

1-1-2023

Physical restraint in older people: A statement from the early career network of the international psychogeriatric association

Mustafa Atee
Edith Cowan University

Claire V. Burley

Victor A. Ojo

Agboola J. Adigun

Hayoung Lee

See next page for additional authors

Follow this and additional works at: <https://ro.ecu.edu.au/ecuworks2022-2026>



Part of the [Nursing Commons](#), and the [Public Health Commons](#)

[10.1017/S1041610223000728](https://doi.org/10.1017/S1041610223000728)

Atee, M., Burley, C. V., Ojo, V. A., Adigun, A. J., Lee, H., Hoyle, D. J., . . . Leon, T. (2023). Physical restraint in older people: A statement from the early career network of the international psychogeriatric association. *International Psychogeriatrics*. Advance online publication. <https://doi.org/10.1017/S1041610223000728>






This Journal Article is posted at Research Online.
<https://ro.ecu.edu.au/ecuworks2022-2026/3266>

Authors

Mustafa Atee, Claire V. Burley, Victor A. Ojo, Agboola J. Adigun, Hayoung Lee, Daniel J. Hoyle, Olufisayo Elugbadebo, and Tomas Leon

COMMENTARY

Physical restraint in older people: a statement from the Early Career Network of the International Psychogeriatric Association

Mustafa Atee,^{1,2,3,4}  Claire V. Burley,^{5,6}  Victor Adekola Ojo,^{7,8,9}
Agboola Jamiu Adigun,¹⁰ Hayoung Lee,¹¹ Daniel Jake Hoyle,¹² 
Olufisayo Elugbadebo,¹³  and Tomas Leon^{14,15} 

¹The Dementia Centre, HammondCare, Osborne Park, WA, Australia

²Curtin Medical School, Faculty of Health Sciences, Curtin University, Bentley, WA, Australia

³Sydney Pharmacy School, Faculty of Medicine and Health, The University of Sydney, Sydney, NSW, Australia

⁴Centre for Research in Aged Care, School of Nursing and Midwifery, Edith Cowan University, Joondalup, WA, Australia

⁵UNSW Medicine and Health Lifestyle Clinic, School of Health Sciences, University of New South Wales, Sydney, NSW, Australia

⁶Centre for Healthy Brain Ageing (CHeBA), University of New South Wales, Sydney, NSW, Australia

⁷Royal Perth and Bentley Group, Bentley, WA, Australia

⁸Nissi Healthcare Telehealth, Clyde, VIC, Australia

⁹Vita Healthcare, Mount Eliza, VIC, Australia

¹⁰Royal Cornhill Hospital, Aberdeen, United Kingdom

¹¹Faculty of Health Sciences, University of Pécs, Pécs, Hungary

¹²School of Pharmacy and Pharmacology, University of Tasmania, Hobart, TAS, Australia

¹³Department of Psychiatry, College of Medicine, University of Ibadan, Ibadan, Nigeria

¹⁴Memory and Neuropsychiatric Clinic (CMYN) Neurology Department, Hospital del Salvador and Faculty of Medicine, University of Chile, Santiago, Chile

¹⁵Global Brain Health Institute, Trinity College, Dublin, Ireland

Emails: matee@dementia.com.au; mustafa.atee@curtin.edu.au

ABSTRACT

The International Psychogeriatric Association (IPA) has expressed significant concerns over the use of physical restraints in older people across diverse aged care settings. Following an extensive analysis of the available literature, the IPA's Early Career Network (ECN) has formulated a collection of evidence-based recommendations aimed at guiding the use of physical restraints within various care contexts and demographic groups. Physical restraints not only infringe upon human rights but also raise significant safety concerns that adversely impact the physical, psychological, social, and functional well-being of older adults. Furthermore, their effectiveness in geriatric settings remains inadequate. Given these considerations, the IPA and its ECN firmly assert that the use of physical restraints should only be considered as a final recourse in the care of older people.

Key words: physical restraint, older adults, evidence-based statement, care settings, dementia, disability, recommendations, ethics, neuropsychiatric symptoms

Background

Globally, the number and proportion of older people (i.e. those aged over 60 years) continues to rise (United Nations, 2019). Between 2019 and 2050, the number of people aged over 60 years is expected to double to 2.1 billion people, accounting for 22% of the population (WHO, 2022). Neurocognitive and neuropsychiatric disorders (e.g. dementia, depression, anxiety, and substance abuse) are estimated to affect over 20% of the older population (WHO, 2017), with many exhibiting neuropsychiatric symptoms. Recently, the International Psychogeriatric

Association (IPA) expressed renewed concern over the inappropriate use of physical restraints for the management of neuropsychiatric symptoms in older people, considering high prevalence rates in various parts of the world, both in high- and low-to-middle income countries (IPA, 2022b).

The IPA is the peak international body for psychogeriatrics, a branch of psychiatry that forms part of the multidisciplinary delivery of mental health care to older people (Silva and Wertheimer, 1996). It was formed to serve the interests, disciplines, and communities representing the full spectrum of geriatric mental health (IPA, 2022a).

The IPA has a wide range of members from over 50 countries that encompass physicians (such as psychiatrists, neurologists, geriatricians, and primary care consultants), nurses, pharmacists, social workers, occupational therapists, psychologists, scientists, and epidemiologists. The IPA's core mission is to advance IPA members and the geriatric mental health of older people everywhere through education, research, professional development, advocacy, health promotion and service development (IPA, 2022a).

While the recommended standard of care is a restraint-free care environment (Bellman, 2016), guidance on using physical restraints is critically needed to inform best practice. In 2001, the American Nursing Association (ANA) published a position statement, titled "*Reduction of Patient Restraint and Seclusion in Health Care Settings*", which recognized that restraints may be necessary but should only be used when "*clinically appropriate*", and "*adequately justified*" (ANA, 2001). The Australian Medical Association's (AMA) position statement, published in 2001 and revised in 2015 and 2022, firmly opposes the use of environmental, mechanical, and physical restraints, including seclusion, when caring for people living in long-term care (LTC) facilities due to their impact on the rights and safety of the individual (AMA, 2022). The Australian Centre for Evidence-Based Care (ACE-BAC) developed a standardized care process for public sector residential aged care services intending to promote evidence-based practice in seeking alternatives to physical restraint for older people who live in these settings (ACEBAC, 2018). Dutch hospitals have established guidelines to support clinical decisions around physical restraints, but adherence to these guidelines remains poor (van der Kooi *et al.*, 2015). Despite local guidelines and resources in various countries, the lack of international consensus on how and when to use physical restraints in older adults contributes to disparities and poor care outcomes in this population (Hwang *et al.*, 2022). The position held by the IPA is that restraint is not to be used at all, if possible, and only if serious harm is imminent and there are no other strategies.

Why is it essential for IPA to make a statement on physical restraint?

Physical restraint is a primary example of the violation of human rights in older people (American Journal of Geriatric Psychiatry, 2021) and should be avoided as much as possible. When avoidance is not possible (e.g. the risk of harm is imminent and there are no other strategies), physical restraint involves complex ethical considerations crossing dimensions

related to older patients' dignity, safety and medical treatment, and the caregivers' safety and responsibility. This statement represents the official policy position of the IPA. The purpose of this statement is to provide clear and concise evidence-based guidance on the clinical and ethical considerations of using physical restraints in older adults, from an international perspective.

Methods

In May 2022, the IPA Director Board commissioned a Working Group from the IPA Early Career Network (ECN) to develop this statement. Members of the Working Group comprised of the eight authors who have an interest and expertise in physical restraint use in older people. The group had four planning and progress meetings between May and November 2022. Existing literature on physical restraint use in older adults was reviewed and summarized from July culminating in the submission of a first draft of this statement to the IPA Board in November 2022. After review and amendment, the IPA Board endorsed this statement in May 2023.

Current situation on physical restraint

What is physical restraint, and what are the different types of physical restraint?

There are various definitions of physical restraint in the literature. An international consensus study defines physical restraint as "*any action or procedure that prevents a person's free body movement to a position of choice and/or normal access to his/her body by the use of any method, attached or adjacent to a person's body that he/she cannot control or remove easily*" (Bleijlevens *et al.*, 2016). A common description of physical restraint is a physical device, material, or piece of equipment with mechanical or manual properties that limits or obstructs the person's ability to mobilize freely and is not easily removed or controlled by the involved individual (Negroni, 2017). This involves the use or action of physical force to deliberately restrict, immobilize, or subdue the movement of a part or whole of a person's body to control or influence their behavior for a period of time (Australian Government, 2020).

Physical restraints can be classified according to the attached body location, such as limb (e.g. leg or hand), chest or abdominal restraints, and/or the materials or objects used or worn. Examples include straight jackets, wrist-cuff belts, lap belts and bed-tied wrist, ankle cuffs, bed rails, bean bags, Posey

bed chairs with tables attached, water chairs, tip-back chairs, confined or curved edge mattresses, and wheelchair brakes. Care should be exercised when categorizing specific types of restraints, as certain types are more widely acknowledged as restraints than others. This consideration carries potential consequences for an individual's autonomy and mobility. For example, the intentional use of wheelchair brakes by an individual to prevent forward movement is significantly distinct from another person using wheelchair brakes to restrict their freedom.

Physical restraint does not include reasonable care practices, such as gently guiding, redirecting, or alerting a person away from a potential injury or a dangerous situation. There are specific care situations that are not considered to be physical restraints. These include assisting care recipients during activities of daily living (ADL) and therapeutic activities where the care recipient has requested assistance or been unable to perform these tasks independently. For instance, assisting care recipients during showering or dressing and prescribing orthopedic devices as part of a treatment process are not classified as physical restraints.

Where and why is physical restraint used?

Physical restraints are not limited to nonmedical uses such as law enforcement, but are also related to psychiatry, geriatrics, and other medical fields (Negroni, 2017).

The fundamental rationale for employing physical restraints is ostensibly to ensure the safety of the patient and others. Four common justifications for resorting to physical restraints include:

1. To prevent interference with medical treatment.
2. To safeguard active or open wounds and recent medical and operative procedures.
3. To reduce the risk of falls or accidents in ambulant patients with safety concerns.
4. To protect other patients, staff, and caregivers against unsafe behaviors, severe injury, or physical harm.

These well-intended motives, however, are not supported by the evidence. On the contrary, many studies show that restraints do not prevent falls and can instead increase the likelihood of injury from falls (Luo, *et al.*, 2011). Restraint use has also been associated with increased falls, walking dependence, abrasions, pressure injuries, urinary and fecal incontinence, aspiration, suffocation, and death (Evans, *et al.*, 2003). Other adverse consequences include impaired cognitive and ADL performance (Hofmann and Hahn, 2014). Further, restraints can expose the restrained person to psychological distress and may increase agitation (Engberg, *et al.*, 2008).

Physical restraint use in different care settings and with different clinical populations

Physical restraints such as bed rails, tables with fixed chairs, belts, and chairs are routinely implemented for patient safety (Sharifi *et al.*, 2021) in many care settings despite research demonstrating a lack of efficacy and safety (Abraham *et al.*, 2020). The following sections outline physical restraint use in hospital settings, LTC facilities, and home care community settings. Restraint use in people living with dementia and older people with disabilities is also discussed.

Hospital settings

Older people represent a large proportion of the patients admitted to hospitals. Hospital environments can be particularly stressful for older adults due to its busy environment, disruptions to the person's routine, frequent bed moves and clinical contact, and the use of physical restraints (Jackson *et al.*, 2017). These factors can precipitate the occurrence of iatrogenic harms, particularly among people living with dementia (AIHW 2020). Iatrogenesis refers to injury experienced by patients resulting from medical care and may include falls, sepsis, pressure ulcers, fractures, delirium, and neuropsychiatric symptoms, such as agitation (Chenoweth *et al.*, 2023).

The prevalence of physical restraint use in hospitalized older adults is as high as 33–68% (Lim and Poon, 2016). Furthermore, older adults are three times more likely to be physically restrained during their hospitalization than their younger counterparts (Said and Kautz, 2013). Guidelines recommend that the use of physical restraints in hospital settings is reduced or stopped entirely (Joseph, 2016; Lachance and Wright 2019; ANZSGM, 2012; Cui *et al.*, 2021). In some countries, the use of physical restraints in these circumstances is illegal (Abraham *et al.*, 2020). Several interventions have been implemented to reduce physical restraint use in hospital settings. They include staff education and training, policy change at the organizational level, and alternatives to less restrictive restraints (see Section "How could physical restraint be avoided?").

LTC facilities

On average, one-third (33%) of LTC residents are exposed to physical restraints, with an estimated range of 6–85% (Ambrosi *et al.*, 2021; Lee *et al.*, 2021). The most common forms of physical restraints in this setting are (in descending order) bedrails 44%, force/pressure used in medical

treatment or ADL (14%), chair belts (8%), chair restraints (8%), surveillance/sensors/tracking systems (8%), trunk restraints (7%), “other physical restraints” (7%), “any belt restraint” (6%), chairs or wheelchairs with locked tables (5%), sleep suits (5%), chairs to prevent rising (Geri chairs, deep or overturned chairs, and chairs on a board) (5%), bed sheet restraints (4%), bed belts (3%), limb restraints (including mittens) (3%), locked bedroom doors (2%), physical retention (2%), removal of walking aids from residents (1%), and bed rail protectors (1%) (Lee *et al.*, 2021). The duration of restraint use in LTC ranges from less than 1 day to 180 days (Lee *et al.*, 2021).

Physical restraint use serves as a defined benchmark that aids in identifying domains where care might be suboptimal and demands enhancement. Alongside several other indicators, the consistent integration of physical restraint use as a crucial element of care quality and safety – denoted as a “Quality Indicator” (QI) – is observed in international LTC reporting. This underscores its clinical significance and the acknowledged value it holds. The use of physical restraints has been included as part of routine monitoring of quality and safety for LTC recipients in the United States, Canada, New Zealand, and the United Kingdom. However, the interpretation of physical restraint use for the purposes of LTC QIs differs across countries. For example, the Canadian Institute for Health Information (CIHI) maintains the Continuing Care Reporting System (CCRS) QIs, a set of 19 indicators for use in residential care that includes daily physical restraints as a surrogate measure of the quality-of-life domain. The CCRS definition of “*Daily physical restraints*” refers to the percentage of residents who were physically restrained daily over 7 days before assessment, using trunk restraint, limb restraint, or chairs that prevent rising. Recently, Australia has added physical restraint as a key QI for residential aged care services as part of the National Aged Care Mandatory Quality Indicator Program. Under this QI, the intent to restrain and use of physical restraint devices are set as two metrics with a zero tolerance for each as the recommended reference range.

