Introduction

Kara is a 22 year old female presenting with obsessive-compulsive disorder, including obsessions related to germs. Cara reports that she uses hand-sanitizers every time she touches a surface, even in her own home. She repeatedly cleans everything with bleach, and views the outside world as 'contaminating'. Kara describes that she is anxious to leave her home and upon her return she has to boil her clothing and wipe herself off with an antibacterial wipe before she can feel comfortable in her home. Kara reports that her fear of germs came about after she spent time in the ICU as a teenager after contracting a severe form of pneumonia.

Diagnosis

According to the DSM-5, Kara has Obsessive Compulsive Disorder, as well as, Mysophobia. Mysophobia is a fear of germs. She reported that she experiences anxiety when she must leave the safety of her home. Experiencing panic-like symptoms with regards to a phobia, meets the DSM-5 guideline for diagnosis (Substance Abuse and Mental Health Services Administration, 2016). Kara has an established ritual for leaving and re-entering her home. Establishing rituals that one must perform in order to feel at ease is a symptom of Obsessive Compulsive Disorder (Substance Abuse and Mental Health Services Administration, 2016). Most importantly, Kara's fears, as well as, her reactions to those fears are having an adverse effect on her life.

Treatment

"Fear, which can be expressed innately or after conditioning, is triggered when a danger or a stimulus predicting immediate danger is perceived" (Garcia, 2017). Kara endured an event that appears to have been traumatic for her, her stay in the ICU as a teenager. Traumatic events can trigger fears, as well as, obsessive compulsive behavior. It is important for Kara to understand the cause of her fear. It is also imperative, for treatment to be successful, for Kara to understand that her behaviors and actions are abnormal.

Classical conditioning is one way that Kara can overcome her mysophobia. "...It is well-known that Pavlovian principles can influence human health, emotion, motivation, and therapy of psychological disorders" (Rehman, Mahabadi, & Rehman, 2019). Because Kara's fear is muti-variabled, one would have to start small and work out to the larger issues. For example, Kara should shake a hand, over and over, without using hand sanitizing products. This will help re-teach her brain that touching another person will not automatically make her ill.

Kara would then touch surfaces of her own home, without using hand sanitizer after. Again, this would have to be performed over and over. Pavlov's techniques only work

if they are repeatedly performed. Kara must continue the actions until she no longer feels fear, anxiety, or a drive to perform her sanitizing ablution. Classical conditioning must occur at a pace set by the person going through the therapy and not the person providing the therapeutic assistance.

She should then move onto leaving her home, repeatedly, but returning and not wiping herself down with an antibacterial wipe. The steps must be small, and performed repeatedly so that Kara can retrain her brains reactions to the stimuli. Once she is able to return home and no longer feels the need to wipe off with an antibacterial wipe, the next step would be to not boil her clothing she wore out in public. Once she is able to perform every action without fear, anxiety, or a drive to perform sanitizing actions, she would be technically cured.

However, classical conditioning will not help with her history of the ICU. It could be the cause of her OCD and phobia, or it could be something she viewed and still views as very traumatic. Kara would need to disclose the events surrounding her ICU stay and her feelings during that time. It is entirely possible that Kara could also have Post Traumatic Stress Disorder stemming from the ICU stay.

If there is a co-morbid diagnosis of PTSD, in addition to OCD and Mysophobia, all three would have to be treated for Kara to be able to find relief. It may be beneficial for Kara to undergo counterconditioning therapy, if her fear stems from the ICU stay. While Kara did not disclose a fear of the hospital when she presented her symptoms, it would be prudent to find out if the hospital, or in particular, the ICU induces fear or anxiety in her. One way to do this would be desensitizing her. This could be accomplished by utilizing virtual reality.

"Virtual reality exposure follows the same concept as general exposure therapy but uses virtual reality to do instead of real-life situations" (Rehman, Mahabadi, & Rehman, 2019). In order for desensitization therapy to work the patient must feel safe while being exposed to the harmful stimuli. Kara would be able to be 'in' the hospital/ICU, without actually being there. She would have the chance to face her fears, virtually. Once she is able to perform this action without any fear or anxiety, she would then go to a brick and mortar hospital to ensure the physical location does not inspire fear or anxiety in her, if she is able to successfully accomplish this, along with the other classical conditioning therapy interventions, Kara would be cured of her OCD, as well as her, Mysophobia.

References

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- Rehman, I., Mahabadi, N., & Rehman, C. I. (2019). *Classical Conditioning*. Treasure Island, FL: StatPearls Publishing.

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