

## KNOWLEDGE OF CAREGIVERS ABOUT PEDIATRIC HOME TRACHEOSTOMY CARE

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**Backgrounds:** Tracheostomy tube is indicated for a variety of medical conditions. A number of children who need tracheostomy tube have been increasing in last decades. Therefore, continuous evaluation and improvement of caregiver knowledge about the tracheostomy care are essential.

**Objectives:** To evaluate the knowledge of the tracheostomy care of caregivers of children with tracheostomy tube and re-educate to correct the pitfalls.

**Methods:** A prospective observational study is done in King Chulalongkorn Memorial Hospital. We evaluate the knowledge of the caregivers by using 25-score true-false questionnaire. After the first evaluation, the caregivers receive re-education to correct the wrong answers. Then we repeat the evaluations at 6 and 12 months after and observe for respiratory complications in 12 months.

**Results:** Fifty-four caregivers are enrolled. The mean score of the first evaluation is 21.8. The common pitfalls are the management of unsuccessful tracheal suctioning, obstruction of tracheostomy tube with respiratory distress, and cardiopulmonary arrest. After re-education, the second and third evaluation reveal significant improvement with the mean score of 22.8 ( $p = 0.003$ ) and 23.0 ( $p = 0.007$ ) respectively. The score is not significantly associated with baseline characteristics of caregivers, and respiratory complications. However, in the second half of study period, the number of respiratory complications is significant decreased, both OPD/ER visits ( $p = 0.01$ ) and non-elective admissions ( $p = 0.019$ ). Respiratory infection is the major cause of complications.

**Conclusion:** Most of the caregivers have a good knowledge about tracheostomy care. Evaluation of the knowledge facilitates identification of the pitfalls. As a result, the process of evaluation and re-education can improve knowledge and decrease respiratory complications in children with tracheostomy tube.

**Keywords:** tracheostomy, caregivers, child care, evaluation, health education