

A Scoping Review on Client-Focused Feedback System in Psychotherapy: Routine Outcome Monitoring

Psikoterapide Danışan Odaklı Geribildirim Sistemine Dair Bir Kapsam Derlemesi: Rutin Sonuç İzleme

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ABSTRACT

Psychologists want to know what works in therapy, what specific factor benefits the individual, and how to improve the quality of therapy outcomes. According to this aim, empirically supported treatments were developed in 2005 and "Evidence-Based Practice" was put forward. Routine Outcome Measure (ROM) is a feedback system which rooted in Evidence-Based Practice. The aim of the current study is to provide information about the ROM method by making a scoping review. EkuAL, PubMed and Scopus databases were scanned. As a result of the screening, 44 studies in the mental health literature that provided information about ROM were included in the study. The findings obtained from 44 studies were evaluated under 6 main headings: Stages of ROM, advantages of ROM, disadvantages of ROM and obstacles to its use, efficacy of ROM, digitalization of ROM and suggestions for the development of ROM. It can be said that ROM is a promising method in terms of improving the quality of therapies. It is expected that studies on ROM and regular use of ROM in therapies will increase in the future.

Keywords: Evidence-based practice, feedback, psychotherapy, routine outcome monitoring, scoping review

ÖZ

Psikologlar psikoterapide neyin işe yaradığını, birey için spesifik olarak neyin fayda ettiğini, psikoterapi çıktılarının kalitesini nasıl arttıracaklarını bilmek istemektedir. Bu bağlamda 2005 yılında ampirik destekli tedaviler geliştirilerek "Kanıtla Dayalı Uygulama (KDU)" öne sürülmüştür. Rutin Sonuç İzlemi (RSİ), KDU'yu temel alan bir geri bildirim sistemidir. Mevcut çalışmanın amacı kapsam derlemesi aracılığıyla RSİ yöntemi hakkında bilgilendirme sunmaktır. EkuAL, PubMed ve Scopus veri tabanlarında tarama yapılmıştır. Taramanın sonucunda ruh sağlığı alan yazınında yer alan ve RSİ hakkında bilgi veren 44 araştırma çalışmaya dahil edilmiştir. 44 çalışmadan elde edilen bulgular RSİ'nin aşamaları, RSİ'nin avantajları, RSİ'nin dezavantajları ve kullanımına dair engeller, RSİ'nin etkinliği, RSİ'nin dijitalleşmesi ve RSİ'nin geliştirilmesine dair öneriler olmak üzere 6 ana başlık altında değerlendirilmiştir. RSİ'nin psikoterapilerin kalitesinin artırılması bakımından umut verici bir yöntem olduğu söylenebilir. Gelecekte RSİ'ye dair çalışmaların ve psikoterapilerde düzenli RSİ kullanımının artması beklenmektedir.

Anahtar sözcükler: Geri bildirim, kanıta dayalı uygulama, psikoterapi, rutin sonuç izleme, kapsam derlemesi

Introduction

The evaluation of psychotherapy is a long-standing and critical area of psychological science. Psychologists are interested in what works in psychotherapy, what works specifically for individuals, and how to improve the quality of psychotherapy outcomes. In Rosenzweig's article, one of the first studies on the impact of psychotherapies, he mentioned the Dodo bird judgment for the first time, stating that different psychotherapy approaches are equally effective (Rosenzweig 1936). Subsequently, in other studies conducted on this subject, psychotherapists were found to be overconfident in evaluating their effectiveness (Lambert 2007, Walfish et al. 2012). It has also been observed that psychotherapists' professional views of positive change in their clients and actual change in their clients are not always parallel to each other (Boswell et al. 2015). Despite the confidence of most psychotherapists, empirical studies claim that only 50% of clients who come to psychotherapy actually benefit from psychotherapy (Lambert 2007). In a survey of psychotherapists, it was found that approximately 85% claimed that their clients recovered, and 90% considered themselves more effective than their peers (Walfish et al. 2012). Therefore, by the mid-1900s, statistical models were claimed to be more accurate than clinical judgments (Ægisdóttir et al. 2006). On the other hand, in the 1990s, the concept of "Empirically

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Received: 04.01.2024 | **Accepted:** 30.04.2024

Supported Treatment" was introduced to define the criteria for effective psychotherapy to define treatments with proven efficacy (Chambless et al. 1996), and different psychotherapy approaches have been questioned according to these criteria. Although the criteria for determining empirically supported treatments are very important, this approach has been criticized for emphasizing only the research aspect of psychotherapy (Lampropoulos 2010). In this context, this approach was further developed in 2005, and the concept of "Evidence-Based Practice (EBP)" was proposed. EBP emphasizes three prominent features in psychotherapy: qualified scientific research, clinical expertise, and client preferences. Thus, the question "Does this treatment work?" has evolved into "Which treatment works, for which individual, under which conditions?" (APA 2006).

The client's preferences, which are one of the three pillars of the EBP approach, emphasize the preferences of clients and their active participation in psychotherapy (e.g. Tilden and Wampold 2017). Here, it would be correct to say that the client's feedback comes at the forefront of the psychotherapy process. In other words, it can be said that feedback is a scientific way of monitoring the course of psychotherapy (Howard et al. 1996). Regarding the importance of feedback, Lambert et al. (2004) made the following statements.

"A necessary and fruitful direction for psychotherapy researchers includes methods of monitoring the client's response to psychotherapy in real time and making changes to the treatment already in progress when the intended positive improvement does not occur. We recommend that more of this type of research be done and that researchers in this field be 'client or outcome oriented'"

With the increase in the importance given to the client and the client's feedback with evidence-based practice and the realization of practice-oriented research, the Routine Outcome Measure (ROM) has emerged (Boswell et al. 2015). In the relevant literature, ROM is also referred to by different names: Progress Monitoring, Measurement-Based Care, Feedback-Informed Treatment (Barkham et al. 2023).

ROM can be seen as the application of standardized measurements, often after sessions, to guide clinical decision-making, monitor treatment progress, and indicate when treatment adaptation is necessary (Pinner and Kivlighan 2018). In addition to providing standardized measurements to the client and scoring these measurements, it can be used as an approach that supports the treatment applied by creating immediate feedback, usually in the form of graphics (Bickman et al. 2012).

ROM is seen as one of the proven methods to increase the effectiveness of psychotherapy (Malins et al. 2020). ROM can be defined as a system that provides outcome assessment in psychotherapy and predicts prognosis according to the results of the assessment (Lambert 2010). It is noteworthy that it integrates the data obtained through outcome assessment into the psychotherapy process and provides feedback to therapists to make adaptations during the course of therapy when things are not going well for clients. There is also evidence that ROM improves the quality of treatment when added to an already-practiced psychotherapy method (Persons et al. 2016). In addition to eclectic applications, there are also researchers who consider ROM as an intervention program on its own right (e.g. Siniscalchi et al. 2020). ROM is also seen as an intervention because it goes beyond just taking measurements and offers the psychotherapist the opportunity to organize their treatment (Malins et al. 2020). The use of ROM as a method stands out, especially in the treatment of depression (Coley et al. 2020).

As a result, ROM is a method based on receiving clients' personal feedback on the psychotherapy process in a regular and standardized manner, based on the fact that not all clients recover. The adaptation of ongoing psychological interventions according to the data obtained using this method contributes significantly to the current effect of psychotherapy (De Jong et al. 2021, Lutz et al. 2021). On the other hand, although this method is predicted to become widespread in a series of studies on the future of psychotherapy in the international psychology literature (Norcross et al. 2022) and recent review studies (Lambert and Shimokawa 2011, Barkham et al. 2023), it is noteworthy that there is no scientific study on this concept in our country yet. The current study aimed to review the studies on ROM through a scoping review and to introduce ROM to experts in Turkey by explaining the main results of ROM.

Method

The present study is not a systematic review that aims to summarize the findings based on the nature, methodology, and statistical analyses of studies in the literature. Rather, it was a literature review in which specific studies were included. It provides an overview in terms of content, with the aim of identifying studies in the literature on ROM, presenting their main characteristics, and predicting future trends. In other words, this study was designed as a scoping review by following the relevant stages (Arksey and O'Malley 2005, Toker, 2022). To ensure that the findings are presented transparently and objectively in a standardized framework, a

screening process based on certain criteria was followed based on (Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews). The EKUAL, PubMed, and Scopus databases were searched to follow the current findings in the national and international literature.

