

# ABSTRACT

## **Evaluation of the Correct Application of 2009's ESPEN Guidelines in CVC Nursing Management: An Empirical Study in an Italian Hospital**

**Introduction & Objectives:** Object of this study are behaviours and practices that nurses working in the hospital "Cardinal Massaia" of Asti, Italy, are using for the management of central venous access catheters (CVC) for parenteral nutrition of patients.. The purpose of the research is to compare the behaviours reported by respondents with those recommended by the European Society for Clinical Nutrition and Metabolism (Espen), in an article published in 2009 (henceforth *Guidelines*) in order to check their compliance or deviation from the *Guidelines* standards.

**Method & Materials:** A set of these behaviours were detected by administering a structured, self-compiled, questionnaire with closed questions. Data collection was performed between May and June 2010; the rate of response was 69% (78 completed questionnaires of 113 nurses employed in five departments. Data of 17 item were processed in an additive index. Named as STANDARD, this index was then subjected, as a dependent variable, to bivariate and multivariate analysis of variance.

**Results & Discussion:** Main results of this study are:

- a) age and seniority in profession are only weakly associated with STANDARD. The association with formal education title is stronger than the previous ones.
- b) Nurses who attended a training course specifically devoted to the management of CVC have an average score lower than those who did not have any specific form of training on the subject. The evidence is quite surprising: it's like as training courses stimulated knowledge and behaviours different from the *Guidelines's* standard.
- c) A more significant source of variation is the Department membership. The average scores on the STANDARD index are very different for each department. Rules for selection of nurses, management style and the culture of the department could have a significant impact on professional behaviours of nurses.

**Keywords:** nurses, central venous catheters; parenteral nutrition; Espen guidelines; experimental research, organizational culture, nursing education, Italy.