

2022

Human Services Professionals' Perceptions of Quality Care with Older Adults Experiencing Mild Traumatic Brain Injury

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Walden University

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Frances Ludmer

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Walden University
2022

Abstract

Human Services Professionals' Perceptions of Quality Care with Older Adults

Experiencing Mild Traumatic Brain Injury

by

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MPhil, Walden University, 2021

MAMFT, Northcentral University, 2019

MEd, Texas A & M Kingsville University, 1995

BA, Tarleton State University, 1994

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Human and Social Services

Walden University

August 2022

Abstract

One-third of patients with chronic consequences from traumatic brain injury (TBI) are reported to receive inadequate care for their ongoing functional, cognitive decline, and advanced pathophysiology. The quality-of-life (QOL) for older adults living with TBI may be reduced due to unequal access to resources and a lack of coordinated, holistic treatment plans. Recently, authors suggested that QOL for older adults with TBI depends on feelings of autonomy and cognitive functioning and requires holistic approaches to care. This generic qualitative study explored the experiences and perceptions of human service professionals (HSPs) working in mild traumatic brain injury (mTBI) related to holistic, patient-inclusive, and quality care for older adults. Maslow's QOL theory formed the framework for this study. The research question focused how HSPs perceive patient-inclusive and quality care for older adults with mTBI. Data were collected using semi structured interviews with 10 HSPs in the southwestern United States with 6 months or more experience working with older adults with mTBI and analyzed using narrative content analysis to identify themes. Emergent themes from the data analysis included inconsistencies in clients' daily care and management practices, challenges communicating with older adults with mTBI, the need for rehabilitation support practices for mental, physical, and social well-being, and more education for better caregiving practices. The findings of this study may contribute to positive social change by informing health administrators of the need for procedures and training to advance social connections, identify pre-existing conditions, develop patience, and expand value-added communication to benefit older adults with mTBI.

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Dedication

I dedicate my dissertation work to my son, Raymond Li, for his encouragement that has led to its completion and a special feeling of gratitude. My son Raymond has never left my side in life and spirit, supporting me throughout the process. Also, my darling daughter, Sarah, is always at my side.

Acknowledgments

There are many to thank for helping me complete this work, but I felt lost when my precious son, Raymond, left to the heavens above. I received an added boost from my daughter, Sarah, my cousin, Sheila, Rabbi Mordechai Groner, Dr. Barbara Benoliel, Dr. Scott Hershberger, Dr. Dorothy Scotten, colleagues, and dear friends, Josephine Morrows-Seegars, Michelle Dartis, Cheryl Zack, and Barbara Toyé-Welsh. I could not have pulled through the most challenging times in my life without all of you. Because of exceptional individuals, I have been blessed and have the stamina to complete research that addresses what needs fixing in society.

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Chapter 1: Introduction to the Study

Traumatic brain injury (TBI) has been a leading cause of disability in the United States (Zhou & Greenwald, 2018) and has occurred for a variety of reasons (Cancelliere et al., 2017; Li et al., 2016). TBI has been defined as an external force applied over the brain that causes permanent or temporary cognitive dysfunction (Kiruthika, 2019) and is a universal health problem (Li et al., 2016). The leading causes of TBI have varied in different regions of the world. In Asia, TBI occurred most frequently due to motor vehicle collisions; in Europe, falls and work-related incidents are the leading cause of TBI. In North America and Oceania, TBI was reported from sports-related injuries (Li et al., 2016). In the North American gerontology population, TBI results from motor vehicle collisions (62.5%) and falls (15.6%), but a blow to the head is a more common cause than in other regions (Dash & Chavali, 2018; Dixon, 2017). Even though older adult females (over 65 years) consistently experienced higher rates of falls than males, both sexes' mortality rates from TBI have recently increased, resulting in increased hospital admissions (Cusimano et al., 2020). Those who have TBI may experience extended disabilities from mechanical damage caused during the initial impact and ongoing complex neurological disorders affecting brain functions due to neurodegeneration (Akamatsu & Hanafy, 2020). Aside from TBI's physical effects, its psycho/social effects may also impair a person's social life; however, these effects have been underdiagnosed and undertreated (Kiruthika, 2019). Human services professionals (HSPs), including personal direct care givers, assistants to health care professionals, and geriatric workers, are frequently called on to support the rehabilitation programs and recovery plans of

older adults with mild traumatic brain injury, and to help with their quality of life (Cancelliere et al., 2017.)

Background

Adults over 65 years old have a high rate of TBI, with falls accounting for 40% (Treat Now, 2020). Every 23 seconds, one person in the United States has sustained a brain injury. Among the 5.3 million Americans suffering from TBI, many require lifelong or long-term assistance to perform daily living activities. The authors of systematic reviews concurred that the TBI phenomena occurs worldwide (Dewan et al., 2018; Kiruthika, 2019). Galgano et al. (2017) described TBI as the result of an individual experiencing concussive injuries without any gross structural damage. TBI is usually followed when direct blows to the head with subsequent acceleration/deceleration forces occur, whether from falls, traffic accidents, stroke, violence, or other conditions, varying in intensity and severity (Galgano et al., 2017).

The American Congress of Rehabilitation Medicine (n.d.) defined mild traumatic brain injury (mTBI) as a traumatically induced physiologic disruption of brain function that manifested with at least one of the following: any period of loss of consciousness, memory loss before or after injury, or alteration in mental state at the time of injury (i.e., feeling dizzy, disoriented, or confused). The focal neurological deficit(s) may or may not be transient (Zhou & Greenwald, 2018). Common symptoms associated with mTBI include the following: headache, dizziness, bad taste in the mouth, sleep disturbances, nausea/vomiting, impaired balance and coordination, tinnitus, and vision changes (Zhou & Greenwald, 2018). An mTBI also causes significant cognitive, emotional, and

behavioral disorders, including poor sleep, which is one of the most debilitating consequences (Zhou & Greenwald, 2018).

Head injuries were the primary cause of losing productive capabilities, including social problems that reduce the quality of life (QOL). Person-centered care is thus an essential component of treatment for individuals with mTBI as it targets all aspects of the person: physical, psychological, social, and emotional. HSPs in their roles supporting licensed health care providers may offer important insights into the recovery process for older adults. The primary focus of this study was to explore the perceptions of HSPs who are actively involved in the care of older adults with mTBI to identify if there is a possible model of care practices currently used that contribute to their patients' QOL. An additional purpose was to identify any recommendations for additional supports to enhance QOL, specifically, the care patients with mBTI receive during recovery and their return home to their regular routines.

Problem Statement

While there has been important research on mTBI causes and medical responses, this study addressed the problem of having no clearly defined model for how HSPs as primary supportive service providers can provide appropriate, person-centered care and contribute to the QOL for older adults with mTBI (Cancelliere et al., 2017). Cancelliere et al. (2017) and Lethin et al. (2017) confirmed that mTBI is an issue in the United States because of the lack of care for mTBI patients, primarily older adults with other injuries, who received less care, planning, and screening than younger patients (Cancelliere et al., 2017). According to Rauen et al. (2020), one-third of patients with chronic traumatic

brain injury received inadequate care for their ongoing functional and cognitive decline and advanced pathophysiology. The associated decreased QOL for adults living with TBI has been exacerbated due to unequal access to resources and the risk factors for dementia, including Alzheimer's disease and chronic traumatic encephalopathy (Stocchetti & Zanier, 2016).

Older adults' assessment in general of their QOL is shown to be related to feelings of autonomy and cognitive functioning, but independence and mental functioning were even more affected in cases of mTBI (Rauen et al., 2020). Tiilikainen et al. (2019) stated that when caring for older adults with mTBI, other factors might have influenced their QOL. For example, the need to approach older adults as autonomous people with cognitive needs, including participating in discussions, negotiating what is necessary for their care, and receiving respect and dignity as part of care services (Rai et al., 2018; Tiilikainen et al., 2019). Further, Valtorta et al. (2018) detailed that some HSPs believed older TBI survivors failed to understand their situation and excluded them from the care planning.

Scholars have studied ways to provide adequate care to older patients and have recognized that their care needs improvement. Braaf et al. (2019) found a lack of consistent care coordination for adults with TBI living with family members and in hospital settings where the care coordinator and the case managers were absent. Gardener et al. (2018) identified inadequate care for older adults with mTBI in pre-existing conditions and cognitive impairment. They suggested that neuro-intensive interventions, as the primary focus areas were vital to improving the problem. Parmar et al. (2018)

stated that supporting older adults is an integral part of the healthcare system, affecting HSPs, healthcare providers, administrators, and policymakers. They all identified needs and made recommendations to address health-related issues. HSPs recognized a lack of orientation and education for assessing the essential components of care, fostering a culture of collaboration, and expanding the healthcare team's notion of inclusive care practices (Parmer, 2018). There was a gap in the research regarding what is known about HSPs' perceptions of patient-inclusive and quality care models for older adult patients with mTBI (Tiilikainen et al., 2019). Therefore, I aimed to address this literature gap to understand how HSPs' perception of inclusive, person-centered, quality care for older adults with mTBI informed a model to improve the wellbeing of this population's QOL.

Purpose of the Study

The purpose of this generic qualitative study was to explore how HSPs perceived their work, their beliefs, and experiences with older adult patients with mTBI. The findings from this study informs recommendations on how to improve person-centered care standards. I used the following two research objectives to achieve the research purpose. First, HSPs who engaged in relationships with older adults with TBI described their experiences and perceptions about patient-inclusive and quality care for older adult patients with mTBI. Second, HSPs contributed recommendations for older adults with mTBI on improving and managing their condition.

Research Question

The study aimed to answer the question: How do HSPs perceive patient-inclusive quality care for older adults with mTBI?

Theoretical Framework

Abraham Maslow established a theory of QOL in 1962 (Maslow, 1962, 1999; Ventegodt et al., 2003a). Maslow's theory emphasizes a person's development towards happiness surfaces when basic needs get fulfilled, and this contributes towards a psychology of wellbeing (Maslow, 1999). The QOL theory is an optimal framework for a better understanding HSPs' perceptions of the practices that increased their clients' QOL (Ventegodt et al., 2003a). Mental health services help fulfill patients' needs, meet social expectations, and access opportunities using the patient's abilities. In persons over 65, some of their abilities may be impaired by mental illness, making it difficult to cope with life demands, and HSPs in their support roles may attempt to help restore abilities as best possible (Bigelow et al., 1991).

Nature of the Study

I conducted a generic qualitative design as the study's methodology and design (Caelli et al., 2003). Qualitative research is an iterative process that moves closer to the phenomenon studied by gathering evidence about human behavior (Aspers & Corte, 2019). Qualitative researchers stress the method as a glimpse at the socially constructed nature of reality to understand the meaning in a social situation, interpret the essence, and identify themes (Denzin & Lincoln, 2005). The plan for this study included interviewing HSPs using a semi structured interview lasting approximately 60 minutes. I conducted the semi structured interviews using interview questions drawn from the literature and open-ended questions that invited exploration. The semi structured interviews involved

both structured and unstructured questions, and the strategy was adopted to get the advantage of both types of questions during the interviews.

Definitions

Holistic care: Delivering holistic care for older adults with mTBI by HSPs required knowing when and how they improved their functionality and became self-reliant (Strabner et al., 2019). HSPs developed care programs for older adult patients by integrating spiritual needs, social activity, and self-care to manage TBI in primary care (Strabner et al., 2019). Holistic care dimensions include HSPs addressing an older adult's spiritual needs, personal resources, loneliness, social integration, and the ability for self-care, such as taking required medication, which increases an older adult's well-being (Strabner et al., 2019).

Human services professionals: HSPs are individuals engaged in providing human services to individuals and communities, in non-licensed capacities. The human service profession promotes social justice by empowering communities and individuals to live optimally and are committed to changing lives (Walden University, 2020). HSPs collaborate, teach, conduct research, network, and develop community capacity through professional development, ethical standards, and shared standards of practice (Human Services Professionals Association, n.d.; National Organization for Human Services, n.d.; Walden University, 2020). HSPs accomplish this by harnessing their competencies, personal communication, and employ skills that help clients reach their goal of being happier, healthier individuals (HumanServicesEdu.org., n.d.). For this study, I defined HSPs as professional who are human services-directed care workers with older adult with

mTBIs that were not licensed. The study did not include other licensed health care professionals who received payment for their services. A professional HSP is someone who helped an older adult due to an injury and symptoms of mTBI, such as limited mobility, memory issues, medical needs, care plan, and everyday chores (Gaunt, 2021). These HSPs were paid healthcare workers in health settings such as hospitals, medical centers, nursing homes, and family settings that supported older adult with mTBIs over 65 years.

Older adults, older persons: The term refers to adults over 65 years of age with mTBI receiving care. The term avoided any connotation of negative stereotypes such as words like (the) aged, elder(s), (the) elderly, (the) senior(s) (Lundebjerg et al. (2017), Pinsker, 2020; Tucil et al., 2020). Instead, for this study, I adopted the terms “older adult(s)” and “older person/people” (Lundebjerg et al. (2017), Pinsker, 2020; Tucil et al., 2020)

Person-centered care: Person-centered care is differentiated from quality care as the focus was on the individualized improved needs for healthcare safety and coordination of care responses when functional limitations were apparent, and there was no standardized delivery of care (Goodwin, 2016).

Quality care: Quality care differentiates from person-centered care in those older adults who experience quality ensuring trained caregivers providing needed care regardless of their functionality level, which results in an older adult feeling satisfaction. For example, the global COVID-19 pandemic has raised health awareness by identifying alternative ways for HSPs to deliver care, notably through telehealth (Bernstein et al.,

2021). Bernstein and their colleagues studied 313,516 telehealth visits and analyzed their outcomes across three healthcare organizations. The researchers discovered that quality care could more readily distinguish urgent and non-emergent needs in 84.0–86.7% of cases, with 95% success within three visits (Bernstein et al., 2021). Quality care also inferred that the type of need did not limit HSP's service delivery. HSPs who held the knowledge, skills, attitude, and values of the older adults, constituted quality of care services for older adult patients (Alvarez et al., 2017). In other words, quality care happened when the older adult and HSPs agreed that quality care occurred after spending time communicating needs and the patient was satisfied with the care received.

Traumatic brain injury (TBI) and concussion: The CDC defined a TBI as a disruption in the brain's normal function caused by a bump, blow, or jolt to the head or a penetrating head injury. Any person at risk for TBI lost consciousness at the time of injury. Concussion" is often referred to as a Mild Brain Injury (National Association of State Head Injury Administrators, n.d.). Mild Traumatic Brain Injury is an injury to the brain that results in no more than 30 minutes of loss of consciousness, less than 24 hours of post-traumatic amnesia, and neurological deficits indicated by a Glasgow Coma Scale score of 13-15 (Albrecht et al., 2016). The diagnosis of mTBI was challenging because clinical criteria were absent among older adults due to comorbid conditions, medication use, and pre-injury cognitive impairment, which disguised the symptoms of mTBI (Albrecht et al., 2016). Most older adults experiencing mTBI had headaches from environmental stimuli (e.g., visual glare), situational factors (e.g., stress), physiological

states (e.g., hormones), or activities (e.g., exercise). These conditions triggered or worsened headaches after mTBI (Silverberg et al., 2019).

Assumptions

For the current study, I included assumptions related to the participants. I assumed the HSPs selected to participate had good experiences in the field. I assumed the participants responded using authentic beliefs to answer the interview questions. They honestly added their view to the unstructured questions with complete details. Another assumption was about participants' understanding of the interview questions and their openness to provide genuine responses without pressure. They were free to explore the knowledge and practice outside of an institutional setting.

I also assumed these participants had online access and were able to come online for interviewees in case of restrictions during the pandemic. The participants booked an interview time that would not interfere with their work schedule.

Scope and Delimitations

The scope of this study included only no licensed HSPs. They worked in nonregulated positions in trauma centers in hospitals, nursing homes, medical centers, or home settings in the United States with a minimum of 6 months or more of experience working with older adult with mTBIs (post-injury). The study excluded licensed HSPs who treated acute or severe TBI clients or young adults.

Limitations

I anticipated two predominant limitations of the study. I attempted to recruit HSPs with at least 2-3 years of experience in providing care for older adults with TBI in a

setting such as a trauma center, hospital, nursing home, or family setting. They were difficult to obtain because the COVID-19 pandemic interfered with face-to-face interviewing, and the participants connected by email or telephone.

Significance

The study results provided insights into HSPs' process for helping older adults with mTBI and uncovered what may be a practice model for providing person-centered care. This research filled a gap in the literature by exploring HSPs' perceptions and practice of person-centered care and quality care (Tiilikainen et al., 2019). HSPs have suggested a model for person-centered care treatment for persons with TBI that improved the QOL (Tiilikainen et al., 2019). Burke et al. (2017) explained that HSPs are clinical evaluators who decide what care older adults need, even when no patient information is available. Therefore, HSPs used in this study's findings unearthed methods that improve the quality of care provided to older adults with mTBI.

HSPs are under constant pressure to perform and be accountable for making effective patient decisions. In this study, I explored the perceptions of HSPs related to delivering better practices for person-centered care and quality care for persons over 65 years with mTBI. The findings provide a roadmap for HSPs to understand the importance of person-centered care in helping older adults with mTBI experience self-reliance. The study's findings may lead to positive social change by addressing the decline in the quality of life that older persons with TBI experience and remedies in three primary ways.

Summary

The prevalence of mTBI and its associated psychiatric effects among older adults presented a significant challenge for the healthcare industry. Effective and supportive treatment is necessary to improve the older adult's QOL, particularly regarding basic needs such as food, listening, companionship, and the negative social implications of mTBI. HSPs serve a critical role in delivering quality and person-centered care among the older adult population with mTBI. This qualitative exploration of HSPs' perception of person-centered care among the older adult with mTBI uncovered the challenges they experience and what might improve in providing the quality of the service for patients. The subsequent chapters further elaborate on the empirical literature regarding HSPs and the implications of delivering quality care and person-centered care during the treatment of mTBI among older adults.

Chapter 2: Literature Review

I explored the beliefs and experiences of HSPs in providing quality person-centered care when caring for older adults with mTBI. Recently, researchers have emphasized the inefficient practices of HSPs (O'Hara et al., 2016), which have led to unmet psychosocial needs and have, consequently, reduced the QOL in adults 65 years and older (O'Hara et al., 2016). According to O'Hara et al. (2016), older adults experienced psychological distress and depressive symptoms because of restraints in care provisions that fail to accommodate physical health and to stimulate daytime activities.

According to Elmore (2019), meeting basic human needs is essential for person-centered care and QOL (the lowest level in Maslow's Hierarchy of Needs). Specific findings of older adults with mTBI were rare as most study samples are aimed at young adults (Hunt et al., 2019). Researchers have emphasized how HSPs experience difficulties when providing quality care for persons over 65 diagnosed with mTBI (Hume et al., 2021). Studies have failed to focus on older adults to ensure the collection of adequate knowledge about preferred health service provisions (Hume et al., 2021). In this chapter, I explore the relevant literature to understand HSPs' practices related to the theoretical concepts of QOL. The literature discussion centers around the following two points: (a) current QOL practices for older adults with mTBI and (b) HSPs' conceptions of older adults' QOL with mTBI.

Literature Search Strategy

Based on this study's conceptual model and practical considerations, I developed a literature search strategy with exclusion and inclusion criteria that helped identify

relevant articles and assisted in retrieving articles. I also used set protocols for abstract review. The standard for inclusion was articles that addressed any aspect of older adults with TBI or mTBI. These aspects included factors that reduced the QOL, the severity of their diagnosis, focusing on mTBI and the impacts on the QOL. Considerations included preliminary studies, meta-analysis reviews, and articles published before 2015, including seminal works.

I conducted a literature search through online databases that included ProQuest, EBSCO, Google Scholar, Cochrane, PsycInfo, PubMed, and Allied Health. Twenty-eight keywords were used, including *HSPs' perceptions; human services; professional practices; HSP roles; mature mTBI; complaints; inadequate care; self-reliance; autonomy; QOL; Traumatic Brain Injury, medical care, feelings, thoughts, and HSPs' attitude*. Websites of related organizations, such as those providing rehabilitation services to older adults with TBI, were also reviewed.

Theoretical Foundation

Maslow developed a theory on the QOL and discussed humans' inner nature (Maslow, 1962; Maslow & Rouse, 2004). The QOL theory was selected as the optimal framework for this study because I explored experiences that helped me find the best practices through person-centered care and quality care and increased QOL (Ventegodt et al., 2003a). Maslow's theory includes the concept that older adults sustain their sense of higher-order needs, including healthy social dynamics, self-esteem, and self-actualization (Sirgy, 1986).

Theories of Quality of Life

Maslow's hierarchy of needs and QOL theory indicates five categories of human needs: physiological, safety, belongingness, esteem, and self-actualization (Maslow, 1962; Rowe et al., 2019). A later work by Erik Erikson described a stage theory of psychosocial stages of life development from early adolescence to changes as a function of life events (Erikson, 1984). Further QOL theory applied to older adults corresponds to Erikson's later development of concepts of integrity versus despair (Rowan et al., 2020). Ego integrity is the eighth stage of Erikson's psychological stages of development. According to Cherry (2021), integrity versus despair is the eighth and final stage of Erik Erikson's stage theory of psychosocial development. HSPs apply their understanding of the final stage approach to caring for older patients. According to Cherry (2021), an older person ruminates over life's accomplishments determining if it is meaningful and satisfying, which is an essential facet of HSPs' work. HSPs act as empowerment leaders as they focus on maintaining the efficiency of the service level for older adults. The older adult reflects on whether they feel fulfillment without regret, and this value refers to an older adult having integrity (Cherry, 2021). Despair is the opposite of this phenomenon, as the older person reflects on bitterness, depression, guilt, shame, or disappointment when they tackle the problem of mortality (Cherry, 2021). Hence, when older adults feel they contributed to the family, work, mentoring, and the community, it is easier for them to confront the deaths of others during their professional life and gain wisdom during earlier periods of life (Cherry, 2021). When the older adult with mTBI exhibits despair, the QOL can improve when the older person builds social support by participating in

community groups or organizations, exploring newly pleasurable experiences, and engaging in spirituality. By enhancing the older adult's QOL, the older person can self-actualize feelings (Maslow, 1963).

According to Ejim (2020), Erikson's (1982) eighth stage of psychosocial development filled an existing gap in gerontology by providing current information about aging. Erikson's research utilized his psychosocial development theory (1982, 1997) to examine the perceptions of aging in late life from a psychosocial developmental perspective, implying that development corresponds to the hierarchy of needs (Ejim, 2020). Erikson's theory (1982) contributed to the current literature, given the limited representation of aging experiences on ego integrity versus despair (Ejim, 2020). The psychosocial developmental framework states that perceptions are aspects of the older adult's identity that drive choices and meaning making and enable them to resolve the developmental crisis associated with aging (Ejim, 2020). According to Erikson (1984), Georg and Dixon (2018), and Jose and Cherayi (2017), the eighth stage of development also brings resolution of the developmental crises. In the context of Maslow's QOL theory, by applying the integrity versus despair stage, Rowan et al. (2020) described how older adults often reflect on experiences in life; when the older adults experience genuine satisfaction, they experience self-actualization. Quality of life theory is related to an older adult's life experiences and attributes, including well-being, satisfaction with life, happiness, meaning in life, realizing life's potential, and fulfilling needs (McLeod, 2020). As well, there are more objective factors related to physiological and psychological needs: (a) physiological satisfaction which includes food and clothing, (b) safety, which

includes a secure home and job security, love and belonging needs including friendship, (c) esteem, and (d) self-actualization, which fulfills societal norms (McLeod, 2020).

Quality of life in post-concussion management in older mTBI adults did not compare to well-studied younger populations, and the practice guidelines have not applied to older adults (McMaster, 2018). McMaster inferred that people need to feel connected, whether volunteering or participating in social activities (McMaster, 2018). Older adults' social priorities and needs change because of health problems, mobility challenges, and sharing social networks, contributing to loneliness and social isolation (McMaster, 2018). Subsequently, HSPs' interactions with older adults require acknowledging the loss of their social network and empathy for the health challenges they confront (McMaster, 2018). There are also ongoing self-esteem needs; if the older adults feel pleased about their support, they feel good about themselves (Cherry, 2021). Tan et al.'s (2017) study documented that self-esteem and social support mediated the relationship between extroversion and happiness effects as equally important. Results showed that extraversion, self-esteem, and social support were significantly associated with happiness derived from friends and family. The high social support, in turn, enhanced feelings of being happy and shed light on the effects of self-esteem and social support, including the impact of indirect effects (Tan et al., 2017). Alternatively, older adults felt loss and had regrets, and emotions alternated between a comfortable QOL or regret at any stage of life due to different life events (Rowan et al., 2020).

According to Ventegodt et al. (2003b), Maslow's theory aimed to improve QOL through healing from a holistic perspective. The holistic process theory explained how

healing occurred: it began with the person in a state of consciousness opposite to the state of crisis (Ventegodt et al., 2003a). The state of consciousness is the level of awareness of the individuals, and the state of emergency indicates the unstable condition that adversely affects individuals. The patient enters the holistic form of healing when agreeing with the physician that there is a perspective to life, a safe environment, a will to live and heal, and trust to go forward. The patient and physician acknowledge awareness, mutual respect, and caring. They accept going forward and let go of adverse decisions to restore the QOL, health, and functionality that are not possible (Ventegodt et al., 2003a).

The application of QOL theory to this study relates to the HSPs role and responsibilities in their professional work. Despite visual and textual analysis that indicate that self-reflection is vital to achieving QOL, there is still the issue of HSP delivering services to older adults. HSPs have a role in supporting older adult with mTBIs to get their basic needs, including the following: (a) well-being; (b) satisfaction with life; (c) happiness; (d) meaning in life. However, there were still issues and concerns for HSPs in providing services that contribute to positive QOL care (Griffin et al., 2017). During frustrating times, HSPs regard older adults as a burden for person-centered care (Griffin et al., 2017). Older mBTI adults remain in flux due to their injury and experienced depression and stress (Mushta et al., 2017; Scheenen et al., 2017; Walter et al., 2020). For example, HSPs effectively offered older adults more time, so they collected their thoughts and responded. However, HSPs need additional education to work with these clients and learn how to help cope with stressors (Scheenen et al., 2017). Scheenen et al. (2017) reminded all service providers of their initial mission to help

survivors of mTBI with functional outcomes toward self-reliance contributing to QOL (Rigon, 2017). Older adults had different identities associated with generational ideas of gender roles (Mollayeva et al., 2018) and other identities, so more strategies had to be explored to ensure that quality individualized person-centered care occurs and QOL increases.

Literature Review Related to Key Concepts

Introduction

The National Institute of Neurological Disorders and Stroke (NINDS, n.d.) informed that TBI is a form of acquired brain injury that occurs when a sudden trauma causes damage to the brain. TBI results when the head suddenly and violently hits an object or when an object pierces the skull and enters brain tissue (NINDS, n.d.). According to the Center for Disease Control (CDC) (2021), the brain bounces around or gets twisted in the skull. As a result, chemical brain changes stretch and damage brain cells. The CDC (2021) publication outlined that brain changes affect how people think, learn, feel, act, and sleep. TBI-related in-hospital mortality was higher among older adults and adults than children (Siman-Tov, 2016). There have also been ongoing discussions about people 65 years or older with mTBI as they presented a significant health concern (Bodner et al., 2019). Studying older adults was essential for understanding the mechanisms of TBI, the pathological outcomes of TBI, and the sampling population for testing therapeutic interventions (Bodner et al., 2019).

Common TBI Terminology

Siman-Tov (2016) informed that age-specific TBI occurred the most among older adults resulting in mild or moderate (mTBI), severe and critical injuries. Severe TBI includes cerebral contusions and lacerations, cerebral hypoxia, chronic traumatic encephalopathy, intracranial hematoma, severe TBI, and effects on the endocrine system (The U. S. Library of Medicine, n.d.). Mild traumatic brain injury resulted from blunt trauma, acceleration, or deceleration forces and was a significant public health concern. In the United States, mTBI occurs in 1.6 to 3.8 million cases annually (The U. S. Library of Medicine, n.d.). TBI is moderate when a person has been unconscious for more than 30 minutes and up to 24 hours (The U. S. Library of Medicine, n.d.). Therefore, the treatment regime for TBI has varied according to severity.

Symptomology

Some of the primary signs of a Traumatic Brain Injury are sensory issues. They included blurred vision, hearing problems such as ringing in the ears, bad taste in the mouth, loss of consciousness, speech problems, nausea or vomiting, headaches, fatigue, drowsiness, sleep disorders, and loss of balance (NIH, 2020). The US National Library of Medicine (n.d.) informed us there were additional traits. They included the dilation of pupils, loss of coordination, convulsion, double vision, inability to smell, and sensitivity to light or sound. Sometimes conditions worsen, such as somatic, emotional, and cognitive symptoms influenced by various psychosocial factors (Katz et al., 2015). Hence, when an individual experiences TBI, they are checked for learning, memory, concentration, and problem-solving to identify the effects of an mTBI or concussion

(CDC, n.d.). Sometimes the injury failed to display neuropsychological or neurocognitive testing. Still, a CT scan helped determine mTBI or concussion to ensure the patient did not bleed on the brain after head or brain injury (CDC, n.d.).

Diagnosis

The CDC concluded that more research was necessary to understand mTBI incidences, risk factors, and strategies for reducing and improving mTBI outcomes. Estimates of under-reporting cases of mTBI have been attributed to the many individuals who sustained an mTBI that never sought medical treatment (Bodner et al., 2019).

Katz et al. (2015) research initiatives suggested an understanding that the pathological and mechanical changes of mTBI get reported in pre-clinical models and research findings from the diagnosis of mTBI in practice but had an inconsistent criterion that relied more on the self- symptoms. Therefore, it was problematic to obtain an accurate diagnosis and define mTBI and its clinical consequences (Katz et al., 2015). Diagnosis relied on clinical criteria regarding the depth and duration of impaired consciousness and amnesia that later evolved in months and years (Katz et al., 2015).

Prognosis

Most brain injuries recover within the first six months to a year after trauma. According to Sbordone's (1994) study, a patient's functioning following severe Traumatic Brain Injury occurs for up to ten years post-injury (Braininjury.com, 2021). The long-term prognosis also considered the possibility of dementia, Parkinson's disease, and Alzheimer's disease. The discussion viewed cases including (a) dementia: In assessing 160,000 trauma patients, mTBI adults over 65 years were associated with an

increase in dementia and were at risk in five to seven years (IFL Science, n.d.). (b) Parkinson's disease: Gardner et al. (2018) assessed mTBI patients for Parkinson's disease, and 56% were at risk, especially military veterans. (c) Alzheimer's disease: Hayes et al. (2017) evaluated Alzheimer's disease for patients with mTBI and determined that high genetic risk showed reduced cortical thinning as a function of injury and vulnerable regions of the brain among males with mTBI.

QOL of life for an older adult is essential in evaluating a person's prognosis for quality improvement and allocating health and social care services (van Leeuwen et al., 2019). In his QOL theory, Maslow proposed a systemic overview of what adults need, but older adults' individual opinions were missing from the plan (van Leeuwen et al., 2019, Valtoria et al., 2018). In his theory of self-actualization, Maslow encouraged older adults to become healthy and attain a better QOL by continually finding a meaning in life that is important to them (Tripathi & Moakumla, 2018). Hence, to help support a positive outcome, HSPs had to listen to older adults' feedback and follow up according to the person's needs.

The QOL theory is an all-encompassing concept of an individual's expectations and experiences (Tripathi & Moakumla, 2018). HSPs know that an older adult was experiencing trauma and needed assurance that the older adult felt cared for (Tiilikainen et al., 2019). HSPs did not always treat older adults as autonomous people who needed to have discussions and negotiate their care (Rai et al., 2018; Tiilikainen et al., 2019), used the QOL theory, which helped HSPs consider the needs of the older adult. To help support a positive health outcome, knowing what older adult with mTBIs wanted was

necessary to align care and service goals to all expectations, from basic needs to self-actualization (van Leeuwen et al., 2019).

Application of QOL to Older Adults

QOL theory users had a frame of reference that considered working with older adults with mTBI. In a synthesis of forty-eight studies by van Leeuwen et al. (2019), QOL was divided into nine different domains as follows:

1. Health perceptions – determined whether the older adult with mTBI felt healthy compared to their prior health status and not restricted by health concerns.
2. Autonomy – determined whether the older adult with mTBI felt independent, not a burden to others, but had a sense of self-control, and retained their dignity.
3. Role and activity – whether the older adult with mTBI felt confident that they had control over their time, kept busy, conducted valuable activities, stayed connected, and helped others.
4. Relationships – Considerations is whether the older adult with mTBI retained valued relationships with friends and family by experiencing a sense of belonging and intimacy while they still wanted to support others.
5. Attitude and adaptation – whether they were positive, accepting, and open to changing standards if deterioration occurred.
6. Emotional comfort – not feeling lonely, isolated, or troubled by previous experiences.

