



**Service Priorities and Programmes**  
**Electronic Presentations**

**Convention ID:** 51

**Submitting author:** Mr PAK LUNG CHIU

**Post title:** Registered Nurse, Tuen Mun Hospital, NTWC

**Knowledge, attitudes and practices among nurses towards physical restraints in a neurosurgical ward**

*CHIU PL (1)*

*(1) Department of Neurosurgery, Tuen Mun Hospital*

**Keywords:**

Physical Restraint

Knowledge

Attitudes

Practices

Neurosurgery

**Introduction**

Physical restraints could be an effective measure to manage problems, especially in neurosurgical settings, while there are a lot of concerns for being used. As knowledge and attitudes can directly affect the use of restraints, local investigation could provide insight for planning the training and reduction strategies.

**Objectives**

(1) Investigate levels of knowledge, attitudes and practices among nurses towards physical restraint (2) Identify demographic data which influences knowledge, attitudes and practices (3) Identify if there is any correlational relationship between the knowledge, attitudes and practices (4) Provide insight for supervisors to optimize the training and restraints reduction strategies

**Methodology**

This study employed a descriptive cross-sectional design. A 57-questions self-administrated validated questionnaire was distributed to all qualified nurses in a neurosurgical ward. Totally 24 nurses returned the questionnaires with a response rate of 92.4%. Descriptive and various non-parametric statistical analysis (Mann-Whitney U, Kruskal-Wallis test, Chi-square test, Spearman's correlation test) were performed by using IBM SPSS 20.0.

**Result**

The mean knowledge score ( $12.17 \pm 2.53$ ), the practices score ( $44.21 \pm 3.26$ ) and the attitudes score ( $17.67 \pm 2.97$ ) were obtained. By using Mann-Whitney U test, it is found that there is no significant differences among the knowledge score ( $U=21.000$ ,  $p=0.138$ ), the practices score ( $U=38.000$ ,  $p=0.876$ ) and the attitudes score ( $U=30.000$ ,  $p=0.438$ ). Also, neither knowledge score ( $U=55.5$ ,  $p=0.392$ ), attitudes score ( $U=56.6$ ,  $p=0.425$ ) nor practices score ( $U=44.0$ ,  $p=0.124$ ) showed significant different between non-experienced ( $<5$  year,  $n=10$ ) and experienced Staff ( $\geq 5$  year,  $n=14$ ). Further

Spearman's Rank Correlation analysis showed a moderate positive correlation between the knowledge score and the practices score ( $r_s=0.405$ ,  $p=0.025$ ) as well as the knowledge score and the attitudes score ( $r_s=0.369$ ,  $p=0.02$ ). This study revealed that attitudes and practices of nurses in the studied neurosurgical unit are in accordance with the current organizational policies and guidelines and the international standards. The analysis also showed the level of knowledge is influential to staffs' practices and attitudes. While attitudes and practices are difficult to be cultivated per se, strengthening the knowledge is one of the most effective ways to improve the quality of care regarding to physical restraints use. Echoing with the results, subsequence training was successfully established (5-mins Talk series) and could be the model for future development.