

# Knowledge, Attitude and Practice of Nursing Home Staff Towards Physical Restraints in Hong Kong Nursing Homes

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**Abstract** The purpose of this paper is to determine the knowledge level, attitudes and practice of nursing staff toward restraint use in nursing homes in Hong Kong. A convenience sample of 253 nursing staff from five nursing homes was included. Many misconceptions exist among staff, for example, most nurses believe either that good alternatives to restraints do not exist, or else they underestimate the physical and psychological effects of restraints applied to clients. However desirable practice was reported, with nurses in a more senior position and staff with longer years of experience tending to have a better knowledge level, more appropriate attitudes and better practice in relation to restraint use. The results of this study provide insights to consider when planning an inservice program on restraint use so that a higher standard of care can be achieved.

## INTRODUCTION

Though it is widely believed that physical restraints can impose many adverse effects on the clients, this practice is still commonly adopted in many health care settings. According to Strumpf and Evans (1992, p.4), "thousands of older adults are restrained in some way on a daily basis". The most frequent reasons stated by nurses for using restraints are to prevent falls (Evans & Strumpf 1990; Mion & Mercurio 1992), to stop patients from wandering about (Mion & Mercurio 1992; Rader 1991), protect the residents from harming themselves or others (Magee et al. 1993; Varone et al. 1992), maintain treatment plans (Hardin et al. 1994; Rader 1991), or to control confused or agitated residents (Hardin et al. 1994; Magee et al. 1993).

Physical restraint is usually the first approach considered as well as the last resort adopted to manage the problems of the above clients. Moreover, when one restraint is ineffective, nurses tend to add another, thus it is not unusual to find a client ending up with multiple restraints (Evans & Strumpf 1990; Magee et al. 1993; Varone et al. 1992). In this study, physical restraints are defined as mechanical devices such as vests, belts or ties applied to the resident's body or wheelchair to restrict movement.

Many myths and misconceptions exist among nurses that support the continued use of restraints as a desired technique to control clients. However, in real situations, these statements can seldom be justified. For example, some nurses believe that applying restraints is for the benefit of the client.

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According to Brower (1991), restraints are viewed by nurses as a necessary evil to be used only when needed. In reality, the hazards of restraining devices appear to outweigh any perceived benefits. Applications of restraints have both physiological and psychological consequences for the client (Brower 1991; McHutchion & Morse 1989).

As Evans and Strumpf (1990, p.127) emphasize, "myths are powerful determinants of behaviour, even in professional practice". Therefore it is worthwhile exploring the usual practice of nursing home staff who play a direct and central role in the care of the elderly. Furthermore, the knowledge level about restraints and underlying attitudes of the staff toward them should also be investigated because knowledge and attitudes can directly affect their practice.

Nowadays, the overseas trend is toward tighter regulation of restraint usage, as set out in the Omnibus Budget Reconciliation Act of 1987 (OBRA) which prohibits the use of physical restraints in nursing homes (Mion & McHutchion 1991; Phillips et al. 1993). In the United States, the desire to reduce or eliminate the use of restraints has increased and become part of a national movement to "untie the elderly" (Phillips et al. 1993). In view of this current trend to advocate the freedom of the resident, more effort should be made to achieve a genuine "restraint-free" environment in nursing homes.

Studies that relate to the use of restraints are relatively recent and are dominated by overseas literature, particularly from North America. The operational differences in health care settings such as the beliefs, practice and knowledge levels in Hong Kong when compared with other countries, may result in the findings of overseas studies being inappropriate to the local environment. Therefore a local study is necessary to produce

findings that will be relevant to our clients in Hong Kong.

