

# Administration of Endovenous Medicine in Pediatrics: Performance of Nursing Professionals

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## Purpose

- Patient safety with regard to drug therapy has been gaining prominence in the discussions worldwide: errors.
- The intravenous route (IV) is the most commonly used in the hospital. However, this presents a high potential for harm to the patient.

It is necessary for the nursing professional to be attentive to the factors of potential risks to patient safety.

# Objective

To evaluate the practice of Nursing in the process of intravenous medication administration in pediatrics.

## Methods

- A cross-sectional, quantitative and observational study;
- Pediatric hospital in Fortaleza, Ceará, Brazil.
- The sample: 135 observations of the intravenous drug administration process. 11 Nursing technicians.

<u>Inclusion criteria:</u> being a Nursing professional who acts in the administration of drugs through the IV route and being of service in the period of data collection.

Exclusion criteria: be on vacation, leave or away on days that the observations will be made.

<u>Data collect:</u> the interview and the direct and non-participant observations of the actions developed by the members of the Nursing team during the IV therapy in pediatrics, using a check list with the actions of the drug process of IV route (answer options: yes, no, partial and does not apply):

- reading of the medical prescription;
   hand hygiene;
- organization of the environment and selection of suitable materials;
- preparation of medication;
- guidance on the procedure;
- IV drug administration, monitoring and recording.

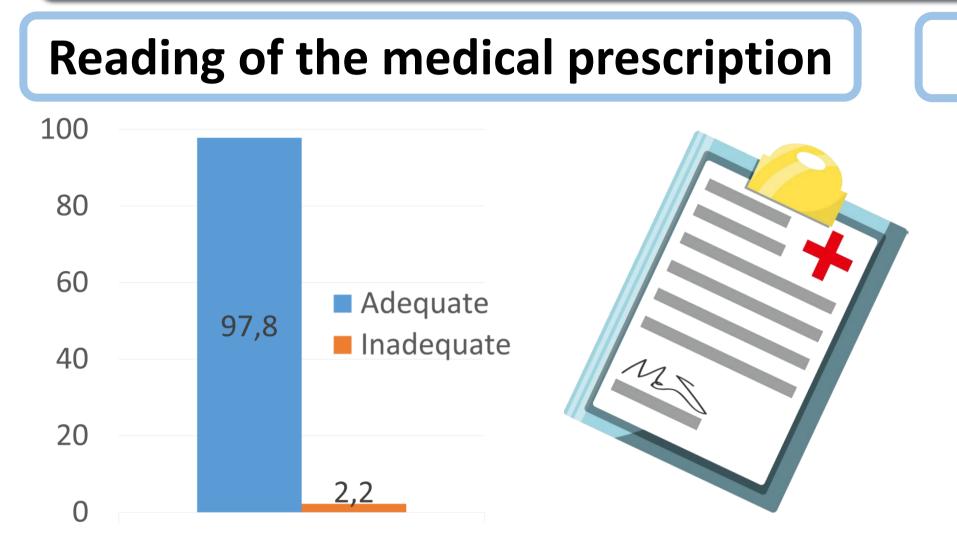
The data was processed and analyzed in a descriptive way.

In order to evaluate the performance of the professionals in the execution of each action of the process, the Positivity Index (IP) for Quality of Care:

- Desirable (IP = 100%)
- Suitable (90% <IP <99%);</li>
- Insurance (80% <IP <89%)</li>• Bord
- Borderline (71% <IP <79%)</li>
- Sufficient (IP <70%).</li>

The study was approved by the Research Ethics Committee of the Federal University of Ceará.

## Results

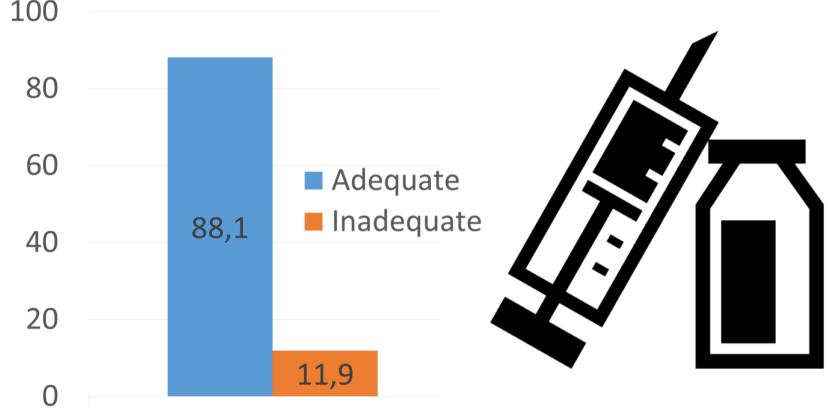




# Hand hygiene 90,4 Rub the thumbs with circular movements using the opposite palm Use the paper towel to close the tap Use the palm of the hands Rubbing the palm with palm, with the fingers intertwined Time adequate (greater than 30 seconds) 9,7

Remove adornments

# Organization of the environment and selection of suitable materials

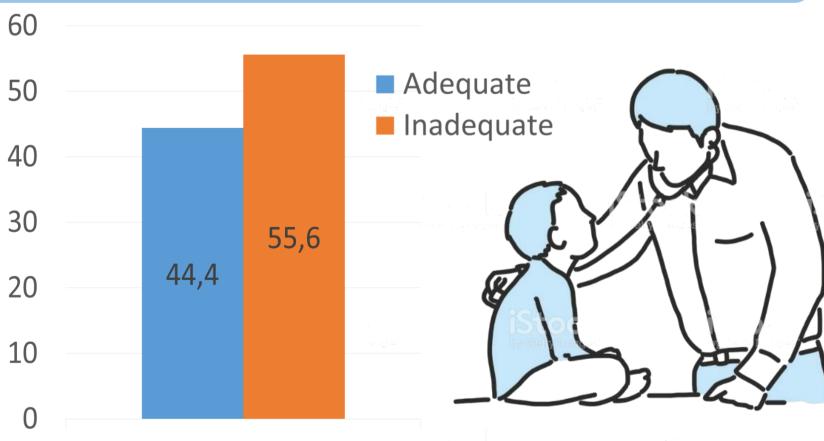


Organization of the bench

# 100 80 60 Adequate 40 Inadequate 93 Disinfection of the ampoule or vial

Actions	Adequate (%)
Check the label of the medication with the prescription	85,2%
Observe the expiration date of the medication	8,9%
Medication reconstituted in distilled water or saline, respecting the principles of hospital infection prevention	97,8%
Properly discards the materials used during the preparation	3%

# **Guidance on the procedure**



Explain the procedure for the patient / companion

# Adequate Inadequate 83,7 83,7 16,3

Records/checks immediately on medical records medication

Intravenous	drug	administration,	monitoring	and	recording

Preparation of medication

	<b>Provides</b>
	related to
	Installs m
	physician
	Patient/c

Actions	Adequate (%)
Provides medicantion and patient name related to prescription	80%
Installs medication as prescribed by physician	100%
Patient/companion guidance	57,8%

## Conclusion

Of the 37 actions:

- 2 actions in a desirable way (100%)
- 1 border action (71-79%)
- 5 actions were adequate (90-99%)
- 9 actions were safe (80-89%)
- 22 actions considered to be suffering (<70%).

In general: unsatisfactory care, representing risks to the safety of the pediatric patient. It is imperative to improve care by Nursing professionals, through lifelong education.