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The Link Between Occupational Therapy Interventions, Quality of Life, and Social and Leisure Participation in Adults with Chronic Conditions

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Katie DeBoer, OTS, Callie Kleindl, OTS & Monicah Nyakoe, OTS, 2022

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Focus Question

What is the link between occupational therapy (OT) interventions, quality of life, and social and leisure participation in adults (18 years and older) with chronic conditions?

Case Scenario

Topic Discussion

The focus population for this critically appraised topic (CAT) was adults aged 18 years and older with chronic conditions. For this CAT, chronic conditions included depression, heart diseases, diabetes, arthritis, respiratory diseases, chronic kidney disease, neurological disorders, and cancers. Chronic conditions greatly impact a large majority of the older adult population. Of the adult population, about 80% had at least one type of chronic condition while close to 70% had two or more (National Council on Aging, 2021). Diving deeper, the prevalence of chronic conditions in adults 65 years and older varied by race/ethnicity. According to Lim et al. (2018), “Asians, Hispanics, and Others showed significantly higher prevalence rates in hypertension, hyperlipidemia, diabetes, and most dyads or triads of the chronic conditions” (p. 421) compared to the White population. White individuals were found to have a higher prevalence of dementia and arthritis (Lim et al., 2018). Chronic conditions may negatively impact an adult’s ability to partake in social and leisure activities. Occupational therapists recognize the importance and the impact engagement in meaningful occupations, such as social and leisure activities, have on one’s quality of life (Hocking, 2019). In this CAT, quality of life was described as lived experiences including subjective aspects of life, such as motivation (Flanagan, 2017).

The Importance of Social Participation to Individuals with Chronic Conditions

Social participation restriction can be operationalized as not participating in social and leisure activities as one desires because of limitations due to health conditions (Griffith et al., 2016). Individuals with chronic conditions experience a strong association between social participation restriction and their mental and physical chronic conditions (Griffith et al., 2016). The conclusion can be drawn that chronic conditions affect an individual's ability to participate in social participation (Griffith et al., 2016; van Hees et al., 2020). According to van Hees et al. (2020), the typology of social participation aspects may be utilized to assess the risk for social participation restriction in older adults living with a chronic condition. This typology of social participation included social withdrawers, proximate social dwellers, moderately active social dwellers, and proactive social dwellers. The proactive social dwellers scored the highest on the well-being scores and those who are social withdrawers scored the lowest on the well-being scores. According to these results, the social typology of an individual with a chronic condition(s) are a sign of lower or higher well-being scores (van Hees et al., 2020).

Theoretical Perspective

The theoretical model used to guide this critically appraised topic (CAT) was the Model of Human Occupation (MOHO). According to O’Brien (2017), the MOHO explains how occupations are motivated, patterned, performed, and organized within everyday environments. The MOHO focuses on three components: volition, habituation, and performance capacity. Volition is one’s motivation to engage in desired occupations and is influenced by values, interests, and personal causation. Habituation consists of habits, patterns, and roles that make up daily routines. Lastly, performance capacity consists of objective physical and mental abilities



that underlie skilled occupational performance as well as one's subjective lived body experience and its influence on performance. The MOHO is intended for use in a variety of contexts. Due to utilizing a top-down holistic approach, the MOHO can be used to assess any person across the lifespan experiencing problems in participating and/or engaging in desired occupations (O'Brien, 2017).

Purpose Statement

The purpose of this critically appraised topic (CAT) is to answer the research question, "What is the link between occupational therapy (OT) interventions, quality of life, and social and leisure participation in adults (18 years and older) with chronic conditions?" through critical appraisal of current evidence. This CAT aims to assist occupational therapy practitioners in making informed decisions on interventions that may have an impact on social and leisure participation and overall quality of life among adults with chronic conditions.

Synthesized Summary

Methodology

The resources for this critically appraised topic were found through an initial literature search performed by three different researchers. Searches occurred on multidisciplinary, occupational therapy, and educational databases including the Cumulative Index to Nursing and Allied Health Literature (CINAHL), Pubmed, American Journal of Occupational Therapy (AJOT), Medline complete, Psychinfo, and Dynamed but useful research articles were only found in CINAHL, Pubmed, and AJOT. Inclusion criteria at this stage included adults (18 years and older), social and leisure participation, quality of life, chronic conditions, and motivation. Articles that were not English were excluded from this literature search. The following search terms were used on March 9, 2022: "adults," "chronic conditions," "chronic diseases," "social participation," "social activities," "leisure participation," "leisure activities," "leisure," "volition OR motivation," "quality of life," "interventions," "programs," "occupational therapy," and "treatment" which yielded 30 articles. To create a more efficient search phrase, "AND" and "OR" were used between keywords or phrases. After this stage, the three researchers came together to operationally define which chronic conditions would be included in the population for this Critically Appraised Topic which included, depression, heart diseases, diabetes, arthritis, respiratory diseases, chronic kidney disease, neurological disorders, and cancers. If any of the articles did not include at least one of these chronic conditions, they were excluded from the study. 12 articles were left at the end.

Types of Articles Reviewed

This CAT included 12 articles. Of these articles three were Level I (Berger et al., 2018; Engels et al., 2021; Smallfield & Molitor, 2018), four were Level IV (Anaby et al., 2010; Griffith et al., 2016; Shattuck et al., 2022; van Hees et al., 2020), and five were Level NA (Ang, 2018; Baron et al., 2019; Hand et al., 2011; McQuoid, 2017; Prather et al., 2022). See Table 1. The articles used in this CAT pertain to adults with chronic conditions. Articles addressed quality of life or social and leisure participation of adults with chronic conditions. Interventions focusing on improving quality of life and social and leisure participation in this population were also reviewed. The majority of the articles reviewed are based on occupational therapy.



Table 1
Articles Reviewed

Author	Level of Evidence/Study Type	Research Question	Population
(Anaby et al., 2010)	Level IV- Cross-sectional study	How does participation contribute to well-being?	Adults 65 years and older with two or more chronic diseases
(Ang et al., 2018)	Level NA- causal mediation analysis	Is self-management of chronic disease linked with how social participation affects health-related quality of life?	Adults 60 years and older living with chronic conditions
(Baron et al., 2019)	Level NA- Scoping Review	“How has QOL been conceptualized and measured thus far in occupational therapy quantitative intervention research? and What are the emerging trends and potential gaps that should be addressed for future occupational therapy research and clinical practice?” (p. 418)	Various client populations and age groups
(Berger et al., 2018)	Level I- Systematic Review	What is the effectiveness of occupational therapy health promotion, management, and maintenance interventions in improving occupational performance and quality of life (QOL)?	Older adults 65 years and older living in the community
(Engels et al., 2021)	Level I- Systematic Review	How does cancer and treatments impact leisure and productivity in older adults?	Adults 65 years and older living or experienced living with cancer
(Griffith et al., 2016)	Level IV- Cross-sectional study	How do mental and physical chronic conditions impact	Community-dwelling adults 45 years and older



		functional disability and social participation?	
(Hand et al., 2011)	Level NA- Scoping review	What is the effectiveness of occupational therapy interventions in improving occupational outcomes for adults with chronic diseases?	Adults with one or more chronic conditions, including cardiovascular disease, COPD, depression, diabetes, OA, or RA
(McQuoid, 2017)	Level NA	How do spatial and temporal characteristics of illness management and symptoms impact participants' enjoyment in leisure activities?	Individuals with chronic kidney disease
(Prather et al., 2022)	Level NA	How do mindfulness-based interventions influence stress and quality of life in patients with chronic conditions?	Individuals with chronic conditions
(Shattuck et al., 2022)	Level IV-Cross sectional study	Are social contact and emotional support linked to anxiety symptoms?	Adults 50 years and older diagnosed with at least one chronic condition
(Smallfield & Molitor, 2018)	Level I- Systematic Review	What is the effectiveness of occupational therapy interventions addressing leisure engagement and social participation?	Adults 65 years and older living in the community, retirement home, or assisted living facility or a rehabilitation, subacute, or hospital setting who were being discharged home.
(van Hees et al., 2020)	Level IV- Latent class analysis	What is a typology in social participation and how is it related to background characteristics and measures of well-being?	Adults 65-97 with disabilities or chronic conditions

Synthesis

Social participation is a subjective term defined in numerous ways. Social participation can be described as participating in desired activities (Griffith et al., 2016) or taking part in interpersonal relationships or leisure activities (Anaby et al., 2010; Shattuck et al., 2022). Social participation can be broken down into two categories: formal and informal participation. Formal



participation includes involvement and interaction in groups and organizations, whereas informal participation includes maintaining social roles with friends and family, involvement in social activities, and developing amicable relationships with others (Anaby et al., 2010; Ang, 2018).

Leisure participation and social participation are closely related (Smallfield & Molitor, 2018). Often, when one form of occupation is being treated, the other improves alongside it (Smallfield & Molitor, 2018). There is little research on leisure participation in older adults with chronic conditions (Engels et al., 2021), but social participation has been well studied. A direct link has been shown between social participation and those with chronic conditions. Chronic conditions have been shown to restrict social participation (Griffith et al., 2016) and social participation has been found to lower anxiety and increase satisfaction and overall well-being for those with chronic conditions (Anaby et al., 2010; Shattuck et al., 2022).

