More than terminology: using ICNP to enhance nursing's visibility in Italy

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Background: The International Council of Nurses (ICN) has elaborated an international terminology for nursing practice [International Classification of Nursing Practice (ICNP)] that can be useful to catalogue the problems of a nursing nature in diagnosis and also find a system for the classification of nursing activities. ICNP is also the reason why the Italian association Consociazione, representing Italian Nurses at ICN, through the School of Advanced Nursing of the University 'La Sapienza' of Rome, has set up a working group for the translation and experimentation of the ICNP version Beta 2.

Content: In this article the ICNP beta translation and validation into Italian is considered with some scenarios of how benefit could be derived by its utilization for nursing's visibility. The visibility of nursing care can be measured not only through patient outcomes but also by studying the existing data of patient care documentation. To have a common language and terminology in nursing is important for a universal understanding.

Results: Some philosophical reasoning on the genesis and development of ICNP is discussed along with arguments for and against nursing classification systems. Some findings on Italian experimentation for nursing documentation as well as economical analysis are reported along with a vision for future development and utilization.

Keywords: Common Language, Documentation, ICNP, Italy, Nomenclature, Nursing, Terminology

Introduction

Throughout the past decade, nurses in many parts of the world have dedicated numerous hours to developing a standardized nomenclature for nursing practice. One of the most significant developments in this area has been the International Classification of Nursing Practice (ICNP) initiative, designed as a unifying framework to facilitate expression of nursing diagnoses, interventions and outcomes [International Council of Nurses (ICN) 2000]. Other classification systems and taxonomies have been developed to communicate nursing work, but none have been shown to have the capacity for mapping nursing work across all clinical situations and all nursing settings, or to encompass existing classifications adequately (Hyun & Park 2002). The studies reported here confirm that the ICNP system can be used in the international arena, specifically in nursing practice in Italy. The studies demonstrate the ease of translation of the system, its usefulness in the clinical setting for both data collection and protocol development and the merits of the system as a management tool. In addition to these practical developments the ICNP system has a broader impact on the profession in terms of enhancing nursing's visibility. As is often the case with new developments, there is a danger of only viewing a part of it and not understanding the philosophy behind it. This article considers how the ICNP system

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can be used to heighten awareness of nursing work, particularly in countries where nursing continues to experience a variable profile relative to that of other health professions.

The context of ICNP development

Contemporary nursing practice is encompassed in the wider context of globalization. Globalization refers to the interdependence of nations around the world, however, it has also become an important consideration in health care, especially in these times of economic constraint. Although globalization has attracted suspicion, and even criticism in some quarters, it is a fact of life. No individual, group or profession can afford to be insular in a shrinking financial environment or one characterized by unprecedented levels of accountability. Combining nursing efforts and sharing information has the potential to enhance the cost-effectiveness of nursing practice and give greater transparency to nursing work. Development of a common nomenclature ensures a more systematic development of protocols and practices, which contributes to professional development and ultimately, client outcomes. In terms of health itself, there are particular advantages of articulating nursing practice in a consistent way. Notions of health, for all populations, are pervasive, particularly in the context of rapid communication, such as is provided through the Internet. Within the profession, understanding what is meant by certain terms is extremely important in the context of increased migration of nurses and also in our multidisciplinary healthcare environment. When nurses speak in a unified manner, there is a greater likelihood they will attract greater respect from other health professionals. To date, this has not always occurred and some styles of nursing communication have created interprofessional rivalries, in some cases, being perceived as a threat to existing diagnostic languages.

A further contextual element is the professional challenge to continue building a scientific body of knowledge. Terminological rigour in any scientific field is one of the '*sine qua non*' (necessary condition) characteristics if a particular discipline is to grow and prosper. In the science of physics, for example, it would be impossible for scientists to have a meaningful dialogue on specific concepts such as *mass*, and on the comprehension of symbols that represent its formulas without shared rigorous terminology. Similarly, if a nurse researcher in one country demonstrates that a certain practice reduces compression lesions from level II to level I, there needs to be a common language to describe what is meant by level II or level I, otherwise, others will have limited comprehension of the terms, and few opportunities to reproduce the study in another country.