7. Spirituality – found fulfillment in their quest for meaning, faith, and religious activities.
8. Home and neighborhood – felt safe, provided privacy and comfort, and lived at home if possible.
9. Financial security – felt comfortable self-sustaining and had the freedom to do what the older adult with mTBI wanted.

Older adults explained QOL as a dynamic web of domains that strongly interacted and partly overlapped. Because Maslow defined the hierarchy of higher-order needs for most of the members of a given society in the QOL theory, the emphasis has been on how older adults with mTBI. They shared how to satisfy their higher-order needs at home and in an institutional setting such as a nursing home, hospital, or medical center.

HSPs delivering services to older adult with mTBIs had distinct roles in caring. HSPs provided for the physical or cognitive needs of the older adult. The risk is that HSPs failed to obtain sufficient assistance for older adults, leaving them with unmet needs (Chen et al., 2018).

Studying HSPs Supporting Older Adults with Mild Traumatic Brain Injury

The National Institute of Neurological Disorders and Stroke (NINDS) reported Hunt et al.'s (2019) research that suggested harmful after-effects of TBI were often due to HSP practices that needed improvement. Improved practices are needed to include older adult quality care, including missing Person-centered care elements (Tulsky & Kisala, 2019). According to Kruithof et al. (2018), failure to give attention to a patient has led to a lower quality of care and reduced QOL for an older adult with mTBI. For

example, older adults with mTBI experience memory loss. Sundel and Sundel (2018) suggested techniques from behavioral and cognitive principles (p. 4) that were helpful, such as accepting negative cognitions, being nonjudgmental to promote problem-solving (pp. 4-5), and creating better relations between the HSPs and the older adult with mTBI are helpful. Competence and innovation were essential elements in QOL care and knowing health tactics made a difference. According to van der Naalt et al. (2017), mTBI accounted for most cases of TBI, and many patients showed incomplete long-term functional recovery. Hence, tactics to reduce risks included a re-evaluation every six months to determine an older adult's emotional distress and how they were coping after the initial injury. Van der Naalt et al. (2017) assessed 910 patients with mTBI, and two-thirds fully recovered. Therefore, the best tactics for evaluating psychological factors such as emotional distress and maladaptive coping experienced after an injury are essential (Sundel and Sundel, 2018).

Challenges for HSPs Providing Care

Whether HSPs serve older adults with TBI in the hospital, at home, or in a nursing home, they consistently experience stressful work-related conditions that, in turn, affect the care of older adult with mTBIs (Kanno & Giddings, 2017). Evidence of their work-related stress was derived from the psychometric testing of 947 HSPs using the Malach Burnout Inventory-Human Services Survey (García et al., 2019). A systematic meta-review of the literature by Batista et al. (2019) highlighted the poor infrastructure in many workplaces. They determined there was a consensus by experts in that field that poor infrastructure in care facilities contributed to inadequate management policies and

practice guidance for older adults' pain and anxiety relief, which automatically decreased an older adult's QOL (Baptista et al., 2019)

HSPs compromised best practices when the burden of care in helping older adults was evident in reduced care found in fifty-one out of sixty-two studies when patient outcomes were not satisfactory and the other few studies associated positive support for older adults (Baker et al., 2017). Thus, person-centered care QOL practices have been insufficient overall. Current practices failed to address retaining HSPs to provide complex care needs to older adults (Baker et al., 2017). According to Dreher et al., 2019; Kanno & Giddings, 2017; Schwartkopf et al. (2017), HSPs have not received adequate training for self-care skills.

Holistic Person-Centered Care

Individual differences in the status of older adult with mTBIs were one reason for needing holistic, person-centered care (Maggio et al., 2019). Traumatic Brain Injury causes deficits in attention, memory, affectivity, behavior, planning, and executive dysfunctions, significantly impacting the QOL of the patient and their family (Maggio et al., 2019). Older adults with mTBI experienced cognitive and behavioral impairment, so it was recommended that they should participate in cognitive and motor rehabilitation programs to improve functional outcomes and QOL (Maggio et al., 2019).

Brain impairment was visible in various evaluations. They included a neuropsychiatric evaluation, clinical imaging, genetic factors, electrophysiological assessment, neuropsychological assessment, and biomarkers (Silver et al., 2019). The impairments for older adult mTBI were issues of consciousness, neurocognitive

disorders, awareness of deficits, social cognition, and neurodegenerative dementia.

Evaluations for mTBI also included emotional or behavioral well-being assessment and a history of psychiatric disorders (e.g., sleep disturbance and fatigue, post-traumatic headaches, dizziness, imbalance, and vestibular dysfunction with persistent symptoms).

However, only when the older adult with mTBI healed feedback was given to HSPs supporting them. The ongoing care has been complex and needed considerable time, resources, and skilled HSP that genuinely supports Person-centered care.

Basic Needs for QOL

Older adults with mTBI who experienced a fall, stroke, car accident, or another incident were most prone to neurodegenerative diseases—specifically Alzheimer’s disease, Parkinson’s disease, and amyotrophic lateral sclerosis.

An older adult’s lifestyle changes how they experience social connection and healing (Gardner & Yaffe, 2015). Older adults often want to live at home to feel safe and secure in familiar surroundings (van Leeuwen et al., 2019). Thus, the person’s residence and neighborhood added to an older adult’s experience of feeling safe at home, where there was privacy, comfort, and safety. According to Elmore (2019) and Hunt et al. (2019) meeting basic human needs has been essential for older adults wanting a high QOL; however, findings often reflected that study samples aimed at younger adults (Hunt et al., 2019), not the older adult. The key research question was: how do HSPs perceive patient-inclusive and quality care for older adult patients with mTBI? Because QOL research provided little information on older adults with mTBI, in this chapter, I explored relevant literature to understand why older adults agreed with the care from HSPs.

Nguyen et al. (2016) stated that process measures derived from understanding how the origin of TBI epidemiology shaped public health policy, implementing prevention strategies, and justified the distribution of resources toward research, education, and rehabilitation of TBI. Nguyen et al. (2016) claimed there were no current systematic reviews of population-based studies of older adults. However, Keelan et al. (2019) reviewed 349 participants with age, sex, and country variations and informed that mTBI is the most studied among these groups. Despite this, studies on older adults with mTBI have not been well-reviewed in current literature, making it challenging to report on neuro-epidemiological studies. Considering post-TBI, Bridges et al. (2019) specified a need for improved care delivery by HSPs, by giving more attention to structural and process measures. Structural factors included the care available for mTBI patients, and its successes were essential for the study (Keelan et al., 2019). According to Li et al. (2020), the QOL questionnaire focused on how an adult's age and gender impacted TBI sleep disturbances and the effects of post-TBI disorder on an older adult's overall QOL. The researcher confirmed a higher prevalence of obstructive sleep apnea, insomnia, and daytime sleepiness in mTBI than in older adults' control (Li et al., 2020). Because QOL research has less information on older adults with mTBI, in this chapter, I explored relevant literature to understand why older adults agreed or disagreed with HSPs' care. The literature focused on (a) impairments, (b) QOL practices for older adults with mTBI, and (c) researched HSPs' perceptions of QOL and the psychosocial elements that either worked or needed improvement to meet the needs of older adult with mTBIs.

HSP Arguments

Jamieson et al. (2020), Walker et al. (2017), and Petriwskyj (2018) refuted that an older adult's opinion did not matter even when an acquired brain injury occurred because it often reduced their communication ability. The rationale was related to several issues. First, older adults have decreased interactions because of cognitive difficulties needed to communicate (Jamieson et al., 2020). Second, HSPs' reports validated that an older adult experienced the psychosocial outcome of post-TBI depression. The persistence of symptoms led to difficulty returning to life pre-injury, so healing was necessary to communicate effectively. Third, Walker et al. (2017) and Petriwskyj (2018) described visual mature adult images that portrayed adults with persistent mTBI symptoms, including mood swings that affected the QOL (Walker et al., 2017) and caused difficulties in communicating. Adult TBI service members and older adults with TBI were associated with an image of support lost, identity transition, cultural metaphors, and existential reflections (Walker et al., 2017). Fourth, head injury increases dementia and Alzheimer's disease risks in many older adults (Li et al., 2017). Thus, older adults with mTBI have a distorted sense of self, so support from HSPs was essential in TBI recovery.

Biological Needs

According to Mollayeva et al. (2018), the transition from an injury event to disability in TBI was affected by many factors, including attitudes at local, family, and societal levels, economic deprivation, and endorsement of civil rights legislation. Biological needs explored communication issues, symptoms, psychological decline, diseases, gender identity, sexual orientation needs, and socioeconomic factors.

Communication Issues

Whether they expressed themselves in mask-making, nonverbal communication, or oral expressions, the mTBI older person often had a conflicted image of themselves (Levert et al., 2017). Medical students validated that the conflicted sense of self was real. The medical students experimented with mask-making and discovered that the activity helped identity formation and wellness by providing an explanatory narrative (Shapiro et al., 2018). The medical students used visual and textual analysis techniques that promoted self-reflection and self-care regarding personal and professional development. Therefore, the masks expressed an mTBI older person's thinking about the following: (a) well-being; (b) satisfaction with life; (c) happiness; (d) meaning in life, and other factors which fulfill societal norms (Shapiro et al., 2018).

According to Scheenen et al. (2017), HSPs recognized that older adults' well-being was possible by listening to responses, reflecting on memory loss, lethargy, or losing balance. Scheenen et al. (2017) and van der Naalt et al. (2017) pointed out that communication deficits were psychological stressors when older adults had no coping strategies and were isolated from receiving patient-inclusive care.

Symptoms

All older adults with mTBI displayed lower cognitive functioning, anxiety, and depression. Typically, cognitive dysfunction resolved in three months post-injury; however, half of the individuals with a single mTBI demonstrated long-term cognitive impairment (Friesen et al., 2019). According to Theadom et al. (2016), HSPs often failed to check whether the older adult with TBI had any pre-existing conditions that contributed to causing symptoms of anxiety and depression. Walter et al. (2020), Mushta

et al. (2017), and Dahdah et al. (2016) emphasized the importance of increasing sensitivity to pre-existing conditions. Walter et al. (2020) and Mushta et al. (2017) showed how pre-existing medical conditions were associated with lower functional and cognitive outcomes for TBI patients. Screening patients for pre-existing medical conditions using multidisciplinary TBI rehabilitation teams meant more aggressive treatments or greater length of stay, depending on conditions like cardiovascular risk factors, low cognitive functioning, anxiety levels, and depression. HSPs failed to ask or check whether the older adult with mTBI had pre-existing conditions (e.g., hypertension, coronary artery disease, diabetes mellitus, smoking, alcohol intake).

Psychological Decline

Even if these conditions are known for an older adult with mTBI, HSPs do not report on an older adult's psychological well-being and progressive functional decline (Dahdah et al., 2016). As a result, when HSPs or other professionals review information about the older adult rapidly declining, responses remain inefficient or uninformative (Dahdah et al., 2016). Thus, asking HSPs how they coped with older adults' desires, values, family situations, social circumstances, and lifestyles (Health Innovation Network, 2017) provided some helpful insights.

Impairments and Diseases

TBI causes deficits in attention, memory, affectivity, behavior, planning, and executive functions, significantly impacting QOL for the patient and their family (Maggio et al., 2019). Older adults with mTBI experienced cognitive and behavioral impairment; thus, there was an expectation that the older adult participating in cognitive

and motor rehabilitation programs improved functional outcomes and QOL (Maggio et al., 2019). Assessing impairments of older mTBI adults included a review of neuropsychiatric evaluations, clinical imaging, genetic factors, electrophysiological assessment, neuropsychological assessment, and biomarkers (Silver et al., 2019). The study considered the neuropsychiatric aspects of mTBI, such as disorders of consciousness, neurocognitive disorders, awareness of deficits, social cognition, and neurodegenerative dementia. Evaluations of mTBI also examined emotional or behavioral well-being and the history of psychiatric disorders (Silver et al., 2019). Only when the older adult with mTBI healed was their feedback to HSPs supporting them.

An older adult with mTBI experienced problematic communication when an HSP was unsupportive in delivering the basic needs of the older person when communication deficits were present (Gravina et al., 2018). If the mTBI of an older adult's symptoms persisted, the altered brain automatically initiated the defense system (Li et al., 2017). The head injury led to dementia with a 50% to 60% probability of Parkinson's or Alzheimer's disease (Li et al., 2017). According to Li et al. (2017), from thirty-two observational studies of more than two million individuals, 13,000 older adults experienced dementia and a 51% increase in incidence, with 8,000 experiencing Alzheimer's disease with an increased risk factor of 63% dementia. Li et al. (2017) published evidence that head injury led to neurodegenerative diseases. Future studies may clarify the cause-and-effect relationship between head injuries, dementia, Parkinson's, and Alzheimer's disease.

Risk of Dementia

According to Zhang et al. (2020), HSPs focusing on older adults with mild cognitive impairment viewed the impairment as a typical transition for aging. According to MacQueen (2016), communication for a mature aging adult declined due to the following: (a) mind/body disconnect; (b) disconnect with pre-injury identity; (c) social disconnect; (d) emotional sequelae; (e) internal and external resources; (f) reconstruction of self-identity; (g) reconstruction of a place in the world, and (h) reconstruction of personhood. Researchers on older adults with mTBI consistently demonstrated that older adults have a changed sense of personal identity, which is evident throughout the experience of recovery and outcome (Arnould et al., 2016). The disturbances of an older adult's identity disturbances are related to unwelcome consequences of brain functionality, HSPs distress, and social reintegration (Arnould et al., 2016). Decreased executive functioning was the early sign of dementia (Zhang et al., 2020). However, according to Zhang et al. (2020), HSPs often lacked sensitivity towards an older person with or without symptoms of dementia (Zhang et al., 2020), although it is unclear why the insensitivity occurred.

Disease Risks: Alzheimer's, Parkinson's, Chronic Traumatic Encephalopathy

Soja et al. (2019) informed that numerous aging challenges were present, and risks were reduced by encouraging healthy strategies for older adults that leaned more towards sensitivity to the older adult. According to Milos and Ikonovic (2020), HSPs' knowledge correlated to sensitivity expertise. HSP knew enough about the older adult's state of health, but no evidence-based research was available to back up the possibilities. Milos and Ikonovic (2020), Collins et al. (2020), Stopa et al. (2019), and Crane et al.

(2016) believed that the risk factor for dementia was likely when the pathological features characterized an accumulation of pathological protein aggregates, which led to Alzheimer's disease, chronic traumatic encephalopathy, and Parkinson's disease.

Gender Identity: Pain Levels

The effects of biological sex and gender represented an amalgamation of social, physical, cultural, and behavioral elements more minor in TBI research and practice (Mollayeva et al., 2018). According to Turkstra et al. (2020), gender differences impact older adults' identity and levels of depression. Males displayed higher levels of depression and pain, with an elevated presence of insomnia (Li et al., 2020; Turkstra et al., 2020). Males also experienced more risks of obstructive sleep apnea, insomnia, and daytime sleepiness (Turkstra et al., 2020). Li et al. (2020) pointed out that gender differences also correlated with pain levels and the occurrence of post-TBI sleep disturbances. According to Ho et al. (2016), elevated chronic disease burden caused older adults to experience daily pain, which reduced their QOL with decreased engagement in social and recreational activities and an increased risk of falls resulting in mTBI. Ho et al. (2016) informed that women's pain threshold and pain tolerance were lower than men's, and they had more robust responses to analgesics than men. It is unclear whether the well-documented differences in pain reports among women and men are biology-based (sex) or shaped by social and cultural expectations (gender; Ho et al., 2016). Therefore, by collecting mTBI data on both older men and women, HSPs provided information on how the different genders engaged in health-promoting behavior and the impacts on QOL. According to Li et al. (2020), another contributing factor to low QOL for older

men and women with mTBI corresponded to obstructive sleep apnea and insomnia. Disrupted sleep was common after TBI, particularly in the inpatient rehabilitation setting, so participation in therapy among the sexes varied (Makley et al., 2020). Gardner et al. (2018) informed that decreased health in older mTBI corresponded with ineffective management decisions that supported older adults.

Sexual Orientation Needs

The faculty of Human Sciences, Department of Sexology, at the University of Quebec in Montreal, Canada, indicated the LGBTQI+ recognition of multiple health inequities in older adults' experiences, including mobilization and stigmatization of their orientation when known. Older adults often felt less worthy (Dorsen & Van Devanter, 2016; Levert et al., 2017). Moreno et al. (2018) stated that older adults had difficulties resuming daily activities after mTBI, such as returning to meaningful relationships in the community. According to Moreno et al. (2018), older adults played down inequities regarding sexual orientation to avoid bias in obtaining support from the HSPs. Therefore, HSPs informed their awareness if older adults with mTBI experienced less satisfaction and happiness in their life as it necessitated hiding their sexual orientation.

Socio-Emotional Needs: Trusting Scenarios, Social Needs in Nursing Homes, Hospitals, and Home Care

Siman-Tov et al. (2016) explained that TBI older adults experience more admission to hospitalization, lasting at least two weeks or more, and get discharged to rehabilitation (Paredes et al., 2021). Older adults utilized more hospital resources, even though intervention programs did not have adequately designed support for older adult

with mTBIs (Siman-Tov et al., 2016). Siebold et al. (2018) informed that during an older adult's hospitalization, in-home, or other rehabilitation treatment, they experience loneliness, impacting their health, well-being, and longevity (Paredes et al., 2021). Therefore, when I collected the data, I learned how older adult with mTBIs reduced feelings of social isolation and distress related to an HSP providing care.

According to van Leeuwen et al. (2019), older adult with mTBIs need support through a caring relationship. It may be bonding with their partner, children, grandchildren, and HSPs to get love and affection that prevent loneliness and stress (van Leeuwen et al., 2019). Xue et al. (2018) added that policymakers or executive directors who managed and supported policymaking for older adult with mTBIs were able to make practical policy recommendations. Management had the propensity also to increase older adult with mTBIs' higher-order needs by teaching them financial literacy or others to meet their needs and experience the freedom to enjoy life and independence (van Leeuwen et al., 2019).

The QOL for the older adult population residing in care homes and other settings has recently become a critical issue given the aging population (Leung et al., 2017). HSPs informed older adults to adapt to nursing home life or another setting, including emotions, acceptance, and social and cultural factors (Wareing & Sethares, 2021). Wilberforce et al. (2017) pointed out that HSPs in home and hospital settings are required HSPs to take on diverse roles in negotiating older adults' boundaries. According to Wilberforce et al. (2017), training an HSP is problematic due to budget and time. Den Ouden et al. (2017) informed that an HSP had trouble conducting daily activities

independently, such as bathing and dressing an older adult. Therefore, when HSPs were asked about their insight on when they have inadequate preparation in their training from orientation or other and what they do in unfamiliar settings served as beneficial in knowing how to perform the older adult with mTBI to obtain more benefits.

Douglas et al. (2020) developed a framework to support persons with cognitive disabilities in making their own decisions across life domains, and it began with trust. The La Trobe practice framework provided an evidence-based guide to help older adult with mTBIs with cognitive skills and steps to trust (2020). Some measures included knowing the person, identifying, and describing their decision, accounting for constraints, seeking advocates, and others.

According to Douglas et al. (2020), the focus depended on the older adults' personal decisions, coping patterns, confidence level, availability of consistent support, knowledge, attention to communication, application of cases, and discussion (reflection). According to Douglas and Bigby (2020), decision-making support started with a devastating experience. Rowan et al. (2019) informed that an older person in the emergency room often experiences cognitive and emotional issues. According to Herrmann and Deatrck (2019), older adults described their emergency room experiences and hospitalization as a division between themselves and HSPs supporting them. Thus, it correlated to medical providers expressing doubt that the older adult was healing and related the issue to the institutional culture, ethics climate, individual personal values, experiences, and emotions that impacted their judgments and decisions (Dang et al., 2019). Berberian et al. (2019) addressed the military culture and how service members

verbally communicated their challenges to care providers, peers, and family regulating emotions when experiencing cognitive, psychological, psychosocial, and physical impairments. According to Berberian et al. (2019), the trauma event registered in the older adult's memory included emotional numbing and other ailments. Retelling memories through pictorial and non-verbal iteration was shared—starting in the eighties, not the nineties. The situation compared to older adults who had underlying memories and emotions. Older adults with mTBI needed to explore how to soothe the problem and gain improvements in their QOL.

Social Aspects of Self-Actualization for Older Adults with mTBIs

In the following sections, I explored the impacts on older adult with mTBIs regarding autonomy, spirituality, internal conflicts, reaching self-actualization, and HSPs' arguments.

Autonomy

According to Skaar et al. (2017), older adults value the ability to act autonomously and have a resilient self-view. Jamieson et al. (2020) and van Leeuwen et al. (2019) informed that self-managing older adults who are autonomous experience dignity and do not feel limited or a burden to others. According to Gutierrez and Ochoa (2017), their abilities were contingent on cultural and social factors and differences across cultures. Therefore, when I collected the data on how HSPs perceive patient-inclusive and quality care for older adult patients with mTBI I learned about Person-centered care practices, regardless of cultural and social factors (van Leeuwen et al., 2019). The situation of an older adult with mTBI drew the question of whether HSPs

served the older adult's interests by administering Person-centered care or were influenced by other factors that negatively changed older adults' habits. For example, Maslow emphasized that an individual must have emotional comfort. An older adult does not feel sad, depressed, lonely, isolated, or troubled by past experiences if supports were in place. In other words, HSPs provided answers to what made older adult with mTBIs reach their higher-order needs. The following discussion addressed the internal values of self-actualizing from an older adult's outlook. They included spiritual values, internal conflicts, and what plateaus self-actualization to feel autonomous.

Spirituality

The investigation of spirituality is a means of self-actualizing (Jones et al., 2018). When older adults experienced brain injury, the study determined that their QOL decreased and was more punctuated (Jones et al., 2018a). In nine studies in the United States, Canada, and the United Kingdom, spirituality was tied to many positive outcomes following a TBI incident (Jones et al., 2018a). Post-traumatic growth and older adults learn to cope psychologically, increased physical health, mental health, productivity, life satisfaction, and functional independence (Jones et al., 2018a). Older adults reported that spirituality meant having faith in God, a quest for meaning, self-development, awareness, and involvement in religious activities or community, creating a sense of well-being (Jones et al., 2018a). However, because there was limited research on spirituality following TBI, HSPs provided information about what spirituality meant from their experiences working with older adult with mTBIs. Thus, self-actualizing was not

spirituality alone; it also considered that many older adults internalized conflict, and information follows.

Older Adults' Conflicted Sense of Self

Older adult survivors shared compelling narratives about losing control during their hospital stays because HSPs dismissed their voices (Herrmann & Deatrck, 2019). Older adults have lived experiences, and their voices are related to understanding their identity, including sexual orientation and gender differences (Turkstra et al., 2020). MacQueen (2016) and Turkstra et al. (2020) stated that older adult with mTBI survivors enhanced their sense of self in the context of engagement, support adjustment, and meaningful outcomes in rehabilitation. Therefore, older adults with social functioning reduced long-term challenges, such as how power dynamics in their relationships affected their role in the family, occupation, and other social groups, which threatened the reconstruction of self-identity after mTBI (MacQueen, 2016).

Reaching Self-Actualization

When an older adult with mTBI self-actualized, HSPs observed what made the difference to older adults feeling comfortable in their skin (van Leeuwen et al., 2019). Community integration programs like art therapy elevated an older adult's self-esteem whether HSPs delivered services in the hospital, nursing home, medical center, or a home environment. Subsequently, HSPs that met the older adults' needs supported QOL through productivity, maintenance, managerial or political, and adaptive facilities (Sirgy, 1986) using their practice-based experience and beliefs, which correlated with Maslow's QOL theory.

Observables

Carr (2018) explained that the media is complicit in keeping images of older adults' suffering out of sight and have ignored the consequences of TBI or the needs that older adults identify. Many older adults with TBI lived with the impacts of their earlier experiences with minimal or no support. The effects of TBI, whether from a fall, car accident, stroke, abuse, or another circumstance, brought an expectation of making changes in health service delivery planning, mainly because the overall rate of TBI per 100,000 people was 95%. The most substantial number of incidences is in North America (Dewan et al., 2018), derived from 75 million baby boomers born between 1946 and 1964 marching into old age (Carr, 2018).

Albrecht et al. (2016) suggested that society has ignored the growing rates of depression and increased TBI incidences among older adults but recognized it was an emotional problem. When older adults experienced TBI with loss of consciousness, there was an increased risk for clinical and neuropathologic findings of Alzheimer's disease, Parkinson's disease, and other dementias (Crane et al., 2016). Therefore, there was an escalating concern for older adults' caretakers and HSPs associated with QOL (Carr, 2018). Gardner et al. (2018) stated that few geriatric specific TBI guidelines assisted with complex management decisions because the under-representation of information helped support an older adult with TBI. Simultaneously, many older adults failed to report their feelings of sadness and depression because of embarrassment, fear of stigma, and an expectation based on societal and historical factors (Carr, 2018). Therefore, it was helpful to study the leading causes of disability that older adults experienced, whether from a

blow to the head or other, and get HSPs' opinions about what improvements were made by caregivers to support older adults with mTBI experience QOL.

According to Abdelmalik et al. (2019), preventing further tissue damage from a head blow is essential. The impact has caused changes on a cellular and molecular level, including cellular swelling, loss of membrane gradients, the influx of immune and inflammatory mediators, excitotoxic transmitter release, and changes in calcium dynamics (Abdelmalik et al., 2019). Consequently, older adults with TBIs need support to rehabilitate and manage their injuries' severity and impacts to avoid intracranial pressure (hypotension and hypoxia; Abdelmalik et al., 2019). Some injuries included spine and spinal cord injuries, which occurred together. Therefore, the initial treatments for TBI were to ensure airway protection, adequate breathing, oxygen, circulation, and blood flow delivery to the brain (Abdelmalik et al., 2019). The older adult experiencing mTBI did not initially make decisions except to give HSPs information when possible.

Mild Traumatic Brain Injury accounts for most cases of TBI, and many patients showed incomplete long-term functional recovery (van der Naalt et al., 2017). According to van der Naalt et al. (2017), data from 910 m (about 2985.56 ft) TBI patients were the predictors for recovery. The older adult with mTBIs experienced emotional distress and maladaptive coping after the injury, combined with pre-injury mental health problems, education, and age. The following discussion addressed executive brain functioning, internal processing changes, and residual disorder.

Managing Executive Function

According to Maggio et al. (2019), TBI causes deficits in attention, memory, affectivity, behavior, planning, and executive dysfunctions, significantly impacting QOL for the patient and their family. Older adults with mTBI experienced cognitive and behavioral impairment, so they participated in cognitive and motor rehabilitation programs as a measure that improved functional outcomes and QOL (Maggio et al., 2019). An older adult with mTBI received an assessment through several steps. Silver et al. (2019) list evaluations as neuropsychiatric, clinical imaging, genetic factors, electrophysiological, neuropsychological, and biomarkers. TBI disorders of consciousness, neurocognitive disorders, awareness of deficits, social cognition, and neurodegenerative dementia. The evaluations determined emotional or behavioral well-being, including the history of psychiatric disorders, mood and anxiety, and somatic disorders (e.g., sleep disturbance and fatigue, post-traumatic headaches, dizziness, imbalance, and vestibular dysfunction with persistent symptoms) (Silver et al., 2019). The older adult with mTBIs never fully recovered (van der Naalt et al., 2017), but healing provided feedback to the supporting HSPs.

Processing Speed and Survival Bias

Gardner et al. (2018) indicated that older adults experienced survival bias with slower processing speed. The authors implied that older adults' memory capacity gets overlooked when they respond too slowly, so HSPs report incorrect information about their condition instead of taking time to interpret what the older adult meant (Gardner et al., 2018). The study helped determine how HSPs evaluated what older adults meant, including their timing, slower processing, or if another underlying condition needed

additional testing. Levert et al. (2017) and Vas et al. (2016) reported that providing memory training with advanced reasoning helped overcome memory issues for older adults with mTBI. Cognitive therapy also improves psychological health by reducing symptoms associated with depression and stress (Levert et al., 2017). The improvements were evident in the older adults' executive function processing, memory, cognitive control, psychological health symptoms, integration into the community, and therapeutic practices. All authors emphasized less the survivor's functional outcomes and self-reliance needed.

Post-traumatic stress disorder

According to Lamb et al. (2017), the precipitating factors for post-traumatic stress disorder are the autonomic nervous system (ANS). The ANS mobilizes emotional disruption for an older person and is perceived as a chronic threat. Lamb et al. (2017) pointed out that an older adult's defensive disposition changed favorably when socially engaged.

Gardner et al. (2017) asserted that older adults' episodic memory, attention, working memory, and verbal semantic fluency were understudied and misunderstood. An effort to evaluate older adults with mTBI included two studies. First, Gardener et al. (2018) investigated the possibilities of an older adult's memory with or without TBI, but his investigation led to a dead end. Kovar (2019) analyzed the influence of virtual reality using the Samsung Gear VR device after an older adult experienced a traumatic event, and there were provable decreases in depression and stress. These researchers presented a method to speed up therapy and reduce pharmaceutical use.

Developments in Older Adult Care

The purpose of reviewing mTBI eldercare trends was to collect data on how HSPs view development as improvements or hindrances. Developments in the older adult population aging fast have affected care practices worldwide. According to the United States Census Bureau (2020), the 65-and-older population grew by over a third (34.2% or 13,787,044) during the past decade. The growth rate was 3.2% (1,688,924) from 2018 to 2019. Several global events have impacted social care systems, such as extreme weather events (heatwaves, cold waves), flooding, fires, the pandemic, workforce layoffs, people living longer, and more (Curtis et al., 2017). According to Baudin et al. (2020), Swedish municipalities explained how these changes worldwide increased the need for healthcare services, and workable solutions even included welfare. Healthcare systems are evolving for preparedness, and emergency response strategies call for action extending beyond the emergency response services to include health and social care providers (Curtis et al., 2017). According to Curtis et al., physical, institutional, and social infrastructures were part of the complex care system. This review highlighted general conclusions relevant to older adult with mTBIs, likely to be of international relevance. However, the focus was on how HSPs perceived patient-inclusive and quality care for older adult patients with mTBI. Therefore, researchers' developments highlighted some issues in the United States that impacted older adult with mTBIs, such as obstacles and support.

Defining HSPs' Regulatory Practices

According to Kim (2017), "HSPs responded to the needs facing the elderly" (p. xv), "as they have the appropriate skills to understand them and their lifeworld in a

societal context” (p. 1). To understand regulatory practices, the World Health Organization (2018) defined care expectations as practicing with continuity and having an ongoing relationship, supporting the World Health Assembly Framework, including policy, practice, advocacy, strategy, knowledge management, and capacity building. The framework guided HSP practitioners to deliver care that best met health needs, irrespective of country setting or development status. Therefore, researchers’ trends confirmed whether HSPs adhered to the World Health Organization guidelines to integrate people-centered health services for older adults with mTBI. The following discussion is on HSPs’ relationships with older adults in rehabilitation and the associated problems.

HSP’s Role in Rehabilitating older adult with mTBIs

The essential developmental findings that emerged in prior studies on HSPs concluded that (a) Person-centered care required that an HSP has a holistic view of the patient by knowing them well enough as an individual to customize their care together with them; (b) HSPs who provided more active involvement in connecting with the older adult and next of kin automatically reduced stress and led to a deeper understanding of the older adult with mTBI’s situation; and (c) HSPs who worked with Person-centered care also led to more coaching and support from supervisors or others (Even et al., 2019). According to Even et al. (2019), there were implications in the study for both theories, research, and the practice of Person-centered care approaches. Halarewicz (2020) pointed out how older adults in healthcare with mTBI still required their hierarchal needs. Therefore, a discussion on quality Person-centered care follows to clarify further.

HSP's Practice

According to Gravina et al. (2018) and Tiilikainen et al. (2019), the literature gap confirmed that an HSP's learning scope and attitude needed improvement. Gravina et al. (2018) stated that enhancing care systems for older adults meant providing more assessments. In other words, having available strategies for maximizing Personal Management Systems led to safety measures and cost-effectiveness to help older adults provide care to older adult with mTBIs when Person-centered care practices were in place. Articles reviewed the structure and emphasized management analysis and a need for re-designed systems, monitoring, or observing self or others (Gravina et al., 2018). The training conducted by Gravina et al. resembled Behavior Skills Training but had no reflection on how they achieved the following: (a) well-being; (b) satisfaction with life; (c) happiness; (d) meaning in life; (e) relevance to birth order; (f) realization of life potential, including (g) the fulfillment of needs; and (h) objective factors of functioning that fulfilled QOL fitting into societal norms. Instead, the literature inferred that improving practices derived from getting support from training supervisors and management when reviewing established treatment packages, measuring interventions, and providing clarity, such as using flow charts or supplementing online materials (Gravina et al., 2018). Other recommendations included researching more pre-intervention assessment tools and promoting best practices that sustained positive social change (Gravina et al., 2018). The researchers in the literature failed to identify how these practices were viable when the supervisors and management were absent, so

psychosocial methods often used technology to act as supervisors and control because of the inefficiency in knowledge practiced.