## METHODOLOGY

A convenience sample was obtained from the staff (registered nurses, enrolled nurses, and personal care workers) working in five subsidized nursing homes in Hong Kong in 1998. The selected nursing homes have 126 to 250 residents under the 'Care and Attention' section, which accommodates residents that are relatively dependent and require much nursing care. A questionnaire which consists of three sections were used in order to collect data relating to the knowledge level, attitudes and practice of the staff towards physical restraints. The items for the questionnaire were originally developed to study nursing personnel who worked in nursing homes in the United States (Janelli et al. 1991, Scherer et al. 1993). The questionnaire was adapted for the staff in nursing homes for the current study by revising some of the items that were more relevant to the settings of nursing homes in Hong Kong. For example, the term 'resident' instead of 'patient' was used in many items. Translation of the questionnaire into Chinese was validated by an experienced translator of the university. Three nursing staff who have rich experiences in geriatric settings were invited to examine the questionnaires for content validity. The panel was made up of two geriatric nurse specialists, and one Department Operations Manager of a geriatric unit. The content validity index of 86% was achieved after a minor adjustment was made. The entire questionnaire consists of four sections. Section 1 deals with the staff's knowledge level toward the use of restraints (11 items). Section 2 contains of items measuring the attitudes of staff toward the use of restraints (12 items). The items in section 3 pertains to nursing practice issues (14 items). Personal data and education level in relation to restraint use were collected in the last section of the questionnaire.



The test-retest reliability coefficients for individual sections (section 1, 2 and 3) of the questionnaire were examined by administering the same instrument repeatedly to 12 subjects from two nursing homes at a 2-week interval. The reliability coefficients for the knowledge, attitudes and practice scales used in this study were 0.65, 0.61 and 0.94 respectively. The questionnaires were distributed by the researcher to different nursing homes. Each questionnaire was accompanied by an information sheet that described the purpose of the study, and explained that the participation was voluntary. The questionnaires were anonymous and subjects were assured that their responses were to be kept confidential.

## DATA ANALYSIS

The quantitative data was analysed by SPSS version 9.0. Descriptive statistics were performed on the responses to the knowledge, attitudes and practice items individually. Parametric tests such as *t*-tests or Analysis of variance (ANOVA) were used to see whether the demographic and professional characteristics (training, staff position, years of experience) will have any effect on the knowledge, attitudes or practice scores. Chi-square analysis was conducted when the impact of staff position or the years of experience on individual items were examined. Additional analysis with the Pearson's product moment correlation was conducted to examine whether there was any interrelationship among knowledge level, attitudes and practice.

## RESULTS

The sample in this study represented 73% of the total nursing staff of the five selected nursing homes. Among the 253 respondents,

8.4% were registered nurses, 24% enrolled nurses, and 67.6% personal care workers.

### *Knowledge about the use of physical restraints:*

In this section, correct responses were given a score of 1 and incorrect responses a score of 0, with "undecided" answers included in the incorrect category. Thus, a score of 11 represented 100% correct responses. However, the mean knowledge score of subjects was below average (mean = 5.3, SD = 1.67), with a range from 2 to 10 (potential range 0-11) (Diagram 1). Most subjects answered incorrectly to items especially related to the risk factors or possible outcomes of the use of restraints (item 7, 9 and 11). Moreover, only 9% of the responses indicated that good alternatives to restraints do exist (Table 1). Analysis of variance (ANOVA) illustrated that there was a significant difference in knowledge level about restraints among staff holding different position ( $F_{2, 159} = 10.48, p < 0.0001$ ), and a post-hoc test further illustrated that registered nurses have a higher knowledge score than enrolled nurses ( $p = 0.017$ ), who in turn have a higher score than personal care workers ( $p = 0.021$ ). On the other hand, significant differences in the knowledge level could be found in nurses with different years of experience ( $F_{2, 158} = 8.59, p < 0.0001$ ), nurses with 7 or more years of experience gained a higher score than those with less than 3 years of experience ( $p < 0.0001$ ) or those with 3-6 years experience ( $p = 0.011$ ).