No study on ROM had been conducted in Turkey, and an English search was conducted to examine publications abroad. The above-mentioned databases were searched using the keywords "Routine outcome measure," "Progress monitoring" and "Measurement-based care." Studies conducted in the fields of psychology and psychiatry, whose full texts were available, were included.

As a result of the literature review, 44 studies (25 research articles, seven review articles, three randomized controlled trials, four meta-analyses, two books, one report, one study protocol, and one method article) in the mental health literature that represented ROM in general and provided descriptive information in particular were included in this article. A detailed representation of the screening process is shown in Figure 1.

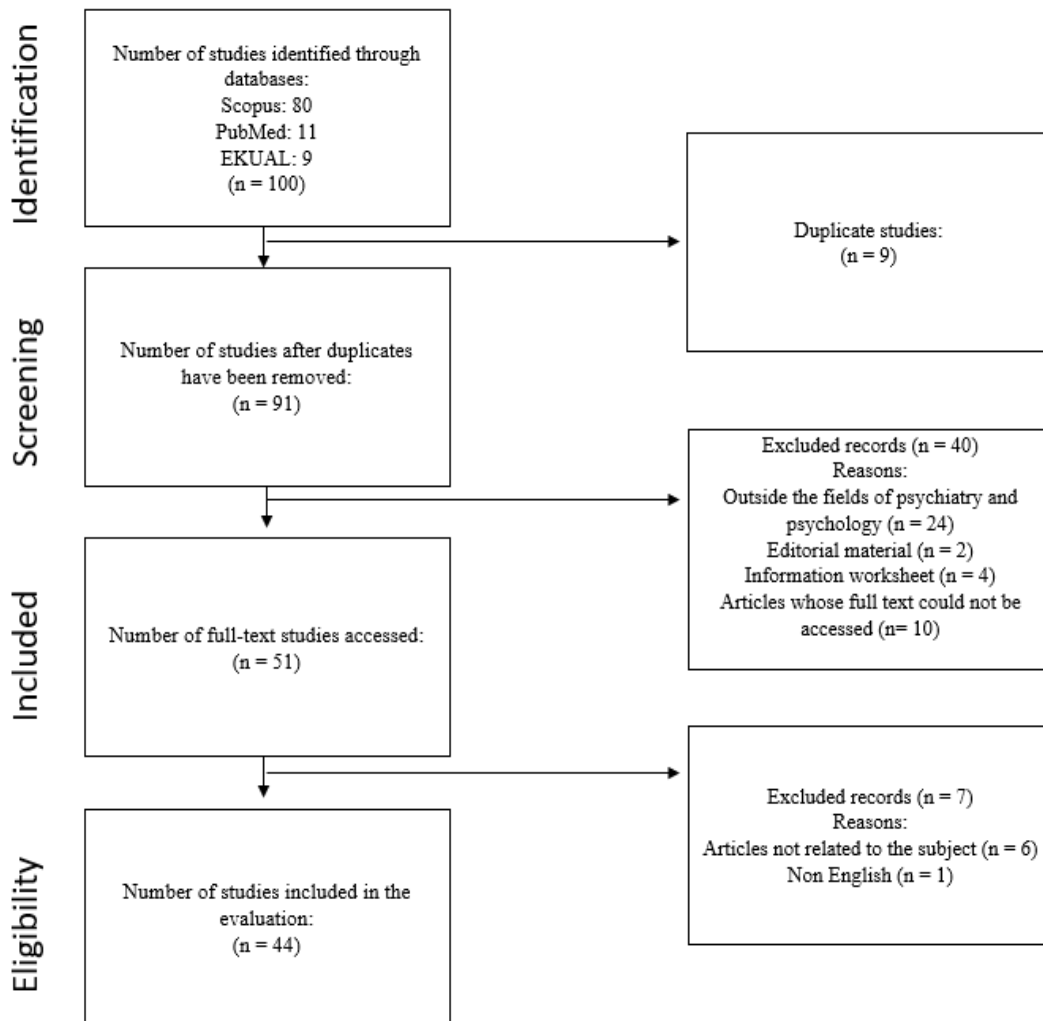


Figure 1. PRISMA flow chart

Results

When the studies on ROM are analyzed as a whole, it is determined that the findings obtained can be analyzed under six main headings: ROM stages, advantages, disadvantages, barriers to its use, effectiveness, digitalization, and suggestions for its development.

Information on the articles used in the findings section is summarized in Table 1. All articles in Table 1 are discussed in detail in the sub-headings below.

Table 1. General characteristics of studies				
Author	Year	Country	Publication type	Findings
Barkham et al.	2001	England	Research	The CORE system, a ROM method, has been found to be valid for different conditions. It has been reported as a reliable measure that is acceptable to both clients and clinicians.
Barkham et al.	2006	England	Review	The development of the CORE system, a ROM method, between 1995 and 2005 was analyzed.
Barkham et al.	2023	England	Research	Clients support ROM when its purpose is clear and it is integrated into treatment. A greater frequency of data collection, use of graphs, and more specific feedback are important.
Bear et al.	2022	England	Research	Participants who used ROM frequently exhibited significantly higher psychological abilities, physical opportunities, social opportunities, and motivation than infrequent users. Lack of a strong evidence base, training for ROM and supervision for ROM were identified as barriers to ROM.
Beck et al.	2021	Australia	Method	A ROM application developed for clients exhibiting addictive behavior was examined. Individual-centeredness is considered important. Further research is required to determine whether this application provides better utilization outcomes.
Bickman et al.	2012	United States	Review	ROM was found to be applicable for family and couple therapy. The advantages and disadvantages of using ROM in family and couple therapies were presented.
Boswell et al.	2015	United States	Review	The advantages, disadvantages, and barriers to the implementation of routine outcome monitoring in clinical practice were reviewed.
Coley et al.	2020	United States	Research	ROM was found to be appropriate for comparing treatment outcomes. It was emphasized that it showed clinically significant improvement, was transparent, and was easy to apply.
De Beurs et al.	2011	Holland	Research	ROM has been shown to be acceptable. Therapists' reservations against ROM started to decrease.
Delgadillo et al.	2018	England	Randomized Controlled Trial (RCT)	When ROM was introduced to patients with a deteriorating prognosis, they were found to show less severe symptoms.
Espel-Huyn et al.	2020	United States	Research	The use of ROM in patients with eating disorders was assessed. ROM was found to be a valid method for the treatment of eating disorders.
Evans et al.	2000	England	Review	The use of ROM was applicable to therapists with different theoretical backgrounds and working in different settings.
Faija et al.	2022	England	Research	Four barriers to improving ROM outcomes were identified: 1. Inconsistency in implementation, 2. Inflexible, mechanistic implementation, 3. Lack of personalization of data, 4. Missed opportunities for therapeutic use.
Gray et al.	2020	Australia	Research	How participants perceive ROM and the potential transition of ROM to technological resources are discussed. The opportunities and risks that may arise when ROM is digitized are highlighted.
Greenhalgh et al.	2018	England	Review	Although ROM allows clients to reflect on their mental health and share their problems with their therapists, it is thought that standardized measurements may limit client communication. In this study, individualized ROM measures were used, which allowed the clients to tell their own stories more.
Hatfield and Ogles.	2004	United States	Research	The rate of therapists' ROM use was investigated. The barriers to therapists not using the ROM method foresee are discussed.
Ionita and Fitzpatrick	2014	Canada	Research	Therapists working in Canada were surveyed regarding their familiarity with ROM. Most therapists were not familiar with ROM.

