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Effectiveness of Occupational Therapy Self-Management Interventions Among Chronically Homeless Veterans with Mental Health and Substance Abuse Disorders

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Focused Question

To what degree does implementing substance abuse and mental health occupational therapy (OT) programs for chronically homeless veterans increase the performance range of their self-management skills in activities of daily living (ADL) and instrumental activities of daily living (IADL)?

Case Scenario

Chronic homelessness is defined as “people who have experienced homelessness for at least a year - or - repeatedly while struggling with a disabling condition such as a serious mental illness, substance use disorder, or physical disability” (National Alliance to End Homelessness, 2021, para. 1). Conditions such as homelessness, mental illness, and substance abuse have been found to be more prevalent in veterans than regular civilians (Ding et al., 2018; Dunne et al., 2015; Tasi et al., 2014). According to Ding et al. (2018), conditions of mental illnesses that include at least one alcohol or other drug use disorder and at least one non-drug-related mental disorder are known as co-occurring disorders (COD). Ding et al. (2018) studied 253 homeless veterans admitted to a transitional housing program and found that 76.7% of participants had at least one prior diagnosed mental illness, 47.4% had some drug-related disorder, and 37.2% reported having COD. Additionally, homeless veterans experience high rates of suicidal behavior (Schinka et al., 2012) reinforcing the importance of addressing mental health and substance abuse disorders. Homeless adults overall have many unmet mental health and substance abuse needs (Kaplan et al., 2019). Current programs that were established to help homeless veterans are semi-effective with room for improvement (Cox et al., 2017; Kaplan et al., 2019; Mares et al., 2004).

When considering a theory, The Ecology of Human Performance (EHP) Model is in close conjunction with the focused question. In this model, the role of context in occupational participation is heavily emphasized, as well as the performance range created by the relationship between the person, task, and context (Dunn, 2017). For the purpose of this critically appraised topic paper, the person factors include people who are veterans of any branch of the United States (U.S.) military/armed forces who are experiencing chronic homelessness and have substance abuse and mental health disorders (Dunn, 2017). Common personal values among veterans and military members include honor, duty, service, courage, loyalty, and respect (Levander & Overland, 2015). Context refers to the temporal, social, physical, and cultural factors in the person’s environment (Dunn, 2017). Performance range refers to the number and types of tasks a person is able to engage in based on the relationship between the person, task, and context (Dunn, 2017). This range is considerably limited for this population due to barriers in the person and context factors related to homelessness, mental health, and substance abuse. Some of the factors that inhibit occupational performance include addiction, lack of social support, and lack of knowledge or accessibility to resources that can offer help (National Alliance to End Homelessness, 2021, para. 3-4).

Within the context of this critically appraised topic paper, self-management encompasses a broad range of skills that support the client’s ability to engage in self-care to increase their performance range. The relevant skills are “self-monitoring, problem-solving, decision making, goal setting (also called action planning), finding and using resources, and building partnership with health care providers and other caregivers” (Hammel et al., 2015, p. 502). Other self-management skills include using medication correctly, being physically active, stress reduction,



healthy eating, getting quality sleep, engaging in leisure, and fulfilling spiritual needs, among others (Hammel et al., 2015). The skills required to manage chronic health conditions are dependent on the client factors, occupational roles and demands, as well as the context of the client (Hammel et al., 2015). Overall, the needs of chronically homeless veterans with mental health and substance abuse disorders are relevant and consistent with the EHP model and help to provide answers to the focused question. This critically appraised topic paper addresses how the performance range of the population can be further shaped by personal and institutional values from occupational therapy perspectives.

Studies have shown that self-management skills from occupational therapy interventions are effective in promoting and maintaining performance and participation in people with chronic mental health conditions (D'Amico et al., 2018). Available evidence reveals that homeless veterans with mental health and substance abuse disorders experience premature aging due to years of homelessness (Gutman et al., 2018). The homeless context affects the abilities of the population to carry out their ADLs and IADLs (Gutman, et al. 2018). According to the Occupational Therapy Practice Framework, ADLs are defined as “activities oriented toward taking care of one’s own body and completed on a routine basis” and IADLs are defined as “activities to support daily life within the home and community” (American Occupational Therapy Association, 2020, pp. 30). Occupational therapy interventions have been shown to be effective in helping people with mental illnesses and substance abuse conditions to improve their occupational performance (D'Amico et al., 2018; Gunnarson et al., 2018). Therefore, more occupational therapy interventions may need to be utilized to help homeless veterans manage their mental health and substance abuse conditions. This is an area where occupational therapy clinicians could make contributions that are germane to the occupational performance of veterans with chronic mental health issues.