### *Attitudes toward the use of physical restraints:*

Respondents were asked to respond on a four-point Likert Scale as to whether they "strongly agree", "agree", "disagree", or "strongly disagree" with the 12 statements. Positively phrased attitude items were scored with a four for "strongly agree", to a one for "strongly disagree". Thus high scores reflected positive attitudes and low scores reflected negative

**Table 1: Knowledge towards the use of physical restraints**

	Agree †	Disagree †	Percent Correct	Percent Incorrect/Undecided
1. Physical restraints are safety vests or garments designed to prevent injury. (n=248)	232 *	16	93.5	6.5
2. Restraints should be used when one cannot watch the resident closely. (n=246)	152	94 *	38.2	61.8
3. Residents are allowed to refuse to be placed in a restraint. (n=248)	160 *	88	64.5	35.5
4. A physical restraint (safety vest, garment) requires a consent form from the family member. (n=248)	236 *	12	95.2	4.8
5. A restraint should be released every 2 hours, if the resident is awake. (n=201)	141 *	60	70.1	29.9
6. Restraints should be put on snugly so that there is no space between the restraint and the resident's skin. (n=247)	68	179 *	72.5	27.5
7. When a resident is restrained, skin breakdown may increase. (n=251)	42 *	209	16.7	83.3
8. When a resident is restrained in bed, the restraint should not be attached to the side rail. (n=244)	99 *	145	40.6	59.4
9. A resident should never be restrained while lying flat in bed because of the danger of choking. (n=249)	40 *	209	16.1	83.9
10. Good alternatives to restraints do not exist. (n=245)	223	22 *	9.0	91.0
11. Deaths have been linked to the use of vest restraints. (n=247)	39 *	208	15.8	84.2

\* = Correct response

† 'Undecided' responses may be included if it is an incorrect response to that item.

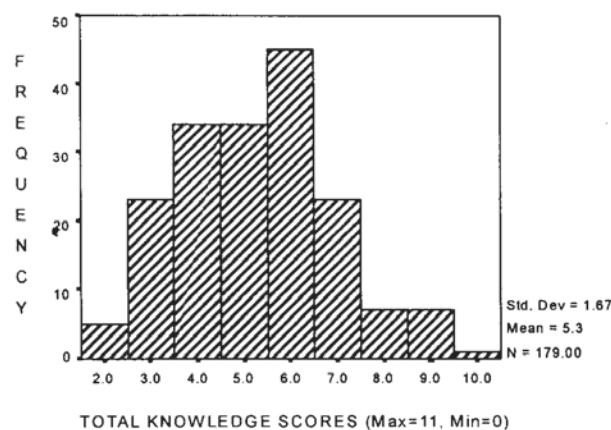


Diagram 1 : The knowledge scores of nursing home staff towards physical restraints.

attitudes. Items 4, 9, 10 and 12 were negative items and their scores were reversed. The maximum possible score was 48.

The attitude of some respondents towards the use of restraints was relatively neutral. Scores ranged from 20 to 39 (potential range 12-48); the mean score was 29.7 with a standard deviation of 3.11 (Diagram 2). It was found that over 70% of the respondents "disagree" or "strongly disagree" with having guilty feelings when placing a resident in restraints, nor do they feel embarrassed when the family enters the room of a resident who is restrained (Table 2).

***Nursing practice performance toward the use of restraints:***

This questionnaire addressed issues relating to the use of alternative measures before restraining, how to care for a client receiving restraints and the level of staffing. Nurses were asked to respond to each of the items on a three-point Likert Scale as to whether they "always", "sometimes", or "never" used these practices. Most of the items were reflective of more positive practices toward caring for restrained clients, with a score of 3 for "always", to a score of 1 for "never" adopted such practices. Item 10 was a negative item and needed to be reverse scored. Thus a score of 14 indicated the most undesirable practice, and a score of 42 the best practice in terms of restraint use. The scores on the use of restraints ranged from 20 to 42 (potential range 14-42), with a mean of 38.7 and a standard deviation of 3.68 (Diagram 3). The majority (88%) of respondents said that they answer the call of the resident in restraints as soon as possible; and 78% of the respondents frequently evaluate and record the effect of physical restraint. Responses to the practice items are listed in Table 3. Since the scores on the use of restraints are skewed to the left

(skewness : -1.64), a logarithmic transformation of data was performed. The transformed data rather than the raw data were used in subsequent parametric analysis.