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Author	Year	Country	Publication type	Findings
Iorfino et al.	2019	Australia	Review	A digital ROM app for young adults was developed. Young adults who used the app were found to have reduced symptoms and potential treatment risks. Future studies are required.
Jensen-Doss et al.	2018	United States	Research	Therapists' attitudes towards ROM and their use of ROM were surveyed. It was found that therapists had positive attitudes about the benefits and harms of ROM, but relatively neutral attitudes about its clinical utility and practicality.
Kendrick et al.	2014	England	Meta Analysis	The use of ROM in adults with common mental health disorders has been found to be ineffective. However, it has been reported that the study findings included in the meta-analysis are subject to uncertainty, and more studies are needed.
Kidd et al.	2022	Australia	Research	A ROM application was examined in clients diagnosed with alcohol use disorder. It was found that clients' treatment completion rates increased. ROM was found to be acceptable and appropriate for both therapists and clients.
Kraus et al.	2005	United States	Research	The psychometric properties of the TOP system, one of the ROM methods, were investigated. It was concluded that the system has good psychometric properties, measures all psychopathologies and can distinguish between "normal" and "abnormal" populations.
Lambert	2010	United States	Book	Changes in routine care have been reported to be required. This article summarizes findings showing that such a change can be easily achieved by integrating specific methods for monitoring clients' treatment response (ROM) at frequent intervals in routine care.
Lambert et al.	1996	United States	Research	The development of the theoretical background of the OQ system, one of the ROM measures, was explained and its psychometric properties were investigated. It was found to have good validity and reliability. It is stated that it can discriminate between "normal" and "abnormal" population.
Lambert et al.	2002(a)	United States	Research	ROM use was found to improve the prognosis of patients whose treatment deteriorated. The clinical significance of ROM use in the treatment of all patients increased.
Lambert et al.	2002(b)	United States	Research	The detection of clients' worsening prognosis was divided into two groups: Detection based on clinical judgment (therapist judgment) and detection based on statistically derived expected improvement curves (use of ROM). The use of ROM was found to identify all clients whose prognosis actually worsened and to be able to identify them more quickly.
Lambert and Shimokawa	2011	United States	Meta Analysis	The effects of two frequently used ROM systems (PCOMS and OQ) were analyzed. The number of clients with poor prognosis was reduced by half with the use of ROM.
Lambert et al.	2018	United States	Meta Analysis	The effects of two frequently used ROM systems (PCOMS and OQ) were analyzed. As a result of the use of ROM, it was found that the worsening of the prognosis of the clients decreased, and the rate of change almost doubled.
Malins et al.	2020	England	Research	The effect of ROM use on clients with intense health anxiety was examined. It was found that the use of ROM provided more improvement in depression, functioning, and well-being levels but did not make a difference in health anxiety. The ROM measurement obtained at the last treatment session predicted the 12-month follow-up.
Miller et al.	2004	United States	Review	The PCOMS system, a ROM method, was explained, and existing research findings on PCOMS were summarized.
Murphy et al.	2021	China	Research	Facilitators and barriers to traditional and digital ROM implementation were identified. It was observed that users' attitudes towards ROM can have both pushing and pulling effects on the use of ROM.

Table 1. General characteristics of studies				
Author	Year	Country	Publication type	Findings
Persons et al.	2016	United States	Research	A training program was developed for therapists to integrate the ROM method into their way of work. Therapists who completed the training showed an increase in the ROM.
Restifo et al.	2015	Australia	Research	The use of ROM in patients with suicidal ideation was assessed. It was observed that the probability of self-harm increased by four cards in clients who were not administered ROM compared with clients who were administered ROM. It was observed that ROM could be used for suicide risk detection.
Peterson and Fagan	2021	United States	Research	The use of ROM was found to significantly influence therapists' assessments and choices. ROM features were found to be influenced by the clinical status of clients.
Rise et al.	2016	Norway	Randomized Controlled Trial (RCT)	The effect of the application of the PCOMS system, a ROM method, on the symptoms and activation levels of clients was investigated. It was found that the use of ROM had no effect on symptoms and activation levels.
Shimokawa et al.	2010	United States	Meta Analysis	The efficacy and effectiveness of ROM in improving therapeutic outcomes are supported. In particular, it has been reported that the treatment outcomes of clients who were at risk in terms of therapy success improved.
Siniscalchi et al.	2020	United States	Randomized Controlled Trial (RCT)	The use of ROM in patients diagnosed with depression was examined. A statistically significant decrease in depression scores was observed. ROM has been found to be effective in identifying and managing depression.
Tasma et al.	2016	Holland	Research	The use of ROM in clients with psychotic symptoms was not reflected in the treatment plan. It was determined that ROM and practical applications are two separate processes that are not integrated.
Tauscher et al.	2021	United States	Research	Therapists working with clients with substance use disorders were interviewed regarding ROM use. Therapists have stated that ROM can be beneficial for clients with substance use disorders.
Tilden and Wampold.	2017	Norway	Book	Information about how ROM should be applied was given. The use of ROM requires good preparation, regular follow-up, and a critical eye on the results.
Van Sonsbeek et al.	2014	Holland	Study Protocol	This study aimed to identify the effective components of ROM and explain their functions in clinical practice.
Wiebe et al.	2021	Canada	Research	Therapists' and clients' attitudes towards the online ROM system were measured. Although there were conflicting attitudes, it was found that online ROM was an acceptable method in general.
Young et al.	2011	United States	Report	In some psychological disorders, such as schizophrenia, ROM has been shown to be inadequate.
Zimmerman and McGlinchey	2008	United States	Research	The frequency of ROM use by therapists working in the United States was examined. Most therapists do not use ROM. The barriers to the use of ROM were found to be the belief that this method is time-consuming, ineffective, and has the necessary training on ROM.

Stages of ROM

ROM consists of three stages (Barkham et al. 2023): 1) Regular data collection from the client (Collect), 2) providing feedback to the psychotherapist and the client about the data collected by the software (Share/Share), and 3) Adapting the psychotherapy process or focusing on feedback when necessary (Act).

1. Stage 1 Data Collection: Although different systems in ROM, four systems are commonly used (Boswell et al. 2015). In the following section, information on each of the four systems is provided.
 - a. The Partners for Change Outcome Management System (PCOMS): The main goal of the PCOMS is to measure progress in psychotherapy and the therapeutic alliance. There are two scales in this

system, each consisting of four items: the Outcome Rating Scale (ORS) and Session Rating Scale (SRS). The first scale focuses on the client's progress between sessions, and the second on the client's perceived psychotherapist-client alliance. The brevity of these measures makes them suitable for every session. The PCOMS measures were completed twice during the session by the client, at the beginning and at the end of the session (Miller et al. 2004).

- b. Treatment Outcome Package (TOP): Through 12 scales, TOP measures clients' symptomatology and functioning. The TOP includes 58 questions on depression, panic, psychosis, suicidal ideation, violence, mania, sleep, substance abuse, and social, work, and sexual life (Kraus et al. 2005). While this system stands out for its multidimensional structure, the difficulty levels in all measured domains can be compared with each other on the same scale owing to the standardization of scores. Therefore, TOP can often be used alone, without the need for additional measurements (Kraus et al. 2010). The TOP is completed before the session (Kraus et al. 2005).
- c. Clinical Outcomes in Routine Evaluation (CORE): CORE, which is frequently used, especially in the UK, has a multidimensional structure like TOP (Barkham et al. 2001). This scale includes 34 questions to measure psychological well-being, social functioning, problems/symptoms, and the risk of harm to others/self-harm (Evans et al. 2000). The brevity of the scale makes it an acceptable measurement system for both clients and psychotherapists. The CORE is completed before the session (Barkham et al. 2006).
- d. Outcome Questionnaire System (OQ): Although it has many forms, the most commonly used is OQ-45. It is the 3rd most frequently used measurement tool when working with adult clients in the USA (Hatfield and Ogles 2004). It comprises 45 items designed to assess psychological distress, interpersonal functioning, and satisfaction with social functioning. The OQ is completed before the session (Lambert et al. 1996).

Each of the four systems described above has its strengths and weaknesses (Kraus et al. 2010). For example, PCOMS is considered more acceptable than the others because it has the fewest items, whereas CORE is widely used in Europe. The TOP and OQ systems are longer than the other two systems, but OQ seems to have the most empirical support (Boswell et al. 2015).

2. Stage 2 Data Feedback: The impact of taking regular measurements on treatment varies according to how information is shared and used in psychotherapy (Greenhalgh et al. 2018). This requires the data to be displayed for joint decision-making in collaboration between the psychotherapist and client (Faija et al. 2022). However, personalized adaptation and feedback procedures should not be rigidly (Drew et al. 2021).

To improve the quality of feedback, it is recommended to clearly explain the rationale for ROM to the client, discuss the results of ROM after each measurement, carry out the process collaboratively, and use graphics or visuals (Barkham et al. 2023).

3. Stage 3 Adaptation of Psychotherapy in the Light of Feedback: It reported that treatment goals can be revised, homework assignments can be created, and therapeutic methods can be adapted individually according to the data obtained from the ROM (Barkham et al. 2023).