Hunt et al. (2019) investigated how TBI older adults perceived QOL after attending healthcare. They found that older adults returned for hospital care after an initial emergency visit worsened in rehabilitation. This information reaffirmed that a complete diagnosis was necessary, which Caplain et al. (2017) failed to consider. Hunt et al. (2019) stated that various instrumentation tests and research findings showed that no single instrument determined TBI survivors' opinions, like Captain et al.'s (2017) pilot program that employed effective strategies. In other words, HSPs needed to learn how to customize mTBI Person-centered care for older adults to deliver quality care (Caplain et al., 2017). Gardner et al. (2018) added that Personal Management Systems should be more age-inclusive, embracing predictive models for a growing older TBI population and researching evidence-based management practices that effectively guide short or long-term outcomes. Gardner et al. (2018) explained that age and TBI severity were not the only markers in assisting the complex and urgent management issues in older adult care. However, HSPs had to learn to view and identify barriers that supported older adults when there were ineffective responses to treatment, insignificant measurements, and inadequate research representation.

Burnout and Fatigue

Tomaselli et al. (2020) highlighted that person-centered care aimed to deliver high-quality and safe healthcare, applying a relational-ethics perspective for all HSPs. The framework required mutual respect, engagement, embodied knowledge,

environment, and uncertainty—the most crucial fact related to older adult integration within a social setting and community. Thus, the healthcare provider partnership and co-creation of this healthcare plan contributed to QOL, safety, and cost-contained healthcare delivery.

According to Newell (2017), older adult self-care should ideally involve connecting with an HSP who supports and regulates care for the older adult with mTBI. Based on the World Health Organization principles, HSPs delivered empathy and had a deep concern for the person (Newell, 2017; Penn & Baartmans, 2018). According to Dams-O'Connor et al. (2018), older adults with mTBI conveyed that HSPs are insincere, provided ineffective communications, and have inadequate knowledge to give Person-centered care. Gonzalez-Rodriguez et al. (2020) pointed out that HSPs experienced indirect effects of trauma, which created emotional challenges when working with mTBI survivors. HSPs experienced compassion fatigue (Cieslak et al., 2016; Gonzalez-Rodriguez et al., 2020; Newell, 2017). HSPs demonstrated empathy, resilience, and self-care toward older adults; they often failed to apply self-care practices for themselves and overdid it because the stress was overwhelming (Newell, 2017).

Health Guidelines Issues

According to Kourkouta et al. (2015), older adults were less active daily, frequently resulting in different psycho-social problems, including dementia, agitation, anxiety, loneliness, social exclusion, and negativity. These problems led older adults to psychological depression and had ill effects on their health (Kourkouta et al., 2015).

Therefore, obtaining HSPs' values on the psycho-social issues of older adult with mTBIs means HSPs provided more understanding of QOL care beliefs and practices.

Leadership Mandates

According to Boscart et al. (2020), HSPs experienced a critical barrier when following leadership mandates, making them inadequately prepared for their role. Executives were inflexible to serve the changing populations and specific ethnic groups' requirements because their preferences differed (Adekpedjou et al., 2018). HSPs following Person-centered care practices and policies at their institutions followed different management guidelines while working in unfamiliar settings. Subsequently, older adults interacting with stressed HSPs or experiencing stress experienced reduced self-esteem (Adekpedjou et al., 2018).

Abuse

HSPs worked with older adult with mTBIs for their brain injuries in nursing home settings, hospitals, and older adult homes. Hence, the HSPs were an example of an HSP that typically operated with the same structure, no matter who was running it. The facility or agencies that hired HSPs had uniform ways of ensuring that health clients received quality Person-centered care. According to Redjem and Marcon (2016), for years, these establishments debated whether leading research informs policies worldwide for home health agencies in the World Health Organization context. Historically, Home Health Care dated its first appearance in the United States and France in the 1920s and was later adopted by other countries worldwide (Redjem & Marcon, 2016). Although the objective was to support older adults with care and instill QOL, abuse has been growing in these

environments because abusive situations are less reported (Halarewicz, 2020). HSPs did not always provide the best solution to support older adults because of growing abuse concerns, even when harm reduction was a goal honoring the Person-centered care approach (Nerenberg, 2019; Teaster & Hall, 2018). The discussion continued about structural issues for older adult with mTBIs and increased attention to funding and advances in legislation (Mollayeva et al., 2018). They included technology (clinical decision making) and applied strategies—art therapy and the law.

Philosophy of Applied Health Strategies

HSPs used common strategies across specialties, including experimental treatment for older adult with mTBIs and personal coping strategies such as obtaining collegial counseling and interdisciplinary consensus-seeking. According to Rattray et al. (2019), most HSPs frame decisions purely on an older adult's medical needs instead of fostering open-mindedness, so decision-making has not always been rational.

Tun et al. (2021) described the extra pressure on healthcare systems globally to use technology for older adults regarding operational costs and resources. Applying the Internet of Things (IoT) and wearable technology has been promising (Tun et al., 2021). These technologies potentially have improved an older adult's QOL while reducing strain on healthcare systems by collecting data and introducing other technologies such as robotics that have minimized the operational cost of healthcare systems (Tun et al., 2021). Because technology affected HSPs' usage to serve the older adult, Durodolu (2016) provided information about the technology acceptance model, which has been gaining popularity for understanding the relationship between humans and technology.

HSPs have been learning to accept and use innovative technology, but there is still resistance because of the failure to adopt modern technology and its application to real-life situations (Durodolu, 2016). Suter et al. (2017) described quality practice changes for older adults' health status and how technology such as Alert software has helped monitor health outcomes that prevented older adults' admission to the emergency room or hospitalization. The technique included wireless devices that monitor blood pressure, oxygen saturation, weight, and hydration (Suter et al., 2017). The Alert technology has automatically informed the staff to respond to abnormal changes (Suter et al., 2017). Modern technology requires staff training to ensure the development of care pathways so that medication administration complements checking the overall health status in assisted living facilities (Suter et al., 2017). The technology has helped with efficiency but should also include the payment model as an incentive for integrative care measures at an organizational level and has been proactive for preventive health services (Holterman et al., 2020). HSPs have been increasingly using mobile devices to support preventative care.

Clinical decision-making and evidence-based practice that implemented technology were helping to support older adults with mTBI. According to Curran et al. (2019), the technology was under-utilized in hospitals and other workplace settings. The rationale for not employing the technology stemmed from discouraging HSPs from learning how to use the technology during work hours and the application costs, which have prevented technological professional development (Curran et al., 2019). Current technology that might support older adults with TBI is assisting older adult with mTBIs

with eye-tracking and unsteady balance. Zanier et al. (2018) evaluated new virtual reality technology and asserted that neuro-restorative strategies for therapeutic interventions through eye-tracking prove technology's effectiveness for mTBI. Zanier et al. (2018) found that neurological changes, such as persistent neuroinflammation, counteracted damage progression for older adults with mTBI. Zanier et al. (2018) stated that the technology was not market-ready for smartphones and tablets to provide QOL care for older adults with TBI. However, some HSPs have already been tapping into this technology and becoming aware that it is becoming available soon.

The technology is advantageous for Person-centered care and QOL for older adults with mTBI. Zhou et al. (2019) connected with telehealth systems or the Technology Acceptance Model and argued that it could reinforce QOL care for older adults with mTBI, especially for telehealth system developers, governments, investors, and hospitals that have promoted the use of this technology for older adult patients. Technology Acceptance Model is still in its infancy to develop an appropriate theoretical model and test its advantages (Kamal et al., 2018). According to Gravina et al. (2018), the common concern with the technology still have associated with the lack of precision because the software has not yet implemented enough safety practices.

Art Therapy and Other Therapeutic Approaches

Open-minded strategies have supported older adults with mTBI, including art therapy interventions to solve TBI-related neurorehabilitation and increased brain plasticity (Kline, 2016). As in mask-making and other art-related activities, it reduced psychosocial stressors, which have been critical to an older adult's functioning. It has

given insight into how HSPs delivery supported QOL. Art programs offer a treatment plan for persons with TBI, including mask-making and artmaking (montage paintings, printed images, clay, music therapy, animal-assisted therapy, medical and nursing care, physical therapy, family therapy, and individual counseling; Berberian et al., 2019).

These creative arts therapies functioned as a change agent for military personnel. The process applied to older adult with mTBIs matches military staff and older adults.

According to Jones et al. (2018b), they both experienced a challenge in reaching former ways of thinking when restoring positive emotions and increased a sense of hopefulness through artmaking. Walker et al. (2017) pointed out that artmaking aided older adults with visual reflections of TBI and other underlying psychological health conditions.

Therefore, when older adults engage in artmaking and describe their physical and psychological symptoms, it is related to their experiences (Kim et al., 2021). Berberian et al. (2019) added that working with injured adults and integrative care honored visual communication for traumatic experiences that cannot otherwise have been communicated through verbal means alone. Thus, HSPs practicing creative art therapies have innovated how older adults express themselves and improve QOL by supporting the quality of care in innovative ways. According to MacQueen (2016), a brain injury impacts a person's sense of self and alters their sense of being in the world. Therefore, I collected data from HSPs to identify how they provided person-centered care. Mask-making is a method in art therapy that may help explain an older adult's drive to perceive the meaning in life and happiness as part of fulfilling societal norms (Maslow, 1962).

According to Rickles (2018) and Stocchetti et al. (2017), other treatments for mTBI in older adults were also influential. Cognitively engaging therapeutic techniques strengthened and stimulated neural capacities (Rickles, 2018). Other possibilities have included music therapy, physical therapy, cognitive therapy, or a combination of interventions for positive neurobehavioral changes (Kline et al., 2016), depending on the customized needs of the older adult with mTBI. “These encouraging findings serve as an impetus for continued combination studies after TBI and ultimately for the development of successful clinically relevant therapies” (Kline et al., 2016, p. 6). Therefore, the following discussion evaluates whether older adult health guidelines for older adult with mTBIs’ QOL were working.

Evaluating Applied Strategies to Health Guidelines

Management decision-making about health guidelines worked on the self-reports of patient complaints, so QOL values associated with person-centered care helped determine cognition for mTBI patients. In other words, management began with early detection to identify who was at risk for developing post-concussion syndrome. The relevant factors for prediction included: demographics (e.g., gender, marital status, school enrollment) and identified pre-existing conditions (e.g., cerebral disease, neurological problem, prior head injuries, psychiatric problems, major life stressors).

The following data considered injury from a motor vehicle collision.

1. The Glasgow Coma Scale assessed the loss of consciousness, post-traumatic amnesia no greater than 20 minutes, post-injury nausea or memory problems, and other identifiable injuries.

2. Adults experiencing persistent symptoms sought compensation, but often there was no identifiable information from HSPs to support an older adult with TBI.

Thus, whether an older adult with mTBI has experienced a motor vehicle accident, a fall, or a stroke, it is vital to know whether management guidelines are in place and have adhered to the World Health Organization values. Oyesanya et al. (2018) investigated HSPs' beliefs and preferences for caring for mild-to-severe TBI patients. According to Oyesanya et al. (2018), HSPs delivering services to older adult with mTBIs did not like treating them. Oyesanya et al. (2018) revealed that HSPs had inaccurate beliefs about an older adult's TBI recovery. Because TBI survivors relied on HSPs, Oyesanya et al. (2018) also determined the necessity of developing educational and training interventions specific to HSPs, ensuring that they had the facts about TBI to clarify the HSP's role concerning TBI older adults. Therefore, more information has been available by collecting data from HSP practitioners.

McCulloch et al. (2020) contradicted Galgano et al. (2017) and asserted that there were no management guidelines for older adults. According to Galgano et al. (2017), customized options for mTBI's circumstances did not apply even though experimental strategies helped the survivor as no methods were available. McCulloch et al. (2020) explained that some guidelines were in place. For example, McCulloch et al. (2020) stated that clinical outcomes after mTBI were positive in older adults even with prolonged symptoms (physical, cognitive, and psychological). Older adults gradually resumed routine activities that avoided the risk of additional injuries because of some guidelines. According to Stocchetti et al. (2017), it has been better to understand whether

HSPs' practices are effective even with burnout, fatigue, or other issues to prevent further harm to older adult with mTBIs. According to Kourkouta et al. (2015), older adults were less active daily, resulting in different psychosocial problems, such as dementia, agitation, anxiety, loneliness, social exclusion, and negativity. These problems led them to psychological depression with subsequent effects on their health (Kourkouta et al., 2015). Therefore, obtaining HSPs' values on the psychosocial issues of an mTBI survivor helped them understand their QOL care beliefs.

Stocchetti et al. (2017) argued that management practices limited the intensive unit by employing a medical-surgical approach to medical monitoring, imaging, and brain recovery mechanisms. Stocchetti et al. (2017) informed that targeted recovery through therapies and customized management strategies improved patient outcomes if the older adult had severe TBI. There was no allusion to mTBI. I was considering that the principal method supported severe TBI patients. Monitoring and customizing were the same interventions applied to mTBI patients, so collecting data from HSPs clarified further. Caplain et al. (2017) restated that in a pilot project focusing on patients with mTBI, customization and employing a multidimensional approach was an excellent approach to identifying predictive factors. The program demonstrated the necessity for a comprehensive neuropsychological evaluation and identified early prognostic factors following mTBI. Caplain et al. (2017) investigated mTBI patients eight to 21 days (about three weeks) post-injury. They followed up for six months after a complete neurological and psychological examination, including brain Magnetic Resonance Imaging. Röckelein et al. (2017) showed that Magnetic Resonance Imaging was applied to an initial

evaluation of trauma severity, and monitoring the process was the imaging used (computed tomography, Magnetic Resonance Imaging).

HSPs' Advocacy

Traumatic Brain Injury care has been an emotional and economic burden in the United States, with an estimated cost of programs and services of \$76.5 billion (about \$240 per person in the US) funded by federal and state sources (National Conference of State Legislatures, n.d.). At least twenty-two states have utilized a home and community-based services (HCBS) waiver extending benefits such as diagnoses and rehabilitation services (National Conference of State Legislatures, n.d.). The Legislation database for fifty states emphasized enforcing policies for students experiencing a concussion. Arizona has been an example that laws were not instrumental in supporting older adults. The most current laws for Ariz. Rev. Stat. Ann §15.341. A.24 (2011 Senate Bill 1521) pertained to school-age children for sports-related injuries. The Traumatic Brain Injury Act of 1996 (P.L. 104-166) became law and funded youth, but there were no allocations for older adults.

The Brain Injury Association of America (n.d.) informed the signing of the Traumatic Brain Injury Act of 1996 (P.L. 104-166) by Bill Clinton on July 29, 1996. The Act addressed TBI prevention, research, service delivery, and funding administered by the Health Resources and Services Administration (HRSA) (Brain Injury Association of America, n.d.). The primary federal agencies included the Center for Disease Control and Prevention (which determines public concerns), the National Institutes of Health,

Administration for community living (Protection and advocacy; Brain Injury Association of America, n.d.).

According to the Brain Injury Association of America (n.d.), the law defined traumatic injury as an acquired injury to the brain but delimited the consideration of brain dysfunction caused by a congenital or degenerative disorder or birth trauma. Therefore, when supporting an older adult with mTBI who contracted a degenerative condition, there were no provisions to help. However, legislation has considered the possibilities as reports circulate to Congress on mTBI (Brain Injury Association of America, n.d.).

According to the Halifax Repair Center, a global initiative, brain injury research should focus on three areas. First, prevention and improvements for TBI survivor outcomes. Second, describe the older adult with mTBI's personal experience. Last, the emphasis was on older adults over 65 years experiencing mTBI concerns (Halifax Repair Center, 2017). Thus, I collected HSP responses from HSPs, which informed how advocacies were aimed to provide patient-inclusive and quality care to older adult with mTBIs but failed to ensure emotional and economic burdens were included.

Summary and Conclusion

As a result of reviewing my findings, this study has offered insights into the benefits of obtaining HSP's perspectives when using Person-centered care to increase QOL for older adult with mTBIs. This research has emphasized the role that HSPs play in regulating care for older adults over 65 years with mTBI. HSPs' positions and strategies ensured that older adults with mTBI received Person-centered care with meaningful outcomes for a higher QOL. Regardless of the older adults' gender, mTBI caused adverse

changes in their social roles with their families and the community. It threatened older adults' self-identities when they felt they were not autonomous in their decision-making. Alert software helped monitor health outcomes that prevented older adults' admission to the emergency room or hospitalization. The technique included wireless devices that monitored blood pressure, oxygen saturation, weight, and hydration (Suter et al., 2017). The Alert technology automatically informed the staff to respond to abnormal changes (Suter et al., 2017). Modern technology has required staff training to ensure the development of care pathways so that medication administration complements checking the overall health status in assisted living facilities (Suter et al., 2017). The technology has helped with efficiency, included the payment model as an incentive for integrative care measures at an organizational level, and has been proactive for preventive health services (Holterman et al., 2020). HSPs have been increasingly using mobile devices to support preventative care, such as cellular phones, but another technology was not disclosed in what the HSPs shared.

Clinical decision-making and evidence-based practice that implemented technology and supported older adults with mTBI were not disclosed by the HSPs. According to Curran et al. (2019), the technology has been under-utilized in hospitals and other workplace settings. The rationale for not employing the technology stemmed from discouraging HSPs from learning how to use the technology during work hours and has included the application costs that have prevented technological professional development (Curran et al., 2019). Current technology that supports older adults with TBI has assisted older adult with mTBIs with eye-tracking and unsteady balance. Zanier

et al. (2018) evaluated new virtual reality technology and asserted that neuro-restorative strategies for therapeutic interventions through eye-tracking prove technology's effectiveness for mTBI. Zanier et al. (2018) found that neurological changes, such as persistent neuroinflammation, counteracted damage progression for older adults with mTBI. Zanier et al. (2018) stated that the technology has not been market-ready for smartphones and tablets to provide QOL care for older adults with TBI. However, some HSPs have been tapping into technology and are already aware that it will be available soon. However, the HSPs offered little information about technology in their daily practices.

The technology may be advantageous for Person-centered care and QOL for older adults with mTBI. Zhou et al. (2019) connected with telehealth systems, or the Technology Acceptance Model, argued that it reinforced QOL care for older adults with mTBI, especially for telehealth system developers, governments, investors, and hospitals that promoted the use of this technology for older adult patients. Technology Acceptance Model is still in its infancy and has not developed an appropriate theoretical model and tested its advantages (Kamal et al., 2018). According to Gravina et al. (2018), the common concern with the technology has been associated with the lack of precision because the software fails to provide adequate safety. The HSP provided no feedback on this topic, which may be reflective of the lack of offering continuing education.

Chapter 3: Research Method

According to Tulskey and Kisala (2019), older adults have received inadequate care from HSPs as minimal management guidelines reduced QOL for the older adult with mTBI. As such, the research question for my study was: How did HSPs perceive patient-inclusive and quality care for older adult patients with mTBI?

This chapter begins with a description of the research design and approach. The discussion justifies how the study's design addressed the problem statement. I then review the sampling, setting, and criteria for inclusion and exclusion of participants. The specific constructs and the questionnaire were integrated to understand the constructs presented when conducting research. Data collection procedures and the protection of participants' rights conclude the chapter.

Research Design and Rationale

The purpose of this qualitative research was to provide an in-depth exploration (see Carminati, 2018). Qualitative research offered more consistency and unanimous procedures adopted in qualitative inquiries (Carminati, 2018) by generating a new understanding of what HSPs are used in a social context. Qualitative research is a method to view the HSPs' opinions, concepts, characteristics, and descriptions (Horrigan-Kelly, 2016). Considering alternative methodology choices led to underlining the disadvantages of quantitative research when understanding how HSPs' perspectives represented this study's social and cultural aspects. Devault (2020) pointed out that quantitative analysis fails to consider HSPs' narrative stories as it is limit to the pursuit of concrete, statistical relationships and may overlook broader themes and relationships.

Considering variations in a qualitative approach, I concluded it was not practical to do a case study as the results were not generalized to most HSPs QOL practices applied to older adults with mTBI (Carminati, 2018). Phenomenological research offers a unique perspective on how people perceive an event or phenomenon (Horrigan-Kelly et al., 2016). It was not a preferred method because I explored what HSPs practiced when providing QOL care for older adults with mTBI, and it was not an unknown phenomenon. I also considered grounded theory. Timonen et al. (2018) inferred that this approach was too complex for novice researchers with less familiarity with the method.

Therefore, I used a generic qualitative design for research, and explored HSPs' attitudes, opinions, and beliefs, and drew on HSP participants' ideas about quality care facts (Bellamy et al., 2016). A qualitative descriptive design was particularly relevant where information was required directly from HSPs experiencing the caregiving for older adults with mTBI (Bradshaw et al., 2017). In keeping with Bradshaw's (2017) outline, this qualitative descriptive research aimed to support HSPs helping older adult with mTBIs. Stances included perspectives on epistemological, philosophical, and ontological care (Bradshaw et al., 2017).

Qualitative research provides in-depth explanations and meanings instead of generalizing findings (Carminati, 2018). According to McLeod (2001), a generic qualitative inquiry is a more manageable approach than other qualitative research methods because no experience is necessary for a novice researcher while still relying on the tools of traditional qualitative methodologies (Kahike, 2018).

According to Kennedy (2016), the variation, specification, abstraction, internal verification, external verification, demonstration and conclusion (VSAIEEDC) model employs standardized guidelines in qualitative social research and uses cognition-based analysis. The generic qualitative approach offer greater flexibility with fewer expertise requirements (Caelli et al., 2003). Cooper and Endacott (2007) stated that a generic qualitative course explores ways to understand a phenomenon and applies to how HSPs perceive patient-inclusive and quality care for older adult patients with mTBI and the people's worldviews. Us of the generic approach entailed flexibility to customize my research design for my questions and context and set the tone for a more creative process (see Kahle et al., 2018).

Role of the Researcher

Research has made ground-breaking discoveries improving the life expectancy of older adults (Graham, 2020). As a therapist and administrator for adults, I have helped support older adults in therapy and school settings, so I felt confident that supporting older adults with mTBI is necessary. Thus, obtaining the data from HSPs became a learning experience for me as a researcher, as suggested by Myer and Willis (2018). Novice researchers have many questions and uncertainties regarding conducting their research (Myer & Willis, 2018). Therefore, I followed the outlined procedure for analysis carefully. Pertinent information surfaced through gathering and interpreting data when I used reflexivity, such as answering the many questions generated. At the same time, I conducted qualitative interviews and reflexive journaling promoted growth in me as a

novice researcher (Myer & Willis, 2018). I also used a reflective journal throughout the study.

The term “reflexivity” identifies several qualitative researchers’ strategies that enhance research rigor. Therefore, applying reflexivity allowed me to develop a certain self-awareness and actively become involved in the research process (Dodgson, 2019) because reflexivity is an iterative and empowering process that allowed me to discover and understand various social phenomena. It helped me recognize, examine, and understand social backgrounds and assumptions that affect the research process (see Haxeltine et al., 2017). Therefore, I used reflexivity and sensitivity in the research process that shaped the data collection. I acknowledge that changes were part of the research findings as I became aware of personal knowledge and methodological concerns involved with the research project (see Haxelton et al., 2017). I avoided assumption-making and eliminated bias. My disciplinary affiliation with gerontology, mental health, and family intervention generated interest in how HSPs perceive patient-inclusive and quality care for older adult patients with mTBI.

Methodology

Participant Selection

To recruit participants, I posted flyers near settings where mTBI patients received support from HSPs in trauma centers, emergency rooms, hospitals, medical centers, and older adult nursing homes. Once the participant replied to the flyer, and I received a call back by telephone or email, I responded to the participants. I told them about the purpose of the research, the timeline, voluntary participation, and consent, and scheduled a time to

interview. I informed them that the interview would not record any information regarding their identity or disclose any information about them except for research and the content of the interview records with their consent. Then I prepared for the interview and clarified where the study was best suited to conduct the interview. Regardless of the communication method, I ensured the participant was at ease in the setting agreed and that the recording device worked. I interviewed the participant by listening attentively to the participant's responses and received an in-depth answer whenever possible. Subsequently, I transcribed and analyzed the interview using thematic qualitative content analysis.

Participant Selection Criteria

I applied a purposeful process that established a criterion for eligibility for workers, including (a) practicing diverse HSPs, (b) a minimum of 2 years of experience working with older adults, preferably with TBI survivors, (c) familiarity with TBI issues, including TBI symptoms, accessibility to services, and others. Because of COVID-19, I conducted screenings of HSPs using computer software supporting webcam recording with microphone capabilities, such as the Zoom platform, or had phone conversations. However, I was open to face-to-face meetings when I received an acknowledgment that an HSPs informed me they had a clearance test for COVID-19, respected social distancing, and wore a mask as a precautionary safety measure (Schiermeler et al. (2020).

For the criterion for participant selection, I considered HSPs that specifically supported older adults with mTBI. They were able to identify basic caregiving practices because they had exposure to health care experiences (Coffey et al., 2017). The preferred

HSPs had some basic medical training. There were specifications to establish that participants met the criterion to discuss caregiving for older adults with mTBI. HSPs had at least six months of experience working with older adults with brain injury and exposure to a trauma center, hospital, medical center, or older adult nursing homes. The number of participants was between eight to 10 HSPs, and ten is when I reached saturation in data collection. The participants identified that they were responding to flyers posted and provided email and telephone contact. The participants were recruited through an introductory discussion, and their consent made them eligible to be part of the research study.

Data Collection

Participant data collection typically used methods that elicited people's responses, giving them the chance to share their ideas. I used semi structured interviews and a pre-developed questionnaire to guide data collection, and it helped to understand the real-world delivery values of HSPs. Whenever possible, I sought information from various HSPs representatives, including those who supported a hospital, a medical center, a trauma facility, and a home setting for an older adult with mTBI.

I asked the participants about their intentionality and insights that guided their behavior in supporting an older adult's living objectives of remaining healthy over time by sustaining the social value that had a sense of relevance (Irving et al., 2017). I used technology to assist in individual one-on-one face-to-face or Zoom interviews in pre-screening. Otherwise, I used the phone and presented open-ended questions formulated in a semi structured interview protocol—the open-ended questions were designed to invite

opinions and personal views on the topic. In the prescreening process, some participants were observed. Also, I listened to what they said by telephone during the interviews to grasp their attitudes, behavior, emotions, and feelings as they shared their experiences during the briefing before the simulations. Further discussions were conducted for a follow-up session by telephone on an as-needed basis on items that required further clarification after the initial interview.

I interviewed the participants until I reached data saturation by collecting and analyzing the data. I recorded the interviews, captured the data, and transcribed the oral recordings for analysis (Henderson, 2018). I explored the complexities of care, including what worked, what was necessary, and what were viable solutions (Henderson, 2018), by identifying available HSPs. Because researcher bias has influenced Western ideologies and societal discourses in health settings (Wadams & Park, 2018), I used bracketing, interpreted subjectively, and reflected on diverse peer reviews from committee members. I used inductive thinking, evaluated investigator responsiveness, and applied critical reflexivity (Wadams & Park, 2018). I was explicit in questioning by reflecting on what the participant said and asked another question when the response was too vague to get clarity. Thus, I monitored and did not interpret too quickly to avoid assumption-making. Then, the qualitative methodology was applied to querying HSP participants (executive directors, gerontologists, and HSPs) and other HSPs that were available to obtain an explicit description of their opinions on how to improve QOL care practices for older adults with mTBI. I controlled the interference of bias by using reflexive journaling and field notes and avoided perceiving patterns that were not meaningfully related to

managing unconscious biases (Buetow, 2019). When inquiring about HSPs' perspectives, I developed the necessary competency by collecting and analyzing the data and using integrity by presenting the findings using a semi structured instrument.

As a researcher, I observed and listened to HSPs' stories, perceptions, and narratives to gain insight into the research problem and understand their roles in working with and caring for older adults within the mTBI population. The research question asked HSPs about their experience providing quality care for older adults over 65 diagnosed with mTBI. The goal was to learn about their practice beliefs in working with this population. I considered HSPs' responses to get their recommendations and how they improved direct one-on-one care practices. I asked the HSPs about their overall outlook and guidance for themselves and the older adults they served.

Because HSPs had an empathetic engagement with traumatized victims, I was aware of any emotional responses that displayed severe emotional reactions such as terror, grief, and rage (Kanno & Giddings, 2017). HSPs reacted to traumatic stress, including Traumatic Countertransference, Vicarious Trauma, and Secondary Traumatic Stress/Compassion Fatigue (CF; Kanno & Giddings, 2017). I provided access to individual free counseling as a consent component.

To ensure that respondents understood all the questions, I provided my contact information (telephone and email) to clarify responses to the questionnaire. I provided insight into asking HSPs' understanding of the question and the concept or construct discussed (Griffith, 2016). By understating the questions, I assessed whether the participants met the criteria of the current study or not.

Data Analysis

Constructing and adhering to a data analysis plan was critical for any research study. According to Guest et al. (2012), it is about making decisions, so I selected the participants in this study, when and how to complete the data collection, and finally, an objective analysis. The precise steps included moving from raw data gathered during data collection to themes and following the six-step thematic analysis protocol proposed by Braun et al. (2021). This protocol began with reading and rereading the transcripts to determine potential points of analytical interest, and then I used vital descriptive phrases to code the dataset. The analysis proceeded by grouping like codes into more significant themes by identifying patterns in the interview transcripts before I reviewed and revised themes. Subsequently, I developed a thematic map that identified relationships and organized the analysis. The final steps involved engaging in a detailed analysis of the data in each theme and refining categories and their organization. I completed a final examination that established its significance and contextualized it in terms of existing theory and research.

Because I used semi structured interviewing as an exploratory data collection tool, I journaled my observations and analyzed data through summative and thematic coding. In my study, I transcribed and applied the codes and the associated HSPs' factors that emerged from research to support comparative analysis of the variation in HSPs' perceptions.

I used data analysis methods for qualitative research by managing the challenges, coding, interrater reliability, and thematic analysis (Belotto, 2018). I addressed the

challenges of the philosophical stance by tackling the criticisms of generic qualitative research through reflexive exploration of qualitative coding techniques (Chowdhury, 2015). I also discussed trustworthiness and how objectivity and reliability addressed the naturalistic paradigm.

I used conventional content analysis and coded categories directly from the text data applying three steps to facilitate the process (Stuckey, 2015). I read the data and created a storyline about what HSPs disclosed (Stuckey, 2015). I categorized the data into codes using memos for clarification and interpretation (Stuckey, 2015). I recalled the research question and acquired answers from HSPs on how they perceived patient-inclusive and quality care for older adult patients with mTBI. In addition, I focused on relevant codes and applied definitions of the codes and their meanings (Stuckey, 2015). I used a systematic process to organize and highlight meanings and classified data using thematic coding (Vaughn & Turner, 2016). I used simple words at the grade six elementary school level to make the themes accessible and searchable for multiple colleagues working with a smaller set tag (Seger, n.d.). Taking the complexity out of the analysis avoided bottleneck challenges (Seger, n.d.). Finally, I used a summative content analysis, which involved counting, and I compared keywords or content, followed by interpreting the underlying context of each approach (Hsieh & Shannon, 2005). The discussion applied strategies to address the data's trustworthiness regarding HSPs' perceptions of providing Person-centered care to increase older adults' QOL for TBI. The methods included were the summative technique and the conventional content analysis. "The VSAIEEDC model is a cognition-based analysis method with seven steps:

variation, specification, abstraction, internal verification, external verification, demonstration, and conclusion. This article sought to contribute to the critical discussion of the foundation of generic qualitative inquiry and offers an analysis method in alignment with the fundamentals of a generic qualitative approach” (Kennedy, 2016, p.1) Therefore, I used the VSAIEEDC model to ensure methodological validity of trustworthiness in the logic of inquiry and procedures (Cooper & Endacott, 2007).

Summative Technique

The summative technique occurred when I listened to an audiotape to summarize the details of the interview. Once the discussion stopped, the content was recorded for post-interview review. Notetaking was crucial to recall what the informant said about specific topics and helped interpret meaning. For instance, the participant initially shared their values or beliefs, which had no purpose. The more the participant talked about how their thoughts, it offered sensitivity and readily helped identify with other views. The summative approach motivated me to validate what I had previously heard. Summarizing information also infused my interpretive interview style, which created a more subjective and logical process. Lastly, I shared the data from the interview, allowing me to collaborate with other HSPs, as in this exercise. However, I did not use a transcribing service as self-transcribing enhanced the experience of listening to the informant's details, including emotions and how tonality changed specific patterns.

Initially, I hand-coded, but I also utilized software so that no data was missing. The two software packages I reviewed were MAAXQD and NVivo. The software packages generated reports, embedded data, viewed textual data, offered an analysis of

images, videos, web sources, data date stamping, and more (Wright-Bevans, 2017). I used NVivo as the coding software. I understood how this resource operated and the steps needed to complete the coding process. The software helped me with my research question and explored the values of Person-centered care and an older adult with mTBI's QOL. Because I evaluated HSPs working with older adult with mTBIs in various settings, NVivo helped integrate the PICO model related to medical considerations. The various features included importing audio and visuals, adding notes, memos, and annotations, ascending and descending order of data, and marking conspicuous text in color, allowing for more possibilities in assessing the research. Further, the NVivo allowed passages to be paraphrased, reflected pauses, punctuation, speech intensity, interjections, word frequencies, and thematic summaries, and offered additional benefits for analyses. I practiced using NVivo and conducted the data analysis.

