclusion criteria of solely management may hazard the success of the project (page 6, line 6), since presumably more HCP's are working with mental ill health – this has now been edited along with the title to focus on broader perception of physiotherapy for people with mental illness as opposed to experience of management alone.

In regard to the phenomenon of interest, I wonder why you did not include psychodynamic physiotherapy, which has shown promise? Eg Mikko Patovirta in Finland is doing research and clinical physiotherapy with this perspective. Perhaps the physiotherapists have a different role in different countries? – Thank you for this comment- this has now been edited as not to exclude interventions such as psychodynamic physiotherapy as, like you say above, treatment approaches are likely to vary across countries and not considering these approaches which may not be common in UK, may limit findings. The text now reads:
'Due to potential differences in treatment approaches across countries, all physiotherapeutic input and interventions will be considered including psychodynamic physiotherapeutic approaches and body awareness techniques. However, interventions must be delivered by a physiotherapist to be included. Studies exploring experiences involving non-physiotherapeutic interventions or those not delivered by a physiotherapist will be excluded. '

In 'Evaluation' (page 6, line 35-40) I wonder what the surveys mean here, because those are not generally qualitative methods? Or will you use data collection on survey data with open-ended response boxes? This has been edited for clarity to read that open responses only will be identified from surveys.

In 'search strategy' (page 7) I ask, whether you would also use MesH terms?

MeSH terms will also be used- the search criteria and pilot search have been edited to include these and the introduction to search strategy also edited to provide information on this. This now reads:

'MesH terms (/) will be searched for alongside keywords in title and abstract fields with Boolean operators AND or OR and truncation (*).'

Page 9, line 23: I wonder whether you ca use this wording on cumulative evidence, since a synthesis is not summarizing data. – Edited to 'confidence in synthesised evidence'

The list of references should be carefully written for empty spaces, dots, and writing the references in exactly the right style. There were many various forms of writing. Also some references seemed to miss a part of the reference: 12, 13, 17, 19, 35

These have now all been edited within the text with additional references also added due to edits made:

For peer review only

33. Mays N, Pope C. Qualitative research in health care. Assessing quality in qualitative research. *BMJ*. 2000;320(7226):50-52. doi:10.1136/bmj.320.7226.50

34. Duncan EAS, Nicol MM. Subtle Realism and Occupational Therapy: An Alternative Approach to Knowledge Generation and Evaluation. *British Journal of Occupational Therapy*. 2004;67(10):453-456. doi:10.1177/030802260406701006

38. Bramer, W.M., Rethlefsen, M.L., Kleijnen, J. *et al.* Optimal database combinations for literature searches in systematic reviews: a prospective exploratory study. *Syst Rev* **6,** 245 (2017). https://doi.org/10.1186/s13643-017-0644-y

Reviewer 2 comments and responses:

Overall, the protocol is well articulated, and I am satisfied in relation to rigour in the proposed methodology. A few minor comments are included below, most of which are semantics related, and some grammar issues. (Please note page numbers listed below are the page numbers listed on top of the pages, e.g. "Page 1 of 22". Thank you for this comment and for your constructive review which we have responded to within text and below.

Page 3 Line 47: Articulate what you mean by 'MDT' - assuming you mean multi-disciplinary teams, you may also wish to elaborate on your discussion of what sort of multi-disciplinary teams are needed by providing specific examples of allied health services and how they interact. – Thank you for identifying this- we have now written this out in full. With consideration around further explanation regarding MDT working, this is mentioned with the line 'Achieving optimal integrated physical and mental health care requires a multi-disciplinary approach[17,18] with communication and referrals between different professionals; something perceived by patients to be lacking within physiotherapy services[12]'. We have also added: 'The importance of integrating physiotherapists and other allied health professionals into mental health MDTs is recognised within literature [1]. Understanding of HCP experiences and perceptions will help identify recommendations to drive integration in clinical practice' for further exploration around MDT working in MH.

P3 Line 60 - "also has" (not have)- Due to consideration of a collective noun 'professional group', I feel this could be either have or has. I have kept this as 'have' at present for consistency across the text.

Page 5
Line 10 - provide examples of rehabilitation outcomes which are reduced due to barriers-

For peer review only

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

This sentence has been edited to read: 'Barriers to access and experience have been linked with decreased adherence to treatment and exacerbated symptoms of both physical and mental illness[12]' as this is more concise and accurate.

Line 18 - pre-mature discharge: please explain whether discharge is due to under-servicing by healthcare professionals, or patient non-compliance? – edited within text to add clarity. This now reads: 'Perceived, potentially misunderstood, lack of patient motivation or adherence leading to premature discharge from physiotherapy[12]'

Line 46 - Explain what you mean by holistic physio services and what exactly they entail / how they are different to other more siloed physio services. – edited within text to read; 'This understanding will enable development of further research and recommendations to promote access to integrated physiotherapy services where staff are able to consider symptoms of both physical and mental health in a holistic manner, rather than delivering a siloed care approach. It is hoped that this, in turn, will optimise healthcare outcomes for patients presenting with co-morbid physiotherapeutic need and MHI.'

Line 56 - "to achieve this" - do you mean achieve this goal? – This has now been edited to 'achieve this aim'

Page 6
Line 21 - Under PCPI, please include further details on who was involved; their demographic information, expertise area (including lived experience expertise etc.). In this section, also provide further details of the scope and extent of focus groups (e.g. how Many; key discussion prompts etc.) – Further details and some information regarding demographics now provided. Due to word count and relevance, further details such as specific prompts has not been included in the text but can be made available on request.

Line 45 - please further explain your epistemological position, why it was chosen + provide appropriate reference –

Expanded within text as below:

A subtle realist believes an external reality exists (objective ontology) but is understood from the perspective of individuals involved (subjective epistemology). One important part of this world view is that it attempts to represent a common reality rather than obtain 'a single truth' [33]. This meta-ethnography with seek to identify common realities within first and second construct data across studies, finding common ground across the data analysed [34]. A meta-ethnography approach also allows for theory development through consideration of the original data across studies[29] as opposed to simply aggregation of themes from eligible studies[33].

Lines 48 - 49 : the reference (33 - JBI) is a bit unclear - which chapter are you alluding to?

For peer review only

This reference is specifically linking to chapter 2 and this has therefore now been updated within the reference list.

Additionally, please explain what you mean by 'first, second, third' order data in the methods section.

Thank you for this comment- this has now been explained within text to read as follows:
The review will follow a subtle-realist meta-ethnography approach with both first order data (original comments and quotes) and second order data (author interpretations and themes) being collated and third order data (synthesis team interpretations) constructed.

Page 8

Lines 17-19: In the search terms for illness, have you considered other terms such as anxiety, PTSD? Is 'distress' also applicable? Or are you only wanting to keep the scope to clinically diagnosed conditions. Either way, please clarify. – anxiety and psychological distress have been added within search terms- thank you for this constructive comment. We have also now included MesH tems to further expand search terms

Line 22 - What about including other search terms such as 'ethnography', 'thematic analysis'. You may even wish to include 'themes' as a search term, combining with OR.

Thank you for these suggestions which have now been edited and the pilot search re-run to include these recommendations.

Page 9

Line 60: change "differentiating" to "differentiates"-
This has instead been edited to ‘hereby differentiating’ for clarity and sense

Page 10

Line 38: change "who" to "which" and change "experience" to "experiences" – Thank you for this comment which has caused some consideration and discussion. Due to the reference to ‘this population’ which is a group of people, I feel the use of ‘who’ and ‘experience’ to be best placed in this case and have therefore not changed at present.

Further edits made within text:

Changing of term mental health illness to mental illness due to being a preferred term

No longer using NICE evidence search as this has been closed.

Thank you again for these comments- I hope you find the responses and edits satisfactory.

Kind regards,

Laura

For peer review only

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

PRISMA P Checklist

Moher D, Shamseer L, Clarke M, Ghersi D, Liberati A, Petticrew M, Shekelle P, Stewart LA. Preferred Reporting Items for Systematic Review and Meta-Analysis Protocols (PRISMA-P) 2015 statement. Syst Rev. 2015;4(1):1.

