



UNIVERSITY OF TASMANIA

TASMANIAN SCHOOL OF NURSING

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Nuritinga

ELECTRONIC JOURNAL OF NURSING



Restraints: a review of the literature

Tara Ogier, BN Student, Year 2
Tasmanian School of Nursing
Nuritinga Issue 1
June 1998

Abstract

The use of restraints in nursing home settings has become an important issue today. While nurses are striving to keep residents safe, they may be compromising the autonomy of the residents. This paper will review the literature, looking at the types of restraints used, the prevalence of use in the United States, Canada and Australia; as well as the rationale behind the use, the effects of using restraints, as well as look at some suggested alternatives to restraints.

The two classifications for restraints are physical and chemical. Physical restraints are mechanical devices applied to a person in such a way that free physical movement is inhibited, (Koch, 1993; Braun & Lipson, 1993). Physical restraints include sheets used as ties, gerichairs (chairs with locking lap trays), wheelchair restraints, side rails, Posey vests, belts and wrist and ankle cuffs, (Braun & Lipson, 1993; Koch, 1993; Sloane, Mathew, Scarbourough, Desai & Tangen, 1991).

Sloane et al (1991) found that chemical restraints are "generally considered to be present when a neuroleptic, anxiolytic or sedative or hypnotic agent is used on a regular basis." Braun & Lipson (1993), discussed how chemical restraints increased in the nursing home settings in the 1960_s after the deinstitutionalisation of mentally ill patients. This in turn lead to these patients being admitted into nursing homes, where the staff did not have the necessary training to handle the complex behaviours of these patients. As a result, the staff became dependant on using psychotropic drugs to control the behaviours of these residents, (Braun & Lipson, 1993). This practice of medicating residents to control their behaviour is still present today.

Sloane et al, (1991) reported that in the United States, between 11%-58% of nursing home residents and 43%-72% of those residents with dementia receive neuroleptics, anxiolytics, sedatives or hypnotic agents, used to control their behavior. The prevalence of physical restraints in the United States seems to vary from 19% to 85%, (Braun & Lipson, 1993; Sloane et al, 1991; Tinetti, Marottoli & Ginter, 1991; Koch, 1993). Bradley, (1995), discussed a survey conducted in Canada, covering six nursing homes (2 in Ontario, 4 in Nova Scotia) and it was found that the rate of restraint use was 70%-85%. In 1997, Andrew Restas conducted a study in Australia and found that 29.5% of residents in nursing homes in South Australia were restrained, 15.3% in New South Whales and 23.6% in Queensland. Another study found that 0%-57% of residents in nursing homes in Australia were physically restrained, (Koch, 1993).

Some common reasons given by nursing staff for the use of restraints are to prevent residents from falling, prevent resistance to treatment, wandering and prevention of injury to self or others, (Huffman, 1998; Koch, 1993). Tinetti, Liu, Marottoli & Ginter, (1991) found that unsteadiness (72%), disruptive behavior such as agitation (41%) and wandering (20%) were the most frequently

quoted reasons for restraint use. It was also found "that resident characteristics independently associated with initiation of restraints were older age, disorientation, dependence in dressing and nonuse of antidepressants," (Tinetti et al, 1991).

Braun & Lipson, (1993) commented that the primary reason for restraint use, cited from a 1988 Strumph & Evans article, were residents confused mental status and the fear that the resident would fall if not restrained. Braun & Lipson also revealed that nursing staff stated that restraints help prevent assaultive behavior, wandering, falls, poor posture and help with the administration of medication, are used as a method of punishment and as a means easier to staff than supervision. Pressure to avoid litigation, insufficient staff, and employee attitudes supporting restraint use were reasons of restraint use given by Coleman (1993).

