# Survey of the level of confidence and satisfaction among nursing home nurses regarding an intensive telegeriatrics nurse training programme

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#### **INTRODUCTION & AIM**

Telemedicine is the digital exchange of medical information across distances and its optimal use can allow timely access to care and improve quality of clinical health statuses<sup>[1-2]</sup>. In order for geriatric care to be effectively delivered to the nursing home (NH) via telemedicine, nurses in NHs must play an active role in assessing and managing the NH residents on-site. The nine-month Telegeriatrics Nurse Training Course (TNTC) is part of a collaboration between Khoo Teck Puat Hospital and three partnering nursing homes to equip the latter's nurses with a set of knowledge and skills targeted at managing NH residents.

The aim of this study is to quantitatively measure the impact of the TNTC on nursing home nurses' self-reported confidence and satisfaction in their telemedicine-required knowledge and skills.

#### **METHODS**

Over the study period from December 2010 to June 2014, all 17 TNTC-trained nurses participated in the study. The nurses signed a standardized informed consent detailing benefits/risks of the study before filling up the survey forms. Two separate sets of a five-point Likert Scale questionnaire on self-reported confidence and satisfaction were then administered to them. The confidence survey was based on the objectives of the TNTC, while the satisfaction survey was adapted from other studies<sup>[3-4]</sup> and modified in accordance with the requirements of the TNTC.

#### **RESULTS**

# **Demographics of TNTC-trained nurses (N=17)**

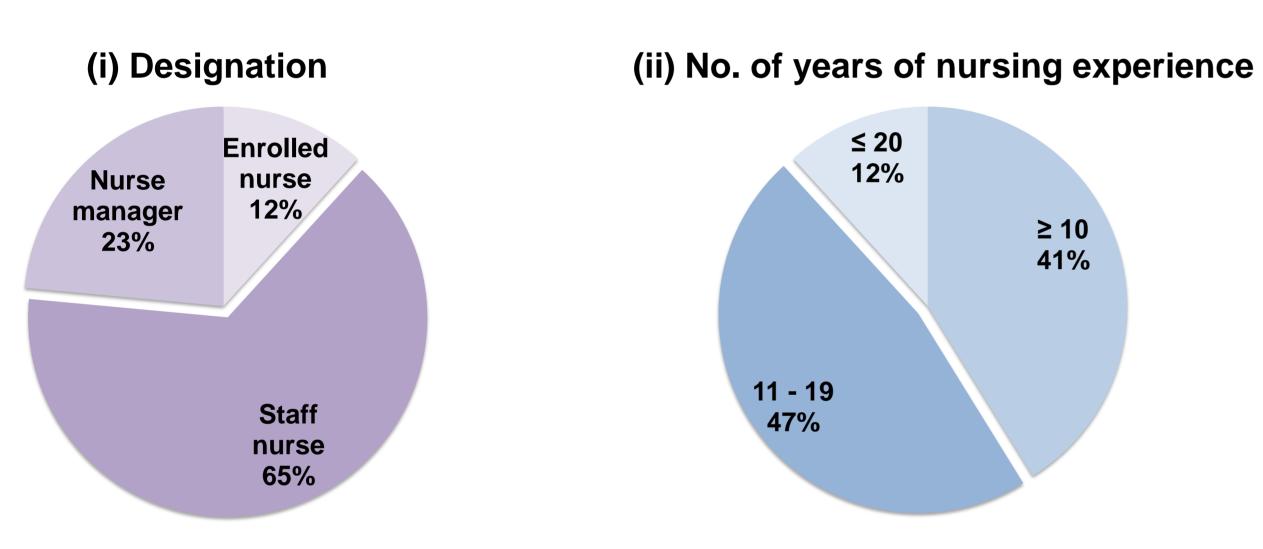


Figure 1: Demographics of TNTC-trained nurses by designation and years of nursing experience

## **Pre- and Post-TNTC Confidence (N=17)**

The 8-item questionnaire reflected the nurses' confidence in performing telemedicine-required clinical behaviors. Ratings of some of these behaviors are shown in Figures 2 and 3. Majority of the nurses reported increased post-course confidence in applying both newly acquired and existing skills in a telemedicine setting.