Home care community settings

The prevalence of restraint use in home care varies between 7 and 25% (Hamers *et al.*, 2016; Scheepmans *et al.*, 2017, 2018). In older adults living with cognitive impairment at home, the prevalence of physical restraint use can reach 42% (Moermans *et al.*, 2018). There are multiple examples of physical restraints used in home care, including bed rails, bed-against-the-wall (positioned to prevent a person

from falling out of bed), locked room or house doors, a deep chair that prevents rising, and restrictive clothing and belts (Scheepmans *et al.*, 2017).

There are several risk factors for physical restraint use in home care, including:

- Personal characteristics, e.g. impaired mobility and cognition, dependency in ADL.
- Contextual factors, e.g. frequent requests from the family to use restraints, the dissatisfied attitude, and poor well-being of the informal caregiver (Hofmann and Hahn, 2014; Scheepmans *et al.*, 2014, 2019).
- Knowledge and attitudes of healthcare providers, e.g. lack of awareness and/or knowledge regarding the negative impact of restraint use, person-centered care, and behavioral communication and support (Gastmans and Milisen, 2006; Hamers and Huizing, 2005).
- Culture of home care organization (Gastmans and Milisen, 2006; Hamers and Huizing, 2005).
- Policy and legislation, e.g. a lack of clear policy within the organization and informed consent.
- Neuropsychiatric symptoms, such as increased agitation.

People living with dementia

The prevalence of restraint use ranges from 6 to 65% among people living with dementia (Feng *et al.*, 2009; Hamers, 2017; Selbaek *et al.*, 2016; Mamun and Lim, 2005). According to a national report on dementia in South Korea in 2011 (Bundang Seoul National University Hospital, 2011), 86.3% of nursing hospitals use physical restraints, and only 52.3% of care facilities for older people kept a record of physical restraints. There is a link between increased antipsychotic use and reduced physical restraint use in LTC residents living with dementia (Konetzka *et al.*, 2014). Evidence suggests that residents with dementia living in special care units (SCUs) are less likely to have bed rails than those living in regular units without an SCU (Luo *et al.*, 2010). Adverse outcomes associated with using restraints in residents with dementia include cognitive and ADL decline, increased agitation, risk of falls and fractures, delirium, and death (Allen *et al.*, 2005; Foebel *et al.*, 2016; Freeman *et al.*, 2017; Lin *et al.*, 2009; Luo *et al.*, 2011; te Boekhorst *et al.*, 2013; Selbaek *et al.*, 2016; Voyer *et al.*, 2011).

Neuropsychiatric symptoms associated with dementia (also known as behaviors and psychological symptoms of dementia [BPSD], noncognitive symptoms, and changed or responsive behaviors) include symptoms, such as verbal/physical agitation, aggression, psychosis, and sexual disinhibition. Individuals with cognitive impairment who

experience these symptoms are more likely to be physically restrained. Neuropsychiatric symptoms are almost ubiquitously experienced by people living with dementia. In the context of dementia, physical restraint is most often used to address the relationship between neuropsychiatric symptoms and falls. However, evidence demonstrates that physical restraint does not prevent falls or fall-related injuries (Qureshi, 2009) and can instead exacerbate symptoms, such as agitation, and cause injuries (Capezuti *et al.*, 1998; Sung *et al.*, 2006). Aggressive behavior toward care staff or other residents may result in the use of physical restraints in LTCs. However, a qualitative study investigating the views of people living with dementia revealed that feelings of worry, fear, and stress are sometimes expressed as anger or frustration (Burley *et al.*, 2021), suggesting that approaches to reduce worry and fear may be more effective and reduce the likelihood of staff resorting to physical restraints. Further, people living with dementia and their families/caregivers express strong views against physical and chemical restraints, “*I’d like people to not restrict me, drug me or tie me in a chair*” (Burley *et al.*, 2022). Participants discussed alternative nonpharmacological and psychosocial approaches, such as suggesting that staff “*look at it (behavior change) holistically*” and “*talk to me and see if they can help me.*”

Many LTC residents have a documented diagnosis of dementia or cognitive impairment. It has been demonstrated that people with dementia consistently experience more restraint use compared to other LTC residents (Luo, *et al.*, 2011). Other predictors for restraint use include advanced age, reduced mobility, reduced functional capacity, and perceived fall risk (Hofmann and Hahn, 2014; Pu and Moyle, 2022). Triggers for neuropsychiatric symptoms are multifactorial (Macfarlane *et al.*, 2021) and may include underlying pain, infections, caregiver approach, and over or understimulation. These triggers must be carefully considered and thoroughly evaluated to identify management strategies other than physical restraints.

Older people with disabilities

Globally, over 46% of older persons have disabilities and more than 250 million older people experience moderate-to-severe disabilities (United Nations, 2022). Several articles by the UN Convention on the Rights of Persons with Disabilities (CRPD) have suggested that the use of restraint on persons with disabilities constitutes a violation of human rights, such as: the right to be free from torture or cruel, inhuman or degrading treatment or punishment; to be free from exploitation, violence, and abuse; and

the right to respect their physical and mental integrity on an equal basis with others (CRPD, 2015). The CRPD has consistently vocalized its concerns about the use of restraint and recommended action to reduce or abolish restraint (CRPD, 2007). Older adults with disabilities have the right to live life with respect, dignity, liberty, and security, as indicated by the Universal Declaration of Human Rights (1948). This entails “*freedom from injury to the body and the mind, or bodily and mental integrity*” (Human Rights Committee, 2014: paragraph 3). Physical restraints deprive this population of these basic civil rights. Thus, these rights should be carefully considered before planning and prescribing restraints in any healthcare setting. Because physical restraints can be harmful and counter-therapeutic, their use may not be justified in older adults with disabilities.

Statement and recommendations

Ethics and physical restraint

Physical restraint is a restrictive practice that severely impacts the patient’s autonomy, freedom, dignity, and personhood and violates the individual’s rights across these ethical domains. Informed consent is essential before using physical restraints. Informed consent should discuss the purpose, potential risks (maleficence), benefits (beneficence), and alternatives and provide an adequate opportunity to review and ask questions about using physical restraints. For people with no capacity to provide informed consent, such as those with cognitive impairment or dementia, a discussion with a proxy, legal guardian, or representative (i.e. substitute decision-maker) should be initiated before attempting to obtain informed consent.

Healthcare professionals must provide the best care without stereotyping or discrimination. Thus, the risk of self-harm or harm to others (e.g. caregivers) should be carefully weighed against using physical restraints.

