Bedridden Elderly: Factors and Risks

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***Abstract*: Health problems among the elderly will occur if their healthy-living needs are not met or achievable. The implications, if left unchecked, can affect the patients' quality of life and lead to them suffering from social dysfunction. Therefore, the purpose of this article is to discuss the factors that cause the elderly to be bedridden and the possible risks arising from this problem.**

***Keywords*: elderly, bedridden, factors, risks, care, gerontology.**

I. INTRODUCTION

Among the various age groups, the elderly is most at risk from being bedridden (Cao et al., 2020). Each bedridden patient will differ in their recovery times. Some may be bedridden for a week, a month, a year or even longer, depending on the health issues that they are experiencing (Handicap International, 1996; Bekdemir & Ilhan, 2019).

A patient is defined as being bedridden if he or she is confined to a bed for 15 days or more, with 90% of their time spent in bed and requiring the assistance of another person to do their daily activities (Bains, Singh & Singh, 2010; Wani & Malik, 2013). Bedridden patients require full-time treatment (Hatano, et al., 2017). As part of the recovery process, bedridden patients need medical equipment such as special mattresses, tubes, special milk, oxygen and others (Ministry of Health Malaysia, 2016).

Bedridden differs from bedrest in that the latter only involves the patient resting in bed for a determined period of time, as part of the recuperation process directed by a medical practitioner. Meanwhile, bedridden refers more to the perception of the deteriorating patient's state of health and reaching the final stage of life which will end in death (Orun, Roesler & Martin, 2015).

II. FACTORS THAT LEAD TO THE ELDERLY BEING BEDRIDDEN

Elderly bedridden patients are usually preceded by disabilities due to chronic diseases (stroke, diabetes, cancer or heart disease) (Handicap International, 1996; Ishikawa, et al., 2006; Yoshino et al., 2011; Wani & Malik, 2013; Orun, Roesler & Martin, 2015). In fact, the two main causes of the elderly being bedridden are stroke and broken bones (Ishikawa, et al., 2006). As such, early efforts to reduce bedridden among the elderly should focus on the prevention of these two medical conditions.

Chronic illness is associated with the risk of physical and mental disability as well as decreased individual quality of life (Liang et al., 2018). Among the chronic illnesses commonly experienced by the elderly are dementia (senility), Parkinson's, Alzheimer's, insomnia (sleep disorders), eye diseases (glaucoma, cataracts), cardiovascular (heart), digestive system disorders, high blood pressure, diabetes, asthma, cancer, renal (kidneys), urinary (bladder), and rheumatism (joints) (Liu & Wong, 1997; Sidik, Rampal & Afifi, 2004; Wressle, Engstrand & Granérus, 2007; Gambhir et al., 2014; Alzahrani & Alamri, 2017; Jaul et al., 2018; Liang et al., 2018; Younis & Ibrahim, 2018; Alzheimer's Association, 2018). Most of the elderly have only one chronic illness, though some may have two or more conditions (Liu & Wong, 1997; Sidik, Rampal & Afifi, 2004). Thus, the loss of ability due to these illnesses, can lead to the elderly being bedridden.

Generally, the elderly will experience problems with their physical health as their age advances (Sagner, Kowal, & Dowd, 2002; Milanovic et al., 2013), hence advancing age is one of the factors of being bedridden. A severely weakened physical condition will prevent the elderly from moving about on their own. Brittle bones can prevent the elderly from walking and causes reduced mobility that leads to being bedridden while cognitive problems can also lead to the same condition (Orun, Roesler & Martin, 2015).

Another factor to being bedridden is the injuries caused by falls among the elderly (Handicap International, 1996; Fumio, 2001; Fujiwara, 2010; Orun, Roesler & Martin, 2015). Accidents and falls can cause spinal injuries and disabilities. A previous study had noted that falls are the main factor to the degradation of daily activities among the elderly (Yoshino et al., 2011). Elderly people are at high risk of falling due to their poor physical endurance. It is said that spinal fractures are one of the main factors in the death of the elderly (Berral et al., 2008). They may also lose limbs as a result of accidents such as road accidents, workplace accidents, sports accidents and others.

The elderly who are afflicted with these conditions are unable to take care of themselves, including activities such as going to the toilet, bathing, combing their hair, brushing their teeth, eating and carrying out interpersonal relationships (Hacer et al., 2015). Being bedridden for long periods of time can cause further complications to appear such as ulcers on the affected body parts and also urinary tract infections (Bains, Singh & Singh, 2010; Jaul et al., 2018).

III. HEALTH RISKS FOR BEDRIDDEN ELDERLY

To ease the provision of care for the bedridden elderly, caregivers need to be aware of the risks to the mental and physical health of the elderly. The following are some of the health risks among the elderly:

Pressure Ulcers: Pressure ulcers are also known as decubitus ulcers, pressure sores or bed sores are common health problems that occur among immobilised patients and require

care by another person (Ladan et al., 2014; Shuk-Fan, 2016). Pressure ulcers are a serious condition because they are localised injuries to skin and tissues that are caused by protruding bones, pressure and/or abrasions (National Pressure Injury Advisory Panel, 2016; Ladan et al., 2014; Edsberg et al., 2016).