		Reporting Item	Page Number
Title			
Identification	#1a	Identify the report as a protocol of a systematic review	1
Update	#1b	If the protocol is for an update of a previous systematic review, identify as such	n/a
Registration			
	#2	If registered, provide the name of the registry (such as PROSPERO) and registration number	2
Authors			
Contact	#3a	Provide name, institutional affiliation, e-mail address of all protocol authors; provide physical mailing address of corresponding author	1
Contribution	#3b	Describe contributions of protocol authors and identify the guarantor of the review	11
Amendments			
	#4	If the protocol represents an amendment of a previously completed or published protocol, identify as such and list changes; otherwise, state plan for documenting important protocol amendments	n/a
Support			
Sources	#5a	Indicate sources of financial or other support for the review	12
Sponsor	#5b	Provide name for the review funder and / or sponsor	n/a
Role of sponsor or funder	#5c	Describe roles of funder(s), sponsor(s), and / or institution(s), if any, in developing the protocol	n/a
Introduction			

For peer review only

BMJ Open: first published as 10.1136/bmjopen-2022-061227 on 24 August 2022. Downloaded from http://bmjopen.bmj.com/ on October 30, 2023 by guest. Protected by copyright.

Rationale	#6	Describe the rationale for the review in the context of what is already known	3&4
Objectives	#7	Provide an explicit statement of the question(s) the review will address with reference to participants, interventions, comparators, and outcomes (PICO)	5
Methods			
Eligibility criteria	#8	Specify the study characteristics (such as PICO, study design, setting, time frame) and report characteristics (such as years considered, language, publication status) to be used as criteria for eligibility for the review	6
Information sources	#9	Describe all intended information sources (such as electronic databases, contact with study authors, trial registers or other grey literature sources) with planned dates of coverage	8
Search strategy	#10	Present draft of search strategy to be used for at least one electronic database, including planned limits, such that it could be repeated	8
Study records - data management	#11a	Describe the mechanism(s) that will be used to manage records and data throughout the review	9
Study records - selection process	#11b	State the process that will be used for selecting studies (such as two independent reviewers) through each phase of the review (that is, screening, eligibility and inclusion in meta-analysis)	9&10
Study records - data collection process	#11c	Describe planned method of extracting data from reports (such as piloting forms, done independently, in duplicate), any processes for obtaining and confirming data from investigators	9&10
Data items	#12	List and define all variables for which data will be sought (such as PICO items, funding sources), any pre-planned data assumptions and simplifications	7&8
Outcomes and prioritization	#13	List and define all outcomes for which data will be sought, including prioritization of main and additional outcomes, with rationale	9

BMJ Open: first published as 10.1136/bmjopen-2022-061227 on 24 August 2022. Downloaded from http://bmjopen.bmj.com/ on October 30, 2023 by guest. Protected by copyright.

Risk of bias in individual studies	#14	Describe anticipated methods for assessing risk of bias of individual studies, including whether this will be done at the outcome or study level, or both; state how this information will be used in data synthesis	9&10
Data synthesis	#15a	Describe criteria under which study data will be quantitatively synthesised	n/a
Data synthesis	#15b	If data are appropriate for quantitative synthesis, describe planned summary measures, methods of handling data and methods of combining data from studies, including any planned exploration of consistency (such as I2, Kendall's τ)	n/a
Data synthesis	#15c	Describe any proposed additional analyses (such as sensitivity or subgroup analyses, meta-regression)	10
Data synthesis	#15d	If quantitative synthesis is not appropriate, describe the type of summary planned	9&10
Meta-bias(es)	#16	Specify any planned assessment of meta-bias(es) (such as publication bias across studies, selective reporting within studies)	n/a
Confidence in cumulative evidence	#17	Describe how the strength of the body of evidence will be assessed (such as GRADE)	10

None The PRISMA-P elaboration and explanation paper is distributed under the terms of the Creative Commons Attribution License CC-BY. This checklist can be completed online using https://www.goodreports.org/, a tool made by the EQUATOR Network in collaboration with Penelope.ai

For peer review only

BMJ Open: first published as 10.1136/bmjopen-2022-061227 on 24 August 2022. Downloaded from http://bmjopen.bmj.com/ on October 30, 2023 by guest. Protected by copyright.

BMJ Open

Healthcare Professionals Perceptions and Experiences of Physiotherapy for people with mental illness: A protocol for a systematic review and meta-ethnography

Journal:	*BMJ Open*
Manuscript ID	bmjopen-2022-061227.R2
Article Type:	Protocol
Date Submitted by the Author:	01-Aug-2022
Complete List of Authors:	Hemmings, Laura; University of Birmingham Heneghan, Nicola; University of Birmingham, School of Sport, Exercise and Rehabilitation Sciences Byrd, Erin; Ulster University Stubbs, B; King's College London Soundy, Andrew; University of Birmingham
Primary Subject Heading:	Mental health
Secondary Subject Heading:	Patient-centred medicine, Qualitative research, Rehabilitation medicine, Research methods
Keywords:	MENTAL HEALTH, Musculoskeletal disorders < ORTHOPAEDIC & TRAUMA SURGERY, PAIN MANAGEMENT, PSYCHIATRY, REHABILITATION MEDICINE

SCHOLARONE™
Manuscripts

BMJ Open: first published as 10.1136/bmjopen-2022-061227 on 24 August 2022. Downloaded from http://bmjopen.bmj.com/ on October 30, 2023 by guest. Protected by copyright.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Healthcare Professionals Perceptions and Experiences of Physiotherapy for people with mental illness – A protocol for a systematic review and meta-ethnography

Hemmings, L[1], Heneghan, NR[1], Byrd, E[2], Stubbs, B[3], Soundy, A[1]

Author affiliations
[1] School of sport exercise and rehabilitation sciences, University of Birmingham, Edgbaston, B15 2TT
[2]Faculty of Life and Health Sciences, Ulster University, Londonderry, BT48 7JL
[3]Kings College London, Strand, London WC2R 2LS

Hemmings, L
Assistant Professor in physiotherapy

Heneghan, NR
Honorary senior lecturer

Byrd, E
Lecturer in sport and public health

Stubbs, B
Senior clinical lecturer

Soundy, A
Lecturer in physiotherapy

Correspondence to Laura Hemmings at L.hemmings@bham.ac.uk

Keywords: physiotherapy, mental health, holistic, integrated care, comorbidities

Wordcount: 3304

For peer review only

Abstract

Introduction: There is a high global prevalence of patients presenting with physical and mental health co-morbidities. Physiotherapeutic interventions, such as exercise, can have positive benefits for physical and mental health. However, poor accessibility and negative experiences of healthcare services for those with mental illness have been consistently observed within literature with recent research identifying poor experiences of physiotherapeutic interactions and processes such as referrals and discharges. One way to help improve physiotherapy services for this population is to understand the personal experiences and perceptions of healthcare professionals (HCP) towards physiotherapy for patients with mental illness (MI). Qualitative based evidence syntheses are suited to bring this data together with the aim of improving physiotherapy services for patients with MI. This review will systematically search and synthesise existing evidence around HCP experiences and perceptions of physiotherapy for people with MI.

Methods and analysis: A systematic search and six-phase meta-ethnography will be undertaken. A comprehensive search of electronic databases (CINAHL plus, Medline, Pubmed, Embase and Psychinfo) and search engines as well as grey literature (unpublished primary research such as theses) will be completed. Searches are planned to take place in July 2022. Eligibility criteria include; (a)qualitative data, (b)perceptions identified from HCP, including physiotherapists, assistants and HCP referring into physiotherapy, about physiotherapy for patients with MI, and (c)are primary studies.

