

Major Contribution

Medically Unexplained Physical Symptoms: Why Counseling Psychologists Should Care About Them

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Abstract

Medically unexplained symptoms and/or syndromes (MUS) affect the health of 20% to 30% of patients seen in primary care. Optimally, treatment for these patients requires an interdisciplinary team consisting of both primary care and mental health providers. We propose that counseling psychologists may develop expertise to improve the care of patients with MUS who are already in their practice, expand the number of patients they help, and enhance the integration of counseling psychology into the broader medical community. Additionally, counseling psychologists' expertise in culture, attunement to therapeutic processes, and focus on prioritizing patients' perspectives and quality of life can fill the gap in research on MUS. By focusing on MUS, counseling psychologists can provide unique contributions to health service delivery.

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An estimated 20% to 30% of patients seen in primary care settings present with multiple persistent physical symptoms (e.g., back pain, stomach upset) that either have no known cause or are common to multiple diagnoses (Escobar, Waitzkin, Silver, Gara, & Holman, 1998). Symptoms or syndromes (a cluster of symptoms; Henningsen, Zipfel, & Herzog, 2007) that have no medical explanation can significantly disrupt a person's well-being in multiple areas of life (McAndrew, Chandler, Quigley, Natelson, & Lange, 2016). Psychologists working in primary care settings who treat the mental health of patients with persistent medically unexplained physical symptoms and/or syndromes (MUS) are increasingly being called on to address the quality of life of these patients, including those without a comorbid mental health diagnosis.

Knowledge of MUS is relevant for counseling psychologists because the best evidence-informed approach to its management prioritizes cognitive-behavioral treatment (CBT; Kroenke, 2014). For this reason, psychologists who gain expertise with MUS can take a leading role in the care of these patients. In fact, doing so reflects the current call to integrate psychologists into primary care, a trend reflected in the American Psychological Association's (APA) recently revised Standards for Accreditation in which all applied psychologists are considered health service psychologists (APA Commission on Accreditation, 2018).

In the first article in our Major Contribution, we aim to (a) inform counseling psychologists about the current thinking regarding MUS and its first-line intervention, CBT; (b) promote counseling psychologists' development of competencies for treating MUS with CBT; and (c) provide suggestions for important future research in this area. In the second article, we report the results of an investigation of patient-provider communication about MUS, and in the third article, we introduce an observer measure of the medical working alliance developed specifically to study the physical health treatment of patients with MUS.

Public Health Impact of MUS

MUS—also called functional somatic syndromes, physical symptom disorders, persistent physical symptoms or chronic multisymptom illness (Greco, 2012; Kroenke, 2006)—is an umbrella term that refers to conditions

characterized by multiple, co-occurring, chronic physical symptoms. MUS may fit into a known diagnostic entity such as chronic fatigue syndrome or fibromyalgia, or may include chronic debilitating symptoms that do not fit into a known label. Table 1 includes a description of common conditions with MUS.

Approximately 70% to 80% of primary care visits are for MUS (Kroenke, 2006), such as lower back pain, fatigue, headaches, and gastrointestinal pain. Although the experience of poorly understood physical symptoms is extremely common, for about 20% to 30% of patients who seek health care, these symptoms can become chronic, affect multiple body systems, and impair their psychosocial well-being (Escobar et al., 1998). MUS can disrupt personal and family relationships and make it difficult to engage in the tasks of daily living. In fact, the impairment in quality of life can be as impairing as better-understood medical conditions such as lung and liver disease (McAndrew, Chandler, et al., 2016). For example, many patients with MUS cannot work outside the home. Indeed, 50% of patients with MUS surveyed at a neurology clinic reported being unemployed; of these, 26% were unemployed due to poor health (Carson et al., 2011).

MUS can cost thousands of dollars a year per person in lost work productivity, early retirement, and sick leave (Konnopka et al., 2012). In addition, the treatment of MUS is costly to the health care system. Many patients with MUS have a higher level of health care utilization than patients whose conditions are medically understood (Barsky, Orav, & Bates, 2005; Mohanty, McAndrew, Helmer, Samore, & Gundlapalli, 2018). In the quest for a cause, patients with MUS often undergo multiple exploratory procedures and surgeries, excessive laboratory testing, and inappropriate consultations with specialty providers. Not only can excessive care have negative consequences on patient function, but it also wastes resources, time, and energy that patients and providers could otherwise use more productively.

Prolonged and ineffective treatment of MUS also has iatrogenic societal consequences. In particular, blame for the current opioid epidemic is widely placed on the practice of overprescribing pain medications (Compton & Volkow, 2006), despite little evidence of their long-term effectiveness (Krebs et al., 2018). One reason for the over prescription of opioids may be the inadequate access to demonstrably effective behavioral treatments for MUS (Gatchel, McGahey, McGahey, & Lippe, 2014). As a result, the current opioid crisis has generated calls to develop, investigate, and train providers in the delivery of effective behavioral treatments for chronic pain (Nelson, Juurlink, & Perrone, 2015).

