

Object : to decrease the unplanned extubation rate in our ICU Method:

1. Our ICU: a 33-bed medical and surgical ICU. The average intubation day is 6.8 days and the unplanned extubation rate is 0.62% in 2007 January to December in our ICU. We set our goal: to decrease the unplanned extubation rate to 0.40% in our ICU.
2. Design and perform the standard protocol of the nursing of patient with endotracheal tube since 2008 January
3. The measures which described below was performed since 2008 February
 - (1) Performed the evaluation of high risk patient of self-extubation; and individualized nursing according to the risk of patients. Evaluation of throat pain in patient with endotracheal tube with face rating scale and further nursing measures or medications to comfort patient.
 - (2) Evaluation of irritable patient and use sedative agent as physician's order.
 - (3) The training of the skills about fixation of endotracheal tube.
 - (4) Design and follow the ventilator weaning protocol.
 - A. Early extubation if patient fit the criteria of quick weaning.
 - B. All weaning process followed the protocol, and the physician decided extubation time .

Result :

1. Design the standard protocol of the nursing of patient with endotracheal tube and follow the ventilator weaning protocol. 3 new evaluation sheet was introduced: A. evaluation sheet of high risk patient of self-extubation. B. evaluation sheet of sedative agent. C. face rating scale of throat pain .
2. All the measures above started from 2008 February , till 2008 December , the unplanned extubation rate decreased to 0.32%, as compared with 0.62% in 2007.
Advance rate $= (0.62\% - 0.32\%) / 0.62\% = 48\%$

Achieving rate $= (0.62\% - 0.32\%) / (0.62\% - 0.32\%) = 100\%$

Conclusion :

We could know the discomfort of patient with endotracheal tube exactly by the evaluation of nursing stuff; then we might perform individualized and preventive nursing measures, included sedative agent, to comfort the patient with endotracheal tube. As we follow ventilator weaning protocol, we could decrease unplanned extubation rate, promote patient safety and medical care quality.