When studying the relationship between quality of life and social patterns, those with a more prominent social life had a higher health-related quality of life than those who are social withdrawers (van Hees et al., 2020). This means that social and leisure participation was associated with a higher quality of life (van Hees et al., 2020). When participants discussed the impact of chronic kidney disease (CKD) on leisure activities, there was a tension between living an enjoyable life and learning to manage the illness (McQuoid, 2017). There was a risk in this balancing act. When choosing to engage in meaningful leisure activities, the participants ran the risk of making their condition worse. On the other hand, to live a meaningful life, one needs to participate in social and leisure activities (McQuoid, 2017). Multiple chronic conditions have been found to restrict one's quality of life (Anaby et al., 2010). The loss of social and leisure activities was felt deeply by the participants, especially when the skill was mastered over a lifetime (McQuoid, 2017). Enhancing older adults with chronic conditions' participation in social and leisure activities was often a challenge because they are at risk of participation restriction due to their condition (Anaby et al., 2010). Instead of disregarding social and leisure participation as an irresponsible risk to one's health, occupational therapists should address this occupational deprivation and utilize social and leisure interventions to enhance their quality of life. Occupational therapists often acknowledge quality of life as being an important outcome but often neglect to define it or measure it (Baron et al., 2019).

Furthermore, evidence suggested that occupational therapy interventions can substantially improve occupational outcomes in people with a varying range of chronic conditions (Hand et al., 2011). However, this literature is emerging and there is still a need for more research on the interventions used by occupational therapists to specifically address social and leisure participation in adults with chronic conditions (Engels et al., 2021). Current literature supports the use of interventions focused on self-management, health promotion, and mindfulness-based models within the scope of occupational therapy to improve occupational performance and quality of life of individuals with chronic conditions (Berger et al., 2018; Hand et al., 2011; Prather et al., 2022; Smallfield & Molitor, 2018). Within the literature reviewed, occupational performance outcome measures varied, however, articles that primarily focused on social and leisure participation were prioritized for this CAT.

Self-management interventions and health promotion interventions are closely intertwined and exhibit similar characteristics (Berger et al., 2018). Self-management interventions primarily focus on increasing a client's overall confidence in managing their chronic condition whereas health promotion interventions serve the goal of enhancing resilience, quality of life, and overall health through the promotion of engagement in healthy living



practices and social and leisure participation (Berger et al., 2018; Hand et al., 2011; Smallfield & Molitor, 2018). Occupational therapists that utilize self-management or health promotion interventions as a method to improve quality of life among clients with chronic conditions should assist clients to develop effective coping skills, social support, and environmental modifications (Hand et al., 2011). Additionally, occupational therapists can facilitate participation and educate clients about self-monitoring their condition through techniques that focus on health-promoting routines and habits (Berger et al., 2018). All formats of self-management and health promotion interventions are effective in improving occupational performance and quality of life; however, occupational therapists should ensure that the strategies utilized with clients must be tailored to accommodate the specific chronic conditions of the particular client to support behavior change (Berger et al., 2018). Several evidence-based occupational therapy self-management and health promotion interventions have been developed and are widely supported by literature and theoretical frameworks (Hand et al., 2011). Occupational therapists and other health care providers (including medical doctors, physical therapists, etc.), can implement these self-management and health promotion interventions as a team in order to best serve clients with chronic conditions and their family members to improve their overall quality of life.

In addition, mindfulness-based interventions are a “diverse collection of formal and informal practices used to achieve a balanced approach in stress management while supporting a sense of well-being” (Prather et al., 2022, p. 68). Effective mindfulness practices are particularly beneficial in improving quality of life, resilience, and participation among adults with chronic conditions (Hand et al., 2011; Prather et al., 2022). These interventions allow occupational therapists to offer a holistic approach to self-managing the complex side effects and common symptoms associated with many chronic conditions. The primary goal of this type of intervention is to allow clients to become more active participants in their health journey and develop practices that can mitigate the effects that chronic conditions can have on an individual’s livelihood. However, due to mindfulness-based interventions being a more recent phenomenon, research is limited. More research needs to be conducted to determine the best practices for the effective universal delivery of these interventions (Prather et al., 2022). Although fairly new, mindfulness-based intervention practices can also be used as a tool in conjunction with individual and community-based group self-management and health promotion interventions (Smallfield & Molitor, 2018).

Limitations

Occupational therapy needs to address social and leisure occupations for those diagnosed with chronic conditions. This area of healthcare is under the scope of occupational therapy and there is an incredible need for more research and utilization in practice, especially for those who are cancer survivors (Engels et al., 2021). It is also not clearly described in most research articles whether the social or physical aspects of ‘social participation and leisure’ are being treated (Engels et al., 2021). In most research articles, it was assumed that social and leisure participation fell under the same definition, but there are distinct differences between them and their effects on occupational performance. There was little research on the impact of chronic conditions on leisure participation, but there was a great deal of research on leisure participation in healthy adults and their positive effects on occupational participation (Engels et al., 2021). Specific occupational therapy interventions that target social and leisure participation in older



adults with chronic conditions are an area of research that is emerging and needs to be further examined for clinical application (Engels et al., 2021).

