



TRANSFORMING COGNITIVE REHABILITATION

Effective Instructional Methods

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CHAPTER 12

Cognitive Rehabilitation for Functional Cognitive Symptoms

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When considering the practice of cognitive rehabilitation, we thought it important to devote a chapter to discussing treatment of individuals with *functional symptoms*. Functional symptoms are genuine, distressing, often disabling to the person, and are accompanied by distinctive clinical features that cannot be fully explained by another recognized neurological or medical condition (Schmidtke, Pohlmann, & Metternich, 2008; Stone et al., 2015). The lack of consensus on nomenclature for individuals with functional symptoms continues to be problematic, with varying labels used in clinical practice and scientific literature, including “psychogenic,” “psychosomatic,” “conversion disorder,” “nonorganic,” “cogniform disorder,” or “medically unexplained.” This chapter will use the term *functional* in accordance with recent trends for diagnostic terminology (Ball et al., 2020; Edwards, Stone, & Lang, 2014; Stone et al., 2015), and because of preliminary evidence that the word “functional” is preferred by clients (Ding & Kanaan, 2016). Functional neurological disorder (FND) is often used as an umbrella term for these conditions.

Functional symptoms can include cognitive symptoms (e.g., memory loss, inability to focus), motor dysfunction (e.g., paralysis, tremor), speech changes (e.g., stuttering, dysphonia), sensory dysfunction (e.g., vision changes, pain), and episodes of altered awareness (e.g., dissociative or functional seizures). Clients with functional symptoms are seen in a variety of medical settings, and symptoms vary widely among clients,

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with many presenting as polysymptomatic. Many individuals with functional symptoms have a comorbid neurological disorder and/or experienced a precipitating physical event or trauma before developing functional symptoms (Kutlubaev, Xu, Hackett, & Stone, 2018; Stone et al., 2009). In other words, a notable percentage of clients present for treatment with both functional symptoms *and also* symptoms related to identifiable pathology [e.g., traumatic brain injury (TBI), epilepsy]. This chapter focuses on functional cognitive symptoms (FCS), which constitute a large proportion of clients with functional symptoms. For example, clients with FCS comprise an estimated 12–56% of new referrals in cognitive or memory disorders clinics (Bharambe & Larner, 2018; Bhome, McWilliams, Huntley, Fleming, & Howard, 2019; Elsey et al., 2015; Pennington, Ball, & Swirski, 2019; Pennington, Hayre, Newson, & Coulthard, 2015; Wakefield et al., 2018). Given these high base rates, it is likely that clinicians have worked with or will work with clients with FCS during their careers, perhaps often.

Despite the high prevalence of FCS, development of evidence-based guidelines and training in treatment approaches have historically been neglected, making it challenging for clinicians working with this population. Clients with functional symptoms report higher levels of disability and distress than clients with other identified neurological diagnoses, which underscores the immense need for targeted interventions for FCS (Carson et al., 2011). These clients are also at high risk for iatrogenic effects secondary to misdiagnosis and delays in appropriate intervention (Stone et al., 2015). Fortunately, there has been increasing awareness and acceptance of functional symptoms as an important clinical issue in recent years. Although more randomized controlled trials are needed, emerging evidence has elucidated general principles and approaches that can be effective when working with clients with functional symptoms (Nicholson et al., 2020; Nielsen et al., 2015). Most of the existing literature and research has focused on noncognitive functional symptoms (e.g., functional motor disorders, functional speech disorders, functional seizures), however, and there is currently no evidence-based consensus on how to treat FCS. More research is needed to develop gold-standard treatments for functional cognitive conditions. In the interim, cognitive rehabilitation clinicians need resources to inform their work with these clients, who frequently present for evaluation and treatment. Thus, using the existing scientific literature on functional symptoms, this chapter provides an overview of what is currently known about FCS and proposes a client-centered, practical approach for cognitive rehabilitation treatment of clients with FCS.

