

MAPPING NURSING TERMS FROM INTENSIVE CARE INPATIENTS RECORDS TO ICNP – VERSION 1

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Introduction

- For an effective evaluation of the service delivered to the population, it is necessary to obtain and follow health indicators.
- Indicators can be extracted from the records performed by nurses.
- To do this, a standardized language should be used along with nursing practice classification systems during the implementation of the nursing process stages.

Introduction

- There is no knowledge about the existence of any specific nursing classification for adult intensive care units.
- Knowing that the ICN is interested in creating ICNP Catalogues for specific areas. (ICN, 2005)

Understanding the ICNP®...

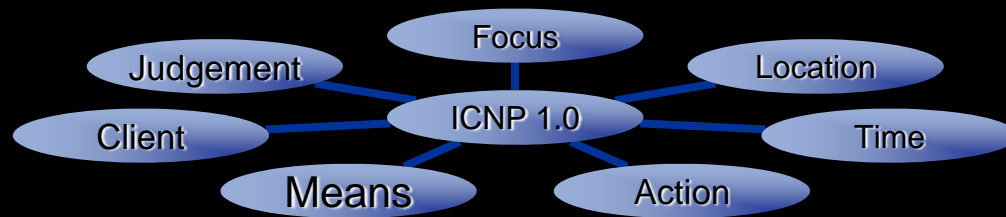


FIGURE 1 –CIPE® axes - Version 1.0

Introduction

ICNP®...

- International Nursing Practice Classification
- Motivation: global unification of the nomenclature used for nursing phenomena and actions, contemplating the cultural and semantic differences that exist in nursing work in every country.

Introduction

Guiding questions

- What terms do adult ICU nurses use to record information on patient records?
- Are these terms in the *International Nursing Practice Classification (ICNP®)* – Version 1.0?
- Are there any terms used in the ICU that are not yet described in the ICNP ® - Version 1.0?
- In case there are terms used in the ICU that are not included in the ICNP ®- Version 1.0, can they be mapped in the classification?

Justification

- It is relevant to describe the elements of nursing practice since it makes it possible to perform research and follow the quality of the care that is delivered.

General objective

- To build a bank of terms consisting of the special nursing language used in adult patient ICU, based on the ICNP® - Version 1.0 - the seven axes model.

Specific objectives

- To identify the terms that nurses use in the patient records of an adult ICU in Belo Horizonte – MG, Brazil.
- To map the terms found on the patient records with those included in the ICNP®-Version 1.0.
- To classify the terms identified as non-included in the seven axes of ICNP®-Version 1.0.

Methods

- Type of study: descriptive
- Place of study: philanthropic hospital in Belo Horizonte
- Population and sample:

583 patient records



182 patient
records



102 patient records

850 documents
164.016 terms

Methods

- Data collection and analysis

- First phase: extracting the terms
- Second phase: extracting the repetitions
- Third phase: normalization of the terms
- Fourth phase: cross mapping
- Fifth phase: extracting medical terms and organizing the medications in pharmacological classes
- Sixth phase: extracting the terms identified based on the concepts present in the axes of CIPE® -Version1.0
- Seventh phase: categorization of the terms that are not included in the seven classification axes CIPE®-Version 1.0.
- Eight phase: Term validation and allocation.

Results

 Terms obtained for the mapping on the axes of ICNP® - Version 1.0:

164,016
New terms

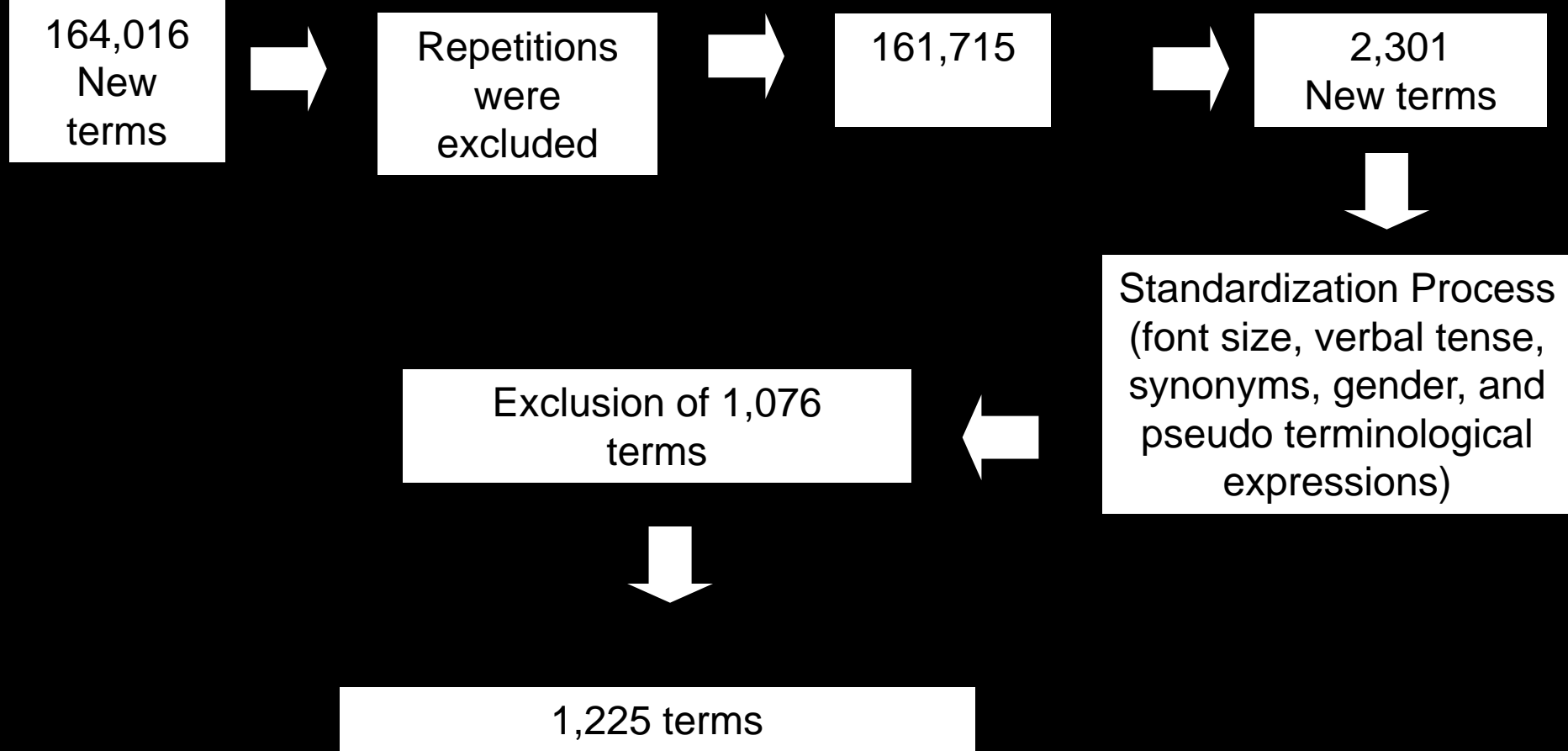
This is a high number compared to studies performed by Nóbrega *et al* (2003), and Trigueiro *et al* (2007) , which found a smaller number of terms for a higher number of patient records

(NÓBREGA <i>et al</i> , 2003)	4,173 terms	167 patient records
(TRIGUEIRO <i>et al</i> , 2007)	2.812 terms	417 patient records

The fact that the documents have the format of a *check list*, i.e., one single document that is filled in by nurses containing pre-defined terms may have affected this result.

