ANALYSIS OF THE EXPERIENCE IN THE USE OF PLASTIC NEEDLES IN THE SPANISH HAEMODIALYSIS UNITS

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• My grandmother worked as a dressmaker.

• To make a dress you need different types of materials, appropriate to the need of the product.

• Nurses also work with different types of materials and we adapt our service to the needs of people.

• For decades, most European countries have used the traditional silicone metal needles for the VA approach.

• Recently, new puncture cannulas have been introduced, these are Plastic Needles (PN), with excellent results.
PLASTIC NEEDLES

- **External plastic cannula** and a metallic internal needle or retainer that is removed once the vessel is canalized.
- Equipped with an **anti-reflux valve**, which prevents the reflux of blood.
- The main advantage of this product is the **lowest risk of damage to the inner vessel wall**.
- By not leaving any sharp part in the vessel, allows a **greater mobility of the patient’s limb** during the session.
- Avoid accidents due to their **security system**.
- Can be used to cannulate **fragile VA** that have tortuous segments or irregular depths.
Introducer needle

Plastic cannula

Luer tapered for safer connection to blood lines
• The **procedure for inserting PN is different** from the conventional metallic needles.

• This aspect can **lead to difficulties for the nurses**, who require training and special skills to modify the technique of puncture.

• The existing data do not provide indications about the **type of device that should be used for each VA**.

• This choice is focused on the **needs of each workplace, on the availability of the device and on the experience or training of the nurse**.

• The **opinions of the nursing staff** in relation with the use of this product have not been explored.

• **Objective:** To analyse the experience using plastic needles in the Spanish haemodialysis units.
MATERIAL AND METHOD

• Cross-sectional observational study.

• An *ad hoc* questionnaire based on literature review was distributed.

• The questionnaire was distributed on digital support through the Google Formulary platform.
Results

- 142 female nurses
- 20 male nurses
- 36 Spanish provinces
- Average age of 42.42 ± 9.97 years
- 15 years of medium hemodialysis experience \[P_{25} 8; P_{75} 22\]
- 61.35% (100): Public institution
- 30.67% (50): Concerted institution
- 7.98% (13): Private institution
42.33% have PN in their workplace.

50.92% have used PN.

55.83% have received training.

77.91% want to receive more training.
More PN availability in public centers than in private ones.
(p<0.001)
(V=0.196)

There is an association between the availability of PN and having used them
(p<0.001)
(V=0.767)

There is an association between the availability of PN and to have training
(p<0.001)
(V=0.362)

There is no difference between years of experience and having received training
(p=0.915)
(V=0.033)
↑ professional satisfaction
↑ perceived patient satisfaction
(rho=0.659)
(p<0.001)

A median of 2
\([P_{25}; P_{75}]\)
modifications on
the product
design would be
included.

The PN
characteristics
are considered
positive by
55.83% and
negative by
10.33%. 
What kind of needle are you going to use?
CONCLUSIONS

• PN are a **well valued** product by Spanish HD nurses.

• An important number of nurses do not have these needles **available** in their units and have not received the necessary **training**.

• PN can be improved and a small percentage of them perceived the characteristics of the product as negative.

• It would be favourable to incorporate nurses in a **working group** aimed at reviewing the characteristics of the product.

• The availability of plastic needles has an **unequal distribution** according to the institution management, and this may condition the uniformity of the quality of care received by patients.
Thank you!

NO GRANDMA.
ONE HAND,
LIKE THIS.

WHOOPS I
MADE A
SCARF.

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