



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

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**Submitting author:** Miss Mei Yi TANG

**Post title:** Registered Nurse, NDH, NTEC

**Monitor Operation & Vital signs evaluation**

*Lai MS(1), Tong WCM(1), Ko CMT(1), Wong CM(1), Yeung SM(1), Leung LHF(1),  
Leung KH(1), Chan CL(1), Tang MY(1)*

*(1)Department of Medicine, North District Hospital*

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**Introduction**

Bedside monitor provides essential information for early recognition of deteriorating patients. However, constant incorporation of bedside monitor led to a large number of alarm sounds which increase patient anxiety and dissatisfaction. 'Alarm fatigue' was resulted. It occurs when large number of alarms mask those that are clinically significant, leading to alarms with clinical relevance being ignored by healthcare workers. When alarms are underestimated and neglected, not only patient dissatisfaction but also patient safety will be compromised.

**Objectives**

- A. To minimize occurrence of bedside monitors' false alarms so that they will be more reliable and reflecting patients' real condition.
- B. To terminate unnecessary use of bedside monitor on end-of-life patients.
- C. To modify nurses' mindset towards alarm management so that they will have more accurate recognition & appropriate response to alarm.
- D. To educate and reinforce nurses' knowledge on monitor operation and vital-signs management through sustainable education.
- E. To enhance patient safety and improve patient experience during hospitalization.

**Methodology**

Since there were no official and effective communication channels on the use of bedside monitor traditionally, the workflow of its usage was re-engineered and optimized through Doctor-nurse cooperation. Besides, 8 mandatory classroom trainings were held in late September and early October, 2017 to educate and reinforce nurses' knowledge on monitor operation and vital-signs management. Subjects were all nurses who were working in the department of medicine. Outcome measures were categorized as (1) knowledge (2) attitude (3) satisfaction survey. At the same time, a pre vs post on-site observation was carried out to evaluate the occurrence of bedside monitor alarm and nurses' attendance.

**Result**

From September 2017 to December 2017, questionnaires were disseminated before and after MOVE correspondingly. After MOVE programme, the knowledge mean score of nursing colleague increased by 1.99 ( $p < .001$ , paired t-test). At the same time, their attitude mean score increased by 1.75 ( $p < .001$ , paired t-test). In addition, there were 18% reduction in false alarm after the intervention.

Therefore, MOVE was effective in reducing bedside monitor false alarms, enhancing nursing knowledge, improving their attitude towards bedside monitor alarms, improving patient safety and experience especially for the end-of-life ones.