

48th Global Nursing & Healthcare Conference

March 04-06, 2019 | Barcelona, Spain

The impact of nurses-led weaning protocol on outcomes of mechanically ventilated critically ill patients among Palestinian hospitals: A quasi-experimental study

Fatima Hirzallah¹, Aidah Alkaissi¹ and Maria do Céu Barbieri-Figueiredo²

¹An-Najah National University, Palestine

²ICBAS – University of Porto, Portugal

Objective: To determine if the weaning protocol led exclusively by critical care nurse reducing the duration of mechanical ventilation (MV), weaning time, intensive care unit (ICU) and hospital length of stay (LOS), and reintubation rate, and hospital mortality in critically ill adult patients who received invasive ventilation at the time of study enrolment compared to usual care (UC) of weaning among intensive care units of Palestinian hospitals.

Methods: A quantitative, prospective, quasi-experimental study design. Sixty eight adult patients (≥ 18 years) who were mechanically ventilated via endotracheal tube for ≥ 24 hours, in multicenter ICU's in Palestinian hospitals were distributed in experimental group and control group. The nurse-led weaning protocol for the experimental group was matched with historical controls (1:1 matching) of retrospective data of UC weaning for the control group, assigned into two groups (n=34 each).

Results: There were no significant differences in the two groups at baseline. Median durations of mechanical ventilation (MV) in the NLWP and UC groups were 24 hours (IQR=30hrs), (min-max=24-110) and 48hrs (IQR=48hrs), (min-max =24-216), respectively (P=0.034). Median of weaning time in the NLWP and UC groups were 2 hours (IQR=2hrs), (min-max = 1-4) and 4 hours (IQR=3hrs), (min-max =2-13), respectively (P=0.001). Median durations of ICU length of stay (LOS) in the NLWP and UC groups were 5 days (IQR=5 days) (min-max=2-17) and 7 days (IQR=6days), (min-max=2-26), respectively (P=0.03). There was statistical significant differences in reintubation rate (%) in the NLWP and UC groups was 3/34 (8.8%) and 11/34 (32.4%), respectively (P= 0.016). There was no difference in hospital LOS, and hospital mortality between the two groups.

Conclusion: Our results clearly indicate that nurses-led weaning protocol was associated with shorter in duration of MV, shorter weaning time, shorter ICU LOS and less of Reintubation rate.

Biography

Fatima Hirzallah has recently completed her PhD in Nursing Science from University of Porto, Instituto de Ciências Biomédicas Abel Salazar (ICBAS), Porto-Portugal. She is currently Lecturer of Critical Care nursing course in the Faculty of Nursing and Midwifery at An-Najah National University, Nablus- Palestine. She has published two papers in reputed journals. She is the coordinator of the ACLS and TNCC courses at An-Najah National University.

Notes: