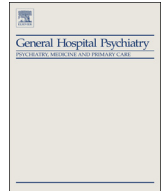




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## Letter to the editor: Potential treatment targets for misophonia

To the Editor,

Misophonia, a condition characterized by extreme sensitivity to select sounds, has recently been proposed for inclusion in the *Diagnostic and Statistical Manual of Mental Disorders (DSM)* [1]. Individuals with this disorder respond with irritation, disgust, anger and distress when exposed to auditory cues ranging from eating sounds (e.g., lip smacking, chewing or swallowing) to breathing sounds or other repetitive sounds (e.g., foot or pen tapping [2]). Individuals with misophonia typically employ several coping strategies, although the primary response is avoidance, including leaving the room, wearing headphones or rearranging schedules to avoid known triggers [2]. Individuals also report that mimicking the trigger sounds can temporarily relieve some of the discomfort [2]. Misophonia was first identified by audiologists [3] but has recently begun to find its way into the clinical psychology literature. However, although case studies [4] and clinical descriptions [5] are beginning to emerge, to our knowledge, there have been no efforts to explore treatment options beyond using tinnitus retraining therapy, which uses psychoeducation and sound therapy to promote habituation [3]. Since the white noise generators used in sound therapy can be seen as more sophisticated avoidance techniques that minimally reduce distress, it is crucial that we find ways to treat the underlying condition.

Schroder et al. (2013) [1] proposed a set of diagnostic criteria and suggested that misophonia best fits in the obsessive–compulsive (OCD) and related disorders category of the *DSM, Fifth Edition*. We agree with this conceptualization but caution against assuming that misophonia should be treated similarly to OCD. In OCD, obsessions cause distress, *anxiety* and sometimes disgust, which are relieved through compulsions. In misophonia, the primary response when confronted with the offending stimulus is *anger* (along with disgust), which is relieved through removal of the trigger. While fear decreases with repeated exposure to the threatening stimulus, disgust does not habituate to exposure in the same way [6]. Although similar studies have not yet been conducted on anger habituation, disgust and anger share several features [7]. For example, evidence from event-recall research suggests that thinking of disgust often brings up anger-related themes, while anger-eliciting situations often bring up feelings of disgust [7]. Therefore, it is possible that exposing a person with misophonia to eating sounds may not result in the same learning as occurs in exposure and response prevention within the context of OCD.

Instead, researchers might look to the emerging literature on cognitive restructuring and stress inoculation training for anger [8]. Primary components of these treatments include identifying triggers, cognitive reframing and relaxation training. We propose that enhancing perspective taking and compassion towards others may also be useful treatment targets [9]. Compassion training, for example, reduces biopsychological responses to stress- and anger-evoking situations [10]. Putting oneself

in the shoes of the person eating popcorn in the movie theater and cultivating compassion for them, for example, might decrease the anger directed at that person.

In addition, therapists may need to focus on increasing distress tolerance, as targeted in mindfulness- and acceptance-based therapies such as acceptance and commitment therapy and dialectical behavior therapy. Rather than attempting to reduce or eliminate the anger and disgust that are triggered, it may be more effective to change one's relationship with these emotions and improve one's ability to engage in meaningful activities even in the face of them. When the goal is to improve the capacity to tolerate or accept the emotional arousal, decreasing or eliminating it becomes less important. Since misophonia involves emotions that are difficult to habituate to through exposure, distress-tolerance and acceptance-based approaches to treatment may be particularly well suited.

As research on the existence and phenomenology of misophonia continues to mount, we believe that it will become increasingly evident that misophonia is a disorder worthy of inclusion in the *DSM*. Currently, clinicians must rely on instincts and on trial and error to treat patients presenting with symptoms of misophonia. Although instincts and case studies are valid starting points when dealing with any new disorder, as misophonia becomes more firmly established, it will be important to conduct more rigorous and standardized research on the best ways to help this understudied and thus underserved population.

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