Ethics and Dissemination: This work is exempt from requiring ethical approval due to review methodology with data accessed from published works. This systematic review is expected to provide insight into experiences and perceptions of HCP around benefits and barriers to accessing physiotherapy for patients with mental health illness. Findings will be used to inform further research and co-develop recommendations to overcome barriers and optimise facilitators to care for this population. Findings will be disseminated via peer-reviewed journal, conference presentations and to key stakeholder groups.

Registration

In accordance with guidelines, this systematic review is registered with the International Prospective Register of Systematic Reviews (PROSPERO) as of [24th November 2021].
Registration number: CRD42021293035

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Article summary

Strengths and limitations of this study:

- Protocol for a meta-ethnography to develop understanding of HCP perceptions of benefits and barriers to physiotherapy for patients with mental health illness using a comprehensive search strategy informed by pilot scoping of MEDLINE database.
- Utilising a meta-ethnography will enable consolidation of knowledge and an ability to provide clarity through synthesis of original data exploring experience and perceptions of HCPs.
- Qualitative synthesis and meta-ethnographies solely explore previous qualitative literature and therefore any quantitative findings will not be included within the synthesis which may present a gap in findings and this review is reliant on existing qualitative data to inform findings and may highlight further gaps in the literature which require further investigation or consideration.
- Synthesis and re-interpretation of perceptions and experiences will identify common realities across included studies as well as generate higher order interpretations allowing for theory development.

For peer review only

Background

Physical and Mental Health and the Challenge of Co-morbidities

Links between physical and mental health are widely recognised[1, 2] with evidence supporting a bidirectional link between the two[3, 4]. Evidence shows a decreased life expectancy for those with mental illness (MI) of up to 30 years[1]. Increased physical health comorbidities and difficulty accessing physical health care[5] are strongly associated with these stark figures[1]. Lifestyle, medication and maladaptive coping strategies are all seen to impact the physical health of those with MI and, who experience an estimated 40% increased risk of stroke, diabetes and cardiovascular disease[1] and up to 50% greater risk of complaints of pain and arthritis[6, 7].

Due to the high prevalence and inter-relationship of such co-morbidities, integration of physical and mental health within healthcare services is vital[2, 8]. Integration of these complex needs is called upon, globally, across physiotherapy services[9-12] with recognition of a role in promoting quality of life and movement potential encompassing physical, psychological, social and emotional wellbeing [9]. Due to respiratory, neurological and musculoskeletal comorbidities being of high prevalence for those with mental illness, there is also a growing acceptance that physiotherapists will work with this patient group irrespective of professional speciality [12].

The COVID-19 pandemic has brought the importance of integrating physical and mental health to the forefront within rehabilitation services such as physiotherapy[13]. Predicted increases in global prevalence of MI[14-16] has resulted in calls for strategies to promote integration of physical and mental health across rehabilitation services[13]. Achieving optimal integrated

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

physical and mental health care requires a multi-disciplinary approach[17,18] with communication and referrals between different professionals; something perceived by patients to be lacking within physiotherapy services[12]. Understanding barriers from the perceptions of the wider multi-disciplinary team (MDT) is therefore deemed vital to develop awareness around processes and barriers across care pathways. The importance of integrating physiotherapists and other allied health professionals into mental health MDTs is recognised within literature [1]. Understanding of HCP experiences and perceptions will help identify recommendations to drive integration in clinical practice.

Due to high prevalence of physical comorbidities within this population[1, 2, 6], physiotherapists are likely to see people with mental illness with potential regularity. This professional group have skills in management of musculoskeletal, neurological, respiratory and functional presentations all of which are found to be highly prevalent in those with MI[1, 6]. Their role within the multi-disciplinary team addressing a multitude of comorbidities experienced by those with MI is therefore of great importance across specialities[12, 19, 20]. Furthermore, exercise is the cornerstone of physiotherapy and widely identified as beneficial in the prevention and treatment of MI[4, 21, 22]. This professional group therefore also have potential to help address this increasingly prevalent global health challenge[1, 23]. The role of the physiotherapist for patients with MI is therefore multifactorial and access for this population crucial.

Recent research demonstrates poor access and negative experiences of physiotherapy processes and interactions for those with MI [12] and supports previous findings around experiences of wider physical health care for those with MI [10, 24-28]. Barriers to access and experience have been linked with decreased adherence to treatment and exacerbated symptoms of both physical and mental illness[12]. Four major factors have been identified as impacting negatively on accessing physical healthcare for those with MI, 1) prolonged waiting times and lack of integration between services[12]; 2) diagnostic overshadowing, where an assumption is made that the physical complaint is a result of mental health[12,24]; 3) negative attitudes towards MI, such as patients lacking rehabilitation potential[26]; and, 4) Perceived, potentially misunderstood, lack of patient motivation or adherence leading to premature discharge from physiotherapy[12]. These barriers have been seen to occur at multiple stages of healthcare pathways and can involve a number of different HCP's. To understand barriers across pathways, it is therefore vital to understand the perceptions of those referring into services as well as those working in physiotherapy services.

Looking more broadly, different HCP groups' experiences and perceptions of access to care for patients with MI supports further investigation of access into other services including physiotherapy. A number of potential barriers and facilitators are found to exist which impact upon healthcare delivery and experience of services for those with MI. Major barriers identified include poor awareness, negative attitudes and ongoing stigma within society and healthcare towards mental health[18, 24, 25]. All of these factors are perceived within physiotherapy-focussed literature to have a negative impact upon patient experience and outcomes[10, 12]. In contrast there is evidence that illustrates facilitators to care include positive experiences of services and interactions [12,24], patient empowerment[24,27] and staff awareness of both physical and mental health needs[10, 24, 28].

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Due to service user reports of poor access to physiotherapy care[12] it is now vital to understand HCP perceptions of barriers, facilitators and experiences specific to physiotherapy care. Understanding physiotherapist and HCP experiences of working with patients with presentations requiring physiotherapy input and MI is vital to enable identification of barriers and facilitators to physiotherapeutic management.

This understanding will enable development of further research and recommendations to promote access to integrated physiotherapy services where staff are able to consider symptoms of both physical and mental health in a holistic manner, rather than delivering a siloed care approach. It is hoped that this, in turn, will optimise healthcare outcomes for patients presenting with co-morbid physiotherapeutic need and MI.

Study Aim

Review based research is needed which can bring together understanding of experiences and perceptions of physiotherapy management or referral for patients with MHI. A qualitative based review that can consolidate knowledge and seek to further understanding is best situated to achieve this aim. A meta-ethnography will allow for identification and understanding around the benefits and barriers to physiotherapy care for this population.

The aim of the current review is to explore HCP's experiences and perceptions of physiotherapy for people with mental illness.

Research Objectives:

1) To explore HCP experiences of delivering/referring into physiotherapy services for patients with MI
2) To explore HCP perceptions of the role and benefit of physiotherapy for patients with MI
3) To identify perceived barriers and facilitators faced by HCPs when managing/referring patients with comorbid physiotherapeutic presentation and MI.
4) Use the evidence to consider processes and models for supporting patients with MI to access physiotherapy care.

Methods

Patient and public involvement

Patient, carer and public involvement (PCPI) has been used to guide the rationale for this study. The research topic has been discussed with patients, carers and public and experts by

For peer review only

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

experience within three focus group discussions involving males and females between the ages of 30 and 80 years. Within discussions, people with lived experience and carers for people with mental illness discussed the importance of this area of work and highlighted the need to improve integration, access and experience of physiotherapy for those with MI. Those involved in discussions recognised the need to integrate physical and mental health considerations and discussed personal experiences of physiotherapy adding weight to the rationale and need for this research.

Research Design

The review will follow a six-phase meta-ethnography design[29] (see figure 1). The protocol for this review has been developed using three principle guidance documents; Noblit and Hare's original proposal[30], the recent eMERge guidance[29] for meta-ethnographies and the Preferred Reporting Items for Systematic review and Meta-Analysis Protocols (PRISMA-P) checklist [31. The JBI manual for evidence synthesis [32] has also been used as a supporting document. The phases of the meta-ethnography can be seen below in Figure 1.