An additional contextual aspect affected by the ICNP is nursing's knowledge base. The scientific foundations of nursing are still emerging and can be communicated among nurses through a meaningful, shared set of symbols, concepts and terms. When nurses are able to share the uniqueness of their knowledge and gather input from others, it is likely that the profession's research and scientific base will flourish. This type of progression helps to ensure nursing's visibility. In addition, it helps to create a professional ethos of unity and professional strength. Solidarity in communication is imperative at a time when languages are themselves changing, and when we are expected to communicate with and advocate for client populations of different cultures and systems. As advocates for health and to maintain accuracy and creativity in care, nurses need a common, shared means of clarifying nursing domains and a common vision.

The genesis and development of ICNP

ICNP has been described as 'a combinatorial terminology for nursing practice that facilitates cross mapping of local terms and existing vocabularies and classifications' (ICN 2000). As a vocabulary, it is aimed at clarity; that is, it can be used to express the exact meaning of a word. However, as with words used in any context, its use is individualized. Words can be used to write a poem, assume a political stance or argue a point. The outcome of what is conveyed depends on the usage of words and the reader's capacity to understand the intention and richness of the content.

The ICNP system was designed to focus on nursing caring activities as dynamic and revolving around practice and practice developments. Although ICNP has the characteristics of a vocabulary, it is, in reality, a classification. In this respect, the system includes criteria for congruency and connectivity between different dimensions. A structural feature of the ICNP is that it can be used in different contexts such as outpatient, hospital, domiciliary or social environments. Because of its hierarchical subdivision system, it also accommodates remodelling with new terms and conditions. Another positive characteristic is the presence of clarifying definitions, so that users can avoid any misunderstanding about the meaning of the terms that are being used. Theoretically, ICNP has unlimited use and spans all nursing fields, for different purposes.

The ICNP's aims as stated by ICN (2000) are to be met within an organizing principle that gives meaning to what is articulated, and maintains coherence and language equivalence. This is a particular challenge for nurses in non-English speaking countries. To ensure the system's applicability and versatility, the terms used are being cross-mapped to other classification systems (Coenen et al. 2001; Hyun & Park 2002). Researchers are also evaluating its use across nursing contexts and with different cultural groups (Coler 2001; Cruz et al. 2000; Rognoni et al. 2002; Ruland 2001). To have universal appeal and to ensure comprehensiveness and versatility, this work is crucial. One of the major research challenges is to question how it can be used by professionals of different cultures,

in different caring situations, and with different degrees of experience and expertise.

An important need for nursing classification systems lies in assisting with the development of nursing standards. It would be impossible to expect that all nurses work in the same way, but all nurses have some elements of practice in common, especially those based on scientific evidence. The clinical and diagnostic domain can also be useful to identify quantitatively and qualitatively and then individualize the needs for care and respond appropriately. A further clinical use of the ICNP is in providing a concept map for the logical reasoning and mapping of nursing interventions. Another potential use of ICNP is in nursing management, where it can be used to assign an economic weight to nursing activities. This would be helpful in guiding reimbursement for care provided. A further use in management is in providing a framework for job descriptions. It could become a tool that helps nurses reach a high level of professional autonomy when combined with work allocation and skill mix.

If the ICNP system proves to have wide, cross-cultural applicability, it may be an important tool in overcoming the invisibility of nursing work. The Latin expression 'Verba Volant and scripta manent' (words fly away . . . writings remain) captures the situation perfectly. How can our work be visible if we do not constantly, systematically document what we are doing (Clark & Lang 1992)? How can invisible work be valued by those within and external to the nursing profession?

Arguments for and against nursing classification systems

In addition to what Clark & Lang (1992) argued for in a systematic orientation to care, other considerations strength the necessity to have a common nursing language as:

• The movement of populations and nurses require a common cultural understanding;

• The spread of pandemic diseases forces nurses to adapt universal strategies, which must be underpinned by a common understanding;

• Global developments such as the European Union, and uncertainty of world stability requires nurses to communicate rapidly using common languages;

• Changes in the health field and restructuring and/or reorientation of national health systems toward cost containment demand common understanding; and

• Nursing shortages and problems with recruitment and retention, indicate a need for the profession to describe the essence of the problems and to reduce the risk of exploitation of nurses, especially in a climate of shrinking resources.