***Impact of seniority or length of experience of staff on the use of restraints:***

Chi-square analysis demonstrated that staff of different grades or with various years of experience show significant differences in response on some of the items related to their knowledge level, attitudes or practice towards restraint use. For example, licensed nurses (registered nurses and enrolled nurses) tended to have a higher knowledge level of the effect of restraints than did personal care workers, regarding risks such as skin breakdown ( $X^2=19.25$ ,  $df=1$ ,  $p<0.0001$ ), and the danger of choking ( $X^2=19.40$ ,  $df=1$ ,  $p<0.0001$ ). Many of them realized that a resident suffers a loss of dignity when restraints are applied ( $X^2=9.94$ ,  $df=3$ ,  $p=0.019$ ) (Table 4). On the other hand, staff with 7 or more years of geriatric experience had a better knowledge about the need to release the restraints every two hours than those with fewer years of experience ( $X^2=7.69$ ,  $df=1$ ,  $p=0.006$ ); and were more inclined to tell family members the reason for restraining the resident than were junior staff ( $X^2=9.76$ ,  $df=2$ ,  $p=0.008$ ) (Table 5).

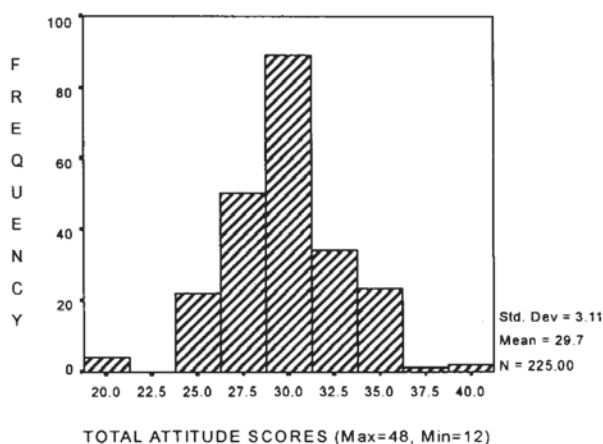
***Other variables:***

Analysis using *t*-tests demonstrated that attitude scores between staff who had or had not received training on the use of restraints in the past differed significantly ( $t_{199} = -2.58$ ,  $p=0.011$ ), but no significant relationship could be found between training and the knowledge score ( $p=0.062$ ) or the practice score ( $p=0.48$ ).<sup>4</sup> Moreover, no association could be observed between the knowledge, attitude or practice score and the other variables, such as gender, or the size of hostel (i.e. number of beds and staff).



**Table 2: Attitudes toward the use of physical restraints**

		Frequency (Percent)			
		Strongly Agree	Agree	Disagree	Strongly Disagree
1.	I feel that family members have the right to refuse the use of restraints.	28 (11.3)	169 (68.4)	46 (18.6)	4 (1.6)
2.	If I were the resident, I feel I should have the right to refuse or resist when restraints are placed on me.	19 (7.7)	171 (69.5)	56 (22.8)	0 (0.0)
3.	I feel guilty placing a resident in restraints.	4 (1.6)	30 (12.2)	183 (74.4)	29 (11.8)
4.	I feel that the main reason that restraints are used is that the nursing home is short staffed.	5 (2.1)	29 (12.0)	149 (61.6)	59 (24.4)
5.	I feel embarrassed when the family enters the room of a resident who is restrained.	3 (1.2)	28 (11.5)	180 (73.8)	33 (13.5)
6.	It makes me feel bad if the residents gets more upset after restraints are applied.	10 (4.1)	103 (41.9)	120 (48.8)	13 (5.3)
7.	It makes me feel bad when residents become more disoriented after the restraints have been applied.	12 (5.0)	89 (36.8)	129 (53.3)	12 (5.0)
8.	A resident suffers a loss of dignity when placed in restraints.	6 (2.4)	100 (40.7)	132 (53.7)	8 (3.3)
9.	It is important to apply restraints to assure legal protection for myself and my nursing home.	12 (5.0)	86 (36.0)	106 (44.4)	35 (14.6)
10.	I feel that placing a resident in restraints can decrease nursing care time.	4 (1.6)	35 (14.3)	148 (60.7)	57 (23.4)
11.	I believe that restraints increase the risk of strangulation.	4 (1.7)	43 (17.8)	162 (67.2)	32 (13.3)
12.	I believe that restraints decrease the number of residents who fall.	77 (31.2)	155 (62.8)	13 (5.3)	2 (0.8)