The National Pressure Injury Advisory Panel (2016) categorised pressure ulcers into six stages, namely: Stage 1 with reddish skin; Stage 2 with reddish skin and wounds or abrasions; Stage 3 with visible deterioration of the skin layer on the wound; Stage 4 with deterioration of the skin and thickening of the tissue layers and the affected muscles, tendons, ligaments, cartilage or bones are clearly visible; Stage 5 which is unstageable, i.e. loss of skin and tissue due to thickening wounds so that tissue damage is not visible; and finally Stage 6 with deep tissue injury, i.e. a purple or maroon localised area that indicates it is covered in blood on suspicion of soft tissue being damaged. According to Ladan et al. (2014), if not treated promptly, the patient will experience skin damage in the affected area that will spread to deeper layers of tissue and will affect muscles, tendons and bones. Pressure ulcers often occur among the bedridden elderly, wheelchair-bound persons and individuals in long-term care (Shuk-Fan, 2016).

Urinary Tract Infections: This infection is among the leading causes of death in older adults (Cortes-Penfield, Trautner, & Jump, 2017). Women are 30 times more at risk for urinary tract infections than men, where half of the women have experienced it at least once in a lifetime (Rowe & Juthani-Mehta, 2013; Tan & Chlebicki, 2016). Urinary tract infection is a condition in which one or more parts of the urinary system such as the kidneys, ureters (channels from the kidneys to the bladder), bladder and urethra (urinary tract) have been infected with bacteria (Puca, 2014; Tan & Chlebicki, 2016). Major risk factors for urinary bladder infections other than age factors include catheter use, mental problems, diabetes, gynaecological problems (women), prostate hypertrophy (men), dehydration, poor hygiene and other infections (Cohn & Schaeffer, 2004; Puca, 2014; Mody & Juthani-Mehta, 2014). Common symptoms of urinary tract infections include cloudy or dark urine, bloody urine, foul-smelling urine, frequent urination, pain or burning sensation during urination, feeling of pressure in the lower pelvis, fever and night sweats or chills (Sollitto, 2019).

Lung Congestion and Lung Inflammation: Being immobilised can cause mucus and fluids to accumulate in the chest, leading to pneumonia and other complications (Wani & Malik, 2013). Preventive measures include lifting the head during waking hours, ensuring that patients do not overeat or have bloating that can block deep breathing and encourage deep breathing exercises and coughing (Thiem, Heppner & Pientka (2011).

Back Pains: Patients who have been bedridden for a long time should be encouraged to move as often as possible to avoid pain in certain areas (Ministry of Health Malaysia, 2007). Staying in one position for long periods of time also puts pressure on the spine and causes back pain (Wright et al., 1995). Bedridden elderly should be frequently repositioned to avoid stress on the spine (Berral et al., 2008; Bains, Singh & Singh, 2010).

Depression: Bedridden patients can become depressed because they may feel that they are burdening others, are losing their autonomy, or because their social interactions are limited. Bedridden patients will experience depression due to failure to adapt to lifestyle changes, inability to manage themselves and inability to continue social life as usual (Normala et al., 2014). They will feel lonely, useless and quick to give up (Alan & Mel, 2003). It is important to meet their emotional and mental health needs and to help the patients know that they are still part of their community (Normala et al., 2014).

Sleep Disorders: Sleep disorders are common because bedridden patients may have irregular sleep schedules, do not physically exercise, or feel too much pain from lying in an uncomfortable position for too long (Matsumoto et al., 2015). Caregivers need to ensure that patients' sleep schedules are in order, use active and passive exercises on a daily basis and ensure that patients sleep in a comfortable and varied position (Daglar et al., 2014).

Muscle Cramps: Being bedridden for a long time can lead to complications to the patient's muscles. Muscle complications include muscle spasms and loss of muscular endurance (Mersal, 2014). Providing support to limbs and having active and passive exercise programs will help maintain muscle tone and movement (Dittmer & Teasell, 1993).

Loss of Appetite: Bedridden patients may feel lethargic and lose their appetite (Harith et al., 2010). Loss of appetite and related nutritional status are clinical signs that need to be evaluated routinely in all at-risk elderly (Volkert et al., 2006). Effective prevention and treatment measures need to be implemented at an early stage and the involvement of multidisciplinary teams is necessary to slow the progression of the disease and to improve the patient’s function and quality of life as a whole.

IV. CONCLUSION

Caregivers play an important role in ensuring that the bedridden elderly have a good quality of life. Nevertheless, it is not an easy task and caregivers need to be strong physically and mentally to avoid being negatively affected themselves. Caregivers can help their bedridden loved ones by providing frequent social activities and arranging time for friends and other family members to visit so that they will not feel lonely and forgotten. Caregivers should also encourage the bedridden elderly to not lose hope and surrender to their illness.

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