Phase 1: Selecting meta-ethnography

The review will follow a subtle-realist meta-ethnography approach with both first order data (original comments and quotes) and second order data (author interpretations and themes) being collated and third order data (synthesis team interpretations) constructed. An important part of a subtle realist stance is representation of a common reality rather than focus on obtaining 'a single truth' [33]. This meta-ethnography will take an inductive approach to identify common realities through synthesis of first and second order data across studies, and interpretation of these to develop third order constructs[34]. A meta-ethnography approach also allows for theory development through this re-interpretation of first and second order data[29] as opposed to simply aggregation of themes from eligible studies[35].

Eligibility Criteria

The SPIDER concept tool[36] has been used to develop eligibility criteria, where S is sample, Pi is phenomenon of interest, D is design, E is evaluation and R is Research types, due to its relevance for studies considering qualitative data sets [36].

Sample

Participants that are HCP, including student HCP, working/studying in any country. Studies should include a population of any HCP group that either directly deliver physiotherapy care (physiotherapists or support workers) or refer into physiotherapy services (e.g. doctors, nurses, occupational therapists, dieticians). HCP included within studies must have a clinical or clinical management role. Staff working in academia will be included if they also have a clinical role (clinical academics).

Phenomenon of interest

For peer review only

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

To be included articles must focus on identifying healthcare professionals' experiences and perspectives of physiotherapy for patients with mental illness. Patient perceived benefits and barriers to other healthcare services have been identified at different levels of the referral pathway, both by HCP referring into a service and those working within the service itself [12,24,27]. To obtain insight into barriers throughout the pathway, literature considering the perceptions of all HCP will be considered. Due to potential differences in treatment approaches across countries, all physiotherapeutic input and interventions will be considered including psychodynamic physiotherapeutic approaches and body awareness techniques. However, interventions must be delivered by a physiotherapist to be included. Studies exploring experiences involving non-physiotherapeutic interventions or those not delivered by a physiotherapist will be excluded.

Design

Studies which include qualitative data, including but not limited to different types of grounded theory, phenomenology, ethnography, narrative, action research and case studies. Mixed method designs will be included if there is clear inclusion of qualitative data including qualitative data collection, analysis and interpretation.

Evaluation

Qualitative methods including survey with open ended questions, interviews, field diaries, and vignettes. These methods should capture the unique experiences and perceptions of physiotherapists working with patients with MHI or of other HCPs referring into/working alongside physiotherapists within this population.

Research type:

Only primary research will be included in this review and opinion pieces editorials, conference proceedings will be excluded.

Exclusion Criteria:

Studies not written or interpreted into English will be excluded.

Studies exploring only patient perceptions of physiotherapy will be excluded.

Phase 2: Deciding what is relevant

Search Strategy

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

The comprehensive search strategy has been informed by an initial scoping search of the MEDLINE database alongside methodological and subject specific expertise within the research team and previous studies [32,37].

A draft search strategy, comprising four facets, as written for MEDLINE has been developed:

(Physiotherap*.mp. OR Physical Therapy Specialty/ OR Exercise Therapy/ OR Allied Health Personnel/ Physical Therapists/ OR Physical Therapy Modalities/ OR physical therap*.mp.

AND

"Attitude of Health Personnel"/ OR experience*.mp. OR perception*.mp. OR perspective*.mp. OR confidence.mp. OR Attitude/ OR Health Knowledge, Attitudes, Practice/

AND

Qualitative Research/ OR narrative.mp. OR grounded theory/ OR ethnography.mp. OR phenomenology.mp. OR thematic analysis.mp. OR qualitative.mp. OR theme.mp.

AND

Mental Health/ OR Mental Disorders/ OR psychiatric illness.mp. OR Anxiety/ OR Depression/ OR Schizophrenia/ OR Bipolar Disorder/ OR Psychological Distress/ OR Dementia/ OR Mood Disorders/ OR Psychotic Disorders/ OR mental health.mp. OR mental illness.mp.)af

Medical Subject Headings (MeSH) terms (/) will be searched for alongside keywords in title and abstract fields with Boolean operators AND or OR and truncation (*). No date limits will be included. [See appendix 1 for pilot search using Medline].

Electronic databases will include CINAHL plus, Ovid Medline, Embase, Pubmed and Psychinfo [38] which will be searched from inception to present [see appendix 2 for search strategies for these databases]. The review will seek to identify both published and unpublished data, as grey literature, such as theses, may provide valuable insights[33,39]. ProQuest dissertation and thesis will therefore be searched from inception to present. Reference lists of all eligible studies will be scanned for further eligible studies. Electronic search engines (ScienceDirect and Google Scholar) will be searched for the first 300 results[40]. Key journals (the three most common journals in which included studies are published) will be searched via contents pages for relevant studies. Searches will be completed independently by the lead author (LH) and co-author (EB) in July 2022.

Phase 3- Reading included studies

Screening of articles

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

All studies will be screened following a two-stage process by two independent reviewers (LH, EB).

1) Titles and abstracts will first be screened for relevance and any duplicates removed. This will be completed by one reviewer (LH) with 10% of records excluded checked by a second reviewer (EB)[37]. Full-texts will be accessed once eligibility criteria (above) are met or it is not possible to establish whether this is met via the title and abstract alone. Authors will be contacted if there is insufficient information to establish whether a study meets criteria. The lead author will make two attempts to contact these authors, via email, across a four-week interval.
2) All relevant full texts will be screened to identify those for inclusion in the final review. Study selection within this stage will be decided by two reviewers (LH and EB) with discussion and involvement of a third reviewer (AS) as required.

Data Management

A PRISMA flow diagram will be completed to record the process and records of studies excluded and reasons for this. Any disagreements between reviewers will be resolved through discussion or involvement of a third reviewer (AS). The bibliographic tool, Endnote (Clarivate Web of Science) and Microsoft Excel 2010 will be used to organise and store literature within this review.

Quality Appraisal

Following screening, all included studies will undergo quality check using JBI Checklist for Qualitative Research[41]. This tool has high levels of validity and coherence[39, 42] and good applicability to qualitative reviews[35]. The quality assessment process will be completed by two reviewers independently (LH and EB) with a third reviewer (AS) to resolve disagreements remaining after discussion. Studies will not be excluded based on quality[43] with the purpose of appraisal being to identify the quality of available evidence and direct future recommendation via the certainty assessment.

Data Extraction

Data on study characteristics including study sample, data collection methods, data analysis methods, study outcomes and study conclusions will be extracted[44]. A second data extraction tool (JBI QARI) will record first and second order constructs (themes, quotes and original author interpretations), including verbatim quotes, with data extracted from all sections of each of the primary studies[29]. This data extraction sheet from JBI QARI will be used due to its validity and recommended use within qualitative reviews[35]. This process will be completed by the lead researcher (LH) and checked for accuracy by a second reviewer (EB).

Phase 4: Determining how studies are related

Phase 4 will examine how the studies are related to provide context for the meta-ethnography. A grid process, with consideration of information within the data extraction table, will be used

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

to highlight similarities and differences across studies to determine how the primary studies relate to each other. This will consider relations between findings, methods and other contextual findings[29]. This phase will be led by the lead researcher (LH) with discussion with the second reviewer (EB) and wider research team (LH, EB, AS, NH) throughout to aid credibility.

Phase 5: Translating studies into one another

Themes from the primary studies will be compared with other themes across studies[29]; this stage hereby differentiating a meta-ethnography from other forms of qualitative synthesis[29]. Similarities/matching themes (reciprocal translations) and contradictory findings (refutable translations) will be considered and recorded across all studies[30]. First, second and third order constructs will be tabulated to enable clear and transparent development of interpretations and themes.

Phase 6: Synthesising Translations

This phase will consist of synthesis of translations and reviewer interpretations to enable development of final themes. These interpretations will be discussed in depth within the review team (LH, EB, AS, NH) to allow multiple perspectives and decrease any bias[29]. Transcripts will be re-read to ensure sound interpretations which are grounded within the original studies. Final themes will be recorded in tables including first, second and third order constructs and explained alongside these constructs within the results and discussion sections of the final write up.

