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Journal of Affective Disorders

Barriers to attending initial psychological therapy service appointments for common mental health problems: A mixed-methods systematic review

--Manuscript Draft--

Manuscript Number:	JAFD-D-20-01407R1
Article Type:	Review Article
Keywords:	systematic review; psychological therapy; Common mental disorders; Non-attendance
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First Author:	Jennifer Sweetman
Order of Authors:	Jennifer Sweetman Peter Knapp Danielle Varley Rebecca Woodhouse Dean McMillan Peter Coventry
Abstract:	<p>Background</p> <p>Non-attendance at initial appointments is a widespread problem which affects mental health services and patients.</p> <p>Methods</p> <p>This mixed methods systematic review identified and synthesised the available literature on factors, which could be modified either by patients or by services, that can influence early attrition to services offering psychological support for common mental health problems. Searches were conducted January 2017, updated Oct 2019, in MEDLINE, CINAHL Plus, EMBASE, Cochrane Library and PsycINFO. Screening, data extraction and quality appraisal were completed independently by two reviewers. Quality appraisals used Joanna Briggs Institute tools.</p> <p>Results</p> <p>Of the 31,758 references identified (21,123 unique), 34 studies were selected for inclusion. Studies used cohort (14), cross-sectional (10) and qualitative (9) designs. An additional study reported both quantitative and qualitative components. Findings from observational studies related to the presenting problem, beliefs about treatment, contact with services and practical issues participants faced which affected initial appointment attendance. Themes from qualitative studies centered around individual perceptions, social and cultural influences, experiences with services and practical issues. Similarities and differences between quantitative and qualitative syntheses are discussed in a combined synthesis.</p> <p>Limitations</p> <p>This review did not attempt to measure the effect of factors affecting attendance, or the effectiveness of interventions to reduce non-attendance to initial treatment appointments.</p> <p>Conclusions</p> <p>Ensuring treatments offered matched patient perceptions of problems, reducing patient concerns around engagement, and offering prompt responses with flexibility to</p>

	accommodate patient circumstances consistently influenced initial attendance. More work is needed to improve perceptions of mental health services in the community.
Suggested Reviewers:	<p>Elizabeth Horevitz info@marinclinics.org</p> <p>Katherine Elliot kelli057@uottawa.ca</p> <p>Thomas Britt twbritt@clermson.edu</p> <p>Heather O'Mahen ho215@ex.ac.uk</p>
Opposed Reviewers:	
Response to Reviewers:	<p>Barriers to attending initial psychological therapy service appointments for common mental health problems: A mixed-methods systematic review</p> <p>Manuscript Number: JAFD-D-20-01407</p> <p>Reviewer #1 The authors performed a systematic review for barriers to attending initial psychological therapy service appointment. The review is well-structured. I think this manuscript is acceptable when considering several comments in order to improve this study more.</p> <p>Paper title: 1The paper title mentions that this review focuses on "barriers to attending initial psychological therapy service appointment". However, the authors state in the text that attendance was recorded for each of the services in this review. I was left confused by the focus of this review. Response: The wording in the text has been amended to clarify this issue (pp 1, pg 1; pp 2, pg 3). This review focuses on the factors which influenced decisions not to attend initial appointments at mental health services.</p> <p>Introduction: 2The authors should present the findings of previous research and/or previous reviews of barriers to attending initial mental health services for common mental health problems. Response: This information has now been added (pp 1, pg 1).</p> <p>3And more precise highlights on the research gap in this field may improve the interest for this article. Response: Thank you for this comment, we have amended the text to better highlight the current gap in knowledge (pp 1, pg 1).</p> <p>Methods: 4The list of search terms seems very limited, for example, help seek(ing) and service use should be included in the list. Important studies may have been missed. Response: This review aimed to identify studies which considered potential barriers to attendance only at initial mental health service appointments. We have added a sentence to the discussion to acknowledge the potential that some studies may have been missed in the searches (pp 21, pg 2).</p> <p>5Related to the comment 1, the definition of outcome in this review is unclear. Especially, is it the likelihood of attendance or the actual attendance? Response: The outcome for this review is non-attendance at either a first (assessment) or second (first treatment) appointment at a mental health service. The wording of the text has been amended to clarify this (pp 1, pg 1; pp 2, pg 3).</p> <p>Results: 6It might be helpful to include the sample and participant characteristics in the result section, such as participant age, gender, settings, diagnose and mental health status of participants, etc. Response: We agree with this comment and have added sample characteristics to</p>

table 3 to reflect this.

7About the quality of included studies, the authors should summarize the quality of included studies in this review. Much content of "Quality Appraisal" (Part 3.1) should be put in the Section of Method but not in the Section of Results.

Response: Many thanks for these comments. The text has been amended to provide more detail in the method section, and brief summaries of quality appraisal information for the different study designs in the results (pp 3, pg 3 and 4; pp 4 pg 1 and 2; pp 6 pg 2; pp 7, pg 1 and 2).

8The data syntheses section needs to be edited. The findings are not properly integrated and the barrier themes need to be refined. Under the "Belief about treatment", the authors state that "Many studies reported attitudinal barriers as important to initial non-attendance due to participants believing that their problem was not severe and that they didn't need treatment". This is actually a lack of understanding of or difficulty identifying the symptoms of mental illness, rather than belief about treatment. Other factors summarised under this term, such as concern about confidentiality and a lack of trust are not either. Also, knowledge of the treatment and previous experience were considered under the term "contact with services". The same problem exists with findings from the qualitative analysis.

Response: In many cases thematic content overlapped, for example beliefs about the nature and severity of their illness were wrapped up with beliefs about whether their symptoms warranted treatment. As such, where possible, we have rephrased some of the theme names to indicate their composite nature. In other instance it has been possible to split out some of the themes in response to your suggestions. We hope that these changes to the presentation of findings are appropriate and will provide more clarity for readers (pp 7, pg 3; pp 8, pg 3; pp 10, pg 3; pp 11, pg 3; pp 12, pg 1; pp 16, pg 2).

Discussion:

9Social influence and cultural identity which are reported in the result sections are not discussed later.

Response: This information has now been added (pp 21, pg 1).

10The recommendations for practice and future research should be more specific and point to the findings from this review.

Response: We agree with this point and have amended the wording accordingly (pp 22, pg 2).

Jenny Sweetman
Department of Health Sciences
University of York
UK

17th September 2020

Dear Professor Brambilla and Professor Soares,

I am writing to submit a review article entitled “Barriers to attending initial psychological therapy service appointments for common mental health problems: A mixed-methods systematic review” for consideration by Journal of Affective Disorders. In this mixed-methods review we synthesise the international literature on barriers which have been reported to affect initial attendance to psychological therapy appointments for common mental health problems. Findings indicate that while the time between referral and treatment, flexibility around appointments, information about treatments being offered, and the presence of social support networks are important, patient perspectives about their problem, the service and treatments offered also contribute to initial non-attendance.

Given the large proportion of individuals who experience common mental health problems, this review is important to inform targeted interventions to improve access to treatment for patients and reduce costs for services offering support. We believe that this work will be of interest to the Journal of Affective Disorders’ diverse readership as it provides clinicians, service providers and policy makers with insights into how service interactions with patients following a referral can impact initial attendance rates. Findings also offer focus for future research to develop interventions which deal directly with these barriers to improve initial attendance rates. The mixed-methods approach used highlights the similarities and differences in findings from different study designs and provides a greater understanding about why some barriers to attendance arise.

We confirm that this work is original and has not been published elsewhere, nor is it currently under consideration for publication elsewhere. The authors of this paper have no conflicts of interest to disclose. Additionally, all of the authors have approved the contents of this paper and have agreed to the Journal of Affective Disorders submission policies.

If you require any additional information about this manuscript please don’t hesitate to contact me at jfs523@york.ac.uk. Thank you for your consideration of this manuscript.

Sincerely,

Jenny Sweetman

Barriers to attending initial psychological therapy service appointments for common mental health problems: A mixed-methods systematic review

Manuscript Number: JAFD-D-20-01407

Reviewer #1

The authors performed a systematic review for barriers to attending initial psychological therapy service appointment. The review is well-structured. I think this manuscript is acceptable when considering several comments in order to improve this study more.

	Reviewer comment	Author Response
Paper title:		
1	The paper title mentions that this review focuses on "barriers to attending initial psychological therapy service appointment". However, the authors state in the text that attendance was recorded for each of the services in this review. I was left confused by the focus of this review.	The wording in the text has been amended to clarify this issue (pp 1, pg 1; pp 2, pg 3). This review focuses on the factors which influenced decisions not to attend initial appointments at mental health services.
Introduction:		
2	The authors should present the findings of previous research and/or previous reviews of barriers to attending initial mental health services for common mental health problems.	This information has now been added (pp 1, pg 1).
3	And more precise highlights on the research gap in this field may improve the interest for this article.	Thank you for this comment, we have amended the text to better highlight the current gap in knowledge (pp 1, pg 1).
Methods:		
4	The list of search terms seems very limited, for example, help seek(ing) and service use should be included in the list. Important studies may have been missed.	This review aimed to identify studies which considered potential barriers to attendance only at initial mental health service appointments. We have added a sentence to the discussion to acknowledge the potential that some studies may have been missed in the searches (pp 21, pg 2).
5	Related to the comment 1, the definition of outcome in this review is unclear. Especially, is it the likelihood of attendance or the actual attendance?	The outcome for this review is non-attendance at either a first (assessment) or second (first treatment) appointment at a mental health service. The wording of the text has been amended to clarify this (pp 1, pg 1; pp 2, pg 3).
Results:		
6	It might be helpful to include the sample and participant characteristics in the result section, such as participant age, gender, settings, diagnose and mental health status of participants, etc.	We agree with this comment and have added sample characteristics to table 3 to reflect this.
7	About the quality of included studies, the authors should summarize the quality of included studies in this review. Much content of "Quality Appraisal" (Part 3.1) should be put in the Section of Method but not in the Section of Results.	Many thanks for these comments. The text has been amended to provide more detail in the method section, and brief summaries of quality appraisal information for the different study designs in the results (pp 3, pg 3 and 4; pp 4 pg 1 and 2; pp 6 pg 2; pp 7, pg 1 and 2).
8	The data syntheses section needs to be edited. The findings are not properly integrated and the barrier	In many cases thematic content overlapped, for example beliefs about the nature and severity of their

	<p>themes need to be refined. Under the "Belief about treatment", the authors state that "Many studies reported attitudinal barriers as important to initial non-attendance due to participants believing that their problem was not severe and that they didn't need treatment". This is actually a lack of understanding of or difficulty identifying the symptoms of mental illness, rather than belief about treatment. Other factors summarised under this term, such as concern about confidentiality and a lack of trust are not either. Also, knowledge of the treatment and previous experience were considered under the term "contact with services". The same problem exists with findings from the qualitative analysis.</p>	<p>illness were wrapped up with beliefs about whether their symptoms warranted treatment. As such, where possible, we have rephrased some of the theme names to indicate their composite nature. In other instance it has been possible to split out some of the themes in response to your suggestions. We hope that these changes to the presentation of findings are appropriate and will provide more clarity for readers (pp 7, pg 3; pp 8, pg 3; pp 10, pg 3; pp 11, pg 3; pp 12, pg 1; pp 16, pg 2).</p>
Discussion:		
9	<p>Social influence and cultural identity which are reported in the result sections are not discussed later.</p>	<p>This information has now been added (pp 21, pg 1).</p>
10	<p>The recommendations for practice and future research should be more specific and point to the findings from this review.</p>	<p>We agree with this point and have amended the wording accordingly (pp 22, pg 2).</p>

Barriers to attending initial psychological therapy service appointments for common mental health problems: A mixed-methods systematic review

Highlights

Treatments need to be relevant to patient perceptions of their problem

Appointment bookings should be prompt and accommodate patient circumstances

Concerns relate to the treatment, service and other people's views of mental health

Mixed-methods approach enabled the synthesis of qualitative and quantitative findings

Barriers to attending initial psychological therapy service appointments for common mental health problems: A mixed-methods systematic review

Abstract

Background Non-attendance at initial appointments is a widespread problem which affects mental health services and patients.