**Table 3: Nursing practice performance toward the use of physical restraints**

		Frequency (Percent)		
		Always	Sometimes	Never
1.	I try alternative nursing measures before restraining the resident. (n=250)	170 (68.0)	72 (28.8)	8 (3.2)
2.	When I restrain a resident, I make this decision only with a physician's order. (n=249)	210 (84.3)	24 (9.6)	15 (6.0)
3.	When I feel that the resident does not need to be restrained, I make this suggestion to the doctor. (n=246)	171 (69.5)	50 (20.3)	25 (10.2)
4.	I answer the call for the resident who is restrained as soon as possible. (n=248)	218 (87.9)	25 (10.1)	5 (2.0)
5.	I check the restraints at least every two hours to make sure they are in the proper position. (n=251)	217 (86.5)	33 (13.1)	1 (0.4)
6.	I inspect the skin of the resident for abrasions or skin tears if I bath the resident who is restrained. (n=251)	245 (97.6)	6 (2.4)	0 (0.0)
7.	I tell family members why the resident is being restrained. (n=249)	213 (85.5)	24 (9.6)	12 (4.8)
8.	I explain to the resident why the restraint is being applied. (n=249)	217 (87.1)	29 (11.6)	3 (1.2)
9.	I tell the resident when the restraint(s) will be removed. (n=246)	180 (73.2)	53 (21.5)	13 (5.3)
10.	More residents are restrained when we are short of staff than when we are fully staffed. (n=247)	24 (9.7)	66 (26.7)	157 (63.6)
11.	In our nursing home, staff members work together to discover ways to control residents' behaviour other than the use of physical restraints. (n=243)	175 (72.0)	63 (25.9)	5 (2.1)
12.	I frequently assess if the restraint should be removed. (n=245)	169 (69.0)	66 (26.9)	10 (4.1)
13.	When physical restraint is applied, I record on the cadets the type of restraint used, the reason for adopting it, the time when the application commences, and the related nursing care required. (n=242)	206 (85.1)	23 (9.5)	13 (5.4)
14.	I frequently evaluate and record the effect of physical restraint when it is applied to a resident. (n=243)	190 (78.2)	40 (16.5)	13 (5.3)

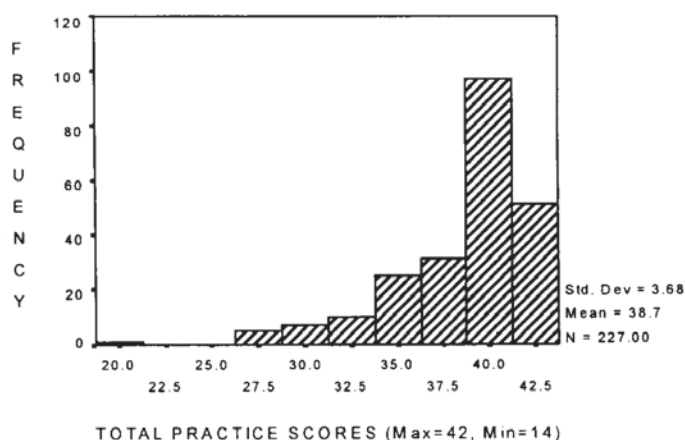


Diagram 3 : The Practice scores of nursing home staff towards physical restraints.

Table 4:

Results of chi-square analysis for items with significant differences among staff with different positions.

