# Physical Restraint Use among Hospitalized Elderly Thais

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**Abstract:** This descriptive study was undertaken to ascertain the prevalence, frequency, type and rationale of the use of physical restraints, as well as assess nurses' and family members' attitudes regarding use of physical restraints among hospitalized elderly in a teaching hospital in Thailand. Data regarding the use of physical restraints were collected via observation, twice daily, using the Physical Restraint Use Observational Tool. During each observation period, patients' cognitive status was also assessed, using the Chula Mental Test. Measurement of the nurses' and family members' attitudes toward the use of physical restraints was accomplished via use of a Physical Restraint Use Questionnaire.

Prevalence of use of physical restraints, including side rails, was found to be 65.7%. However, the use of side rails only was 59.4%. The use of side rails, in addition to other forms of physical restraint devices, was determined to be 6.3%. The most frequently used physical restraint devices were bilateral wrist restraints that were mainly used to protect medical equipment and prevent falls. Significant differences were found, based on age and cognitive status, among both restrained and unrestrained hospitalized elderly. In addition, significant differences were found, regarding attitude toward use of physical restraints, between family members of the elderly who were restrained and nurses who provided care for the restrained elderly.

The findings illustrate the extent and use of physical restraints within one Thai teaching hospital, wherein side rails was the predominant method of physical restraint. The results suggest the need for appropriate educational and clinical guidelines regarding the use of physical restraints among hospitalized elderly Thais.

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**Key words:** Physical restraints; Hospitalized elderly; Attitudes regarding use of physical restraints.

## Introduction

Thailand currently is experiencing one of the most rapid increases in the number of aged citizens in the world.[1] As the life expectancy of Thais increases, problems often associated with aging (i.e. chronic illness and disability) are becoming more prevalent.[1] Due to the lack of a sufficient number of nursing homes and formal home health care services,

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chronically ill elderly Thais typically are admitted to hospitals, rather than being cared for in their homes.

Hospitalized elderly Thais often are at risk for physical restraint, with a physical restraint usage prevalence rate of 28.1% among hospitalization Thais age 60 and over.[2] Physical restraints, in Thailand, may include physical or mechanical devices that cannot easily be removed (i.e. hand; vest/chest; wrist, arm, ankle and/or leg restraints; and, raised, full-length, side rails) by a patient experiencing altered mental status, difficulty ambulating and/or repeated falls.[1]

In the United States of America (USA), the incidence and prevalence of physical restraint use among elders varies depending upon setting.[3] Prior American studies have revealed that 18- 41.5% of hospitalized acute care patients[4] and 15-85% of nursing home residents have been restrained.[3,5] However, where legislative mandates have been made and regulatory standards have been established, such as in nursing homes in the USA, physical restraints have been found to be less often used.[6]

The impetus for use of physical restraints, throughout Thailand, most often arises from hospital administrators concerns about risk management, such as worries about litigation if a patient falls or sustains a serious injury. Although Thailand's Hospital Accreditation standard states that a patient's right for privacy, human dignity, personal values and beliefs must be respected, nurses often view restraint as an appropriate intervention when they do not know how to control a patient's undesirable behavior.[7] Because of concerns for patient safety, the healthcare staff's use of physical restraints appears to be accepted as an inevitable and unquestioned practice. However, a lack of empirical evidence exists regarding the effectiveness of using physical restraints, in Thailand, to safeguard patients from injury.

Physical restraints have been used to: maintain patients and others' safety; prevent falls;[5] prevent unwanted removal of tubes;[8] manage agitation and aggression;[9] and, prevent wandering.[10] However, no clear evidence exists to support the use of physical restraints to prevent injury in clinical settings.[12] In addition, the use of physical restraints have been found to have negative physical and psychological effects on patients, family members and hospital staff.[11]

Even though a great deal of research related to the use of restraints has been conducted in the USA,[3,5] investigation regarding the use of physical restraints in Thailand has been limited, with only two studies on the topic being published.[7,13] Thus, this descriptive study was undertaken to ascertain the prevalence, frequency, type and rationale of the use of physical restraints, as well as to assess nurses' and family members' attitudes regarding the use of physical restraints among hospitalized elderly in a teaching hospital in Thailand.