The responsibility for decisions surrounding using physical restraints varies by setting and country. For example, for legislative reasons, Australian physicians have a limited role in making such decisions for LTC residents. But they consistently advocate on behalf of the resident to ensure the clinical appropriateness of these restraints (AMA, 2022). Nurses play a significant role in determining when physical restraints are used and the type and duration of use. A 2007 study across four Turkish hospitals found that only one-third of nurses involved physicians when deciding on using physical restraints in ICUs, emergency

departments, and surgical wards. This is a reminder that context-specific legislation is a vital tool for reducing the use of physical restraints (Demir, 2007). Sadly, the decision to use physical restraints is often based on unfounded beliefs and perceptions about benefits and underestimated harmful effects of these restraints.

The decision to use physical restraints should be informed by a collaborative approach after seriously weighing human safety versus personal freedom (ANZSGM, 2016). The decision-making process should involve consultation with the individual or their substitute decision-maker (e.g. family member), nursing staff, medical practitioner, and other relevant clinicians. Before making this decision, documentation of a comprehensive care plan on restraint use should be in place. The plan should consist of an extensive review of the individual by a medical practitioner, the rationale for restraint use and its intended duration, a regular review and monitoring of use, and a list of potential alternatives to restraint use.

Why should physical restraint be avoided?

Recent literature has shown that physical restraints are neither necessary nor effective for preventing falls and injuries in older persons (Abraham *et al.*, 2020). The use of restraints in older persons increases the risk of physical and psychological complications, such as agitation, risk of suffocation, and muscle loss. Furthermore, physical restraints may violate or disrespect the autonomy of the patient. According to the United Nations Principles for Older Persons (United Nations, 1991): “*Older adults should have the privilege of enjoying their human and fundamental rights when residing in any care home or treatment facility, with full respect for their dignity, beliefs, needs, and privacy and right to make decisions about their health.*” Physical restraint should only be reserved for emergency crises as a “*last temporary resort*” intervention.

How could physical restraint be avoided?

Every attempt should be made to remove, if not minimize, physical restraint use in older adults. Restraint removal or minimization strategies can include early preventative actions and improving approaches toward care. Some examples of these are listed in Table 1.

In the Netherlands, an effective program named EXBELT has been developed that combines these recommendations through policy change, staff education and training, using alternative strategies (e.g. hip protectors and special pillows) and a consultation nurse (Bleijlevens *et al.*, 2013; Gulpers *et al.*, 2012, 2013) and builds on the knowledge that

education alone is not effective (Huizing *et al.*, 2006, 2009).

Physical restraint is sometimes used in response to behavior that is perceived by healthcare staff as aggressive. Staff training in person-centered approaches so they better understand how to respond to neuropsychiatric symptoms and unmet needs has been shown to reduce agitation (Ballard *et al.*, 2017; Chenoweth *et al.*, 2019, 2023), though staff need to be supported at the organizational level, so their responses are not impeded by structural or procedural constraints within the facility (Chenoweth *et al.*, 2019; Rapaport *et al.*, 2018).

The use of physical restraints can be reduced or eliminated by creating an environment that is friendly toward older adults, embraces aging with compassion, promotes safe mobility by making the physical environment accessible to people with disabilities, and caters for the needs of older people. In addition, educating family members, caregivers, and healthcare professionals on the ethical challenges and underlying factors associated with the use of restraints for the older population is crucial in advocating for the avoidance of the use of restraints among older persons (Scheepmans *et al.*, 2019).

Strong organizational leadership and culture in a restraint-free care environment have been linked to reduced restraint use across a care home (Australian Government, 2014). Nonrestraint strategies should be attempted first. Many alternatives to restraint use focus on optimizing the physical environment (e.g. access to the outdoors and adequate lighting), increasing meaningful engagement activities and programs (e.g. physical exercise, personalized activities and hobbies, music therapy, and socialization), using validation techniques (e.g. reassurance), and addressing unmet needs (e.g. sensory impairment, pain, and caregiver approach). However, there is little evidence for alternative interventions to physical restraints in older adults. Furthermore, the scarcity of studies that concentrate on singular interventions adds complexity to the evaluation of such measures.

Both psychosocial and nonpharmacological interventions are essential alternatives to physical restraints in older adults. Psychosocial interventions are usually focused on improving the well-being and functioning of the individual, whereas nonpharmacological interventions are primarily aimed at symptom management (Moniz-Cook *et al.*, 2011; McDermott *et al.*, 2019).

Person-centered care is deemed the gold standard for older adults across various care settings, as it focuses on a more humanistic approach as opposed to a traditional biomedical one. Minimizing, discontinuing, or ceasing the use of physical restraints helps promote a more person-centered

Table 1. Examples of care optimization strategies and principles applied to reduce the use of physical restraint in older adults

EXAMPLE STRATEGY	CARE OR ETHICS PRINCIPLES APPLIED
Care should be focused on upholding the persons’ healthcare rights while respecting age, culture, language, and spiritual differences and allowing for differences in health literacy.	Autonomy and respect
Embracing positive, respectful, and collaborative relationships with individuals, their caregivers, and families, using care approaches that emphasize person-centered care principles and practices and respect human dignity.	Person-centered and relationship-based care and respect
Healthcare professionals have a greater understanding of the perspectives, experiences, and preferences of individuals who experience neuropsychiatric symptoms.	Knowledge, awareness, education, and training of healthcare team (e.g. registered nurses in long-term care facilities)
Formulating individualized behavior support plans for people with a greater risk of developing agitated or aggressive behavior, particularly if they have a history of being physically restrained.	Personhood and person-centered care
Assessment and treatment of the person’s physical and mental health condition(s) and associated symptoms using evidence-based guidelines.	Holistic assessment and comprehensive management of all medical conditions
Conducting a rigorous behavioral assessment that identifies environmental triggers or contributing factors, level of distress and risk of neuropsychiatric symptoms, such as increased agitation and/or aggression using validated screening and assessment tools, such as the Neuropsychiatric Inventory (NPI), Cohen-Mansfield Agitation Inventory (CMAI), and 4AT delirium screening.	Holistic assessment and understanding of the underlying cause(s) of behaviors (e.g. delirium-induced agitation)

and compassionate approach to caring for older adults, such as nursing home residents living with dementia (Jacobsen *et al.*, 2017). The provision of person-centered care protects the safety of the individual and others while respecting and enhancing the values of autonomy, dignity, and well-being (Kitwood and Bredin, 1992). High-quality care should be centered around personhood, which entails recognition, respect, and trust (Fazio *et al.*, 2018). In contrast, using physical restraints contradicts personhood principles of care as it abolishes or threatens these values (Scheepmans *et al.*, 2020). Thus, not surprisingly, the WHO, the Dementia Care Practice Recommendations and Alzheimer’s Association have listed person-centered care as a critical focus area of quality care in older adults and dementia (WHO, 2015; Fazio *et al.*, 2018; Whitlatch and Orsulic-Jeras, 2018).

Cultural adaptations concerning physical restraints

Culture is an agreed and accepted set of values, principles, norms, and acts by individuals, peoples, and societies. Inspired by cultural differences, countries and geographic regions may have different laws, legislations, policies, and views when dealing with restraint use. Intercultural differences such as personal agency, authority, control, weighed

assessment of benefits versus harm and risks, the urgency of the situation encountered, and views on ageism may influence the use of physical restraints on older adults. As such, cultural adaptations have been translated into local laws or policy implementation to restrict restraint use. For example, in South Korea, the Enforcement Rule of the Medical Act was revised in 2020 to include standards for physical restraint use in medical institutions, but further recommendations from the National Human Rights Commission of Korea (NHRCK) were made to improve programs and procedures in local government and welfare facilities (NHRCK, 2023). Some countries, such as the United Kingdom, the United States, Germany, the Netherlands, and Australia, have enacted criteria for the use of physical restraints. This has subsequently reduced the use of restraints in these countries (Scheepmans *et al.*, 2020).