Table 1. Common Medically Unexplained Syndromes and Related Conditions

Condition	Description	Case definition/diagnosis	References
Fibromyalgia	A chronic pain disorder characterized by widespread pain with problems with sleep, severe fatigue, and cognitive impairment.	American College of Rheumatology (2016) revisions	Wolfe et al., 2016
Myalgic encephalomyelitis/ chronic fatigue syndrome	Chronic fatigue associated with postexertional malaise, sleep disturbance, and cognitive impairment.	Centers for Disease Control and Prevention (1994); Institute of Medicine (2015)	Fukuda et al., 1994; Haney et al., 2015
Irritable bowel syndrome	Chronic abdominal pain with changes to the frequency and form of stool and related to defecation.	Rome III (2006); Rome V (2016)	Drossman, 2016;
Gulf War Illness	Impacts veterans from the Persian Gulf War and is characterized by multiple chronic and disabling symptoms including musculoskeletal pain, fatigue, and/or neurocognitive symptoms.	Centers for Disease Control and Prevention (1998); Kansas (2000)	Drossman et al., 2006 Fukuda et al., 1998; Steele, 2000
Tempromandibular joint dysfunction	Orofacial pain originated in the tempromandibular joint that can be accompanied by a clicking or popping sound, headaches, and/or functional limitations.	Research Diagnostic Criteria for Tempromandibular Disorders Axis I/ Axis II	Schiffman et al., 2014
Chronic pain	Pain that "persists past healing time" can be medically unexplained or explained.	The International Classification of Disease, Eleventh Revision will code pain as a primary condition with multiple types	Treede et al., 2019
Somatic symptom disorder	Excessive and disproportionate thoughts, feelings, and behaviors in response to somatic symptoms that cause functional impairment. Can occur in combination with medically unexplained and/or explained conditions.	Diagnostic and statistical manual of mental disorders (5 th ed.; DSM-5)	American Psychiatric Association, 2013

Why Counseling Psychologists Should Care About MUS

Already, counseling psychologists see many MUS patients and treat their comorbid mental health conditions, particularly depression and anxiety. All too often, however, psychologists are not adequately addressing patients' unexplained physical symptoms. At best, counseling reduces the symptoms of a mental disorder, but it rarely directly addresses the patient's management of MUS. At worst, patients leave treatment prematurely due to their frustration at the suggestion that mental health care is the appropriate treatment for their MUS. Patients often interpret this suggestion as reflecting their physician's belief that the MUS are "all in my head," and come to believe that no one is taking their physical symptoms seriously (Peters et al., 2009).

The first-line counseling treatment for MUS is CBT delivered by a mental health practitioner (Baker & Shaw, 2007) either in primary care or in another clinical setting. Many patients with MUS are interested in a referral to mental health care if they perceive the provider has expertise in their medical condition. One study found 70% of primary care patients with MUS were not receiving counseling, although 40% of them reported being interested in doing so (Arnold, De Waal, Eekhof, & Van Hemert, 2006). Given their expertise in forming therapeutic relationships with diverse clients, counseling psychologists are well-positioned to engage these medical patients, but only if practitioners can demonstrate an understanding of MUS and concomitant quality of life concerns.

Best practices require psychologists who treat patients with MUS to work closely with primary care providers, specialists (e.g., neurologists, gastroenterologists), and allied health providers (e.g., physical therapists, chiropractors; Engel, Hyams, & Scott, 2006). This collaboration is important, given that traditionally psychologists have practiced outside the medical field. Indeed, in 1991, Alcorn noted, "counseling psychologists, with few notable exceptions, are latecomers to the [medical] field. As such they must find a place within a multidisciplinary setting that already includes a number of established health specialties" (p. 337).

Despite the fact that 25 years have passed since Alcorn's (1991) comment, psychologists' integration into primary care remains relatively new; in fact, primary care providers currently treat mental health concerns more frequently than psychologists (Olfson & Marcus, 2010). A survey of counseling psychology training program directors indicated more interest in integrative health care among graduate students than available training opportunities (Raque-Bogdan, Torrey, Lewis, & Borges, 2013). Although scholarship in counseling health psychology is increasing, such as research on improving

the care of patients with HIV (Werth, Borges, McNally, Maguire, & Britton, 2008) and on reducing health disparities (Buki, 2007), health psychology has yet to become part of mainstream counseling psychology.

