

## Intensive Care Unit Nurses' Knowledge, and Practice towards Parenteral Nutrition Support: Multi-Center Cross-Sectional Study

Ambaye Dejen Tilahun<sup>1</sup>, TilahunKassew<sup>2</sup> and Bikis liyew<sup>3</sup>

<sup>1,3</sup>School of Nursing, University of Gondar, Ethiopia

<sup>2</sup>School of medicine, University of Gondar, Ethiopia

### Abstract

**Background:** Parenteral nutrition is an invasive therapy that provides nutrition support for persons who do not have adequate gastrointestinal functions; however, it does have inherent risks. Parenteral nutrition may better secure the intended nutritional intake but is associated with more infectious complications, most likely due to hyperalimentation and hyperglycemia.

**Objective:** to assess Knowledge, and Practice towards parenteral nutrition support on critical ill patients among nurses working in intensive care units at Amhara regional state referral hospitals, Northwest, Ethiopia, 2019.

**Methods:** Institution based cross-sectional study was conducted among 264 nurses from July 1 to August 15, 2019. Convenience sampling technique was used to recruit study participants. Data were entered by using epi-data 3.1 and analyzed by using STATA version 14. Descriptive statistics like frequency, mean, standard deviation and percentage were used to describe the distribution of data. The total scores of knowledge and practice were obtained and tested based on the nurses' socio-demographic characteristics using independent Sample T-test, One-way ANOVA and Tukey HSD pairwise comparison test. P-values of <0.05 were considered to be statistically significant for all analysis.

**Result:** The mean knowledge and practice level of nurses' towards parenteral nutrition were  $22.63 \pm 4.18$  and  $1.75 \pm 1.23$  respectively. Results evidence that categories of training [ $p < 0.001$ ], age [ $p < 0.001$ ], religion [ $p = 0.0049$ ], educational level [ $p < 0.001$ ], working units [ $P < 0.05$ ], total working experiences as a nurse [ $p < 0.001$ ], working experiences in intensive care units [ $p < 0.001$ ], and monthly income [ $p < 0.001$ ] have significant difference between mean knowledge of nurses' towards parenteral nutrition support. The same is evidenced for age [ $p < 0.001$ ], educational level [ $p < 0.001$ ], training [ $P < 0.001$ ], total working experiences as a nurse [ $p < 0.001$ ], working experiences in intensive care units [ $p < 0.0022$ ], and monthly income [ $p < 0.001$ ] have significant difference in relation with mean practice of nurses'.

**Conclusion and recommendations:** The finding of this study concluded that nurses have insufficient knowledge and practice towards parenteral nutrition support. Categories of age, educational level, training, total working experiences as a nurse, working experiences in intensive care units, and monthly income have significant difference between mean knowledge and practice of nurses' towards parenteral nutrition. Based on the finding of the study to it is better to enhance nurses' knowledge and skill towards parenteral nutrition via regular training and carrying out educational programs about nursing management of parenteral nutrition complications and administration.