The debate for and against using non-nursing classifications tends to focus on the complexity of nursing activities and the distinctiveness of nursing practice. There are advantages and disadvantages on both sides, at the practical and theoretical levels. Using a multidisciplinary language and system could help to ensure that nursing is congruent with what is occurring in other parts of the healthcare system, however, the uniqueness of nursing may be lost. In a unique, nursing system, there would be a lesser possibility of misunderstandings and inaccuracies. Theoretically, this should guide nursing practice to a greater level of standardized competence. On the other hand, working to a rigid structure might, as mentioned previously, negate the creativity that exists in nursing practice.

A further dilemma lies in ensuring that the system maintains clarity for, in developing a classification that captures the complexity of nursing practice, there is a risk that it may be too broad to capture the reality. One advantage of the ICNP is that it allows a conceptual translation of the existing classifications and, depending on how the vocabulary is used, provides the possibility of creating new, comprehensible and culturally transferable classifications. This would counter any fear of leveling or cultural colonization.

Ultimately, there is a need for nurses to seek ways of responding to the major issues that guide practice. This can only be carried out from a common frame of understanding, irrespective of whether their practice is in Rome, Paris, Sydney, Tokyo or New York, as happens with medical diagnoses. Nursing practice is distinct from medical practice in requiring a more fluid and flexible type of nomenclature. In the standardized medical language, illness is the focal point, and diagnoses are more rigidly defined and enduring. Medical diagnoses tend to synthesize information in a reductionist way, while nursing diagnoses expand, modify and change over time to ensure they capture the holistic nature of nursing care. A biomedical model has only limited reference to the client experience (chronic illness, being a caregiver, experiencing grief) and therefore cannot be used to collect sufficient evidence for, or demonstrate, the holistic nature of nursing. In addition, there is always the risk that adopting a biomedical approach might simply help to reaffirm the existing domination of medicine over nursing practice.

There are lessons to be learned from the development of the North American Nursing Diagnosis Association (NANDA) system. It was originally developed as a first step toward having insurance companies pay nurses directly for their care (Carpenito 1989; Gebbie & Lavin 1998; Gordon 1982; Webb 1992). This required considerable subservience to the insurance companies, which simply compounded the domination of nurses by external groups. Those researching in the area know that if nursing goes too far in allowing integration of a standardized nursing language, the dominant discourse will most certainly be medical (Powers 2002). NANDA has been criticized for its emphasis on disease or

deficit, and was denied inclusion in the International Classification of Disease (Clark & Lang 1992; Webb 1992). The SNOMED (Systematized Nomenclature of Medicine) system can accommodate nursing diagnoses within its numerical classifications, but it remains a medical system (Gebbie & Lavin 1998). For these reasons, Powers (2002) has suggested that nursing have a separate international classification. Currently, a collaborative effort is occurring between the two to have NANDA included in the ICNP. The ultimate aim is to provide a unified nursing language system worldwide.

An additional argument is posed by those who indicate that, in a multidisciplinary healthcare environment, it is important to distinguish nursing work and nursing outcomes with nursing language (Hyun & Park 2002; Moen et al. 1999; Purkis 2001). This could readdress problems with nursing's invisibility and become a point of reference for the nursing profession as it develops its scientific and professional knowledge base. A system unique to nursing is its ability to be responsive to the continuous need to update information (Feringa et al. 2002) and ought to include qualitative methods of validation. Although there remains a need for description and integration of nursing data within multidisciplinary health information systems, the contribution of nursing to patient outcomes must be articulated (Hogston 1997). This would have the added advantage of fostering professional empowerment. Ultimately, it may be classification systems, with their strength of communication, comparison and evaluation that provide the means by which the tangible effects of nursing can be proven (Kearney et al. 2000).

