

Challenges and Success Rates of Ultrasound-Guided IV Insertion(UGPIV) In Emergency and Critical Care Settings

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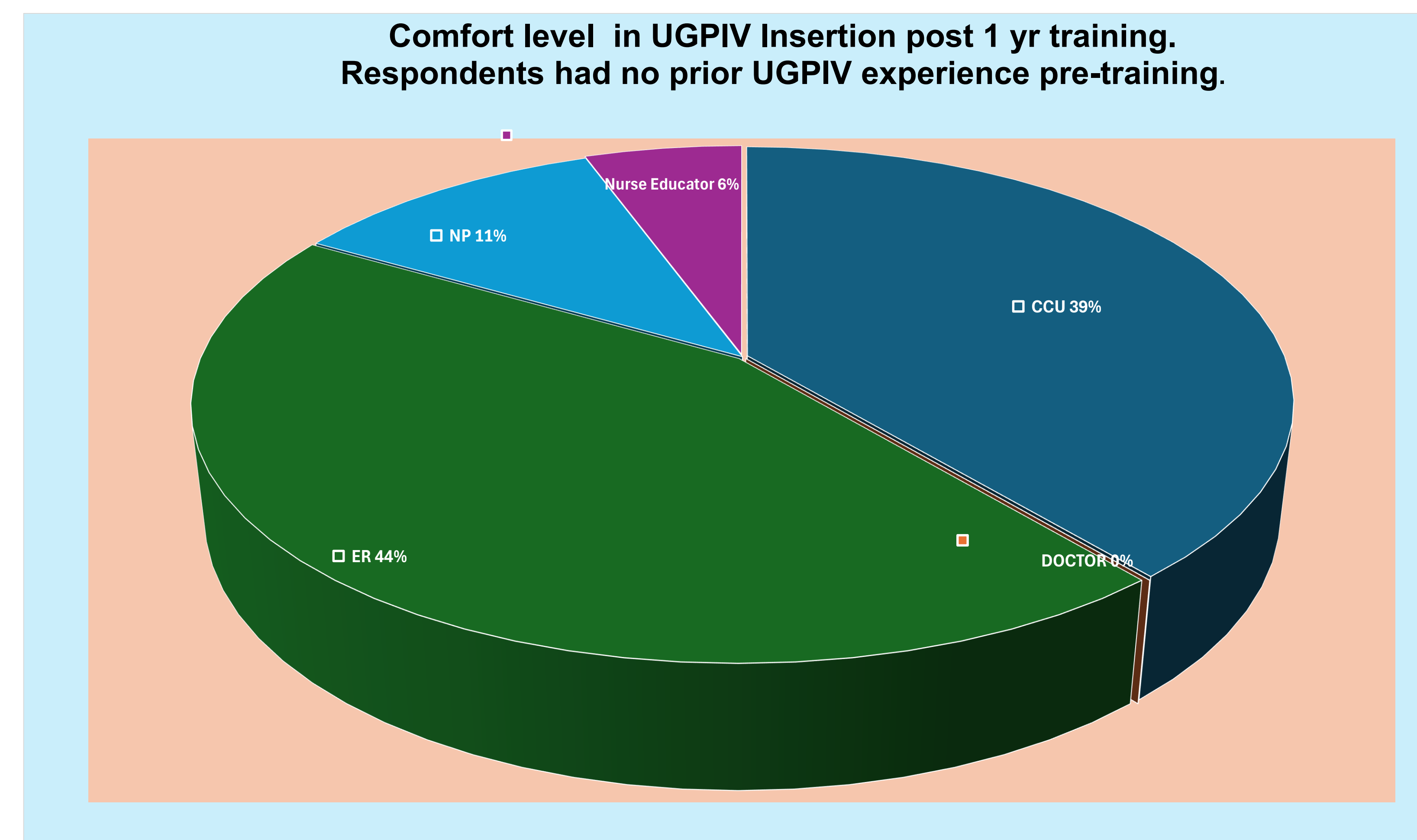
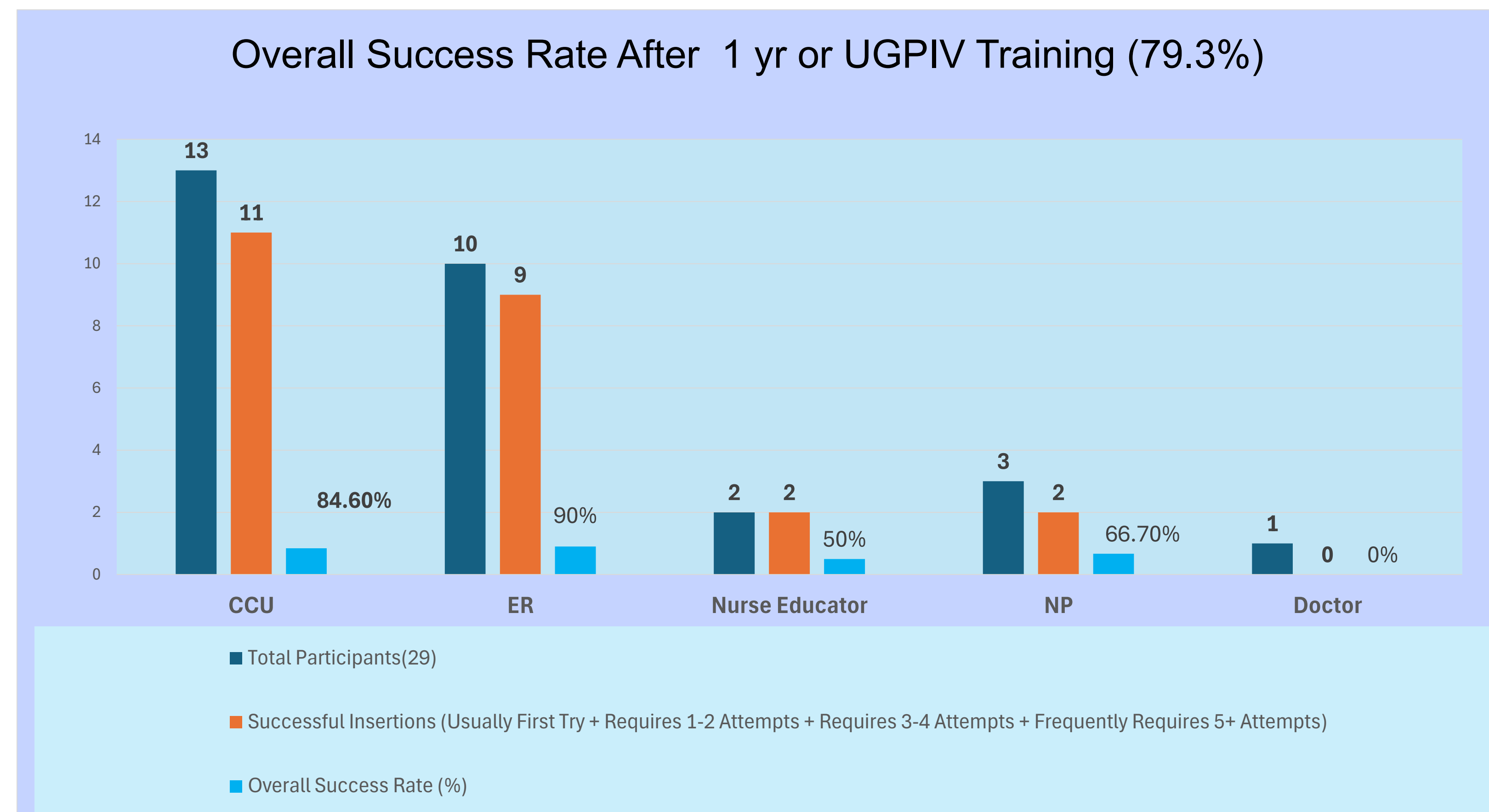
BACKGROUND

