



Analysis of peripherally inserted central catheters in the Spanish critical care units: Results From PICC-ICU Survey

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Introduction and objectives: The safer use of central venous catheters are a cornerstone in critical patient. The advantages offered by peripherally inserted central catheters (PICC) make their use growing rapidly in intensive care units (ICU)¹. However, less is known about the number of PICC placement, who and how are inserted². To know about the situation of PICC placement in Spanish ICU is essential for patient safety.

Method: Descriptive, observational and cross-sectional study. Population: ICU nurses that filled out the survey about PICC insertion procedure.

Results: 605 surveys have been analysed of nurses belonging to 75% of Spanish ICU. A total of 534 (88,3%) insert PICC in their ICU, 169 (31,6%) use ultrasound for PICC insertion, 193 (37,3%) measure catheter-to-vein ratio every time. Antecubital zone is where most PICCs are inserted with 303 answers (42,4%). Chest x-ray is the most used method to check the PICC tip 508 (92,7%).

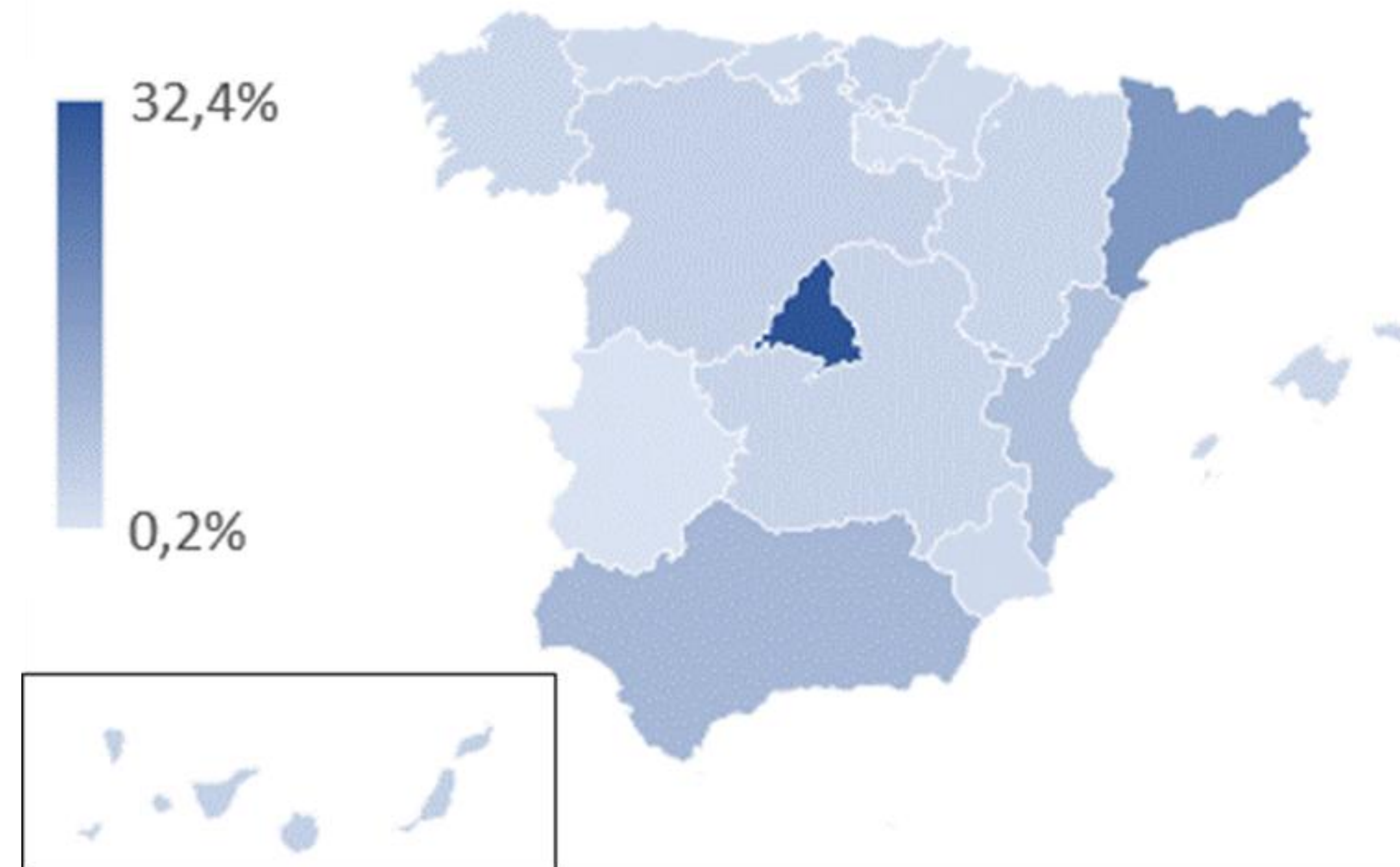


Figure 1. Percentage of responses by Regions of Spain

PICC-ICU Survey Results
Ultrasound + Adjust Catheter Size + Measure Distance

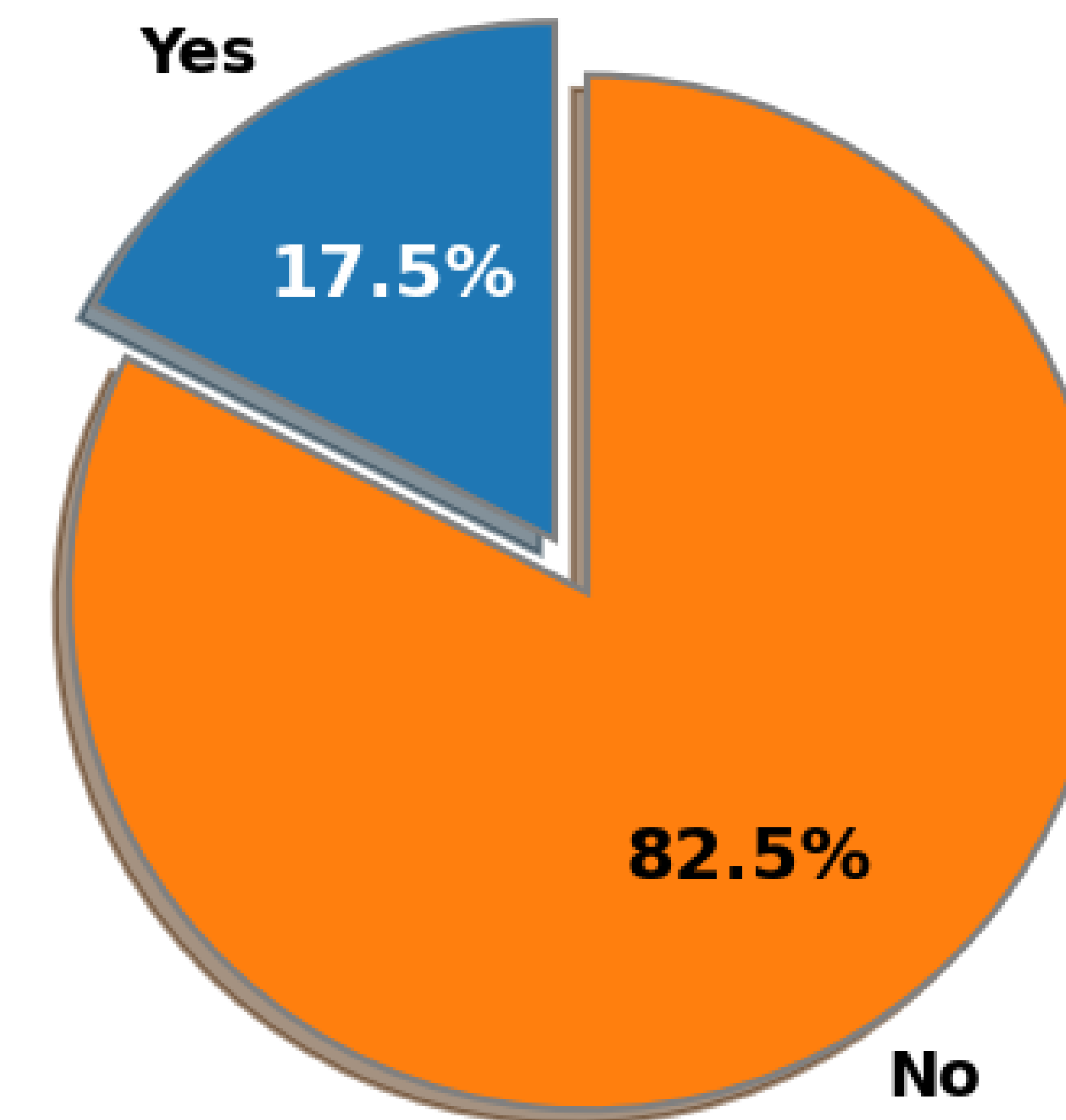


Figure 2. Percentage of responses (N = 521)

Conclusions: The PICC-ICU survey provides an overview of PICC placement practices in Spanish ICUs. This findings reveal significant differences between clinical practice and evidence-based recommendations. Additional studies are recommended to better understand these differences and improve patient safety.

Key words: PICC; Peripherally inserted central catheter; intensive care unit; nursing; patient safety.

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² Martín Delgado MC, et al. Guía de práctica clínica sobre el uso de catéteres venosos centrales de inserción periférica (PICC) en el paciente crítico. Published online December 13, 2022.