Method

Translation
The ICNP (Beta version) was translated into the Italian language using the following system. First, a working group was established as a joint initiative of CNAI (Consociazione Nazionale Associazioni Infermieri), the Italian Nursing Association and The University of Rome, 'La Sapienza' (Sansoni et al. 2002). The group consisted of seven Italian nurses and one native English-speaking nurse academician. Selection criteria for the group included a working knowledge of English, competence in various fields of clinical practice, administration and education, knowledge of, and experience with database systems, and knowledge of the various international classification systems. Members were representative of the various geographical regions of Italy and each held a strategic position that was expected to enable further development of the ICNP system once it was translated. The translation from one language to another is a difficult task that is not the focus of the present paper. The procedure for translation involved five members undertaking independent translations of the ICNP documentation. Subsequently, all attended a seminar to provide peer review of the five translations. During the seminar, minor conceptual, lexical and structural problems were addressed, and the meeting concluded with agreement on a single translation. The ICNP system translated into Italian was followed by a back translation to English, conducted by the native English-speaking nurse academician. Comparison between the original and new translations for congruity ensured translation validity.

Utilization of the Italian version ICNP
The purpose of the research was to create a useful, Italian version of the ICNP documentation system that would adhere to the intentions of the original wording as well as the criteria for inclusion. Two studies were undertaken to examine the utility of the Italian version of the documentation. Study 1 examined the 'fit' between the documentation currently being used in the nursing setting and ICNP documentation. Nursing records used in documenting the care of 90 adults in a rehabilitation centre were used as a basis for comparison with ICNP nomenclature (Axis A, Focus of nursing practice) documentation. Postgraduate students in nursing collected the data, which was analysed in conjunction with their thesis supervisors at The University of Rome. Study 1 also incorporated an economic modelling exercise, developed by one of the students with a particular interest in this area. She examined the real and potential costs of nursing positions in the rehabilitation ward, which was her place of employment. Existing nursing costs were modelled on the basis of DRGs (Diagnostic Related Groups) and her query was aimed at examining whether, and to what extent, staffing costs would be more accurately reflected using the ICNP data.

In Study 2, a smaller sample ($n = 40$) was used in a different context (paediatrics). Pre-defined documentation using ICNP was analysed to ascertain the number of terms used that could be encoded in ICNP and the corresponding definitions for diagnosis formulation, although the two different samples of the studies, and the number of stated diagnosis was considerably relevant (Table 1).

Findings
Study 1 was retrospective study carried out in a long-term care facility that analysed existing data from more than 3000 records of patients with a minimum of 30 days length of stay (2700 total number of days and 90 patients). From this data, 41 nursing diagnoses were identified using ICNP terms.

Study 2 was carried out in a paediatric setting, data from 1071 records, 150 hospital days and 30 patients were analysed. Data collecting charts were prepared according to the INCP terms and 92 nursing diagnoses were identified using this form. This not only

Table 1 Comparison between the two studies

Study 1	Study 2
Long-term care	General hospital
Rehabilitation Medicine Unit	Children's Unit
Minimum of 30 days of stay	Admission presentation random sample
Retrospective analysis	Descriptive/explorative study, structured scientific observation
Data from existing charts	Pre-defined charts by ICNP data
2700 total days of analysis	150 total days of analysis
90 patients	30 patients
41 nursing diagnoses	92 nursing diagnoses

ICNP, International Classification of Nursing Practice.

Table 2 Data concerning Study 2

- 150 days of data gathering
- 1071 nursing sentences found
- 2629 coded words
- Nursing phenomena area
  - Frequency of label
    - FocusAxis   A = total terms 435
    - JudgementAxis   B = total terms 422
    - LikelihoodAxis   G = total terms 13
- Total unique terms = 96
- First 8 terms represent 8.3% of the 96 unique terms and represent the 52.3% of all repeated terms
- First 15 terms represent 15.6% of the 96 unique terms and represent the 67.5% of all repeated terms
- First 23 terms represent the 75.3% of all repeated terms (Terms reported mainly referred to tasks to care for basic needs!)