In the Netherlands, the national law is focused on preventing the use of involuntary treatment, including physical restraints (Law care and force, 2018). This law is based on the principle that no treatment may be provided without the consent of the person receiving it. If a clinician wishes to apply involuntary treatment, they need to follow a multidisciplinary, person-centered plan (Table 2). Before using physical restraints, this plan must be followed regardless of consent, because these measures are

Table 2. A practical guide for clinicians to eliminate or reduce physical restraint in older adults

A PRACTICAL GUIDE FOR CLINICIANS WHEN DEALING WITH PHYSICAL RESTRAINT IN OLDER ADULTS

1. Evaluate the need and associated risks for physical restraint after conducting a comprehensive person-centered assessment of the older adult's physical and psychiatric health, including cognitive function, mobility, and any underlying medical conditions; prioritizing the older adult's autonomy, comfort, safety, and dignity; and respecting older adult's cultural values. Evaluate the urgency and risk of harm (e.g. falls and behaviors) that might prompt the consideration of physical restraint.
2. Consider and prioritize the use of alternative and multicomponent interventions (such as person-centered care approaches, environmental modifications (e.g. bed alarms), and psychological support strategies) over physical restraints.
3. Consult family members, caregivers, and other clinicians in the multidisciplinary team before using any form of physical restraints. Engage early with the family in the decision-making process, seeking a holistic understanding of the individual's needs and preferences after an extensive discussion on the risks and benefits of restraint use.
4. Restraints should be used as a last temporary resort and only in certain exceptional circumstances. Reserve the use of restraints for high-risk behaviors and behavioral emergencies, where the safety of the older adult and/or others is in danger. If alternatives have been exhausted or ineffective and there is a serious risk of harm to the older adult and/or others, use the least restrictive form of restraints for the shortest possible time.
5. Educate, train, and encourage clinicians on best practice minimization strategies for physical restraints. This includes education on the potential risks and benefits of physical restraint usage, open communication, person-centered care, and other alternative techniques for managing complex behaviors or situations without resorting to restraints. Information on physical restraints should be part of the clinical staff's orientation and continuous education.
6. Continuously reevaluate the need for restraint and regularly monitor the response to restraints utilizing the principles of benefits–risks ratio.
7. Document all steps toward considering, initiating, minimizing, or discontinuing physical restraints in a structured care plan.

harmful and greatly restrict the freedom of the person receiving them. Only if there are no other alternatives possible, involuntary treatment may be applied.

Conclusions

Physical restraint use remains high in geriatric care settings. The IPA and its ECN believe that the use of physical restraints is not aligned with human rights and encourages taking every step possible to avoid physical restraint use. When considered absolutely necessary, the clinician should document the rationale in the medical record and justify why physical restraint is considered the only option. Documentation should indicate the frequency of periodic reviews to evaluate for adverse effects and the opportunity to discontinue. Physical restraints have significant safety concerns that affect older adults' physical, psychological, social, and functional well-being and lack effectiveness in geriatric settings. Embracing positive and collaborative relationships with individuals, person-centered care principles, staff education and training, and organizational-level policy change can help avoid its use. Policy on preventing physical restraints in LTC for older persons should be implemented on the national/regional/local levels. Further research is needed to inform the use of alternative interventions to prevent or minimize physical restraint use in older

adults and clarify ethical issues concerning physical restraint policies.

Conflict of interest

The authors have no conflicts of interest to declare.

Description of authors' roles

All authors contributed to the conceptualization, literature review, and writing and approval of the manuscript.

Acknowledgments

The authors thank the IPA Board for reviewing and approving the manuscript.

References

- Abraham, J., Hirt, J., Kamm, F. and Möhler, R. (2020). Interventions to reduce physical restraints in general hospital settings: a scoping review of components and characteristics. *Journal of Clinical Nursing*, 29, 3183–3200. <https://doi.org/10.1111/jocn.15381>.
- Allen, R. S., Burgio, L. D., Fisher, S. E., Michael Hardin, J., Shuster, J. L. (2005). Behavioral characteristics of agitated nursing home residents with