In Bradley's article on Canadian studies, (1995) seven arguments were given as factors associated with restraint use and they are: restraints keep people safe; no alternatives to restraints; used only as last resort; insufficient staff, people ask to be restrained and therefore do not mind; restraints keep staff and institution safe from litigation and finally, restraint reduction is not safe without full administrative support. Arguments disputing such rationale for use will be discussed later on in this paper. One of the main reasons cited in the literature for restraint use in nursing homes is to prevent residents from falling and "this is a paradox which is widely recognized in the literature because the act of restraining a resident can jeopardize the future mobility and in no way assures the safety of that resident, (Bell, 1997).

In 1998, G.B. Huffman stated that prolonged use of restraints has been associated with fall-related injuries as well as a decrease in physical and psychological function. Some specific examples of negative physical effects of restraint use are: decreased muscle mass, strength/physical deterioration, orthostatic hypotension, urinary and faecal incontinence, increased risk for nosocomial infections, oedema of lower extremities, changes to body chemistry such as demineralisation and electrolyte loss, increased risk of falls, increased risk for pressure sores, and accidental strangulation, (Bell, 1997; Huffman, 1998; Koch, 1993; Sloane, Papougenis & Blakeslee, 1992; Tinetti, Marottoli & Ginter, 1991). Restraints can also have negative psychological effects on the resident and these include: reduced communication skills, increased confusion and agitation, loss of self-esteem, loss of trust, loss of self-confidence and loss of autonomy, (Sloane, Papougenis & Blakeslee, 1992; Koch, 1993; Braun & Lipson, 1993). Residents often associate restraints with punishment. Braun & Lipson (1993), stated that to avoid the linking of punishment and restraints, staff should avoid removing the restraints when there is an improvement in behaviour. This would only reinforce the resident's belief that he/she is being punished. The use of restraints can also have a negative psychological effect on the nurses implementing the restraints, such as feelings of inadequacy, frustration, dissatisfaction and feelings of guilt, (Bell, 1997).

Seven arguments supporting the use of restraints were mentioned earlier in this paper. Bradley (1995), provided counter arguments for each of the seven points, which will now be discussed. The first argument for restraint use, given by nursing staff, was that restraints keep residents safe from falling. Bradley stated that restraints actually increase the danger to residents, and supported this statement by giving the example that residents often climb over rails, between rails and over the end of the bed, which in turn often results in a fall or injury. One reason the resident may be trying to leave the bed is that they have to go to the bathroom and with the delay of trying to get around the restraint, often incontinence occurs, which increases the risk of the resident slipping in their own urine on the floor, (Bradley, 1993).

The second argument for restraints was that there are no alternatives to restraints and this was counteracted with the statement that education is key to realising that there are indeed alternatives. Studies have shown that education does make a difference; in Nova Scotia after a ten hour educational program on alternatives to restraints, restraint use was reduced by 50%, (Bradley, 1995). Huffman's 1998 article also supported this when he found that there was an average absolute decline in restraint use of 18% in a nursing home that received education and consultation. He commented that "a combination of staff education and consultation leads to a decrease in the use of physical restraints in nursing homes, without a concomitant increase in staff time, use of psychoactive drugs or injuries related to falls, (Huffman, 1998). Restas (1997) found that the education needs to be adequate, recent and focussed on achieving attitudinal changes and implementing practices that incorporate those changes. Bradley also suggested that some effective alternatives are better pain management, flexibility of care, residents having more independence, subtle environmental changes and it was stressed that the restraint-free alternatives fix or manipulate the environment and not the resident, (Bradley, 1995).

The third argument in Bradley's 1995 article was that restraints are used only as a last result. Bradley felt that this statement was false and that restraint use was underestimated by nursing staff and one reason for this may be that the act of restraining a resident is very uncomfortable to the staff. Some restraints, gerichairs and bedrails, are used so often that some staff no longer consider them to be restraints, which may also account for the low estimation of restraint use by nursing staff, (Bradley, 1995). Koch (1993) felt that nursing homes need to adopt a philosophy where restraints are advocated only as a last resort and that the staff be limited on the number of restraints available to them.