We believe that as a specialty, counseling psychology needs to become fully integrated into the medical health care system. Just as patients exist within a community, we need to join the broader health care community to optimally assist our patients (Wagner et al., 2001). By failing to do so, we risk losing the opportunity to treat large numbers of medical patients who otherwise may seek help from allied professionals (Baker, McFall, & Shoham, 2008).

Finally, as counseling psychologists we should care about MUS because this is a fundable area of research. In recent years, both the Department of Veterans Affairs (VA) and Congressionally Directed Mandated Research Proposals have issued special calls for proposals to treat veterans with Gulf War Illness, a particularly debilitating MUS condition closely related to chronic pain, for which opioids are overly prescribed. In August 2018, the U.S. Congress appropriated \$5,000,000 to the National Institutes of Health (NIH) to fund research on the opioid epidemic (Collins, Koroshetz & Volkow, 2018). Even prior to this bill, the NIH, the VA, and the Department of Defense jointly called for research proposals on nonpharmacological treatments for chronic pain. In particular, reducing health disparities in treating chronic pain is a priority area for funding by the National Institute on Minority Health and Health Disparities as well as the National Center of Complementary and Integrative Health. Further, the NIH and Centers for Disease Control and Prevention have developed several programs to facilitate research in chronic fatigue syndrome, including the common data elements (Feldman et al., 2018).

Counseling Psychologists' Contribution to Clinical Care For Patients With MUS: CBT

The primary clinical role of counseling psychologists with expertise in MUS is to provide evidence-based CBT to improve patients' quality of life and reduce physical symptoms. Treatments can and should directly target MUS along with any comorbid mental health concerns.

As the most studied psychosocial treatment for MUS (Van Dessel et al., 2014), CBT has demonstrated small-to-moderate effects for improving patients' quality of life as well as for reducing the influence of physical symptoms and their concomitant psychological distress (Kroenke & Swindle, 2000). In CBT, patients with MUS learn behavioral, cognitive, social, and

relaxation skills to address their diminished quality of life and prevent the worsening of physical and psychological symptoms (Deary, Chalder, & Sharpe, 2007; Speckens et al., 1995). Specific behavioral strategies include gradually increasing pleasurable and meaningful activities, including physical exercise, leisure, and vocational activities. Cognitive strategies include challenging catastrophic thoughts such as "I can't handle the pain" or "I am going to die." Social strategies include increasing activities that reduce isolation and engaging in role-plays to address unhelpful solicitous responses from caregivers. Other strategies include (a) relaxation training, such as teaching diaphragmatic breathing to reduce autonomic arousal, and (b) encouraging lifestyle changes to alleviate symptom distress, such as improving diet and sleep habits.

CBT approaches to address MUS are varied (Brown, 2004; Speckens et al., 1995). Given that MUS were historically believed to be psychological in nature, CBT therapists would address the patient's misattribution of physical symptoms to a serious physical illness. Such misattributions were believed to contribute to patients' typically excessive focus on physical symptoms, fear of activity, and repeated seeking of medical care (Brown, 2004). In addition, this constellation of psychological factors was said to cause patients' acute symptoms to become chronic. For this reason, psychologists' treatments were intended to reattribute the cause of symptoms from physical to psychological, to reduce catastrophic thinking, and to enhance physical activity (Brown, 2004).

Increasingly, however, the medical community has recognized that MUS are not solely due to psychological problems. MUS are currently considered multiply determined and biopsychosocial. That is, they have physiological, genetic, social, and psychological contributing factors (Burton, 2003). For this reason, rather than recommending CBT to address the cause of a patient's MUS, contemporary experts advocate focusing on reducing the consequences and maintaining factors of MUS by teaching patients specific skills to manage their physical limitations (Speckens et al., 1995). In this approach, patients gain skills (e.g., gradually increasing activity, reducing catastrophic beliefs) with the goal of reducing MUS regardless of the cause (McAndrew, Greenberg, Ciccone, Helmer, & Chandler, 2017). The psychologist should, of course, also address the patient's comorbid mental health concerns; although psychological problems do not solely cause MUS, they are nonetheless a typical consequence of MUS that exacerbates patients' physical symptoms; over 50% of patients with MUS have depression and/or an anxiety disorder (Lowe et al., 2008). Specific recommendations for managing MUS appear in Table 2.