Purpose Statement

Homeless veterans are challenged with chronic mental health and substance abuse disorders that affect their abilities to carry out their daily functions. There is a paucity of focused literature to address the extent to which occupational therapy interventions help chronically homeless veterans that struggle with substance abuse and mental health issues. The purpose of this critically appraised topic paper was to investigate and demonstrate the extent to which substance abuse and mental health occupational therapy programs may help to increase the performance range of self-management skills of chronically homeless veterans.

Methodology

The methodology began with a literature search conducted within the period of March 3rd, 2022 to March 10th, 2022. The searches were carried out across multidisciplinary databases which included the American Occupational Therapy Association (AOTA), Pub-Med, Clinical Key, Cumulative Index to Nursing and Allied Health Literature (CINAHL), and Google Scholar. The following search terms were used: “homeless,” “veterans,” “homeless veterans,” “mental health,” “alcohol abuse,” “drug abuse,” “substance abuse,” “occupational therapy,” “post-traumatic stress disorder,” and “depression”. For the purpose of creating a more refined search, Boolean search commands “AND” and “OR” were added to combine search terms and phrases. Exclusion criteria consisted of studies that did not take place in the U.S. and articles that were published before 2014. An exception was made for one article from 2013, two from 2012, one from 2009, and one from 2004 because they included rich and relevant data and there were no recently published studies in which the researchers had assessed the same information.



Types of Articles Reviewed

A total of 34 articles were reviewed and 28 were chosen for further, in-depth review. Of those 26 articles, 3 were level I studies (D'Amico et al., 2018; Malte et al., 2017; Tsai & Rosenheck, 2015), 4 were level III (Ding et al., 2018; Gutman et al., 2018; O'Toole et al., 2013; Tsai et al., 2014), 16 were level IV (Byrne et al., 2019; Cox et al., 2017; Dahlke et al., 2019; Dunne et al., 2015; Goldstein et al., 2012; Gunnarsson et al., 2018; Harnish et al., 2016; Holliday et al., 2021; Jutkowitz et al., 2019; Kaplan et al., 2019; Kline et al., 2009; Macia et al., 2020; Manhapra et al., 2021; Mares et al., 2004; Schinka et al., 2012; Tsai et al., 2019), and 5 were level N/A (Gin et al., 2019; Kenny & Yoder, 2019; Kim et al., 2019; Levander & Overland, 2015; Ritchie, 2019). Other resources reviewed included a government organization website (National Alliance to End Homelessness, 2021), the Occupational Therapy Practice Framework (American Occupational Therapy Association, 2020), and select chapters from occupational therapy textbooks (Dunn, 2017; Hammel et al., 2015).

Synthesis

Theoretical Base

The goal of this critically appraised topic paper was to gain an understanding of the mental health and substance abuse disorders that chronically homeless veterans experience, and how occupational therapy programs can help homeless veterans that experience these disorders engage in ADLs and IADLs. To understand these concepts through an occupational theory philosophical lens, the occupation-based model EHP was used. The evidence showed that mental health and substance abuse disorders are more prevalent in chronically homeless veterans than in regular civilians, and that these disorders inhibit occupational performance (Ding et al., 2018; Dunne et al., 2015; Tasi et al., 2014). Homeless veterans who experience mental health or substance abuse disorders are likely to experience the two concurrently (Ding et al., 2018). Current programs offered are semi-effective to help homeless veterans find housing and treat their mental health and substance abuse disorders (Cox et al., 2017; Kaplan et al., 2019; Mares et al., 2004). Additionally, the social learning theory (SLT) is useful as a critical building block for self-management interventions because clients are likely to establish rapport and build trust with other people who have similar needs and issues (Hammel et al., 2015). Individuals' self-efficacy skills are increased by learning, becoming more engaged, and supporting each other as a group to plan and solve problems (Hammel et al., 2015). The SLT is relevant and significant as it helps to measure learned performance in ADLs and IADLs.

Risk Factors for Homelessness Among U.S. Veterans

Trauma Exposure and Homelessness

U.S. Veterans face unique risk factors regarding homelessness, substance abuse, and mental health disorders. According to a systematic review of the risk factors, although homeless veterans have many consistent advantages that could lower their risk of homelessness, such as education, work experience, and health coverage, many veterans are still facing disproportionate rates of homelessness (Tsai & Rosenheck, 2015). However, there are a plethora of other factors that contribute to the higher rates of homelessness experienced by U.S. Veterans. High exposure to trauma in deployment and combat may contribute to this population's vulnerability to certain health and psychological problems (Tsai & Rosenheck, 2015). This exposure to trauma can also negatively impact emotion regulation and self-management skills, leading to intrusive, suppressive, and ruminating thoughts, actions, and behaviors (Macia et al., 2020). Oftentimes, these behaviors manifest in the form of mental health and/or substance abuse disorders (Macia et al., 2020).