## Conceptual Framework

The conceptual framework was synthesized from Ajzen and Fishbein's Theory of Reasoned Action (TRA),[14] which aims to explain how individuals decide to perform certain behaviors. TRA was chosen because its assumptions are in line with an exploration of physical restraint and its contributing factors, including patient behavior and nurses' attitudes. TRA suggests behavior is determined by personal intentions to perform a behavior and that this intention is, in turn, a function of attitudes toward the behavior.[14] Intention (the immediate antecedent of behavior) is the probability, as rated by the subject, a particular behavior will be performed. However, individuals tend to engage in behaviors when the behaviors are evaluated positively. Attitude is an individual's positive or negative belief about performing a specific behavior. It is made up of personal beliefs accumulated over a lifetime. Beliefs are formed from direct experiences, outside information

and inference. Only a few beliefs, however, actually influence attitude. Subjective norms are based on the perceptions of specific significant others (i.e. spouse, family, colleagues & close friends) as to whether one should engage in a behavior. Perceived behavioral control is a third antecedent of intention in TRA. It is an individual's perception of the correctness or incorrectness of performing a behavior. Because nurses are expected to be grounded in professional ethics and capable of logical thought, they should be able to consider the benefits and consequences of performing the behavior of physical restraint use.

Although a number of studies, based on TRA, have focused on individual rather than collective behavior,[15,16] this study, similar to Werner and Mendelsson's study,[17] examined nurses' attitudes, subjective norms, moral obligations and intentions to use physical restraints with hospitalized elders. Prior research suggests nurses' and family members' attitudes toward the use of physical restraints, as well as patients' characteristics, influence the use of physical restraint.[17]

## Method

***Design:*** A cross-sectional descriptive design, using observation and a survey, was used.

***Ethical Considerations:*** Approval to conduct the study was granted by the Institutional Review Board of the principal investigator's (PI) academic institution and the hospital where data were gathered. All potential subjects were informed about: the study's purpose; what would be involved to participate in the study; anonymity and confidentiality; and the right to withdraw at any time without negative repercussions. All subjects signed a consent form prior to data collection.

***Setting and Sample:*** Based on results of prior studies that suggest the prevalence and incidence of physical restraint use is higher on medical, surgical and orthopedic wards, data were collected on 9 wards (3 medical, 4 surgical and 2 orthopedic) of a large teaching hospital in southern Thailand. The hospital was selected because it annually admitted more than 8,600 elderly (60 years of age or older) patients and was known for providing quality care to patients, with serious health problems, from southern Thailand.

Three types of subjects were needed for the study: elderly patients, nurses and family members of the elderly patients. The selection criteria for each of the three types of subjects were different. The patients had to be: able to speak, read and write Thai; 60 years of age or older; and, admitted to one of nine hospital wards during the observation period. The nurses had to have restrained elderly patients, while the family members had to be responsible for the restrained elder and able to speak, read and write Thai.

Utilizing Lemeshow and colleagues[18] method, a sample size of 384 was determined. Review of the patient roster of each of 9 hospital wards (medical, surgical, neuro-surgical and orthopedic) that contained elderly patients was conducted to identify potential patients to recruit. In order to account for possible drop-outs, consent to participate in the study was obtained from 442 males and females 6o years and older. However, 13 of those who consented were transferred to wards not identified as data gathering sites and, thus, eliminated from the study.

Of the 429 elders observed, 27 were restrained and consented to participate in the study. In addition, 27 family members of the restrained elderly patients and 27 nurses who had been involved in restraint of the elderly patients consented to participate. The 27 physically restrained elders were 62 to 90 years of age (mean = 76.1yrs.) and had been hospitalized for 2 to 60 days (mean = 18.4 days). Most of them were cognitively impaired (88.9%; n =24) and male (55.6%; n = 15).