Confidence in Synthesised Evidence

The Confidence in the Evidence from Reviews of Qualitative Research (CERQual) Framework will be used to evaluate the strength in review findings[45]. The quality of the findings will be considered across all four CERQual components: methodological limitations; relevance; coherence; and adequacy of data.

Discussion

Physiotherapy for patients with MHI is recognised as important for both physical and mental health[12,19]. However patients report barriers to access and experience within this service[12]. This lack of access has potential to negatively impact on the physical and mental health of this population, who already experience substantial disparities in physical health outcomes and life expectancy[1,5]. Where physiotherapists are ideally placed to promote physical and mental health for this population[19,46,47] it is now vital that we develop our understanding of the benefits and barriers to physiotherapy for those with MHI. This understanding will inform development of strategies to promote equitable access to physiotherapy for this group.

Previous research identifies patient perceptions of barriers to physiotherapy to exist across pathways and amongst different professional groups[12]. This review seeks to add depth to this previous work and expand our understanding of barriers to physiotherapy by bringing together

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

perceptions and experiences of HCP. Through a review of qualitative data, we hope to broaden our awareness of how physiotherapy for patients with MHI is perceived across the MDT and the barriers experienced when managing patients with complaints conducive to management through physiotherapy and comorbid MHI.

Strengths and Limitations of this study

Utilising a meta-ethnographic review will enable clear understanding around experiences and perceptions of these factors across physiotherapy pathways. This approach will allow consideration of evidence which can help further current knowledge through the proposal of models, processes or theory[29]. This review is reliant on existing qualitative data to inform findings and may highlight further gaps in the literature which require further investigation or consideration. The meta-ethnography will focus on establishing inferential generalisation and/or theoretical generalisation rather than establishing the representativeness of findings.
It is recognised within our stance and approach that all perspectives are subjective and we are hereby seeking to synthesise multiple subjective perspectives to increase confidence in findings as opposed to identification of a firm truth.

Ethics and Dissemination

Understanding the barriers to physiotherapy for this population will allow us to identify strategies for improving access for this at-risk group; a current research priority within physiotherapy[48]. Findings from this review will be used to inform processes and co-produce models and recommendations to improve access and experience of physiotherapy for patients with co-morbid MHI. To optimise impact of the study, a multifaceted dissemination plan will ensure maximise reach. This will include submission to a peer review journal and presentation at a national or international conference (Physio UK or International Conference of Physiotherapy in Mental Health. Findings will be widely disseminated and used to develop future research via journal publications, conference presentations and sharing of findings with key stakeholders. Due to the review nature of this research, there are no ethical issues identified and ethics approval is not required. All named authors have contributed to the paper meeting all four of the International Committee of Medical Journal Editors' recommendations for authorship[49] and will support dissemination of findings.

Author Contributions

All named authors have contributed to the paper meeting all four of the International Committee of Medical Journal Editors' recommendations for authorship[49]. LH is the guarantor. LH, AS and NH drafted the manuscript with critical revisions from BS and EB. All authors contributed to methodological design including methodological framework consideration, selection criteria, data extraction strategy and extraction criteria. LH developed the search strategy. AS and NH provided methodological input and support. LH, BS and EB provided expertise around physiotherapy and mental health. All authors read, provided feedback and approved the final manuscript.

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

Funding

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests

none declared

References

1. Firth J, Siddiqi N, Koyanagi A, et al. The Lancet Psychiatry Commission: a blueprint for protecting physical health in people with mental illness. Lancet Psychiatry. 2019 Aug;6(8):675-712. doi: 10.1016/S2215-0366(19)30132-4.

2. Das P, Naylor C, Majeed A. Bringing together physical and mental health within primary care: a new frontier for integrated care. J R Soc Med. 2016 Oct;109(10):364-366. doi: 10.1177/0141076816665270.

3. Bullmore, Edward (2018) *The Inflamed Mind: A Radical New Approach to Depression*. London: Short Books.

4. Kandola A, Ashdown-Franks G, Hendrikse J, Sabiston CM, Stubbs B. Physical activity and depression: Towards understanding the antidepressant mechanisms of physical activity. Neurosci Biobehav Rev. 2019 Dec;107:525-539. doi: 10.1016/j.neubiorev.2019.09.040.

5. Solmi M, Firth J, Miola A, Fornaro M, Frison E, Fusar-Poli P, Dragioti E, Shin JI, Carvalho AF, Stubbs B, Koyanagi A, Kisely S, Correll CU. Disparities in cancer screening in people with mental illness across the world versus the general population: prevalence and comparative meta-analysis including 4 717 839 people. Lancet Psychiatry. 2020 Jan;7(1):52-63. doi: 10.1016/S2215-0366(19)30414-6.

6. Arthritis and Musculoskeletal Alliance. Mental Health and Musculoskeletal Conditions: Report of Roundtable.2019 [online] Available at: <http://arma.uk.net/wp-content/uploads/2019/05/Mental-Health-Roundtable-report.pdf>

7. Stubbs B, Vancampfort D, Veronese N, Thompson T, Fornaro M, Schofield P, Solmi M, Mugisha J, Carvalho AF, Koyanagi A. Depression and pain: primary data and meta-analysis among 237 952 people across 47 low- and middle-income countries. Psychol Med. 2017 Dec;47(16):2906-2917. doi: 10.1017/S0033291717001477.

For peer review only

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

8. Independent Mental Health Taskforce. *The Five Year Forward View for Mental Health* NHS England, 2016. (https://www.england.nhs.uk/wp-content/uploads/2016/02/Mental-Health-Taskforce-FYFV-final.pdf).

9. World Confederation for Physical Therapy (2019) Description of Physiotherapy: Policy Statement [Online] Available at https://world.physio/sites/default/files/2020-07/PS-2019-Description-of-physical-therapy.pdf. Accessed on 19/11/21

10. Andrew E, Briffa K, Waters F, Lee S, Fary R. Physiotherapists' views about providing physiotherapy services to people with severe and persistent mental illness: a mixed methods study. J Physiother. 2019 Oct;65(4):222-229. doi: 10.1016/j.jphys.2019.08.001.

11. Driver C, Kean B, Oprescu F, Lovell GP. Knowledge, behaviors, attitudes and beliefs of physiotherapists towards the use of psychological interventions in physiotherapy practice: a systematic review. Disabil Rehabil. 2017 Nov;39(22):2237-2249. doi: 10.1080/09638288.2016.1223176.

12. Hemmings L, Soundy A. Experiences of physiotherapy in mental health: an interpretative phenomenological analysis of barriers and facilitators to care. Physiotherapy. 2020 Dec;109:94-101. doi: 10.1016/j.physio.2020.01.001.

13. Barker-Davies RM, O'Sullivan O. et al. The Stanford Hall consensus statement for post-COVID-19 rehabilitation. Br J Sports Med. 2020 Aug;54(16):949-959. doi: 10.1136/bjsports-2020-102596.

14. Vindegaard N, Benros ME. COVID-19 pandemic and mental health consequences: Systematic review of the current evidence. *Brain Behav Immun*. 2020;89:531-542. doi:10.1016/j.bbi.2020.05.048

15. Rajkumar RP. COVID-19 and mental health: A review of the existing literature. *Asian J Psychiatr*. 2020;52:102066. doi:10.1016/j.ajp.2020.102066

16. Ettman CK, Abdalla SM, Cohen GH, Sampson L, Vivier PM, Galea S. Prevalence of Depression Symptoms in US Adults Before and During the COVID-19 Pandemic. *JAMA Netw Open.* 2020;3(9):e2019686. doi:10.1001/jamanetworkopen.2020.19686

17. Stubbs B, Soundy A, Probst M. et al.Understanding the role of physiotherapists in schizophrenia: an international perspective from members of the International Organisation of Physical Therapists in Mental Health (IOPTMH). J Ment Health. 2014 Jun;23(3):125-9. doi: 10.3109/09638237.2013.869574.