Mental Health and Substance Abuse Disorders and Homelessness

In a cross-sectional analysis, Jutkowitz et al. (2019) stated that homeless veterans were more likely than stably housed veterans to have diagnoses of substance abuse and mental health disorders, as well as dementia, liver disease, lung disease, and trimorbidity (mental illness, physical illness, and co-occurring substance abuse). Dunne et al. (2015) conducted a survey of 353 homeless male veterans and found that elevated rates of mental health and substance abuse disorders were reported as a primary cause of homelessness. They also found that homeless veterans were more likely to report current issues with mental health or addiction than nonveterans (Dunne et al., 2019). Manhapra et al. (2021) conducted a cross-sectional analysis to compare the prevalence of opioid use disorder (OUD) and other clinical factors of homeless and non-homeless veterans receiving Veterans Health Administration (VHA) care. Manhapra et al. (2021) found that homeless veterans had a substantially higher prevalence of OUD (7.7%) than non-homeless veterans (0.6%), and OUD was associated with 13 times higher unadjusted odds of homelessness. Veterans Affairs (VA) services have been put into place by the U.S. Government to help address these issues and provide resources to people who have military service experience (Cox et al., 2017). In a static group comparison between newly, episodically, and chronically homeless veterans, Cox et al. (2017) noted that a significant majority of all groups accessed VA emergency department services. Of the 181 homeless veterans involved in the study, approximately half reported accessing inpatient services as well, with increased levels of utilization among chronically homeless veterans (Cox et al., 2017). However, despite the availability and high utilization of these services, a compelling number of homeless veterans with mental health and substance abuse disorders seem to remain unstable when it comes to housing and treatment needs (Cox et al., 2017).

Suicide

Another major risk factor among chronically homeless veterans with COD is suicide. Holliday et al. (2021) noted in their secondary analysis of cross-sectional data that homelessness and employment in justice services like the military and police forces were both associated with higher levels of acute mental health and substance abuse disorders. Employment in justice services and homelessness were also associated with increased rates of suicidal ideation and attempt (Holliday et al., 2021). Schinka et al. (2012) also found that among older homeless veterans, prevalent suicidal behavior was associated with a history of substance abuse and psychiatric disorders. In their retrospective study that examined the self-reported suicidal behavior of 10,111 older homeless veterans, suicidal ideation was reported by 12% of participants and 3% disclosed a suicide attempt 30 days prior to admission to a transitional housing program (Schinka et al., 2012). Goldstein et al. (2012) noted that there were 14:1 odds that a homeless veteran with mental health issues and difficulty regulating aggressive behaviors could have serious potential for suicidal behaviors.

Unmet Needs of Chronically Homeless Veterans

Mental Health and Substance Abuse Related Needs

Kaplan et al. (2019) stated, in a longitudinal cohort study of 350 homeless adults, that although the majority of participants had diagnoses of mental health or substance abuse disorders, only one-third of participants received mental health care and fewer than 13% of participants received substance abuse treatment. Participants with mental health disorders reported barriers to mental health services including high cost of care, lack of insurance coverage, and inability to identify available sources of care (Kaplan et al., 2019). Participants with substance abuse disorders also listed lack of insurance and lack of knowledge or access to



available care sources as barriers to substance use treatment, as well as financial concerns and competing needs, such as food or shelter (Kaplan et al., 2019). According to Harnish et al. (2016), the social stigma associated with having mental health and substance abuse disorders is also a contributing factor to homeless veterans not seeking out treatment.

General Needs

Accompanying the unmet needs related to mental health and substance abuse treatment are an abundance of other general unmet needs. Tsai et al. (2019) conducted a 5-year survey of the unmet needs of homeless veterans and reported that the highest unmet needs were related to dental care, utility assistance, furniture and housewares, credit counseling, and Supplementary Security Income/Social Security Disability Insurance (SSI/SSDI). Many other unmet needs were reported, such as assistance with case management and access to emergency shelters (Tsai et al., 2019). The reported needs of these items varied over the years the survey was conducted (Tsai et al., 2019).