The 27 family members ranged in age from 23 to 74 years (mean = 45.8 yrs.). Most of them were college educated (44.4%, n = 12), female (66.7%; n = 18) and children (92.6%, n = 25) of the restrained elders.

The 27 nurses predominantly held baccalaureate degrees (85.2%, n = 23) and were female (96.3%, n = 26). They ranged in age from 26 to 47 years (mean = 37.8 years) and had 3 to 27 years (mean = 16.4 yrs.) of clinical experience. Most of them (85%; n = 23) had never received special training, education or information regarding the use of physical restraints, nor special training, education or information regarding geriatric nursing (81.4%; n = 22).

***Instruments:*** Data were collected via observations and questionnaires. The instruments included the: Thai Chula Mental Test (TCMT);[19] Physical Restraint Use Observation Tool (PRUOT); [20] and, Perceptions of Restraint Use Questionnaire (PRUQ).[21] Since the PRUOT and PRUQ were adapted from instruments originally developed in English, they required translation into Thai and back-translation into English to assure no changes in meaning had occurred. Permission for use, adaptation and translation of the instruments was obtained from the owners of the instruments. The TCMT was in the public domain.

The Thai *Chula Mental Test (TCMT)*[19] was used to assess the cognitive function of the elderly patients. The TCMT was designed to assess one's perception, memory, attention, language and recall through use of questions (i.e.: "How old are you?" and "What time is it?"). Item responses were coded on a dichotomous scale where: 0 = "incorrect" and 1= "correct." A total score was obtained by summing across items. Since some of the items generated two or three possible scores, a total TCMT score of 0 -19 was obtained from the 13 items. A TCMT score ≥ 15 indicated normal cognitive function, while a TCMT score < 15 indicated cognitive impariment.

The *Physical Restraint Use Observation Tool (PRUOT)* was adapted from the 17-item Restraint Use Observation Tool (RUOT)[20] that was designed to record physical restraint use among elderly nursing home patients in the USA. Adaptation of the RUOT to create the 19- item PRUOT included word alterations, as well as addition of two items (cognitive status and reason for use of restraints) to reflect the context of Thai hospitals and patients. Examples of word alterations included changing 'room' to 'bed' and 'unit' to 'ward'. The PI and one registered nurse, experienced in the use of physical restraint, determined the inter-rater reliability, with 10 elderly restrained patients, prior to use of the PRUOT in the study. Their inter-rater agreement was found to be 100%. The PRUOT sought to obtain information regarding each restrained elder's: age; gender; cognitive status (determined by the TCMT); initials; reason for being restrained (provided by the primary nurse); and, type of restraint (vest, waist, ankle, mitt, side rails or other restraining device). In addition, data (i.e. date, ward and time of observation) were recorded.

The *Perceptions of Restraint Use Questionnaire (PRUQ)* was adapted from the 22- item Restraint Questionnaire for Staff (RQS)[21] and used to determine the nurses' and family members' attitudes about the use of physical restraints. Adaptation of the RQS, to create the PRUQ, involved minor wording revisions and the addition of two items ("Bedrails are a form of physical restraint" and "Restraint is a means of assuring safe patient care") to reflect the context of Thai hospitals and elders.

The first version of the PRUQ consisted of 24 items and was pilot tested, with 20 nurses who had experience restraining patients, to assess its understandability and assure its reliability. The instrument's Cronbach's alpha coefficient was found to be 0.50. Based on individual item analysis, five items were deleted (due to low scores) leaving 19 items

in the second version of the PRUQ. The second version of the PRUQ was retested, using another group of 20 nurses with experience restraining patients, and revealed a Cronbach's alpha coefficient of 0.72. Three experts in gerontological nursing, who were not the same nurses as those used to assess reliability, determined the CVI of the PRUQ to be 0.86.