Issues of Trustworthiness

Trustworthiness has been a foundation of well-functioning relationships and societies (Scigala et al., 2020). Readers trust the future study results because I took steps to ensure participants answered with honesty and attentiveness to the following.

First, I ensured the participants spoke honestly and developed a trustworthy interaction. I fulfilled the participant expectations through informed consent, conducted attention checks through notetaking, journaling, and email, and received in-depth responses through reflexivity.

Second, confirmability was established from HSPs' narratives, and words shaped their values when responding to questions asked during the interview. According to Shenton (2004), responses accurately depict the phenomenon under scrutiny.

Third, I ensured transferability by having the participants explain the context of quality person-centered care for older adults with mTBI and how they improved the QOL. Therefore, I have enabled future investigators to repeat the study, allowing them to take steps to demonstrate that findings emerged from the data to ensure Trustworthiness in undertaking a qualitative inquiry (Shenton, 2004).

Fourth, I complied with the research ethics committee and Institutional Review Board to avoid potential conflicts of interest by ensuring I had no previous relationship with any of the participants and no known common contacts. The following procedures confirm compliance with ethical practices and ethical guidelines.

Research Ethics

Ensuring confidentiality means I took additional measures, including during the process of obtaining informed consent, and confirmed the participants' perspectives remained confidential. Fairness and confidentiality guided the interview practices and I adhered to ethical procedures (Orbb et al., 2000). Before conducting the interviews with HSPs, I ensured that the required approvals from the Institutional Review Board (IRB) were received and recorded. The IRB directed me to comply with Walden University's checklist regulations on appropriate procedures. The ethical practice also adhered to the Code of Ethics standards for HSPs (National Association for Human Services, n.d.). I also asked the participant if they had a disability and required accommodations.

Emphasis was on:

1. The Interview Procedures: I requested to conduct an audio-recorded interview with the participant for about 60 minutes. Transcriptions of interviews were analyzed, and copies of interview recordings and transcripts were made available to participants upon request.
2. Voluntary Nature of the Interview: participants had the right to change their minds and not participate in the interview at any time during the interview.
3. Privacy: interview recordings and full transcripts were shared only with each participant upon request. Transcripts with identifiers were redacted were shared with Walden University faculty along with my analysis. The interview recording and transcript are stored in a secure archive for five years.

Summary

In this chapter, I outlined the methodological plan for the generic qualitative study that explored the perceptions and experiences of HSPs that worked within the field of mTBI. The research question I submitted for this study is: How do HSPs perceive patient-inclusive and quality care for older adult patients with mTBI? Therefore, this study targeted understanding the specific beliefs of HSPs regarding providing holistic, patient-inclusive, and quality care to older adult patients with mTBI. As illustrated in this chapter, semi structured interviews among ten HSPs were conducted to understand better the experience of providing care to older adult patients with mTBI. Data obtained from these interviews were analyzed using the narrative content analysis approach to identify themes related to the primary research question. The subsequent chapter has expanded on

the findings from these interviews to provide insight into how HSPs perceived patient-inclusive and quality care for older adult patients with mTBI. The chapter was organized using the themes and codes from the narrative content analysis in response to the primary research question.

Additionally, trustworthiness was detailed in this chapter, aligning credibility, reliability, and confirmability, and ensuring ethical standards and integrity were used (Moser & Korstjens, 2018; Percy et al., 2015). Transferability and generalizability were examined, showing relevancy in the field and appropriate current social application. In chapter 4, the study results have been detailed, showing emerging themes, nuances, and interpretation of participant interviews.

Chapter 4: Results

The focus of this generic qualitative study was to explore the perceptions of direct caregivers for older adult with mTBIs, reflecting on care practices for ongoing functional and cognitive decline, advanced pathophysiology, and QOL. Many mTBI patients first seen in the emergency room showed incomplete long-term active recovery because of psychological factors, pre-injury mental health problems, education, and age. HSPs position their services to provide person-centered care (PERSON-CENTERED CARE) and quality care for older adults (Cancelliere et al., 2017), so they may help mTBI patients in the recovery process.

Chapter 4 includes an introduction and overview of the purpose of the study, a description of HSPs' practices that convey their perceptions of QOL care, and the results of this explorative qualitative study. The chapter details the setting and participants, the interview process, data collection, and thematic analysis. The data coding process, categorization, and emerging themes are also discussed. Quotes are used to illustrate the themes. I also discuss evidence of trustworthiness and consider steps to ensure credibility, transferability, dependability, and confirmability. This chapter also includes details of the interview timeline, frequency, and any changes to the original research plan.

The Setting of the Study

After receiving IRB approval (# 03-22-22-1023434, expiring March 21, 2023), I began recruiting. The HSP participants were direct caregivers currently practicing in Arizona. Some participants previously worked in Georgia and Texas. I organized 10 telephonic interviews with participants on a convenient day for their schedules. I

conducted the interviews in a quiet room and captured the conversations using telephone recordings to allow participants to answer questions candidly in a private setting (Khalil et al., 2021).

Demographics

HSPs who participated did not all practice in the same state (see Table 1); as such, the focus of caregiving practices was not homogenous. Participants had a minimum of high school education, while some HSPs had continuing education coursework in nursing, childcare, psychology, pharmacology, and religious beliefs. The minimum criteria for inclusion in the study were 6 months of experience supporting an older adult with mTBI; most participants had 10 years or more of experience working in caregiving settings with older adult with mTBIs.

Table 1

Demographics of HSP Participants Working with mTBI Adults

Gender	Region of Practice	Highest Level of Education Achieved	Work Experience	Age of HSPs
F (10)	California (1)	Grade 11 (1)	6 months (1)	18–40 (2)
	S. Carolina (4)	High School (1)	2–5 years (2)	41–55 (5)
	Arizona (5)	Associate (4)	5–10 years (2)	56+ (3)
		College (4)	10+ years (5)	

Table 2*Experience of HSP Participants*

Care Settings Experiences	Continuing Education Topics	Role: Business Owners
Assisted Living (8)	Childcare (1)	Assisted Living (2)
Family Home (8)	Religion (1)	Mental Health (1)
Hospitals Emergency (5)	Pharmacy (1)	Role: Contracted Employee
Memory Care (3)	Psychology (1)	Independent Home Care (4)
Mental Health Govt. (1)	Business (2)	Agency Hired (4)
Incarceration (1)	Nursing (1)	
Nursing Home (NH, 4)	In-House (0)	

Data Collection

I interviewed 10 HSPs currently in Arizona and of these participants, some had prior working experience in California and South Carolina. Following IRB approval, I contacted potential participants by telephone and in-person via Starbucks coffee shop managers, managers of uniform shops, retail outlets, thrift shops, caregiver and medical supply shops, and managers of food outlets who had community bulletin boards. I asked them to post a recruiting flyer on their community bulletin boards. Over 2 weeks, I telephoned 60 locations in Tucson, and 35 sites agreed to post a flyer.

HSPs replied to the flyer posting to be part of the study. After introducing myself, I discussed the study in detail and informed the HSPs that I would send an introductory letter and consent form by email. At the end of the conversation, each HSP identified a time for a follow-up telephone call. I answered questions about the study and the consent form in that conversation. Once the HSPs expressed interest in participating and had no other questions, I confirmed they met the criteria of being a paid caregiver and working with older adult with mTBIs for at least 6 months.

Regarding the education of the HSPs, four of the 10 participants stated receiving associate certificates. They continued pursuing a college education, and two other participants went directly to college without having an associate certificate. Among the ten participants, feedback shared that education among HSPs was lacking. Any of the participants offered no information about continuing education or in-house training.

Interested participants agreed to schedule an interview within one to two days. The 10 participants who met the criteria and agreed orally to the terms also confirmed their consent in writing via email by stating, "I consent voluntarily to participate in the study." The 10 HSPs in this study worked with older adults with mTBI to align with the IRB protocol.

Before interviewing any participants, I practiced asking questions in front of a mirror, noting intonations and expressions to avoid undue emphasis on particular questions. My experience conducting research helped participants maintain a calm demeanor. I developed the interview questions based on the theory chosen and the research question.

Before beginning each interview, I reconfirmed that the participant wanted to participate, reminded them that the conversation would be recorded, and informed them that their identities would be confidential. During each interview, I spoke clearly and rephrased the question when the telephone connection was unclear. Questions were open-ended, allowing HSPs to answer fully and candidly.

After each interview, I captured the audio recording with the IVR Voice Recording software application and transcribed the data into a Microsoft Word document

using the application's "dictate" feature. The IVR software stored all recordings and transcriptions in a password-protected computer folder, aligning data collection with the process detailed in Chapter 3. I conducted each interview by telephone in my home, while participants chose their location. Discussions ranged from 50-75 minutes. Participants demonstrated openness and sincerity. Recruitment and the interviews were completed within 30 days (about four and a half weeks).

After each interview, I thanked each participant and reminded them that a transcript of the interview would be sent to them for their approval. If the transcript did not capture their answers correctly, the HSPs were asked to note the differences. After HSPs received their transcripts, each called and emailed me to confirm "no changes." I sent a thank you email and called each participant to express appreciation for their willingness to participate.

Weller et al. (2018) posited that data saturation is evident when recurrent themes appear in the data collection process. Data saturation occurred with eight participants in this study, but I interviewed two additional participants to obtain further descriptions. Generic qualitative studies can reach saturation with smaller sample sizes when new participants no longer mention new themes (Braun & Clark, 2021). I intended to include up to 10 participants, which provided robust data. As the participants answered the questions, I prompted the HSPs to enhance the depth and range of the responses. I was confident that data saturation was achieved.

Data Analysis

I first entered all transcripts in Microsoft Excel and manually coded and categorized them using thematic analysis. After linearly entering the data in rows and columns, I decided that this process was insufficient for tracking the data. I switched to NVivo, as it offered an organized and structured approach to analysis. Using NVivo, I could follow and review Word transcripts and import them into the project, adding thematic coding (nodes) and noting emerging ideas in thematic coding and memos as I coded (Refer to Appendix K).

All data were easily accessible with backup in NVivo and Word. NVivo features enabled me to view the coding in ascending order and create visuals reflecting the coded perspectives of the HSPs. Researchers use NVivo to identify coded excerpts, making extracting information across selected criteria easier during the writing phase. I could also easily import additional content from other HSPs interviewed after the initial import of files.

I conducted an inductive study and explored themes through open-ended questions (Weller et al., 2018). I reviewed each transcript, highlighting responses for each question, highlighting words and phrases line-by-line, and analyzing data for critical codes. After exhaustive highlighting, I merged the principles into four over-arching categories, color-coding each category for keywords and categories.

When the four categories emerged, I returned to the highlighted words and phrases and developed supporting themes for the four categories. I copied direct quotes from each node (or code). Often, the regulations were similar, so I restricted the concepts

to the four categories, which exemplified the critical concepts across all participants' answers. The themes are: (a) determining inconsistencies that do not provide QOL, (b) communicating challenges for older adult with mTBIs, (c) rehabilitation practices for older adult with mTBIs, and (d) educating those involved in the care of TBI older adults for a QOL model.

After coding and organizing the emerging themes (see Appendix K), I identified subcategories to ensure a significant analytical process for trustworthiness (Korstjens & Moser, 2018). This coding and organizing ensured the data's credibility, transferability, and reliability (Korstjens & Moser, 2018).

Evidence of Trustworthiness

Credibility

According to Brigitte (2017), accuracy and internal validity are achieved when a researcher seeks credibility from the information collected. Credibility is confirmed through the data's transferability, dependability, and confirmability (Wood et al., 2020). Credibility is essential for the trustworthiness of generic qualitative research and for displaying findings transparently and methodological (Wood et al., 2020). This research was consistent in its data collection methods and replicable transcription practices with telephone recordings and Excel coding (Wood et al., 2020). Additionally, my rapport with the participants and tone when asking questions remained unbiased.

Transferability

Daniel (2019) posited that transferability is achieved using clear findings, transcriptions, and the way results are conveyed. The generalizability of findings to

broader social conditions results in the study's transferability (Wood et al., 2020). This study resulted in meaningful and rich information applicable to gerontology, mental health, and the medical community, exhibiting its transferability. I recorded each interview with IVR and transposed the dialogue using Microsoft Word dictation for consistency. Each step was documented as I took in the discussion, from the first question to the last. I also created a journal of each interview, including my notes and observations. I recorded each interview for consistency and to ensure accuracy.

Each transcription was treated the same to ensure uniformity. I also practiced uniformity with each participant by asking questions and allowing sufficient pauses for participants to reflect and respond. Each phase of this study was replicable due to the transparency and clarity of each step.

Dependability

Trustworthiness and validity were assured through consistency and dependability. The same sources, questions, and methods for data collection for each participant were used (Brigitte, 2017). I documented all stages of the study, beginning with the interview procedures, consistently used transcribing and coding applications, and sought accuracy of the documentation and replicability (Moser & Korstjens, 2018). I thoroughly reviewed all transcripts, memos, and coding to ensure accuracy and minimize researcher bias (Nowell et al., 2017).

Confirmability

Korstjens and Moser (2018) noted that confirmability allows other researchers to corroborate and substantiate the research, minimizing researcher bias. As mentioned

earlier, it is achieved using transparency in the methodology and uniform questions, coding, and analysis for replicability (Korstjens & Moser, 2018). I used triangulation to ensure the confirmability of the study. Interviews transcripts were analyzed consistently and coding for confirmability minimized researcher bias (Fusch et al., 2018).

Results of the Study

The study included ten interview questions aligned with Maslow's hierarchy of needs theory and the research question; how do HSPs perceive patient-inclusive quality care for older adults with mTBI? All participants were asked the same questions. In order to provide direct quotes from the participants while maintaining their privacy and confidentiality, I have numbered the participants, so that each participant has a four-digit number to identify them. Each quote will be accompanied by the number in reference to the participant.

During data analysis, four dominant themes emerged: (a) inconsistencies in mTBI geriatric patients' basic daily care routines for primary care of mTBI geriatric patients and interference from the family absence or excessive control and medical policies that conflict with daily person-centered care; (b) HSPs' perspectives on coping with communication challenges poses issues to navigate recovery from brain injury; (c) rehabilitation for older adult with mTBIs well-being needs (mental, physical, and social), including the difficulties associated with elder abuse, and what to do to increase recovery from brain injury; and (d) educating for better caregiving practices with an emphasis on educating patients, families, or other parties involved in caring for older adult with

mTBIs. HSPs face barriers due to an imbalance of authority when using quality person-centered care. Each of these themes is reviewed in detail below.

Theme 1: Inconsistencies in mTBI Geriatric Patient Basic Daily Care

HSPs reported that older adults with mTBI experienced inconsistent daily care from other HSPs. All participants mentioned three reasons for this first emergent theme of primary care. First, they indicated the limitations to providing appropriate care were due to the impediments of institutional policies. Second, HSPs' values of care. Third, HSPs provide inconsistent care for older adult with mTBIs. Abrahamson et al. (2017) found causes for this situation: (a) HSPs underestimate the older adult's abilities in their daily lives, so daily routines remain inconsistent; (b) a lack of integration within health services, social care, and voluntary support; and (c) no designated person or case manager who oversees the patient's journey from admission onwards.

Meaning of Consistent Care

Caregiving means taking action to care for older adults with mTBI by helping them feel comfortable. The consensus from the data indicated passionate HSPs who care for older persons feel uncomfortable when observing other HSPs who do not contribute enough daily care to an older person's well-being. As a reminder, to identify the source of the quotes below, participants have been assigned four-digit numbers as identifiers.

Participant #1 stated:

Like the definition of caregiving, I care –listening and ensuring what they need before acting. If I do not give care, it takes away feelings of the older person's self-worth and pride. A more senior person gains the most from supporting their

emotional needs. Many caregivers are heartless and dry. Emotional needs are most important, making sure the clients' needs include changing as needed, feeding when hungry, and making them comfortable. It is the same as raising a family. Not everything has to be said but acting is vital. I can contribute to their quality of life by being observant and communicative.

Participant #2 noted that "it causes an issue not to be able to talk about religion and politics as they should be added as essential to address." Participant #7 said:

It is about respecting the human soul. I am getting older, and I still have feelings, and I can help myself, and things get better. In giving care, it means extending love to another human soul. Giving love needs patience brings the soul a sense of peace and can help many people. The older adults' human soul matters, and, sadly, it gets forgotten by others.

Participants were consistent in their inclusion of physical, emotional, and spiritual care in their understanding of consistent care.

Inconsistencies in Meeting Care Criteria

Rest and Stimulation. HSPs described the need for consistent care, explaining that mTBI patients become moody and emotionally imbalanced without constant care or rest. If there were management guidelines about the side effects of inconsistent care, it could support what HSPs are voicing. Participant #3 noted that older adults:

Need rest and a quiet place that does not have stimulation or noise. Music should be at a low volume, and there should be no confrontation. Considerations include

what they eat because it can affect their behavior, particularly red-colored food.

Also, ensuring they have the proper medication at the right time.

Communication and Memory Gaps. Participants discussed older adults with mTBI who do not receive companionship from HSPs feel lonely and less worthy because their views are not heard. They stated older adults cannot express themselves, so they become angry when ignored. Other older adult with mTBIs have difficulty talking. HSPs respond to older adult with mTBIs by repeating what their client says, and do not consistently demonstrate patience when trying to understand the older adult's meaning. They added older adult with mTBIs experience memory lapses and become moody. Participant #2 emphasized an older adult's basic need to communicate what is on their mind: "They get interested in talking, and their mood changes. They want to talk about what they have on their minds, primarily held in". Participant #4 said, "One of the challenges is when an older person has memory gaps. They talk randomly about whatever comes into her mind, and I must repeat it. I stop repeating it after a while.". When communication becomes difficult, the older adult with mTBI may experience distress and insecure feelings. Participant #5 reflected on habits and said, "Switching caregivers can get confusing." Participant #5 stated:

Recovery is about creating safety and getting comfortable with the client so they can do independent things they did before. Encouraging positive behavior and informing the older adult they will not lose their independence but can regain it by doing it independently and in their own space.

Exercising. HSPs reflected on older adults not receiving equitable physical care and less time spent with clients. Those who no longer have insurance coverage for physical therapy or support from family to exercise do not receive daily follow-up care unless HSPs exercise with them. Little attention is given to the liabilities of no follow-up physical therapy or training, but the HSPs decide whether to add activity into the routine; this is usually at the family's discretion. Participant #5 observed that the expectations for HSPs are based on "who hires them (whether) the family, or an older adult seeking help." This information may help or hinder the older adult's care.

Participant #6 stated:

The critical issue is treating (brain injury clients) like before the brain injury.

The older person may not see things the same, but I had to adapt to them as a caregiver. Exercising is vital and interaction, so it is about getting them to move and stimulate their brain. A body at rest stays at rest, which is not what a brain injury victim wants. It is up to the caregiver to bring them stimulation, and I believe they hear what you say to them.

Cleanliness and Hygiene. Older people's QOL reduces when they experience poor HSP basic care discomfort. Older adults face depression and feelings of lower self-worth. Participant #7 reflected on changes after a brain injury, including changes in QOL: "The older adults accept their condition, know it is different from before. The seniors that do not accept their condition leads to depression often." Participant #8 said:

The goal of caregiving is to get the older person to be self-reliant. However, staffing is a huge issue. I had twenty-seven patients in a nursing care facility for two days. It is impossible to make sure that seniors have everything they need.

Self-Reliance and Comprehending Cognitions. HSPs perceived an expectation that they oversee older adult with mTBIs even when the family, and medical support team that collaborated with them (nurses, doctors, supervisor), do not provide a history of injury. Participant #6 commented on HSPs making decisions for older adult with mTBIs: “Families expect the caregiver to take over and make all the decisions in their absence.”

Theme 2: HSPs’ Perspectives on Coping with Communication Challenges

This second theme involved the obstacles the HSPs recognized as difficulties in communicating with an mTBI geriatric patient to navigate recovery. The HSPs disclosed that brain injury is associated with older adults having difficult communication (Harrison et al., 2017); communication is instrumental in supporting their recovery.

Participant #6 indicated that older adult with mTBIs cannot be clear on what they want to say as “it is about listening to (their) gibberish.” Participant #5 stated that older adult with mTBIs cannot “communicate how they feel.” Participant #7 added that “repeating” daily is necessary. Participant #4 observed that older adult with mTBIs: “Talk at random about whatever comes into her mind, and I must repeat it. I stop repeating it after a while.”

Due to various communication problems of the older adult, either talking

excessively, or not talking much or at all, the HSPs believed they could not provide adequate care to understand the needs of the older client. Participant #9 stated they managed by:

[making the person feel secure. I am a touchy-feely person, so I am always touching the mTBI person's shoulder and back and making them feel they matter and feel better. I also do a lot of listening, talking, and reading.

Participant #2 used alternate communication, recognizing the older adult is aware and considers, "spending time listening to music, planning a day to do something."

Participant #5 focuses on things they can do instead of dialoguing: "Some physical activities may include stretching, yoga, exercising using yoga balls, sitting in a circle, and listening to music; stretches also help change moods and encourages the spirit to go outside and engage."

HSPs' Burden of Care Related to Communication

Mild TBI geriatric care complexities require HSPs to be committed to working with older adults beyond the scope of practical care. They must navigate needs such as disability benefits, financial management, medical issues, grooming, dental care, and more on behalf of their clients. HSPs found it complex to navigate effective services in-home care, nursing homes, hospitals, and group homes for older adult with mTBIs. How other HSPs provided care during shift transitions and viewed missing care suggested that older adult with mTBIs can be a burden because some HSPs ignore the constant basic needs of this group.

Participant #4 described the client not having a memory of where and who they lived with, so it is a burden trying to care for someone when he: “Does not remember her husband died a year ago, and he had lived there with her and her son”.

Participant #1 said some HSPs “allow older adults to remain soiled, (and) acquire rashes, and bad situations get overlooked.” Participant #1 described difficulties communicating with mTBI adults when the demand on her to care for older adults is excessive, so she has no time to understand them or address their needs. Participant #6 said, “recovery is not always inevitable,” and communication is a barrier for an older adult. Participant #1 said that yelling at a more senior person paralyzes their sensibility to respond because verbal abuse “occurs in different forms (and) can be defeating for the older person” who was entirely independent before. Participant #2 explained that QOL decreased because of COVID-19:

Everything has changed, and healthcare has also changed. It is more challenging to get a doctor’s appointment and occurs virtually. The true meaning of life is lost in these times. People are losing their people skills, and workers in the healthcare system are abusive. (For example) She had a massive rash and could not lift her neck. I was washing her, and no one paid attention to her needs.

Communication/Decision Making, Self-Reliance, and HSPs’ Burden of Care.

Some older adults with brain injury have slurred speech, talk randomly, forget what they previously said, or have unexpected mood swings. As a result, older adult with mTBIs cannot always convey their needs, and not all HSPs know how to manage their care. Older adults cannot always say what is on their minds or communicate what matters.

They cannot effectively communicate their discomfort or pain, ask for medication, share emotional moments, or request assistance to the bathroom. Also, request help with organizing their belongings, stopping theft, eating healthy diets, overseeing finances, asking where something is, seeking companionship, or saying what is wrong with them or their environment.

Participant #7 commented that QOL is less for older adult with mTBIs who can no longer express themselves as before and be self-reliant:

Words do not come out as what she wants to say, so I have to be patient when she does speak. Daily routines depend on how I approach memory care. Everyone is an individual, and it is 'their way' to have a smoother day. Otherwise, the person may get upset if you do not do things the way they want.

Participants #6 and #10 noted that brain injury causes speech impediments in communicating, reducing opportunities for older adults to be self-reliant. Participants #9 and #10 related that older adult with mTBIs want to be heard because they have something to say, but HSPs cannot directly address the beliefs or emotional needs of others who cannot understand them. Participant #8 said, "The goal of caregiving is to get the older person to be self-reliant."

Participant #7 focused on supporting self-reliance:

Michael had his own construction business, was robbed and beaten up, and experienced a head injury. He was angry and lashed out; at other times, he was scared. Some words would come out and talk at random. Ultimately, he wound up receiving disability. Dealing with him daily was like waking up a small child. He

did not like grooming or taking a bath. I helped him get out of bed, dress, or undress. He said, "I don't want to brush my teeth," and refused to change his clothes. I would talk to him and tell him how important it was to have clean clothes. Some mornings, I had a cup of coffee with him, but he was mindful enough to allow him to come and go as he pleased.

I was worried about his safety, so I ensured he took his medication to be on the right track. At lunchtime, I had to encourage him to come back home midday to eat. Sometimes, I had to find him, but he was usually nearby. This older man was brilliant, so every Friday, I would sit down with him to help him understand finances by letting him think about how he handled funds in his business. I encouraged him to think on his own.

As the client could not manage his funds, Participant #7 pointed out that she became his guardian and went to Social Security. She later stopped being a caregiver.

Self-reliance and returning to how the older mTBI adult was before their injury is not a given but creates possibilities. Participant #10 reflected on HSPs' role in increasing self-reliance by focusing on what a caregiver could improve for the older adult with mTBIs:

It is about having much communication. You must have heart and passion for doing this kind of stuff. (and) ask if they want help and do not help automatically. HSPs try to hear what an older patient needs, but even the doctors do not hear you out (or) talk to the family about the patient's needs.

Having household organization is necessary for an older mTBI client to be self-reliant and find what they need. The burden of care reflects how an HSP supports and provides this. Participant #1 reflected on older adult with mTBIs not always having support in place even though they are “entitled to get care for what (they) need.”

Participant #1 also pointed out that there is reduced self-reliance because of HSPs:

Do not show up and provide for the needs of the senior even though (the older person) is primarily independent. The older adult needs support to clean and organize the environment because (the client could not) stand up for long.

Many (HSPs) bought microwavable food, so when I decided to create meals, the client was so grateful and enchanted by what I did.

Participant #6 reflected on how HSPs disregarded and disrespected older adult with mTBIs while providing care, noting:

It depends on the tonality of how the caregiver talks to an older person, including the doctor. However, the caregiver is there all the time. There should be vetting about what is not okay. There are many horror stories about caregivers, so the human side needs to come out and treat older people right as if they were their parents.

Decision-making issues are part of the communication process and remain a burden for HSPs when the client is not self-reliant. HSPs must weigh an older adult’s ability to communicate. Participant #7 said that decision-making is not automatic for older adult with mTBI clients:

In decision-making, I would sit with the patient and ask questions. If their response were “I do not want to say anything,” I would ask him to think more about it. When I heard his decision was not beneficial, I would wait for another response. Occasionally, the older brain injury adult would ask what he should do. Because I am dealing with a grown man, I would encourage thinking and remembering a better way.

Participant #10 considered factors that might prevent the older adult with mTBI from making a reasonable decision:

It all depends on where they are at in their stability. If you must make the choices for them, I prefer them to at least try to learn what is right if it is safe. If it gets to a point in having to decide for them, I will ask for support from higher-ups on their outlook on how to proceed.

HSPs’ Ability to Enhance Client’s Self-Reliance and the Burden of Care

Once communication is open and the HSP has a good rapport with an older adult with mTBI, this helps boost the client’s ego, gives them hope, and allows them to adapt to brain injury challenges. Adaptation results in more excellent emotional balance and self-care, leading to better QOL despite brain injury. Participant #10 wanted to increase an older adult with mTBI’s QOL: “Boost the ego and give them (older adults) light at the end of the tunnel. In other words, you give hope no matter what to want to live.”

Participant #6 commented on increasing QOL and stated:

Positively contribute to their life by knowing them as a number one priority, including their likes and dislikes. I try to make every day an enjoyable day. For

example, a client has an attraction to anything shiny. I noticed it, so I located shiny stuff and hung it around her bed. She was delighted.

HSPs Rethinking Practice: Increasing Clients' Self-Reliance and Reducing the Burden of Care

Through HSPs' adaptability and willingness to rethink routines, older adults with mTBI can find ways to increase their QOL when they feel respected. As a result, the older adult cooperates with the HSP. Otherwise, the older adult will not have a healthy frame of reference. Depending on the HSP's daily routines, practices can encourage patient self-reliance or deter recovery

By assessing the environment, reducing the care burden for HSPs requires observation and rethinking the QOL for an older adult with mTBI. Participant #1 reflected on how providing QOL care was contingent on the setting:

Now I feel confident because I do what one person needs. In a home setting, there were problems with other caregivers not showing up or providing for the needs of the senior even though he is primarily independent. The client needs support to clean and organize the environment because he cannot stand up for long. I began noticing that lots of things needed doing. I supported the client.

Regarding QOL, this participant stated, "you cannot change people, but procedures need to change. Individuals in charge must be on top of caregivers and get more involved."

HSPs Coping with Communication Expectations from the Family. HSPs consider the family a controlling force with specific expectations for treating older adult with mTBIs. Participant #5 shared:

Families expect the caregiver to take over and make all the decisions in their absence. However, some family members are involved. Some families give me all the permission to handle matters for the older person, but I will always contact a family member. I constantly stay in touch, at least texting once a day. There is a fine line that I consider. People get territorial and going in “all gung-ho” without a family can create hatred, so I make sure they know about a decision. There can be others involved like a power of attorney, the doctors, the client – even if I make the decision, I have to be aware of keeping everyone informed.

Participant #5 stated: “Expectation for HSP (but it) is based on who hires them (whether) the family, or an older adult seeking help” may help or impede the older adults care.”

Lofty expectations are placed on HSPs and they assume that the family establishes rules and family relationships even when absent or unavailable. HSPs do not always have the best relationships with their patients’ families when establishing familiar routines for older adult with mTBIs. The HSPs in this study recommended family members be more involved because the family may not always be aware of the older adult’s likes, dislikes, or needs. HSPs concluded that some family members are more sensitive to the care needs of older adults, while others are absent but dictate expectations.

Participant #8 reflected on the need to educate the family: “I made them aware that being around matters more. Family members do not know what they want to do for an older person and tend to call 911.” Participant #6 implied that HSPs are instrumental to increasing an older adult with mTBI’s QOL:

I think giving them choices provides a better chance of recovery. A good caregiver will also do research with the family, so it helps to know the client's likes and dislikes, so the caregiver should know how to support them. One of my clients needed a podiatrist to come in person every few months. Initially, she was walking, but later she did not. In discussion with family, there was a question about whether it was worth paying \$600. For the podiatrist to come in person, my opinion gets asked. I said, "why stop it? Everything else gets taken away from her." The family decided to retain the podiatrist as it was a familiar thing the client liked.

Participant #8 noted that families establish expectations for HSPs, often without any discussion: "I take cues from the family members. They will advise where help is needed." Participant #10 indicated that an older adult with mTBI's QOL depended on the family: "All depends on what the family allows. It could include walking on the sidewalk, the patio, and the zoo, but not anything too significant for them."

Family members can also be less involved, limiting their connections to an older adult with mTBI. They primarily manage the finances and insurance, and there is uncertainty if the family will or will not be helpful.

Participant #8 discussed the other aspects of increasing QOL for an older adult with mTBI: "More social work support (is necessary) to get the family more involved. Many family members leave the older person at the wayside and are not there for them."

Participant #2 said:

The family sold her house without her consent and put her in the assisted living center. [Because of the absence of family support] she had a massive rash and could not lift her neck. Most family support needs to be more than just managing finances or insurance.

Theme 3: HSPs and Patients' Mental, Social, Physical, and Spiritual Wellbeing

HSPs and the supporting medical management team do not intentionally try to harm any patient. However, they might unknowingly do so by having anti-elderly bias, denying older adult with mTBIs appropriate treatments, and contributing to anti-elderly health care rationing, which is unethical. Inappropriate care is abuse and can impact an older person's mental, physical, social, and spiritual well-being.

Participant #7 considered that appropriate mental care means understanding the older adult's condition, which may develop into dementia or other conditions:

I had to deal with individuals that were angry and frustrated. For example, one woman would say she is hungry and later has no memory of why food is delivered. Because of my experiences, I plan to take more psychology courses to grasp better how to help people in need.

Participant #7 considered that appropriate mental health care includes decision-making:

I would sit with the patient and ask questions. If the response were "I don't want to say anything," I would ask him to think more about it. When I hear (that the) decision was not beneficial, I will wait for another response. Occasionally, the older brain injury adult would ask what he should do. Because I am dealing with a grown man, I would encourage thinking and remembering a better way.

In the event of improper mental care from HSPs, older adults experience abuse.

HSPs' incorrect actions had an unfavorable impact on the mental well-being of older adults and created uncertainty for HSPs in knowing how to help older adult with mTBIs. The HSPs in this study reported that abuse is a consequence of older adults receiving care from HSPs not committed to providing quality care. It also results from the absence of family members and the medical team support.