Specialized Needs

Among the homeless veteran population, there are also many individuals with specialized needs that are not being met. Legal assistance for evictions or foreclosures, housing for registered sex offenders, and legal assistance for child support were among the top unmet needs reported by subsamples of this population (Tsai et al., 2019). Other specialized needs of homeless veterans include military service era and gender (Kenny & Yoder, 2019; Kline et al., 2009). Kline et al. (2009) conducted a static group comparison of the needs of homeless veterans from three different service eras: the Vietnam, Post-Vietnam, and Persian Gulf/Middle East eras. According to their findings, Vietnam era veterans reported greater needs related to physical health, Post-Vietnam era veterans reported greater needs related to substance abuse, and Persian Gulf/Middle East era veterans reported greater needs regarding their earlier onset of homelessness and mental health (Kline et al., 2009). In a case study of five homeless female veterans, Kenny and Yoder (2019) revealed that because women have only been able to serve in the U.S. military forces for the past 30 years, there is a lack of existing research on the needs and characteristics of homeless female veterans. Along with the need for mental health and substance abuse treatment, participants of this study also reported needs pertaining to sexual abuse while in the military, social participation and networking, living minimally, and family upheaval (Kenny & Yoder, 2019). Ritchie (2019) revealed that 15.7% of military personnel and veterans reported military sexual trauma. Among that population, 3.9% were men and 38.4% were women (Ritchie, 2019). Within the demographics of the veteran population, women veterans receive service in the same environment that is dominated by their male counterparts even though their health issues may be the result of male service member perpetrators (Kim et al., 2019). Thus, a lack of housing and gender-specific interventions leads to an increased vulnerability of female veterans (Kim et al., 2019).

Benefits of Occupational Therapy Services

The purpose of occupation-based intervention is to build skills and incorporate them into the daily lifestyle of the client (Hammel et al., 2015). However, this can be a challenge for veterans with chronic mental health issues. The role of occupational therapists is to provide support such as teaching condition-specific support skills, helping negotiate changes in behaviors, providing information, training clients to problem solve and address emotional issues, and following up as appropriate (Hammel et al., 2015). Self-management interventions, from an occupational therapy perspective, incorporate broad-based personal and social learning strategies that help build self-efficacy during difficult situations (Hammel et al., 2015). O'Toole et al.



(2012) conducted a comprehensive study on the occupation-based approach to self-management and stated that participants applied the knowledge gained in the program to their individual needs. This positively impacted weekly goal setting by reducing mortality and improving function, participation, wellness, and life satisfaction among clients with chronic diseases (O'Toole et al., 2012).

Limitations of Occupational Therapy Services

There is a large body of evidence to demonstrate that the goal of occupational therapy is to enable and support clients to independently engage and fully participate in society (Hammel et al., 2015). Positive impacts are made by working directly with clients to provide individualized care (O'Toole et al., 2012). However, interprofessional scholars argue that there is a lack of basic understanding of the processes of communication and how professionals collaborate with each other (Dahlke et al., 2019). From a cultural standpoint, there is intrinsic bias in interventions for homeless veterans across gender. A considerable amount of the effort put forth by the VA to end homelessness among U.S. Veterans is channeled towards the male population, whereas the concerns of female Veterans are not sufficiently addressed (Levander & Overland, 2015). Thus, it is important that occupational therapists have the necessary awareness and strategic skills in military culture to better understand the experiences of the population, especially how their military background affects their health and well-being (Levander & Overland, 2015).

Current Occupational Therapy Interventions for Chronically Homeless Veterans' Health

The literature revealed that promoting self-care management among homeless clients with chronic mental health issues increases their performance range (D'Amico et al., 2018). In a systematic review, four occupational therapy intervention studies were reviewed on ADLs, IADLs, life skills, empowerment, safe social interaction in the community, and occupational goals (D'Amico et al., 2018). The results showed that individually client-centered intervention led to significant improvement in ADLs and IADLs of clients with Schizophrenia (D'Amico et al., 2018). A cross-sectional analysis by Jutkowitz et al. (2019) of all the veterans admitted into Skilled Nursing Facilities showed that the veterans were likely to have more serious health conditions. Jutkowitz et al. (2019) discovered that "among the 84,503 veterans admitted to a nursing home, 3,355 (4%) were homeless in the year prior to their admissions; 16,264 (19%) were at risk for being homeless, and 64,884 (77%) were stably housed" (Jutkowitz et al., 2019, p. 1709). The results of the study justified the assertion that homeless veterans are confronted with serious geriatric health issues earlier in life and have a wide spectrum of medical and social needs. (Jutkowitz et al., 2019). Thus, the ever-growing veteran population with diverse unique needs requires highly developed, individualized interventions that are occupation-based and occupation-focused (D'Amico et al., 2018; Jutkowitz et al., 2019).