Table 2. Treatment Recommendations for Helping Individuals With Medically Unexplained Symptoms and/or Syndromes (MUS)

Domain	Do	Do not	References
Relationship	<ul style="list-style-type: none"> Validate the patient's experience and perspective. <ul style="list-style-type: none"> Although every patient with MUS is different, many experience a shared context of not having their condition believed or validated by multiple medical providers and/or their family. MUS are often debilitating. Develop a shared understanding of symptoms. When possible, collaborate with the primary care provider to determine if a MUS label (e.g., fibromyalgia) and/or a functional explanation (e.g., overactive nerves) is appropriate. Regardless of the label, work with the patient to develop a shared understanding of the impact (e.g., debilitating) and areas the patient does have control (e.g., less symptomology when rested). Give specific recommendations to help patient feel empowered in managing their health (e.g., diet, exercise, pain management, sleep). Use trial and error to help the patient test out behavioral and cognitive changes that help them manage their symptoms and disability. 	<ul style="list-style-type: none"> Focus on reattributing physical symptoms to a psychological cause. Ignore the patient's history within the medical system. 	Burton, 2012; Häuser, Thieme, & Turk, 2010; Thieme, Mathys, & Turk, 2017; Veterans Affairs/Department of Defense, 2014; WRISC, n.d.
Collaboration	<ul style="list-style-type: none"> Collaborate with primary care physicians and other healthcare providers. When possible, develop a shared understanding of the condition with the treatment team as well as common recommendations. Knowing the primary care provider's recommendations can guide the behavioral and cognitive skills to work on in therapy. Use guideline-consistent care. Consider directing the treatment team to clinical practice guidelines and recommend that the primary care provider schedule regular appointments (e.g., every 3 months) to reduce emergency care visits. Teach patient how to communicate effectively with healthcare providers. 	<ul style="list-style-type: none"> Pressure physician to find a physical cause as this can lead to unnecessary assessment and iatrogenic consequences. Propose symptoms are a mental health condition. Advocate for patients in their healthcare treatment. Recommend opioids. 	Burton, 2012; Häuser et al., 2010; Thieme et al., 2017; Veterans Affairs/Department of Defense, 2014

(continued)

Table 2. (continued)

Domain	Do	Do not	References
Assessment	<ul style="list-style-type: none">Assess the patient's understanding of their symptoms/condition. The DSM-V includes a cultural formulation interview that may be helpful.Assess severity of symptoms and current functioning. There are common data elements that may help to direct appropriate assessment.Assess for comorbid mental health conditions. Although comorbid conditions don't cause MUS, they do complicate MUS and need to also be treated.	<ul style="list-style-type: none">Projective tests, personality assessments and tests of effort can be invalid in this population.	American Psychiatric Association, 2013; Broadbent, Petrie, Main, & Weinman, 2006; Davis et al., 2006; Dworkin et al., 2005; Dworkin et al., 2008; Heijmans et al., 2011; National Institute of Neurological Disorders and Stroke, 2017; Turk et al., 2003
Neurocognition	<ul style="list-style-type: none">Assess multiple neurocognitive domains including: validity measures, premorbid intellectual estimate, attention and processing speed, visual learning and memory, verbal learning and memory, visuospatial functioning, verbal functioning, psychomotor functioning, executive functioning. Neurocognitive difficulties may be more apparent subjectively than on formal neurocognitive testing. Self-reported cognitive fatigue and other symptoms should be given sufficient weight.Address whether there are other factors exacerbating the cognitive difficulties (e.g., insomnia, history of TBIs, cerebrovascular risk factors).	<ul style="list-style-type: none">Projective tests, personality assessments and tests of effort can be invalid in this population.	Heijmans et al., 2011; National Institute of Neurological Disorders and Stroke, 2017

(continued)

Table 2. (continued)

Domain	Do	Do not	References
Treatment	<ul style="list-style-type: none"> Use cognitive behavioral therapy to help the patient manage the impact of physical symptoms. Assume a biopsychosocial model and address the cognitive, behavioral and social factors helping to maintain MUS. Treatment should focus on improving functioning and what the patient can do and is in control of rather than on their limitations. Consider incorporating the primary care provider's recommendations into therapy (e.g., increase physical activity). Treat comorbid mental health concerns and other comorbidities (e.g., insomnia) using evidence-based treatments. Consider other approaches with evidence for their efficacy (e.g., mindfulness). 	<ul style="list-style-type: none"> Only treat comorbid mental health conditions. Assume that MUS are only caused by psychological factors. Prescribe treatment goals without patient involvement. Focus primarily on eliminating symptoms. 	Murphy et al., 2014; Thorn, 2017; Woolfolk & Allen, 2007

Although CBT has the largest evidence base for treating MUS, other psychological approaches show promise for improving the well-being of these patients as well. These approaches include mindfulness practices (Kearney et al., 2016), acceptance and commitment therapy (Wicksell et al., 2013), and brief psychodynamic therapy (Abbass, Kisely, & Kroenke, 2009). An existential approach may also help patients find meaning in life despite having debilitating symptoms (Maunder & Hunter, 2004), although this treatment approach needs to be tested in a clinical trial. In Appendix A (see Supplemental Material available online at <https://journals.sagepub.com/doi/suppl/10.1177/0011000019888874>), we present the case description of a psychotherapy client who developed chronic fatigue syndrome while she was in treatment to address her lifelong depression. We provide this case to illustrate how therapists working outside of a medical setting can also help clients who have MUS. Specifically, the second author (M. F.) used an integrative approach to help the client (a) recognize and accept her medical condition, (b) consult with a specialist when a medical diagnosis for her MUS was unknown, and (c) eventually accept the limitations caused by her disabling condition. This final step of acceptance allowed the client to focus on improving her quality of life.