Older adults with mTBI may experience yelling (#1), disregard for their basic needs (#4), mental duress (#2), disrespect (#10), and not being listened to (#5, #7), and more. Participant #6 discussed the inferior performance of HSPs:

Caregivers do not treat clients equally or apologize for wrongdoing. There is inadequate staff, but they are scattered and not focused on serving the needs of the brain injury clients. You cannot change people, but the procedures need to change. Individuals in charge must be on top of caregivers and get more involved.

Depending on the recovery stage of the older adult with mTBI, HSPs use strategies to promote social engagement, such as participating in bingo, dancing, or another community or facility activity. Among all the HSPs, a handful of HSPs infer they have an passion for supporting the older adults by keeping them safe and protecting them from high-risk caregivers that deny older adults social opportunities. Participant #7 focused on several activities that gathered older adults together:

I was asking them what they wanted to do. We did this on Saturdays and went to the movies, an outdoor concert, the beach, etcetera. We did an Easter hunt one year, and I placed eggs around the house. I told the group that whoever found the

eggs (they) could decide what was for dinner for the whole week. I would write a food list and pay two dollars for each egg found. I encouraged everyone to have fun, watching grown adults act like children. They understood that any eggs not found could cause a stink.

On another occasion, during Christmas, their hearts melted when I asked them to make three wishes for what they wanted. All their wishes came through, as I got sponsors from retail outlets like Frys, Sporting Goods Store, Bed Bath and Beyond, and all items were new.

Every month, everyone sits at the table talking about what they like or dislike. At the beginning of conducting monthly meetings, no one said anything. However, it was an excellent opportunity to teach them about respect, not just saying “Hey!” when hungry, and to use the correct language, no cussing.

Therefore, I started with core house rules to get them focused. These monthly meetings gave everyone a voice, and their thoughts could bring them to the table.

Participant #8 offered more information on engaging older adult with mTBIs to increase their QOL: “Dancing, listening to music, playing bingo if it keeps them engaged. There are different themes for gatherings like poker night, pool day, etcetera. These activities are engaging so older adults can mingle.”

In contrast to those HSPs who were proactive in social engagement, other HSPs were not. Participant #7 observed that “some do not socialize and need advocacy. I advocate for safety, and (I am) not a significant decision-maker in my position.

Participant #2 said building a rapport and encouraging socialization is inappropriate: “I am not supposed to get too personal. Certain information is not allowed to discuss.”

Participant #8 found that socialization is a necessity for older adults and impacts their well-being mentally and physically:

Mental health coincides with physical functionality for an older person to get better; they need proper rest and communication with others. They do not need to feel isolated; using the appropriate medication can also benefit them. Some colors can also brighten up someone’s day because they make them think social and alive and give them a reason to get out of bed. Jazz exercise is something that has improved the older person’s well-being. An instructor comes in and does chair exercises twice a week, creating a sense of engagement.

As for social well-being, outings for brain injury victims were not always feasible. It depends on the health conditions of the individual. There may be social events in the building where they stay, so it can bring other older people together to dance, listen to music, or play bingo if it keeps them engaged. There are different themes for gatherings like poker night, pool day, etcetera. These activities engage older adults and help them mingle in the facility.

However, nursing homes only focus on physical health and fail to emphasize mental health. Nursing homes and mental health facilities go downhill as they do not consider these elements. Older adults entering an institution do not want to be there because it is not home. They feel isolated from home, and it takes away their independence.

Physical Well-Being: Sexuality

Participant #8 concluded that promoting one's well-being regardless of gender one's sexual orientation:

Jazz exercise is something that has improved the older person's well-being. An instructor comes in and does chair exercises twice a week, creating a sense of engagement. Social events in the building can (get) older adults (to) mingle in the facility. However, nursing homes only focus on physical health and fail to emphasize the mental aspects that are also needed (such as sexuality). Nursing homes and mental health facilities are practical when they do not consider these elements. Older adults entering an institution do not want to be there because it is not home. They feel isolated from home, and it takes away their independence.

Participant #9 discussed how brain injury reduces older adults' QOL in sexual behavior when treating the individual in a hospital trauma center:

In a milder brain injury case, I helped the patient walk the halls in the hospital trauma center. I worked closely with the nurses, who told me the patient did not remember who he was, but he still had sexual arousal. I reminded him not to take off his clothes as he stood in the doorway, exposing himself, so the memory gaps punctuated his thinking.

As a direct caregiver, I respectfully bathed him and changed his gown. Like the severe brain injury victim, the patient had a sense of knowing that I was trustworthy. He would look at me and understand what I was saying. Another older man would post a sign "Do not disturb" when having conjugal visits with

his wife. In all cases mentioned, the patients' nonverbal cues conveyed who was able to assist, whether it was wiping down or something else. Other medical staff would make comments about the patients. Nothing was wrong with the patients' hearing or that they could not think. However, both the male and female nurses knew patients wanted particular caregivers. It boils down to if the caregiver gave respect to the patient and did not make inappropriate and unprofessional comments.

Spirituality

This study identified HSPs' views on religion and spirituality when caregiving for older adult with mTBIs. Some HSPs recognized that supporting older adults spiritually could also assist them to have positive emotions and help them cope with stress and raised notions about HSPs' awareness of spiritual needs. Participant #8 emphasized that discussing religion leads to "being fired" as it is disallowed. Participant #10 added:

Anything leading to medical knowledge, politics, or religion is not allowed for discussion. We can listen if the client starts talking about what happened to them. We do not have to be rude if they want to talk about it; we can listen. We cannot lead the conversation. Instead, learning is engaging, but they cannot always put words into what happened.

Participant #9 had another view:

I am there to listen to topics such as spirituality, religion, or politics (However); it depends on the hospital policies and practices and what the family volunteers (feel) are okay. Historically, opening up about anything was okay, but not today. I

do not want backlash for talking inappropriately, but our world today is about diversity. Therefore, I may think about talking to them about religion, spirituality, or politics only if they invite the conversation first.

Family and Medication

The caregivers in this study did not confirm they could administer medication. However, Participants #7 and #4 said that knowledge of the client's medication and medical issues is necessary to support a patient's self-reliance and that information comes from the family or managers. Participant #7 added: "I do not know the key issues for treatment. I discovered more about [medical] needs from his sister, that visited monthly and made it on holidays. I ensured he took the proper medication." In the context of medical issues, Participant #4 added that an older adult lack understanding of medical issues, and the HSP's role is to "advocate (for) medical issues, [including] to talk to [the] family doctor."

Theme 4: Educating for Better Caregiving Practices

The HSPs in this study educated their patients, families, and others involved in caring for older adults with mTBI. HSPs displayed their passion for caring. Participant #1 said, "most caregivers keep their work for older care to straight business." However, they did not feel confident about their ability to fully support older adult with mTBIs because there was no case management structure to support HSPs. The question about what to discuss was evident in Participant 2849's words: "Institutional policies limit the HSPs' ability to discuss spirituality, politics, or the patient's medical condition unless the older adult with mTBI invites the conversation and directs it."

The HSPs interviewed recommended that education should not be limited to the caregiver but should include training for family members, the supporting medical team, and other parties involved in caring for the older adult with mTBI. They emphasized that education was self-motivation, but HSPs also needed to encourage others to become more involved in the recovery of older adults to ensure they have a better QOL.

Participant #10 discussed education:

It would be a cure for everybody and education for everybody. There is never a cure for everything, but we can help out a lot more with education than we do for the doctors and family, but it has to start with education. The family needs to understand that some things they do are not always with appropriate manners. The family may not know when they are rude and blurt something disrespectful. Their behavior has become their norm until they receive more training that helps. The doctors use sophisticated terminology and need to bring it to an ordinary level for HSPs to understand. Not everyone processes the same way we do. Some doctors are in medicine for the money. Others are there to help a family. I know that from firsthand experience when my mother experienced cancer.

Participant #6 considered educating the family is essential:

Many families live in other states. I do not know if they do not care, but I have not had the issue of having to educate them. However, doctors need education on talking to clients and caregivers. They talk down and do not demonstrate enough compassion.

The HSPs educated their clients on staying mentally, physically, socially, and spiritually. In the event of uncertainty, HSPs asked the older adult's family for help. They addressed wanting to get support from the medical team, especially when struggling to adapt to changing clients.

Caregiver Rationale for Educating

HSPs recommended education to encourage proper communication, motivate recovery, and recognize that QOL for mTBI geriatric patients was related to pursuing healthcare services, the healthcare system, and the general community. Quality services could lead to improved health but are often unaffordable (Carolozzi et al., 2018).

Participant #10 advised that educating all people involved in the care of an older adult with mTBI would be beneficial:

A cure for everybody is education for everybody. There is never a cure for everything, but we can help out a lot more with education than for the doctors and family, but it has to start with education. The family needs to understand that some things they do are not always with appropriate manners. The family may not know when they are rude and blurt something disrespectful. Their behavior has become their norm until they receive more training that helps. The doctors use sophisticated terminology and need to bring it to an ordinary level for HSPs to understand. Not everyone processes the same way we do. Some doctors are in medicine for the money. Others are there to help a family. I know that from firsthand experience when my mother experienced cancer.

Motivation

Participant #10 concluded that an older adult with mTBI needed the encouragement to know that their life was worthwhile: “Praise all the things they do and not overly correct. I want them to learn something and not feel discouraged. It is all about a re-learning process.” Participant #8 said that QOL requires family support by having family members engage more with the older adult: “Mental health can improve and escalate recovery by getting the family more engaged.”

Recognize QOL for Older Adults with mTBIs.

Participant #5 reflected on the premises of Maslow’s hierarchy:

Everyday living needs, shelter, explaining resources, talking about referrals, and meeting the goals make them feel safe in their own home. Some people need HSP care daily, others for a few hours. It is about gauging what an older adult need regarding support. This is at all independence does not get lost. HSPs have to encourage and support depending on the member’s needs.

Participant #5 remembered that brain injury causes changes in behavior for the older adult: “Not every day is a good day, so HSPs need to be prepared to come with compassion and handle special needs. HSPs also need support and training as they can always learn how to service their clients.”

Education for Caregivers

Participant #6 recommended that HSPs pursue more education to fulfill the needs of older adults who want an improved QOL with the appropriate support systems in place: “Caregivers need better knowledge and training, primarily in treating others and interacting with other caregivers.”

Participant #10 reflected on the need to provide consistent care for older adult with mTBIs to have a better QOL:

It is a big thing, helping out. Sometimes, switching caregivers can confuse what to do with the older adult. There must be a consistency of support and praise, and I encourage trying other ways that work better. Never tell them they are doing it incorrectly. Responses should be positive and encouraging. It is just about having a lot of communication. You have to have the heart and passion for doing this kind of stuff.

Education assists the family in preventing neglect if other family members take unauthorized steps to sell assets or do not follow up to ensure that the older adult has diligent care if moving from home to an assisted living center. Participant #2 called exploitation a form of abuse that impacts older adults' QOL:

The family sold her house without her consent and put her in the assisted living center. (She) She had a massive rash on her neck and could not lift her neck. I was washing her, and no one paid attention to her needs.

Participant #6 reflected on the deficits in providing QOL for older adult with mTBIs: Educating the family (is a problem because they are) not there as many families live in other states. I do not know if they do not care, but I have not had the issue of having to educate them. However, doctors need education on talking to clients and caregivers. They talk down and do not demonstrate enough compassion.

Educating the client is necessary so that they have the hope of returning to a state of self-reliance. Participant #5 emphasized: “Encouraging positive behavior and informing the older adult they will not lose their independence but can regain it by doing it independently and in their own space.”

Participant #9 reflected on how an older adult could feel self-reliant and respected: “I am also aware that I should listen to their point of view and not impose mine because it might agitate them to hear a different outlook.”

Educating physicians and other medical practitioners are needed to gain more insight into how they are projecting. Participant #10 spoke of the need for doctors to have more integrity and specialized training to serve the older adult better and ensure that they experience a better QOL: “I do not usually see anything odd. Some doctors do not even hear you out, and they do not talk to the family.”

Summary

This chapter explored the rationale for appropriate qualitative design and analysis to understand caregiver perceptions. The chapter outlined the nature of the study and its research procedures. Ten participants expressed concerns about inconsistent care practices supporting older adults with mTBI. Participants wanted to create healthy attachments with all older adult with mTBIs in their care and treat them as a part of their family. Chapter 5 reviews the findings of this research within QOL theory and the literature. It also explores the limitations of this study and offers recommendations for future studies and the implications of this research for social change.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this generic qualitative study was to explore how HSPs perceive their work concerning their beliefs and experiences when collaborating with older adult patients with mTBI. Findings from this study may inform recommendations for improving person-centered care standards. I used two research objectives to achieve the research purpose. First, HSPs engaged with older adults with TBI and described their experiences and perceptions about patient inclusivity and quality care for older adult patients with mTBI. Second, HSPs contributed recommendations for older adults with mTBI about effectively improving and managing their condition.

This generic qualitative study explored HSPs' positions on current care delivery to seniors with mTBI that impair their QOL. Specifically, how person-centered care during COVID-19 enhanced their QOL through recovery, communication, teaching, and satisfaction (Herrmann & Deatrck, 2019; Souesme et al., 2019). I sought information from the HSPs to discover their values regarding how they practice supporting caregiving for older adults experiencing mTBI or concussion, especially during the pandemic.

This chapter includes my interpretation of the data from Chapter 4 and the literature review. Subsequently, I revisit the conceptual framework, limitations, recommendations, and implications of the study before presenting a summary.

Interpretation of the Findings

This study sought to understand HSPs' experiences working with mTBI adults over 65 years using a QOL theoretical framework, which focuses on the importance of an older adult's relationship with their caregiver. Despite the different care efforts, the study

identified similarities in HSPs' opinions about increasing the QOL for older adult with mTBIs. Opinions ranged from neglecting the needs of older adults because of not having adequate guidance from the management team; insufficient in-house or continuing education to understand how to address quality person-centered care better; family intervening in care practices; or not being available to support the older adults. Regarding differences, some HSPs focused on the lack of care offered by HSPs and institutional settings. For example, in institutional settings, the demand to care for more older adults than possible resulted in poor care for the older mTBI adults. Some HSPs expressed that when going to the next shift for the older person, the HSPs were lethargic in caring. They chose not to prepare home-cooked meals and gave small frozen dinners. Cleaning, listening, and providing companionship were minimized, and they often experienced abuse instead. Some of the older adults learned to repress their feelings and other older adults shared their concerns. Maslow (1962) developed a QOL theory, which explores a person's development toward self-actualization. It surfaces when basic needs are fulfilled toward a psychology of being (Maslow, 1999). QOL theory is a framework for better understanding HSPs' perceptions of the practices that increase their clients' QOL (Ventegodt et al., 2003a). Researchers found that when older adults have a low QOL, they have an increased risk for behavioral and emotional issues that can negatively impact their functioning, resulting in loneliness, mental and physical illness, anxiety, and depression (Gerino et al., 2017).

HSPs' Perceptions of QOL for Older Adults with mTBIs

Participants indicated that they could increase the QOL of mTBI in older adults and had done so in the past. However, the participants expressed that insufficient training and external support factors created barriers to QOL treatment options for older adult with mTBIs. Many participants voiced their frustration with the absence of family members and doctors who supported the patients because older adults are perceived as a burden for person-centered care (Griffin et al., 2017).

Older adults with mTBI may remain in flux due to their injury, experiencing depression, and stress (Mushta et al., 2017; Scheenen et al., 2017; Walter et al., 2020). However, HSPs can influence by offering older adults more time to collect their thoughts and respond. Older adults experience frustration when overlooked and do not meet their needs (Abrahamson et al., 2017). Families often ignore older adults, as do medical teams, administration, and social care services. There may be no assigned person to follow up on their progress from admission onward, including the diagnosis of mTBI. In addition, inconsistent criteria were extracted from older adults' self-reported symptoms (Katz et al., 2015).

As a result, HSPs' practices were inconsistent. They voiced frustration over the lack of services to prepare them for future challenges or assist them in addressing caregiving practices. These HSPs navigated complex relationships and reported a lack of support from a system designed to help them.

HSPs, according to the data, have specific beliefs about needs in senior care, and pointed to critical limitations for older adult with mTBIs, including maintenance costs

and reduced rehabilitation practices and programs due to the pandemic and insurance restrictions. The HSPs in this study identified a need for a more consistent approach to mental and social services and routines, addressing brain injury challenges, and promoting patient autonomy. HSPs did not allude to working with technology but voiced concerns about abuse and the need for clients to be self-reliant while receiving the necessary support from their medical management teams and family members.

Consistent care could reduce an older adult's frustration by aligning their care with the family's caregiving tasks, managed care, and daily integration of health services (Wong-Cornell et al., 2017). In this study, I replicated this definition of consistent care and explored the consequences when constant care is absent. Participant #1 stated:

Like the definition of caregiving, I care by listening and ensuring what they need before acting. If I do not care, it takes away feelings of the older person's self-worth and pride. A more senior person gains the most from supporting their emotional needs. Many caregivers are heartless and dry. Emotional needs are most important, making sure the clients' needs include changing as needed, feeding when hungry, and making them comfortable. It is the same as raising a family. Not everything has to be said, but acting is vital. I can contribute to their quality of life by being observant and communicative.

The HSPs shared experiences addressing challenges from brain injuries and working with rehabilitation practices. It was also necessary to incorporate education for HSPs, doctors, nurses, and therapists to increase the patients' sense of autonomy. They reflected on the need to ensure older adults embrace self-reliance and reaffirm how to talk

to and hear them. Participant #1 stated, “the goal of caregiving is to get the older person to be self-reliant. However, staffing is a huge issue. I had twenty-seven patients in a nursing care facility for two days.” Participant #6 observed, “doctors need education on talking to clients and caregivers. They talk down and do not demonstrate enough compassion,” Participant #10 said, “some doctors don’t even hear you out.”

Barriers to older adult with mTBIs’ progress included a lack of knowledge and friction within the medical team, including physicians disregarding patients’ decision-making potential without asking for their input (Nakase-Richardson et al., 2020). Additionally, older adult with mTBIs experienced barriers to patient care because HSPs, the family, and the medical management team did not consider their emotions. Supporting older adult with mTBIs who face social and environmental limitations creates joy and fulfillment.

The Rationale for Person-Centered Caring by HSPs

Two participants believed there were no difficulties when caring for older adult with mTBIs. The first participant expressed a different reason for caring about older adults; Participant #7 cared for people in need as the primary means of being self-reliant in the aging process. On the other hand, Participant #6 expressed caring about morbidity as a need for an older adult, which was part of caregiving outcomes and the aging process. Her responses regarding QOL differed from those of the other participants.

HSPs’ Perspectives on Caring for mTBIs: Dedication to Caregiving

Four participants were committed to providing QOL care to older adult with mTBIs. According to Elmore (2019), meeting basic human needs is essential for person-

centered care and QOL (the lowest level in Maslow's hierarchy of needs). As older people ruminate over their life, determining if it is meaningful and satisfying, HSPs can be empowered to maintain their QOL (Cherry, 2021). However, according to the HSPs, patients' physiological and psychological needs are not always met (McLeod, 2020). Participant #1 pointed out that altercations were necessary to address physiological issues and observed that older adults' needs did not include meal preparation and being entitled to address primary care needs and love: "Regardless of their mental health or brain injury, anybody needs a check-in. It can come from friends giving a callback and checking at least once or twice on them."

Concerning self-esteem and self-actualization, Participants #10 and #6 emphasized that "having a good rapport between the HSP with an older adult is upbeat, and a friendly relationship between the HSP and the client." Participant #10 explained that a healthy person-centered caring relationship could boost the ego and provide hope. However, expectations to support an older mTBI person's quality of life are not clearly defined. Participant #5 says expectations are "based on whether hired by the family, or an older adult seeks out help." Therefore, Participant #5 considered that "expectations are influenced by the severity of the person's injury, the family thinking, and policies." Hence, it is not feasible to have consistent person-centered care that provides the QOL for older adult with mTBIs.

HSP Participants #6 and #1 said older adults are their priority, and they are the problem-solvers. All participants had some inconsistencies, presenting a combination of positive and negative care practices. For example, Participant #6 introduced music

therapy and yoga to change moods but commented on having to confront the patient's anger, not explaining how the participant and the patient coped. On the other hand, Participant #7 assumed that she was not the right person to handle all care situations and viewed others as decision-makers than she. Also, because older adults have distinct types of brain injury, she could not necessarily be an asset: "Healing has a lot to do with the individual." She did not consider that there may be a lack of knowledge or open-mindedness.

These findings supported previous research (Stein et al., 2019), which found that one in five mTBI adults experience mental health symptoms after a concussion, underscoring the importance of follow-up care. Simultaneously, the indicators of HSP participants showed that "autonomy and cognition are decisive factors for older adult with mTBIs feeling satisfaction with care and one-third suffer from the unsatisfactory outcome with psychiatric sequelae and need to be installed in future TBI guidelines" (Rauen et al., 2020, p. 144). Participant #1 found that "HSPs do not listen to what patients need, often leaving them bedridden and overlooking physical, mental, and social well-being." For example, not treating ear and eye conditions can unfavorably impact recovery (Hac & Gold, 2022). There are numerous causes of visual and hearing impairments, but most are benign and treatable. However, other symptoms are potentially life-threatening and require a diagnosis. Therapies include exercise, computerized programs, transcranial magnetic stimulation, gene therapy, stem cell therapy, and nanoparticles. Some novel modalities remain unavailable (Hac & Gold, 2022). In this

study, I explored mitigating factors of HSPs' PPC practices that impact well-being among older adults with mTBI while receiving geriatric care.

Some HSPs wondered about the definition of a caregiver; was it their job to improve an older person's quality of life? The lack of defined roles for HSPs created inconsistent emotional support for patients that balanced internal well-being as the brain experiences chronic strain on its systems, leading to stressors like depression (Bay et al., 2017). Participant #1 considered "emotional needs are most important, (but) not everything has to be said. [Person-centered caring] is vital, observant, and communicative." Participants #9 and #10 reflected on older adult with mTBIs wanting to voice their emotions because they have "something to say," but that is infrequent.

These findings also supported previous research, which found that one in five mTBI adults experience mental health symptoms after a concussion, underscoring the importance of follow-up care for these patients (Stein et al., 2019). Participants #3 and #5 noted that patients are emotionally imbalanced when they have inconsistent care, inadequate rest, or overstimulation; for instance, they become moody (Ciuffred et al., 2022; Nakase-Richardson, 2020). Participant #8 said this was a result of changes in sleep patterns. Sleep disturbance adversely affects neural repair and outcome following traumatic brain injury, mainly by causing sleepiness (Nakase-Richardson et al., 2020).

Moreover, older adult with mTBIs require exercise and consistent dietary patterns. HSPs are better informed on therapeutic strategies (Marcovic et al., 2017). Participant #4 said, "One of the challenges is when an older person has memory gaps. They talk randomly about whatever comes into her mind, and I must repeat it. I stop

repeating it after a while.” Post-older adult with mTBIs report daily impairment in episodic and autobiographical memory, yet their QOL depends on consistent memory reminders impaired by aging, brain injury, and neurodegeneration (Jones et al., 2021; Wames et al., 2017). Older adult with mTBIs must relearn when memory gaps occur. Participants #7, #5, #9, #10, #7, #2, #6, and #5 encouraged grooming and healthy habits. Participant #7 said:

I helped him get out of bed, dress, or undress. He would say, ‘I don’t want to brush my teeth,’ and refused to change his clothes. I would talk to him and tell him how important it was to have clean clothes.

Participant #4 reflected on “dressing and grooming, brushing teeth, washing face.”

These comments emphasized that health related QOL improves when HSPs provide oral hygiene interventions to patients (Kothari et al., 2017). Participant #9 noted that memory gaps were punctuated when thinking of “sexual arousal (and needed) reminder not to take off his clothes to expose himself.” Following an mTBI, patients can experience the devastating impact of more frequent sexual dysfunction (Latella et al., 2018). There is a need for HSPs to manage patients better to achieve sexual health, more functional outcomes, and a higher QOL (Latella et al., 2018).

Overall, there is a lack of medical experts who can provide information about HSPs’ practices in caring for older adult with mTBIs. As a result, HSPs lack knowledge of providing cognitive, physical, social, and human support to older adult with mTBIs.

HSPs' Perspectives on Caring for Older Adult With mTBIs: Human Support

Consistent care means continuity of care in alignment with family caregiving tasks, managed care, and daily integration of health services delivered to older family members (Wong-Cornell et al., 2017). In reviewing the findings from Chapter 4, four themes emerged: (a) inconsistencies in mTBI geriatric patient's primary daily care due to family control and medical policies; (b) HSPs' perspective on coping with brain injury challenges for older adults; (c) HSPs' thoughts on improving recovery for older adult with mTBIs; and (d) HSPs recommendation for further education on better caregiving practices that embrace their passion and desire to treat older adults with mTBI.

HSPs emphasized how a culture of caregiving provides a healthy outlook for seniors' social life as they cope with diverse situations and identify risk factors (pre-existing conditions of trauma, dementia, Parkinson's, Alzheimer's, or other). Also, determine whether treatment for improving functionality and cognition was effective.

HSPs' Perspectives on Caring for Older Adult With mTBIs: Family

HSPs in this study revealed the limitations of mTBI geriatric patient care in terms of institutional policies concerning contact with the patient's family, what information cannot be discussed with the patient, and limited support from medical teams that created barriers to recovery and impacted patient's QOL. Participant #6 shared:

They are educating (absent) families because many families live in other states. I do not know if they do not care, but I do not educate them. However, doctors need education on talking to clients and caregivers. They talk down and do not demonstrate enough compassion.

These findings support previous research, which has noted the importance of informing family members and medical teams how to offer support (Piccenna et al., 2017). Participant #5 said HSPs “need support and training as they can always learn how to service their clients.” Participant #6 noted that “caregivers need better knowledge and training, primarily in treating others and interacting with other caregivers.” Earlier, minimal clinical management was assumed for mTBI patients (Silverberg et al., 2020). However, because older adult with mTBIs experience altered mental conditions, medical management strategy has not been a criterion (Silverberg et al., 2020). Participant #1 stated, “it is the facility’s liability to provide care that the doctor orders. However, when orders do not follow, the directives get shuffled to the side and do not make things easier.” Lieshout et al. (2020) noted that “caregivers had high demand and difficulty in their role. They were least prepared to get help or acquire information from the health system, so caregiving practices remain inconsistent” (p. 6).

HSPs’ Perspectives on Caring for Older Adult With mTBIs: The Pandemic

Older adults with mTBI were considered at higher risk of contracting Covid-19, but they want to be independent and autonomous and not burden others (Mai et al., 2021). Researchers found a more significant increase in the perceived importance of independence and autonomy among older adults than in middle-aged adults (Mai et al., 2021). The healthcare system is unprepared to support those over sixty-five because coronavirus has disrupted quality care services since 2019 (Fulmer et al., 2021; Khoury & Karam, 2020). “Leading forced change management for an organization has become more challenging” (Burton & O’Neill, 2020).

During the pandemic, HSPs were uncertain of their decisions because of difficulties collaborating and communicating remotely with other staff (Burton & O'Neill, 2020). Systemic strains have a devastating impact on all aspects of a senior's functioning, often "taking away a survivor's sense of meaning and identity" (Carroll & Coetzer, 2011; Gracey et al., 2009; Ownsworth & Haslam, 2014). Seniors also experience decreased motor ability and physical activity participation, increased obesity, impaired cognition, and various psychological disorders (Gao et al., 2020). Thus, HSPs' workload, communication dynamics, and interventions for neurogenerative diseases (Parkinson's, dementia, Alzheimer's) shifted due to the pandemic.

Participant #1 identified unhealthy changes in caregiving practices during Covid: Everything has changed, and healthcare has also changed. It is more challenging to get a doctor's appointment and occurs virtually. The true meaning of life is lost in these times. People are losing their people skills, and workers in the healthcare system are abusive... The caregivers do not treat clients equally or apologize for wrongdoing. There is adequate staff, but they are scattered and not focused on serving the needs of the brain injury clients. You cannot change people, but procedures need to change. Individuals in charge must be on top of caregivers and get more involved.

HSPs' Perspectives on Caring for Older Adult With mTBIs: Psychology

Suppose a senior with mTBI becomes ill with COVID-19. In that case, they may experience neuropsychological deficits through direct or indirect mechanisms, such as neurovirulence, stroke, intubation, or other medical procedures that can result in PTSD

among pandemic survivors (Kaseda & Levine, 2020). Neuropsychologists have difficulty differentiating PTSD-related deficits from neuropathologies among COVID-19 survivors (Kaseda & Levine, 2020).

Workload. HSPs value sharing information about their workload, communication dynamics, self-actualization when collaborating with seniors, supportive technology, and physical and cognitive attributes across a spectrum of psychology-related areas. HSPs have experienced an increased workload across healthcare systems (Joy et al., 2020). This workload impacts HSPs and has harmful psychological effects (Kontoangelos et al., 2020). HSPs must care for seniors with more social restrictions because of the pandemic (Simonetti et al., 2020).

Communication Difficulties exacerbate the burden on HSPs when attempting to restore senior social interactions (Stasolla et al., 2020). Seniors have limited access to leisure opportunities and interaction with friends and relatives. Assistive technologies offer a helpful strategy for mitigating challenges for seniors and are associated with remote communication (Stasolla et al., 2020).

Self-Actualization/Self-Esteem. Mindfulness-based interventions reduce stress and foster resilience among HSPs working with mTBI seniors (Vega et al., 2020). During the pandemic, HSPs and seniors have an increased risk of mental health problems (i.e., anxiety, depression, burnout, insomnia, and stress-related disorders) stemming from isolation/quarantine and social distancing (Gupta & Sahoo, 2020). HSPs devised interventions to reduce social isolation, reducing QOL and associated physical and mental problems (Dassieu & Sourial, 2021).

During the pandemic, equity-based person-centered care approaches countered the adverse outcomes of social isolation and reduced the risk of infection (Dassieu & Sourial, 2021). Interventions included leisure-based group meetings, individual encounters, service providers, social networks through online access, attentiveness to power relationships, and confidentiality. The intervention considered the seniors' needs, personal histories (trauma and experiences of violence), and social context, including cultural and familial characteristics, financial barriers, and housing conditions (Dassieu & Sourial, 2021). Regrettably, not all seniors receive this benefit.

Supportive Technology. HSPs use technology to support patients in nursing homes, particularly older adults experiencing long isolation and dementia (Dores et al., 2020; Mendes-Santos et al., 2020; Simonetti et al., 2020).

Physical Aspects. The pandemic worsened cognitive impairment in elderly patients, and they had a higher risk of developing neurodegenerative diseases (Simonetti et al., 2020), complicating the workload for HSPs. For example, some seniors did not understand the restrictive measures needed (Simonetti et al., 2020; Wilkie et al., 2021).

Cognitive Disorders. Clients with neurobehavioral problems who required intensive care posed a burden and exhibited poor mental health (Griffin et al., 2020). Patients with mTBI were more likely to be diagnosed with Parkinson's disease (Gardner et al., 2018). HSPs viewed cognitive disorders as typical in many neurological conditions (Mantovani et al., 2020). During Covid, rehabilitation measures included remote communication technologies to support healthcare interventions such as neurorehabilitation and cognitive rehabilitation (Mantovani et al., 2020).

Interventions include telemedicine, virtual reality (VR), and augmented reality. Gao et al. (2020) noted that VR exercise during the pandemic facilitated improved physical outcomes, such as motor ability, reduced obesity, and positive cognitive and psychological effects for seniors. VR immerses seniors in a computer-generated, multi-sensory, three-dimensional world where they interact with the virtual environment using a headset or exercise equipment. The VR intervention engages older adults to improve their motor skills, sensorimotor learning, and cortical plasticity, increasing their motor ability, including hip muscle strength and balance control. VR also is an effective intervention strategy for fall prevention for seniors, thereby reducing the risk of mTBI (Gao et al., 2020).

HSPs' Perspectives on Caring for Older Adult With mTBIs: Public Health

Public health needs are a growing concern, and HSPs want access to innovative approaches for person-centered care with QOL outcomes. HSPs must proactively promote better and more equitable care for older adults (Fulmer et al., 2021). Reduced person-centered care is evident among White and non-Hispanic U.S. seniors (Callison & Ward, 2021). Seniors also experience delays and cancellations in accessing medical care (Callison & Ward, 2021). The tools policymakers are developing are not helpful but cause more significant service interference (Khoury & Karam, 2020). For example, homecare is cognitive rehabilitation software that addresses home-based cognitive rehabilitation in neurodegenerative diseases, such as mild cognitive impairment and early dementia (Bernini et al., 2020).

HSPs' Perspectives on Caring For Older Adult With mTBIs: Home Care Safety and Other Outcomes

According to CADTH (2021), there has been a cultural change in delivering long-term care, from attending large-scale nursing homes to shifting toward person-centered care in small-scale, home-like environments. HSPs in this study preferred this model of care because it gave more opportunities to support older persons with brain injury.