Methods This mixed methods systematic review identified and synthesised the available literature on factors, which could be modified either by patients or by services, that can influence early attrition to services offering psychological support for common mental health problems. Searches were conducted January 2017, updated Oct 2019, in MEDLINE, CINAHL Plus, EMBASE, Cochrane Library and PsycINFO. Screening, data extraction and quality appraisal were completed independently by two reviewers. Quality appraisals used Joanna Briggs Institute tools.

Results Of the 31,758 references identified (21,123 unique), 34 studies were selected for inclusion. Studies used cohort (14), cross-sectional (10) and qualitative (9) designs. An additional study reported both quantitative and qualitative components. Findings from observational studies related to the presenting problem, beliefs about treatment, contact with services and practical issues participants faced which affected initial appointment attendance. Themes from qualitative studies centred around individual perceptions, social and cultural influences, experiences with services and practical issues. Similarities and differences between quantitative and qualitative syntheses are discussed in a combined synthesis.

Limitations This review did not attempt to measure the effect of factors affecting attendance, or the effectiveness of interventions to reduce non-attendance to initial treatment appointments.

Conclusions: Ensuring treatments offered matched patient perceptions of problems, reducing patient concerns around engagement, and offering prompt responses with flexibility to accommodate patient circumstances consistently influenced initial attendance. More work is needed to improve perceptions of mental health services in the community.

Keywords: Systematic review, Psychological therapy, Common Mental Disorders, Non-attendance.

Barriers to attending initial psychological therapy service appointments for common mental health problems: A mixed-methods systematic review

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Barriers to attending initial psychological therapy service appointments for common mental health problems: A mixed-methods systematic review

Manuscript

1. Introduction

Patient non-attendance at healthcare appointments has consequences for individual health, services and the wider societal costs of untreated health problems (Kheirkhah et al., 2015; Moore et al., 2001). With common mental health problems such as depression and anxiety disorders estimated to affect 4.4% and 3.6% of the global population respectively (Steel et al., 2014), and non-attendance rates for treatment appointments common (Akhigbe et al., 2014; Davies et al., 2016; Mitchell and Selmes, 2007) this issue requires attention. Previous research has considered the effectiveness of psychological treatments for common mental health problems (Cuijpers and Dekker, 2005; Cuijpers et al., 2014), the consequences of discontinuing treatment on subsequent mental health (Wang, 2007; Wells et al., 2013b), and interventions to improve non-attendances in mental health services (Lefforge et al., 2007). To our knowledge, there are no published reviews identifying factors which influence attendance at initial service appointments offering psychological therapy for common mental health problems that could be modified by services or individuals seeking support. This review aims to fill this gap by focusing on non-attendance to one of two initial appointment (before engagement with offered treatments). Initial appointments are defined here as the first and second appointments offered by a service; this assumes the first appointment offered is likely to be a comprehensive assessment, and the second appointment, therefore, comprises the initial treatment (Clark, 2011; Gyani et al., 2013). Factors associated with non-attendance at either of these two service appointments were the focus of this review.

The aim of this review was to identify and synthesise the available research on factors, which could be modified either by individuals seeking support or by services, that can influence early attrition to services offering psychological support for common mental health problems. Combining evidence from different study designs, the findings are designed to be relevant to healthcare policy and practice (Harden, 2010).

2. Methods

This review was informed by guidance from the Cochrane Collaboration (Higgins and Green, 2008) and Centre for Reviews and Dissemination (Deeks et al., 1996). Reporting was informed by the PRISMA statement (Liberati et al., 2009; Moher et al., 2009). A review protocol (Sweetman et al., 2017) is available: www.crd.york.ac.uk/PROSPERO/display_record.php?ID=CRD42017055667.

2.1 Searches

Searches were run in January 2017 and updated in October 2019 in five databases: MEDLINE 1946-present, Cumulative Index to Nursing and Allied Health Literature (CINAHL Plus), Excerpta Medica Database (EMBASE), Cochrane Library and PsycINFO 1987-present. Thesaurus terms and keywords relating to common mental health disorders and non-attendance were included to identify additional relevant articles for consideration. The full search strategy used for MEDLINE is included in Table 1; searches for other databases were based on this strategy. References were imported into Endnote X8 (Ray, 2008) for duplicate removal, before being exported to MS Excel (2016) for screening (see Table 2).

[Insert Table 1]

[Insert Table 2]

2.2 Screening

Barriers to initial attendance were captured by including information about non-attendances **at first or second service appointments**. This did not include appointments that were cancelled ahead of the planned appointment. Drop-outs were also not generally considered to relate to initial non-attendances; where studies recorded attendance at assessment and categorised subsequent non-attendance as 'drop-out', factors influencing this drop-out from initial appointments were considered relevant to this review. No restrictions were placed on the design of studies to maximise the likelihood of identifying barriers to initial attendance which could be altered by services. Two reviewers independently screened at each stage: title, abstract, and full-text. The same processes were used for initial and update searches. Screening was piloted at each stage using a random sample to establish inter-rater reliability. Reliability was assessed using Cohen's kappa; agreement

was accepted for kappa ≥ 0.5 (Higgins and Green, 2008). During title and abstract screening, discrepancies were resolved through re-screening or inclusion in the next stage. Differences in opinion at full-text screening were resolved through discussion.

2.3 Data extraction

A data extraction tool was developed informed by CRD guidelines (Deeks et al., 1996); chosen items were those thought to be likely to inform the review question. The tool was designed to capture data from articles reporting different designs and included: general study details; research context; population; problem type(s) of participants; any intervention(s); attendance rates where relevant; and factors associated with attendance. Two reviewers independently extracted data from included articles. The data extraction tool was piloted with one of the review articles; differences in extraction were resolved through discussion. An iterative process guided the development of the tool, after which extraction was completed for all articles.

2.4 Quality appraisal

Joanna Briggs Institute quality appraisal tools were used as they provided a study-specific range of appraisal tools (Zeng et al., 2015). Two reviewers independently appraised the quality of included studies with differences resolved through discussion. Quality criteria were not used to determine inclusion, rather to inform a discussion of the findings.

During the assessment of cohort studies, when considering the provision of service information for patients and its recording, reviewers coded 'yes' where processes were standardised for all patients and there were no reported contradictory statements from patients, 'no' was coded where there was no standardisation, and 'unclear' was used where there was insufficient detail. Strategies to deal with confounding factors were assessed as being present where the analysis plan and results took account of identified potential confounders. Statistical analyses were considered appropriate when they enabled the researchers to address the aim(s) of the study, taking appropriate account of the variables of interest. When the analysis did not enable authors to address their research questions, or did not appropriately deal with variables, they were coded as 'no.' Vague descriptions of the analysis, or results that did not match the analysis plan resulted in an 'unclear' assessment.

When appraising cross-sectional studies, reviewers considered descriptions of study subjects and settings to have been described in detail where it was clearly included in the report. 'No' was

recorded when these details were either not included or were vague. When information about the service was given to participants in a standardised way then reviewers recorded a response of 'yes', if there was no standardisation reported then reviewers coded 'no.' Insufficient or vague information was recorded as 'unclear.' Strategies to deal with other factors considered to influence attendance were assessed from reported analysis plans and results. Responses reflect whether the analysis plan and results took account of identified potential confounders.

During the appraisal of qualitative studies, when considering whether one aspect of the paper followed appropriately from the preceding section, responses of 'unclear' were given where reports did not state information about an expected component, for example a philosophical perspective was not always stated. 'Unclear' was also used where studies provided information about both components, but the presentation of information was not considered typical for the design which had been used. Adequate representation of participant voices was assessed using the findings section; reviewers coded 'yes' where interpretations of the data were clearly supported by participant quotes. Where quotes were used but there was insufficient detail to allow reviewers to assess whether they were supportive of researcher interpretations, reviewers coded 'unclear.' When there were insufficient quotes included to support the researcher interpretations a code of 'no' was given.

2.5 Analysis

Data were synthesised in three stages (Oliver et al., 2005). Initially data from quantitative studies was synthesised using narrative synthesis methods (Popay et al., 2006). Headline factors were extracted from cohort and cross-sectional studies and similar factors grouped together, with factors considered in the context of each study to ensure the synthesis reflected original reference findings. Groups of factors were then considered in relation to each other to describe quantitative findings. This was followed by a separate synthesis of data from qualitative studies using thematic analysis methods (Braun and Clarke, 2006). Themes and sub-themes reported in each qualitative study were considered in relation to other qualitative study findings. Common findings were described, and interpretations of the qualitative dataset were developed. Finally, the two independent syntheses were compared to produce a combined synthesis (Thomas et al., 2004). Similarities and differences were described in the context of the study designs included, overlaps and gaps in evidence were identified and described.

3. Results

Initial searches identified 24,099 records, of which 8,539 were duplicates. 11,492 titles did not meet review criteria and a further 3,999 were excluded following abstract screening. From the remaining 69 full texts, 31 were selected for inclusion in this review. During update searches 7,659 records were identified, 2,096 of these were duplicates. From the 5,563 unique references, 5,450 titles and 103 abstracts did not meet review criteria. The remaining 10 full texts were screened and three were selected for inclusion. Reasons for exclusion at full text screening are listed in the PRISMA diagram (Moher et al., 2015) in Figure 1.

[Insert Figure 1]

Included studies used cohort, cross-sectional and qualitative study designs. Studies categorised as cohort studies measured attendance at the time of a referral being made until treatment was offered to the patient. Data were collected from service records and socio-demographic factors were included as variables that might affect attendance. Patients within included studies were drawn from service referrals and groups were defined by the study. Each study identified potential factors such as socio-demographic characteristics which were considered by study authors to be potentially influential to attendance, details of these were recorded and incorporated into study analysis plans. At the time of being referred to a service, patients were not in receipt of other treatment for the common mental health problems they were experiencing; attendance was recorded for each of the services in the review. Studies categorised as cross-sectional generally involved participant responses to a survey about their mental health, referrals to mental health services (general) or attendance to offered appointments during a specified period. Data were not collected at a service level and did not usually target participants who had been offered appointments at a specific mental health service. These were often national surveys considering information over a previous year. Qualitative studies used interviews to collect data and tended to include people who had contacted a specific service, either a primary care physician, mental health service or research study offering treatments.