When the studies in the literature on ROM were examined, it was observed that this method was used for a wide range of problems. This spectrum includes anxiety disorders (Malins et al. 2020), addiction (Kidd et al. 2022), major depression (Coley et al. 2020, Siniscalchi et al. 2020), psychotic disorders (Young et al. 2011, Tasma et al. 2016), eating disorders (Espel-Huynh et al. 2020) and suicidal thoughts (Restifo et al. 2015).

Advantages of ROM

The advantages of the ROM approach can be listed as follows:

1. It has a positive effect on prognosis: ROM implementation has been reported to have a positive impact on client prognosis (Boswell et al. 2015). ROM has also been found to help identify clients who do not show improvement in treatment or are at risk of dropping out (Shimokawa et al. 2010). As some ROM systems include the monitoring of risk elements (such as suicide or homicide threats, domestic violence, abuse), they are also known to create an opportunity for the detection of newly developing negativities (Restifo et al. 2015), as well as client safety (Tilden and Wampold 2017).

2. It ensures that person-specific outputs are obtained: With the ROM, and clinicians are said to be able to follow the change in clients and generate personalized data (Barkham et al. 2006). With the continuous follow-up feature of ROM, clients who doubt the success of the treatment can be reassured and contribute to the continuation of therapy. In addition, owing to their ability to detect deviations from treatment, psychotherapists can be warned that the current treatment method is dysfunctional or damaging (Lambert et al. 2002b).
3. It reduces the gap between scientific research and practice: ROM involves the transfer of theoretical knowledge developed for randomized controlled trials to daily clinical practice (De Beurs et al. 2011). In practice, it enables data collection in natural settings that generates evidence about outcomes and allows for the investigation of the psychotherapy process (Tilden and Wampold 2017).
4. It is flexible: ROM can be used for different types of psychotherapy approaches, contexts, and client groups. It can also be applied alone or in combination with a treatment approach (Persons et al. 2016, Tilden and Wampold 2017, Siniscalchi et al. 2020).
5. It increases the client's motivation: The client's regular and frequent completion of ROM questionnaires enables abstract data in psychotherapy (emotions, thoughts, interpersonal relationships) to be made more concrete through text, numbers, and graphs (Bickman et al. 2012). Monitoring these changes can increase client motivation. The use of ROM gives the client the message that the ultimate goal is recovery and that they will focus on this goal during the psychotherapy process. In this way, the therapeutic alliance between the psychotherapist and the client can be strengthened (Tilden and Wampold 2017).
6. It enables treatment across diagnoses: A review of the literature reveals evidence that ROM provides advantages specifically in the treatment of different psychological disorders (Shimokawa et al. 2010, Lambert et al. 2018). The first example comes from substance use disorders. In the treatment of substance use disorders, there is evidence that ROM improves client engagement, adherence, and prognosis (Russell et al. 2018, Tauscher et al. 2021). Similarly, there is evidence that ROM provides advantages in the treatment of mood disorders (Lambert et al. 2002a, Coley et al. 2020). The use of ROM for the treatment of eating disorders is relatively new. In 2019, researchers developed and tested the effectiveness of a multidimensional ROM tool for the treatment of eating disorders. The results showed that ROM is appropriate for the treatment of eating disorders (Espel-Huynh et al. 2020).

Disadvantages of ROM and Barriers to its Use

Despite the advantages of ROM, there are disadvantages. These disadvantages can be described as follows.

1. Use of ROM is not yet widespread: most clinicians do not regularly use ROM tools regularly (Kidd et al. 2022). For example, a survey in Canada found that only 12% of psychologists and 40% of mental health professionals in the US use ROM tools (Ionita and Fitzpatrick 2014, Jensen-Doss et al. 2018). In parallel, studies from different countries support this situation (Hatfield and Ogles 2004, Zimmerman and McGlinchey 2008). One of the reasons for this may be that evidence-based practices reach real-life clients too late (Persons et al. 2016), as it has been reported that it takes about 17 years for an empirical research finding to be translated into treatment practice (Weingarten et al. 2000).

One of the clearest examples of the lack of new evidence-based practice in this field is psychotic disorders. The lack of valid, routinely collected outcome data to identify individuals who do not improve or do not receive appropriate treatment for schizophrenia is an ongoing problem. The lack of such data reflects the problem of which outcome domains to monitor and how to functionally collect routine outcome data in large samples. One of the barriers to collecting outcome data on schizophrenia is the gap between research and practice. The ROM methods used in research protocols have proven too costly and time-consuming to be widely adopted in routine practice (Young et al. 2011). To overcome this problem, a comprehensive ROM protocol (PHAMOUS) for individuals with psychotic disorders was established in the Netherlands in 2006 (cited in Tasma et al. 2016). In a study measuring the effectiveness of PHAMOUS, 100 participants diagnosed with a psychotic disorder for an average of 17.7 years were studied. The problems identified in most cases were not reflected in the treatment plans. Therefore, ROM and daily clinical practice seem to be two separate processes (Tasma et al. 2016).

2. Issues with regard to the fidelity of psychotherapists: Some experts see ROM as a barrier to implementing treatment based on a different measure, some see ROM implementation as unnecessary (Persons et al. 2016); while others have noted that some experts may not always be able to review the

results of ROM measures completed by clients, potentially leading to clients feeling unheard (Peterson and Fagan 2021). In addition to the measurement results, the time spent learning new software and managing and monitoring hardware can potentially increase clinicians' workloads. The difficulties associated with accepting and using a new tool and procedure when the clinician's work schedule is overloaded also seem to apply to ROM (Tilden and Wampold 2017).

3. Concern about the objectivity of measures: In a study of 15 clinicians working in three different substance treatment clinics in the United States, experts reported concerns that client-reported outcome measures may contain unreliable, incomplete, inaccurate, or biased information (Peterson and Fagan 2021).

Effectiveness of the ROM

When the advantages and disadvantages of ROM are reviewed, the following question arises: "Is ROM a scientifically effective method?" To answer this question, this section includes the findings of randomized controlled trials and meta-analyses.

A randomized controlled trial conducted by Delgado et al. (2018) involved 77 psychotherapists in the UK who were qualified to deliver evidence-based psychological interventions. Psychotherapists were randomly assigned to the ROM intervention (experimental group) or standard treatment (control group) groups. This study included 2233 clients. All psychotherapists routinely recorded clients' weekly outcome measures (depression and anxiety symptoms) using an electronic recording system. Only psychotherapists in the ROM group had access to advanced outcome-tracking graphs that included expected treatment response curves. These graphs generated an automatic risk signal to alert psychotherapists to clients whose treatment was not going well. The results of the study showed that the symptoms of clients whose treatment was not going well were less severe after treatment in the ROM group compared to those in the control group. Recently, another randomized controlled trial involved 263 individuals diagnosed with major depressive disorder. At the end of the study, they reported that the client recovery rate increased from 0% to 3% (Siniscalchi et al. 2020).

Shimokawa et al. (2010) meta-analyzed the effectiveness of ROM in the treatment of clients at a risk of treatment failure. ROM was found to be effective in improving treatment outcomes by providing a warning system for clinicians to intervene before treatment failure. Lambert et al. (2018) conducted another meta-analysis. Twenty-four studies using the PCOMS and OQ, two of the most commonly used ROM systems, were analyzed. Sixteen studies found that ROM-assisted psychotherapy was superior to standard treatment delivered by the same practitioners. The mean standardized effect sizes showed that the effects ranged from small to moderate.

The available evidence from randomized controlled and meta-analysis studies mentioned in the previous paragraphs suggests that ROM may be an effective approach (Delgado et al. 2018, Shimokawa et al. 2010). Lambert and Shimokawa (2011) reviewed three randomized controlled trials, summarizing a meta-analysis. They found that the ROM groups were 3.5 times more likely to achieve reliable change compared to the standard treatment group.

Although studies have provided evidence of the efficacy of ROM, there are also criticisms of randomized controlled trials and meta-analyses that have been conducted. Almost all randomized controlled trials and meta-analyses of ROM have been conducted by researchers committed to the method under investigation. Therefore, the effectiveness of ROM tends to increase (Luborsky et al. 1999). This is supported by evidence that randomized controlled trials conducted by independent researchers sometimes have less positive results (e.g. Rise et al. 2016). Another criticism of ROM studies is the lack of long-term follow-up (Kendrick et al. 2014). Relatively few studies have performed follow-up measurements after treatment (Malins et al. 2020). Immediate gains have been found in ROM, but it is unclear whether they translate into long-term improvement. The lack of follow-up measurements is a factor that increases the effectiveness of ROM owing to the potential for treatment effects to diminish after the completion of treatment (Lambert 2010).