Items	Licensed nurses *	Personal care workers	p-value
<b>Knowledge :</b>			
	% correct	% correct	
A restraint should be released every 2 hours, if the resident is awake.	81	65	0.026
When a resident is restrained, skin breakdown may increase.	32	9	<0.0001
A resident should never be restrained while lying flat in bed because of the danger of choking.	32	9	<0.0001
Good alternatives to restraints do not exist.	15	7	0.044
Deaths have been linked to the use of vest restraints.	27	13	0.015
<b>Attitudes :</b>			
	Strongly Agree (%) Agree (%) Disagree (%) Strongly Disagree (%)	Strongly Agree (%) Agree (%) Disagree (%) Strongly Disagree (%)	
A resident suffers a loss of dignity when placed in restraints.	7 46 44 3	1 38 59 2	0.019
I believe that restraints increase the risk of strangulation.	3 36 53 8	1 9 75 15	<0.0001
<b>Practice :</b>			
	Always (%) Sometimes (%) Never (%)	Always (%) Sometimes (%) Never (%)	
I try alternative nursing measures before restraining the resident.	78 22 ---	63 32 5	0.035
I tell family members why the resident is being restrained.	100 --- ---	82 12 6	0.001
I explain to the resident why the restraint is being applied.	97 3 ---	82 17 1	0.006
I frequently assess if the restraint should be removed.	81 19 ---	63 30 7	0.010
When physical restraint is applied, I record on the cadets the type of restraint used, the reason for adopting it, the time when the application commences, and the related nursing care required.	93 7 ---	81 11 8	0.024
I frequently evaluate and record down the effect of physical restraint when it is applied to a resident.	85 15 ---	75 16 9	0.031

\* Licensed nurses = registered nurses and enrolled nurses



Table 5:

Results of chi-square analysis for items with significant differences among staff with different years of experience.

Items	≤ 6 years	7 or more years	p-value
<b>Knowledge :</b>			
	% correct	% correct	
A restraint should be released every 2 hours, if the resident is awake.	64	83	0.006
When a resident is restrained, skin breakdown may increase.	13	25	0.032
A resident should never be restrained while lying flat in bed because of the danger of choking.	11	26	0.003
Deaths have been linked to the use of vest restraints.	12	25	0.012
<b>Attitudes :</b>			
	Strongly Agree (%) Agree (%) Disagree (%) Strongly Disagree (%)	Strongly Agree (%) Agree (%) Disagree (%) Strongly Disagree (%)	
A resident suffers a loss of dignity when placed in restraints.	2 40 58 ---	4 41 50 5	0.042
I believe that restraints increase the risk of strangulation.	2 10 74 14	3 30 59 8	0.002
<b>Practice :</b>			
	Always (%) Sometimes (%) Never (%)	Always (%) Sometimes (%) Never (%)	
I tell family members why the resident is being restrained.	82 12 6	96 1 3	0.008
I explain to the resident why the restraint is being applied.	81 18 1	95 4 1	0.010

The Pearson's product moment correlation showed a significant positive relationship between knowledge and attitudes ( $r=0.385$ ,  $p<0.0001$ ); while a weak relationship could be observed between attitudes and practice ( $r=0.189$ ,  $p=0.007$ ), and between knowledge and practice ( $r=0.150$ ,  $p=0.054$ ).

## DISCUSSION

It was found that the knowledge level of the staff of nursing homes towards restraints was inadequate. Most of them underestimated the effect of restraints applied to clients. Physically, the limitation of movements in

the client resulted in muscle wasting and weakness (Strumpf et al. 1990), unsteadiness and eventually inability to walk (Eigsti & Vrooman 1992; Strumpf et al. 1990), bone resorption due to demineralization (Brower 1991; Conely & Campbell 1991), abrasion and skin tears (Press 1991), and decreased appetite and intake (Strumpf & Evans 1991). Some authors (Cutchins 1991; Lofgren et al. 1989) report that the use of restraints can increase the number of nosocomial infections. In more serious cases, the misuse of restraints may also result in a resident's death through asphyxiation or strangulation (Conely & Campbell 1991). Some residents have even died in fires when they tried to free themselves by burning the vests restraining them (Blakeslee et al. 1991).