Of the 34 included studies 15 were cohort studies, 9 cross-sectional, 9 qualitative and one mixed methods study, which reported cohort and qualitative components (Anderson et al., 2006; Andrade et al., 2014; Ayres et al., 2019; Bados et al., 2007; Barnes et al., 2013; Britt et al., 2015; Bruwer et al., 2011; Caplan and Whittemore, 2013; Conner et al., 2010; Elliott et al., 2015; Farid and Alapont,

1993; Flynn et al., 2010; Greeno et al., 1999; Horevitz, 2014; Hundt et al., 2018; Levy et al., 2019; Lewy et al., 2014; Lichtenthal et al., 2015; Lincoln et al., 2005; Mohr et al., 2006; Mojtabai et al., 2011; Mokruue et al., 2011; Murphy et al., 2016; Murphy et al., 2013; O'Mahen et al., 2015; Reece, 2003; Reust et al., 1999; Shepardson and Funderburk, 2016; Skuse, 1975; Sloan, 2014; Sparks et al., 2003; Terrell and Terrell, 1984; Trepka, 1986; Wells et al., 2013a). Most studies were conducted 2011-2019 across Europe and North America. 18 studies were undertaken during research, 13 as part of routine care and 3 as part of national surveys. Qualitative studies included 12-127 participants, cohort studies reported 55-1105 participants, and cross-sectional studies reported 120-4583 participants. Depression and anxiety disorders were experienced most commonly by participants in the studies, with data about a range of other common mental health problems also captured by some studies. A summary of the data extracted from included studies is presented in Table 3.

[Insert Table 3]

3.1 Quality Appraisal

3.1.1 Cohort Studies

Three items included in the quality appraisal assessment for cohort studies were considered not applicable for this review (see Table 4). Five of the cohort studies reviewed met all of the quality criteria in the appraisal, however variation relating to four appraisal items was identified for the remaining 11 cohort studies. It was unclear whether the same information was provided to people who did and did not attend appointments, and whether the statistical analysis undertaken was appropriate in some studies. Not all of the reviewed studies provided details about whether the information provided to people referred to services was recorded, and how confounding variables were accounted for in the analysis (see Table 4).

[Insert Table 4]

3.1.2 Cross-sectional Studies

Three of the cross-sectional studies reviewed met all of the quality criteria in the appraisal, however variation relating to three appraisal items was noted for the remaining six studies. The sample and study setting, reliability of service information provided to people referred, and methods to account for confounding variables were not clearly described in all studies (see Table 5).

[Insert Table 5]

3.1.3 Qualitative Studies

The reporting of included qualitative studies was notably more varied than for quantitative studies; none of these studies met all of the quality appraisal criteria. All studies included descriptions of methodological approaches appropriate to the stated research question(s) or objective(s). Additionally, the methods used to collect data were consistent with the methodology described. Nearly all studies reported conclusions that were clearly linked to the analysis. None of the studies included a statement describing the researcher's cultural or theoretical position, and no study clearly indicated the influence of the researcher on the research (or vice versa). Five further aspects of the quality appraisal varied among the qualitative studies (see Table 6).

[Insert Table 6]

3.2 Data syntheses

3.2.1 Quantitative analysis

A narrative synthesis of the headline factors was conducted for the 25 included observational quantitative studies. Six themes are presented, describing the findings from included primary studies: the common mental health problem for which individuals were seeking support, patient beliefs relating to their mental health symptoms and potential treatment, contact with services, knowledge about services and treatment, practical challenges to overcome to allow attendance, and the support participants experience from others.

Presenting problem

The common mental health problem and associated severity of symptoms were considered important to early attendance using data collected from primary studies. Two articles included in this review discussed specific diagnoses in relation to early attendance with one presenting data from a clinical sample where initial non-attendance was significantly more common in patients with diagnoses other than anxiety disorders or 'other conditions that may be the focus of clinical attention.' Data captured patients with affective disorders, eating disorders, adaptive disorders, impulse control disorders, somatoform disorders, personality disorders, sexual dysfunction and nicotine dependence (Bados et al., 2007). A second study surveying primary care patients suggested that a diagnosis of depression was associated with reporting more perceived barriers to treatment attendance (Mohr et al., 2006).

Three studies considered severity of mental health symptoms in relation to attendance. Reece (2003) reported that individuals with severe OCD symptoms were more likely to attend for treatment than individuals with severe symptom relating to other diagnoses (Reece, 2003). Another study found that participants with more severe symptoms were more likely to attend than individuals reporting less severe symptoms (Greeno et al., 1999). Upon examining the level of distress patients felt at the point of deciding to refer to a mental health service, Elliot and colleagues (2015) reported a positive correlation between level of symptom distress and two other variables: difficulty deciding that therapy might help and making a decision to seek therapy (Elliott et al., 2015). Where individuals believed they had improved or considered they would recover without additional support, they were less likely to attend for treatment (Bados et al., 2007; Bruwer et al., 2011).

Beliefs relating to mental health symptoms and treatment

Many studies reported attitudinal barriers as important to initial non-attendance due to participants believing that their problem was not severe and that they didn't need treatment (Andrade et al., 2014; Bruwer et al., 2011; Mojtabai et al., 2011; Mokruet et al., 2011). Three of these studies used the WHO CIDI (Kessler and Üstün, 2004) to collect and interpret reasons for non-attendance, the fourth asked an open question and developed a coding system for interpretation (Mokruet et al., 2011). Another study found 'the decision that therapy would be helpful' was more difficult than 'deciding to seek help', with 'contacting services' considered to be the least difficult decision (Elliott

et al., 2015). Attitudinal factors were more influential than symptom recognition in two studies that gathered retrospective data about mental health service use in national surveys. Both studies found that individuals who accepted a need for treatment reported not having attended mental health services due to a desire to handle their mental health on their own (Andrade et al., 2014; Mojtabai et al., 2011). Similarly motivation to attend treatment was considered to influence attendance with one study directly reporting a lack of motivation being associated with non-attendance at early treatment appointments (Bados et al., 2007). Within this study patients who did not attend early appointments provided three main reasons for non-attendance: low motivation and/or dissatisfaction with the treatment or therapist; external difficulties such as practical difficulties with appointments or other responsibilities; and the belief that they had improved.

Concerns about perceived stigma for attending mental health treatment were identified in three studies (Britt et al., 2015; Lewy et al., 2014; Skuse, 1975). One study specifically investigated stigma for accessing mental health services in military personnel, indicating that individuals with mental health problems were more likely than those without mental health problems to stigmatise: 1. their own thoughts about seeking treatment, 2. others who seek mental health treatment, 3. believe that others would stigmatise them if they accessed treatment and 4. that receiving mental health treatment would negatively affect their career (Britt et al., 2015). Another study described participants with HIV who were referred for mental health treatment, and found that increased perceived stigma related to HIV diagnosis were related to non-attendance for mental health treatment (Reece, 2003).

Investigations into beliefs about treatment, using an unpublished initial appointment questionnaire (Mansell, 2010) to examine beliefs, goals and attitudes towards therapy, found that participant endorsement of positive beliefs about therapy such as the statement “talking to a therapist will help me understand better how my mind works” was associated with increased initial appointment attendance (Murphy et al., 2016; Murphy et al., 2013). Conversely, difficulties or fears associated with talking about individual circumstances were considered to be a barrier to early attendance (Lichtenthal et al., 2015; Mohr et al., 2006; Murphy et al., 2016). Perceptions of mental health services themselves were reported to influence initial appointment attendance with individuals who lacked trust and confidence in mental health services and providers being less likely to attend (Terrell and Terrell, 1984). In an online survey for military wives and the general population (Lewy et al., 2014), options of potential barriers to mental health service attendance were informed by previous qualitative work and combined with items from the National Survey on Drug Use and Health (Mojtabai, 2009). Concerns about confidentiality were included as potential barriers to

attending early appointments, and were reported as a barrier more frequently by military wives than in the general population (Lewy et al., 2014).

Contact with Services

Referrals made by agencies of social control (Greeno et al., 1999), and those considered low quality (i.e. omitting information about medication, family history, main symptoms, reason for referral or psychiatric history) seen as 'key items' by Pullen and Yellowless (1985), were associated with non-attendance (Farid and Alapont, 1993). Knowledge and awareness of a referral for mental health appointments were considered important to attendance with two studies indicating that self-referrals were more likely to result in early appointment attendance (Sparks et al., 2003; Trepka, 1986). Recommendations for mental health care by a primary care provider was associated with initial attendance for psychological therapy in one study (Reece, 2003). Contact between the referrer, patient and psychological treatment provider was investigated in another study; findings suggested that individuals are more likely to attend treatment following in-person introduction to the therapy provider and details about the service (Horevitz, 2014). Two studies indicated that the time between a referral and appointment did not affect attendance (Farid and Alapont, 1993; Sparks et al., 2003); however, another two studies reported that prompt appointments were more likely to increase attendance (Greeno et al., 1999; Levy et al., 2019).

Knowledge about services and treatment

Having knowledge of the treatments being offered was important to attendance, with a lack of understanding considered a barrier to treatment (Skuse, 1975). Where participants were aware of the referred treatment, those who reported perceived barriers to treatment, concerns about non-voluntary treatments or requirements to take medications, and who held doubts about the treatment concepts were more likely not to attend (Lewy et al., 2014; Lincoln et al., 2005; Reece, 2003).

Previous experience with mental health services was also important; however, evidence was mixed for whether previous experience of mental health services was associated with current attendance (Farid and Alapont, 1993; Greeno et al., 1999; Reece, 2003; Trepka, 1986).

Practical challenges

Finances affected attendance within many included studies (Andrade et al., 2014; Bruwer et al., 2011; Lincoln et al., 2005; Mohr et al., 2006); however, a study comparing military wives to similar women from a national survey found finances were less important than other variables in determining initial appointment attendance for military wives (Lewy et al., 2014). Access to transport and the location of treatment appointments affected attendance (Bados et al., 2007; Mohr et al., 2006; Reece, 2003). Other commitments and responsibilities reportedly affected initial attendance (Ayres et al., 2019; Bados et al., 2007; Lewy et al., 2014; Mokruue et al., 2011; Reece, 2003; Sloan, 2014), as did physical health problems (Bados et al., 2007). Difficulties associated with finding time to attend appointments or finding appropriate support services were also reported as barriers to attendance (Ayres et al., 2019; Bados et al., 2007; Lichtenthal et al., 2015).

Social support

Having social support was important to initial attendance in one study of women who had recently migrated from countries in which HIV and mental health problems were highly stigmatised (Sloan, 2014). The authors suggest women with social support may be less likely to attend for formal mental health treatment as they felt sufficiently supported in the community, with an alternative commentary linking a potential fear of stigma from the source of social support if women disclosed having mental health problems (Sloan, 2014).

3.2.2 Qualitative analysis

Findings from the ten qualitative papers were analysed using thematic synthesis (Thomas and Harden, 2008). NVivo v11 (Edhlund and McDougall, 2016) was used to code information and organise the codes into themes. The resultant synthesis was organised into five themes: individual perceptions **about mental health symptoms and accessing support**, the social and cultural influences affecting attendance, **patient experiences of mental health services**, **the route to accessing support**, and notable logistical issues relating to initial attendance.

Individual perceptions about mental health symptoms and accessing support

This theme considers participants' reflections of their lives, and their views of mental health problems. Beliefs about whether personal experiences represent a mental health problem, how this reflects on them and beliefs about the cause of the problem, all have consequences for treatment attendance. Additionally, intrinsic beliefs about people who experience mental health problems and perceived consequences for immediate family members, physical health and employment all contribute to decision making about accessing support.

Recognising a need for mental health support was deemed fundamental for early appointment attendance. For those who did not consider their problems constituted a true mental health problem, and whose feelings of mental ill-health were normalised or minimised, decisions about attendance were negatively affected:

Well, they say, "Well, you're just getting old." Yeah, you're supposed to feel this way, or just because you get older you're supposed to feel [depressed]. (Conner et al., 2010).