- Ultrasound-guided IV insertion is a critical skill in medical practice, particularly in emergency and critical care settings.
- The study aimed to address the variability in success rates and comfort levels among different departments, highlighting the importance of training and equipment quality.
- Understanding these factors is essential for improving patient care and procedural efficiency.

METHODS

- Data was collected from 29 entries.
- Entries were categorized by department or role.
- The majority of entries were from the Emergency Room (34.5%) and CCU (44.8%).
- The frequency of IV insertions was assessed.
- The success rate, defined as the percentage of insertions completed on the first try, was determined for each category.
- Common challenges encountered during IV insertions, including fragile or obese patient veins, were identified and quantified.
- Information on prior ultrasound experience for other medical procedures was gathered.
- Qualitative data were collected regarding comfort levels with ultrasound-guided IV insertion.

RESULTS



RESULTS

Group	Total Attempted	Successful Insertions	Overall Success Rate
CCU	13	11	11/13 ≈ 84.6%
Doctor	1	0	0/1 = 0.0%
ER	10	9	9/10 = 90.0%
Nurse Educators	2	1	1/2 = 50.0%
Nurse Practitioners	3	2	2/3 ≈ 66.7%

DISCUSSION

- Consistent training and high-quality equipment are crucial for effective ultrasound-guided IV insertion.
- Frequent practice enhances confidence and proficiency.
- Infrequent use can lead to skill deterioration over time.
- Specialized IV teams may improve patient outcomes and procedural success.

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REFERENCES