The final adapted version of the PRUQ (19 items), using a Likert-like scale, assessed the nurses' and family members' attitudes and beliefs toward the use of physical restraint (i.e. 'Restraints are undesirable, but necessary' and 'Restraints humiliate patients'). Six items (scored on a 3 point scale) assessed attitudes involving increases, decreases or no changes in: sensory stimulation; confusion; falling out of bed; injury as a result of restraint use; pulling out therapeutic devices; and, nursing care time. The remaining 13 items (scored on a point 4 scale) assessed beliefs about: restraint desirability; most patients who are restrained; patient freedom; bedrails; safe care; legality; physician's orders; patient insult; patient humiliation; insufficient staff; family decision making; presence of family members; and, alternatives to restraints. Scoring of the PRUQ was achieved by summing the value of each of the item responses to arrive at a total score that could range from 19 to 70. The higher the total score, the stronger the favorable attitude toward restraint use and, thus, the greater likelihood for restraint use.

***Procedure:*** Once consent was obtained from all subjects, the patient subjects were observed, by the PI or research assistant (a registered nurse trained by the investigator regarding the study's definition of terms, inclusion criteria and instrument use), using the PRUOT, for 3 to 5 minutes twice daily (between 10:00am & 2:00 pm, and between 6:00pm & 10:00pm) until discharge. Prior to the start of each observation, the respective patient subject was administered the TCMT. The results were recorded on the PRUOT. At the time of each patient observation, the PI or research assistant requested the nurse and family member, in attendance, to respond to the PRUQ, which took approximately 5-10 minutes to complete.

***Data Analysis:*** Descriptive statistics were used to calculate the: demographic characteristics of the subjects; prevalence and frequency of physical restraints; comparison of nurses' and family members' responses to items on the PRUQ; and, TCMT scores. Chi-square was used to determine the difference between patient characteristics and physical restraint use. The independent t-test was used to determine the difference between the nurses' and family members' attitudes toward physical restraint use.

## Results

***Prevalence, frequency, type and rationale of PRU:*** The prevalence of PRU (including side rails) was 65.7% (n = 281), with 6.3% (n = 27) of the restrained patients having both side rails and other physical restraint devices in place. Three of the restrained patients had 3 types of restraints (wrists, chest and ankles) applied in a 24-hour period. Prevention of falls was the only reason stated for the use of side rails as a physical restraint.

***Patient characteristics and PRU:*** Age and cognitive status were found to differ for both the restrained and unrestrained patients, while gender was not found to be significantly different (See **Tables 1 & 2**). The restrained patients, compared to those who were unrestrained, were found to be older and more cognitively impaired.

***Attitudes toward PRU:*** A significant difference was found between the family members' and nurses' attitudes toward PRU (See **Table 3**). The mean score on attitudes toward PRU of family members of restrained elderly patients was more favorable than that of the nurses who restrained elderly patients.

**Table 1** Comparison of PRU by Patients' Ages in Years (n = 429)

| PRU | n | Mean | SD | t | p-value |
|---|---|---|---|---|---|
| Restrained | 27 | 76.11 | 7.334 | 3.615 | .001 |
| Unrestrained | 402 | 70.72 | 7.514 | | |

**Table 2** Difference in PRU by Gender and Cognitive Status (n = 429)

| Variables | PRU | | $\chi^2$ | p-value |
|---|---|---|---|---|
| | Restrained | Unrestrained | | |
| **Gender** | | | | |
| Female | 12 | 165 | .021 | .84ns |
| Male | 15 | 237 | | |
| **Cognitive status** | | | | |
| Intact | 3 | 378 | 166.815 | .001 |
| Impairment | 24 | 24 | | |

**ns = not significant**

**Table 3** Nurses' and Family Members' Attitudes toward PRU

| Attitudes toward PRU | Mean | SD | Range | t-test | p-value |
|---|---|---|---|---|---|
| Nurses (n = 27) | 44.6 | 3.9 | 35-54 | -2.27 | .027 |
| Family members (n = 27) | 46.9 | 3.4 | 40-53 | | |

***Comparison of attitude items toward PRU between the nurses and family members:*** Table 4 shows individual instrument item comparison between the nurses and family members regarding their attitudes toward PRU. With the exception of four items for nurses and four items for family members, the majority of the nurses and family members agreed with the statements shown in **Table 4.** Among nurses, the items they did not agree with were those related to: injury; legal protection; humiliation of patients; and, insufficient staff. The items family members did not agree with were those related to: need for physician's order; insult to personal right; humiliation of patients; and, insufficient staff.