I don't never consider what I go through far as depression. I just--I consider it a high level of stress, and maybe that's just how I label it because of the word 'depression'. (Flynn et al., 2010).

Not feeling ready for treatment, or worrying about the emotional consequences of attending for treatment also influenced decisions not to attend:

The only thing that's been holding me back is me and my insecurity, my fear. Because like you just mentioning it right now, my heart is beating fast... it's nothing that I would want to do, but I know that I need to do something.

I'd get suicidal again, worse than I already am. I already know that. (Hundt et al., 2018)

Triggers for common mental health problems influenced whether patients perceived treatments to be relevant for them. For example, individuals who believed that environmental stressors such as job loss were the cause of their problems, indicated that appropriate support would focus on finding a new job (Horevitz, 2014). Participants who described problems stemming from an abusive relationship, raised concerns about the consequences of attending mental health treatment which they believed would focus on them rather than recognising their partner as the underlying cause (Anderson et al., 2006). Consequently, where individuals' perceptions about service treatments did

not match their beliefs about the cause of the problem, they were less likely to consider treatment as worthwhile and consequently less likely to attend appointments.

Prioritising their needs above caring responsibilities also influenced early attendance. This was particularly evident where individuals had children, viewing family commitments as more important than addressing their mental health (Caplan and Whittemore, 2013). Constraints related to physical health problems also took precedence over mental health in some cases, with individuals feeling too unwell physically to attend appointments (Reust et al., 1999).

Internal motivation to access treatment was low for many individuals, despite acknowledging they were experiencing a mental health problem and being encouraged to seek support (Wells et al., 2013a). In some instances, the dissonance created by believing that they need support for a mental health problem and feeling that mental ill-health is a sign of weakness may have influenced appointment attendance:

I think [of depression] as a weakness. I want to just beat myself up and cuss myself out and everything like that, you know. I just down rate myself. (Conner et al., 2010).

The anticipation of attending was another factor highlighted in one study; the idea of travel by public transport influenced a participant's thoughts about whether they could then engage with mental health appointments:

Having to deal with public transportation, it's kind of hard for me so it kind of takes a little motivation like, "[Exasperated] Okay I've got to get myself ready" like (laugh). You know and then once I get there, I'm not very in my full mental capability. I'm still stressed so when I get to the [appointment location] I'm like, "Alright, I just want to go. I don't want to be here." (Hundt et al., 2018)

Related to self-perceptions, many individuals also held beliefs about others which caused them to worry about attending initial appointments. Where individuals were aware of needing support, fear of disclosing information related to historical experiences reduced attendance in some cases:

Very few people know about it [sexual abuse]—my partner, my psychiatrist, and now you. [Until recently] I never dared to tell my therapists, because I was afraid, because I was embarrassed, and because I was afraid that they were not going to understand me. (Caplan and Whittemore, 2013).

Participants also described concerns about consequences for family members if they sought support. Most commonly mothers worried that acknowledging mental health problems would result in them being considered an unfit parent with possible removal of their child(ren) from their care (Anderson et al., 2006). This may be linked to ideas about what others think of mental health problems. Where this specific question was asked of participants, responses were largely negative, contributing to likely non-attendance at initial treatment appointments:

They're dangerous. They can get violent. They pass on their genes to their children. That, they're completely ... they're crazy ... When a person's depressed, they're crazy (Conner et al., 2010).

Concerns were raised about the possible consequences of attendance on future employability with fears that attending mental health appointments would be recorded and could be linked to future job applications (Conner et al., 2010). Although not always the case a lack of employment was reported by participants in one study as a major contributor to the development of common mental health problems; unemployment and consequent poverty were considered as stressors triggering depression, especially in male participants (Horevitz, 2014).

Social and cultural influences

Cultural identity, and people whose opinions they valued and respected, were both factors seen to be crucial to understanding initial non-attendance. Individuals identifying with specific ethnic groups were less likely to attend for support appointments because mental health problems were not openly discussed within their communities:

I don't think we discuss it that much, Black people. If you're depressed, nobody knows. You don't tell people, you know. They just look at you, figuring you might have a problem, but you don't talk about it, you don't discuss it (Conner et al., 2010).

Belonging to certain community groups was associated with increased stigma from wider society. Members of these groups who also considered themselves to have a mental health problem believed that they faced additional stigma as a result (Conner et al., 2010), which created another barrier to attendance. This was not specific to minority ethnic groups. New mothers experiencing post-natal depression also perceived higher levels of judgement for needing mental health support. This was described in addition to feelings of being judged as a mother:

In society, anything postpartum is oh, you're crazy, oh boy, you should be careful because you're going to go home and drown your children. You know, I mean it's such a stigma in the media and everything else. It's a total lack of education, you know. (Flynn et al., 2010).

In addition to social and cultural groups, differences in attendance were also associated with support from a specific person. In many instances participants who had family, peer or professional support for treatment were more likely to attend treatment appointments (Horevitz, 2014; Reust et al., 1999). However, this was not the case for all participants. For some, family members held negative opinions of services and encouraged individuals to seek support elsewhere (Hundt et al., 2018). Family members or community groups also minimised or normalised participant experiences in some cases. Where this was evident, individuals were less likely to attend for treatment despite attempting to obtain social support:

My wife...she was one of those that always heard that you don't get the best quality of care there and so she encouraged me to just to go outside the [mental health support organisation]. (Hundt et al., 2018).

Maybe I could ask my doctor about it, or something...if I should still be feeling this way, because everyone says, like when I mention it to my mom, she's just like "Oh... you're just going through the emotions. You're pregnant. (Flynn et al., 2010).

Religious influences were highlighted in two studies. Although many participants did not consider religious leaders a source of support for mental health problems, having trust in religion to resolve personal issues was associated with non-attendance at initial treatment appointments. Participants believed their faith would heal them and that their mental health problem was a test of their faith (Caplan and Whittemore, 2013; Conner et al., 2010).

Experiences with services

Previous experiences of mental health services influenced attendance for referral appointments. In one case a positive past experience increased the likelihood of attendance. However, the majority of studies described negative past experiences as a barrier to accessing treatment (Reust et al., 1999). Concerns based on previous experiences of being rushed, not listened to or believed, or being offered medication rather than a therapeutic approach, influenced non-attendance (Hundt et al., 2018; Wells et al., 2013a). Additionally, individuals described issues with staff other than therapists as being influential in decisions not to attend:

Every time I go to the [appointment location], somebody will ask me at the front desk, "Oh, is your husband in the [organisation]?" No sister. No sister, I was. So that irritates me. Like I couldn't do that job too....I would rather not go to an appointment just because I don't wanna experience that. (Hundt et al., 2018).

Studies also reported that participants viewing mental health services as ineffective, or having lost faith in services, were factors contributing to non-attendance (Conner et al., 2010). Similarly, some participants lacked knowledge about treatments and possible benefits of attending:

I don't know what it [treatment for depression] would do, but, if it would help me, then I would definitely consider it. (Flynn et al., 2010).

It just doesn't make [sense]; I don't understand the value of it. Nobody's ever been able to tell me why it's valuable. (Hundt et al., 2018).

Route to accessing support

Experiences of referral processes varied greatly across studies. The timeliness of contact by mental health services was influential to initial engagement with services; participants expressed a desire for immediate support for common mental health problems. Where referral processes took days, or weeks, individuals reported feeling unimportant (O'Mahen et al., 2015):

I came in here and spoke to my doctor about it, back in May...she was, okay, I can give you a referral to see a social worker. No, I don't think that I should have to wait for a referral to see a social worker. And then she called like three or four days later and I think the turnaround was too long and when she called I didn't even want to be bothered, so I was like, oh no, nothing's wrong. (Flynn et al., 2010).

The length of time offered for treatment was also influential for initial attendance. Participants indicated that treatment needed to be proportionate to their perceptions of the problem. Where problems were considered complex and likely to take longer to resolve than the treatment being offered, individuals indicated that they were less likely to consider it worthwhile:

I think there's different levels of depression, you know what I mean? I just have a lot of problems, you know? I just don't think three to six visits is enough. (Horevitz, 2014).

Individual perceptions of the cause and severity of mental health problems have been discussed previously, however these concepts also overlap with the communication individuals had with services. In order to facilitate attendance, individuals described the importance of services listening to them, and their ideas about treatment, in order to match the treatment offered to these perceptions and tailor a relevant support plan (Horevitz, 2014). Where individuals did not feel their needs could be met by the treatment offered, they were less likely to attend appointments:

“... the online course, it was tailored to my needs at the time and I think that's how it helped so much.” (O'Mahen et al., 2015).

Studies identified psychological treatments as being preferable to medical treatments (Conner et al., 2010; Wells et al., 2013a). Some participants indicated a wider choice of treatments would be more appealing; furthermore the idea of doing 'homework' as part of treatment felt childish and off-putting to some (Barnes et al., 2013; Hundt et al., 2018). Beliefs about the experience of therapists offering treatments was also viewed as critical to attendance. Where therapists were not considered to have relevant real-world experience, individuals felt less inclined to attend:

I, myself, wouldn't go there because I don't think their advice is good... because a lot of these people you get have not even been through [a situation like mine] and don't even know.... And here you have people who don't have kids, never been molested in their life, and never had children that have been molested.... She's real young, and I believe that wisdom comes with age. And me sitting there talking to this girl would be like talking to my daughter. (Anderson et al., 2006).

Another aspect of services reported to be important was the potential for treatment to be delivered by different therapists. Individuals in the included studies reported that inconsistencies in treatment providers meant covering the same topics repeatedly rather than moving forwards with recovery. This process commonly started before the initial contact, participants reported having to share their information before a referral was made, then again at assessment, and again before treatment was started. When therapists changed, this resulted in an additional need for patients to share the same information. Consistency was therefore endorsed as important to initial treatment engagement:

They switch you out constantly and ... you have to go back to the beginning again. ... I don't want to go over it again, I don't want to relive it again, I want to leave the past there. (Caplan and Whittemore, 2013).

This was especially important where the therapist was instrumental in receiving relevant treatment. Participants described difficulties relating to, or trusting therapists (Barnes et al., 2013; Hundt et al.,

2018). Where a positive connection was not made with the therapist, individuals suggested lower inclinations to attend.

Logistical issues

Administrative issues were reported as justification for not attending for treatment. When appointments were cancelled, some were not rescheduled. Additionally, when appointments were not offered directly following a referral or when there was a perception of too many steps involved to access treatment, individuals indicated they lost interest in support offered:

... they cancelled it on me. Because I apparently, she wasn't gonna make it. So um, they never rescheduled another one with me. Uh they said they were, but they never did. They just cancelled it, so I never came to talk to her. (Horevitz, 2014).

Someone is gonna call you back. Someone is gonna call you back. Nobody ever calls back. Nobody ever does anything. (Hundt et al., 2018).

Some reports of non-attendance related to the convenience of appointment dates, times or locations. For working participants, the ability to access support outside of working hours was not always offered; where this was an option, individuals suggested that repeating their information to someone offering convenient appointments was off-putting (Hundt et al., 2018). For others the location impacted on attendance in a different way; negative experiences of being in the appointment setting intensified symptoms of mental health problems, such as hypervigilance for this participant seeking support for PTSD:

I despise going to the [appointment location] like with every fiber of my being.... There are people everywhere, just hordes of people everywhere...I think that I was the only female in there, and I was just, I almost left... some crazy person, excuse my French, how do I say? Will come up and bother me.... People talking and coughing on you and touching you and asking you questions.... Usually I sit there with my purse clutched like I'm at the subway station in New York or something. (Hundt et al., 2018).

