

Manipal Academy of Higher Education

Impressions@MAHE

Manipal College of Nursing, Manipal Theses
and Dissertations

MAHE Student Work

Winter 8-1-2017

Effectiveness of Training Programme on prevention of Ventilator Associated Events (VAE) in terms of Knowledge and practice among health care professionals of selected Intensive Care Units (ICU) of a tertiary care hospital udupi

ARJUN S

Follow this and additional works at: <https://impressions.manipal.edu/mcon>



Part of the **Nursing Commons**

"ABSTRACT

A research study "Effectiveness of training programme on prevention of Ventilator Associated Events (VAE) in terms of knowledge and practice among Health Care Professionals of selected Intensive Care Units (ICU) of a tertiary care hospital Udupi" was carried out at Manipal University, Manipal by Arjun S for the award of Master of Science in Nursing as a partial fulfilment of the course.

The objectives of the study were to assess the knowledge regarding VAE prevention using a structured knowledge questionnaire, determine the VAE preventive practices among health care professionals of selected ICUs using observational checklist, determine the effectiveness of training programme on prevention of Ventilator Associated Events (VAE) among health care professionals of selected ICUs in terms of improvement in Knowledge scores and Practice scores.

The conceptual framework for the study was based on "Donabedian's healthcare Quality Framework". (Care Coordination. 2007).

The study hypothesized that there will be significant difference between the mean pretest and posttest knowledge scores and practice scores regarding ventilator associated events.

The tool used in this study were Demographical proforma, structured knowledge questionnaire, observation checklist on VAE preventive practices- mouth care, observation checklist on VAE preventive practices- suctioning, observation checklist on VAE preventive practices - tracheostomy care, observation checklist on VAE preventive practices-VAE bundle, observation checklist on VAE preventive practices- Intubation, observation checklist on VAE preventive practices -Tracheostomy insertion, opinionnaire of training Programme on VAE and barriers Of VAE preventive practices.

Content validity and reliability of the tool were established and all the tools were pre-tested. Pilot study revealed the feasibility of the study and permissions from all the relevant authorities were obtained prior to conducting the study.

The study was conducted during the month of January to March 2017 at the Intensive Care Unit of Kasturba hospital Manipal. The study sample comprised of 75 Health Care Professionals of Intensive Care Units.

The gathered data was coded and summarized in a master data sheet and was analyzed using SPSS

16.0 version. Frequency and percentage of pre-test and post-test of knowledge and observations were calculated. Wilcoxon's sign rank test and McNemars test was computed to find effectiveness of the training programme on VAE.

Majority of the subjects who participated in the study were in the age group ranging from 20-25 years (53.5%) and 8% of the participants were more than 30 years of age. Majority of the study participants were females (78.9%).14% of the staff reported that they were not aware of VAE guidelines.

In the pre-test, out of 71 participants none of the participants had excellent knowledge regarding VAE and VAE preventive practices. It was also noted that 21 participants (29.6%) had poor knowledge. Mean percentage of pre-test scores ranged from 53.27% in the area of knowledge on baseline infection control practices on VAE to 61.58% in the area of knowledge of guidelines regarding prevention of VAE, where as in the posttest 35 participants (49.3%) had excellent knowledge, 33 participants (46.5%) had good knowledge on VAE and VAE preventive practices. The mean percentage score ranged from 81.09% in the area of knowledge on baseline infection control practices on VAE to 86.58% in the area of knowledge of guidelines regarding prevention of VAE. There was increase in knowledge in post-test score after the training program.

In a total of 55 suctioning events under study, during pre-test only in 27 events (49.1 %) Health Care Professionals performed hand washing and only in 11 events (20%) hyper oxygenated the patient before starting suctioning. Whereas after the training program on VAE preventive practices in 45 events (81.8%) hand washing was performed and in 44 events (80%) hyper oxygenation was followed by the

Health Care Professionals.

Out of total 60 events of VAE Bundle care, only in 4 events (6.7%) Health Care Professionals gave mouth care in eight hourly. In post-test the number of events of mouth care increased to 20 (33.3 %).

Out of total 53 events of mouth care, only in 30 events (56.6%) the Health Care Professionals followed hand washing before starting the procedure in the pre-test but there was an improvement in practice of hand washing after the training programme to 81.1% (43 events).Also there is no improvement in the practice of mouth care with chlorhexidine solution even after training programme.

Out of 17 events of tracheostomy care, during pretest in eight events hand washing was not performed (47.1%) before starting the tracheostomy but in post-test only in one event hand washing was not performed (5.9%). Study showed that there was decline in practice of keeping sterile gauze under the tracheostomy from 100% to 88.2 % because of use of the opened gauze pack for changing the dressing.

The study concluded that Educational programmes or training programmes should be implemented in the ICU at regular intervals keeping infection control as a goal in mind which in turn will help the Health Care Professionals to enhance the present knowledge and to bring out the best practice possible care to the patients.

"