

## H47 Physical Restraint and Neglect in the Elderly: A Forensic Case and Review of the Literature

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Learning Overview: After attending this presentation, attendees will be able to describe the impact of forensic science in cases of restraint use in the elderly.

**Impact on the Forensic Science Community:** This presentation will impact the forensic science community by demonstrating that restraint is not to be considered a therapeutic act and does not reduce the risk of falls in the elderly.

The elderly population is defined as people aged 65 years and over. The demographic trend of the past decades is characterized by an increase in the elderly population. In these subjects, restraint is justified by the high risk of falls and the general deterioration of health.<sup>1</sup>

This study was conducted through the review of the scientific literature and an analysis of studies relating to efficacy and risks related to restraint. Judicial inspection and autopsy were carried out in the death of an elderly woman; details of that death are reported here.

An elderly woman was found dead in her home. Scene analysis revealed that the body was completely burned by fire and that the fire involved only one room in the apartment. The relatives initially reported an accidental death by fire due to proximity of a shawl, worn by the woman, to a nearby stove. However, the stove was found on the balcony opposite the room where the fire had occurred. Furthermore, on the same balcony were found remains of a wooden chair, on whose arms burnt remains of wool laces were found. All the rooms in the apartment were examined. Fragments of string of a similar type and material to the remains found in the chair were found in garbage cans. At autopsy, the elderly woman's wrists demonstrated bruising from restraint. The analysis of all the data concluded the use of restraints of an elderly woman, who was closed in a room every day, without any surveillance by family members, tied to a chair located near a heating stove. The elderly woman lived with a caregiver who went away for many hours and left her tied to the arms of the chair. When the clothes caught fire, the woman could not escape and died from the combined effects of fire and inhalation of smoke (carbon monoxide).

Restraint means any action that limits an individual's freedom of movement and/or the normal use of the body, such that the victim cannot easily control or remove themselves.<sup>2</sup> The restraint can be: (1) physical restraint (reduction of the freedom through the use of a belt or other retention means); (2) a chemical restraint (administering drugs that reduce freedom of movement); and/or (3) environmental restraint (environmental modifications in which the victim lives in order to limit his/her movements).

The elderly population is vulnerable; therefore, they are often victims of restraint by family members or caregivers. In the elderly, restraint is justified by the general deterioration of health, space-time disorientation, increased risk of falls, and aggressiveness. Restraint is used due to the difficulty in managing the elderly person and the belief that it will reduce the risk of negative events. However, restraint in the elderly has many negative consequences: physical (related to immobilization such as ulcers, incontinence, muscle atrophy), psychological (depression, restlessness), and social.<sup>3</sup> Therefore, restraint should not be considered a therapeutic act in the elderly as it worsens health conditions and does not reduce the risk of falls. The elderly victims of physical restraint have greater cognitive impairment and worsening of global autonomy, with a reduction in the scores on the Barthel index. Furthermore, restraint violates the dignity of the person. The case reported here highlights the crucial role of the correct analysis of crime scene data even in apparent accidental deaths of the elderly. Restraint is related to high health risks for the elderly. The importance of family and social integration of the elderly in order to prevent the occurrence of accidents related to lack of control in elderly subjects and the need to limit the use of restraint to only those cases where it is indispensable for elderly safety have been demonstrated.

## Reference(s):

- Hamers J.P.H., Huizing A.R. Why do we use physical restraints in the elderly? Z Gerontol Geriat 38:19 25 (2005) DOI: 10.1007/s00391-005-0286-x.
- <sup>2.</sup> Bleijlevens M.H.C., Wagner L.M., Capezuti E., Hamers Jan P.H. Physical Restraints: Consensus of a Research Definition Using a Modified Delphi Technique. J Am Geriatr Soc, 64: 2307-2310, 2016.
- <sup>3.</sup> Hofman H., Hahn S. Characteristics of nursing home residents and physical restraint: A systematic literature review. *J Clin Nurs*, 23 (2014), pp. 3012-3024.

Forensic Sciences, Elderly, Restraint