Results

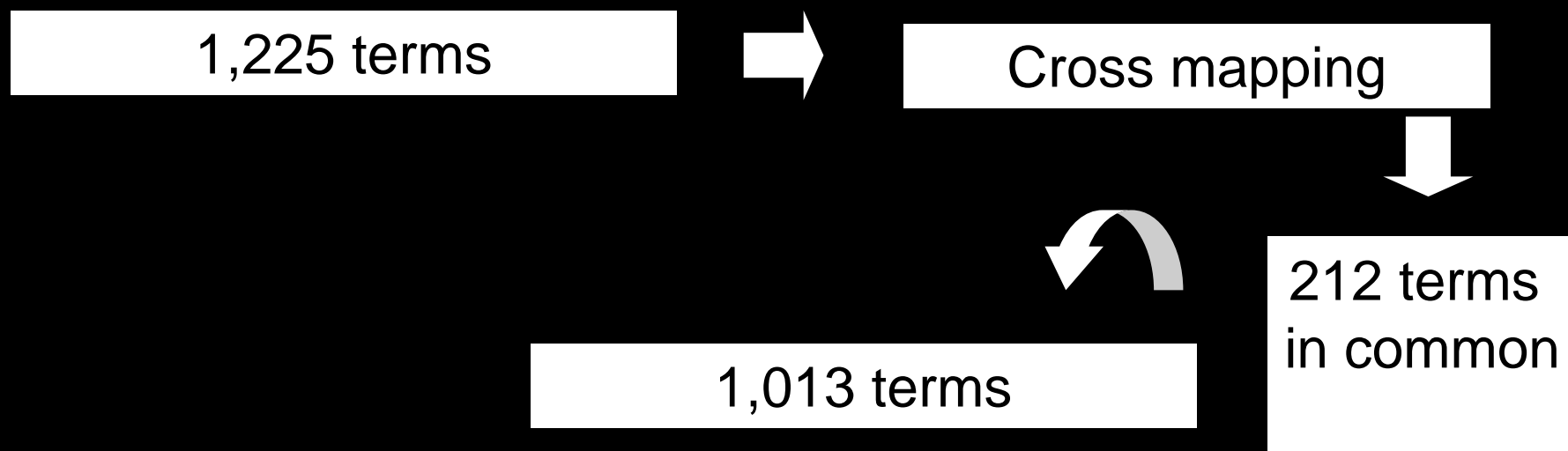
Concerning the terms obtained for mapping on the axes of ICNP® - Version 1.0



(PAVEL and NOLETE, 2001; ALBUQUERQUE, NÓBREGA and GARCIA,2006)

Results

About the terms obtained for mapping on the axes on ICNP® - Version 1:



- It is evidenced that a specific and unique language is used in ICUs.

(ALBUQUERQUE, NÓBREGA and GARCIA, 2006)
(BITTENCOURT and NÓBREGA, 2006)
(BITTENCOURT *et al*,2005)
(TRIGUEIRO *et al*, 2007)

Results

About the terms obtained for mapping on the axes of ICNP® - Version 1.0:



Justification for excluding medical terms: in a terminological study, one should be careful about extracting the terms that belong to other disciplines. (PAVEL and NOLETE, 2001)

Results and Discussion

About the terms obtained for mapping on the axes of ICNP® - Version 1:

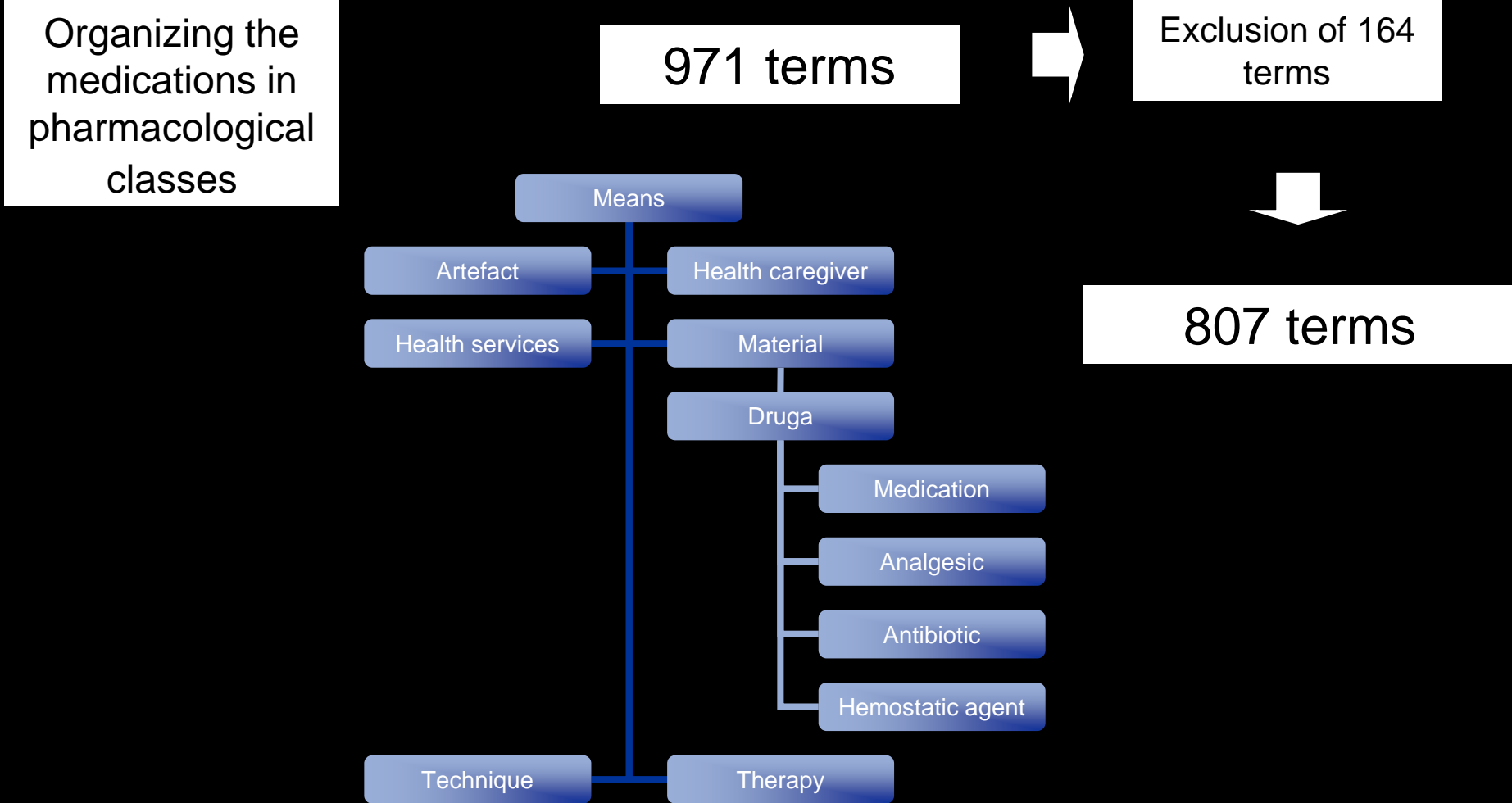