After presenting all these findings, De Jong et al. (2012) noted that ROM is only effective when it is routinely practiced and feedback is provided to clients.

Digitalization of ROM

Recently, steps have been taken to digitalize the ROM. These efforts are relatively new, and further studies are needed to evaluate the effectiveness of these practices. In 2019, researchers developed a new digital platform

(Innowell) that provides regular feedback. The Innowell Platform is a configurable digital tool for young adults that aims to facilitate measurement-based treatment. The platform collects personal and health information from a young adult (client), an individual clinician, and support persons. This information is scored and reported to the individual, clinician, and desired support person (Iorfino et al. 2019). The platform automatically processes the assessment results using a set of algorithms that score and interpret the responses and data. The results were presented to the user in the form of indicators and text. Personalized treatment options are also offered as a result of these assessments. These options are divided into 2: "What can I do now" and "What can I do with my clinician". In this way, the platform enables joint decision-making between young people, their support person(s), and health professionals. The Innowell Platform is one of the first online applications to provide regular feedback (Van Os et al. 2019).

In another study, conducted in 2020, clients were asked about their views on the use of a digital platform created for ROM. It was observed that most clients were unaware of ROM. The most common statements were "I have never used it", "I have never heard of it", and "What is this?". After being informed about the ROM, the participants were again asked about their opinions on the digitalization of the ROM. The participants' concerns about the digitalization of ROM were as follows: violation of confidentiality and privacy, unauthorized access to information by others, difficulty in getting used to technological mechanisms, and technology replacing face-to-face contact (Gray et al. 2020).

In 2021, a smartphone application, SMART, was developed. It is designed to provide specific feedback on addictive behaviors. The app focuses on the person's plans, problematic behaviors, impact of substance use, self-care, social relationships, and outlook on life and resources. There were several exercises within the app. Through the "7-day plan" exercise, participants can record the details of an action plan and their progress towards personally meaningful goals. The "impulse diary" exercise allows participants to rate the strength of an impulse as it is experienced, receive functional coping strategies and motivational messages, and record relevant triggers, consequences and dysfunctional coping strategies. Emphasis is placed on empowering clients and highlighting their progress. For example, when participants achieved meaningful goals, the app sent a celebratory confetti emoji. Clients' progress is shown through graphics and written feedback (Beck et al. 2021).

In 2021, online ROM was proposed to encourage its increased use in clinical practice. The acceptability of the online ROM system by both the clients and psychotherapists was examined (n=98). It was observed that approximately half of the clients (46%, n=45) accepted the online ROM system. Some clients preferred to use a pen and paper and fill in the measurements during the session with the psychotherapist. When the results of the clients who accepted the intervention were analyzed, it was observed that the completion rate of the questionnaires increased from 16% to 54%. The findings of psychotherapists have been contradictory. 57% (n=56) of psychotherapists reported that the online system was less time-consuming than previous paper-based methods. However, only 31% (n=31) of psychotherapists reported that the online system did not increase their workload. Overall, the results of this study show that the online ROM system can be adopted (Wiebe et al. 2021).

Recommendations for Improving the ROM

Experts have made several recommendations for improving ROM, thus increasing its use. This section presents a compilation of experts' recommendations.

1. **Training of Experts:** Introducing, interpreting, and discussing outcome data with confidence is a time-consuming skill. Therefore, it is recommended that experts receive specialized training on ROM (Bear et al. 2022).
2. **Commitment to ROM:** Specialists' commitment to the treatment they administer is one of the factors affecting the success of treatment (Farmer et al. 2017). Therefore, the extent to which practitioners perceive ROM as meaningful may affect the success rate of ROM. While training specialists on ROM, information about the evidence base and practical usefulness of ROM should also be included (Bear et al. 2022).
3. **Supervision:** Experts may also review ROM during supervision sessions. Thus, the accuracy of the ROM applied in practice (Bear et al. 2022).
4. **Easy Use:** It has been suggested that arrangements should be made for experts to access the measurements directly and easily during the sessions (Bear et al. 2022). In addition, experts are concerned that time and energy burdens will increase (Young et al. 2011, Wiebe et al. 2021). Therefore, it is necessary to develop software to reduce these burdens (Boswell et al. 2015).

5. **Setting Norms and Risk Management:** In maximize the effectiveness of ROM, it is also necessary to establish cutoff points at the interpersonal and intrapersonal levels. Based on these norms, we can determine the risk level of clients and how to intervene. These systems use different methods to predict the level of risk; for example, the OQ system draws a statistically constructed expected improvement curve for different levels of distress before treatment and uses this as a baseline (Boswell et al. 2015).
6. **Emphasizing that Progress is Not Linear:** There fluctuating rather than a linear progression in treatment. At the same time, clients may miss small changes while catching large changes. For this reason, it is recommended to emphasize nonlinear progress to the client by visualizing the data (Tauscher et al. 2021).
7. **Measuring Clinically Useful Outcomes:** Treatment may be perceived as unsuccessful if the client's progress is imposed and measured using rigid standards. For example, in the treatment of substance abuse, complete abstinence is a rigid expectation. Instead, it is necessary to measure more targetable outcomes (client's functional coping skills, increase in quality of life, decrease in symptoms, etc.) (Tauscher et al. 2021).
8. **Ensuring Active Participation of the Client:** For ROM to be effective, it is necessary to fill out questionnaires for the clinician to review the answers and discuss the results with the client during the session (Van Sonsbeek et al. 2020).
9. **Patience** A recent study on psychological treatments shows that the effect of providing feedback to clients increases over time. Therefore, it is recommended that experts should not give up immediately when implementing the ROM system but should be more consistent (Van Sonsbeek et al. 2020).
10. **Ensuring Equality:** Although digitalization of ROM is a new field, the use of digital technology is very important in this field. However, there are demographic differences among clients such as age, access to technology, and the location where they live, which may prevent the use of technology. Therefore, it is recommended that these differences should be taken into consideration and solutions should be produced to ensure equality (Murphy et al. 2021).
11. **Increasing Research on ROM:** Continued research is needed to improve measurement and feedback systems and support clinical utility. According to experts, more evidence on the effectiveness of ROM is needed (Boswell et al. 2015).
12. **Adopting a Researcher-Practitioner Identity:** There gap between the development of evidence-based practices and the transfer of this knowledge to the field. Thus, specialists are expected to bridge this gap. One way to do this is to expand the training program beyond theoretical knowledge to include case conceptualization and treatment planning (Boswell et al. 2015).

Discussion

Psychotherapists want to help their clients in various ways (Tilden and Wampold 2017). However, subjective measurements of the effect of psychotherapy may lead to biased results (Boswell et al. 2015). This underlines the importance of objective measurements and evidence-based practices (Ægisdóttir et al. 2006). On the other hand, today, the question "Which psychotherapy works for which individual?" is the starting point, followed by evidence-based practice principles. Evidence-based practice emphasizes client preferences and psychotherapist characteristics, as well as the best research (APA, 2006). In the emphasis on client preferences, feedback and measurements taken from the client are important. ROM originates from the client-focused pillar of evidence-based practice (Howard et al. 1996).

ROM is a non-complex method that is added to psychotherapy already applied or applied independently and has a moderate to large effect according to research results (Persons et al. 2016, Coley et al. 2020). The basic definition of ROM is that the client fills out standardized measurements systematically and regularly during psychotherapy, and these measurements are evaluated by the feedback system between the client and psychotherapist during psychotherapy (Tilden and Wampold 2017). The implementation of ROM usually consists of three stages: taking measurements from the client on a regular basis (collect), transforming the measurement into written and visual feedback (share), and revising the course of psychotherapy according to the feedback (act) (Barkham et al. 2023).

Looking at the methods developed for ROM, it is seen that there is no single accepted system; more than one system can be applied, and each system has different advantages and disadvantages (Boswell et al. 2015).

Therefore, the system to be adopted may vary according to the needs of the client and psychotherapist's roadmap. For example, a psychotherapist who wants to take measurements with little time in each session may choose PCOMS, while a psychotherapist working with a client who is at risk of harming himself or others may prefer CORE (Evans et al. 2000). However, given that each system has its own theoretical infrastructure and equipment, it would be unrealistic to expect psychotherapists to know and apply every system. Therefore, learning which system to learn, apply, and accept the advantages and disadvantages of the applied system seems to be a decision to be made from the beginning.