ETIOLOGIES

Historically, functional symptoms were thought to result from emotional trauma and other psychological causes. Although psychological factors can increase the risk for developing functional symptoms, many individuals with functional symptoms do not endorse any history of traumatic events or psychological diagnoses (Kranick, Gorrindo, & Hallett, 2011). Current etiological models have moved away from erroneous mind-versus-body dichotomies and instead propose that development and maintenance of functional symptoms can best be understood via a biopsychosocial framework. Psychological factors to consider include history of adverse childhood events, comorbid psychological conditions, and illness beliefs. Social factors may include social benefits

(e.g., increased support from family) or avoidance of undesired activities (e.g., a stressful work environment) due to symptoms. Biological factors, as noted above, often include a precipitating physical injury (e.g., a concussion) or medical illness (e.g., epilepsy, COVID-19) that precedes the onset of functional symptoms. The combination of these three factors underscores the utility of an integrated biopsychosocial approach to treatment, as opposed to the historical approach of solely referring to a psychiatrist or psychologist for treatment.

ASSESSMENT

Given that functional symptoms can be highly varied and may present differently depending on the time point, setting, and treating provider, interprofessional assessment and collaboration are crucial for diagnosis and treatment planning. The need for diagnostic criteria is supported by evidence that clients with longer symptom duration have poorer outcomes, whereas early diagnosis predicts good outcomes (Gelauff & Stone, 2016). One common misconception is that functional conditions are a diagnosis of exclusion (i.e., a diagnosis made by ruling out all other conditions), as opposed to diagnosing based on clinical features (Lidstone, Araújo, Stone, & Bloem, 2020). However, recent research efforts have focused on identifying “positive” clinical signs that can be used to make an affirmative diagnosis of functional symptoms (Espay et al., 2018; McWhirter, Ritchie, Stone, & Carson, 2020).

As with any diagnosis, the potential for misdiagnosis of FND must be acknowledged and carefully considered, as this has significant implications for prognosis and treatment. FND is often diagnosed by a neurologist, and referral to a specialist with expertise in neurological diagnosis is recommended (Bennett et al., 2021). It is, however, important for all clinicians engaged in cognitive rehabilitation to be knowledgeable about positive clinical signs of FND. As Lidstone and colleagues (2020) highlighted, missing another medical or neurological condition can cause profound harm to the client, but misdiagnosing FND as another neurological condition can be just as harmful. While more longitudinal studies are needed, existing data suggest that when a specialist makes an FND diagnosis, FND can be diagnosed as accurately as other neurologic and psychiatric conditions (Gelauff & Stone, 2016).

Unfortunately, although there are emerging diagnostic criteria for FND, at present there are no validated diagnostic criteria specifically for FCS. As with all clients with FND, clients with FCS are at high risk for iatrogenic effects if symptoms are not accurately diagnosed and appropriately treated in a timely manner (McWhirter et al., 2020). Many individuals with FCS undergo unnecessary, duplicative, and costly tests and evaluations, as well as inappropriate treatment, without receiving an accurate explanation for their symptoms. Without a clear understanding of their diagnosis, clients are denied the opportunity to make informed treatment decisions (Barnett, Davis, Mitchell, & Tyson, 2020).

Although there is no consensus on diagnostic criteria for functional cognitive conditions, experts in the field have described the utility of “internal” and “external” inconsistencies as markers for FCS (Bennett et al., 2021; Duffy, 2016; McWhirter et al., 2020). Internal inconsistency has been described as the ability to perform a task well at certain times but with significantly impaired ability at other times, particularly when the client’s

performance on the task is the focus of attention (Ball et al., 2020). For example, a client may demonstrate excellent working memory and detailed recall of recent events during casual conversation but severely impaired performance on simple tasks of attention and recall during formal testing. Another example of internal inconsistency is a client who successfully maintains a cognitively challenging job but demonstrates significant difficulty on much simpler cognitive tasks during treatment sessions. It is important to highlight that these inconsistencies must be distinguished from the fluctuations over time that can be observed in other conditions, such as delirium, Lewy body dementia, or cognitive fatigue after acquired brain injury, or from medication effects.