Integrated Model of Care

Although most patients do not yet receive best practice treatment for MUS, ideally a psychologist would function as part of an interdisciplinary team led by a primary care provider. Care starts with this provider assessing the patient's symptoms to rule out physical causes such as anemia, sleep apnea, or an infectious case of diarrhea. After the common causes of presenting symptoms are ruled out, the provider formulates a diagnosis (e.g., fibromyalgia) or a functional explanation for the patient's symptoms (e.g., overactive nerves). In the absence of a formal medical diagnosis, a functional explanation for MUS can facilitate an effective patient-provider relationship (Burton, 2003).

Ideally, the primary care provider takes a Socratic approach to develop a treatment plan with the patient, with the goal of reducing symptoms and improving quality of life (Burton, 2012). For example, the provider might recommend acupuncture for the patient's widespread pain, tai chi for the patient's fatigue, and a food diary to track the relation of food to the patient's onset of diarrhea. Concomitantly, the psychologist might provide CBT treatment and consult with the primary care provider and decide how best to communicate with the patient.

In Appendix B (see Supplemental Material available online at <https://journals.sagepub.com/doi/suppl/10.1177/0011000019888874>), we present one physician's approach to assessing and treating MUS, specifically an approach used by Drew Helmer, MD, who is Director of the New Jersey VA War Related Illness and Injury Study Center, a national center for MUS. He has extensive experience working with an interdisciplinary team to provide integrated care to military veterans with MUS. Additionally, he regularly conducts research on MUS and provides education to other providers on the topic.

The foregoing discussion summarizes best practices for the integrated medical and psychosocial assessment and treatment of MUS. Most patients, however, do not receive this model of care, likely because few primary care providers receive training in MUS. Indeed, many providers do not feel sufficiently knowledgeable to diagnose and treat MUS (Howman, Walters, Rosenthal, Ajjawi, & Buszewicz, 2016). MUS are often a diagnosis of exclusion, which means they are diagnosed after known physical causes of a patient's symptoms are ruled out. Although clinical practice guidelines recommend not using medical assessments with limited additional benefit to confirm the diagnosis of MUS, physicians tend to worry about missing a significant physical problem. Thus, as a precaution, patients with MUS may receive extensive testing and other kinds of physical assessments to rule out unlikely but possible causes of their symptoms. This overreliance on testing can have iatrogenic consequences. Without a clear understanding of the symptoms, providers tend to be reluctant to offer a specific diagnosis or functional explanation, which tends to be highly frustrating for patients who are searching for answers. In addition, when MUS are identified, many primary care providers do not have the knowledge of behavioral treatments needed to treat the condition (Salmon et al., 2007).

Consultation

In the absence of direct care, psychologists with expertise in MUS can consult with primary care and specialty providers about ways to improve their patients' well-being. Indeed, specific recommendations in the form of a consultation letter may yield positive results. For example, in a consultation letter psychologists may encourage primary care providers to have regularly-scheduled, brief appointments with their patients with MUS. This strategy has been shown to reduce medical costs and improve patients' physical health outcomes because it results in fewer visits to urgent care facilities, a reduction in unnecessary hospitalizations, and less reliance on medications (Kroenke, 2007; Rost, Kashner, & Smith, 1994). In a consultation letter to primary care and

specialist providers, psychologists can set the stage for establishing strong patient-provider relationships and provide education on using CBT to manage MUS (Kroenke, 2007; Smith, Rost, & Kashner, 1995).

Aside from written letters, consultation can involve telephone calls or in-person communications. In our experience, primary care providers tend to be quite interested in consulting with psychologists. In our ongoing clinical trial for 268 veterans with MUS, we contact primary care providers to offer general recommendations or suggest a need for additional treatments. Having reached out to approximately 25% of our research participants' primary care providers, we found that providers are generally appreciative of the additional support and collaboration (Greenberg et al., 2017).

Counseling Psychology's Opportunity to Contribute to MUS Research

The study of MUS is rapidly changing (Woolfolk & Allen, 2007). Although MUS are no longer considered psychological disorders (Henningsen, Zimmermann, & Sattel, 2003), it was not until 2013 that somatization disorder was taken out of the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (APA, 2013; Dimsdale & Creed, 2009). As discussed next, counseling psychologists, with our unique areas of expertise, are perfectly suited to carry out research on the many unanswered questions about MUS.