As in many other studies (Hardin 1994; McHutchion & Morse 1991, Press 1991; Stilwell 1991), participants in this study showed little awareness of alternatives. Current literature (Brower 1991; Conely & Campbell 1991; Kallmann et al. 1991; Strumpf & Evans 1992) suggests that many alternatives to physical restraints do exist. Evans and Strumpf organise the alternatives into five main categories – “companionship and supervision, changing treatment, physical and diversional activities, psychosocial interventions and environmental manipulation” (Koch 1993, p.10). Some concrete suggestions have been made by Janelli et al. (1994), such as ensuring easy reach of a call light, using a calm and non-threatening voice to talk to the client, playing soft background music, providing reorientation for a patient who is disoriented, evaluating the effect of drugs which may contribute to agitation, and the use of care plans to meet individual needs of clients.

Awareness of the psychological impact of a restraint on the client was low. Many staff

members said that they do not feel guilty when placing a resident in restraints, nor do they feel embarrassed when the family enters the room of a resident who is restrained. Over half of the respondents (57%) also “disagree” or “strongly disagree” with the view that a resident will suffer a loss of dignity when placed in restraints. These findings also accord with the findings in a paper published by Scherer, et al. (1993) who also state that nurses in their study did not appear guilt ridden or embarrassed with regard to the use of restraints. The assumption appears to be that physical protection is more important than the negative psychological effect imposed on the resident. Strumpf and Evans (1991) report the result of interviews with residents of nursing homes, they found that many residents revealed anger, fear, humiliation, resistance and demoralisation when being restrained. A patient who had the experience of being restrained had the following grievances: “I felt like a dog and cried all night. It hurts me to have to be tied up. I felt like I was nobody, that I was dirt. It makes me cry to talk about it (tears). The hospital is worse than a jail” (Strumpf & Evans 1988, p.134). Press (1991, p.30) also stresses that “restraints dehumanise the caring process for both the client and the caregiver, and may be a violation of the client's human rights”. The vast majority of respondents (77%) in the present study believed that if they were the residents, they should have the right to refuse or to resist when restraints are placed on them. This response suggests that respondents may have negative thoughts regarding the use of restraints of which they are unaware.

Another misapprehension is that many nurses believed that restraints could decrease the number of residents who fall. Yet, in 10% to 47% of the cases of patients who had falls,

physical restraints were in place (Ginter & Mion 1992). Using restraints in the elderly decreases muscular strength and therefore increases the potential for falls (Koch 1993). Strumpf & Evans (1988) also state that restraint use often precipitated falls, as patients attempted to untie restraints. Some authors (Blakeslee, Goldman, Popougenis and Torell 1991) even notice that non-restraining facilities cause fewer injuries from falls than facilities that use restraints. Therefore the use of restraints does not necessarily ensure residents in nursing homes remain secure.

Though the knowledge level and attitudes of the respondents towards restraints were not favourable in this study, desirable practice was frequently reported by staff when the resident was restrained. Despite their favourable scores, certain responses are in contrast to some of the items in the "Knowledge" measurement section and needed to be noted. For example, 68% of respondents stated that they try alternative nursing measures before restraining the resident, however many of them said that good alternatives to restraints do not exist (item 10 in Table 1); over 97% of the staff mentioned that they always inspect the skin of the resident for abrasions or skin tears if they bath the resident who is restrained, but 83% indicated that they do not follow this procedure or do not know that skin breakdown may be one of the possible outcomes when a resident is restrained. This finding may indicate that what the staff believe and what they do may not always be the same. As one might anticipate, staff in a higher position (registered nurses and enrolled nurses) and staff with longer years of experience in geriatric nursing tended to have a better knowledge level, the more appropriate attitudes and better practice in relate to the use of restraints. It may be that

staff in a more senior position or with longer years of experience may have a better awareness of the implications of restraint usage. Therefore they are in an ideal position to act as role models for other staff members and can provide appropriate guidance about decisions to apply restraints, and when to remove it. Moreover, Werner et al. (1994) also notice that registered nurses or licensed practical nurses who had more years of experience and more seniority at work more easily had their perceptions changed in the desired direction following the implementation of a restraint-reduction program.