**Table 4** Nurses' and Family Members' Attitudes toward PRU

| Items | Nurses (n = 27) | | Family members (n = 27) | |
|---|---|---|---|---|
| | n | (%) | n | (%) |
| **In general, restraints:** | | | | |
| 1. Are undesirable, but necessary | 24 | 88.9 | 22 | 74.1 |
| 2. Increase patients' sensory stimulation | 25 | 92.6 | 19 | 70.4 |
| 3. Increase confusion | 21 | 77.8 | 19 | 70.4 |
| 4. Decrease risk of falling out of bed | 26 | 96.3 | 22 | 81.5 |
| 5. Decrease injury | 13 | 48.1 | 22 | 81.5 |
| 6. Decrease pulling out therapeutic devices | 27 | 100.0 | 26 | 96.3 |
| 7. Decrease nursing care time | 14 | 51.9 | 18 | 66.7 |
| 8. Are need by some patients | 14 | 51.9 | 19 | 70.4 |
| 9. Are needed for patient protection | 17 | 63.0 | 17 | 63.0 |
| 10. Include bed rails | 16 | 59.3 | 23 | 85.2 |
| 11. Are need to assuring safety | 17 | 63.0 | 27 | 100.0 |
| 12. Are needed for legal protection | 10 | 37.0 | 16 | 59.3 |
| 13. Require a physician's order | 25 | 92.6 | 7 | 26.0 |
| 14. Are an insult to personal rights | 21 | 77.8 | 7 | 26.0 |
| 15. Humiliate patients | 12 | 44.4 | 10 | 37.0 |
| 16. Are used due to insufficient staff | 8 | 29.6 | 9 | 33.3 |
| 17. Require family approval | 22 | 81.5 | 23 | 85.2 |
| 18. Are applied after family members are used as an alternative | 26 | 96.3 | 24 | 88.9 |
| 19. Should be used only after other alternatives are used | 25 | 92.6 | 20 | 74.1 |

## Discussion

The prevalence of PRU (including side rails) in this study was 65.7%, while the use of both side rails and additional physical restraint devices was 6.3%. Finding the use of side rails to be high in this study was not surprising given the literature points out that side rails are the most commonly used form of restraint with acutely and chronically ill patients.[23] The primary use of side rails was found to be prevention of patients falling out of bed. For this reason, the majority of nurses and family members, in this study, were found to have a positive attitude regarding the use of side rails. This finding is congruent with those of Helmuth's[24] study wherein prevention of falls was found to be a strong indication for the use of side rails as a restraint.

The use of additional restraint devices was low in this study. However, based on comments from nurses who restrained patients, restraints other than side rails usually were used to prevent such problems as agitated patients removing an endotracheal tube or other treatment devices. The PI and research assistant noted, during their observations, nurses tended to rely on family members and side rails to help control agitated patient behavior, rather than resorting to the use of other type of restraints. Thus, it was not surprising to find the majority of nurses and family members agreed with the statement, 'restraints are applied after family members are used as an alternative.'

In addition, the nurses were observed to primarily restrain patients to prevent damage or removal of medical devices. This finding is consistent with Minnick and colleagues[25] finding where the predominant reason for physical restraint was prevention of treatment disruption. Happ[26] also noted nurses' decisions to apply physical restraints often is based on the belief the patient, if unrestrained, would intentionally or inadvertently remove intravenous lines, tubes, drains, or life-sustaining equipment. Thus, it was not surprising to find, in this study, 100% of the nurses and 96.3% of the family members had a positive attitude regarding the use of restraints to 'decrease pulling out therapeutic devices.' Maintaining technological devices is almost exclusively a nursing responsibility and, thus, nurses are protective of these devices, especially if accidental removal is considered life-threatening.