Cultural Factors and MUS

Few studies have been conducted to identify the contribution of cultural factors to MUS. Although there is growing appreciation that psychological and social factors, along with biological factors, interact to contribute to disease, the Western medical community nonetheless expects the cause of disease to be dysfunctions in underlying physiology. With MUS, the underlying physiology is poorly understood. Although physiological changes can be detected at a group level, analysis of such changes has not yet resulted in an accepted medical model of MUS with known biomarkers. Consequently, patients with MUS are marginalized within the medical system, that is, MUS are viewed as less legitimate than better understood medical conditions such as diabetes or cancer. When providers view patients with MUS as malingering, or attribute their symptoms to a personality flaw or mental health condition (Salmon et al., 2007), patients are likely to receive suboptimal care. This marginalization extends into a patient's personal life. Without a medically legitimate

condition, it is difficult for others to accept patients as sick, and to understand the consequences of their symptoms. For instance, a patient with MUS who can no longer work and who needs special accommodations may be seen by others as lazy, demanding, or “making up” physical symptoms.

Culture also influences the patients’ experience of MUS (Kirmayer & Sartorius, 2007). Through cultural expectations and sanctioned illness roles, certain symptoms are considered more important than others, and the expression of symptoms thus is amplified or downplayed (Robbins & Kirmayer, 1991). It has long been acknowledged that different kinds of MUS are culture-specific (Isaac et al., 1995). Culturally determined MUS include, for example, *sick building syndrome*, which occurs when people who are working or living together in a community experience similar unexplained symptoms in the absence of a known cause (Burge, 2004). However, research in this area is at a very early stage leaving us with far more questions than answers.

At present, the lack of research on cultural influences on the experience of MUS offers a clear pathway for counseling psychologists whose training has placed culture at the forefront as a core feature of the specialty. Questions deserving of attention include the following: How do culturally-specific MUS develop? How do people’s perceptions of MUS develop within a culture (Kirmayer & Sartorius, 2007)? How should cultural norms and values be addressed when providing treatments for patients with MUS?

Illness Perceptions

Another critical area for research related to MUS is the relationship between illness perceptions and health outcomes. *Illness perceptions*, which are thought to be particularly important in MUS (Moss-Morris, 2011), include how patients understand their prognosis, the cause of their condition, the possible consequences, the ways to control MUS, and the nature of MUS in general. In MUS, illness perceptions account for 40% of the variance in outcomes, such as quality of life (Moss-Morris, 2011), possibly because patients often receive little information or contradictory advice from their medical providers. Instead, patients have to use their understanding of MUS to guide their self-management. For example, when patients with chronic fatigue syndrome feel tired, they must decide whether to rest, to gradually increase their activity level, or to ignore the fatigue and push through. These self-management decisions directly influence patients’ quality of life and their actual experience of symptoms (McAndrew et al., 2018).

Although illness perceptions have been found to be particularly important for MUS, a better understanding is needed of *which* illness perceptions are

most important and *how* they influence outcomes. Counseling psychologists' expertise in assessing individuals' perspectives on their lives can suggest various research investigations on this topic. For instance, it is not known which illness perceptions are particularly related to health outcomes in MUS. The most researched type of illness perception is the cause of MUS. Historically, it was believed that attributing MUS to a physical illness was especially harmful because this perception would lead patients to pressure their providers to use medical interventions with little known benefit (Salmon, 2007). Recent research, however, indicates that providers are more likely than patients to recommend medical interventions (Ring, Dowrick, Humphris, & Salmon, 2004). Furthermore, patients tend to have a complex understanding of their MUS, including perceiving social and moral causes in addition to physical ones (Risor, 2009). These findings suggest that patients' causal attribution of MUS as a medical condition may not be as critical a predictor of health outcomes as was once believed. Further, although illness perceptions are believed to influence self-management efforts, which in turn influence outcomes (McAndrew et al., 2018), few researchers have investigated these relationships.

Finally, it remains to be determined how providers should best address patients' illness perceptions. As described in the next section, differences in illness perceptions between patients and providers tend to negatively affect their working relationships, yet little research exists that offers guidance on how to best navigate these differences in perceptions.

Patient–Provider Relationships

Experts in MUS consider the patient–provider relationship to be a critical component of care (Heijmans et al., 2011). Given that there is no known cure for MUS, a multidisciplinary team needs to collaborate with patients to develop an individualized treatment plan to address their unique needs. Ideally, treatment plans need to incorporate behavioral strategies, take into account the physiological aspects of MUS, and fit within the patient's daily life.