Participants with caring responsibilities had mixed views about the location of treatment; some indicated that home-based appointments were preferable, as they reduced transport or childcare issues, while others suggested that home-based treatments increased worries about preparing their home for visits (Flynn et al., 2010).

Problems with documentation and insurance provided barriers to initial attendance. Those without appropriate identification, or a method of financing treatment, felt unable to engage with offered support:

I did go once, but they did not see me because one time a lady told me she needed my social security number and other paper work. I don't have a social security, so I just left. I would have liked to see her, but because of that, I did not.(Wells et al., 2013a).

I didn't have the money to pay for the appointment. I have insurance and I couldn't afford the co-payment fee. (Reust et al., 1999).

Related to this, the method of paying for mental health treatment affected the specific options available to some participants. Where this was the case, and choices were restricted, individuals described finding it difficult to engage with the treatment offered:

I had a hard time opening up to him and feeling comfortable with him (social worker). A lot of it was because I was on Medicaid, and there were not many choices. (Flynn et al., 2010).

Participants from ethnic minority groups with a preference to communicate in a language other than the one offered at the service were less likely to attend due to perceived or previously experienced communication barriers. For older participants and those with financial concerns, transport was also cited as a reason for non-attendance:

I could not go because of transportation – the bus. Tokens were not provided. I think even though I was feeling really bad, I would have shown up if someone would have gone to pick me up at my house.(Wells et al., 2013a).

3.2.3 Combined synthesis

There were many areas of overlap between the quantitative and qualitative syntheses. Both highlighted the presenting problem as affecting attendance; however, within the quantitative studies, associations between specific diagnoses and levels of severity were seen to influence attrition rates. Differences in attendance between individuals with contrasting diagnoses were not presented within qualitative studies; however, participants indicated the underlying cause of the problem was important to attendance. Ideas about needing or accessing treatment for common mental health problems were included in both analyses, with reflections about the need for

treatment and thoughts about others' views of mental health consistent across different study designs. Additionally, concerns about talking with professionals about their presenting problem or information connected to the presenting problem, and a lack of confidence in services and the possible impacts of attendance were relevant to both syntheses.

It was clear from both syntheses that timeliness of contact following a referral, and having sufficient understanding of the available treatments, were important to facilitate attendance. Where this was lacking individuals did not attend offered appointments. Concerns about treatments such as whether the treatment offered would be sufficient, and the perceived abilities of therapists to provide effective treatments, were noted in both analyses. Mixed findings were presented for previous experiences with mental health services; however, studies consistently described past experiences as being influential to current attendance.

Support from others was mentioned in both analyses, although this was explored more within qualitative studies. Support from others who were positive about treatment was considered to improve the likelihood of attendance; however, having peer or community support which did not view treatment positively was associated with early non-attendance.

Many overlaps were noted for practical issues related to attending initial appointments, such as finances, transport, the location of treatment, having other responsibilities, and finding time to attend offered appointments. In addition, qualitative studies also highlighted administrative issues with booking appointments and language barriers as influencing attendance.

There were four areas that were reported as influential across only one of the study designs. The quality of referrals for mental health support and the referrer, was not explored in qualitative studies. Similarly, quantitative studies did not include data about the religious beliefs of participants which were included as part of the social and cultural influences theme within the qualitative synthesis. Qualitative studies also described the relevance of treatments to participant perceptions of their problem as important to initial attendance; this was not assessed in quantitative studies.

4. Discussion

This review found that initial non-attendance was associated with a perceived mismatch between treatments offered and patient perceptions of the cause or severity of their problem, patient

concerns about the consequences of engaging with mental health services, and a lack of confidence in the service or therapist offering treatment. Additionally, failing to provide a prompt response to referral, sufficient information about offered treatments, or flexibility to accommodate patient circumstances and issues with the service administrative processes, were also related to initial non-attendance in a number of included studies. Patient perceptions about other people's views of mental health were also frequently discussed within included references; the consequences to attendance decisions when people are associated with individuals or groups that are not supportive of mental health treatment indicates that further work is needed to reduce the perceived stigma around mental health in the wider community. There is evidence that work to design interventions which improve initial attendance at mental health appointments is underway (Lefforge et al., 2007), with results suggesting that where time and resources are available using a combination of evidence-based strategies (such as prompt initial appointments, use of letters/telephone reminders, discussing obstacles which may affect attendance and solutions to overcome them, video or leaflets about the service) are most likely to improve initial attendance rates. Opt-in approaches to appointments (Hawker, 2007; Schauman et al., 2013) have also been investigated with positive results for initial attendance, however evidence of interventions which attempt to account for patient perceptions of mental health at treatment decision-making is lacking in the literature.

This review benefits from a broad focus which has enabled the factors which affect initial non-attendance for this patient group and are likely to be modifiable by services or patients, to be considered together. Despite this, the wide range of terms which could be used to describe non-attendance at initial service appointments means that it is possible that some relevant studies may not have been captured by the searches conducted. Many of the methods used within this review were selected to reduce the chance of bias in reported findings: searching multiple databases, independent screening using two reviewers, independent data extraction and quality appraisal using systematically developed and validated design-specific tools. The quality of included studies was not used as a criterion for exclusion within this review, rather as additional information to inform the interpretation of study findings. These findings incorporate the experiences of 12,148 patients from across the globe who have been referred for psychological treatment for common mental health problems within various settings, and data collection spanning both healthcare and research environments.

The mixed method approach used in this review enabled the inclusion of both observational and qualitative research. While the quantitative study designs did not generally reflect typical cohort or cross-sectional studies, they demonstrate a pragmatic approach to a real-world issue. Most findings from cohort studies were based on routine healthcare settings with patient self-selection, service

data collection methods and definitions of non-attendance varying between studies. Conclusions drawn from cross-sectional studies should be made with consideration to the inevitable differences in length of time between offered appointments and survey completion; contrasting tools were also used to define mental health problems making comparisons between studies difficult. Qualitative studies lacked information about how researchers approached the work from a theoretical perspective, and none acknowledged the influence of the researcher on the research findings, making it difficult to confidently draw conclusions about the issues emphasized within research interpretations. Despite these drawbacks, included studies described similar issues as being important to early non-attendance. The consistencies across study designs support the conclusion that these are factors which are influential to initial non-attendance and could potentially be modified either by individuals seeking support or by services. Consideration of early non-attendance from different perspectives is possible due to the mixed methods approach used and has enabled an increased level of understanding about why some issues arise so frequently, such as difficulty with finances and transport. This approach has enabled insight into complexities around social support which highlight that having social support is not necessarily enough to reduce the risk of non-attendance; those providing social support also need to be perceived by patients as accepting of mental health issues and promoting attendance to services. Contrasting findings between qualitative and quantitative studies highlight another benefits of this mixed methods review; factors such as the quality of referral made to mental health services would be unlikely to appear in qualitative studies conducted with non-attending patients; likewise, the patient perception about relevance of treatment offered for the presenting problem was not included in any quantitative study focusing on early non-attendance to these appointments.

Some of the studies included in this review reported findings from specific sub-groups of the population such as pregnant women, military personnel, individuals with immigrant or refugee status, patients with HIV, and parents bereaved by cancer; findings from these populations may not apply to wider community samples. This review did not attempt to ascertain the effects of pre-specified barriers on appointment attendance, rather the aim was to consolidate previously documented barriers to attendance for people with common mental health problems who had been referred for psychological support. This limits the application of findings from this review and services will need to decide which, if any, of the factors identified can be addressed, to reduce the likelihood of early non-attendance. **Reflecting on whether any of the factors identified in this review are relevant to individual services may assist service management teams to develop strategies which may support increased attendance to initial appointments.** Future research to ascertain the effect on early attrition of each of the factors identified within this review would enable clinical teams to

make a more informed decision when considering making changes to their referral to treatment pathway. Additionally, research developing interventions which address these factors successfully to improve attendance is needed to support clinical changes. Factors which could not easily be modified by individuals seeking support, or by services, were not included in this review. A separate review of this nature would complement the current review and support services in identifying patient groups which may be at higher risk of not attending initial appointments for support.

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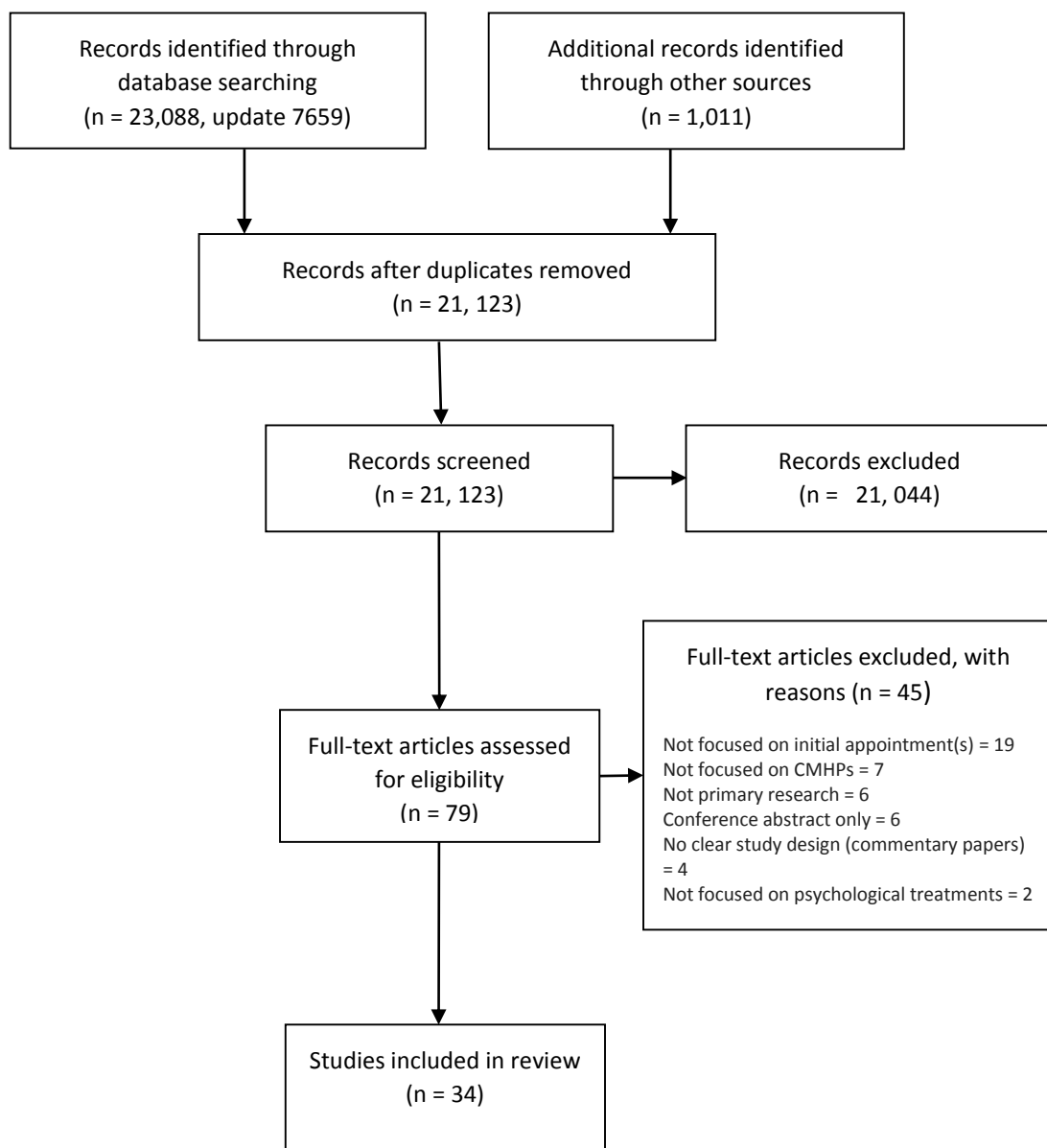
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Barriers to attending initial psychological therapy service appointments for common mental health problems: A mixed-methods systematic review