ROM emphasizes collaboration between the psychotherapist and the client (Faija et al. 2022). One of the most important factors that make ROM work is providing feedback to clients and talking to them about this feedback (De Jong et al. 2012). In other words, ROM emphasizes interaction and flexibility according to the situation rather than a dogmatic and rigid approach. This underlines the therapeutic alliance and client's active participation in the session. The therapeutic alliance is a collaborative relationship between the psychotherapist and client, based on the extent to which agreement is reached on psychotherapy goals and a set of therapeutic tasks defined to achieve those goals (Baier et al. 2020). Stronger collaboration is associated with more positive treatment outcomes, regardless of psychotherapy modality (Fluckiger et al. 2018). Parallel to the importance of the therapeutic alliance in psychotherapy, it is possible to say that the therapeutic alliance is also important in ROM.

ROM emphasizes the importance of visualization when providing feedback (Barkham et al. 2023). Digital ROM applications use visualization at the highest level (Iorfino et al. 2019, Beck et al. 2021). Through the use of visualization and graphics, clients can gain a better understanding of ROM and become more engaged. The client's more active involvement can strengthen the therapeutic alliance mentioned in the previous paragraph and, consequently, the quality of ROM practice can improve. In this context, psychotherapists can be expected to prioritize creating graphs and discussing them with clients.

Studies have shown that ROM applications have various advantages (Boswell et al. 2015). The most important of these factors can be said to contribute to an improved prognosis (Lambert and Shimokawa 2011). Another finding is that ROM is associated with more favorable psychotherapy outcomes and faster recovery (Boswell et al. 2015). ROM provides a warning about the absence or worsening of any change in the course of psychotherapy or the risk of dropping out of psychotherapy. At the same time, it also enables the detection of factors (such as suicide, abuse) that may put the client's safety at risk during the psychotherapy process (Tilden and Wampold 2017). Thanks to these warnings, the psychotherapist and client can make changes to improve the prognosis.

Instead of providing the same standardized results for everyone, ROM provides individual-specific outputs (Kraus et al. 2010). Obtaining individual-specific outcomes may enable psychotherapy to be shaped on an individual basis. This corresponds to the definition of tailoring psychotherapy according to the uniqueness of the client and the conditions of the context in which the client lives; that is, the concept of individualization/personalization (tailoring). (Norcross and Wampold 2010). Structuring psychotherapy according to only one psychological disorder can result in incomplete treatment. This deficiency can be overcome by the individual characteristics of the client, beyond psychological disorders (Wampold 2001). In this context, it can be said that individualization strives to answer the question posed by evidence-based practice: "Which treatment works for which individual?". It is possible to say that ROM, which takes its origin from evidence-based practice, provides consistency within its own method by providing individualization.

When we look at the studies, it is seen that ROM is used in the treatment of many psychological disorders (Coley et al. 2020, Espel-Huynh et al. 2020). This shows that ROM is a flexible approach and its application area is not limited to a single disorder. Thus, it is possible to say that the needs of heterogeneous client groups can be met through ROM. However, ROM is insufficient in some psychological disorders such as schizophrenia (Young et al. 2011). Future studies should be conducted to expand the application of ROM.

Currently, there are problems in the delivery of scientific studies to experts in the field, and it is recommended that the gap between the National Institute of Mental Health [NIMH] 2023) be bridged. Another advantage of the ROM is that it responds to this need and reduces the gap between research and practice. In this way, both the psychotherapist and the client can participate in the treatment process as two co-researchers (Tilden and Wampold 2017). However, ROM has both disadvantages and advantages. First, ROM is not widely used by clinicians (Kidd et al. 2022) or is not preferred by some clinicians (Persons et al. 2016). This may be because the application of ROM is not sufficiently understood by clinicians. According to literature, the extent to which a psychotherapist applies a method depends on the level of treatment compliance and competence (Foa and Meadows 1997). Increasing the level of knowledge of psychotherapists about ROM, and organizing training and supervision programs on ROM may increase the use of ROM among psychotherapists.

The advantages and disadvantages of ROM, as well as whether it is an effective method, have been the subject of research. It has been argued that while there is evidence for the effectiveness of ROM (e.g. Shimokawa et al. 2010, Delgado et al. 2018), this evidence is mostly from randomized controlled trials and meta-analyses conducted by the same researchers (Luborsky et al. 1999). Another criticism is the lack of follow-up measurements in ROM studies (Malins et al. 2020). An independent group of researchers who conducted randomized controlled trials on ROM reported fewer positive findings on the effectiveness of ROM (Rise et al. 2016). In the light of these findings, it can be said that there is conflicting evidence on the efficacy of ROM, and although ROM is a promising method, there is a need for more studies to be conducted by independent groups.

The American Psychological Association (APA) has long recommended the use of ROM and feedback methodology in routine care (APA, 2006). In some countries, such as Australia, Canada, the UK, and Norway, measuring treatment outcomes has even become a legal requirement (Knapstad et al. 2018). However, there is no information regarding the use of ROM in our country yet. ROM studies should be conducted in Turkey and psychotherapists should be introduced to this method.

Conclusion

The most reliable measurement of recovery in psychotherapy is provided by objective measures (Ægisdóttir et al. 2006). Today, evidence-based practice is the basis for the application of objective measurements and for more people to benefit positively from psychotherapy. ROM is rooted in evidence-based practice and provides feedback by taking regular measurements from clients. Although ROM is practiced in many countries, there is no evidence of its use in Turkey. There is a need to conduct studies on ROM in our country and train psychotherapists who use ROM. This study is the first to introduce ROM in Turkey. This study included 44 articles based on the criteria specified in the methodology and by selecting studies that provide descriptive and representativeness. However, the selection of authors during the screening process may have created bias. This is a limitation of this study.

ROM is an approach that has both advantages and disadvantages; however, it can be said to be a promising method for improving the quality of psychotherapies (Lambert 2007, Boswell et al. 2015). However, more randomized controlled studies should be conducted in this field, and different researchers should participate in these studies. In addition, although it is known which psychotherapy approaches work today, it is not known exactly which specific elements of psychotherapy work (Mulder et al. 2017). Because ROM consists of frequently collected research data, it can identify possible areas for change. Analyzing these data can provide information about what specifically works in psychotherapy (Tilden and Wampold 2017). In the future, it is expected that studies on ROM will increase, psychotherapists will receive training and supervision on ROM, and regular use of ROM in psychotherapies will be observed. Thus, more information can be obtained about how psychotherapies work, for whom they work, and under what conditions they work (Mulder et al. 2017). Although the widespread use of digital ROM seems to be one of the situations that will occur in the future, it is thought that the use of classical ROM should be introduced to individuals first.

References

- Adams JL, Gaynes BN, McGuinness T, Modi R, Willig J, Pence BW (2012) Treating depression within the HIV “Medical Home”: a guided algorithm for Antidepressant Management by HIV Clinicians. *AIDS Patient Care STDS*, 26:647-654.
- Ægisdóttir S, White MJ, Spengler PM, Maugherman AS, Anderson LA, Cook, RS et al. (2006) The meta-analysis of clinical judgment project: fifty-six years of accumulated research on clinical versus statistical prediction. *Couns Psychol*, 34:341-382.
- APA (2006) American Psychological Association (APA) Presidential Task Force on Evidence-Based Practice: Evidence-based practice in psychology. *Am Psychol*, 61:271-285.
- Arksey H, O'Malley L (2005) Scoping studies: towards a methodological framework. *Int J Soc Res Methodol*, 8:9-32.
- Baier AL, Kline AC, Feeny NC (2020) Therapeutic alliance as a mediator of change: a systematic review and evaluation of research. *Clin Psychol Rev*, 82:101921.
- Barkham M, Margison F, Leach C, Lucock M, Mellor-Clark J, Evans C et al. (2001) Service profiling and outcomes benchmarking using the CORE-OM: Towards practice-based evidence in the psychological therapies. *J Consult Clin Psychol*, 69:184-196.
- Barkham M, Mellor-Clark J, Connell J, Cahill J (2006) A core approach to practice-based evidence: a brief history of the origins and applications of the CORE-OM and CORE System. *Couns Psychother Res*, 6:3-15.