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

18. Happell B, Scott D, Platania-Phung C. Perceptions of barriers to physical health care for people with serious mental illness: a review of the international literature. Issues Ment Health Nurs. 2012 Nov;33(11):752-61. doi: 10.3109/01612840.2012.708099.

19. Probst, M. . Physiotherapy and Mental Health. In: Suzuki, T. , editor. Clinical Physical Therapy [Internet]. London: IntechOpen; 2017 [cited 2022 Jun 23]. Available from: https://www.intechopen.com/chapters/54472 doi: 10.5772/6759

20. Filipčić I, Šimunović Filipčić I, Grošić V, Bakija I, Šago D, Benjak T, Uglešić B, Bajić Ž, Sartorius N. Patterns of chronic physical multimorbidity in psychiatric and general population. J Psychosom Res. 2018 Nov;114:72-80. doi: 10.1016/j.jpsychores.2018.09.011.

21. Erickson KI, Voss MW, Prakash RS, Basak C, Szabo A, Chaddock L, Kim JS, Heo S, Alves H, White SM, Wojcicki TR, Mailey E, Vieira VJ, Martin SA, Pence BD, Woods JA, McAuley E, Kramer AF. Exercise training increases size of hippocampus and improves memory. Proc Natl Acad Sci U S A. 2011 Feb 15;108(7):3017-22. doi: 10.1073/pnas.1015950108.

22. Herold, F., Muller, P., Gronwald, T. et al,.Dose–Response Matters! – A Perspective on the Exercise Prescription in Exercise–Cognition Research. Frontiers in Psychology. 2019. Front. Psychol., 01 November 2019 | https://doi.org/10.3389/fpsyg.2019.02338

23. Stubbs B, Vancampfort D, Hallgren M et al. EPA guidance on physical activity as a treatment for severe mental illness: a meta-review of the evidence and Position Statement from the European Psychiatric Association (EPA), supported by the International Organization of Physical Therapists in Mental Health (IOPTMH). Eur Psychiatry. 2018 Oct;54:124-144. doi: 10.1016/j.eurpsy.2018.07.004.

24. Decoux M. Acute versus primary care: the health care decision making process for individuals with severe mental illness. Issues Ment Health Nurs. 2005 Nov;26(9):935-51. doi: 10.1080/01612840500248221.

25. Nankivell J, Platania-Phung C, Happell B, Scott D. Access to physical health care for people with serious mental illness: a nursing perspective and a human rights perspective-common ground? Issues Ment Health Nurs. 2013 Jun;34(6):442-50. doi: 10.3109/01612840.2012.754974.

26. Hall, A., Watkins, R., Lang, I. *et al.* The experiences of physiotherapists treating people with dementia who fracture their hip. *BMC Geriatr* **17,** 91 (2017). https://doi.org/10.1186/s12877-017-0474-8

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

27. Lester H, Tritter JQ, Sorohan H. Patients' and health professionals' views on primary care for people with serious mental illness: focus group study. BMJ. 2005 May 14;330(7500):1122. doi: 10.1136/bmj.38440.418426.8F.

28. Mesidor M, Gidugu V, Rogers ES, et al. A qualitative study: barriers and facilitators to health care access for individuals with psychiatric disabilities. Psychiatr Rehabil J. 2011 Spring;34(4):285-294. doi: 10.2975/34.4.2011.285.294.

29. France, E.F., Cunningham, M., Ring, N. *et al.* Improving reporting of meta-ethnography: the eMERGe reporting guidance. *BMC Med Res Methodol* **19,** 25 (2019). https://doi.org/10.1186/s12874-018-0600-0

30. Noblit, G.W. and Hare, R.D. Meta-Ethnography: Synthesizing Qualitative studies. Sage Publications, 1988. Newbury Park. https://doi.org/10.4135/9781412985000

31. Moher, D., Shamseer, L., Clarke, M. *et al.* Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. *Syst Rev* **4,** 1 (2015). https://doi.org/10.1186/2046-4053-4-1

32. Aromataris E, Munn Z. Chapter 1: JBI Systematic Reviews. In: Aromataris E, Munn Z (Editors). *JBI Manual for Evidence Synthesis*. JBI, 2020. Available from https://synthesismanual.jbi.global.. https://doi.org/10.46658/JBIMES-20-02

33. Mays N, Pope C. Qualitative research in health care. Assessing quality in qualitative research. *BMJ*. 2000;320(7226):50-52. doi:10.1136/bmj.320.7226.50

34. Duncan EAS, Nicol MM. Subtle Realism and Occupational Therapy: An Alternative Approach to Knowledge Generation and Evaluation. *British Journal of Occupational Therapy*. 2004;67(10):453-456. doi:10.1177/030802260406701006

35. Lockwood C, Porrit K, Munn Z, Rittenmeyer L, Salmond S, Bjerrum M, Loveday H, Carrier J, Stannard D. Chapter 2: Systematic reviews of qualitative evidence. In: Aromataris E, Munn Z (Editors). *JBI Manual for Evidence Synthesis.* JBI, 2020. Available from https://synthesismanual.jbi.global. https://doi.org/10.46658/JBIMES-20-03

36. Cooke A, Smith D, Booth A. Beyond PICO: the SPIDER tool for qualitative evidence synthesis. Qual Health Res. 2012 Oct;22(10):1435-43. doi: 10.1177/1049732312452938.

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

37. Quirk, H., Crank, H., Harrop, D. *et al.* Understanding the experience of initiating community-based physical activity and social support by people with serious mental illness: a systematic review using a meta-ethnographic approach. *Syst Rev* **6,** 214 (2017). https://doi.org/10.1186/s13643-017-0596-2

38. Bramer, W.M., Rethlefsen, M.L., Kleijnen, J. *et al.* Optimal database combinations for literature searches in systematic reviews: a prospective exploratory study. *Syst Rev* **6,** 245 (2017). https://doi.org/10.1186/s13643-017-0644-y

39. Booth, A., Sutton, A. and Papaioannou, D., 2016. *Systematic approaches to a successful literature review*. Los Angeles: SAGE.

40. Haddaway NR, Collins AM, Coughlin D, Kirk S. The Role of Google Scholar in Evidence Reviews and Its Applicability to Grey Literature Searching. PLOS ONE 2015. 10(9): e0138237. https://doi.org/10.1371/journal.pone.0138237

41. Joanna Briggs Institute, The Joanna Briggs Institute Critical Appraisal tools for use in JBI Systematic Reviews: Checklist for Qualitative Research. Online. Available at [http://joannabriggs.org/research/critical-appraisal-tools.html]

42. Hannes K, Lockwood C, Pearson A. A comparative analysis of three online appraisal instruments' ability to assess validity in qualitative research. Qual Health Res. 2010 Dec;20(12):1736-43. doi: 10.1177/1049732310378656.

43. Thomas, J., Harden, A. Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Med Res Methodol* **8,** 45 2008. https://doi.org/10.1186/1471-2288-8-45

44. Sattar, R., Lawton, R., Panagioti, M. *et al.* Meta-ethnography in healthcare research: a guide to using a meta-ethnographic approach for literature synthesis. *BMC Health Serv Res* **21,** 50 (2021). https://doi.org/10.1186/s12913-020-06049-w

45. Lewin, S., Bohren, M., Rashidian, A. *et al.* Applying GRADE-CERQual to qualitative evidence synthesis findings—paper 2: how to make an overall CERQual assessment of confidence and create a Summary of Qualitative Findings table. *Implementation Sci* **13,** 10 (2018). https://doi.org/10.1186/s13012-017-0689-2

46. Stubbs B, Vancampfort D, Smith L, Rosenbaum S, Schuch F, Firth J. Physical activity and mental health. Lancet Psychiatry. 2018 Nov;5(11):873. doi: 10.1016/S2215-0366(18)30343-2.