Figures

Figure 1: Systematic Review PRISMA diagram



Barriers to attending initial psychological therapy service appointments for common mental health problems: A mixed-methods systematic review

Tables

Table 1: Medline search strategy

1	(Common adj3 mental health problem\$.ti,ab.
2	(Common adj3 mental illness\$.ti,ab.
3	(Common adj3 mental adj2 disorder\$.ti,ab.
4	Exp Depression/
5	Depression.ti,ab.
6	Exp Depressive disorder/
7	Depressive disorder\$.ti,ab.
8	Dysthymic disorder/
9	Dysthymia.ti,ab.
10	Dysthymic disorder\$.ti,ab.
11	Obsessive compulsive disorder/
12	(Obsessive compulsive adj3 disorder\$.ti,ab.
13	OCD.ti,ab.
14	(Obsessive compulsive adj2 spectrum adj2 disorder\$.ti,ab.
15	Exp Anxiety/
16	Anxiety.ti,ab.
17	Exp Anxiety disorder/
18	GAD.ti,ab.
19	Social anxiety.ti,ab.
20	Health anxiety.ti,ab.
21	Post traumatic stress disorder\$.ti,ab.
22	PTSD.ti,ab.
23	Acute stress disorder/
24	Acute stress disorders/
25	Acute stress disorder\$.ti,ab.
26	Phobia/
27	Phobia\$.ti,ab.
28	Phobic\$.ti,ab.
29	Panic disorder/
30	Panic disorders/
31	Panic disorder\$.ti,ab.
32	Agoraphobia/
33	Agoraphobias/
34	Agoraphobi\$.ti,ab.
35	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34
36	No-Show Patients/

37	(No-show or no-shows).ti,ab.
38	*Appointments/ and schedules/
39	(Nonattend\$ or non-attend\$).ti,ab.
40	Did 'not' attend.ti,ab.
41	((dropout\$ or drop out\$ or dropped out or cancel\$ or withdraw\$ or withdrew or non-engage\$ or engage\$) adj3 (psychotherapy or therap\$ or treatment\$ or care or program\$ or service\$)).ti,ab.
42	((Failure\$ or failed or miss\$ or keep\$ or kept) adj3 attend\$).ti,ab.
43	((Failure\$ or failed or miss\$ or keep\$ or kept or utili#e\$ or utili#ation or cancel\$ or withdraw\$ or withdrew or non-engage\$ or engage\$) adj3 (appointment\$ or session\$ or visit\$ or clinic\$ or follow-up)).ti,ab.
44	(attend adj3 (appointment\$ or session\$ or visit\$ or clinic\$ or follow-up)).ti,ab.
45	(attend adj3 (outpatient\$ or out-patient\$ or inpatient\$ or in-patient\$ or hospital\$)).ti,ab.
46	(attend adj3 (psychotherapy or therap\$ or treatment\$ or care or program\$ or service\$)).ti,ab.
47	((Patient\$ or client\$ or user or users or person or persons or people) adj3 attend\$).ti,ab.
48	36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47
49	35 and 48
50	(attend\$ adj6 psychotherapy).ti.
51	49 or 50

Table 2: Systematic Review Inclusion and exclusion criteria

Inclusion	Exclusion
Participants ≥16 years	Participants < 16 years
Participants with common mental health problem including: depression, depressive disorder, dysthymia, obsessive compulsive disorder, anxiety, general anxiety disorder, social anxiety, health anxiety, post-traumatic stress disorder, acute stress disorder, phobia, social phobia, panic disorder or agoraphobia*	Participants with a serious mental health problem including: dementia, substance dependence, schizophrenia, delusional disorders, psychotic disorders, mania, bipolar, dissociative disorders, somatoform disorders, eating disorders, personality disorders and learning disabilities*
Psychological therapy treatment(s) offered	Exclusively medical treatments offered
Research focus on non-attendance at the first or second service appointment	Research focus on trialling the effectiveness of treatments
Article abstracts discuss factors affecting initial non-attendance which could be modified by patients or services including relevant practical, service-related, social or environmental factors	Article abstracts exclusively identify factors affecting non-attendance which could not easily be modified, such as socio-demographic characteristics of patients.

* Categorisation of mental health problems was based on ICD-10 criteria (WHO, 1992).

Table 3: Summary of included studies

Author	Aim	Service type(s) included	Sample characteristics	Method of data collection	Main factor(s) identified as affecting attendance
Anderson et al., 2006	To gain a better understanding of mothers' perceptions of their own distress and their children's problems, their treatment experiences, and their views of the formal mental health service delivery system.	Community mental health centres	127 female, 0 male. Mean age 37.8. Ethnicity: 56% White, 40% African American, 4% Other. Mental health: symptoms of depression and/or anxiety.	Interviews	Four areas were identified as relevant to understanding a mother's reluctance or refusal to accept mental health treatment: acceptance of a diagnosis; perceptions of the causes of her distress; reactions to being referred for mental health treatment; and perceptions of their child's and other mental health services.
Andrade et al., 2014	To examine barriers to initiation and continuation of mental health treatment among individuals with common mental disorders	None	63,678 participants across 25 countries. Age ranges differed between countries: participants were aged between 18 and 100 years. Mental health: surveys categorised disorders and mild, moderate and serious. Data extracted related to mild disorders.	Survey / Face to face interview	Barriers were grouped into structural and attitudinal. Structural barriers included finances, availability, transport and inconvenience. Attitudinal barriers included wanting to handle problems on their own, perceived ineffectiveness of treatment, stigma, thought they would get better, problem was not severe.
Ayres et al., 2019	To increase engagement with perinatal mental health services by identifying modifiable barriers and facilitators to women accessing this service following a referral from their antenatal obstetric service.	Maternity services	218 female, 0 male. Age band 18-24 (53), 25-34 (130), 35+ (35). Ethnicity: Caucasian/White (111), Australasian (39), Indigenous Australasian (11), Other (57). Mental health: depression, anxiety.	Electronic questionnaire	Participants reporting previously being treated for anxiety or depression, were more likely than those who had never received treatment to plan to attend the appointment. For women that did not attend an offered perinatal mental health service appointment a lack of time, no one to look after children, and encouragement by family and HCP were identified as the primary factors that influenced their decision to not engage.
Bados, Balaguer and Saldana, 2007	To provide further information about a number of key aspects of CBT dropouts: percentage of dropouts, the point at	Behavioural Therapy Unit (UTC) of the	147 female, 56 male. Mean age 31.2 years (SD 9.9). Ethnicity: not reported.	Questionnaire	Patients who dropped out were more likely to present diagnoses other than anxiety disorders or other conditions that may be a focus of clinical attention. The main

	which they occur, reasons given by patients for stopping treatment, and differences between patients who drop out and those who complete treatment.	University of Barcelona	Mental health: anxiety disorders, affective disorders, other disorders, eating disorders, adaptive disorders, impulse control disorders, somatoform disorders, personality disorders, sexual dysfunction, nicotine dependence.		reasons were grouped into three categories in line with previous studies: low motivation and/or dissatisfaction with the treatment or the therapist, external difficulties such as transport problems, moving house, timetables, illness, new responsibilities, and finally because they believed they had improved.
Barnes et al., 2013	To explore participants' views and experiences of CBT focusing on what participants found challenging and how this impacted on their experience and willingness to engage with treatment.	Primary care (GP practice recruitment)	16 female, 1 male. Mean age 47 years (SD 9.7). Ethnicity: White British. Mental Health: Depression.	Telephone questionnaires and qualitative interviews	People who didn't attend any appointments stated reasons as being other commitments, the time place or location was inconvenient, did not have time to attend, decided they did not want to receive CBT other. People who attended at least one session stated attendance decisions were affected by ideas about CBT, emotional difficulties with processes involved in CBT, relating to the therapist and homework.
Britt et al., 2015	The purpose of this study was to more fully investigate the role of different stigma perceptions as correlates of treatment seeking and dropout among a large sample of active duty military personnel.	Military	93 female, 1,231 male. Age band 20-24 (569), 25-29 (357). Ethnicity: 61 % were White. Mental health: stress, PTSD, depression, alcohol dependence.	Survey, self-report	Individuals screening positive for mental health problems consistently indicated more perceived stigma than those without mental health problems. Stigma related to career, stigma related to differential treatment, stigmatizing perceptions of others and self-stigmatizing from treatment seeking were assessed.
Bruwer et al., 2011	To examine structural and attitudinal barriers to treatment initiation among individuals with a mental disorder as well as demographic and clinical predictors of treatment dropout	None	2597 female, 1718 male. Age not reported. Ethnicity: Black (3257), Mixed (550), White (297), Indian-Asian (147). Mental health: 729 met criteria for a mental disorder in the previous 12 months.	National probability survey	Structural and attitudinal barriers were reported. Structural barriers included financial, availability and transportation. Attitudinal barriers included low perceived need for treatment, wanting to handle the problem on their own, perceived ineffectiveness, stigma, thought it would get better, and problem was not severe. Those with mild clinical severity were significantly more likely than those with moderate severity to endorse a low perceived need.