## (i) Increased self-reported confidence in applying newly acquired skills

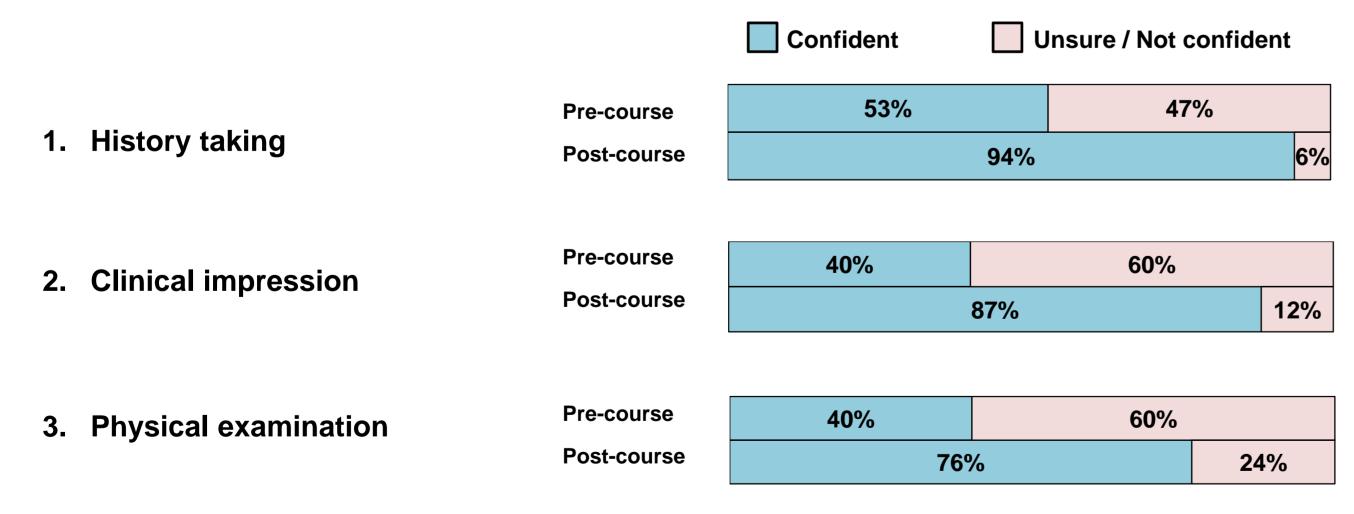


Figure 2: Results from survey items that assessed confidence in performing newly acquired clinical behaviours

## (ii) Increased self-reported confidence in applying existing skills

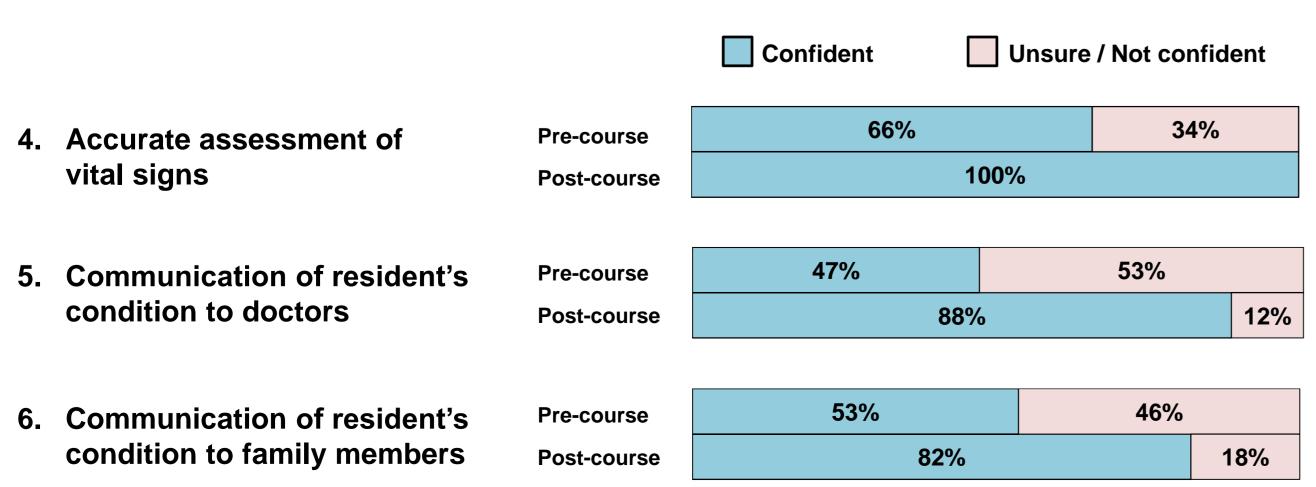


Figure 3: Results from survey items that assessed confidence in performing existing clinical behaviours

# RESULTS (CONTINUED)

## **Post-TNTC Satisfaction (N=17)**

The 9-item satisfaction survey measured the nurses' satisfaction in the following areas:

- Efficiency of course materials and curriculum (Items 1-3),
- Preparedness and competency of trainers (Items 4-6), and
- Professional and academic development (Items 7-9).