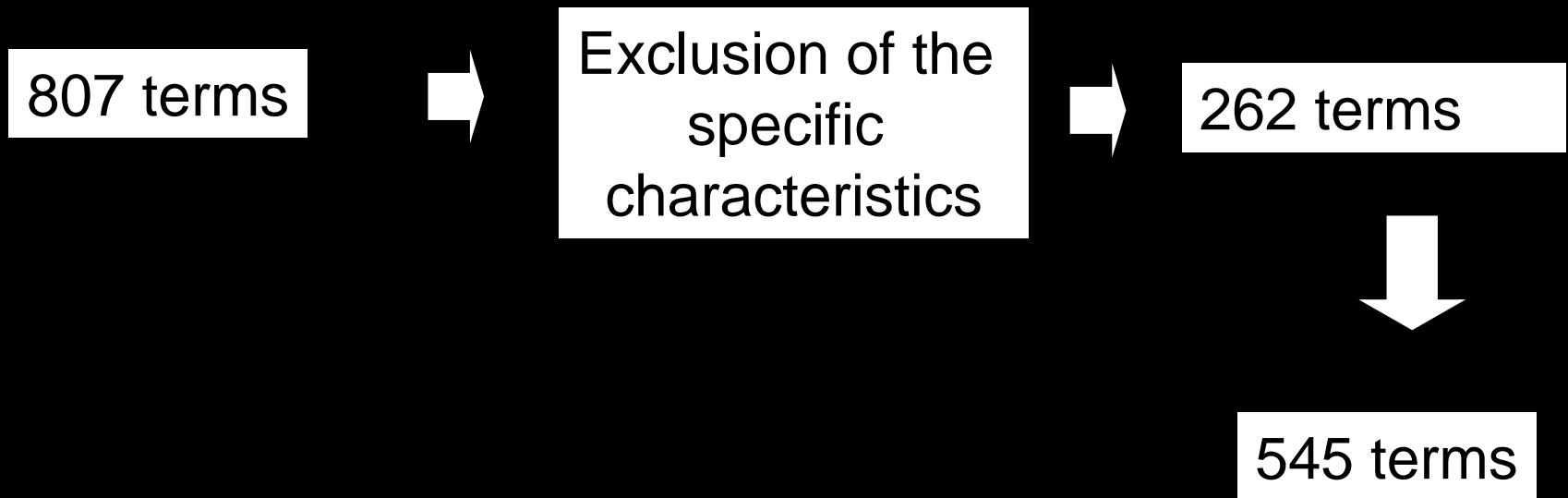