Participant #1 stated private care led to better results:

The goal of caregiving is to get the older person to be self-reliant. However, staffing is a huge issue. I had twenty-seven patients in a nursing care facility for two days. It is impossible to make sure that seniors have everything they need. I receive \$16.00 an hour, but now as a private homecare provider, I do half the work for twice as much compensation. Therefore, paying workers makes a difference in supporting recovery for an older person.

Interviewees primarily worked in home-like models but did not allude to Eden Alternative, Green House homes, the Butterfly Model of Care (for persons with dementia), or Dementia Villages (the Hogeweyk Care Concept). However, the literature suggested that daily activities impact neuroplasticity, which may help patients' recovery from mTBI using a wide range of interventions (Allen, 2019).

It is also essential to examine core components, including rehabilitative science fundamentals, practices' evolution, and current evaluation and treatment methods. Optimizing the effectiveness of cognitive rehabilitation for mTBI depends on the ability of a multidisciplinary team to work together to implement systematic learning, functional

practice, compensatory strategies, and metacognitive training to target the cognitive domains (or goals) of attention, memory, executive functioning, and social communication.

In this study, the HSPs' perceptions revealed that older adult with mTBIs' improvement depends on the quality of care received. HSPs are not always willing to support older adults with mTBI because they have reservations about providing care (Allen, 2019). Home-like models of care and the related safety outcomes (e.g., Covid infection, injuries from falls) point to the benefits of small-scale, home-like long-term care settings over traditional large-scale environments.

Solutions

Older adults with mTBI and more severe traumatic brain injury commonly experience persistent physical, cognitive, and emotional deficits that require long-term rehabilitation (Atiyeth et al., 2019). Technology provides an innovative alternative to traditional intervention models for caregivers to support older adults (Atiyeh et al., 2019). Older adults need to accept these interventions to implement technology using theory-driven research to support their rehabilitation and maximize functional outcomes.

Limitations of the Study

There were three limitations in this study:

- a. No medical expert provided information on managers' lack of consistent care.

Though this study explored how older persons' happiness and fulfillment of basic needs contributed to the psychology of being and what practices HSPs perceived as increasing their clients' QOL, the overall focus was to

understand better how caregivers viewed the QOL process. A medical perspective may have provided support for the participants' perspectives.

- b. The participants were all interviewed in Arizona, so their homogeneity could affect the transferability of the findings to other geographical locations due to the lack of geographical variation.
- c. I did not have enough time to ask participants how long they spent in each care setting, which may have influenced what they shared. At the end of the interview, one HSP added information addressing how care should involve the family. However, they did so while sharing that they had kidney cancer, which may have biased their response.

I used various means to ensure the study's transferability and reliability and address the study's limitations. Transferability was achieved by obtaining a detailed description of data with details on the context, setting, and assumptions about the geriatric population with mTBI (Anker et al., 2021). The focus was on receiving relevant data from the participants and providing information on how the data were collected and analyzed, the nature of the study, and my epistemological perspective and approach. The study is, therefore, more likely to be replicated because of its transparency (Tuval-Mashiach, 2021). As the focus of this study was the HSPs' perceptions, their medical expertise was not needed to have a suitable description of their experiences.

Recommendations

I have four recommendations for future research on enhancing the QOL for older adult with mTBIs. First, this study should be repeated in other regions of the United

States. This recommendation is based on the idea that perceptions of QOL may differ across geographically and culturally diverse locations and that departments of aging may respond to mTBI geriatric populations in several ways across the country. Researchers should replicate the study with caregivers who have experience advocating for older adults and are registered to obtain support from county or state agencies.

Second, future research would benefit from a medical professional's assistance in exploring the struggles of QOL due to mTBI in relational and neurological contexts. Third, policymakers and organizations should consider improving accessibility and funding for education, training, and support programs for home, hospital, nursing settings, or assisted living strategies to improve the sustainability of caregivers in their indispensable role in improving person-centered care and QOL for older adult with mTBIs. The need to enhance the effectiveness of in-service training of caregivers to obtain CEUs is an inevitable requirement. Fourth, future directions for research include using theory-driven research designs to improve our understanding of technology acceptance and to support the development of rehabilitation technologies that maximize functional outcomes for individuals with mTBI (Vaezipour et al., 2019).

Implications and Potential Positive Social Change

This study contributed to the literature on QOL theory and Erikson's developmental stages, better understanding how older adult with mTBIs interact with HSPs when HSPs deliver their care. There is an opportunity to advocate for increased assistance and interventions and a path to establish evidence-based interventions that will benefit this population. Further exploration of this topic is needed to understand QOL

interactions better so that future caregivers will not experience the same struggles in optimizing care.

Decreasing the struggles related to QOL difficulties and their associated adverse outcomes would cause less harm to society. HSPs currently providing care for older adult with mTBIs could also increase their skills to modify their approach to patients. This research could better address the mental health needs of older adult with mTBIs, thus allowing for new early intervention strategies to better address the QOL of older adults recovering from brain injury.

Conclusion

The evolution of traumatic brain injury rehabilitation in military service members and veterans began during the Civil War (Cifu et al., 2010). The literature first explored TBI subjects through self-reporting, developing instruments sensitive to deficits in cognition and other health and life domains, and conducting qualitative studies that examined QOL to make recommendations for methodological and substantive research (Djikers, 2004).

Maslow developed QOL in the 1960s, and “its primary focus has been on the relationship between functional and applicable methods and new cognitive demands involving executive function to improve screening, prevention, and rehabilitation of cognitive impairment and falls” (Ansai et al., 2017, p. 144). Because the present study assessed HSPs’ values for caring for older adult with mTBIs to improve their QOL, I provided a perspective on health systems not often considered and allowed the voices of those involved in the care system to be heard. HSPs expressed that they perceived deficits

in the caregiving delivery for older adult with mTBIs due to inconsistencies in the system and shared their frustration over how these deficits impacted older adults' functioning.

The findings from this generic qualitative study have contributed to the existing body of literature on QOL, expanding the ideas set forth by Maslow (1962) and Erikson described by Ekland (1970), including the social problems inherent in inconsistent care practices that impact patients' QOL. The results of this study might create social change within human services, social work, aging departments, and mental health communities, mainly affecting older adults who have experienced mTBI from falls, strokes, accidents, or other causes.

This study has the potential to create a foundation to better address caregivers' reported frustrations. The results provide the narratives and viewpoints of HSPs working to assist older adults with mTBI. These narratives may also assist caseworkers and clinicians working with this population to appreciate their clients' difficulties better and find new ways to address the flaws documented here.

References

- Abrahamson, V., Jensen, J., Springett, K. & Sakel, M. (2017). Experiences of patients with traumatic brain injury and their careers during the transition from in-patient Rehabilitation to the Community: A qualitative study, *Disability, and Rehabilitation*, 39(17), 1683-1694.
<http://doi.org/10.1080/09638288.2016.1211755>
- Abdelalrik, P. A., Draghic, N., & Ling, G. S. F. (2019). Management of moderate and severe Traumatic Brain Injury. *Transfusion*, 59(52), 1529-1538.
<https://doi.org/10.1111/trf.15171>
- Adekpedjou, R., Stacey, D., Briere, N., Freitas, A., Garvelink, M. M., Turcotte, S., Meanear, M., Bourassa, H., Fraser, K., Durand, P. J., Dumont, S., Durand, P., Dumont, S., Roy, L., & Legare, F. (2018). “Please listen to me”: A cross-sectional study of experiences of seniors and their HSPs making housing decisions. *PLOS One*, 13(8), e0202975. <https://doi.org/10.1371/Journal.Pone.0202975>
- Akamatsu, Y., & Hanafy, K. A. (2020). Cell death and recovery in Traumatic Brain Injury. *Neurotherapeutics*, 17(2), 446–456. <https://doi.org/10.1007/s13311-020-00840-7>
- Albrecht, J. S., Hirshon, J. M., Mccunn, M., Bechtold, K. T., Rao, V., Simoni-Wstila, L., & Smith, G. S. (2016). Increased rates of Mild Traumatic Brain Injury among older adults in US emergency departments, 2009-2010. Mild Traumatic Brain Injury in older adults. *Journal of Head Trauma Rehabilitation*, 31(5), e1-e7.
<https://doi.org/10.1097/HTR.000000000000190>

- Allen, J. J. (2019). Cognitive rehabilitation for mild traumatic brain injury (mTBI). *Neurosensory Disorders in Mild Traumatic Brain Injury*. 357-379.
<https://doi.org/10.1016/b978-0-12-812344-7.00021-2>
- Alvarez, I. C. C., Ong, M. B., & Abocejo, F. T. (2017). Learning needs and quality care among family HSPs and elderly patients of Guadalupe, Cebu City, Central Philippines. *European Scientific Journal*, 13(24), 356-376.
<https://doi.org/10.19044/esj.2017.v13n24p356>
- American Congress of Rehabilitation Medicine. (n.d.). *Definition of mild traumatic brain injury developed by the Mild Traumatic Brain Injury Committee of the head injury interdisciplinary particular interest group*.
https://www.acrm.org/wpcontent/uploads/pdf/TBIDef_English_10-10.pdf
- Ancker, J. S., Bemda, N. C., Reddy, M., Unertl, K. M., & Veinot, T. (2021). Guidance for publishing qualitative research in informatics. *Journal of the American Medical Informatics Association*, 28(12), 2743–2748. <https://doi.org/10.1093/jamia/ocab195>
- Allen, J. J. (2019). Cognitive rehabilitation for mild traumatic brain injury (mTBI). *Neurosensory Disorders in Mild Traumatic Brain Injury*. 357-379.
<https://doi.org/10.1016/B978-0-12-812344-7.00021-2>
- Aspers, P., & Corte, U. (2019). What is qualitative in qualitative research? *Qualitative Sociology*, 42, 139-160. <https://doi.org/10.1007/s11133-019-9413-7>
- Atiyeh, V., Brooke-Mai, W., Wall, K., Theodoros, D. (2019). Acceptance of rehabilitation technology in adults with moderate to severe traumatic brain injury,

their caregivers, and healthcare professionals: A systematic review, *Journal of Head Trauma Rehabilitation*: 34(4), E67-E82

<https://doi.org/10.1097/HTR.0000000000000462>

Ayalon, L., Lev, S., & Lev, G. (2020). What can we learn from the past about the future of gerontology? Using natural language processing to examine the field of gerontology? *The Journals of Gerontology: Series B*, gbaa066.

<https://doi.org/10.1093/geronb/gbaa066>

Baig, M.R., Meraj, A., & Tapia, (2020). Development of a practice tool for primary care providers: Medication management of posttraumatic stress disorder in veterans with mild traumatic brain injury. *Psychiatry Quarter*, 91, 1465–1478.

<https://doi.org/10.1007/s11126-020-09767-w>

Baker, A., Barker, S., & Sampson, A., & Martin, C. (2017). HSPs outcomes and interventions: A systemic scoping review of the literature on traumatic brain injury and spinal cord injury. *Clinical Rehabilitation*, 31(1), 45-60.

<https://doi.org/10.1177/0269215516639357>

Baptista, A. F., Fernandez, A. M., Sa, K. N., Okano, A. H., Brunon, A. R., Lara-Solares, A., Iskander, A. J., Guerrero, C., Arnescue-Garcia, C., Kraychete, D. C., Caparelli-Daquer, E., Atencio, E., Piedmonte, F., Colmon, F., Hazine, F. A., Garcia, J. B., Hernandez-Castro, J. J., Cartisani, J. A. F., Monte-Silva, K. K., de Andrade, D. C. (2019). Latin American and Caribbean consensus on noninvasive central nervous system neuromodulation for chronic pain management. *Pain Reports*, 4(1), e692. <https://doi.org/10.1097/PR9.0000000000000692>

- Baudin, K., Gustafsson, C., & Frennert, S. (2020). Views of Swedish eldercare personnel on ongoing digital transformation: Cross-sectional study. *Journal of Medical Internet Research, 22*(6), e15450. <https://doi.org/10.2196/15450>
- Bay, E., Garbinski, A. M., & Maycock, S. E. (2017). Prevention strategies in post-TBI depression in older adults. *Professional Case Management, 22*(6), 284-290. <https://doi.org/10.1097/NCM.0000000000000224>
- Bellamy, K., Ostini, R., Martini, N., & Kairuz, T. (2016). Seeking to understand using generic qualitative research to explore access to medicines and pharmacy services among resettled refugees. *International Journal of Clinical Pharmacy, 3*, 671. <https://doi.org/10.1007/s11096-016-0261-1>
- Belotto, M. J. (2018). Data analysis methods for qualitative research: Managing the challenges of coding, interrater reliability, and thematic analysis. *The Qualitative Report, 23*(11), 2622–2633. <https://doi.org/10.46743/2160-3715/2018.3492>
- Berberian, M., Walker, M. S., & Kaimal, G. (2019). Master my demons?: Art therapy montage paintings by active-duty military service members with Traumatic Brain Injury and post-traumatic stress. *Medical Humanities, 45*(4), 353-360. <https://doi.org/10.1136/medhum-2018-011493>
- Bernini, S., Stasolla, F., Panzarasa, S., Quaglini, S., Sinforiani, E., Sandrini, G., Vecchi, T., Tassorelli, C., & Bottiroli, S. (2021). Cognitive telerehabilitation for older adults with neurodegenerative diseases in the COVID-19 era: A Perspective Study. *Frontiers in Neurology, 11*, 623933. <https://doi.org/10.3389/fneur.2020.623933>

- Bernstein, P., Ko, K., Israni, J., Cronin, A. O., Kurliand, M. M., Shi, J. M., Chung, J., Borgo, L., Reed, A. L., Chang, A. M., Sites, F. D., Funahashi, T., & Agha, Z. (2021). Urgent and non-emergent telehealth care for seniors: Findings from a multi-site impact study. *Journal of Telemedicine & Telecare*.
<https://doi.org/10.1177/1357633x211004321>
- Bigelow, D. A., McFarland, B. H., & Olson, M. M. (1991). QOL of community mental health program clients: Validating a measure. *Community Mental Health Journal*, 27, 43–55. <https://doi.org/10.1007/BF00752714>
- Bodnar, C. N., Roberts, K. N., Higgins, E. K., & Bachstetter, A. D. (2019). Systematic review of closed head injury models of mild traumatic brain injury in mice and rats. *Journal of Neurotrauma* 36(11). <https://doi.org/10.1089/neu.2018.6127>
- Booker, J., Sinha, S., Choudhari, K., Dawson, J., & Singh, R. (2019). Description of the predictors of persistent post-concussion symptoms and disability after mild traumatic brain injury: The SHEFBIT cohort. *British Journal of Neurosurgery*, 33(4), 367-375. <https://doi.org/10.1080/02688697.2019.1598542>
- Boscart, V. M., Mccleary, L., Stolee, P., Taucar, L. S., Wilhelm, J., Johnson, K., D'avernas, J., Brown, P., & Raasok, M. (2020). Enhancing nursing home care for seniors: Impact of a living classroom on nursing assistant's education. *Educational Gerontology*, 46(8), 461-472.
<https://doi.org/10.1080/03601277.2020.1774842>
- Braaf, S., Ameratunga, S., Christie, N., Teague, W., Ponsford, J., Cameron, P., & Gabbe, B. (2019). Care coordination experiences of people with traumatic brain injury

- and their family members in the 4-years after injury: A qualitative analysis. *Brain Injury*, 33(5), 574-583. <https://doi.org/10.1080/02699052.2019.1566835>
- Bradshaw, C., Atkinson, S., & Doody, O. (2017). Employing a qualitative description approach in health care research. *Global Qualitative Nursing Research*, 4, 2333393617742282. <https://doi.org/10.1177233393617742282>
- Brain Injury Association of America. (n.d.). *Traumatic brain injury act*. <https://www.biausa.org/public-affairs/public-policy/traumatic-brain-injury-act>
- Braininjury.com (2021). *Recovery and rehabilitation*. <https://braininjury.com/recovery-andrehabilitation/#:~:text=The%20majority%20of%20recovery%20from%20brain%20injuries%20occurs,occur%20for%20up%20to%20ten%20years%20post%20injury.>
- Braun, V. & Clarke, V. (2021). To saturate or not to saturate. Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. *Qualitative Research in Sport, Exercise and Health*, 13(2), 201-216. <https://doi.org/10.1080/2159676X.2019.1704846>
- Bridges, J., Pope, C., & Braithwaite, J. (2019). Making health care responsive to the needs of older people. *Age Ageing*, 48(6), 785–788. <https://doi.org/10.1093/ageing/afz085>
- Brigette, C. (2017). Rigor or reliability and validity in qualitative research: Perspectives, strategies, reconceptualization, and recommendations. *Dimension of Critical Care Nursing*: 7/8, 36(4), 253-263. <http://doi.org/10.1097/DCC.0000000000000253>
- Buetow, S. (2019). Apophenia, unconscious bias, and reflexivity in nursing qualitative

research. *International Journal of Nursing Studies*, 89, 8-13.

<https://doi.org/10.1016/j.ijnurstu.2018.09.013>

Bui, D. C., Myerson, J., & Hale, S. (2013). Note-taking with computers: Exploring alternative strategies for improved recall. *Journal of Educational Psychology*, 105, 299-309. <https://doi.org/10.1037/A0030367>

Burke, R. E., Lawrence, E., Ladebue, A., Ayele, R., Lippmann, B., Cumbler, E., Allyn, R., & Jones, J. (2017). How hospital clinicians select patients for skilled nursing facilities. *American Geriatric Society*, 65(11), 2466-2472.

<https://doi.org/10.1111/jgs.14954>

Burton, B. & O'Neill, K. (2020). Charting a crisis: Bolstering business continuity with organizational change manages: How to adjust business continuity plan during the Covid-19 crisis. *Organizational Change*

Management. <https://www.teksystems.com/en/insights/article/charting-a-crisis>

Caelli, K., Ray, L., & Mill, J. (2003). "Clear as mud": Toward greater clarity in generic qualitative research. *International Journal of Qualitative Methods*, 2(2), 1.

https://sites.ualberta.ca/~iiqm/backissues/2_2/html/caellietal.htm

Callison, K., & Ward, J. (2021). Associations between individual demographics characteristics and involuntary health care delays as a result of COVID-19. *Health Affairs*. <https://doi.org/10.1377/hlthaff.2021.00101>

Cancelliere, C., Coronado, V., Taylor, C., & Xu, L. (2017). Epidemiology of isolated vs. Non-isolated mild traumatic brain injury treated in emergency departments in The United States, 2006-2012: Sociodemographic characteristics. *Journal of Head*

Trauma Rehabilitation, 32(4), e37-e46.

<https://doi.org/10.1097/HTR.0000000000000260>

Caplain, S., Blancho, S., Marque, S., Montreuil, M., & Aghakhani, N. (2017). Early detection of poor outcome after mild traumatic brain injury: Predictive factors using a multidimensional approach, a pilot study. *Frontiers in Neurology*, 8, 666. <https://doi.org/10.3389/fneur.2017.00666>.

Carminati, L. (2018). Generalizability in Qualitative Research: A tale of two traditions.

Qualitative Health Research, 28(13), 2094-2101.

<https://doi.org/10.1177/1049732318788379>

Carr, D. (2018). *Golden years? Social inequality in later life*. Russell Sage Foundation.

Carlozzi, N. E., Lange, R. T., French, L. M., Sander, A. M., Freedman, J., & Brickell, T.

(2018). A latent content analysis of barriers and supports to healthcare

perspectives from caregivers of service members and veterans with military-

related traumatic brain injury. *Journal Head Trauma Rehabilitation*, 33(5), 342-

353. <http://doi.org/10.1097/HTR0000000000000373>

Carroll, E., & Coetzer, R. (2011). Identity, grief, and self-awareness after traumatic brain

injury. *Neuropsychological Rehabilitation*, 21, 289–

305. <https://doi.org/10.1080/09602011.2011.555972>

Castleberry, A., & Nolen, A. (2018). Thematic analysis of qualitative research data is as

easy as it sounds? *Currents in pharmacy teaching and learning*, 10(6), 807-815.

Center for Disease Control (2021). Updated mild traumatic brain injury guideline for

adults. *Traumatic Brain Injury and Concussion*.

https://www.cdc.gov/traumaticbraininjury/mtbi_guideline.html

Center for Disease Control (n.d.). Mild TBI and concussion. | traumatic brain injury | CDC injury center

Chaudhuri, S. (2017). Witches, activists, and bureaucrats: Navigating gatekeeping in qualitative research. *International Journal of Sociology*, 47(2), 131-145. <https://doi.org/10.1080/00207659.2017.1300469>

Chen, S., Zheng, J., Chen, C., Xing, Y., Cui, Y., Ding, Y., & Li, X. (2018). Unmet needs of activities of daily living among a community-based sample of disabled, elderly people in Eastern China: A cross-sectional study. *BMC Geriatrics*, 18, 160. <https://doi.org/10.1186/s12877-018-0856-6>

Cheng, A., Kessler, D., Mackinnon, R., Chang, T. P., Nadkarni, V. M., Hunt, E. A., Duval-Arnould, J., Lin, Yiqun, Cook, D. A., Pusic, M., Hui, J., Moher, D., Egger, M., & Auberbach, M. (2016). Reporting guidelines for health care simulation research: Extensions to the CONSORT and STROBE statements. *Advanced Simulation*, 1, 25. <https://doi.org/10.1186/s41077-016-0025-y>

Cherry, K. (2021). The five levels of Maslow's hierarchy of needs. Medically reviewed by David Susman, Ph.D. Verywellmind.com

Chowdhury, M. F. (2015). Coding, sorting, and sifting of qualitative data analysis: Debates and discussions. *Quality and Quantity*, 49(3), 1135–1143. <https://doi.org/10.1007/s11135-014-0039-2>

Cieslak, R., Benight, C. C., Rogala, A., Smoktunowicz, E., Kowalska, M., Zukowska, K.,

- Yeager, C., & Luszczvinska, A. (2016). Effects of an internet-based self-efficacy intervention on secondary traumatic stress and secondary post-traumatic growth health and human services professionals exposed to indirect trauma. *Frontiers in Psychology, 7*, 1009. <https://doi.org/10.3389/fpsyg.2016.01009>
- Cifu, D. X., Cohen, S. I., Lew, H. L., Jaffee, M., & Sigford, B. (2010). The history and evolution of traumatic brain injury rehabilitation in military service members and veterans, *American Journal of Physical Medicine & Rehabilitation, 89*(8), 688-694. <http://doi.org/10.1097/PHM.0b013e3181e722ad>
- Coffey, N. T., Cassese, J., Cai, X., Garfinkel, S., Patel, D., Jones, R., Shaewitz, D., & Weinstein, A. A. (2017). Identifying and understanding the health information experiences and preferences of HSPs of individuals with either traumatic brain injury, spinal cord injury, or burn injury: A qualitative investigation. *Journal of Medical Internet Research, 19*(5), e159. <http://doi.org.10.2196/jmir.7027>
- Collins, J. M., Woodhouse, A., Bye, N., Vickers, J. C., King, A. E., & Ziebell, J. M. (2020). Pathological links between traumatic brain injury and dementia: Australian pre-clinical research. *Journal of Neurotrauma, 37*(5), 782-791. <https://doi.org/10.1089/neu.2019.6906>
- ConnectUs. (2017). Eight advantages and disadvantages of phenomenological research. 8 advantages and disadvantages of phenomenological research
ConnectUS(connectusfund.org)
- Cooper, S., & Endacott, R. (2007). Generic qualitative research: A design for qualitative research in emergency care? *Emergency Medicine Journal, 24*(12), 816-819.

<https://doi.org/10.1136/emj.2007.050641>

Constantinou, C., Payne, N., van den Akker, O., & Inusa, B. (2021) A qualitative exploration of health-related quality of life and health behaviors in children with sickle cell disease and healthy siblings.

<https://doi.org/10.1080/08870446.2021.1955119>

Crane, P. K., Gibbons, L. E., Dams-O'Connor, K., Trittschuh, E., Leverenz, J. B., Keene, D., Sonnen, J., Montine, T. J., Bennett, D. A., Leurgans, S., Schneider, J.

A., & Larson, E. B. (2016). Association of traumatic brain injury with late-life neurodegenerative conditions and neuropathologic findings. *JAMA Neurology*, 73(9), 1062–1069. <https://doi.org/10.1001/jamaneurol.2016.1948>

Cross Country Healthcare. (2021). Caring for our HSPs: Strategies to drive systemic change. <https://www.crosscountryhealthcare.com/blogs/strategies-to-drive-systemic-change>.

Ciuffreda, K. J., & Thiagarajan, P. (2021). Objectively based vergence and accommodative dynamics in mild traumatic brain injury (mTBI): a mini review. *Vision Research*, 191, 107967. Elsevier.

<https://doi.org/10.1016/j.visres.2021.107967>

Curran, V., Fleet, L., Simmons, K., Lannon, H., Gustafson, D., Wang, C., Garmsiri, M., & Wetsch, L. (2019). Adoption and use of mobile learning in continuing professional development by health and human services professionals. *Journal of Continuing Education in the Health Professions*, 39(2), 76-85.

<https://doi.org/10.1097/ceh0000000000000243>

- Curtis, S., Fair, A., Wistow, J., Val, D. V., & Owen, K. (2017). Impact of extreme weather events and climate change for health and social care systems. *Environmental Health*, *16*, 128. <https://doi.org/10.1186/s12940-017-0324-3>
- Cusimano, M. D., Saarela, O., Hart, K., Zhang, S., & Mcfaull, S. R. (2020). A population-based study of fall-related traumatic brain injury identified in older adults in hospital emergency departments. *Journal of Neurosurgery*, *49*(4), e20. <https://doi.org/10.3171/2020.7.focus20520>
- Dahdah, M. N., Barnes, S. A., Buros, A., Allmon, A., Dubiel, R., Dunklin, C., Callender, L., & Shafi, S. (2016). The impact of preexisting illness and substance use on functional and neuropsychological outcomes following traumatic brain injury. *Baylor University Medical Center Proceedings*, *29*(3), 271-276. <https://doi.org/10.1080/08998280.2016.11929433>
- Dams-O'Connor, K., Landau, A., Hoffman, J., & St De Lore, J. (2018). Patient perspectives on quality and access to healthcare after brain injury. *Brain Injury*, *32*(4), 431-441. <https://doi.org/10.1080/02699052.2018.1429024>.
- Dang, C., Harrington, K. D., Lim, Y-Y., Ames, D., Hassenstab, J., Laws, S. M., Yassi, N., Hickey, M., Rainey-Smith, S. R., Robertson, J., Rowe, C. C., Sohrabi, H. R., Salvado, O., Weinborn, M., Villemagne, V. L., Masters, C. L., & Maruff, P., (2019). AIBL Research Group, Superior memory reduces the 8-year risk of Mild Cognitive Impairment and Dementia but not amyloid β -associated cognitive decline in older adults. *Archives of Clinical Neuropsychology*, *34*(5), 585-598. <https://doi.org/10.1093/arclin/acy078>

- Daniel, B. K. (2019). Using the TACT Framework to Learn the Principles of Rigour in Qualitative Research. *Electronic Journal of Business Research Methods*, 17(3).
<https://academic-publishing.org/index.php/ejbrm/index>
- Dash, H. H., & Chavali, S. (2018). Management of traumatic brain injury patients. *Korean Journal Anesthesiology*, 71(1), 12-21.
<https://doi.org/10.4097/kjae.2018.71.1.12>
- Dassieu, L., & Sourial, N. (2021). Tailoring interventions for social isolation among older persons during the COVID-19 pandemic: challenges and pathways to healthcare equity. *International Journal of Equity Health* 20, 26.
<https://doi.org/10.1186/s12939-020-01360-8>
- De Costa, P. I., Valmori, L., & Choi, I. (2017). Qualitative research methods. In *The Routledge handbook of instructed second language acquisition* (pp. 522-540). Routledge.
- Den Ouden, M., Kuk, N. O., Zwakhalen, S. M. G., Bleijlevens, H. C. M., Meijers, J., & Hamers, J. P. H. (2017). The role of nursing staff in the activities of daily living among nursing home residents. *Geriatric Nursing*, 38(3), 225-230.
<https://doi.org/10.1016/j.gerinurse.2016.11.002>
- Denzin, N. K., & Lincoln, Y. S. (2005). *Introduction: The discipline and practice of qualitative research*. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage Handbook of Qualitative Research* (pp. 1-32). Sage.
- Devault, G. (2020). Advantages and disadvantages of quantitative research.
<https://www.thebalancesmb.com/quantitative-research-advantages-and->

disadvantages2296728#:~:text=Disadvantages%20of%20Quantitative%20Resear
ch%20However%2C%20the%20focus%20on,lead%20to%20researchers%20over
looking%20broader%20themes%20and%20relationships.

Dewan, M. C., Rattani, A., Gupta, S., Baticulon, R. E., Hung, Y.-C., Punchak, M.,
Agrawal, A., Adeleye, A. O., Shrime, M. G., Rubiano, A. M., Rosenfeld, J. V., &
Park, K. B. (2018). Estimating the global incidence of traumatic brain injury.
Journal of Neurosurgery, *130*(4), 1039-1408.

<https://doi.org/10.3171/2017.10.jns17352>

Dixon, K. J. (2017). Pathophysiology of traumatic brain injury. *Physical Medicine and
Rehabilitation Clinics*, *28*(2), 215

Dijkers, M. P. (2004). Quality of life after traumatic brain injury: a review of research
approaches and findings. Presented in part at "State of the Science Conference on
Community Integration of Individuals with traumatic brain injury," April 24–26,
2002, Washington, DC. *Archive of Physical Medicine and Rehabilitation*, *85*, 21-
35. Supplement 2. <https://doi.org/10.1016/j.apmr.2003.08.119> -225.

<https://doi.org/10.1016j.pmr.2016.12.001>

Dodgson, J. E. (2019). Reflexivity in qualitative research. *Journal of Human Lactation*,
35(2), 220-222. <https://doi.org/10.1177/0890334419830990>

Dorsen, C., & Van Devanter, N. (2016). Open arms conflicted hearts: Nurse
practitioner's attitudes towards working with lesbian, gay, and bisexual patients.
Journal Clinical Nursing, *25*(23-24), 3716–3727.

<https://doi.org/10.1111/jocn.13464>

- Douglas, J., Bigby, C., & Smith, E. (2020). Final report: Building capability to support client decision-making. *La Trobe University*.
<https://doi.org/10.26181/5fa20ac4bba07>
- Douglas, J. M., & Bigby, C. (2020). The development of an evidence-based practice framework to guide decision-making support for people with cognitive impairment due to acquired brain injury or intellectual disability. *Disability and Rehabilitation*, 42(3), 434-441. <https://doi.org/10.1080/09638288.2018.1498546>
- Dreher, M. M., Hughes, R. G., Handley, P. A., & Tavakoli, A. S. (2019). Improving retention among certified nursing assistants through compassion fatigue awareness and self-care skills. *Journal of Holistic Nursing*, 37(3), 296-308.
<https://doi.org/10.1177/0898010119834180>
- Durodolu, O. O. (2016). Technology acceptance model as a predictor of using information system' to acquire information literacy skills. *Library Philosophy and Practice (e-journal)*, 1450. The University of Nebraska-Lincoln.
<http://digitalcommons.unl.edu/libphilprac/1450>
- Ejim, M. (2020). *Integrity versus Despair: Perceptions of aging among African Americans in late life* (Publication No. 27664030) [Doctoral dissertation, Capella University]. ProQuest Dissertations Publishing.
- Elkind, D. (1970). The New York Times Magazine. Reprinted by permission from The New York Times Company. Supplemental teaching handouts, Module III, 1-26.
- Elmore, S. A. (2019). *A qualitative study on the relationship of unmet needs for persons with brain injuries related to secondary diagnoses, age of onset, for the injured*

person, family, and HSPs (Publication No. 13806808) [Doctoral dissertation, Northcentral University]. ProQuest Dissertations Publishing.

Ergetie, T., Yohanes, Z., Asrat, B., Demeke, W., Abate, A., & Tareke, M. (2018).

Perceived stigma among non-professional HSPs of people with severe mental illness, Bahir Dar, northwest Ethiopia. *Annual General Psychiatry 17*, 42.

<https://doi.org/10.1186/s12991-018-0212-4>

Even, G., Spaak, J., von Arbin, M., Franzen-Dahlin, A., & Stenfors, T. (2019).

Healthcare professionals' experiences and enactment of person-centered care at a multidisciplinary outpatient specialty clinic. *Journal Multidisciplinary Health, 12*, 137-148. <https://doi.org/10.2147/JMDH.S186388>.

Family HSPs Alliance, National Center on Caregiving. HSPs statistics: Work and

caregiving. (<https://www.HSPs.org/resource/HSPs-statistics-work-and-caregiving/>

Fraser, S., Lagacé, M., Bongué, B., Ndeye, N., Guyot, J., Bechard, L., Garcia, L., Taler,

V., Adam, S., Beaulieu, M., Bergeron, C. D., Boudjemadi, V., Desmette, D.,

Donizzetti, A. R., Éthier, S., Garon, S., Gillis, M., Levasseur, M., Lortie-lussier,

M., Marier, P., Robitaille, A., Sawchuk, K., Lafontaine, C., & Tougas, F. (2020).