- dementia at the end of life. *The Gerontologist*, 45, 661–666. <https://doi.org/10.1093/geront/45.5.661>.
- Ambrosi, E. et al.** (2021). Variation of the occurrence of physical restraint use in the long-term care: a scoping review. *International Journal of Environmental Research and Public Health*, 18, 11918. <https://doi.org/10.3390/ijerph182211918>.
- American Journal of Geriatric Psychiatry.** (2021). Combating ageism, mentalism and ableism: it's time for a United Nations Convention on the human rights of older persons. *The American Journal of Geriatric Psychiatry*, 29, 989–1078. <https://www.sciencedirect.com/journal/the-american-journal-of-geriatric-psychiatry/vol/29/issue/10>
- American Nurses Association (ANA).** (2012). American Nurses Association (ANA) Position Statement: Reduction of Patient Restraint and Seclusion in Health Care Settings. Retrieved on 13/11/2022 from: https://www.nursingworld.org/~4af287/globalassets/docs/ana/ethics/ps_reduction-of-patient-restraint-and-seclusion-in-health-care-settings.pdf.
- Australian and New Zealand Society for Geriatric Medicine (ANZSGM).** (2012). Australian and New Zealand Society for Geriatric Medicine (ANZSGM) Position Statement No. 2 Physical Restraint Use in Older People. Retrieved on 13/11/2022 from: <https://agedcare.royalcommission.gov.au/system/files/2020-06/CTH.1007.1003.4677.pdf>.
- Australian and New Zealand Society for Geriatric Medicine (ANZSGM).** (2016). Australian and New Zealand Society for Geriatric Medicine (ANZSGM) position statement abstract: physical restraint use in older people, *Australasian Journal on Ageing*, 35, 225–225. <https://doi.org/10.1111/ajag.12224>.
- Australian Centre for Evidence-Based Care (ACEBAC).** (2018). Physical Restraint: Standardised Care Process. State of Victoria, Department of Health and Human Services. Retrieved on 13/11/2022 from: <https://www.health.vic.gov.au/sites/default/files/migrated/files/collections/factsheets/s/scp-physical-restraint-pdf.pdf>.
- Australian Government.** (2014). Quality of Care Principles 2014, Part 4A, Canberra, ACT: Office of Parliamentary Counsel. Retrieved on 13/11/2022 from: <https://agedcare.royalcommission.gov.au/system/files/2020-06/CTH.0001.1000.4676.pdf>.
- Australian Government.** (2020). Physical and Chemical Restraint in Aged Care. Department of Health. Retrieved on 13/11/2022 from: <https://agedcare.royalcommission.gov.au/system/files/2020-06/CTH.1007.1010.7404.pdf>.
- Australian Institute of Health and Welfare (AIHW).** (2020). Patterns of health service use by people with dementia in their last year of life: New South Wales and Victoria. Canberra, ACT, Australian Government, 1–66, Cat. no: AGE 102. Retrieved on 13/11/2022 from: <https://www.aihw.gov.au/reports/dementia/patterns-of-health-service-use-dementia-nsw-vic/summary>
- Australian Medical Association (AMA).** (2022). AMA Position Statement: Use of restrictive practices in Residential Aged Care Facilities (First published 2001, revised in 2015 and 2022). Retrieved on 13/11/2022 from: https://www.ama.com.au/sites/default/files/2022-08/Restrains%20in%20Aged%20Care%20Position%20Statement_FINAL.pdf.
- Ballard, C. et al.** (2017). Impact of antipsychotic review and non-pharmacological intervention on health-related quality of life in people with dementia living in care homes: WHELD—a factorial cluster randomised controlled trial. *International Journal of Geriatric Psychiatry*, 32, 1094–1103.
- Bellman, S.** (2016). *Residential Aged Care: Physical Restraint: Evidence Summaries*. Adelaide, JBI.
- Bleijlevens, M. H., Gulpers, M. J., Capezuti, E., van Rossum, E. and Hamers, J. P.** (2013). Process evaluation of a multicomponent intervention program (EXBELT) to reduce belt restraints in nursing homes. *Journal of the American Medical Directors Association*, 14, 599–604. <https://doi.org/10.1016/j.jamda.2013.03.002>.
- Bleijlevens, M. H., Wagner, L. M., Capezuti, E., Hamers, J. P., International Physical Restraint Workgroup** (2016). Physical restraints: consensus of a research definition using a modified delphi technique. *Journal of the American Geriatrics Society*, 64, 2307–2310.
- Bundang Seoul National University Hospital.** (2011). *Dementia Elderly Survey*. Korean Ministry of Health and Welfare. Retrieved on 10/08/2023 from: http://library.mohw.go.kr/Users/bogun/PdfViewer.aspx?mastid=72241&pdf_url=MS036156.pdf.
- Burley, C. V., Casey, A., Chenoweth, L. and Brodaty, H.** (2021). Reconceptualising behavioral and psychological symptoms of dementia: views of people living with dementia and families/care partners. *Frontiers in Psychiatry*, 12, 710703. <https://doi.org/10.3389/fpsy.2021.710703>.
- Burley, C. V., Casey, A., Chenoweth, L. and Brodaty, H.** (2022). Views of people living with dementia and their families/care partners: helpful and unhelpful responses to behavioral changes. *International Psychogeriatrics*, 35, 1–17. <https://doi.org/10.1017/S1041610222000849>.
- Capezuti, E., Strumpf, N. E., Evans, L. K., Grisso, J. A. and Maislin, G.** (1998). The relationship between physical restraint removal and falls and injuries among nursing home residents. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*, 53, M47–M52. <https://doi.org/10.1093/gerona/53A.1.M47>.
- Chenoweth, L. et al.** (2023). Evaluating implementation and outcomes of a person-centered care model for people with dementia in the rehabilitation in-patient setting: project protocol. *Journal of Alzheimer's Disease*, 91, 1409–1421. <https://doi.org/10.3233/JAD-220882>.
- Chenoweth, L., Stein-Parbury, J., Lapkin, S., Wang, A., Liu, Z. and Williams, A.** (2019). Effects of person-centered care at the organisational-level for people with dementia. A systematic review. *PLoS One*, 14, e0212686. <https://doi.org/10.1371/journal.pone.0212686>.
- Committee on the Rights of Persons With Disabilities (CRPD).** (2015). Guidelines on article 14 of the Convention on the Rights of Persons with Disabilities: the right to liberty and security of persons with disabilities. Adopted during the Committee's 14th session, held in September, 2015. Retrieved on 3/10/2022 from: www.ohchr.org/Documents/HRBodies/CRPD/GC/GuidelinesArticle14.doc
- Convention on the Rights of Persons with Disabilities (CRPD).** (2007). Convention on the Rights of Persons with Disabilities. Opened for signature 30 March 2007, 2515 UNIT 3 (entered into force 3rd May 2008). Retrieved on