Evidence of external inconsistencies can also suggest functional symptoms (Stone et al., 2015). External inconsistencies are incongruencies between the client's presentation and what typically occurs in neurological conditions affecting cognition. For example, after a concussion, a client with FCS may report a marked increase in cognitive symptoms 6 months after the event with no other precipitating cause. This is incongruent with expected concussion recovery, in which cognitive symptoms improve rather than worsen over time. Another example is a client concerned about dementia who is able to easily recall detailed information about their recent medical experiences (e.g., appointment dates, clinicians' names, test results) but reports an inability to recall the names of family members and close friends with whom they regularly interact. This presentation is incongruent with neurological conditions affecting memory, in which we would typically expect overlearned, remote information to be more intact than new information. Although further empirical validation of positive clinical signs of FCS is needed to improve diagnostic accuracy, these clinical signs should trigger further investigation by the client's physician and treatment team. Rather than jumping to conclusions based on one observation, the treatment team should collaborate to determine if there are converging patterns of positive clinical signs. Neuropsychological testing, which emphasizes performance and symptom validity measurement, can provide objective evidence for internal and external inconsistencies, and assist with diagnosis and treatment recommendations.

When assessing clients with possible functional symptoms, clinicians may encounter behaviors that feel "exaggerated," which can raise questions about the presence of consciously feigned symptoms for secondary gain, such as attention from others (as seen in factitious disorder) or financial gain (as seen in malingering). Clinicians may find themselves attempting to disentangle whether symptoms are consciously or unconsciously produced, which is difficult, if not impossible in many cases (Stone, Carson, & Sharpe, 2005). While it is important for treating clinicians to thoroughly consider external factors that may be reinforcing symptoms (e.g., avoiding a stressful work setting, receiving increased care from spouse), a brief trial of client-centered treatment can be provided to improve functioning without making a determination regarding volition. Clinicians are encouraged to be aware of natural biases they may have to ensure that these biases do not impede a nonjudgmental and collaborative approach. If clients feel that their clinician is doubting the veracity or validity of their symptoms, they may (consciously or unconsciously) exhibit increased severity of symptoms (Ahern, Stone, & Sharpe, 2009; Bennett et al., 2021; O'Connell, Jones, Chalder, & David, 2020). In turn, clinicians can become frustrated by this increase in symptoms and resulting lack of progress, creating a vicious cycle (Barnett et al., 2020).

COMMON PRESENTATIONS OF FCS

Presentations of FCS can be very heterogeneous. The following are examples that may be encountered within the context of cognitive rehabilitation (Stone et al., 2015).

FCS as the Primary Concern

Miguel was a 44-year-old attorney who presented to outpatient cognitive rehabilitation with complaints of memory problems for the previous year after a concussion. A neurological exam and neuroimaging were normal, and neuropsychological testing indicated above-average cognitive abilities. During the initial evaluation with his speech-language pathologist, Miguel provided a detailed description of his recent errors and memory lapses, recalling exactly when and where they occurred. The accuracy of his report was verified by his husband. He had disengaged from household responsibilities he once took pride in doing, such as grocery shopping and cooking, due to fear of memory lapses. Despite these cognitive symptoms, he had been recently promoted at work, and he consistently receives positive feedback about his performance from his partners at his law firm.

Individuals may present with FCS as the sole concern or chief complaint. Although they may also have other comorbid functional symptoms, such as dizziness or vision changes, the cognitive symptoms are causing the most distress and/or having the most impact on functioning.

FCS as a Component of Another Functional Neurological Disorder

Nia, a 53-year-old financial manager, participated in physical therapy after being diagnosed with a functional movement disorder after hospitalization 2 years previously. Her primary symptoms at that time were functional weakness and tremor in her legs. Although she was receptive to the diagnosis and treatment approach, progress had been somewhat slow. When discussing perceived barriers, she reported difficulty attending to information during therapy sessions due to extreme distractibility, as well as difficulty implementing treatment strategies at home due to forgetfulness. Although not reported during her initial evaluation, it became evident as sessions progressed that cognitive symptoms were limiting treatment progress and daily functioning. On neuropsychological testing, Nia performed better on more challenging tasks than easier tasks (e.g., better performance on free recall than recognition memory tasks).