FIGURE 2 – Components of the terminology tree of the means axes, on ICNP®-Version 1.0, with details about the medication concept

Results

About the terms obtained for mapping on the axes of the ICNP® - Version 1:



Results

- Mapping the terms not included in the ICNP®-Version 1.0 with the Classification axes :

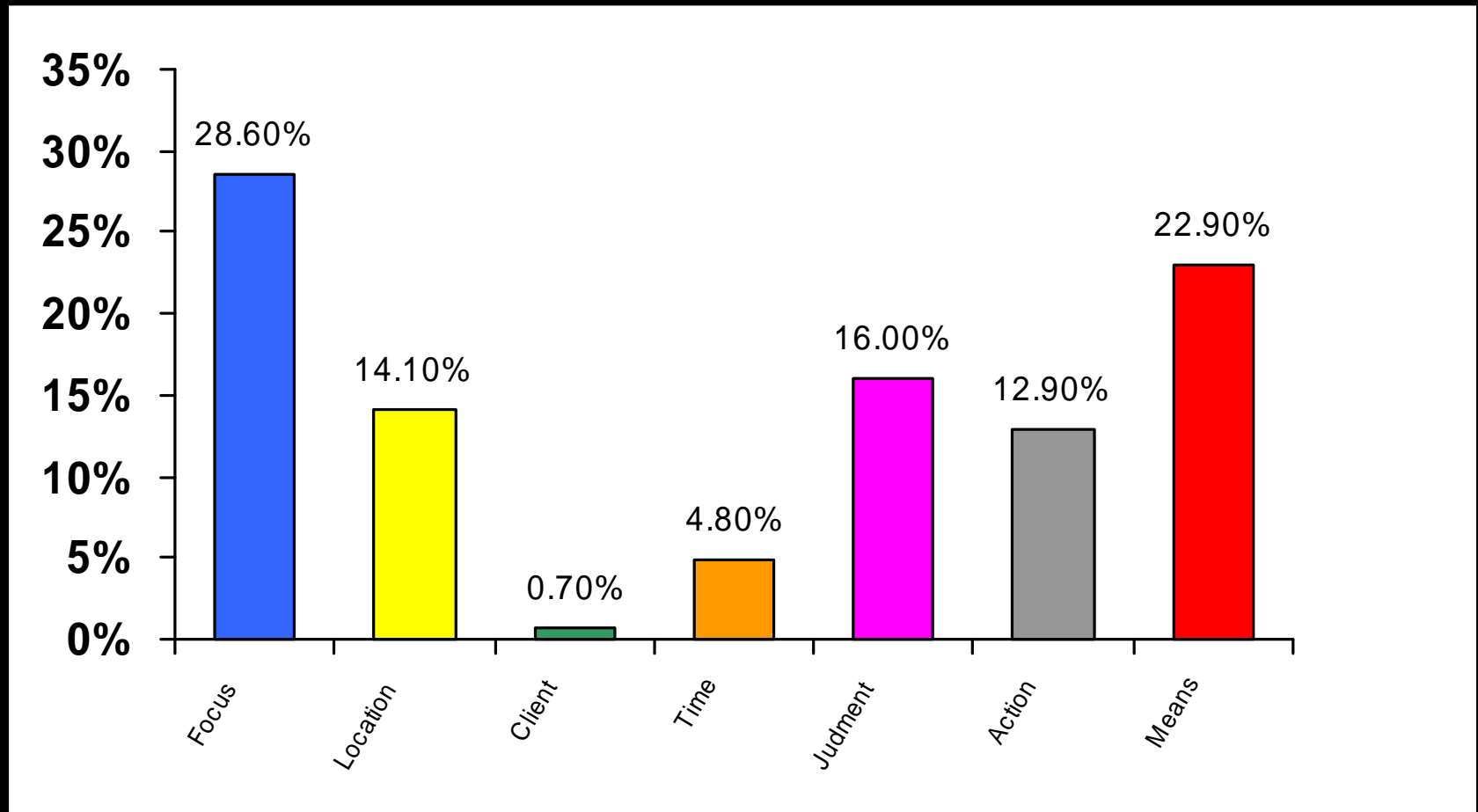



CHART 1 – Distribution of the terms not included in the ICNP®- Version 1.0 on the seven classification axes.

Discussion


Categorization of the terms that are not included in the ICNP® - Version 1.0 on the seven classification axes

 Focus axis: 156 terms (28.6%)



Nursing care area

Reflect the complexity of ICU care

 Localization axis (77-14.1%) and resource axis (125 - 22.9%)

Reflect the complexity of ICU care, the clinical condition of this type of patient and the interventions performed at the unit and registered on the patient records.

Discussion

Categorization of the terms that are not included in the ICNP® - Version 1.0 on the seven classification axes

Judgment axis : 87-16% terms

Such a high number of new terms may have been due to the fact that nurses formulate nursing diagnoses on a daily basis as well as the complexity of those patients.

Action axis: 70 – 12.9%

In the planning phase, the nurse establish priorities for the formulated problems, determines results with the client and, minimize or prevent any problems

Discussion

Categorization of the terms that are not included in the ICNP® - Version 1.0 on the seven classification axes

 Time axis: 26 terms (4.8%)


When a nurse formulates a nursing outcome, it should be registered as a way to include an estimate of the time it will take to be achieved, offering guidance for care continuity.

(ALFARO-LEFEVRE, 2005)

Time axis terms were extracted from the documented nursing outcomes and from the description of the performed invasive procedures

Discussion

Categorization of the terms that are not included in the ICNP® - Version 1.0 on the seven classification axes

 Client axis: 4 terms (0.7%)

Student/Relatives/Daughter/Patient
In ICU there is restriction regarding the people flow due to the characteristics of the unit.



Conclusions

This study found the terms that nurses use in the patient records of an ICU

The identified terms were mapped with those included in the ICNP®-Version 1.0.

Terms considered as non-included in the ICNP®-Version 1.0 were classified on its seven axes.

Contribution to ICNP® catalogue for ICU



Conclusions

This study allowed an approximation with the ICNP®

It also allowed to appreciate the strong effort of some nurses researchers in this arduous and detailed work to build such a broad classification that aims to be capable of representing nursing at a global level.

The contribution of this study to Nursing:

ICNP® can be considered a dictionary that needs to be refined.

This study is a contribution to the continuity of its evolution.

Thank you!



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