Ageism and COVID-19: What do our society's responses say about us? *Age and Aging, 49*(5) 692–695. <https://doi.org/10.1093/ageing/afaa097>

Friesen, M. K., MacKenzie, D. E., Westwood, D. A., & Boe, S. G. (2019). Mild

traumatic brain injury and chronic cognitive impairment: A scoping review. *PLOS One, 14*(6), e0218423. <https://doi.org/10.1371/journal.pone.0218423>

Frisch, M. B. (2013). Evidence-based well-being/positive psychology assessment and

intervention with quality-of-life therapy and coaching and the quality-of-life inventory (QOLI). *Social Indicators Research*, 114, 193.–227.

<https://doi.org/10.1007/s11205-012-0140-7>

Fu, W. W., Fu, T. S., Jing, R., McFaul, S. T., & Cusimano, M. D. (2017). Predictors of falls and mortality among elderly adults with traumatic brain injury: A nationwide, population-based study. *PLOS One*, 12(4), e0175868.

<https://doi.org/10.1371/journal.pone.0175868>

Fulmer, T., Reuben, D. B., Auerbach, J., Fick, D. M., Galambos, C. (2021). Actualizing better health and health care for older adults. *Health Affairs*,

40(2). <https://doi.org/10.1377/hlthaff.2020.01470>

Fusch, P., Fusch, G. E., & Ness, L. R. (2018). Denzin's paradigm shift: Revisiting triangulation in qualitative research. *Journal of Social Change*, 10(1), 2, 19-32.

<http://doi.org/10.5590/JOSC.2018.10.1.02>

Gao, Z., Lee, J-E., McDonough, D. J., & Albers, C. (2020). Virtual reality exercise as a coping strategy for health and wellness promotion in older adults during the COVID-19 Pandemic, *The Journal of Clinical Medicine*, 9(6),

1986. <https://doi.org/10.3390/jcm9061986>

Galgano, M., Toshkezi, G., Qiu, X., Russell, T., Chin, L., & Zhao, L.-R. (2017). traumatic brain injury: Current treatment strategies and future endeavors.

Traumatic Brain Injury, 26(7), 1118-1130.

<https://doi.org/full/10.1177/0963689717714102>

García, R. G., Alonso, M., Llamazares, S., & Llamazares-Sanchez, M.

- L. (2019). Factorial validity of the Maslach Burnout Inventory-Human Services Survey (MBI-HSS) in a sample of Spanish social workers. *Journal of Social Service Research, 45*(2), 207-219.
<https://doi.org/10.1080/01488376.2018.1480549>
- Gardener, R. C., Byers, A. L., Barnes, D. E., Li, Y., Boscardin, J., & Yaffe, K. (2018). mild traumatic brain injury and risk of Parkinson disease: A chronic effects of neurotrauma consortium study. *Neurology, 90*(20), e1771-e1779.
<https://doi.org/10.1212/WNL.0000000000005522>
- Gardner, R. C., Byers, A. L., Barnes, D. E., Li, Y., Boscardin, J., & Yaffe, K. (2018). Mild TBI and risk of Parkinson's disease. Chronic effects of neurotrauma consortium study. *Neurology*. <https://doi.org/10.1212/wnl.0000000000005522>
- Gardner, R. C., O'Connor, K. D., Morrissey, M. R., & Manley, G. (2018). Geriatric traumatic brain injury: Epidemiology, outcomes, knowledge gaps, and future directions. *Neurotrauma, 5*(7), 889-906. <https://doi.org/10.1089/neu.2017.5371>
- Gardner, R. C., Langa, K. M., & Yaffe, K. (2017). Subjective and objective cognitive function among older adults with a history of traumatic brain injury: A population-based cohort study. *PLOS Medical, 14*(3), E1002246.
<https://doi.org/10.1371/journal.pmed.1002246>
- Gardner, R. C., & Yaffe, K. (2015). Epidemiology of mild traumatic brain injury and neurodegenerative disease. *Molecular and Cellular Neuroscience, 66*(Part B), 75-80. <https://doi.org/10.1016/j.mcn.2015.03.001>
- Gaunt, A. (2021). The top ten senior HSPs duties you may encounter.

<https://www.aplaceformom.com/HSPs-resources/articles/HSPs-duties>

- Gipson, L. (2017). Challenging neoliberalism and multicultural love in art therapy. *Art Therapy, 34*(3), 112-117. <https://doi.org/10.1080/07421656.2017.1353326>
- Genoe, M. R., & Liechty, T. (2016). Using our whole selves: Our experiences with reflexivity while researching a community arts-based leisure program. *Leisure/Loisir, 40*(4), 469-492.
- Gerino, E., Rolle, L., Sechi, C., & Brustia, P. (2017). Loneliness, resilience, mental health, and quality of life in old age: a structural equation model. *Frontiers In Psychology, 8*. <https://doi.org/10.3389/psyg.2017.02003>
- Gonzalez-Rodriguez, R., Alonso, J. D., Diego, C. V., & Padin, P. F. (2020). Psychometric properties of the Maslach Burnout Inventory - Human Services in social work professionals in Spain. *Health and Social Care in the Community, 1-8*. <https://doi.org/10.1111/hsc.13256>
- Goodwin, C. (2016). Person-centered care: A definition and essential elements. The American geriatrics society expert panel on person-centered care. *Journal of The American Geriatrics Society, 64*(1), 15-18. <https://doi.org/10.1111/jgs.13866>
- Gov.UK. (2020). Mixed methods study. <https://www.gov.uk/guidance/mixed-methods-study>
- Gracey, F., Evans, J. J., & Malley, D. (2009). Capturing process and outcome in complex rehabilitation interventions: a "Y-shaped" model. *Neuropsychological Rehabilitation, 19*, 867-890. <https://www.doi.org/10.1080/09602010903027763>
- Graham, J. (2020). Life expectancy for older adults increasingly depends on where they

live. Seniors in urban areas and on the coasts are surviving longer than their counterparts in rural areas and the nation's interior.

<https://www.benefitspro.com/2020/03/13/life-expectancy-for-older-adults-increasingly-depends-on-where-they-live/?slreturn=20210919010448>

- Gravina, N., Villacorta, J., Albert, K., Clark, R., Curry, S., & Wilder, D. (2018). A literature review of organizational behavior management interventions in human service settings from 1990 to 2016. *Journal of Organizational Behavior Management, 38*(2-3), 191-224. <https://doi.org/10.1080/01608061.2018.1454872>
- Gray, L. M., Wong-Wylie, G., Rempel, G. R., & Cook, K. (2020). Expanding qualitative research interviewing strategies: Zoom video communications. *The Qualitative Report, 25*(5), 1292-1301. <https://doi.org/10.46743/2160-3715/2020.4212>
- Griffin, J. M., Lee, M. K., Bangerter, L. R., Van Houtven, C. H., Friedemann-Sánchez, G., Phelan, S. M., Carlson, K. F., & Meis, L. A. (2017). Burden and mental health among HSPs of veterans with traumatic brain injury/polytrauma. *American Journal of Orthopsychiatry, 87*(2), 139-148. <https://doi.org/10.1037/ort0000207>
- Griffith, T. H. (2016). Application of summative content analysis to a postal questionnaire *Nurse Researcher, 23*(3), 30-36. <https://doi.org/10.7748/nr.23.3.30.s7>
- Guest, G., MacQueen, K. M., & Namey, E. E. (2012). *Applied Thematic Analysis*. Sage.
- Gutierrez, F. L., & Ochoa, S. F. (2017). It takes at least two to tango: Understanding the cooperative nature of elderly caregiving in Latin America. *ACM Conference of Computer Supported Cooperative Work and Social Computing, 1618-1630*.

<https://doi.org/10.1145/2998181.2998314>

Gupta, S., & Sahoo, S. (2020). Pandemic and mental health of the front-line healthcare workers: a review and implications in the Indian context amidst COVID-19. *General Psychiatry*, 33(5), e100284. <https://www.doi.org/10.1136/gpsych-2020-100284><https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7415074/>

Hac, N. F., & Gold, D. R. (2022). Neuro-visual and vestibular manifestations of concussion and Mild TBI. *Current Neurological Neurosciences*.
<http://doi.org/10.1007/s11910-022-01184-9>.

Halarewicz, A. K. (2020). Facilitators and barriers for home health aides detecting and reporting elder abuse in New York City (Publication No. 27993158) [Doctoral dissertation, City University of New York]. ProQuest Dissertations Publishing.

Halifax Repair Center. (2017). traumatic brain injury research partnership business plan.

Harrison, A. L., Hunter, E. G., Thomas, H., Bordy, P., Stokes, E., & Kitzman, P. (2017). Living with traumatic brain injury in a rural setting supports and barriers across the continuum of care, *Disability and Rehabilitation*, 39(20), 2071-2080, <http://doi.org/10.1080/09638288.2016.1217081>

Haxeltine, A., Pel, B., Wittmayer, J., Dumitru, A., Kemp, R., & Avelino, F. (2017). Building a middle-range theory of transformative social innovation; theoretical pitfalls and methodological responses. *European Public and Social Innovation*, 2(1).

Hayes, J. P., Logue, M. W., Sadeh, N., Spielberg, J. M., Verfaellie, M., Hayes, S. M., Reagan, A., Salat, D. H., Wolf, E. J., McGlinchey, R. E., Milberg, W. P., Stone,

- A., Schichman, & Miller, M. W. (2017). mild traumatic brain injury is Associated with reduced cortical thickness in those at risk for Alzheimer's disease. *Brain, 140*(3), 813-825. <https://doi.org/10.1093/brain/aww344>
- Hayman, B., Wilkes, L., & Jackson, D. (2012). Journaling: Identification of challenges and reflection on strategies. *Nurse Researcher, 19*(3), 27-31. <https://doi.org/10.7748/nr2012.04.19.3.27.c9056>
- Health Innovation Network. (2017). What is person-centered care, and why is it important? https://healthinnovationnetwork.com/system/ckeditor_assets/attachments/41/what_is_person-centred_care_and_why_is_it_important.pdf
- Henderson, H. (2018). Difficult questions of difficult questions: the role of the researcher and transcription styles. *International Journal of Qualitative Studies in Education, 31*(2), 143-157. <https://doi.org/10.1080/09518398.2017.1379615>
- Herrmann, L., & Deatrck, J. A. (2019). Experiences and perceptions of hospitalization and recovery of older adults and their HSPs following traumatic brain injury: “Not Knowing.” *Research In Gerontological Nursing, 12*(5), 227-238. <https://doi.org/10.3928/19404921-20190610-01>
- Ho, A., Ashe, M. C., DeLongis, A., Graf, P., Khan, K. M., & Hoppmann, C. A. (2016). Gender differences in pain-physical activity linkages among older adults: *Lessons learned from daily life approach. Pain Research Management, 19*31590. <https://doi.org/10.1155/2016/1931590>
- Holterman, S., Lahr, M., Wynia, K., Hettinga, M., & Buskens, E. (2020). Integrated care

for older adults: A struggle for sustained implementation in the northern Netherlands. *International Journal of Integrated Care*, 20(3).

<https://doi.org/10.5334/ijic.5434>

Horne, K.S., Filmer, H.L., Nott, Z.E., Hawi, Z., Pugsley, K., Mattingley, J. B. & Dux, P. E. (2021). Evidence against benefits from cognitive training and transcranial direct current stimulation in healthy older adults. *Nature Human Behavior*, 5, 146–158. <https://doi.org/10.1038/s41562-020-00979-5>

Horseman, Z., Hamilton, S., Noble, H., Jones, A., Rafferty, A. M., Holloway, A., Reid, J., Harris, R., Smith, P., & Kelly, D. (2020). Identifying the barriers and opportunities of the executive nurse director role in the UK: A scoping review. *Nursing Management*, 27(6), 21-27. <https://doi.org/10.7748/nm.2020/e1948>

Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288. <https://doi.org/10.1177/1049732305276687>

Human Services Professionals Association. (n.d.). *About Human Services Professionals Association (HSPA)*. <https://www.hspa.ca/>

HumanServicesEdu.org. (n.d.). *Human Services Edu: Educating to better the lives of others*. <https://www.humanservicesedu.org/>

Horrigan-Kelly, M., Millar, M., & Dowling, M. (2016). Understanding the key tenets of Heidegger's philosophy for interpretive phenomenological research. *International Journal of Qualitative Methods*, December-January 1-8. <https://doi.org/10.1177/1609406916680634>

- Hume, C. H., Wright, B. J., & Kinsella, G. J. (2021). Systemic review and meta-analysis of outcome after mild traumatic brain injury in older people. *Journal of International Neuropsychological Society*, 1-20.
<https://doi.org/10.1017/S1355617721000795>
- Hunt, C., Zahid, S., Ennis, N., Michalak, A., Masanic, C., Vaidyanath, C., Bhalerao, S., Cusimano, M. D., & Baker, A. (2019). QOL measures in older adults after traumatic brain injury: a systematic review. *Quality Life Research*, 28, 3137–3151. <https://doi.org/10.1007/s11136-019-02297-4>
- IFL Science. (n.d.). What does a concussion do to the brain?
<https://www.iflscience.com/brain/what-does-concussion-do-brain/>
- Irving, J., Davis, S., & Collier, A. (2017). Aging with purpose: Systemic search and review of literature pertaining to older adults and purpose. *The International Journal of Aging and Development*. <https://doi.org/10.1177/0091415017702908>
- Jamieson, M., Jack, R., O'Neill, B., Cullen, B., Lennon, M., Brewster, S., & Evans, J. (2020). Technology to encourage meaningful activities following brain injury. *Disability and Rehabilitation: Assistive Technology*, 15(4), 453-466.
<https://doi.org/10.1080/17483107.2019.1594402>
- Jones, K. F., Pryor, J., Care-Unger, C., & Simpson, G. K. (2018a). Spirituality and its relationship with positive adjustment following traumatic brain injury: A scoping review. *Brain Injury*, 32(3-14), 1612-1622.
<https://doi.org/10.1080/02699052.2018.1511066>
- Jones, J. P., Walker, M. S., Drass, J. M., & Kaimal, G. (2018b). Art therapy interventions

- for active-duty military service members with post-traumatic stress disorder and traumatic brain injury. *International Journal of Art Therapy*, 23(2), 70-85. <https://doi.10.1080/17454832.2017.1388263>
- Jones, W. E., Bengtson, J. F., & Scullin, M. K. (2021). Preserving prospective memory in daily life: A systematic review and meta-analysis of mnemonic strategy, cognitive training, external memory aid, and combination interventions. *Neuropsychology*, 35(1), 123–140. <https://doi.org/10.1037/neu0000704>
- Joy, M., McGagh, D., Jones, N., Liyanage, H., Sherlock, J., Parimalanathan, V., Akinyemi, O., van Vlymen, J., Howsam, G., Marshall, M., Hobb, R. F. D., & de Lusignan S. (2020). Reorganization of primary Care for older adults during COVID-19: a cross-sectional database study in the United Kingdom. *British Journal of General Practice*. 70(698), e540-e547. <https://doi.org/10.3399/bjgp20x710933>
- Kamal, S. A., Hussain, S., Shafiq, M., & Jahanzaib, M. (2018). Investigating the adoption of telemedicine services: An empirical study of factors influencing physicians' perspective in Pakistan. *The Nucleus*, 55(3), 153-163. <http://www.thenucleuspak.org.pk/index.php/Nucleus/article/view/289/243>
- Kanno, H., & Giddings, M. M. (2017). Hidden trauma victims: Understanding and preventing traumatic stress in mental health professionals. *Social Work in Mental Health*, 15(3), 331-353. <https://doi.org/10.1080/15332985.2016.1220442>
- Kasada, E. T. & Levine, A. (2020). Post-traumatic stress disorder: A differential diagnostic consideration for COVID-19 survivors, *The Clinical*

Neuropsychologist, 34(7-8), 1498-1514.

<https://doi.org/10.1080/13854046.2020.1811894>

Kahlke, R. (2018). Reflection/Commentary on a Past Article: “Generic Qualitative Approaches: Pitfalls and benefits of Methodological Mixology. *International Journal of Qualitative Methods*, 17(1),

<https://doi.org/10.1177/160940691401300119>

Katz, D., Cohen, S., & Alexander, M. P. (2015). mild traumatic brain injury. *Handbook Clinical Neurology*, 127, 131-56. <https://doi.org/10.1016/B978-0-444-52892-6.00009-X>

Keelan, R. E., Mahoney, E., Sherer, M., Hart, T., Giacino, J., Bodien, Y. G., Nakase, Richardson, R., Dams-O'Connor, K., Novack, T. A., & Vanderploeg, D. (2019). Neuropsychological characteristics of the confusional state following traumatic brain injury. *Journal of the International Neuropsychological Society*, 25(3), 302-313. <https://doi.org/10.1017/S1355617718001157>

Kelly, B., Margolis, M., & McCormack, L., LeBaron, P.A., & Chowdhury, D. (2017). What affects people’s willingness to participate in qualitative research? An experimental comparison of five incentives. *Field Methods*, 29(4), 333-350. <https://doi.org/10.1177/1525822X17698958>

Kennedy, D. M. (2016). Is it any clearer? Generic qualitative inquiry and the VSAIEEDC model of data analysis. *Qualitative Report*, 21(8), 1369-1379. <https://doi.org/10.46743/2160-3715/2016.2444>

Khalil, K., Das, P., Kammowanee, R., Saluka, D., Miltra, P., Das, S., Gjara, D., Bjatt, D.,

- Kumar, M., & Framzen, S. (2021). Ethical considerations of phone-based interviews from three studies of COVID-19 impact in Bihar, India. *BMJ Global Health*, 6(5). <http://doi.org/10.1136/bmjgh-2021-5981>
- Khankeh, H., Ranijbar, M., Khorasani-Zavareth, D., Zargham-Boroujeni, A., & Johansson, E. (2015). Challenges in conducting qualitative research in health: A conceptual paper. *Iran Journal Nursing Midwifery Research*, 20(6), 635-641. <https://doi.org/10.4103/1735-9066.170010>
- Khoury, R., & Karam, G. (2020). Impact of COVID-19 on mental healthcare of older adults: Insights from Lebanon (Middle East). *Cambridge University Press*. <https://www.cambridge.org/core/journals/international-psychogeriatrics/article/impact-of-covid19-on-mental-healthcare-of-older-adults-insights-from-lebanon-middle-east/D02AA975AB854202CA3DA2EC36BAF57F>
- Kiewra, K. A. (1985). Investigating notetaking and review: A depth of processing alternative. *Educational Psychologist*, 20, 23-32. https://doi.org/10.1207/s15326985ep2001_4
- Kim, K. S., Kwekkeboom, K. L., Roberts, T., & Ward, E. (2021). Biopsychosocial characteristics associated with engagement in artmaking among older adults. *Geriatric Nursing*, 42(3), 727-733. <https://doi.org/10.1016/j.gerinurse.2021.03.011>
- Kim, P. K. H. (2017). *Serving the elderly: Skills for practice*. Aldine De Gruyter.
- Kiruthika, A. (2019). *Psychiatric morbidity in patients with traumatic brain injury* (Publication No. D42568264) [Master's thesis, Madras Medical College]. The

Tamil Nadu Dr. M. G. R. Medical University. <http://repository-tnmgrmu.ac.in/id/eprint/10970>

Klaib, A. F., Alsrehin, N. O., Melhem, W. Y., & Bashtawi, H. O. (2019). IoT smart Home using eye-tracking and voice interfaces for elderly and special needs people. *Journal of Communications, 14*(7), 614-621.

<http://www.jocm.us/uploadfile/2019/0610/20190610053627339.pdf>

Kline, A. E., Leary, J. B., Radabaugh, H. L., Cheng, J. P., & Bondi, C. O. (2016). Combination therapies for neurobehavioral and cognitive recovery after experimental traumatic brain injury: is it better? *Progress in Neurobiology, 142*, 45-67. <https://doi.org/10.1016/pneurobio.2016.05.002>

Kline, T. (2016). Art therapy for individuals with traumatic brain injury: A comprehensive neurorehabilitation-informed approach to treatment. *Art Therapy: Journal of the American Art Therapy Association, 33*(2), 67-73.

<https://doi.org/10.1080/07421656.2016.1164002>

Knox, K., Fejzic, J., Mey, A., Fowler, J. L., Kelly, F., McConnell, D., Hattingh, L., & Wheeler, A. (2019). Mental health consumer and HSPs perceptions of stigma in Australian community pharmacies.

https://espace.curtin.edu.au/bitstream/handle/20.500.11937/19022/219303_219303.pdf?ence_2&isAllowed-y

Kontoangelos, K., Economou, M., & Papageorgiou. (2020). Mental health effects of COVID-19 pandemic: A review of clinical and psychological traits. *Psychiatry Investigation, 17*(6), 491505. <https://doi.org/10.30773/pi.2020.0161>

- Kothari, M., Sasidharan, R., Koothari, F., Neto, R. S., Kumar, A., & Nielsen, J. F. (2017). Oral health status in patients with acquired brain injury: A systemic review. *Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology*, *123*(2), 205-219.e7
- Kourkouta, L., Iliadis, C., & Monios, A. (2015). Psychosocial issues in elderly. *Progress in Health Sciences*, *5*(1), 232-237.
<http://cejsh.icm.edu.pl/cejsh/element/bwmeta1.element.ceon.element-932dd247-f74732bd-88de-cd8afd14234d>
- Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *European Journal of General Practice*, *24*(1), 120-124. <https://doi.org/10.1080/13814788.2017.1375092>
- Kovar, I. (2019). Use of virtual reality as a tool to overcome the post-traumatic stress disorder of pensioners. *International Journal on Advanced Science, Engineering, and Information Technology*, *9*(3), 841-848.
<https://doi.org/10.18517/ijaseit.9.3.8245>
- Kruithof, N., Traa, M. J., Karabatzakis, M., Polinder, S., de Vries, J., & de Jongh, M. A. C. (2018). Perceived changes in QOL in trauma patients: A focus group study. *Journal of Trauma Nursing*, *25*(3), 177-186.
<https://doi.org/10.1071/JTN.00000000000000364>
- LaBelle, J. T., & Belknap, G. (2016). Reflective journaling: Fostering dispositional development in preservice teachers. *Reflective Practice*, *17*(2), 125-142.
<https://doi.org/10.1080/14623943.2015.1134473>
- Lamb, D. G., Porges, E. C., Lewis, G. F., & Williamson, J. G. (2017). Non-invasive

vagal stimulation effects on hyperarousal and autonomic state in patients with post-traumatic stress disorder and history of mild traumatic brain injury:

Preliminary evidence. *Frontiers in Medicine*, 4, 124.

<https://doi.org/10.3389/fmed.2017.00124>

Latella, D., Grazia M., De Luca, R., Maresca, G., Piazzitta, D., Sciarrone, F., Carioti, L., Manuli, A., Bramanti, P., & Calabro, R. S. (2018). Changes in sexual functioning following traumatic brain injury: An overview on a neglected issue, *Journal of Clinical Neuroscience*, 58, 1-6. <https://doi.org/10.1016/j.jocn.2018.09.030>.

Lethin, C., Renom-Guiteras, A., Zwakhalen, S., Soto-Martin, M., Saks, K., Zabalegui, A., Challis, D. J., Nilsson, C., & Karlsson, S. (2017) Psychological well-being over time among informal caregivers caring for persons with dementia living at home, *Aging & Mental Health*, 21:11, 1138-1146, <https://doi.org/10.1080/13607863.2016.1211621>

Leung, M., Famakin, I., & Olomolaiye, P. (2017). Effect of facilities management components on the quality of life of Chinese elderly in care and attention homes. *Facilities*, 35(5-6), 270-285. <https://doi.org/10.1108/F-03-2016-0032>

Lever, M. J., Lefebvre, H., Levasseur, M., Gélinas, I., Mckerall, M. L., Roy, O., & Proulx, M. (2017). Towards a better understanding of the impact of the sequelae of traumatic brain injury on the social participation of seniors. *Archives of Nursing Practice and Care*, 3(30), 68-76. <https://doi.org/10.17352/anpc.000029>.

Li, M., Zhao, Z., Yu, G., & Zhang, J. (2016). Epidemiology of traumatic brain injury over the world: A systemic review. *General Medicine*, 4(5), e275.

<https://doi.org/10.4172/227-5146.1000275>

Li, W., Ya-Ting, W., Thompson, H., Cyong-Yi, L., Yu-Kai, S., Pin-Yuan, C., Ching-Yi, C., Yeu-Hui, C., Ya-Jui, L., Chu-Ting, C., Ching-Chang, C., Hsia-Ting, C., & Hsia-Yean, C. (2020). Sleep disturbances following traumatic brain injury in older adults: A comparison study. *Journal of Head Trauma Rehabilitation*, 35(4), 288-295. <https://doi.org/10.1097/HTR.0000000000000563>

Li, Y., Li, Y., Li, X., Zhang, S., Zhao, J., Zhu, X., & Tian, G. (2017). Head injury as a risk factor for dementia and Alzheimer's disease: A systematic review and meta-analysis of observational studies. *PLOS One*, 12(1), e0169650. <https://doi.org/10.1371/journal.pone.0169650>

Lieshout, K., Oates, J., Baker, A., Unsworth, C. A., Cameron, I. D., Schmidt, J., & Lannin, N. A. (2020). Burden and preparedness amongst informal caregivers of adults with moderate to severe traumatic brain injury. *International Journal of Environmental Research and Public Health*, 17(17), 6386; <https://doi.org/10.3390/ijerph17176386>

Lannin, N. A. (2020). Burden and preparedness amongst informal caregivers of adults with moderate to severe traumatic brain injury. *International Journal of Environmental Research and Public Health*, 17(17), 6386; <https://doi.org/10.3390/ijerph17176386>

Liu, W., Tripp-Reimer, T., Williams, K., & Shaw, C. (2018). Facilitators and barriers to optimizing eating performance among cognitively impaired older adults: A qualitative study of nursing assistants' perspective. *Dementia*, 19(6), 2090-2113.

<https://doi.org/10.1177/1471301218815053>

- Lundebjerg, N. E., Trucil, E. E., Hammond, E. C., & Applegate, W. B. (2017). When it comes to older adults, language matters: Journal of the American Geriatric Society adopts modified American Medical Association Style. *Journal of the American Geriatrics Society*, *65*(7), 1386-1388.
- MacQueen, R. M. (2016). *Masculine identity after traumatic brain injury* (Publication No. 60949) [Doctoral dissertation, University of East Anglia].
https://ueaeprints.uea.ac.uk/id/eprint/60949/1/MacQueen_Thesis_Masculine_Identity_T117.08.pdf
- Maggio, M. G., De Luca, R., Molonia, F., Porcari, B., Destro, M., Casella, C., Salvati, R., Bramanti, P., & Calabro, R. S. (2019). Cognitive rehabilitation in patients with traumatic brain injury: A narrative review on the emerging use of virtual reality. *Journal of Clinical Neuroscience*, *61*, 1-4.
<https://doi.org/10.1016/j.jocn.2018.12.020>
- Mai, C., Fung, H. H., & Tsang, H. L. V. (2021). Older adults pursue more autonomy during the Pandemic: An explanation by social obligation. *Innovation in Aging*, *5*, 193. <https://doi.org/1093/geroni/gab046.73>
- Makley, M. J., Gerber, D., Newman, J. K., Philippus, A., Monden, K. R., Biggs, J., Spier, E. Tarwater, P., & Weintraub, A. (2020). Optimized sleep after brain injury (OSABI): A pilot study of a sleep hygiene intervention for individuals with moderate to severe traumatic brain injury. *Neurorehabilitation Neural Repair*, *34*(2), 111-121. <https://doi.org/10.1177/1545968319895478>

- Manley, G. T., Macdonald, C. L., Markowitz, A. J., Stephenson, D., Robbins, A., Gardner, R. C., Winkler, E., Bodien, Y. G., Taylor, S. R., Yue, J. K., Kannan, L., Kumar, A., Mccrea, A., Wang, K. K., Diaz-Arrastia, R., Dikman, S., Giacino, J., Levin, H., Mukherjee, P., & Yuh, E. (2017). The traumatic brain injury endpoints development (TED) initiative: Progress on public-private regulatory collaboration to accelerate diagnosis and treatment of traumatic brain injury. *Journal of Neurotrauma*, *34*(19), 2721-2730. <https://doi.org/10.1089/neu.2016.4729>
- Mantovani, E., Zucchella, C., Bottiroli, S., Federico, A., Giugno, R., Sandrini, G., Chiamulera, C., & Tamburin, S. (2020). Telemedicine and virtual reality for cognitive rehabilitation: A roadmap for the COVID-19 pandemic. *Frontier Neurology*, *11*, 926. <https://www.doi.org/10.3389/fneur.2020.00926>
- Markovic, S. J., Fitzgerld, M., Peiffer, J. J., Scott, B. R., Rainey-Smith, S. R., Sohrabi, H. R., & Brown, B. M. (2021). The impact of exercise, sleep, and diet on neurocognitive recovery from mild traumatic brain injury in older adults: A narrative review. *Ageing Research Reviews*, *68*, 101322. <https://doi.org/10.1016/j.arr.2021.101322>
- Marin, J. R., Weaver, M. D., & Mannix, R. C. (2017) Burden of USA hospital charges for traumatic brain injury, *Brain Injury*, *31*(1), 24-31. <https://doi.org/10.1080/02699052.2016.1217351>
- Marshall, S., Bayley, M., Mccullagh, S., Velikonja, D., Berrigan, L., Ouchterlony, D., & Weegar, K. (2015). Updated clinical practice guidelines for concussion/Mild traumatic brain injury and persistent symptoms. *Brain Injury*, *29*(6), 688-700.

<https://doi.org/10.3109/02699052.2015.1004755>

Maslow, A. H. (1962). *Toward a psychology of being*. Princeton.

Maslow, A. H. (1999). *Toward a psychology of being* (3rd ed.) John Wiley and Sons.

McCulloch, K. L., Osborne, M. B. A., & Ramsey, C. R. (2020). Geriatric mild traumatic brain injury. *Current Geriatric Report, 9*, 142–153.

<https://doi.org/10.1007/s13670-020-00329-3>

McLeod, J. (2001). *Qualitative research in counseling and psychotherapy*. Sage.

McMaster University. (2018). Addressing the social needs of older adults: A contributing factor to their health and well-being. *Optimal Aging Portal*.

mcmasteroptimalaging.org

Milos, A. E. E., & Ikonovic, D. (2020). Brain injury-induced dysfunction of the blood-brain barrier as a risk for dementia. *Experimental Neurology, 328*, 113257.

<https://doi.org/10.1016/expneurol.2020.113257>

Mollayeva, T., Mollayeva, S., & Colantonio, A. (2018). Traumatic brain injury: sex, gender, and intersecting vulnerabilities. *Natural Review Neurology, 14*, 711–722.

<https://doi.org/10.1038/s41582-018-0091-y>

Moreno, A., Gan, C., & Zasler, N. D. (2018). A transdisciplinary approach to sexuality neurorehabilitation, changing the culture of Neuro-disability through language and sensitivity of providers: Creating a safe place for LGBTQIA+ people.

Neurorehabilitation, 41(2), 375-393. <https://doi.org/10.3233/NRE-172187>.

Mushta, J., Rush, K. L., & Andersen, E. (2017). Failure to rescue as a nurse-sensitive indicator. *Nursing Forum, 53*(1), 84-92. <https://doi.org/10.1111/nuf.12215>

- Meyer, K. & Willis, R. (2019). Looking back to move forward: The value of reflexive journaling for novice researchers. *Journal of Gerontological Social Work*, 62(5), 578-585. <https://doi.org/10.1080/01634372.2018.1559906>
- Mozley, C., Sutcliffe, C., Bagley, H., Cordingley, L., Challis, D., Huxley, P., & Burns, A. (2022). *Towards Quality Care: Outcomes for older people in homes*. Routledge. <https://doi.org/10.4324/978135114460>
- MVOrganizing. (2021) What are the advantages and disadvantages of a case study? <https://www.mvorganizing.org/what-are-the-advantages-and-disadvantages-of-case-study/>
- Nakase-Richardson, R., Schwartz, D. J., Drasher-Phillips, L., Ketchum, J. M., Calero, K., Dahdah, M. N., Monden, K. R., Bell, K., Magalang, U., Hoffman, J. M., Whyte, J., Bogner, J., & Zeitzer, J. M. (2020). Comparative effectiveness of sleep apnea screening instruments during inpatient rehabilitation following moderate to severe TBI rise. *Archives of Physical Medicine and Rehabilitation*, 101, 283-96
- National Association of State Head Injury Administrators. (n.d.). *Traumatic brain injury facts and older adults*. [https://www.biav.net/wp-content/uploads/2017/06/TBI Facts_Older-Adults.pdf](https://www.biav.net/wp-content/uploads/2017/06/TBI_Facts_Older-Adults.pdf)
- National Center on Caregiving. (n.d.). HSPs Statistics: Work and caregiving. <https://www.HSPs.org/resource/HSPs-statistics-work-and-caregiving/>
- National Conference of State Legislatures. (n.d.). Traumatic brain injury legislation. <https://www.ncsl.org/research/health/traumatic-brain-injury-legislation.aspx>
- National Institute of Neurological Disorders and Stroke. (NINDS). (n.d.).