Research suggests that clients with other functional neurological disorders, such as functional movement disorders, also may report cognitive complaints (Matin et al., 2017). Although cognitive complaints may be a “background” symptom to primary complaints, cognitive rehabilitation may be warranted if symptoms impact daily functioning or engagement with other therapies (e.g., physical therapy, cognitive-behavioral therapy). Because individuals with functional neurological conditions are often polysymptomatic,

interdisciplinary treatment and collaboration (e.g., collaborative goal setting) are often needed to optimize functioning across symptom domains.

Functional Cognitive Symptoms with Comorbid Medical or Neurological Conditions

William was a 26-year-old nurse who sustained a moderate TBI with a loss of consciousness of 4 hours. While in acute care, his treatment team was impressed with his rapid cognitive recovery. He was quickly transferred to an inpatient rehabilitation facility, and initial evaluations suggested an excellent prognosis. Within a few days, he was able to accurately recall detailed and complex information from the previous days. At the same time, his family was expressing concerns to the team that he was unable to recall basic autobiographical information, such as how many children he had and the state where he was raised. A few days later, these memory problems began to present during therapy sessions, and his carryover between sessions deteriorated from excellent to poor. Medical workup did not reveal an explanation for the recent rapid decline. After collecting information across sessions, his treatment team noted his memory difficulties seemed more pronounced when he was being directly asked or “tested,” as opposed to when he was engaging in casual conversation about the day’s events. He was becoming increasingly anxious about whether these memory issues would become permanent.

As previously mentioned, physical injury, medical illness, and neurological conditions are risk factors for developing functional symptoms. For example, a systematic review and meta-analysis found that 22% of clients with functional seizures had a history of epileptic seizures (Kutlubaev et al., 2018). The term *functional overlay* is often used when core symptoms caused by another recognized medical or neurological condition are complicated by additional functional features (Stone, Reuber, & Carson, 2013). Clinicians are encouraged to be mindful that a client’s presentation cannot always be clearly delineated as functional versus another medical/neurological condition and instead may include features of both. Although this comorbidity can pose clinical challenges, many of the treatment principles described below are still applicable.

TREATMENT PRINCIPLES AND STRATEGIES

With increased research and clinical efforts in recent years, clinics specializing in the treatment of functional symptoms have been developed. However, given the limited number of specialized clinics and the prevalence rates of clients with functional symptoms, rehabilitation clinicians working outside of these specialty clinics need to be informed of how to meet the treatment needs of this client population. This section will outline general principles and techniques that have been suggested from extant research and experts in the field (Bennett et al., 2021; Duffy, 2016; Nicholson et al., 2020; Nielsen et al., 2015). Given the heterogeneity of functional presentations, treatment interventions will need to be personalized based on the client’s particular symptom

presentation, beliefs, goals, and response to treatment; and factors maintaining symptoms.

Interprofessional Approach

As many clients with functional symptoms present as polysymptomatic, interprofessional collaborative treatment is recommended. It is imperative that all clinicians use similar language and consistent messaging when working with the client and their family. A team meeting at the onset of treatment and regular team huddles are beneficial to ensure that all clinicians are working toward common targets and remaining current on progress across disciplines. Performance advancement can quickly become stalled if one clinician is working on a high-level cognitive aim (e.g., the client independently taking notes), while another clinician from a different profession is not aware of that aim and may be unintentionally reinforcing a lower level of functioning (e.g., writing out notes for the client). Clinicians should frequently model and reinforce the team's collaborative approach with the client (e.g., "You did fantastic with your note taking today. I'm going to let your physical therapist know so you can use this during your sessions with them as well."). Co-treatment sessions are another helpful means to ensure skills and independence are generalizing to other areas of functioning.