Supported Housing Programs and Effectiveness

There is strong evidence to support the assertion that homeless veterans are confronted with diverse challenges that impact their health and wellness (Byrne et al., 2019; Gin et al., 2019). Lack of access to housing results in hospitalization and has cost implications for the healthcare system (Gin et al., 2019). The VA grant and per diem program is geared toward funding non-VA community-based organizations to make transitional housing and related services available to veterans who are challenged by homelessness (Gin et al., 2019). Gin et al. (2019) found that organizations are extremely motivated toward improving their level of preparedness for disaster. Other emerging themes revealed that there was a need to make preparedness easy and doable, as well as a need to collaborate with partners (Gin et al., 2019). The literature substantiates that interprofessional practice is beneficial to excellent client care



(Dahlke et al., 2019; Malte et al., 2017). This is an area where occupational therapy becomes relevant as professional partners work to provide quality, individualized care for the population. There is evidence to support occupational therapy intervention as suitable for providing clients with strategies to manage daily routines and engage in occupations for self-care (O'Toole et al., 2012). O'Toole et al. (2012) conducted a six-week occupation-based approach to a self-management program that focused on educating the participants on the relationship between occupational engagement and its importance for health and wellness (O'Toole et al., 2012). The interventions have been used as strategies to address chronic health issues.

Summary

Overall, 28 articles were reviewed thoroughly. The articles included topics on homeless veterans, mental health, substance abuse, unmet needs, risk factors, occupational therapy interventions, and VA programs. The following main points were found:

- Veterans are at higher risk for homelessness, substance abuse, and mental health disorders than the general population (Ding et al., 2018; Dunne et al., 2015; Tasi et al., 2014).
- Chronically homeless veterans who experience substance abuse and mental health disorders have many unmet needs (Kaplan et al., 2019). Currently, programs focus more on veterans' housing statuses and neglect other unmet needs such as treatment for substance abuse and mental health issues (Tsai et al., 2019).
- Occupational therapy programs have been shown to be effective in addressing self-management skills and strategies related to ADLs and IADLs, but cultural biases related to service era and gender prevent accessibility to these interventions (D'Amico et al., 2018;).

The goal of researching these topics was to review the existing literature regarding the use of mental health and substance abuse occupational interventions to improve self-management skills. A review of the available literature on this topic indicated that there was not enough evidence to determine whether or not mental health and substance abuse occupational therapy interventions can improve the performance range of self-management skills in chronically homeless veterans.

Clinical Bottom Line

To what degree does implementing substance abuse and mental health occupational therapy programs for chronically homeless veterans increase the performance range of their self-management skills in ADLs and IADLs?

While there is a variety of literature that supports the positive effect that occupational therapy has on individuals with mental health and substance abuse conditions to improve self-management skills, there is not enough research to conclusively demonstrate the effectiveness of occupational therapy programs on self-management skills specifically for chronically homeless veterans (D'Amico et al., 2018). The EHP model was used to analyze the performance range of chronically homeless veterans based on the person, context, and task factors (Dunn, 2017). Similarly, the SLT was used to explain the learning process and group interactions among clients and how it was used to measure outcomes against stated objectives (Hammel et al., 2015).

Following a thorough search of the topic of interest, it was found that chronically homeless veterans have unique person and context factors that decrease their performance range in occupational activities (Dunn, 2017). Homeless veterans currently have many unmet needs regarding their prevalent co-occurring mental health and substance abuse disorders (Kaplan et al., 2019). More research is needed to understand the diverse gender and service era needs of homeless veterans to allow occupational therapists to provide the best possible care while



reducing biases (Ritchie, 2019). It will be beneficial for occupational therapists to easily access this information in order to provide interventions that can improve the self-management skills of homeless veterans in accordance with evidence-based practice (Hammel et al., 2015). Through advocacy, coaching, education, and access to programs, occupational therapists can work to promote better self-management skills in this population (Hammel et al., 2015). Both occupational therapists and other interprofessional healthcare team members should be aware of the cultural factors and needs of homeless veterans to recognize and implement the different treatments needed and advocate for services that could be beneficial to the population.

The literature that has been analyzed will be useful for guiding and growing the involvement of occupational therapy to help promote independence for U.S. Veterans. It is evidenced that occupational therapy interventions are effective in positively addressing the common conditions that homeless veterans experience (D'Amico et al., 2018). Evidence from current literature demonstrates that by improving self-management skills through occupational therapy intervention, homeless veterans can increase their occupational performance range (D'Amico et al., 2018; Dunn, 2017; Hammel et al., 2015). However, further higher-level evidence is needed regarding the effectiveness of self-management interventions for chronically homeless veterans with COD. Overall, occupational therapy has an opportunity to help meet the needs of homeless veterans and increase the profession's scope of practice.



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