- 13/11/2022 from: <https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html>
- Cui, N. et al.** (2021). Quality appraisal of guidelines on physical restraints in intensive care units: a systematic review. *Intensive and Critical Care Nursing*, 70, 103193. <https://doi.org/10.1016/j.iccn.2021.103193>.
- Demir, A.** (2007). Nurses' use of physical restraints in four Turkish hospitals. *Journal of Nursing Scholarship*, 39, 38–45. <https://doi.org/10.1111/j.1547-5069.2007.00141.x>.
- Engberg, J., Castle, N. G. and McCaffrey, D.** (2008). Physical restraint initiation in nursing homes and subsequent resident health. *The Gerontologist*, 48, 442–452. <https://doi.org/10.1093/geront/48.4.442>.
- Evans, D., Wood, J. and Lambert, L.** (2003). Patient injury and physical restraint devices: a systematic review. *Journal of Advanced Nursing*, 41, 274–282. <https://doi.org/10.1046/j.1365-2648.2003.02501.x>.
- Fazio, S., Pace, D., Flinner, J. and Kallmyer, B.** (2018). The fundamentals of person-centered care for individuals with dementia. *The Gerontologist*, 58, S10–S19. <https://doi.org/10.1093/geront/gnx122>.
- Feng, Z. et al.** (2009). Use of physical restraints and antipsychotic medications in nursing homes: a cross-national study. *International Journal of Geriatric Psychiatry*, 24, 1110–1118. <https://doi.org/10.1002/gps.2232>.
- Foebel, A. D. et al.** (2016). Physical restraint and antipsychotic medication use among nursing home residents with dementia. *Journal of the American Medical Directors Association*, 17, 184. e9–184. <https://doi.org/10.1016/j.jamda.2015.11.014e14>.
- Freeman, S., Spiriene, L., Martin-Khan, M. and Hirdes, J. P.** (2017). Relationship between restraint use, engagement in social activity, and decline in cognitive status among residents newly admitted to long-term care facilities. *Geriatrics & Gerontology International*, 17, 246–255. <https://doi.org/10.1111/ggi.12707>.
- Gastmans, C. and Milisen, K.** (2006). Use of physical restraint in nursing homes: clinical-ethical considerations. *Journal of Medical Ethics*, 32, 148–152. <https://doi.org/10.1136/jme.2005.012708>.
- Gulpers, M. J., Bleijlevens, M. H., Ambergen, T., Capezuti, E., van Rossum, E. and Hamers, J. P.** (2013). Reduction of belt restraint use: long-term effects of the EXBELT intervention. *Journal of the American Geriatrics Society*, 61, 107–112.
- Gulpers, M. J., Bleijlevens, M. H., Capezuti, E., van Rossum, E., Ambergen, T. and Hamers, J. P.** (2012). Preventing belt restraint use in newly admitted residents in nursing homes: a quasi-experimental study. *International Journal of Nursing Studies*, 49, 1473–1479.
- Hamers, J.** (2017). The prevention and reduction of physical restraint use in long-term care. In: S. Schüssler and C. Lohrmann (Eds.), *Dementia in Nursing Homes* (pp 219–228). Cham: Springer, https://doi.org/10.1007/978-3-319-49832-4_16.
- Hamers, J. P., Bleijlevens, M. H., Gulpers, M. J. and Verbeek, H.** (2016). Behind closed doors: involuntary treatment in care of persons with cognitive impairment at home in the Netherlands. *Journal of the American Geriatrics Society*, 64, 354–358. <https://doi.org/10.1111/jgs.13946>.
- Hamers, J. P. and Huizing, A. R.** (2005). Why do we use physical restraints in the elderly? *Zeitschrift Für Gerontologie Und Geriatrie*, 38, 19–25. <https://doi.org/10.1007/s00391-005-0286-x>.
- Hofmann, H. and Hahn, S.** (2014). Characteristics of nursing home residents and physical restraint: a systematic literature review. *Journal of Clinical Nursing*, 23, 3012–3024. <https://doi.org/10.1111/jocn.12384>.
- Huizing, A. R., Hamers, J. P., Gulpers, M. J. and Berger, M. P.** (2006). Short-term effects of an educational intervention on physical restraint use: a cluster randomised trial. *BMC Geriatrics*, 6, 1–10.
- Huizing, A. R., Hamers, J. P., Gulpers, M. J. and Berger, M. P.** (2009). A cluster-randomised trial of an educational intervention to reduce the use of physical restraints with psychogeriatric nursing home residents. *Journal of the American Geriatrics Society*, 57, 1139–1148. <https://doi.org/10.1111/j.1532-5415.2009.02309.x>.
- Human Rights Committee.** (2014). *General Comment No. 35 – Article 9 (Liberty and Security of Person)*. Geneva: 112th sess, UN Doc CCPR/C/GC/35.
- Hwang, K., Moore, K.J., Chong, T.W., Williams, S. and Batchelor, F.** (2022). Improving clinical practice guidelines for older people: considerations and recommendations for more inclusive and ageing-relevant guidelines. *The Lancet Healthy Longevity*, 3(5), e316–e317. [https://doi.org/10.1016/S2666-7568\(22\)00074-5](https://doi.org/10.1016/S2666-7568(22)00074-5).
- International Psychogeriatric Association (IPA).** (2022a). IPA Mission and Vision. Retrieved on 13/11/2022 from: <https://www.ipa-online.org/about/mission-and-vision>.
- International Psychogeriatric Association (IPA).** (2022b). IPA Debate Series. Retrieved on 13/11/2022 from <https://sgxx.org/docs/noticias/IPA-Debate-flyer-20220210.pdf>.
- Jackson, T.A., Gladman, J.R., Harwood, R.H., MacLulich, A.M., Sampson, E.L., Sheehan, B. and Davis, D.H.** (2017). Challenges and opportunities in understanding dementia and delirium in the acute hospital. *PLoS Medicine*, 14(3): e1002247. <https://doi.org/10.1371/journal.pmed.1002247>
- Jacobsen, F. F. et al.** (2017). A mixed method study of an education intervention to reduce use of restraint and implement person-centered dementia care in nursing homes. *BMC Nursing*, 16, 1–11. <https://doi.org/10.1186/s12912-017-0244-0>.
- Joseph, C.** (2016). *The Use of Physical Restraint in Acute and Sub-Acute Settings: A Snapshot of the Evidence. Evidence Snapshot*, Melbourne, Australia. Centre for Clinical Effectiveness, Monash Innovation and Quality, Monash Health. Retrieved on 13/11/2022 from: <https://monashhealth.org/wp-content/uploads/2019/03/Physical-Restraint-Evidence-Snapshot-Oct-2018.pdf>.
- Kitwood, T. and Bredin, K.** (1992). Towards a theory of dementia care: personhood and well-being. *Ageing and Society*, 12, 269–287. <https://doi.org/10.1017/S0144686X0000502X>.
- Konetzka, R. T., Brauner, D. J., Shega, J. and Werner, R. M.** (2014). The effects of public reporting on physical restraints and antipsychotic use in nursing home residents with severe cognitive impairment. *Journal of the American*