Client Education

Personalized education is essential to ensure the clients' understanding of their symptoms throughout the course of treatment. Information should be presented in a validating, collaborative manner. Published consensus recommendations (Nicholson et al., 2020; Nielsen et al., 2015; Stone, Carson, & Hallett, 2016) suggest that the following client education ingredients can be useful:

1. Assure the client that you believe them and are taking their concerns seriously. It is important to say this explicitly (e.g., "The symptoms you are experiencing are very real, and they are impacting your quality of life. Is it OK if we work together to help you address these symptoms?"). This is particularly important when clients report prior negative experiences with other health care providers.
2. Highlight that functional symptoms are common (e.g., "Functional cognitive symptoms are actually very common even though many people have not heard of them. I have worked with many other individuals with concerns similar to yours.").
3. Emphasize that symptoms can get better (e.g., "We aren't always sure what causes functional symptoms, but fortunately we do know these symptoms can get better.").
4. Emphasize that self-help will be a key component of treatment and progress (e.g., "We are going to work together as a team to help you get back to doing the things you care about. I am also going to ask you to take the strategies you learn in our sessions and apply them throughout your daily routine at home, work, etc. Our goal is for you to become independent in using these strategies.").

5. Provide printed or online peer-reviewed information specific for functional symptoms, or links to peer-reviewed resources from organizations specializing in functional neurological disorders. These online resources not only reinforce important education and a sense of hope for clients but can also facilitate a sense of community with other individuals with functional symptoms. An example of a website with support and information for both providers and clients with FND is <https://fndhope.org>.

6. Avoid emphasis on finding a psychological origin unless the client is making this link on their own. If the client has identified specific “triggers” for functional symptoms, such as increased stress, then this can be helpful when developing self-help strategies.

7. With the client’s consent, it can be helpful to involve members of the client’s support network when providing education.

Additional educational ingredients are provided below within each of the treatment approaches. Anecdotally, we have observed that for a subset of clients with FCS, education and reassurance are sufficient to improve functioning, but many clients require further intervention. Additional research is needed to determine which clients will benefit from education alone.

Stepwise Goal Approach

At the beginning of treatment, it is recommended that time be spent identifying the client’s personal and cultural values and goals, which can be translated into a structured, stepwise goal approach. These values-driven goals should be referenced regularly throughout the course of treatment. It can be particularly helpful to keep these goals and associated targets in a written format (e.g., visual chart), so that checking off target achievements can be used as a source of positive reinforcement for progress. The focus should be on high-level, personalized, activity-based (i.e., functional) targets, with clear timelines for accomplishment (e.g., “Now that you’ve successfully gotten back to managing meal-planning for your family, I feel confident you’ll be able to prepare a simple dish following a recipe by the end of the week.”). Involving members of the client’s support network in goal-setting discussions is also crucial so that they can reinforce the same goals outside of sessions with an appropriate level of support.

The following questions can be helpful starting points in assessing a client’s values and goals:

- “If your symptoms were not getting in the way, what kinds of things would you want to be doing? Walk me through what you would like a typical day to look like.”
- “I want you to think about times in which you’ve felt most fulfilled. What would I find you doing during those times?”
- “If you felt really confident that your symptoms could get better, what kinds of big goals would you set for yourself?”

Chapter 3 on psychological mindedness offers additional information and tools for exploring personal values to guide interactions with clients, identify areas for desired

changes, inform approaches to care, and maximize engagement in rehabilitation by linking treatment targets to values-based, person-centered life goals.