- Barkham M, De Jong K, Delgado J, Lutz W (2023) Routine outcome monitoring (ROM) and feedback: research review and recommendations. *Psychother Res*, 33:841-855.
- Bear HA, Dalzell K, Edbrooke-Childs J, Wolpert M (2022) Applying behaviour change theory to understand the barriers to implementing routine outcome monitoring. *Br J Clin Psychol*, 61:557-578.
- Beck AK, Kelly PJ, Deane FP, Baker AL, Hides L, Manning V et al. (2021) Developing a mHealth routine outcome monitoring and feedback app ("Smart track") to support self-management of addictive behaviours. *Front Psychiatry*, 12:677637.
- Bickman L, Kelley SD, Athay M (2012) The technology of measurement feedback systems. *Couple Family Psychol*, 1:274-284.
- Boswell JF, Kraus DR, Miller SD, Lambert MJ (2015) Implementing routine outcome monitoring in clinical practice: benefits, challenges, and solutions. *Psychother Res*, 25:6-19.
- Burgess P, Pirkis J, Coombs T (2015) Routine outcome measurement in Australia. *Int Rev Psychiatry*, 27:264-275.
- Chambless DL (1993) Task Force on Promotion and Dissemination of Psychological Procedures: A Report Adopted by the Division 12 Board-October 1993. Washington DC, American Psychological Association.
- Chambless DL, Sanderson WC, Shoham V, Johnson SB, Pope KS, Crits-Christoph P et al. (1996) An update on empirically validated therapies. *Clin Psychol*, 49:5-18.
- Coley RY, Boggs JM, Beck A, Hartzler AL, Simon GE (2020) Defining success in measurement-based care for depression: a comparison of common metrics. *Psychiatr Serv*, 71:312-318.
- Crits-Christoph P, Ring-Kurtz S, Hamilton JL, Lambert MJ, Gallop R, McClure B et al. (2012) A preliminary study of the effects of individual patient-level feedback in outpatient substance abuse treatment programs. *J Subst Abuse Treat*, 42:301-309.
- De Beurs E, den Hollander-Gijsman ME, van Rood YR, Van der Wee NJ, Giltay EJ, van Noorden MS et al. (2011) Routine outcome monitoring in the Netherlands: practical experiences with a web-based strategy for the assessment of treatment outcome in clinical practice. *Clin Psychol Psychother*, 18:1-12.
- De Jong K, van Sluis P, Nugter MA, Heiser WJ, Spinhoven P (2012) Understanding the differential impact of outcome monitoring: therapist variables that moderate feedback effects in a randomized clinical trial. *Psychother Res*, 22:464-474.
- De Jong K, Conijn JM, Gallagher R, Reshetnikova AS, Heij M, Lutz MC (2021) Using progress feedback to improve outcomes and reduce drop-out, treatment duration, and deterioration: a multilevel meta-analysis. *Clin Psychol Rev*, 85:102002.
- Delgado J, de Jong K, Lucock M, Lutz W, Rubel J, Gilbody S et al. (2018) Feedback-informed treatment versus usual psychological treatment for depression and anxiety: a multisite, open-label, cluster randomised controlled trial. *Lancet Psychiatry*, 5:564-572.
- Drew P, Irvine A, Barkham M, Faija C, Gellatly J, Ardern K et al. (2021) Telephone delivery of psychological interventions: balancing protocol with patient-centred care. *Soc Sci Med*, 277:113818.
- Duncan BL, Reese RJ (2015) The partners for change outcome management system (PCOMS): revisiting the client's frame of reference. *Psychotherapy (Chic)*, 52:391-401.
- Espel-Huynh H, Thompson-Brenner H, Boswell JF, Zhang F, Juarascio AS, Lowe MR (2020) Development and validation of a progress monitoring tool tailored for use in intensive eating disorder treatment. *Eur Eat Disord Rev*, 28:223-236.
- Evans C, Mellor-Clark J, Margison F, Barkham M, Audin K, Connell J et al. (2000) CORE: clinical outcomes in routine evaluation. *J Ment Health*, 9:247-255.
- Faija CL, Bee P, Lovell K, Lidbetter N, Gellatly J, Ardern K et al. (2022) Using routine outcome measures as clinical process tools: maximising the therapeutic yield in the IAPT programme when working remotely. *Psychol Psychother*, 95:820-837.
- Farmer CC, Mitchell KS, Parker-Guilbert K, Galovski TE (2017) Fidelity to the cognitive processing therapy protocol: evaluation of critical elements. *Behav Ther*, 48:195-206.
- Fluckiger C, Del Re AC, Wampold BE, Horvath AO (2018) The alliance in adult psychotherapy: a meta-analytic synthesis. *Psychotherapy (Chic)*, 55:316-340.
- Foa EB, Meadows EA (1997) Psychosocial treatments for posttraumatic stress disorder: a critical review. *Annu Rev Psychol*, 48:449-480.
- Gray RM, Kelly PJ, Beck AK, Baker AL, Deane FP, Neale J et al. (2020) A qualitative exploration of SMART Recovery meetings in Australia and the role of a digital platform to support routine outcome monitoring. *Addict Behav*, 101:106144.

- Greenhalgh J, Gooding K, Gibbons E, Dalkin S, Wright J, Valderas J et al (2018) How do patient reported outcome measures (PROMs) support clinician-patient communication and patient care? A realist synthesis. *J Patient Rep Outcomes*, 2:42-70.
- Hatfield DR, Ogles BM (2004) The use of outcome measures by psychologists in clinical practice. *Prof Psychol Res Pr*, 35:485-491.
- Howard KI, Moras K, Brill PL, Martinovich Z, Lutz W (1996) Evaluation of psychotherapy. Efficacy, effectiveness, and patient progress. *Am Psychol*, 51:1059-1064.
- Ionita G, Fitzpatrick M (2014) Bringing science to clinical practice: a Canadian survey of psychological practice and usage of progress monitoring measures. *Can Psychol*, 55:187-196.
- Iorfino F, Cross SP, Davenport T, Carpenter JS, Scott E, Shiran S et al. (2019) A digital platform designed for youth mental health services to deliver personalized and measurement-based care. *Front Psychiatry*, 10:595.
- Jensen-Doss A, Haimes EMB, Smith AM, Lyon AR, Lewis CC, Stanick CF et al. (2018) Monitoring treatment progress and providing feedback is viewed favorably but rarely used in practice. *Adm Policy Ment Health*, 45:48-61.
- Kendrick T, Moore M, Gilbody S, Churchill R, Stuart B, El-Gohary M (2014) Routine use of patient reported outcome measures (PROMs) for improving treatment of common mental health disorders in adults. *Cochrane Database Syst Rev*, 7:CD011119.
- Kidd C, Connor JP, Feeney GF, Gullo MJ (2022) Improving assessment and progress monitoring in alcohol use disorder: an implementation evaluation of the instant assessment and personalised feedback system (iAx). *Addict Behav*, 135:107438.
- Knapstad M, Nordgreen T, Smith OR (2018) Prompt mental health care, the Norwegian version of IAPT: clinical outcomes and predictors of change in a multicenter cohort study. *BMC Psychiatry*, 18:260.
- Kraus DR, Seligman D, Jordan JR (2005) Validation of a behavioral health treatment outcome and assessment tool designed for naturalistic settings: The Treatment Outcome Package. *J Clin Psychol*, 61:285-314.
- Kraus DR, Boswell JF, Wright AGC, Castonguay LG, Pincus AL (2010) Factor structure of the treatment outcome package for children. *J Clin Psychol*, 66:627-640.
- Lambert MJ, Burlingame GM, Umphress V, Hansen NB, Vermeersch DA, Clouse GC et al. (1996) The reliability and validity of the Outcome Questionnaire. *Clin Psychol Psychother*, 3:249-258.
- Lambert MJ, Whipple JL, Vermeersch DA, Smart DW, Hawkins EJ, Nielsen SL et al. (2002a) Enhancing psychotherapy outcomes via providing feedback on client progress: a replication. *Clin Psychol Psychother*, 9:91-103.
- Lambert MJ, Whipple JL, Bishop MJ, Vermeersch DA, Gray GV, Finch AE (2002b) Comparison of empirically derived and rationally derived methods for identifying clients at risk for treatment failure. *Clin Psychol Psychother*, 9:149-164.
- Lambert MJ, Bergin AE, Garfield SL (2004) Overview, trends, and future issues. In *Handbook of Psychotherapy and Behavior Change* (Eds MJ Lambert):805-821. Hoboken, NJ, Wiley.
- Lambert M (2007) Presidential address: What we have learned from a decade of research aimed at improving psychotherapy outcome in routine care. *Psychother Res*, 17: 1-14.
- Lambert MJ (2010) *Prevention of Treatment Failure: The Use of Measuring, Monitoring and Feedback in Clinical Practice*. Washington, American Psychological Association.
- Lambert MJ, Shimokawa K (2011) Collecting client feedback. *Psychotherapy (Chic)*, 48:72-79.
- Lambert MJ, Kahler M, Harmon C, Burlingame GM, Shimokawa K, White MM (2013) *Administration and Scoring Manual. Outcome Questionnaire OQ®-45.2 (Rev ed.)*, Salt Lake City, UT, OQMeasures.
- Lambert MJ, Whipple JL, Kleinstaubler M (2018) Collecting and delivering progress feedback: a meta-analysis of routine outcome monitoring. *Psychotherapy (Chic)*, 55:520-537.
- Lampropoulos GK (2010) A reexamination of the empirically supported treatments critiques. *Psychother Res*, 10:474-487.
- Lennox RD, Sternquist MA, Paredes A (2013) A simplified method for routine outcome monitoring after drug abuse treatment. *Subst Abuse*, 7:155-169.
- Luborsky L, Diguier L, Seligman DA, Rosenthal R, Krause ED, Johnson S et al. (1999) The researcher's own therapy allegiances: a "wild card" in comparisons of treatment efficacy. *Clin Psychol (New York)*, 6:95-106.
- Lutz W, De Jong K, Rubel JA, Delgadillo J (2021) Measuring, predicting, and tracking change in psychotherapy. In *Handbook of Psychotherapy and Behavior Change* (Eds M Barkham, W Lutz, LG Castonguay):89-133. Hoboken, NJ, Wiley.
- Malins S, Moghaddam N, Morriss R, Schröder T (2020) Extending the use of routine outcome monitoring: predicting long-term outcomes in cognitive behavioral therapy for severe health anxiety. *Psychother Res*, 30:662-674.

