

# A Support System for Self Training in Transferring Patient

Transferring patient is a kind of typical nursing activities which is to move and turn the patients' body, for an instance, to transfer from bed to wheelchair. Since the operations relate to the patients' status, such as height, weight and the states of body, the qualities of this kind of nursing activities is mostly depended by the practice experiences. Also, comparing with other operations, accidents and hurt is more easily happen on not only the patients but also the nurses during transferring patient, because there are lots of interaction motions. However, limiting by the number of the teacher and the lack of practice of training, traditional education is inefficiency. In this research, for the object of improve of the training efficient, we propose an innovational self training support system to give trainees enough feedback training (Fig. 1).

In order to evaluate the qualities of the trainees' performance, in the first step of this research, we established a multi camera system to detect their motions (Fig. 2) Through this camera system, the key motions of the operation are extracted by the algorithm and compared with the veteran nurses' motions. Through the experiment in simulated transferring patient form bed to wheelchair training (Fig. 3), we evaluated the accuracy and have proved the efficient of this system (Fig. 4).

*Keywords:* Transferring patient, self training, camera system

## References

- 1) Yonetsuji et al., An Aiding System for Self Training in Transferring Patients, Prep. 2011 JSPE Spring annual conference, 575/576 (2011), in Japanese.

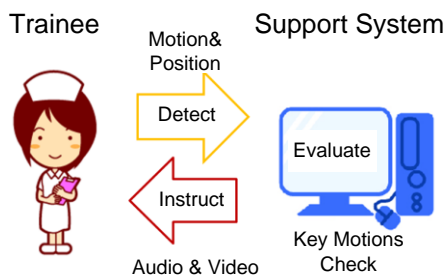


Fig. 1 Support system for self training

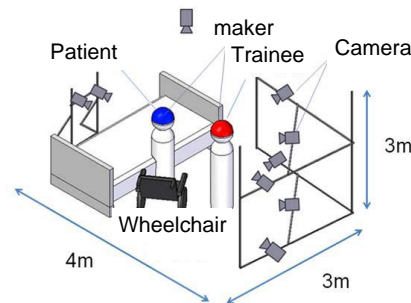


Fig. 2 Multi camera system



Fig. 3 Bed to wheelchair transferring

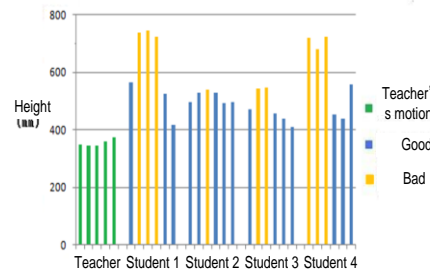


Fig. 4 Experimental results