Operant Conditioning Approach

An operant conditioning approach has been proposed as a potentially useful treatment approach for functional symptoms (Hardin & Carson, 2019; Jimenez, Aboussouan, & Johnson, 2019; Speed & Mooney, 1997). This type of approach involves the clinician providing positive reinforcement via verbal praise and attention when the client demonstrates progress or independently engages in self-help strategies to improve functioning. When the client shows behaviors or patterns that the clinician is working to reduce, the clinician avoids giving excessive attention to these behaviors. For example, if a client is making frequent errors on a bill-paying task, the clinician might say, “Hmm. This seems to be one of those moments when your mind’s signal is glitchy. That’s OK; it happens. We’ve talked about some ways to help your brain get unstuck and back on track. Shall we try one of those now?” With this approach, there is minimal to no discussion about the specific errors, and the conversation quickly turns to selecting self-help techniques. The clinician should give ample attention and praise when the client effectively uses a self-help technique, such as initiating the use of a calculator or a task checklist. This may look very different than interventions used with other client groups, in which error feedback may be used to increase the client’s insight into deficits and self-monitoring of errors.

Members of the client’s support network also need education on how to respond when the client is exhibiting difficulty. Well-meaning members of the client’s support network may frequently step in to assist the client with tasks, which can maintain symptoms and reduce self-efficacy. Thus, it can be helpful to provide close others with concrete examples of how they can respond in a supportive manner that also promotes optimal client functioning. Inviting close others to practice these approaches with the client during treatment sessions can be beneficial.

Promoting Realistic Expectations for Cognition

During the initial phase of treatment, it is important to understand how the client conceptualizes and responds to their symptoms. Unhelpful illness beliefs, for example that symptoms will be permanent, can be poor predictors of successful outcomes (Sharpe et al., 2010). Some individuals with FCS become hyper-focused on normal, everyday cognitive errors (Stone et al., 2015). “Memory perfectionism” has been used in the literature to describe clients who have unrealistically high standards for their memory (Pennington et al., 2015). For these clients, psychoeducation about the frequency of cognitive errors in healthy individuals can be beneficial.

It is important to note that while there is emerging evidence to support the efficacy of cognitive-behavioral therapy (CBT) in treating functional conditions, some individuals with functional symptoms may be resistant, at least initially, to engaging in treatment with a mental health provider. Thus, cognitive rehabilitation clinicians would benefit from being familiar with basic CBT-informed strategies to promote realistic expectations and optimize progress. Specifically, when clients engage in avoidance behaviors (e.g., deferring all tasks to a family member, avoiding social interactions due

to fear of memory lapses), it can be beneficial to provide education on how avoidance may provide short-term relief from unwanted thoughts and feelings but will actually maintain symptoms in the long run.

Clinicians should discuss with clients and their families how gradual exposure to challenging activities will allow the client's brain to "challenge" unhelpful beliefs and relearn that they can be successful with implementation of self-help tools, whereas avoidance does not provide this opportunity for change. For example, clients with FCS may believe, "If I go to the grocery store by myself, I'll forget an item and feel like a failure." Instead, the clinician can encourage the client to consider and test out alternative potential outcomes, such as, "If I go to the grocery store, I will need to bring a list of items and double check the list before I leave. Needing to rely on a list in the past has made me feel embarrassed, but I know that it might help me be successful, which would build my confidence." Readers may refer to Chapter 3 on psychological mindedness for additional information and tools about CBT-informed strategies.

Addressing "Overfocus"

Research suggests that excessive effort or self-attention can interfere with performance in individuals with functional symptoms. For example, clients with functional motor disorders who are unable to walk may be able to walk backward or run when engaged in tasks that divert attention away from deliberate, effortful processes (McWhirter et al., 2020). It is thought that diverting attention allows automatic movement-control processes to take over, which, in turn, improves performance (Nielsen et al., 2015). Similarly, it has been hypothesized that clients with FCS may demonstrate more difficulty when striving to perform on cognitive tests but then exhibit intact cognitive abilities when less effort is being exerted, such as during casual conversation or when multitasking (McWhirter et al., 2020). If this pattern is present for clients, it can be helpful to make them aware of how such "overfocus" can negatively impact functioning. Showing the client specific, in-the-moment examples of overfocus can be illustrative and promote mindfulness of internal patterns. The clinician can then guide the development of self-awareness and self-help strategies for the client to "reset" when they notice excessive effort or focus. For example, it may be beneficial for a client to step away from a task for a few minutes and distract themselves with a more automatic or relaxing activity (e.g., doing the dishes, stretching) before resuming the more cognitively demanding task.