- Miller SD, Duncan BL, Brown J, Sparks J, Claud D (2003) The outcome rating scale: a preliminary study of the reliability, validity, and feasibility of a brief visual analog measure. *Journal of Brief Therapy*, 2:91-100.
- Miller SD, Duncan BL, Sorrell R, Brown GS (2004) The partners for change outcome management system. *J Clin Psychol*, 61:199-208.
- Mulder R, Murray G, Rucklidge J (2017) Common versus specific factors in psychotherapy: opening the black box. *Lancet Psychiatry*, 4:953-962.
- Murphy JK, Michalak EE, Liu J, Colquhoun H, Burton, H, Yang X et al. (2021) Barriers and facilitators to implementing measurement-based care for depression in Shanghai, China: a situational analysis. *BMC Psychiatry*, 21:430.
- National Institute of Mental Health [NIMH] (2023) Dissemination and implementation research program. <https://www.nimh.nih.gov/about/organization/dsir/services-research-and-epidemiology-branch/dissemination-and-implementation-research-program> (Accessed 09.11.2023).
- Norcross JC, Wampold BE (2011) What works for whom: tailoring psychotherapy to the person. *J Clin Psychol*, 67:127-132.
- Norcross JC, Pfund RA, Cook DM (2022) The predicted future of psychotherapy: A decennial e-Delphi poll. *Prof Psychol Res Pr*, 53:109-115.
- Persons JB, Koerner K, Eidelman P, Thomas C, Liu H (2016) Increasing psychotherapists' adoption and implementation of the evidence-based practice of progress monitoring. *Behav Res Ther*, 76:24-31.
- Peterson PA, Fagan C (2021) Improving measurement feedback systems for measurement-based care. *Psychother Res*, 31:184-199.
- Pierce M, Bird SM, Hickman M, Marsden J, Dunn G, Jones A et al. (2016) Impact of treatment for opioid dependence on fatal drug-related poisoning: a national cohort study in England. *Addiction*, 111:298-308.
- Pinner DH, Kivlighan DMIII (2018) The ethical implications and utility of routine outcome monitoring in determining boundaries of competence in practice. *Prof Psychol Res Pr*, 49:247-254.
- Pinsof WM, Wynne LC (2000) Toward progress research: closing the gap between family therapy practice and research. *J Marital Fam Ther*, 26:1.
- Restifo E, Kashyap S, Hooke GR, Page AC (2015) Daily monitoring of temporal trajectories of suicidal ideation predict self-injury: a novel application of patient progress monitoring. *Psychother Res*, 25:705-713.
- Rise MB, Eriksen L, Grimstad H, Steinsbekk A (2016) The long-term effect on mental health symptoms and patient activation of using patient feedback scales in mental health out-patient treatment. A randomised controlled trial. *Patient Educ Couns*, 99:164-168.
- Russell KC, Gillis HL, Law L, Couillard J (2018) A pilot study examining outcomes associated with the implementation of progress monitoring at a substance use disorder treatment program for adolescents. *Child Youth Care Forum*, 47:403-419.
- Shimokawa K, Lambert MJ, Smart DW (2010) Enhancing treatment outcome of patients at risk of treatment failure: meta-analytic and mega-analytic review of a psychotherapy quality assurance system. *J Consult Clin Psychol*, 78:298-311.
- Siniscalchi KA, Broome ME, Fish J, Ventimiglia J, Thompson J, Roy P et al. (2020) Depression screening and measurement-based care in primary care. *J Prim Care Community Health*, 11: 2150132720931261.
- Tasma M, Swart M, Wolters G, Liemburg E, Bruggeman R, Knegtering H et al. (2016) Do routine outcome monitoring results translate to clinical practice? A cross-sectional study in patients with a psychotic disorder. *BMC Psychiatry*, 16:107.
- Tauscher JS, Cohn EB, Johnson TR, Diteman KD, Ries RK, Atkins DC et al. (2021) What do clinicians want? Understanding frontline addiction treatment clinicians' preferences and priorities to improve the design of measurement-based care technology. *Addict Sci Clin Pract*, 16:38.
- Toker A (2022) Bir araştırma metodolojisi olarak sistematik literatür incelemesi: meta-sentez yöntemi. *Anadolu Üniversitesi Sosyal Bilimler Dergisi*, 22:313-340.
- Tilden T, Wampold BE (2017) *Routine Outcome Monitoring in Couple and Family Therapy. How, When, and Why Do People Change Through Psychological Interventions*. Berlin, Springer.
- Van Os J, Guloksuz S, Vijn TW, Hafkenscheid A, Delespaul P (2019) The evidencebased group-level symptom-reduction model as the organizing principle for mental health care: time for change? *World Psychiatry*, 18:88-96.
- Van Sonsbeek MA, Hutschemaekers GG, Veerman JW, Tiemens BB (2014) Effective components of feedback from Routine Outcome Monitoring (ROM) in youth mental health care: study protocol of a three-arm parallel-group randomized controlled trial. *BMC Psychiatry*, 14:3.
- Walfish S, McAlister B, O'Donnell P, Lambert MJ (2012) An investigation of self-assessment bias in mental health providers. *Psychol Rep*, 110:639-644.
- Wampold BE (2001) *The Great Psychotherapy Debate: Models, Methods, and Findings*. New Jersey, Erlbaum.

- Weingarten S, Garb CT, Blumenthal D, Boren SA, Brown GD (2000) Improving preventive care by prompting physicians. *Arch Intern Med*, 160:301-308.
- Wiebe DE, Remers S, Nippak P, Meyer, J (2021) Evaluation of an online system for routine outcome monitoring: Cross-sectional survey study. *JMIR Mental Health*, 8:e29243.
- Young AS, Mintz J, Cohen AN (2004) Using information systems to improve care for persons with schizophrenia. *Psychiatr Serv*, 55:253-255.
- Young AS, Niv N, Chinman M, Dixon L, Eisen SV, Fischer EP et al. (2011) Routine outcomes monitoring to support improving care for schizophrenia: report from the VA Mental Health QUERI. *Community Ment Health J*, 47:123-135.
- Zimmerman M, McGlinchey JB (2008) Why don't psychiatrists use scales to measure outcome when treating depressed patients? *J Clin Psychiatry*, 69:1916-1919.

Authors Contributions: The author(s) have declared that they have made a significant scientific contribution to the study and have assisted in the preparation or revision of the manuscript

Peer-review: Externally peer-reviewed.

Conflict of Interest: No conflict of interest was declared.

Financial Disclosure: No financial support was declared for this study.