Summary

Overall, researchers have found a link between occupational therapy interventions, quality of life, and social and leisure participation in adults with chronic conditions. Social participation has a direct link with chronic conditions. Chronic conditions can serve as a barrier to social participation (Griffith et al., 2016), but engagement in social participation has favorable results on the overall quality of life of adults with chronic conditions (Anaby et al., 2010; Shattuck et al., 2022). Social and leisure participation positively impacts the quality of life for those with chronic conditions (van Hees et al., 2020). Having multiple chronic conditions is associated with restricting overall quality of life (Anaby et al., 2010). Finally, research has shown occupational therapy interventions substantially improve occupational outcomes in those with chronic conditions (Hand et al., 2011).

Clinical Bottom Line

The overall purpose of this critically appraised topic (CAT) was to explore the literature to determine the link between occupational therapy interventions, quality of life, and social and leisure participation in adults (18 years and older) with chronic conditions. Based on the literature reviewed for this CAT, chronic conditions have been shown to decrease occupational performance in numerous areas as well as restrict an individual's overall quality of life and active participation in social and leisure activities (Anaby et al., 2010; Griffith et al., 2016). In the literature, social and leisure participation are often interconnected within the scope of occupational therapy, and both have been shown to decrease stress and anxiety levels, improve psychosocial wellbeing and life satisfaction, and provide subjective meaning to occupations (Anaby et al., 2010; Shattuck et al., 2022; Smallfield & Molitor, 2018). Occupational therapists center their interventions to recognize the impact engagement in meaningful occupations, such as social and leisure activities, have on one's quality of life (Hocking, 2019).

Occupational performance outcome measures varied within the literature evaluated; however, studies focusing largely on social and leisure participation were favored for this CAT. In the systematic review conducted by Berger et al. (2018), results were obtained as a method to build upon prior research by Arbesman & Mosley (2012, as cited in Berger et al., 2018) where studies examined three areas in relation to chronic conditions and health promotion interventions. The three areas measured were quality of life, health care utilization, and occupational performance. Berger et al. (2018) found that all formats of health promotion interventions, both individual and group, were effective in improving occupational performance and quality of life; however, they were unable to determine which specific components of the interventions led to positive outcomes due to different mechanisms being used in their reviewed studies. In the qualitative study conducted by Prather et al. (2022), mindfulness-based interventions were evaluated to determine improvements in health-related outcomes. The study suggests that mindfulness-based interventions can be effective in promoting quality of life and well-being in patients with chronic conditions as well as can simultaneously provide patients with tools to effectively self-manage their symptoms. They also concluded that further work would need to be done to translate the research into clinical practice. In the systematic review conducted by Smallfield & Molitor (2018), results showed strong evidence for the use of leisure-



based interventions and moderate evidence for the use of self-management interventions tailored to enhance leisure participation of adults with chronic conditions. Smallfield & Molitor (2018) noted that these interventions would best be offered to individuals who have decreased participation in leisure activities; however, due to the mixed evidence, occupational therapy practitioners should implement these interventions on a case-by-case basis in order to meet the needs of the client and their symptoms. Lastly, in the qualitative study conducted by Hand et al. (2011), evidence showed that occupational therapy interventions have the capability to improve activities of daily living (ADLs) and instrumental activities of daily living (IADLs) in people with a range of chronic conditions. Consequently, quality of life and overall health also improves exponentially. The study authors reviewed occupational therapy interventions that targeted ADLs and IADLs, work, social participation, physical health, psychological health, quality of life, and the effectiveness of group-based interventions. Hand et al. indicated that all the interventions evaluated in the study were determined to be in accordance with the World Health Organization's (WHO) recommendations that health professionals should facilitate self-management techniques and implement partnerships with various healthcare providers in order to provide the most optimal interventions and treatment plans aimed at improving client wellbeing (Hand et al., 2011). Research reviewed for this CAT extensively validated the use of self-management, health promotion, and mindfulness-based interventions within the realms of occupational therapy as methods to optimize occupational performance and quality of life in people with chronic conditions (Berger et al., 2018; Hand et al., 2011; Prather et al., 2022; Smallfield & Molitor, 2018).

Evidence from the reviewed literature was examined through the lens of the Model of Human Occupation ([MOHO], O'Brien, 2017). This model emphasizes that an individual's daily occupations are a combined function of motivational factors (volition), life patterns and routines (habituation), range of skills and abilities (performance capacity), and environmental influences (O'Brien, 2017). Each component of MOHO can impact each other, therefore, consideration of each in intervention planning is vital. Understanding the components of MOHO relating to the person allows occupational therapists to design and carry out effective interventions tailored to the person and the chronic condition impacting their life.



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