Again, this approach frequently looks different than traditional cognitive rehabilitation approaches in which we often encourage clients to concentrate fully on a task and minimize distractions. Chapter 3 reviews acceptance and commitment therapy (ACT; Hayes et al., 2016) as a method that does not focus directly on symptom alleviation and instead emphasizes the benefits of acknowledging internal experiences/symptoms in a nonjudgmental manner and mindfully shifting one's attention to pursue valued activities in the present moment.

Self-Management Strategies

The focus of cognitive rehabilitation for FCS is to teach client-specific management strategies to restore function, promote self-efficacy, and support successful reengagement in

meaningful activities. Chapter 7 provides instruction on cognitive strategy training. Direct teaching and guided practice seek to empower clients to achieve treatment targets, followed by gradual weaning from therapeutic support to effective self-management in daily situations. Reinforcing healthy behaviors that can impact cognition (e.g., sleep hygiene, education about medication effects, management of cerebrovascular risk factors, exercise, relaxation) can foster a proactive attitude of prevention and maintaining wellness.

MONITORING PROGRESS AND CONCLUDING TREATMENT

Clinicians should discuss outcome monitoring and a set discharge process from the onset of treatment to reinforce expectations for progress and highlight that treatment is time-limited and has the end goal of self-management. Monitoring of progress is particularly important when working with clients with FCS given the aforementioned risks for iatrogenic effects. Clinicians must be mindful of the fact that certain treatment approaches and/or settings can reinforce or exacerbate functional symptoms in some clients, and a prolonged course of treatment in the absence of improvement is strongly discouraged. It is important to be transparent with clients that progress toward goals will be collaboratively monitored and routinely discussed, and if the client is not advancing toward their identified goals, then services may need to be discontinued. In these situations, clinicians can emphasize that discontinuing therapy that is not advancing the client toward their goals may allow the client to spend more time on meaningful activities (Gilmour et al., 2020). Some clients with chronic, severe symptoms may require higher levels of care, such as a specialized functional disorders clinic or inpatient rehabilitation, before they can benefit from outpatient services. It is still unclear which treatment setting is best for clients with functional symptoms and is likely highly variable depending on the client. Outcome monitoring can assist with making these decisions.

The heterogeneity and variability of symptoms, as well as the discrepancy between objective measures/clinician ratings and the clients' subjective experiences of symptoms, can complicate outcome measurement in functional symptoms (Nicholson et al., 2020). Pick and colleagues (2020) conducted a systematic review of outcome measurement in FND to identify existing measures, develop recommendations, and guide future research. They concluded that there is a dearth of functional disorder-specific outcome measures and much more research is needed. In the interim, the authors recommended measures assessing quality of life and general functioning, such as the Short Form Health Survey (SF) scales (Ware, Kosinski, & Keller, 1996), which can help identify clinically meaningful change during treatment. Assessing change in illness beliefs and symptom attributions across treatment, with tools such as the Illness Perception Questionnaire (Weinman, Petrie, Moss-Morris, & Horne, 1996), may provide helpful information as important mediators of treatment response. Given the heterogeneity of symptoms, use of personalized assessments such as Goal Attainment Scales (see Chapter 5) may also be beneficial for tracking progress.

When concluding treatment, it is recommended that the clinician and client collaboratively develop a written self-management plan that includes self-help strategies proven to be beneficial in therapy, future goals with realistic time frames, and plans for

how to address potential setbacks/relapses. Symptom relapse is common in this population, and clients ought to be prepared with a personalized plan to get back on track should this occur. It can also be helpful to engage in role-playing exercises with clients before discharge, so they know how to educate future health care providers about both their diagnosis and also the treatment approaches that work best for them. If the client will be discharged to a different setting, a summary letter or phone consultation is recommended to ensure that the next clinician is informed of treatment approaches that were effective.