- Geriatrics Society*, 62, 454–461. <https://doi.org/10.1111/jgs.12711>.
- Lachance, C. and Wright, M. D.** (2019). *Avoidance of Physical Restraint Use among Hospitalised Older Adults: A Review of Clinical Effectiveness and Guidelines [Internet]*. Ottawa (ON), Canadian Agency for Drugs and Technologies in Health (CADTH). Retrieved on 13/11/2022 from: <https://www.ncbi.nlm.nih.gov/books/NBK545889/>
- Law Care and Force.** (2018). Overheid Wettenbank, Netherlands. Retrieved on 07/02/2023 from: <https://wetten.overheid.nl/BWBR0040632/2021-11-06>.
- Lee, D. A. et al.** (2021). Prevalence and variability in use of physical and chemical restraints in residential aged care facilities: a systematic review and meta-analysis. *International Journal of Nursing Studies*, 117, 103856. <https://doi.org/10.1016/j.ijnurstu.2020.103856>.
- Lim, S. and Poon, W.** (2016). Restraint use in the management of the elderly with dementia in hospital. *Internal Medicine Research Open Journal*, 1, 1–4. <https://doi.org/10.31038/IMROJ.2016124>.
- Lin, L., Wu, S., Kao, C., Tzeng, Y., Watson, R. and Tang, S.** (2009). Single ability among activities of daily living as a predictor of agitation. *Journal of Clinical Nursing*, 18, 117–123. <https://doi.org/10.1111/j.1365-2702.2008.02367.x>.
- Luo, H., Fang, X., Liao, Y., Elliott, A. and Zhang, X.** (2010). Associations of special care units and outcomes of residents with dementia: 2004 national nursing home survey. *The Gerontologist*, 50, 509–518. <https://doi.org/10.1093/geront/gnq035>.
- Luo, H., Lin, M. and Castle, N.** (2011). Physical restraint use and falls in nursing homes: a comparison between residents with and without dementia. *American Journal of Alzheimer's Disease & Other Dementias®*, 26, 44–50. <https://doi.org/10.1177/1533317510387585>.
- Macfarlane, S., Atee, M., Morris, T. and Cunningham, C.** (2021). When responsive and reactive meet organic? treatment implications of language use in the era of #BanBPSD. *International Journal of Geriatric Psychiatry*, 36, 1299–1303. <https://doi.org/10.1002/gps.5545>.
- Mamun, K. and Lim, J.** (2005). Use of physical restraints in nursing homes: current practice in singapore. *Annals of the Academy of Medicine, Singapore*, 34, 158–162.
- McDermott, O. et al.** (2019). Psychosocial interventions for people with dementia: a synthesis of systematic reviews. *Aging & Mental Health*, 23, 393–403. <https://doi.org/10.1080/13607863.2017.1423031>.
- Moermans, V. R., Bleijlevens, M. H., Verbeek, H., Tan, F. E., Milisen, K. and Hamers, J. P.** (2018). The use of involuntary treatment among older adults with cognitive impairment receiving nursing care at home: a cross-sectional study. *International Journal of Nursing Studies*, 88, 135–142. <https://doi.org/10.1016/j.ijnurstu.2018.09.004>.
- Moniz-Cook, E., Vernooij-Dassen, M., Woods, B., Orrell, M. and Network, I.** (2011). Psychosocial interventions in dementia care research: the INTERDEM manifesto. *Aging & Mental Health*, 15, 283–290. <https://doi.org/10.1080/13607863.2010.543665>.
- Negroni, A.** (2017). On the concept of restraint in psychiatry. *The European Journal of Psychiatry*, 31, 99–104. <https://doi.org/10.1016/j.ejpsy.2017.05.001>.
- Pu, L. and Moyle, W.** (2022). Restraint use in residents with dementia living in residential aged care facilities: a scoping review. *Journal of Clinical Nursing*, 31, 2008–2023. <https://doi.org/10.1111/jocn.15487>.
- Qureshi, H.** (2009). Knowledge Review 24: Restraint in care homes for older people, London, Social Care Institute for Excellence. Retrieved on 13/11/2022 from: <https://lx.iriss.org.uk/sites/default/files/resources/kr24.pdf>.
- Rapaport, P. et al.** (2018). How do care home staff understand, manage and respond to agitation in people with dementia? A qualitative study. *BMJ Open*, 8, e022260-2018-022260. <https://doi.org/10.1136/bmjopen-2018-022260>.
- Said, A. A. and Kautz, D. D.** (2013). Reducing restraint use for older adults in acute care. *Nursing*, 43, 59–61. <https://doi.org/10.1097/01.NURSE.0000437484.75992.ca>.
- Scheepmans, K., de Casterle, B. D., Paquay, L. and Milisen, K.** (2018). Restraint use in older adults in home care: a systematic review. *International Journal of Nursing Studies*, 79, 122–136. <https://doi.org/10.1016/j.ijnurstu.2017.11.008>.
- Scheepmans, K., Dierckx de Casterlé, B., Paquay, L., Van Gansbeke, H., Boonen, S. and Milisen, K.** (2014). Restraint use in home care: a qualitative study from a nursing perspective. *BMC Geriatrics*, 14, 1–7. <https://doi.org/10.1186/1471-2318-14-17>.
- Scheepmans, K., Dierckx de Casterlé, B., Paquay, L., Van Gansbeke, H. and Milisen, K.** (2017). Restraint use in older adults receiving home care. *Journal of the American Geriatrics Society*, 65, 1769–1776. <https://doi.org/10.1111/jgs.14880>.
- Scheepmans, K., Dierckx de Casterlé, B., Paquay, L., Van Gansbeke, H. and Milisen, K.** (2020). Reducing physical restraints by older adults in home care: development of an evidence-based guideline. *BMC Geriatrics*, 20, 1–14. <https://doi.org/10.1186/s12877-020-1499-y>.
- Scheepmans, K., Milisen, K., Vanbrabant, K., Paquay, L., Van Gansbeke, H. and de Casterlé, B. D.** (2019). Factors associated with use of restraints on older adults with home care: a secondary analysis of a cross-sectional survey study. *International Journal of Nursing Studies*, 89, 39–45. <https://doi.org/10.1016/j.ijnurstu.2018.07.019>.
- Selbæk, G. et al.** (2016). Antipsychotic drug use is not associated with long-term mortality risk in Norwegian nursing home patients. *Journal of the American Medical Directors Association*, 17, 464. e1–464. <https://doi.org/10.1016/j.jamda.2016.01.016> e7.
- Sharifi, A., Arsalani, N., Fallahi-Khoshknab, M. and Mohammadi-Shahbolaghi, F.** (2021). The principles of physical restraint use for hospitalized elderly people: an integrated literature review. *Systematic Reviews*, 10(1), 1–10. <https://doi.org/10.1186/s13643-021-01676-8>
- Silva, J. C. E. and Wertheimer, J.** (1996). Psychiatry of the elderly: a consensus statement: division of mental health and prevention of substance abuse World Health Organization Geneva, 1996. *International Journal of Psychology*, 31, 289–294. <https://doi.org/10.1080/002075996401043>.
- Sung, H., Chang, S., Lee, W. and Lee, M.** (2006). The effects of group music with movement intervention on agitated behaviours of institutionalised elders with

- dementia in taiwan. *Complementary Therapies in Medicine*, 14, 113–119. <https://doi.org/10.1016/j.ctim.2006.03.002>.
- te Boekhorst, S., Depla, M., Francke, A., Twisk, J., Zwijsen, S. and Hertogh, C.** (2013). Quality of life of nursing-home residents with dementia subject to surveillance technology versus physical restraints: an explorative study. *International Journal of Geriatric Psychiatry*, 28, 356–363. <https://doi.org/10.1002/gps.3831>.
- The National Human Rights Commission of Korea (NHRCK).** (2023). The National Human Rights Commission of Korea (NHRCK), Opinion and recommendations to prevent abuse against older persons and protect human rights of victims. Retrieved on 24/04/2023 from: <http://www.humanrights.go.kr/eng/board/read?boardManagementNo=7003&boardNo=7608793&searchCategory=&page=1&searchType=&searchWord=&menuLevel=2&menuNo=114>.
- United Nations.** (1991). Principles for older persons, United Nations Human Rights Office of the High Commissioner. Retrieved on 13/11/2022 from: <https://www.ohchr.org/en/instruments-mechanisms/instruments/united-nations-principles-older-persons>.
- United Nations.** (2019). *Department of Economic and Social Affairs, Population Division. World population ageing: Highlights (ST/ESA/SER. A/430)*.
- United Nations.** (2022). Ageing and Disability, Department of Economic and Social Affairs Disability. Retrieved on 13/11/2022 from: <https://www.un.org/development/desa/disabilities/disability-and-ageing.html>.
- van der Kooi, A. W. et al.** (2015). Use of physical restraints in dutch intensive care units: a prospective multicenter study. *American Journal of Critical Care*, 24, 488–495. <https://doi.org/10.4037/ajcc2015348>.
- Voyer, P., Richard, S., Doucet, L., Cyr, N. and Carmichael, P.** (2011). Precipitating factors associated with delirium among long-term care residents with dementia. *Applied Nursing Research*, 24, 171–178. <https://doi.org/10.1016/j.apnr.2009.07.001>.
- Whitlatch, C. J. and Orsulic-Jeras, S.** (2018). Meeting the informational, educational, and psychosocial support needs of persons living with dementia and their family caregivers. *The Gerontologist*, 58, S58–S73. <https://doi.org/10.1093/geront/gnx162>.
- World Health Organisation (WHO).** (1996). Education in Psychiatry in the Elderly: A Technical Consensus Statement, Department of Mental Health. Retrieved on 13/11/2022 from: https://apps.who.int/iris/bitstream/handle/10665/65023/WHO_MNH_MND_98.4_eng.pdf.
- World Health Organisation (WHO).** (2015). World Health Organisation (WHO) global strategy on people-centred and integrated health services. Retrieved on 13/11/2022 from: https://apps.who.int/iris/bitstream/handle/10665/155002/WHO_HIS_SDS_2015.6_eng.pdf.
- World Health Organisation (WHO).** (2017). Mental health of older adults. Retrieved on 14/11/2022 from <https://www.who.int/news-room/fact-sheets/detail/mental-health-of-older-adults>.
- World Health Organisation (WHO).** (2022). Ageing and health. Retrieved on 13/11/2022 from: <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>.