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

47. Chartered Society of Physiotherapists (2008) Recovering Mind and Body. London: The Chartered Society of Physiotherapists

48. Rankin G, Summers R, Cowan K, et al.; James Lind Alliance (JLA) Physiotherapy Priority Setting Partnership (PSP) Steering Group. Identifying Priorities for Physiotherapy Research in the UK: the James Lind Alliance Physiotherapy Priority Setting Partnership. Physiotherapy. 2020 Jun;107:161-168. doi: 10.1016/j.physio.2019.07.006.

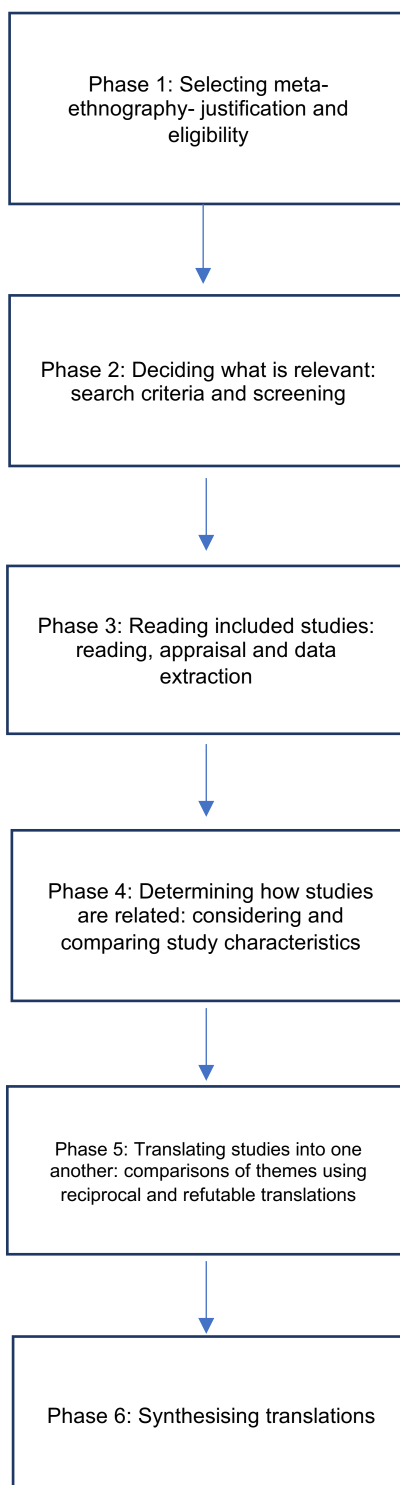
49. Uniform requirements for manuscripts submitted to biomedical journals: Writing and editing for biomedical publication. *J Pharmacol Pharmacother*. 2010;1(1):42-58.

Figure Captions

Figure 1: Meta-ethnography six-stage process adapted from France et al[29].

For peer review only

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

#	Query	Results from 20 Jun 2022
1	physiotherap*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]	26,089
2	Physical Therapy Specialty/	2,957
3	Exercise Therapy/	46,670
4	Allied Health Personnel/	12,711
5	"Attitude of Health Personnel"/	129,598
6	experience*.mp.	1,083,040
7	perception*.mp.	448,724
8	perspective*.mp.	321,326
9	confidence.mp.	551,316
10	Qualitative Research/	74,539
11	narrative.mp.	45,127
12	grounded theory/	2,446
13	ethnography.mp.	3,385
14	phenomenology.mp.	8,399
15	thematic analysis.mp.	24,611
16	Health Knowledge, Attitudes, Practice/	123,669
17	Mental Health/	53,586
18	Mental Disorders/	173,654
19	psychiatric illness.mp.	6,482
20	Anxiety/	98,679
21	Depression/	141,467
22	Schizophrenia/	108,195
23	Bipolar Disorder/	43,800
24	Psychological Distress/	3,310
25	Dementia/	58,346
26	Mood Disorders/	15,530
27	Psychotic Disorders/	50,405
28	Physical Therapists/	2,737
29	Physical Therapy Modalities/	39,584
30	physical therap*.mp.	56,540
31	Attitude/	51,826
32	qualitative.mp.	256,930
33	theme.mp.	23,212
34	mental health.mp.	205,950
35	mental illness.mp.	29,049

For peer review only

36	1 or 2 or 3 or 4 or 28 or 29 or 30	123,528
37	10 or 11 or 12 or 13 or 14 or 15 or 32 or 33	327,920
38	5 or 6 or 7 or 8 or 9 or 16 or 31	2,412,538
39	17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 34 or 35	720,685
40	36 and 37 and 38 and 39	212

Final search terms across four facets:

Physiotherap*.mp. OR Physical Therapy Specialty/ OR Exercise Therapy/ OR Allied Health Personnel/ Physical Therapists/ OR Physical Therapy Modalities/ OR physical therap*.mp.

AND

"Attitude of Health Personnel"/ OR experience*.mp. OR perception*.mp. OR perspective*.mp. OR confidence.mp. OR Attitude/ OR Health Knowledge, Attitudes, Practice/

AND

Qualitative Research/ OR narrative.mp. OR grounded theory/ OR ethnography.mp. OR phenomenology.mp. OR thematic analysis.mp. OR qualitative.mp. OR theme.mp.

AND

Mental Health/ OR Mental Disorders/ OR psychiatric illness.mp. OR Anxiety/ OR Depression/ OR Schizophrenia/ OR Bipolar Disorder/ OR Psychological Distress/ OR Dementia/ OR Mood Disorders/ OR Psychotic Disorders/ OR mental health.mp. OR mental illness.mp.

For peer review only

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Appendix 2: Search database strategies for all databases to be used

Pubmed: 1,780

Limiters: none

(((((("Depression"[Mesh]) OR "Anxiety"[Mesh]) OR "Psychotic Disorders"[Mesh]) OR "Bipolar Disorder"[Mesh]) OR "Mental Disorders"[Mesh]) OR "Mental Health"[Mesh]) OR "Psychological Distress"[Mesh]) OR "Schizophrenia Spectrum and Other Psychotic Disorders"[Mesh]) OR "Dementia"[Mesh]) OR ''Mental Disorders'') OR "Schizophren*")

AND

((((Physiotherap* OR physical therap* OR "Allied health personnel"[Mesh] OR "physical therapy modalities"[Mesh] OR "physical health speciality" OR "exercise therapy")

AND

((((((“Attitude*”) OR “Perception*”) OR “Experience*”) OR “Perspective*”) OR “Confidence”) OR “Attitude of health personnel”[Mesh])

AND

(((((((“Qualitative”) OR “narrative”) OR “grounded theory”) OR “phenomenology”) OR “ethnography”) OR “thematic analysis”) OR theme)

CINAHL Plus:

Limiters: none
Expanders - Apply equivalent subjects
Search modes - Boolean/Phrase

(MH "Mental Disorders/ED/PF/RH/TH") OR "(((((("Depression"/) OR "Anxiety"/) OR "Psychotic Disorders"/) OR "Bipolar Disorder"/) OR "Mental Disorders"/) OR "Mental Health"/) OR "Psychological Distress"/) OR "Schizophrenia Spectrum and Other Psychotic Disorders"/) OR "Dementia"/) OR ''Mental Disorders'') OR "Schizophren*"))

AND (Physiotherap* OR physical therap* OR “Allied health professional” OR “allied health personnel” “physical therapy modalities/ OR “exercise therapy”)

AND (“Attitude*” OR “Perception*” OR “Experience*” OR “Perspective*” OR “Confidence” OR “Attitude of health personnel”/)

For peer review only

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

AND (Qualitative” OR “narrative” OR “grounded theory” OR “phenomenology” OR “ethnography" OR “thematic analysis” OR themes)"

Medline:

Limiters: none

(physiotherap*.mp. OR Physical Therapy Specialty/ OR Exercise Therapy/ OR Allied Health Personnel/ Physical Therapists/ OR Physical Therapy Modalities/ OR physical therap*.mp.