Caplan, 2013	To examine barriers to treatment engagement and how experiences of childhood adversity and gender-based violence influenced perceived support for treatment among Latinas with elevated depressive symptoms who were at high risk for diabetes.	Community health team	12 female 0 male. Mean age 43 years (SD 13.74). Ethnicity: Puerto Rican/ American/Latina (9), Mexican (1), Colombian/American (1), Dominican (1). Mental health: total comorbidities 2.5, current MH treatment (2), previous MH treatment (9).	Semi-structured interviews	Barriers related to treatment engagement and perceived lack of support for the decision to seek help were predominantly driven by gender-based violence and adverse childhood experiences, which engendered stigma and fear of disclosure. Cultural values and religiosity, personal values, and perceptions of the effectiveness of treatment for depression took on different meaning in the context of gender-based violence and adverse childhood experiences. Other barriers to treatment engagement included treatment issues, which included negative experiences with therapy, fears about medication, and denial of illness severity.
Conner et al., 2010	To examine: (1) their experience with depression; (2) their process of determining whether or not to seek professional mental health treatment for their depression; (3) any barriers they experienced when attempting to seek professional mental health treatment; and (4) culturally sanctioned strategies they engaged in to cope with their depressive symptoms.	None	Female 31, male 6. Age range 60-over 81 years. Ethnicity: African-American. Mental health: depression.	Interviews	Beliefs about depression among older African Americans included cultural beliefs, fear, multiple stigma and lack of information. Barriers to seeking treatment included experiences of stigma, lack of faith in treatment, lack of access to treatment, mistrust, ageism and lack of recognition. Cultural coping strategies included self-reliance strategies, frontin' (participant's decision to hide depressive symptoms from family and friends), denial, language and 'Let Go and Let God' (beliefs that prayer and a relationship with God is the first line of defence in the treatment).
Elliott et al., 2015	To examine the duration and difficulty of steps in the therapy-seeking process, the longitudinal course of clients' expectations of difficulty in working on their problems in therapy and their commitment to therapy, and whether the duration and difficulty of seeking therapy predicted clients' expectations of how difficult therapy would be and how committed they were to therapy.	University clinical psychology training clinic	121 female, 34 male. Mean age 30.1 (SD 8.8). Ethnicity: White (87%), Black (5%), Asian (5%), Aboriginal (1%), Other (3%). Mental health: anxiety, depression, relationship problems, other.	Structured telephone interview	Participants took the longest amount of time to decide that therapy might help. A pairwise comparison indicated that deciding to seek therapy took significantly less time than deciding that therapy might help. Once participants had decided to seek therapy, a pairwise comparison indicated that it reportedly took them less time to contact the clinic. Most participants reported contacting the clinic within a month of deciding to seek therapy. Taking the first step by deciding that therapy might help was described as being more difficult than deciding to seek therapy; contacting the clinic was reported to be easier than deciding to seek therapy. Participants' self-reported

					distress was significantly positively associated with the first two decisions: difficulty in deciding that therapy might help and deciding to seek therapy. Reported distress level was not significantly related to reported difficulty contacting the clinic. Mean self-reported duration of seeking therapy was positively associated with expectations of therapy difficulty measured before treatment. No significant associations were found between mean reported duration of seeking therapy and commitment to therapy at pre-treatment. Mean reported difficulty in the process of seeking psychotherapy was positively associated with pre-treatment expectations of difficulty in the therapy process. No significant associations were found between mean reported difficulty in the process of seeking therapy and reported commitment to therapy at pre-treatment.
Farid and Alapont, 1993	To assess the impact of quality of referral letter on attendance at a psychiatric out-patient clinic	Psychiatric out-patient clinic	64 female, 66 male. Mean age non-attenders 38.7, attenders 47.4. Ethnicity: not reported. Mental health: not reported.	Referral letters	There were significant differences in the quality rating given to the letter of referral for those who attended and those who did not. Non-attenders had lower quality referral letters which did not contain adequate history or specific description of their problems. There were no notable differences between the waiting period for attenders and non-attenders. Non-attenders were likely to have previously not attended for medical or psychiatric out-patient appointments.
Flynn et al., 2010	Identify factors that influence the likelihood of seeking and participating in perinatal depression treatment among un-treated depressed women to begin to inform strategies to better address depression in the obstetrics setting.	Two University hospital-affiliated obstetric clinics	23 female, 0 male. Age not reported. Ethnicity: Black/African-American (11), White/Caucasian (8), Multiracial (1), Asian-American (1), American-Indian (2). Mental health: depression.	Semi-structured interviews	Practical and psychological factors were highlighted as affecting attendance. A strong overarching theme was the need and preference for an individualized approach. That is, women showed varying and individual specific influences (both practical and psychological) on reactions to depression treatment referral and follow through. Practical factors included treatment location, proactive and timely connections with referrals and flexible options. Psychological factors included information about depression and treatment and concerns about stigma associated with treatment for depression.

Greeno et al., 1999	To determine whether patient, system, and illness characteristics predicted patients' return for at least one treatment visit after an assessment appointment.	Rural community mental health centre	51 female, 61 male. Mean age attenders 34.5, non-attenders 30.2. Ethnicity: White (98). Mental health: not reported.	Chart review	Patients seen for assessment within one week of the initial phone call were more likely to attend. Where referrals came from an agency of social control patients were less likely to attend. Non-attenders were more likely to present with issues related to criminal activity, whereas attenders were more likely to present with psychotic or serious cognitive disorders. The distribution of other disorders such as substance abuse, anxiety, and depression was similar. Attenders were assessed as experiencing more severe symptoms at assessment. A significantly higher proportion of attenders had previously received treatment.
Horevitz, 2014	To examine psychosocial and contextual factors in the referral process that predict follow-up with mental health services.	Community Health Clinic	Phase 1: 313 female, 118 male. Mean age 43.5 (SD14.8). Phase 2: 13 female, 3 male. Age not reported. Ethnicity: Latino. Mental health: depression, anxiety, panic.	Face-to-face interviews	Warm hand-offs were significantly more likely to lead to attendance, especially where English was the preferred language. Interviews highlighted the following as being important to patient experiences during the referral process: participants' understanding of the root causes and treatment preferences for depression; participants' overall experience at the service (i.e., sense of connection to the clinic and their primary care provider) as well as their experience of the referral to behavioural health; readiness to engage in recommended treatment for depression; and everyday barriers such as poverty, scheduling issues, and adequate understanding of the services being offered. Issues relating to level of acculturation (language) and gender were also important.
Hundt et al., 2018	To understand the attitudes, experiences, and barriers and facilitators to treatment for veterans who enrolled in a Veterans Association PTSD specialty clinic and were offered prolonged exposure or cognitive processing therapy, but who did not	VA medical centre	5 female, 19 male. Mean age 44.6 (SD 11.9). Ethnicity: Non-Hispanic White (4), African American (12), Hispanic/Latino (8). Mental health: PTSD.	Medical records Qualitative interviews	Barriers categorised as practical, knowledge, emotional, therapy-related and VA-system-related barriers. To facilitators were noted, the thought that treatment had been selected correctly and had positive experiences with the therapist.

	engage in any sessions of either treatment.				
Levy et al., 2019	To compare the characteristics of Veterans with PTSD who did and did not initiate an evidence-based psychotherapy after participating in a treatment information session.	VA medical centre	<p>10 female, 86 male.</p> <p>Mean age for those who initiated treatment 51.36 (SD 12.53), for the no initiation group 50.35 (SD 15.81).</p> <p>Ethnicity: Black (57), White (35), Hispanic/Latino (2), American-Indian (1), Biracial (1).</p> <p>Mental health: depression, anxiety, PTSD, insomnia, panic.</p>	Electronic medical record data collection	Veterans in the No-Initiation group had a longer period of time between the referral and information session than Veterans in the Initiation group. Most Veterans in the No-Initiation group had more than 10 days between the referral and information session.
Lewy and McFarland, 2014	To describe barriers to mental health care perceived by wives of military service members and to compare barriers for military wives with those experienced by similar women in the general population.	None	<p>569 female, 0 male.</p> <p>Mean age 29, range 18-56.</p> <p>Ethnicity: Caucasian (379), African American (11), Asian/ Pacific Islander (12), American Indian (8), Hispanic/Latino (29), other (5).</p> <p>Mental health: depression.</p>	Web-based screening questions and health status measures.	Feeling unable to get away during the day, confidentiality, negative opinions in the community, worries about being committed or forced to take medication, concerns mental health providers would not understand military spouses, trust and not knowing where to go for mental health services were all barriers for military wives attending for mental health support. Cost was a more commonly reported barrier in the general population which didn't feature as prominently with military wives. General population barriers included not knowing where to go for mental health services and being unable to get away during the day, however these were less pertinent than for military wives.
Lichtenthal et al., 2015	To examine bereavement mental health service use, barriers to use, and factors associated with use in parents bereaved by cancer.	Cancer and Paediatric Oncology services	<p>84 female, 36 male.</p> <p>Mean age 47.4 (SD 7.9).</p> <p>Ethnicity: White (99), Black (11), Hispanic (4), Asian (4), Other (2).</p> <p>Mental health: Depression, anxiety, grief.</p>	Survey	Parents reported finding it too painful to speak about their loss, and it was difficult to find help. Increased prolonged grief was associated with it being too painful to discuss their child's death and feeling like no-one can help with coping with the loss.

Lincoln et al., 2005	To search for promising predictors of treatment acceptance, attrition, effectiveness, and relapses after treatment in a field treatment outcome study for social phobia and to compare these with variables identified as predictors in the context of controlled efficacy studies.	Outpatient clinical psychology clinics	126 female, 161 male. Mean age 33.9 (SD 10.5). Ethnicity: not reported. Mental health: social phobia.	Questionnaire/ assessment interview sessions	Finances, accessing treatment elsewhere, doubts about the treatment concept and organisational difficulties were reported to affect attendance for treatment following assessment (assessments took between 4 and 6 50-minute sessions). Where individuals attended for a next session following assessment (cognitive preparation) but did not return, finances, difficulties with treatment and feeling sceptical of the treatment rationale were reported to influence decisions not to attend.
Mohr et al., 2006	To investigate perceived barriers to psychotherapy in a sample of primary care patients and to test the hypothesis that these barriers would be more common among patients with depression.	University based primary care clinic	170 female, 120 male. Mean age 52.6 (SD 14.6). Ethnicity: Caucasian (178), African American (39), Asian American, (34), Latino/a (21), unknown or Other (18). Mental health: depression	Postal survey	Barriers identified were grouped into practical and emotional categories. Practical barriers included cost, time, transport and other responsibilities. Emotional barriers included discomfort talking about personal issues, concerns about being seen while emotional, talking about private topics with someone not known, and concerns about what others (family, friends) would think. More practical and total barriers were reported by women, and more practical, emotional, and total barriers were reported by ethnic minority patients. Poorer perceived health status was associated with increased barriers in all categories. The majority of patients reported at least one perceived barrier that would make it very difficult or impossible to participate in psychotherapy. Depression was associated with increased frequency of perceived barriers. Depression predicted several individual practical barrier items, including cost and transportation difficulties. History of psychotherapy was associated with lower perceived emotional barriers.
Mojtabai et al., 2011	To examine barriers to initiation and continuation of treatment among individuals with common mental disorders in the US general population.	None	5962 participants; sample characteristics not reported.	Survey and face-to-face interviews	Among respondents who recognized a need for treatment, the desire to handle the problem on one's own was the most commonly reported reason for not seeking treatment. Attitudinal/evaluative barriers (such as wanted to handle on own, perceived ineffectiveness, stigma, negative experience with provider, the problem got better) were much more commonly reported than structural barriers (such as

					financial, availability, inconvenient or transportation). Reported reasons for not seeking treatment varied significantly across severity levels, with low perceived need more commonly reported by respondents with mild than moderate or severe disorders. Most attitudinal/evaluative barriers were reported by a higher proportion of respondents with perceived need who had severe or moderate than mild conditions.
Mokruet et al., 2011	To assess the attitudes, perceptions, and obstacles reported by physically injured patients in response to offers of free, brief cognitive-behavioural therapy (CBT) after commonly cited structural obstacles were removed.	Hospital trauma centre	20 female, 35 male. Mean age 34 (SD 12.2). Ethnicity: African American/Black (36), Latino (4). Mental health: acute stress disorder, PTSD, depression, anxiety.	Semi-structured interview and assessment.	The two most common reasons why participants refused treatment were that they believed that they did not need treatment, and concern about friends or family members involved in the trauma took precedence.
Murphy et al., 2013	Trial a method of gathering measures at the point of referral, observe the completion rate of the study measures, and to explore whether it was possible to identify attitudes towards therapy that predicted first point attendance, to inform the design of a larger study.	Primary care	55 female, 49 male. Age range 16-70. Ethnicity: not reported. Mental health: depression, anxiety.	Questionnaire	Endorsing the statement "Talking to a therapist will help me understand better how my mind works" was associated with increased likelihood of attendance.
Murphy et al., 2016	To identify positive and negative attitudes towards therapy that predicted initial attendance.	Primary care	58 female, 38 male. Age not reported. Ethnicity: 96% white. Mental health: not reported.	Questionnaire	Endorsement of an item measuring concern about self-disclosure predicted non-attendance. Positive attitudes towards therapy, particularly those measuring motives for self-reflection, predicted increased attendance among less depressed individuals.
O'Mahen et al., 2015	To gain patient perspectives on engagement and barriers to the Netmums' "Helping with Depression" treatment.	None	17 female, 0 male. Age of trial participants, mean 31.3 (SD 3.95). Ethnicity: not reported. Mental health: not reported.	Telephone interviews.	Relevance to lifestyle, unrealistic expectations of motherhood, a feeling of double stigma, hopeless mentality, negative experience with previous treatment, inadequate support network were all included as barriers to attending for mental health support.