Education received by the staff in the past seems still to affect their present attitudes towards the use of restraints. The majority of the respondents (71.7%) stated that they have attended an restraint in-service program of some form in the past. However, the intensity and the content of the courses were not explored in this study. According to Stilwell (1991), education about the use of restraints for nursing staff is often restricted to an hour or less during the orientation in the nursing homes. Therefore the way to implement the program, and transmit knowledge into daily practice have to be monitored and evaluated. More vivid and creative teaching methods about restraints could be considered, such as role playing, case studies, demonstrations, simulations, debates, or involving family members in the discussions on restraint use could even be considered.

The significant interrelationship among knowledge level, attitudes and practice related to restraints further illustrates that it is important to consider the knowledge level and the power one's beliefs have on one's practice. It is expected that the higher the knowledge level, the more positive the attitudes, and the better the practice.



Strengthening the knowledge base regarding the use of restraints among staff is the first step to improve the quality of care for the clients. It is hoped that once the knowledge gaps are closed, more positive attitudes among staff towards restraints can be cultivated, thus leading to more desirable and appropriate practice when restraints are considered.

## LIMITATIONS

Information for this study was elicited from a self-selected sample, therefore information from the non-respondents cannot be collected. It may be possible that those who did not participate may have responded differently to the items in this questionnaire. To minimize bias, second letters with the same set of questionnaire were sent to the nursing home staff to try to obtain a higher return rate.

The statements on the questionnaire were frequently worded towards the positive side on practice performance. Consequently, some respondents might tend to answer these statements the way they believe the researcher would like them to answer rather than the actual way they perform.

## CONCLUSION AND RECOMMENDATIONS

Many myths and misconceptions related to the use of restraints exist among staff working in nursing homes in Hong Kong. The overall knowledge level regarding restraint usage is low, and the attitudes are less favourable. However, nursing practice regarding restraint use indicates that respondents use restraints in accordance with acceptable practice. The misconceptions and

negative attitudes evident from data obtained for this study could serve as a basis for the re-education of nurses in regard to the use of restraints and the implications of such use. More favourable attitudes and better practice towards restraints could be achieved once the knowledge gaps are closed. Moreover, staff in higher positions or with more years of experience could act as role models for other staff members so as to provide appropriate guidance for making decision about applying restraints.

The findings from this study could provide some insight for the nursing home administrators on the planning of an inservice program on restraint use for their working staff. It is hoped that more effective alternative interventions to restraining clients could also be explored. If physical restraint is to be employed, it should be used properly. Staff must understand not only how to use it properly, but also need to know its negative consequences so as to limit the frequency with which it is used.

As Strumpf, Evans, Wagner and Patterson (1992) emphasize that restrictions of movement by physical restraint generally symbolize a poor quality of care, therefore only when the use of this harmful practice is reduced, or even eliminated, can the standard of care for the residents in nursing homes ultimately be improved.

### ACKNOWLEDGMENT

This study was funded by a Departmental Research Grant from the Department of Nursing & Health Sciences, the Hong Kong Polytechnic University. Special thanks are due to Dr. L.M. Janelli and her research team who permitted the use of their instruments on physical restraints in this study. Appreciation is also extended to the nursing personnel who participated in this project and to Mr. Samuel Tsang who has offered his kind assistance during the data collection process.

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#### 護理安老院的護理人員對使用身體約束法之認識、態度及使用

本研究的目的是在於探討護理人員對身體約束法之認識、態度及使用情況。被訪者乃來自五間護理安老院的253個護理員工。研究結果顯示很多護理人員對約束法有誤解，例如覺得除約束法外，便沒有更好的選擇；又或低估約束法對院友的身體及心理上做成的負面影響。大部份的被訪者均能正確使用約束法；而較高級或年資較長的護理人員對約束法有較多的認識、更正確的態度及施行方法。此研究報告能提供有關部門作為參考，以策劃約束法之在職訓練課程，從而提高護理質素。

摘要