

## **MEETING ABSTRACT**

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## Peripherally Inserted Central Catheter (PICC) placement in newborns, Italian training program for nurses: preliminary results

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In the Italian Neonatal intensive care Units the positioning of Peripherally Inserted Central Catheters (PICC) is strictly a medical competence, neonatal nurses are the ones fully entrusted of the PICCsmanagement. In 2014 a group of neonatologists and nurses established at the Civil Hospital in Brescia a PICC group; the aim was to review and update the internal procedures but, also to ponder the idea of training nurses to place PICCs. Many were the reasons for this last consideration; to improve the quality and safety of neonatal critical care, to standardize the procedures to reduce errors and complications but also to make neonatal nurses fully aware of their role in PICCs correct management. A course was organized in two phases (lessons and practice) with the aim to provide participants with the knowledge and skills to safely position and manage PICCs. A careful work of review of national and international scientific literature regarding PICCs was carried out, the NICU procedures were updated prior the course onset [1-5]. All the specific topics regarding PICCs were tackled during the first part of the course(theoretical). The second part (practical) was divided in three parts:A) "executor" nurses were supposed to successfully position 4 PICCs under medical supervision, B) "tutor" nurses were asked to correctly position 10 PICCs, C) maintenance of the acquired skills. Data collection forms have been designed to keep records on PICCs placements, management and potential adverse events. Of the 54 nurses working in NICU, 32 (59%) participated actively at the project. At present 20 nurses have started the practical training:6 have completed the A) phase.53 PICCs have been successfully placed by nurses. The medium number of PICC placement for nurse has been 2,65. The training course for nurses has shown a good safety profile, a high success rate, and no post-procedural complications; a questionnaire has been proposed to all the NICU staff to acknowledge their opinions and impact. These preliminary data are promising, but we need to complete the whole program before being able to encourage other centers to follow our steps.

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