Reece, 2003	To identify predictors of dropout and assist in developing interventions to retain clients in care.	Community-based mental health clinic	42 female, 90 male. Mean age 34.9 (SD 7.8). Ethnicity: Black (67), White (61). Mental health: not reported.	Questionnaires	The most significant predictor of mental health care dropout was the perceived barriers construct of the health belief model, and this was the case after controlling for demographics, physical and psychological health status, and alcohol and other drug use characteristics. It was anticipated that clients would perceive themselves to have a high level of barriers to maintaining appointments for mental health care given the low resource nature of the clinic's client population.
Reust and Lattie, 1999	To explore individual motivations and reasons for appointment-keeping or appointment missing behaviour.	A satellite clinic of a community mental health centre	36 participants. Sample characteristics not reported.	Telephone interviews.	Reasons why patients did not keep appointments included financial issues or transportation difficulties, illness-related reasons, motivation, previous negative experience(s), administrative issues. Those who did not attend appointments were less likely than those who attended to identify an external person who motivated them to attend, or acknowledge that they had a problem which required support.
Shepardson and Funderburk, 2016	To describe primary care patients' likelihood of attending anxiety treatment featuring various options for different treatment attributes	Primary care clinics at a Veteran's Affairs Medical Centre	25 female, 119 male. Mean age 59.8 (SD 13.9). Ethnicity: White (85.4%), Black/African American (9.7%), Hispanic/Latino (1.5%). Mental health: anxiety	Telephone survey followed by a postal/online survey	Participants indicated preferences for monthly, face-to-face individual treatment at a veteran's health administration primary care clinic for 45–60 or 30–45 min with a plan for more than 1–2 visits in total. Appointments with the primary care provider was preferred. Having a symptom focused treatment was rated as more important than whether treatment was face-to-face, over the phone, internet or via an app; the location; or whether treatment was individual, in a group or in a class setting.
Skuse, 1975	To discover patients' feelings about the prospect of seeing a psychiatrist and the attitudes of their friends and relatives to the referral. The study also aimed to find the effect that correcting patients' misconceptions would have on the likelihood of their subsequently attending the clinic.	Psychiatric outpatient clinic	29 female, 21 male. 27 participants were less than 30 years. Ethnicity: not reported. Mental health: not reported.	Interview based on questionnaire responses	Findings indicated that knowledge about treatment, fear and stigma related to mental health and knowledge about the reason for referral were important to those referred to the clinic.

Sloan, 2014	To describe the findings from a retrospective review of patient charts suggesting some reasons for low adherence with treatment relevant to women, particularly recent immigrants or those who have refugee status.	Hospital psychiatry clinic	<p>59 female, 0 male.</p> <p>Mean age 38 (SD 12).</p> <p>Country of origin: Canada (22), Sub-Saharan Africa (26), Other, e.g. Asia, South America, West Indies (11)</p> <p>Mental health: depression, PTSD, GAD, adjustment disorder with depressive mood, other.</p>	Clinic chart review	Being an immigrant or having refugee status, not living with a partner, having children living in the same country and having emotional or social support were all associated with low adherence to treatment in this population.
Sparks et al., 2003	To assess the relationship between referral source (self vs. other), race, and wait time, and whether the client showed up for the intake appointment.	A large urban community mental health centre	<p>587 female, 518 male.</p> <p>Mean age 40.08 (SD 11.91).</p> <p>Ethnicity: African American (165), Asian (24), Caucasian (785), Hispanic (31), Native American (43), Other (30), Unknown (27).</p> <p>Mental health: not reported.</p>	Archive data and telephone logs	The results indicated that individuals who referred themselves for services were more likely to attend an initial intake appointment than those who were referred by others. Conversely, neither race nor wait time was significantly related to pre-intake attrition.
Terrell and Terrell, 1984	To examine whether a relation exists between race of counsellor, client sex, cultural mistrust level, and pre-mature termination rates among black clients.	Outpatient mental health clinic	<p>80 female, 72 male.</p> <p>Age range 27-41.</p> <p>Ethnicity: Black (135).</p> <p>Mental health: depression, anxiety, sexual dysfunction, marital problems.</p>	Clinic records	The results of this study indicate that black clients are more likely to terminate counselling prematurely when seen by a white counsellor than when seen by a black counsellor. One unexpected finding was a significant relation between the simple main effect of trust level and termination rates for all clients and counsellor categories. In addition, Black clients with a high level of mistrust who were seen by a white counsellor had a higher rate of premature termination from counselling than did highly mistrustful black clients seen by a black counsellor.
Trepka, 1986	To establish the extent of attrition from a British out-patient psychology clinic, and to identify factors associated with it.	Outpatient psychology clinic	<p>75 female, 43 male.</p> <p>Mean age 34.1.</p> <p>Ethnicity: not reported.</p>	Clinic appointment attendance	Past psychiatric contact was significantly different between attenders and non-attenders; non-attenders were significantly more likely to have had previous psychiatric contact. Non-engagers were more likely to have been referred by physicians with whom the psychologist had poorer contact.

			Mental health: anxiety, depression, psychosomatic disorders.		
Wells et al., 2013	To examine reasons for dropping out of depression treatment and barriers to depression treatment among predominantly Latino ED patients, and to identify facilitators to depression treatment engagement in this population.	Emergency department at a State and University Medical Centre	19 female, 5 male. Age range 18-62. Ethnicity: Latino. Mental health: depression.	Retrospective telephone interviews	Patients identified a number of barriers that contributed to early non-attendance: transportation problems, cost concerns, employment/unemployment concerns, patient-provider dissatisfaction and issues, and immigrant documentation worries.

Table 4: Quality appraisal (cohort studies)

	Were the two groups similar and recruited from the same population?	Was the information given to patients about the service similar for patients who attended and did not attend appointments?	Was information given to patients about the service recorded in a valid and reliable way?	Were confounding factors identified?	Were strategies to deal with confounding factors (such as socio-demographic characteristics considered to influence attendance) stated?	Were the groups/participants free of the outcome (non-attendance) at the start of the study (or when information about the service was given)?	Were the outcomes measured in a valid and reliable way?	Was the follow up time reported and sufficient to be long enough for outcomes to occur?	Was follow up complete, and if not, were the reasons to loss to follow up described and explored?	Were strategies to address incomplete follow up utilized?	Was appropriate statistical analysis used?
Bados et al., 2007	N/A	Yes	Yes	Yes	No	Yes	Yes	Yes	N/A	N/A	Yes
Elliott et al., 2015	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A	Yes
Farid and Alapont, 1993	N/A	Unclear	No	Yes	No	Yes	Yes	Yes	N/A	N/A	Unclear
Greeno et al., 1999	N/A	Yes	No	Yes	Yes	Yes	Yes	Yes	N/A	N/A	Unclear
Horevitz, 2014*	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A	Yes
Levy et al., 2019	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A	Yes
Lincoln et al., 2005	N/A	Unclear	No	Yes	Yes	Yes	Yes	Yes	N/A	N/A	Yes
Mokruet al., 2011	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A	Unclear

Murphy et al., 2013	N/A	Yes	Yes	Yes	Unclear	Yes	Yes	Yes	N/A	N/A	Yes
Murphy et al., 2016	N/A	Yes	Yes	Yes	No	Yes	Yes	Yes	N/A	N/A	Yes
Reece, 2003	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A	Yes
Skuse, 1975	N/A	Unclear	Yes	Yes	Unclear	Yes	Yes	Yes	N/A	N/A	Unclear
Sloan, 2014	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A	Yes
Sparks et al., 2003	N/A	Unclear	Yes	Yes	Unclear	Yes	Yes	Yes	N/A	N/A	Yes
Terrell and Terrell, 1984	N/A	Yes	Yes	Yes	Unclear	Yes	Yes	Yes	N/A	N/A	Unclear
Trepka, 1986	N/A	Unclear	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A	Yes

Table 5: Quality appraisal (cross-sectional studies)

	Were the criteria for inclusion in the sample clearly defined?	Were the study subjects and the setting described in detail?	Was information given to patients about the service recorded in a valid and reliable way?	Were objective, standard criteria used for measurement of the condition?	Were confounding factors identified?	Were strategies to deal with other factors (such as socio-demographic characteristics considered to influence attendance) stated?	Were the outcomes measured in a valid and reliable way?	Was appropriate statistical analysis used?
Andrade et al., 2014	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Ayres et al., 2019	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Britt et al., 2015	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bruwer et al., 2011	Yes	Yes	N/A	Yes	Yes	Yes	Yes	Yes
Lewy et al., 2014	Yes	Yes	N/A	Yes	Yes	Unclear	Yes	Yes
Lichtenthal et al., 2015	Yes	Yes	N/A	Yes	Yes	Yes	Yes	Yes
Mohr et al., 2006	Yes	Yes	Unclear	Yes	Yes	Yes	Yes	Yes
Mojtabai et al., 2011	Yes	Unclear	Yes	Yes	Yes	Yes	Yes	Yes
Shepardson and Funderburk, 2016	Yes	Yes	N/A	Yes	Yes	Unclear	Yes	Yes

Table 6: Quality appraisal (qualitative studies)

	Is there congruity between the stated philosophical perspective and the research methodology?	Is there congruity between the research methodology and the research question or objectives?	Is there congruity between the research methodology and the methods used to collect data?	Is there congruity between the research methodology and the representation and analysis of data?	Is there congruity between the research methodology and the interpretation of results?	Is there a statement locating the researcher culturally or theoretically?	Is the influence of the researcher on the research, and vice-versa, addressed?	Are participants, and their voices, adequately represented?	Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?	Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?
Anderson et al., 2006	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Barnes et al., 2013	Unclear	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Caplan and Whittemore, 2013	Unclear	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Conner et al., 2010	Unclear	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Flynn et al., 2010	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Horevitz, 2014*	Unclear	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Hundt et al., 2018	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
O'Mahen et al., 2015	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes

Reust et al., 1999	No	Yes	Yes	Unclear	Unclear	No	No	Unclear	No	Unclear
Wells et al., 2013	Yes	Yes	Yes	No	Unclear	No	No	Unclear	Yes	Yes

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Conflict of Interest

Declarations of interest: None.

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Author Statement

Contributors: The concept and methodological approach for this review was developed by JS, DM and PK. JS undertook all tasks relating to searches, screening, data extraction and appraisal, analysis and write-up. DV independently screened titles and abstracts, PK independently screened full-text articles and RW independently extracted and appraised data from selected studies. PC contributed to the analysis process and interpretation of review findings. DM and PK provided supervision throughout this review and contributed to early drafts of this paper. All authors have contributed to the final manuscript.

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