Unfortunately, when patients have MUS, their relationship with their medical provider is often strained due to differing illness perceptions. For instance, in qualitative studies, patients with MUS reported being told by primary care providers that their symptoms were "all in their head" or a "mental health disorder" (Nettleton, Watt, O'Malley, & Duffey, 2005). As a result, these patients are often dissatisfied with the primary care they receive (Hansen & Lian, 2016) and have negative views of mental health treatments, such as CBT and psychotropic medication (Balon, 2009). In turn, primary

care providers tend to consider MUS to be the most difficult condition they treat, describing patients with MUS as “frustrating” and “heartsink” (Salmon et al., 2007). Mental health providers are not immune from these negative perceptions. Interviews with mental health providers have shown that they consider patients with MUS to be challenging in terms of a lack of engagement; in particular, these patients’ slow progress tends to arouse negative emotional reactions in mental health providers (Lewis, 2013) as well as physical health providers.

In our view, counseling psychologists’ understanding of effective therapeutic relationships can further empirical efforts to improve patient–provider relationships in medicine. Previous researchers have assumed that to improve these relationships providers need to change a patient’s illness perceptions about MUS from a physical cause to a psychological cause. Termed *retribution treatment*, initial studies on this approach have indicated some effectiveness; however, subsequent studies have found that retribution is generally ineffective at improving health outcomes of patients with MUS (Gask, Dowrick, Peters, & Morriss, 2011).

An alternative approach is for health providers to view patients as experts in their own MUS and medical professionals as experts in medical science, both of which are necessary for effective care. From this perspective, patients and providers need to work together to develop a concordant understanding of the patient’s MUS. Similar to counseling psychologists’ conceptions of the working alliance, patient and provider agreements on tasks and goals of treatment are critically important components of effective therapeutic relationships (Horvath & Greenberg, 1989), adapting the alliance construct to medical care seems apt (Fuentes et al., 2007). The third paper in this series, which introduces a new measure for observing this alliance in physical medicine, can serve as a resource for future research on this topic.

New Treatment Development

Improving the patient–provider relationship alone is not sufficient; it is also necessary to develop, improve, and test evidence-based treatments for MUS. Although CBT is the best researched treatment for the condition, it has generally been found to be less efficacious for MUS than for depression or anxiety disorders (Deary et al., 2007). One explanation for this disparity may be the heterogeneity of patients with MUS (Schweickhardt, Larisch, & Fritzsche, 2005); in other words, patients with MUS have disparate symptoms, comorbid conditions, and other individual characteristics that tend to complicate treatment efforts. In particular, there has been little research on the individual

and cultural factors that contribute to MUS patients' differential responses to treatment.

Effective change mechanisms in CBT treatments for MUS are unknown. One particularly controversial aspect of CBT treatment is the type of activity required of patients. CBT manuals generally recommend a gradual increase in behavior under the assumption that slowly increasing activity will improve a patient's energy level (Allen, Escobar, Lehrer, Gara, & Woolfolk, 2002). Evidence for this recommendation, however, is not well-established. For example, in a recent clinical trial for patients with one MUS condition, chronic fatigue syndrome, researchers compared a treatment with gradual increases in activity to a treatment with activity pacing (White et al., 2011). Activity pacing is based on the understanding that patients with MUS have a limited amount of daily energy; therefore, increasing activity will sap this energy (commonly referred to as an *envelope or spoon theory*). The investigators found that gradual increases in activity were significantly more efficacious than activity pacing (White et al., 2011). However, patient advocate groups (as well as other researchers (Wilshire, 2017; Wilshire et al., 2018), raised concerns about the analyses, given that the investigators changed the definition of the investigated outcome. Due to this challenge, the database was made public for reanalysis by other investigators and patients (Wilshire, 2017; Wilshire et al., 2018). The reanalysis questioned the strength of the efficacy of gradually increasing activity for these patients.

One explanation for the difficulty in identifying effective change mechanisms in CBT for MUS is the possibility of subtle differences among various methods used by patients to manage their MUS. In a longitudinal study of pain, researchers found that avoiding activities, activity pacing, and excessive activity were all associated with greater disability; similarly, they found that pain-contingent activity (continuing an activity until experiencing pain) was also associated with greater disability, but that task-contingent activity (continuing an activity until the task is completed) was associated with less disability (Kindermans et al., 2011). In other words, working toward completing a task lessened disability as long as the activity was not done in excess or the patient did not stop due to pain or a loss of energy (Kindermans et al., 2011).

Similarly, social support is considered particularly important for managing MUS. However, overly solicitous support (e.g., urging or enabling the patient to avoid activity) has been associated with greater disability, as has social support that minimizes the reality of the patient's disability (Band, Wearden, & Barrowclough, 2015).