AND

"Attitude of Health Personnel"/ OR experience*.mp. OR perception*.mp. OR perspective*.mp. OR confidence.mp. OR Attitude/ OR Health Knowledge, Attitudes, Practice/

AND

Qualitative Research/ OR narrative.mp. OR grounded theory/ OR ethnography.mp. OR phenomenology.mp. OR thematic analysis.mp. OR qualitative.mp. OR theme.mp.

AND

Mental Health/ OR Mental Disorders/ OR psychiatric illness.mp. OR Anxiety/ OR Depression/ OR Schizophrenia/ OR Bipolar Disorder/ OR Psychological Distress/ OR Dementia/ OR Mood Disorders/ OR Psychotic Disorders/ OR mental health.mp. OR mental illness.mp.).af

Psychinfo:

Limiters: none

(physiotherap*.mp. OR Physical Therapy Specialty/ OR Exercise Therapy/ OR Allied Health Personnel/ Physical Therapists/ OR Physical Therapy Modalities/ OR physical therap*.mp.

AND

"Attitude of Health Personnel"/ OR experience*.mp. OR perception*.mp. OR perspective*.mp. OR confidence.mp. OR Attitude/ OR Health Knowledge, Attitudes, Practice/

AND

Qualitative Research/ OR narrative.mp. OR grounded theory/ OR ethnography.mp. OR phenomenology.mp. OR thematic analysis.mp. OR qualitative.mp. OR theme.mp.

For peer review only

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

AND

Mental Health/ OR Mental Disorders/ OR psychiatric illness.mp. OR Anxiety/ OR Depression/ OR Schizophrenia/ OR Bipolar Disorder/ OR Psychological Distress/ OR Dementia/ OR Mood Disorders/ OR Psychotic Disorders/ OR mental health.mp. OR mental illness.mp.).

Embase:

((physiotherap* mp or Physical Therapy Specialty or Exercise Therapy or Allied Health Personnel or Physical Therapists or Physical Therapy Modalities or physical therap*) and ("Attitude of Health Personnel" or experience* or perception* or perspective* or confidence or Attitude or Health Knowledge, Attitudes, Practice) and (Qualitative Research or narrative or grounded theory or ethnography or phenomenology or thematic analysis or qualitative or theme) and (Mental Health or Mental Disorders or psychiatric illness or Anxiety or Depression or Schizophrenia or Bipolar Disorder or Psychological Distress or Dementia or Mood Disorders or Psychotic Disorders or mental health or mental illness)).af.

Google scholar:

(physiotherapy* OR physical therap*) AND experience OR perception OR confidence OR Attitude AND (Qualitative Research) AND (Mental Health OR Mental Disorders)

Science direct:

(physiotherapy OR physical therapy) AND experience OR perception OR confidence OR Attitude AND (Qualitative Research) AND (Mental Health OR Mental Disorders)

PROQuest:

noft(physiotherap* OR Physical Therapy Specialty OR Exercise Therapy OR Allied Health Personnel OR Physical Therapists OR Physical Therapy Modalities OR physical therap*) AND noft(experience* OR perception* OR perspective* OR confidence OR Attitude OR Health Knowledge, Attitudes, Practice) AND noft(Qualitative Research OR narrative OR grounded theory OR ethnography OR phenomenology OR thematic analysis OR qualitative or theme) AND noft(Mental Disorders OR psychiatric illness OR Anxiety OR Depression OR Schizophrenia OR Bipolar Disorder OR Psychological Distress OR Dementia OR Mood Disorders OR Psychotic Disorders OR mental health OR mental illness)

For peer review only

PRISMA P Checklist

Moher D, Shamseer L, Clarke M, Ghersi D, Liberati A, Petticrew M, Shekelle P, Stewart LA. Preferred Reporting Items for Systematic Review and Meta-Analysis Protocols (PRISMA-P) 2015 statement. Syst Rev. 2015;4(1):1.

		Reporting Item	Page Number
Title			
Identification	#1a	Identify the report as a protocol of a systematic review	1
Update	#1b	If the protocol is for an update of a previous systematic review, identify as such	n/a
Registration			
	#2	If registered, provide the name of the registry (such as PROSPERO) and registration number	2
Authors			
Contact	#3a	Provide name, institutional affiliation, e-mail address of all protocol authors; provide physical mailing address of corresponding author	1
Contribution	#3b	Describe contributions of protocol authors and identify the guarantor of the review	11
Amendments			
	#4	If the protocol represents an amendment of a previously completed or published protocol, identify as such and list changes; otherwise, state plan for documenting important protocol amendments	n/a
Support			
Sources	#5a	Indicate sources of financial or other support for the review	12
Sponsor	#5b	Provide name for the review funder and / or sponsor	n/a
Role of sponsor or funder	#5c	Describe roles of funder(s), sponsor(s), and / or institution(s), if any, in developing the protocol	n/a
Introduction			

For peer review only

BMJ Open: first published as 10.1136/bmjopen-2022-061227 on 24 August 2022. Downloaded from http://bmjopen.bmj.com/ on October 30, 2023 by guest. Protected by copyright.

Rationale	#6	Describe the rationale for the review in the context of what is already known	3&4
Objectives	#7	Provide an explicit statement of the question(s) the review will address with reference to participants, interventions, comparators, and outcomes (PICO)	5
Methods			
Eligibility criteria	#8	Specify the study characteristics (such as PICO, study design, setting, time frame) and report characteristics (such as years considered, language, publication status) to be used as criteria for eligibility for the review	6
Information sources	#9	Describe all intended information sources (such as electronic databases, contact with study authors, trial registers or other grey literature sources) with planned dates of coverage	8
Search strategy	#10	Present draft of search strategy to be used for at least one electronic database, including planned limits, such that it could be repeated	8
Study records - data management	#11a	Describe the mechanism(s) that will be used to manage records and data throughout the review	9
Study records - selection process	#11b	State the process that will be used for selecting studies (such as two independent reviewers) through each phase of the review (that is, screening, eligibility and inclusion in meta-analysis)	9&10
Study records - data collection process	#11c	Describe planned method of extracting data from reports (such as piloting forms, done independently, in duplicate), any processes for obtaining and confirming data from investigators	9&10
Data items	#12	List and define all variables for which data will be sought (such as PICO items, funding sources), any pre-planned data assumptions and simplifications	7&8
Outcomes and prioritization	#13	List and define all outcomes for which data will be sought, including prioritization of main and additional outcomes, with rationale	9

BMJ Open: first published as 10.1136/bmjopen-2022-061227 on 24 August 2022. Downloaded from http://bmjopen.bmj.com/ on October 30, 2023 by guest. Protected by copyright.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Risk of bias in individual studies	#14	Describe anticipated methods for assessing risk of bias of individual studies, including whether this will be done at the outcome or study level, or both; state how this information will be used in data synthesis	9&10
Data synthesis	#15a	Describe criteria under which study data will be quantitatively synthesised	n/a
Data synthesis	#15b	If data are appropriate for quantitative synthesis, describe planned summary measures, methods of handling data and methods of combining data from studies, including any planned exploration of consistency (such as I2, Kendall's τ)	n/a
Data synthesis	#15c	Describe any proposed additional analyses (such as sensitivity or subgroup analyses, meta-regression)	10
Data synthesis	#15d	If quantitative synthesis is not appropriate, describe the type of summary planned	9&10
Meta-bias(es)	#16	Specify any planned assessment of meta-bias(es) (such as publication bias across studies, selective reporting within studies)	n/a
Confidence in cumulative evidence	#17	Describe how the strength of the body of evidence will be assessed (such as GRADE)	10

None The PRISMA-P elaboration and explanation paper is distributed under the terms of the Creative Commons Attribution License CC-BY. This checklist can be completed online using https://www.goodreports.org/, a tool made by the EQUATOR Network in collaboration with Penelope.ai

For peer review only

BMJ Open: first published as 10.1136/bmjopen-2022-061227 on 24 August 2022. Downloaded from http://bmjopen.bmj.com/ on October 30, 2023 by guest. Protected by copyright.