***Differences between Patient Characteristics and PRU:*** Slightly more than one-half of the restrained elderly patients were men (n = 15; 55.6%) and the vast majority had cognitive impairment (n = 24; 88.9%). A statistically significant difference was found between age and PRU. This finding is similar to prior research where persons 60 years of age or older have been found to more likely be restrained. Not surprisingly, the risk of physical restraint with this age group has been found to be 3 to 4 times greater than that of persons less than 60 years of age.[27]

Hospitalized older adults truly appear to be at risk for use of physical restraints, especially when they are elderly and experiencing altered mental status. Similar to the findings of Bredthauer and colleagues,[28] wherein 30% of elderly patients were found to be physically restrained, with the highest incidence (48%) occurring among those who have severe cognitive impairments, a significant relationship was found, in this study, between cognitive status and PRU. The findings of this study also are congruent with prior findings that reveal individuals with cognitive impairment are 3 to 4 times more likely to be restrained, during a hospital stay, compared to persons without a cognitive impairment.[22]

***Differences in Attitudes toward PRU by Nurses and Family Members:*** A significant difference was found toward PRU between the attitudes of family members of restrained elderly patients and nurses who restrained elderly patients. The mean scores of nurses' attitudes toward PRU were lower than those of family members. Family members also tended to desire PRU more often than did nurses. In addition, the majority of nurses and family members agreed on the various aspects of PRU.

There were very few aspects of PRU with which a low percentage of the nurses and family members agreed. Two of those aspects were: 'restraints humiliate patients'; and, 'restraints are used when there is insufficient staff'. Two additional aspects with which a low percentage of nurses agreed were: 'restraints decrease injury'; and, 'restraints are needed for legal protection'. Two other aspects with which a low percentage of family members agreed were: 'restraints require a physicians order'; and, 'restraints are an insult to personal rights'. However, these findings are incongruent with the findings of other studies. For example, family members have

been found to: be upset and have strong emotional responses when seeing their loved ones restrained;[29] often fail to understand why restraints are used; and, lack knowledge about restraints potential physical and psychological harm.[30,31]

In this study, family members viewed restraint as an expected standard for patient safety. Although they desired to be involved in patient care, the family members appeared fearful about taking responsibility for the care of their elder, possibly because of their lack of effective communication skills or physical ability. This may have contributed to the family members request or desire for physical restraint.[32] No prior study could be located that compared all of the attitudes nurses and family members may have toward PRU.

## Limitations

Like all studies, this study has limitations. The subjects were recruited from one hospital in the southern part of Thailand, limiting generalizability of the findings to other parts of Thailand. Moreover, the subjects may have responded to the questionnaire in ways they believed were pleasing to the researcher, rather than responding in a manner that reflected their actual beliefs and practices.

## Conclusions and Recommendations

Further research regarding the use of restraints appears essential to ensure safe and humane nursing care. Based upon the fact all nurse subjects, in the study, agreed restraints should be applied after the presence of family members is used as an alternative brings attention to the need for examination of alternatives to PRU. Although many restraint alternatives have been cited in the literature, few have been rigorously evaluated. A number of studies have demonstrated PRU can be reduced by using a variety of alternatives. However, it has not yet been determined which alternatives are most effective for which patients.[33] Therefore, the testing of various alternative interventions and alternatives to restraints, such as family participation at the bedside instead of PRU, is strongly indicated.

The nature of the use of side rails is less clear as they have been viewed as a safety device. Side rails commonly have been used to minimize falls from hospital beds, although descriptive studies have shown falls occur from bed despite the use of side rails.[34] Findings from this study found that 65.7% of nurses used side rails to prevent falls. Therefore, a retrospective/prospective study about the relationship between falls and side rail use is recommended, as well as efforts to use only half rather than full side rails.