There is a need for researchers to investigate the influence of CBT on physiological outcomes. Evidence suggests that CBT for other medical

disorders may improve immune function and cause positive physical changes to the brain (Antoni et al., 2012; Levy-Gigi, Szabó, Kelemen, & Kéri, 2013). To our knowledge, no researcher has examined the effect of CBT on physiological outcomes for MUS. Continuing this line of inquiry could offer counseling psychology researchers the opportunity to collaborate with researchers in other fields on fundable interdisciplinary work.

Counseling psychologists may also become leaders in developing and testing other treatment approaches for MUS. Brief psychodynamic therapy, mindfulness, acceptance and commitment therapy (Abbass, Campbell, Magee, & Tarzwell, 2009; Lakan & Schofield, 2013; Maunder & Hunter, 2004) have shown initial efficacy but thus far have not been well-researched. Complementary alternative treatments such as acupuncture or yoga (Mayhew & Ernst, 2007) also require study because patients with various physical and emotional conditions are increasingly seeking out these kinds of treatments.

Recommended Next Steps

We hope that this article has inspired readers to consider ways in which they may work to improve the care of patients with MUS and the field of MUS through research and training. Below we provide specific training recommendations to obtain the competencies needed to treat MUS.

For counseling psychologists to play a more prominent role in developing knowledge and providing clinical care for patients with MUS, we must prepare graduate students and offer training in best practices for MUS. At present, few counseling psychology programs require academic preparation in health psychology. National funding opportunities that provide graduate programs with the resources to develop coursework and practica in integrated medical care will enable students develop competencies in this area. MUS patients' retention in treatment requires the kind of expertise that we are already training our students to have.

Some health centers focus specifically on MUS and offer practicum and externship opportunities for graduate students. The VA, for example, has three centers that focus on complex postdeployment health conditions for combat personnel. These centers treat veterans' unexplained symptoms such as Gulf War Illness (Lange et al., 2013) and offer fellowship opportunities for training and research. Graduate students may also be able to find other settings that offer informal training experiences in MUS; research teams may be eager to have graduate trainees join their efforts. The first author (L. M. M.), for example, began developing her specialization in this field as a graduate student by creating a specific externship on CBT interventions for MUS (Allen, Woolfolk, Escobar, Gara, & Hamer, 2006).

Relatively more training opportunities are available for working with patients who have chronic pain. VA medical centers in the United States have mental health providers who treat chronic pain, and many of these centers offer training opportunities, including internships and postdoctoral fellowships (Baker et al., 2008). Given that CBT treatments for chronic pain are similar to those for treating MUS, students who receive training in this area develop skills that can be transferred to the treatment of MUS. APA also offers information on training opportunities, educational resources, and networking for both novice and experienced psychologists.

Psychologists can also develop competencies through continuing education, reading books and articles on pain and MUS, using evidence-based treatment manuals, watching videos, and attending health related conferences. Given that the opioid epidemic has highlighted the importance of improving access to evidence-based behavioral treatment for patients with pain or MUS, many local, state and national organizations are offering continuing education for psychologists in this area. We recommend that psychologists interested in receiving training reach out to their preferred professional associations and inquire about opportunities and/or consider coursework in health psychology. In addition, the annual convention of the APA and yearly meeting of the Society of Behavioral Medicine often offer excellent opportunities for education and training. In Table 2, we provide a list of books, journals and videos that are likely to be particularly helpful to gain competency in MUS. We also strongly recommend using an evidence-based treatment manual and obtaining peer supervision from psychologists knowledgeable in this area.

Conclusion: Our Potential Impact

In this article, we recommend that counseling psychologists develop clinical and scientific expertise in MUS, particularly because the best outcome evidence for treating MUS has involved CBTs. Developing expertise in delivering these evidence-based treatments will allow counseling psychologists the opportunity to reach more patients. Given that these treatments need to be collaborative within primary care, joining a multidisciplinary team provides psychologists the opportunity to work in the broader medical field. Further, by contributing to research on MUS, psychologist researchers can draw interdisciplinary attention to our perspective, particularly by addressing gaps in the literature. This includes the ways in which cultural factors impact the individual's experience of MUS as well as how MUS are treated. Counseling psychologists are well-positioned to play a key role in identifying opportunities for improving treatments for MUS.

Gaining expertise and developing a reputation for treating MUS also has broader implications. We as mental health providers can take specific steps to integrate counseling psychology within the medical field. As counseling psychologists, we have notable strengths in the psychosocial aspects of the biopsychosocial model, but we have historically ignored the biological aspects. We can no longer afford to do so—primary care has become the de facto mental health system.

In brief, we are calling for counseling psychologists to work in collaboration with medical providers to offer comprehensive care to our patients with MUS. We must not miss this important practice, consulting, training, and research opportunity that can enhance our field, our individual careers, and improve the lives of the patients we treat.

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Supplemental Material

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