<https://www.ninds.nih.gov>

National Organization for Human Services. (n.d.). What are human services?

<https://www.nationalhumanservices.org/what-is-human-services>

Nerenberg, L. (2019). *Elder justice, ageism, and elder abuse (Critical topics in an aging society)*. Springer.

Newell, J. M. (2017). *Cultivating professional resilience in direct practice: A guide for human service professionals*. Columbia University Press.

Nguyen, R., Fiest, K., Mcchestney, J., Kwon, C., Jette, N., Frolkis, A., & Gallagher, C. (2016). The global incidence of traumatic brain injury: A systemic review and meta-analysis. *Canadian Journal of Neurological Science*, 43(6), 774-785.
<https://doi.org/10.1017/cjn.2016.290>

NINDS. (2019). Traumatic brain injury information page. What research is being done?
<https://www.ninds.nih.gov/Disorders/All-Disorders/Traumatic-Brain-Injury-Information-Page>.

NIH Eunice Kennedy Shriver National Institute of Child Health and Human Development. (2020). How do healthcare providers diagnose traumatic brain injury (TBI)?
<https://www.nichd.nih.gov/health/topics/tbi/conditioninfo/diagnose#:~:text=NICHDsupported%20research%20has%20found%2C%20however%2C%20that%20diagnosis%20of,than%2030%20minutes%20and%20up%20to%2024%20hours>

NINDS (n.d.). Traumatic brain injury information page. What research is being done?
<https://www.ninds.nih.gov/Disorders/All-Disorders/Traumatic-Brain-Injury->

Information-Page

- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International journal of qualitative methods, 16*(1), 1-13. <https://doi.org/10.1177/1609406917733847>
- O'Hara, K., Forsyth, K., Webb, R., Senior, J., Hayes, A. J., Challis, D., Fazel, S., & Shaw, J. (2016). Links between depressive symptoms and unmet health and social care needs among older prisoners, *Age and Ageing, 45*(1), 158–163. <https://doi.org/10.1093/ageing/afv171>
- Ojala, H., Pietilä, I., & Nikander, P. (2016). Immune to ageism? Men's perceptions of age-based discrimination in everyday contexts. *Journal of Aging Studies, 39*, 44-53. <https://doi.org/10.1016/j.jaging.2016.09.003>.
- Orbb, A., Eisenbauer, L., & Wynaden, D. (2000). Ethics in qualitative research. *Journal of Nursing Scholarship, 33*(1), 93-96. <https://doi.org/10.1111/j.1547-5069.2001.00093.x>
- Oshodi, T. O., Bruneau, B., Crockett, R., Kinchington, F., Nayar, S., & West, E. (2019). Registered nurses' perceptions and experiences of autonomy: A descriptive phenomenological study. *BMC Nursing, 18*, 51. <https://doi.org/10.1186/s12912-019-0378->
- Owensworth, T., & Haslam, C. (2014). Impact of rehabilitation on self-concept following traumatic brain injury: an exploratory systematic review of intervention methodology and efficacy. *Neuropsychological Rehabilitation 26*, 1–35. <https://doi.org/10.1080/09602011.2014.977924>

- Oyesanya, T. O., Bowers, B. J., Royer, H. R., & Turkstra, L. S. (2018). Nurses' concerns about caring for acute and Chronic traumatic brain injury patients. *Journal of Clinical Nursing, 27*(7-8), 1408-1419. <https://doi.org/10.1111/jocn.14298>
- Oyesanya, T. O., & Thomas, M. A. (2019). Strategies nurses use when caring for patients with moderate-to-severe traumatic brain injury who have cognitive impairments. *Journal Clinical Nursing, 28*(21-22), 4098-4109. <https://doi.org/10.1111/jocn.14958>
- Palaganas, E., Sanchez, M. C., & Caricativo. (2017). Reflexivity in qualitative research: A journey of learning. *The Qualitative Report: Semantic Scholar*.
- Paredes, A. M., Lee, E. E., Chik, L., Gupta, S., Palmer, B. W., Palinkas, L. A., Kim, H. C., & Jeste, D. V. (2021). A qualitative study of loneliness in a senior housing community: The importance of wisdom and other coping strategies. *Aging & Mental Health, 25*(3), 559-566. <https://doi.org/10.1080/13607863.2019.1699022p>
- Parmar, J., Torti, J., Bremault-Phillips, S., Charles, L., Chan, K., & Tian, P. G. J. (2018). Supporting family HSPs of seniors within acute and continuing care systems. *Canadian Geriatrics Journal, 21*(4), 292-296. <https://doi.org/10.5770/cgj.21.317>
- Parsekar, S. S., Bailey, A., Binu, V. S., & Nair, S. (2020). Exploring perceptions and practices of cancer care among HSPs and care recipients of breast cancer in India. *Psycho-Oncology, 29*(4), 737-742. <https://doi.org/10.1002/pon.5326>
- Peel, K. L. (2020). A beginner's guide to applied educational research using thematic analysis. *Practical assessment, research, and evaluation, 25*(25). Article 2.
- Penn, S., & Baartmans, H. (2018). A phenomenological study on meaningful

- Professional experiences for human services professionals. *Journal of Human Services, 38*(1), 35-44.
- Percy, W. H., Kostere, K., & Kostere, S. (2015). Generic qualitative research in psychology. *The Qualitative Report, 20*(2), 76-85.
- Peters, M. E., & Gardner, R. (2019). Traumatic brain injury in older adults: Do we need a different approach? *Traumatic Brain Injury and Concussion, 3*(3).
<https://doi/full/10.2217/CNC-2018-0001>
- Petriwskyj, A. (2018). Diversity, inclusion, and the voice of older people: engagement and decision-making in seniors' organizations. *International Journal of Public Administration, 41*(9), 671-683. <https://doi.org/10.1080/01900692.2017.1295463>
- Piccenna, L., Lannin, N. A., Scott, K., Bragge, P., & Gruen, R. (2017). Guidance for the community-based caregivers in assisting people with moderate to severe traumatic brain injury with transfers and manual handling: evidence and key stakeholder perspectives. *Health and Social Care, 25*(2).
<https://doi.org/10.1111/hsc.12327>
- Pinsker, J. (2020) When does someone become old? *The Atlantic*
<https://www.theatlantic.com/family/archive/2020/01/old-people-older-elderly-middle-age/605590/>
- Plöthner, M., Schmidt, K., de Jong, L., Zeidler, J., & Damm, K. (2019). Needs and preferences of informal HSPs regarding outpatient care for the elderly: a systematic literature review. *BMC Geriatrics 19*, 82.
<https://doi.org/10.1186/s12877-019-1068-4>

- Rai, S., Khanal, P., & Chalise, H. N. (2018). elderly abuse experienced by older adults prior to living in old age homes in Kathmandu. *Journal of Gerontology & Geriatric Research*, 7, 460. <https://doi.org/10.4172/2167-7182.100046>
- Ranasinghe, R., & Nawarathna. (2020). Antecedents of residents' support for meg events: A pls path model based on perceived event impacts and quality of life. (299-314). [conference paper] *Travel and Tourism: Sustainability, Economics, and Management*. Springer.
- Ratray, M., Roberts, S., Desbrow, B., Wullschleger, M., Robertson, T., Hickman, I., & Marshall, A. P. (2019). A qualitative exploration of factors influencing medical staff's decision-making around nutrition prescription after colorectal surgery. *BMC Health Services Research*, 19, 178. <https://doi.org/10.1186/s12913-019-4011-7>
- Rauen, K., Reichelt, L., Probst, P., Schäpers, B., Friedemann, M., Jahn, K., & Plesnila, N. (2020). Quality of life up to 10 years after traumatic brain injury: A cross-sectional analysis. *Health and Quality of Life Outcomes*, 18, 166. <https://doi.org/10.1186/s12955-020-01391-3>
- Redjem, R., & Marcon, E. (2016). Operations management in the home care services is a heuristic for the HSPs' routing problem. *Flexible Service and Manufacturing Journal*, 28, 280–303. <https://doi.org/10.1007/s10696-015-9220-8>
- Renz, S. M., Carrington, J. M., & Badger. (2018). Two strategies for qualitative content analysis: An intramethod approach to triangulation. *Qualitative Health Research*, 28(5), 824-831. <https://doi.org/10.1177/104973231775358>

- Rickles, L. (2018). *Group art therapy with nursing home residents with dementia qualitative case studies* (thesis). Woods Scholars.
<https://scholars.smwc.edu/handle/20.500.12770/234>
- Rigon, A., Turkstra, L. S., Mutlu, B., & Duff, M. C. (2018). Facial-affect recognition deficit as a predictor of different aspects of social-communication impairment in traumatic brain injury. *Neuropsychology, 32*(4), 476-483.
<https://doi.org/10.1037/neu0000368>
- Robinson, C. A., Bottorff, J. L., & Pesut, B., & Zurr, J. (2020). Development and implementation of the Family Caregiver Decision Guide. *Qualitative Health Research, 30*(2) 303–313. <https://doi.org/10.1177/1049732319887166>
- Röckelein, V., Buchfelder, M., & Kleindienst, A. (2017). Traumatic brain injury in the elderly. In M. Berhouma, & P. Krolak-Salmon. (Eds), *Brain and spine surgery in the elderly* (pp. 331-352). Springer. https://doi.org/10.1007/978-3-319-40232-1_19
- Rosenthal, D. A., Gurney, R. M., & Moore, S. M. (1981). From trust on intimacy: A New inventory for examining Erikson's stages of psychosocial development. *Journal Youth Adolescence, 10*, 525–537. <https://doi.org/10.1007/BF02087944>
- Rosenthal, M. (2016). Qualitative research methods: Why, when, and how to conduct interviews and focus groups on pharmacy research. *Currents in Pharmacy Teaching and Learning, 8*(4), 509-516.
<https://doi.org/10.1016/j.cptl.2016.03.021>
- Rouse, G. K. A. (2004). Beyond Maslow's Hierarchy of Needs. What do people strive

for? *Performance Improvement*, 43(1), 27-31.

Rowan, G. M., Smeets, G.I., Kempen, J. M., Rixt Zijlstra, G.A., van Rossum, E., de Man van, J. M., Ginkel, W., Hanssen, A. G., & Metzelthin, S. F. (2020). Experiences of home care workers with the 'Stay Active at Home' program targeting re-enablement of community living older adults: An exploratory study.

<https://doi.org/10.1111.hsc.12863>

Rubin, H. J., & Rubin, I. S. (2021). *Qualitative interviewing: The art of hearing data*. (3rd ed.). Sage Publications.

Sadler, G. R., Lee, H. C., Lim, R. S. H., & Fullerton, J. (2010). Recruitment of hard-to-reach population subgroups via adaptations of the snowball sampling strategy. *Nursing and Health Sciences*, 12(3), 369-374.

Saldana, J. (2015) *The coding manual for qualitative researchers*. (3rd. ed.). Sage Publications.

Saunders, P. A., McMullen, T., & Barsness, S., Carle, A. & Hanna, G. P. (2021). The COVID-19 pandemic reignites the need for a person-centered Gerontological approach. *Gerontology and Geriatric Medicine*. Sage Journals.

<https://doi.org/10.1177/23337214211041800>

Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., & Jinks, C. (2018). Saturation in qualitative research: Exploring its conceptualization and operationalization. *Qualitative Quantitative*, 52(4), 1893-1907. <https://doi.org/10.1007/s11135-017-0574-8>

Scheenen, M. E., van der Horn, H. J., de Koning, M. E., van der Naalt, J., & Spikman, J.

- M. (2017). Stability of coping and the role of self-efficacy in the first year following mild traumatic brain injury. *Social Science and Medicine*, *181*, 184-190. <https://doi.org/10.1016/j.socscimed.2017.03.025>
- Schiermeler, Q., Else, H., Mega, E. R., Padma, T. V., & Gaind, N. (2020). Like to do science amid COVID-19 from Germany to India, researchers are grappling with how to run labs and lessons under extraordinary restrictions. *Nature*, *586*, 466-487.
- Schwartzkopf, D., Henrik, R., Ruddel, T., Feife, J., Bernhard, P., Kramer, M., Hartog, C. T., & Bloos, C. S. (2017). Perceived nonbeneficial treatment of patients, burnout, and intention to leave the job among ICU nurses and junior and senior physicians. *Critical Care Medicine*, *45*(3), e265-e273(9).
<https://doi.org/10.1097/CCM.0000000000002081>
- Shapiro, J., Youm, J., Heare, M., Hurria, A., Miotto, G., Nguyen, B.-N., Nguyen, T., Simonson, K., & Turakhia, A. (2018). Medical students' efforts to integrate and/or reclaim authentic identity: Insights from a mask-making exercise. *Journal of Medical Humanities*, *39*, 483–501. <https://doi.org/10.1007/s10912-018-9534-0>
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, *22*(2), 63-75 <https://doi.org/10.3233/EF1-2004-22201>
- Siebold, L., Obernaus, A., & Goyal, R. (2018). Criteria to define mild, moderate, and severe traumatic brain injury in the mouse-controlled cortical impact model. *Experimental Neurology*, *310*, 48-57.

<https://doi.org/10.1016/j.expneurol.2018.07.004>

- Seidman, I. (2006). *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. Teachers College Press.
- Silver, J. M., Mcallister, T. W., & Arciniega, D. B. (2019). *Textbook of Traumatic Brain Injury* (3rd ed.). American Psychiatric Association Publishing.
- Silverberg, N. D., Martin, P., & Panenka, W. J. (2019). Headache triggers sensitivity and avoidance after mild traumatic brain injury. *Journal of Neurotrauma*, *36*(10), 1544-1550. <http://doi.org/10.1089/neu.2018.6025>
- Silverberg, N. D., Iaccarino, M. A., Panenka, W. J., Iverson, G. L., McCulloch, K. L., Dams-O'Connor, K., Reed, N., & McCrea, M. (2020). Management of concussion and mild traumatic brain injury: A Synthesis of Practice Guidelines. American Congress of Rehabilitation Medicine Brain Injury Interdisciplinary Special interest group mild TBI Task Force. *Archives of Physical Medicine and Rehabilitation*, *101*(2), 382-393. <https://doi.org/10.1016/j.apmr.2019.10.179>.
- Siman-Tov, M., Radomislensky, I., Knoller, N., Bahouth, H., Kessel, B., Klein, Y., Michaelson, M., Rivkind, B. M. A., Shaked, G., Simon, D., Soffer, D., Stein, M., Jeroukhimov, I., & Peleg, K. (2016). Incidence and injury characteristics of traumatic brain injury: comparison between children, adults, and seniors in Israel. *Brain Injury*, *30*(1), 83-89. <https://doi.org/10.3109/02699052.2015.1104551>
- Simonetti, A., Pais, C., Jones, M., Cipriani, M. C., Jamiri, D., Mgnti, L., Landi, F., Bernabei, R., Liperoti, R., & Sani, G. (2020). Neuropsychiatric symptoms in elderly with dementia during COVID-19 pandemic: Definition, treatment, and

future directions. *Frontier Psychiatry*, 11, 579842.

<https://doi.org/10.3389/fpsy.2020.579842>

Sirgy, J. M. (1986). A QOL theory is derived from Maslow's development perspective.

The American Journal of Economics and Sociology, 45(3), 329-342.

<https://doi.org/10.1111/j.1536-7150.1986.tb02394.x>

Skaar, E., Ranhoff, A. H., Nordrehaug, J. E., Forman, D. E., & Schaufers, M. A. (2017).

Conditions for autonomous choice: A qualitative study of older adults' experience of decision-making in TAVR. *Journal Geriatric Cardiology*, 14(1), 42-48.

<https://doi.org/10.11909/j.issn.1671-5411.2017.01.007>

Smith, A. E., Dumuid, D., Goldsworthy, M. R., Graetz, L., Hodyl, N., Thornton, N. L., &

Ridding, M. C. (2021). Daily activities are associated with non-invasive measures of neuroplasticity in older adults. *Clinical Neurophysiology*, 132(4), 984-992.

Soja, E., Soja, P., Kolkowska, E., & Kirikova, M. (2019). Supporting active and healthy

aging by ICT solutions: Preliminary lessons learned from Polish, Swedish, and Latvian older adults. In S. Wrycza, & J. Maślankowski (eds.), *Information*

systems: Research, Development, Applications, Education. SIGS AND/PLAIS

2019. Lecture Notes in Business Information Processing, 359. Springer, Cham.

Springer. https://doi.org/10.1007/978-3-030-29608-7_5

Souesme, G., Voyer, M., Gagnon, E., Terreau, P., St-Amand, G. F., Lacroix, N., Gravel,

K., Vaillant, M. C., Gagné, M. E., & Ouellet, M. C. (2021). Barriers and

facilitators linked to discharge destination following inpatient rehabilitation after traumatic brain injury in older adults: a qualitative study, *Disability, and*

Neuropsychological Rehabilitation.

<http://doi.org/10.1080/09638288.2021.1919212>

Stasolla, F., Matamala-Gomez, M., Bernini, S., Caffo, A. O., & Bottiroli, S. (2020).

Virtual reality is a technological-aided solution to support communication in persons with neurodegenerative diseases and acquired brain injury during the COVID-19 pandemic—frontiers in *Public Health*.

<https://doi.org/10.3389/fpubh.2020.635426/full>

Stein, M. B., Jain, S., Giacino, J. T., Levin, H., Brain Dikmen, S., Nelson, L., Vassar, M.

J., Okonkwo, O., Diaz-Arrastia, R., Robertston, S., Mukherjee, P., McCrea, M.,

MacDonald, C., Yue, J. K., Yuh, E., Sun, X., Campbell-Sills, L., Temkin, N., &

Manley, G. T. (2019). Risk of post-traumatic stress disorder and major depression

in civilian patients after Mild Traumatic Injury. A track-TBI study. *JAMA*

Psychiatry, 76(3):2,49-258. <http://doi.org/10.1001/jamapsychiatry.2018.4288>

Stocchetti, N., Carbonara, M., Citerio, G., Ercole, A., Skrifvars, M. B., Smielewski, P.,

Zoerle, T., & Menon, D. K. (2017). Severe traumatic brain injury: Targeted

management in the intensive care unit. *The Lancet Neurology*, 16(6), 452-464.

[https://doi.org/10.1016/S1474-4422\(17\)30118-7](https://doi.org/10.1016/S1474-4422(17)30118-7)

Stocchetti, N., & Zanier, E. R. (2016). The chronic impact of traumatic brain injury on

outcome and quality of life: A narrative review. *Critical Care*, 20, 148.

<https://doi.org/10.1186/s13054-016-1318-1>

Stopa, B. M., Mezzalana, E., Khawaja, A., Izzy, S., & Gormley, W. B. (2019). Traumatic

brain injury as a risk factor for dementia: An eighteen-year two institutions

clinical experience. *Neurosurgery*, 66(Suppl. 1), nyz310_124.

https://doi.org/10.1093/neuros/nyz310_124

- Strabner, C., Frick, E., Stotz-Ingenlath, G., Buhlinger-Gonfarth, N., Szecsenyi, J., Krisam, J., Schalhorn, F., Valentini, J., Stolz, R., & Joos, S. (2019). Holistic care program for elderly patients to integrate spiritual needs, social activity, and self-care into disease management in primary care (HoPES3): Study protocol for a cluster-randomized trial. *Trials*, 20, 364. <https://doi.org/10.1186/s13063-019-3435-z>
- Stuckey, H. L. (2015). The second step in data analysis: Coding qualitative research Data. *Journal of Social Health and Diabetes*, 3(1), 7-10. <https://doi.org/10.4103/2321-0656.140875>
- Sundel, M., & Sundel, S. S. (2018). *Behavior changes in the human Services: Behavioral and cognitive principles and applications* (6th ed.). Sage Publications.
- Suter, E., Tarraf, R. C., Boakye, O., Boulanger, P., Birney, A., Sadowski, A. C., Gill, G., & Mrklas, K. (2017). Using e-technology to create quality care for seniors. *International Journal of Integrated Care*, 17(5), A54. <https://doi.org/10.5334/ijic.3357>
- Tan, CS., Krishnan, S.A., & Lee, QW. (2017). The role of self-esteem and social support in the relationship between extraversion and happiness. *A Serial Mediation Model. Current Psychology*, 36, 556–564. <https://doi.org/10.1007/s12144-016-9444-0>
- Teaster, P., & Hall, J. (2018). *Elder abuse and the public's health*. Springer. Theadom,

A., Parag, V., Dowell, T., McPherson, K., Starkey, N., Barker-Collo, S., Jones, K., Ameratunga, S., & Feigin, V. (2016). Persistent problems one year after mild traumatic brain injury: A longitudinal population study in New Zealand. *British Journal of General Practice*, 66(642), e16-e23.

<https://doi.org/10.3399/bjgp16X683161>

Tiilikainen, E., Hujala, A., Kannasoja, S., Rissanen, S., & Narhi, K. (2019). “They’re always in a hurry.” Older people perceive access and recognition in health and social care services. *Health & Social Care in the Community*, 27(4), 1011-1018.

<https://doi.org/10.1111/hsc.12718>

Timonen, V., Foley, G., & Conlon, C. (2018). challenges when using grounded theory: A pragmatic introduction to doing GT research.

<https://doi.org/10.1177/1609406918758086>

Tomaselli, G., Buttigieg, S. C., Rosano, A., Cassar, M., & Grima, G. (2020). Person-centered care from a relational ethics perspective for the delivery of high-quality and safe healthcare: A scoping review. *Frontiers in Public Health*, 8, 44.

<https://doi.org/10.3389/fpubh.2020.00044>

Treat Now. (2020). *Car accidents and brain injury statistics: 2020*.

<https://treatnow.org/knowledgebase/car-accidents-and-brain-injury-statistics-2020/>

Tripathi, N., & Moakumla. (2018). A valuation of Abraham Maslow's theory of self-actualization for the enhancement of quality of life. *Indian Journal of Health and Wellbeing*, 9(3), 499-504. <http://www.i->

scholar.in/index.php/ijhw/article/view/181552

- Tulsky, D., & Kisala, P. A. (2019). An overview of the traumatic brain injury–quality of life (TBI-QOL) measurement system. *Journal of Head Trauma Rehabilitation*, 34(5), 281-288. <https://doi.org/10.1097/htr.0000000000000531>
- Tun, S. Y. Y., Madanian, S., & Mirza, F. (2021). Internet of things (IoT) applications for elderly care: A reflective review. *Aging Clinical Experiences Resources*, 33, 855–867. <https://doi.org/10.1007/s40520-020-01545-9>
- Trucil, D. E., Lundebjerg, N.E., & Busso, D.S. (2021), When it comes to older adults, language matters and is changing: American geriatrics society update on reframing aging style changes. *Journal American Geriatric Society*, 69: 265-267. <https://agsjournals.onlinelibrary.wiley.com/doi/10.1111/jgs.16848>
- Turkstra, L. S., Mutlu, B., Ryan, C. W., Stafstien, E. H. D., Richmond, E. K., Hosokawa, E., & Duff, M. C. (2020). Sex and gender differences in emotion recognition and theory of mind after TBI: A narrative review and directions for future research. *Frontiers in Neurology*, 11, 59. <https://doi.org/10.3389/fneur.2020.00059>
- Tuval-Mashiach, R. (2021). Is replication relevant for qualitative research? *Qualitative Psychology*, 8(3), 365-377. <https://doi.org/10.1037/qup0000217>
- United States Census Bureau. (2020). *2020 Census* <https://www.census.gov/programs-surveys/decennial-census/decade/2020/2020-census-main.html>
- Universal teacher. (2021). Why do research? <https://universalteacher.com/1/reasons-for-conducting-research/>
- U.S. National Library of Medicine. (n.d.). Traumatic brain injury acquired brain injury,

TBI *MedlinePlus*. Traumatic brain injury | TBI | MedlinePlus

- Vaezipour, A., Whelan, B. M., Wall, K., & Theodoros, D. (2019). Acceptance of rehabilitation technology in adults with moderate to severe traumatic brain injury, their caregivers, and healthcare professionals: a systematic review. *Journal of Head Trauma Rehabilitation*, 34(4), E67-E82, <https://doi.org/10.1097/HTR.0000000000000462>
- Valtorta, N. K., Moore, C., Barron, L., Stow, D. & Hanratty, B. (2018). Older adults' social relationships and health care utilization: A systematic review. *American Journal of Public Health*. <https://doi.org/10.2105/AJPH.2017.304256> [https://doi.org/10.1016/S1474-4422\(17\)30117-5](https://doi.org/10.1016/S1474-4422(17)30117-5)
- van Leeuwen, K. M., van Loon, M. S., van Nes, F. A., Bosmans, J. E., de Vet, H. C. W., Ket, J. C. F., Widdershoven, G. A. M., & Ostelo, R. W. J. G. (2019). What does the quality of life mean to older adults? A thematic synthesis. *PLOS One*, 14(3), e0213263. <https://doi.org/10.1371/journal.pone.0213263>
- van der Naalt, J., Timmerman, M. E., de Koning, M. E., van der Horn, H. J., Scheemen, M. E., Jacobs, B., Jageam, G., Yil, az, T., Roks, G., & Spikman, J. M. (2017). Early predictors of outcome after mild traumatic brain injury. Upfront: A cohort study. *The Lancet Neurology*, 16(7), 532-540.
- Vas, A., Chapman, S., Aslan, S., Spence, J., Keebler, M., Rodriguez-Larrain, G., Rodgers, B., Jantz, T., Martinez, D., Rakic, J., & Krawczyk, D. (2016). Reasoning training in veteran and civilian traumatic brain injury with persistent mild impairment. *Neuropsychological Rehabilitation*, 26(4), 502-531.

<https://doi.org/10.1080/09602011.2015.1044013>

- Vaughn, P., & Turner, C. (2016). Decoding via coding: analyzing qualitative text data through thematic coding and survey methodologies. *Journal of Library Administration*, 56(1), 41–51. <https://doi.org/10.1080/01930826.2015.1105035>
- Vega, B. R., Palao, A., Munoz-Sanjoe, A., Torrijos, M., Acquire, Pl, Fernandez, A., Amador, B., Rocamora, C., Blanco, L, Marti-Edquitino, J., Villalobos, A., Alonso-Sanudo, M., Cebolla, S., Curo, J., Villaneuva, R., de la iglesia, M-J., Carracedo, D., Casado, C., Vidal, E., Trigo, D., Iglesias, N., Cabanas, D., Mellado, L., Garcia, D., Fernandez-Encinas, C., Navarro, R., Mediavilla, R., Vidal-Villegas, M-P., Bravo-Ortiz, M-F., & Bayon, C. (2020). Implementation of a mindfulness-based crisis intervention for frontline healthcare workers during the COVID-19 outbreak in a public general hospital in Madrid, Spain. *Frontier Psychiatry*. <https://doi.org/10.3389/fpsyt.2020.562578>
- Ventegodt, S., Merrick, J., & Andersen, N. J. (2003a). Quality of life theory I. The IQOL theory: An integrative theory of the global quality of life concept. *The Scientific World Journal*, 3, 325251. <https://doi.org/10.1100/tsw.2003.82>.
- Ventegodt, S., Merrick, J., & Andersen, N. J. (2003b). Quality of life theory III. Maslow revisited. *The Scientific World Journal*, 3, 1050-1057. <https://doi.org/10.1100/tsw.2003.84>
- Wadams, M., & Park, T. (2018). Qualitative research in correctional settings: Researcher bias, western ideological influences, and social justice. *Journal of Forensic Nursing*, 14(2), 72-79. <https://doi.org/10.1097/JFN.000000000000199>

- Walden University. (2020). *What do human Services professionals do?*
- Walden University. (2021). *Human Services leadership has numerous career options.*
- Walker, M. S., Kaimal, G., Gonzaga, A. M. L., Myers-Coffman, K. A., & DeGraba, T. J. (2017). Active-duty military Service members' visual representations of PTSD and traumatic brain injury in masks. *International Journal of Qualitative Studies on Health and Well-being*, *12*(1), 1267317.
<https://doi.org/10.1080/17482631.2016.126731/>
- Walter, N., Cohen, J., Lance Holbert, R., & Morag, Y. (2020). Fact-checking: Meta-analysis of what works and for whom. *Political Communication*, *37*(3), 350-375.
<https://doi.org/10.1080/10584609.2019.166894>
- Wammes, J. D., Good, T. J. & Fernandes, M. A. (2017). Autobiographical and episodic memory deficits in mild traumatic brain injury. *Brain and Cognition*, *111*, 112-126. <https://doi.org/10.1016/j.bandc.2016.11.004>
- Wanat, C. L. (2008). Getting past the gatekeepers: Differences between access and cooperation in public school research. *Field Methods*, *20*(2), 191-208.
<https://doi.org/10.1177/1525822X07313811>
- Wareing, S., & Sethares, K. A. (2021). Personal, social, and cultural factors affect Elders' transitions to long-term care: certified nursing assistant perspective. *Applied Nursing Research*, *59*. <https://doi.org/10.1016/j.apnr.2021.151419>
- Weller, S. C., Vickers, B., Bernard, H. R., Blackburn, A. M., Borgatti, S., Gravlee, C., & Johnson, J. C. (2018). Open-ended interview questions and saturation. *Plos One*, *13*(6): e0198606.1-18. <https://doi.org/10.1371/journal.pone.0198606>

- Wiedenbach, E. (1970). Nurses' wisdom in nursing theory. *The American Journal of Nursing*, 70(5), 1057-1062. <https://doi.org/10.2307/3421362>
- Wilberforce, M., Abendstern, M., Tucker, S., Ahmed, S., Jasper, R., & Challis, D. (2017). Support workers in community mental health teams for older people: Roles, boundaries, supervision, and training. *Journal of Advanced Nursing*, 73(7), 1657-1666. <https://doi.org/10.1111/jan.1326>
- Wilkie, L., Arroyo, P., Conibeer, H., Kemp, A. H. & Fisher, Z. (2021). The impact of psychosocial interventions on the well-being of individuals with acquired brain injury during the COVID-19 pandemic. *Frontiers in Psychology*. <https://doi.org/10.3389/psyg.2021.64828>
- Wong-Cornall, C., Parsons, J., Sheridan, N., Kenealy, T., Peckham. (2017). Extending “Continuity of Care” to include the contribution of family carers. *International Journal of Integrated Care*, 17(2): 11, 1–7, <https://doi.org/10.5334/ijic.2545>
- Wood, L. M., Sebar, B., & Vecchio, N. (2020). Application of rigor and credibility in qualitative document analysis: Lessons Learnt from a case study. *The Qualitative Report*, 25(2), 456-470. <https://doi.org/10.3102/0013189X17703946>
- World Health Organization. (2018). *Continuity and coordination of care: Practice brief to support the implementation of the WHO Framework on integrated people-centered health services*. World Health Organization. <https://apps.who.int/iris/handle/10665/274628>
- Wright-Bevans, K. (2017). NVivo, Word or good old-fashioned pen & paper: Pros and cons of three qualitative data analysis tools [Blog post]. <http://drkwright->

bevans.com/2017/07/30/nvivo-word-or-good-old-fashioned-pen-paper-pros-and-cons-of-three-qualitative-data-analysis-tools/

Xue, R., Gepp, A., O'Neill, T. J., Stern, S., & Vanstone, B. J. (2018). Financial literacy amongst elderly Australians. *Accounting and Finance*, 59(1), 887-918.

<https://doi.org/10.1111/acfi.12362>

Zanier, E. R., Zoerle, T., Lernia, D., & Riva, G. (2018). Virtual reality for traumatic brain injury. *Frontier Neurology*, 9, 345. <https://doi.org/10.3389/fneur.2018.00345>

Zayyad, M. A., & Toycan, M. (2018). Factors affecting sustainable adoption of e-health technology in developing countries: An exploratory survey of Nigerian hospitals from the perspective of healthcare professionals. *Peer Journal*, 6,

e4436. <https://doi.org/10.7717/peerj.4436>

Zhang, H., Peng, Y., Li, C., Lan, H., Xing, G., Chen, Z., & Zhang, B. (2020). Playing mahjong for 12 weeks improved executive function in elderly people with Mild Cognitive Impairment: A study of implications for traumatic brain injury-induced cognitive deficits. *Frontiers in Neurology*, 11, 178.

<https://doi.org/10.3389/fneur.2020.00178>

Zhou, M., Zhao, L., Campy, K. S., & Wang, S. (2019). Factors influencing behavior intentions to telehealth by Chinese elderly: An extended tam model. *International Journal of Medical Informatics*, 126, 118-127.

<https://doi.org/10.1016/j.ijmedinf.2019.04.001>

Zhou, Y., & Greenwald, B. D. (2018). Update on insomnia after mild traumatic brain injury. *Brain Science*, 8(12), 223. <https://doi.org/10.3390/brainsci8120223>