What is restraint?

There are two types of restraints, namely physical restraint and chemical restraint. Physical restraint is defined as “any device attached to or adjacent to a person’s body that cannot be controlled or easily removed by the person, and deliberately restricts a person’s freedom of movement and/or prevents a person’s normal access to his or her body”1. Common types of physical restraint used in Hong Kong hospitals include trunk restraint, bilateral bedtime rails, chair-boards (a chair with fixed tray table)2, boxing gloves and strait jackets3; while chemical restraint used in clinical settings may be medication such as antipsychotic, antianxiety, or hypnotic agents used to serve the same purpose4.

Prevalence of restraint use (Globe and HK)

A recent longitudinal study of 11 years in ten Hong Kong long-term care facilities with 2,896 residents suggested an increase in prevalence of physical and chemical restraint from 57.9% in 2005 to 75.7% in 2015 and 15.9% in 2005 to 21.78% in 2015 respectively4. Comparing the prevalence of restraint use of Hong Kong to other developed countries, Feng et al.5 suggested Hong Kong to have high physical restraint use (20%) comparing to the US (9%) and Switzerland (6%) but relatively with low usage of chemical restraint.

Associated factors for restraint use

Dementia or cognitive impairment was found to be correlated with likelihood of physical or chemical restraint use4. Chemical restraint may be applied on persons with dementia (PWD) in order to control the behavioral and psychological symptoms of dementia (BPSD)5,6 such as verbal and physical aggression, hallucination, delusion, sleep disturbance and wandering7. Healthcare workers claimed that the main reasons for applying physical restraint were person-oriented, such as to maintain safety, manage agitation and aggression and prevent wandering of service users, as extension of physical support8, as well as to prevent fall and to secure the operation of medical devices in hospitals for older people1.

Harm/risks associated with restraint use

There is no evidence showing that restraint is an effective measure as a therapeutic intervention9. On the contrary, studies have suggested various risks associated with restraint use. Potential adverse effects associated with physical restraints included asphyxia, catecholamine rush (a compound that induce “fight or flight” response) caused by extreme stress, psychological trauma9, increased behavioral issues, declined cognitive performance, fall, increased dependence in walking, pressure ulcers and contractures10. Chemical restraint was found associated with increased mortality risk in older people with dementia11.
Restraint reduction program

A local study which involved 2,000 patient episodes in a convalescent hospital has proved restraint reduction to be beneficial to the hospitalized elderly, especially to those with cognitive impairment. With the implementation of the restraint reduction program, the physical restraint rate decreased from 13.3% to 4.1%; while length of stay (LOS), which is a reliable indicator of treatment outcome, also decreased from 19.5 days to 16.8 days. Subgroup analysis showed a significant decrease in LOS among the cognitively impaired patients from 23.0 days to 17.8 days. In long term, it was suggested to promote restraint reduction in elderly settings in order to provide better elderly care in Hong Kong.
Reference