Nearly all of nurses in this study agreed with the statement, 'In general, restraints decrease pulling out therapeutic devices.' Several studies have found patients who self-extubate do so despite being restrained. Nevertheless, re-intubation is not required in 50-89% of patients with unplanned extubation.[35] An unrestrained patient may remove medical devices just as easily as a restrained patient. Therefore, further research regarding the relationship between PRU and medical device removal, especially self-extubation, is recommended.

Development of an appropriate educational intervention and guidelines suitable for practice, regarding PRU in Thailand, is encouraged. Possible approaches include: education on falls and treatment inference; interventions designed to eliminate the need for side rails; education and support for families whose loved ones are restrained; better training for staff to provide individualized care to patients interfering with treatments; and, improving hospital policies related to incidents regarding PRU.

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# การใช้การผูกยึดในผู้ป่วยสูงอายุไทยที่เข้ารับการรักษาในโรงพยาบาล

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**บทคัดย่อ:** การศึกษาเชิงพรรณนาครั้งนี้มีวัตถุประสงค์เพื่อศึกษาอุบัติการณ์ ความถี่ ประเภท และของการใช้การผูกยึด และทัศนคติต่อการใช้การผูกยึดในผู้ป่วยสูงอายุที่เข้ารับการรักษาในโรงพยาบาล ระหว่างเจ้าหน้าที่ทางการพยาบาลและญาติผู้ป่วยจากโรงพยาบาลมหาวิทยาลัยแห่งหนึ่งในประเทศไทย ข้อมูลการใช้การผูกยึดในผู้ป่วยสูงอายุรวบรวมโดยใช้แบบสังเกต สังเกตการใช้การผูกยึดวันละ 2 ครั้ง ทุกวันจนกระทั่งจำหน่ายออกจากโรงพยาบาล ภาวะการรู้คิดของผู้ป่วยสูงอายุประเมินโดยใช้ Chula Mental Test เจ้าหน้าที่ทางการพยาบาลและญาติผู้ป่วยตอบแบบสอบถามเกี่ยวกับทัศนคติต่อการใช้การผูกยึดในผู้ป่วยสูงอายุที่เข้ารับการรักษาในโรงพยาบาล (Physical Restraint Use Questionnaire)

ผลการศึกษาพบว่า อุบัติการณ์การใช้การผูกยึดคิดเป็น 65.7% แบ่งเป็น การใช้ไม้กั้นเตียงอย่างเดียว 59.4% และการใช้ไม้กั้นเตียงร่วมกับการใช้การผูกยึดวิธีอื่น 6.3% ประเภทของการผูกยึดที่ใช้บ่อยที่สุดคือ การผูกข้อมือทั้งสองข้าง เหตุผลที่ใช้ในการผูกยึดคือ ป้องกันการดึงอุปกรณ์ทางการแพทย์และป้องกันการหกล้ม อายุและภาวะการรู้คิดระหว่างผู้ป่วยสูงอายุที่ถูกผูกยึดและไม่ถูกผูกยึดมีความแตกต่างกันอย่างมีนัยสำคัญทางสถิติ ญาติของผู้ป่วยที่ถูกผูกยึดและเจ้าหน้าที่ทางการพยาบาลที่ผูกยึดผู้ป่วยเหล่านั้นมีทัศนคติต่อการผูกยึดแตกต่างกันอย่างมีนัยสำคัญทางสถิติ

ข้อค้นพบจากการศึกษาครั้งนี้ ให้ข้อมูลพื้นฐานของการใช้การผูกยึดในผู้ป่วยสูงอายุ อันจะนำไปสู่การพัฒนาโปรแกรมการศึกษา วิธีการและแนวทางปฏิบัติที่เหมาะสมเพื่อลดการใช้การผูกยึดในอนาคตต่อไป

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**คำสำคัญ:** การผูกยึด ผู้ป่วยสูงอายุไทยที่เข้ารับการรักษาในโรงพยาบาล ทัศนคติต่อการผูกยึด

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