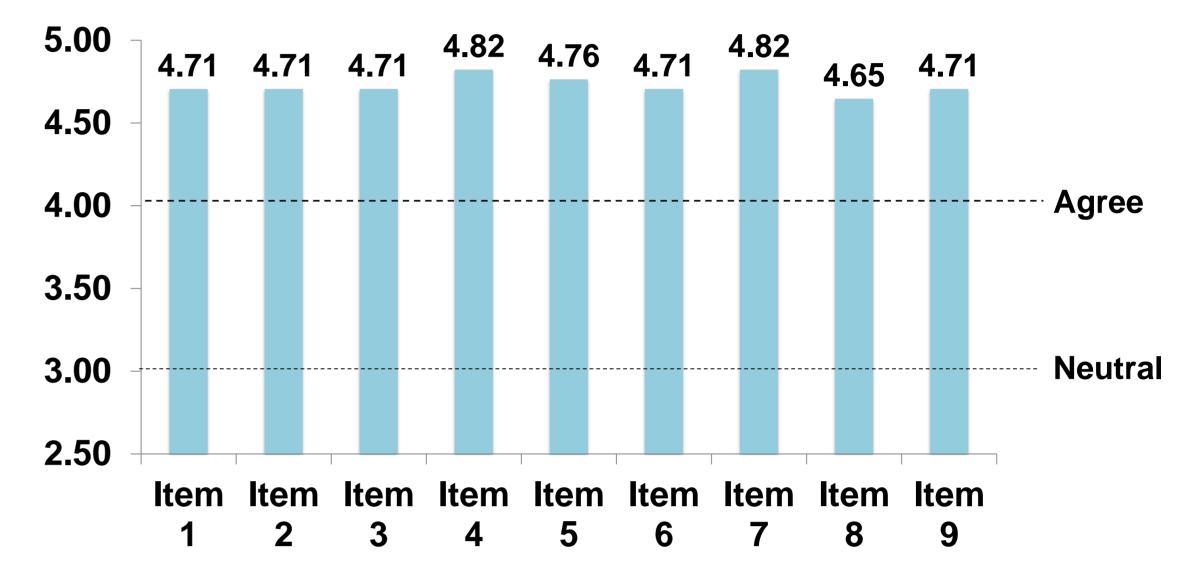


Figure 4: Mean scores of each item in a five-point scale survey that assessed satisfaction in the TNTC

Generally, positive responses were found from the post-course satisfaction survey (mean score range 4.65 - 4.82). The nurses particularly felt that the trainers were willing to assist them to learn (Item 4) and that the TNTC helped them develop their professional competencies (Item 7).

#### **Open-ended comments on TNTC**

"It [the TNTC] makes us more confident, more systematic in doing [physical] assessments and delivering systematic care towards the patient." (Staff Nurse 1)

"We know how to assess the residents. We can communicate the resident's symptoms to the doctor and he would give us instructions to perform a physical assessment, and prescribe a treatment." (Staff Nurse 2)

"Nurses' skills are upgraded. They can manage residents better, as they can pick up residents who are not well and treat early." (Nurse Manager)

## **DISCUSSION & CONCLUSION**

Findings indicated general acceptability of TNTC among the nursing home nurses. Nurses reported a rise in confidence, particularly in applying the newly acquired skills into telemedicine practice. This suggests that the TNTC has better equipped the nurses in managing conditions in the NH and hence enhanced adherence to care plans and resident outcomes. In addition, attitudes towards the TNTC were positive, showing its potential for improving knowledge and skills of future nursing trainees who partake in the care of the residents.

Nursing care, a crucial part of healthcare delivery, can be strengthened through nurse engagement interventions such as the TNTC<sup>[5]</sup>. The TNTC is a promising training course which could engage nurses and forge better co-operation between nurses and geriatricians who are entrusted to promote nursing home care.

A continued assessment of the TNTC's acceptability in the long-term using a larger sample size and a longer period of time is currently underway.

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