Inadequate staffing in nursing homes was the next argument given by the nursing staff. Bradley agreed that if there was an improvement in the staff/resident ratio then there would also be an improvement in the quality of care to residents. She also argued that more time is required to look after a resident who is restrained compared to one who is not. Restraining someone requires that the resident be provided with exercise, to try to prevent immobility complications, which takes up a lot more of the nurses time. Toileting would also take up more time as the resident would have to be removed from restraint and assisted to the toilet because of diminished physical strength, (Bradley, 1995).

In some circumstances, residents or the residents family may request for restraints to be used. This is often because they feel more secure and safe, or because they are used to restraints being used. If such is the case, the resident and family may need to be educated on restraint use and the nurse may need to provide the resident with extra attention until such time that they feel safe and comfortable with their environment, (Bradley, 1995). Nurses often believe that by using restraints, they are keeping themselves and the institution safe from litigation if a resident should happen to fall while not restrained. This argument is untrue in that there has been no argued case where an institution has been sued because they did not restrain a resident; Chances are more likely that the institution will be sued if a resident has an accident and sustains injuries while restrained, (Bradley, 1995).

The final argument was that restraint reduction is not possible without administrative support. Bradley, (1995) found this to be true, in that providing just the nurses with education regarding restraint reduction is insufficient, as the administrative staff may advocate restraint. This may in turn influence the effect of the education received. Braun & Lipson, (1993) also noted that restraint use has been endorsed by many disciplines, making it a more acceptable practice. This means that

efforts to reduce restraint use must be a team effort and take place in a larger restorative framework. Thus, the more staff advocating the reduction of restraint use, the more success is likely.

Molasiotis (1995) felt that the "main alternatives to physical restraints are environmental manipulation, reality orientation and behavioural techniques, adequate staffing and a no-restraint policy training. It was felt that increased light, placing the patient close to the nursing station, mattresses on the floor, a quiet room, accessible call light or other means of communication with nursing staff, and a redesign of furniture would be beneficial to the cognitively impaired resident and decrease the need for restraints, (Molasiotis, 1995). Molasiotis also felt that confusion, agitation or disorientation (the main reasons for restraint use) may in fact be due to medication, a wet bed, electrolyte imbalance or impaired renal function. If the cause of the confused, agitated or combative behaviour is relieved then the nurse may be able to avoid using restraints (Molasiotis, 1995).

In 1993, Coleman found that night-time diversional activities and environmental modifications such as the "wandering loop," locked units or door alarms give residents more independence and freedom while still ensuring their safety. Some strategies to decrease the risk of falling, while maintaining patient autonomy, include lowering beds closer to the floor, making bedside commodes available and moving high risk patients closer to the nursing stations, (Coleman, 1993). Coleman also found that by identifying residents at greater risk of behavioural problems of dementia and implementing a surveillance and preventive strategy, the use of restraints may be reduced.

In 1987, with the movement of "Untie the Elderly", the Omnibus budget Reconciliation Act (OBRA) was passed in the United States. The act states that nursing home residents have a right to be free of restraints and that physical restraints only be used if required for treatment and not for the purpose of punishment or convenience of the staff, (Braun & Lipson, 1993). Since this implementation of the act, restraint use has reduced in the United States to a rate of about 21% in 1995, (Cohen, Neufeld, Dunbar, Pflug & Breuer, 1996). However, it is still felt that many nurses are still unaware of alternatives to physical restraints. The availability of research on alternatives is somewhat limited.

The issue of restraint use is global, as there is a high prevalence rate in a lot of countries, particularly western countries. More awareness of alternatives needs to be implemented into nursing training. A policy introducing restraint reduction gradually into the system may be necessary, as staff are often afraid of change and also fear the program not working. Small successes with may prod the staff on to continue with the program whereas a failure may see failure of the whole program. All in all, the use of restraints is a cause for concern as it damages not only the residents morality but also that of the nurse. Change is required and with change will come improvement in both staff and resident autonomy. A balance between safety and autonomy is what is needed and more policies and support for this type of system are needed.

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