Table 3 Some unique terms found in Study 2 on Axis A – Focus

Unique terms	Frequency	%
1 Body temperature	74	17
2 Fever	35	8
3 Pain	26	6
4 Bowel elimination	24	5.5
5 Rest	20	4.6
6 Ventilation	18	4.1
7 Diarrhoea	16	3.7
8 Vomiting	15	3.4
9 Rumination	14	3.2
10 Crying	13	3
11 Migraine	12	2.8
12 General functions	8	1.8
13 Sleep	7	1.6
14 Diuresis	6	1.4
15–96 Other terms		

The first 8 labels on Axis A (Focus) represent 52.3% of all observations (435). The first 23 unique terms of the 96 represent >75% of all observations (435). In a second phase of the study some terms have been unified (fever–body temperature, etc.)

shows that using ICNP terms is efficient but also helps us be aware of how and what we document (Tables 2 and 3).

Economic benefit

The financial analysis shows the comparison between the medical DRG evaluation and its real price, as derived by computing the actual cost of nursing care using ICNP. The cost of nursing activities was calculated taking into consideration the nurses' contract wages (€12.02 per hour) as compared to the daily nursing activities per day for a patient with cerebrovascular disease (€181.80). The regional reimbursed payment in these DRGs is €261.84 per day. This shows that the real cost of nursing care evaluated on the basis of documentation constitutes 70% of the DRG reimbursement. It could also explain the difficulty of appropriate staffing practices, for example, when DRGs are used as the basis of funding, without separating out the true costs of nursing care. Using

ICNP, nurse managers would be able to maintain better budgeting practices specific to the real costs of nursing work.

This is an interesting point to investigate further especially in countries such as Italy where the nursing budget is part of the general budget of the hospital and not specific for nursing care. Further studies would be interesting with regards to establishing hypothetically a national system of nursing budgeting using ICNP whose use could be adapted in private, public and community settings.

Other studies could be established to write or review nursing procedures and protocols. Our experimentation in reviewing the existing nursing protocols has shown a more accurate and precise wording using ICNP beta terminology (Degan et al. 2002) (Table 4).

Discussion

Concordance between the Italian translation and the English language Beta version of ICNP was pleasing. The high percentage of correspondence (75%) in the definitions of nursing activities also was taken as a measure of success with the translated version of the ICNP system. This compares favourably with the findings of a Brazilian study by Cruz et al. (2000), which found 45.5% correspondence in a similar analysis of the records of 59 clients in an intensive therapy unit. The economic modelling was instructive and provides data to guide policy change. Although the findings provided reinforcement for the use of ICNP internationally and in

Table 4 Protocols

Actions used in the first elaboration of the protocol	Actions using ICNP
Appropriate hand washing	Washing [ICNP] hands [ICNP] with antiseptic
Apply a sterile dressing under a CV Catheter	Positioning [ICNP] a sterile dressing [ICNP] under the extremity of a CV Catheter [ICNP]

ICNP, International Classification of Nursing Practice; CV, central venous.

different languages, we urge caution, as the ICNP's utility and visibility with nurses across a variety of cultures depends on how it is rationalized and used in day-to-day practice. Nursing practice extends beyond the concrete, measurable realm of practice to the psychological, affective and emotional spheres. In these aspects it is often difficult to make nursing visible and measurable, particularly if there are no specific terms to define exactly what is occurring. One challenge, for example, would be to define the actions of the nurse who sits on the side of a person's bed, deep in caring conversation. We need to devise culturally appropriate ways of defending this type of activity in appropriate language to managers in various cultural contexts who might require some persuading regarding the clinical merits of this activity.

The diversity of nursing roles, specialties, educational degrees, competencies, regulations and practice activities increase the complexity of the problem when proposing universal, translatable tools. To be useful, a tool has to represent the knowledge base and act as a guideline for practice. It must include application throughout different parts of the world, with different population groups and different ethnicities. It needs to incorporate a system for ongoing development of new concepts and multiple hierarchies. Given this complexity and diversity, caution should be taken in the way nursing actions are made visible. We need to query whether all care can be made visible, whether measurement is possible for all care, and ask what constitutes visibility of care, for whom and for what purpose (Sansoni & Giustini 2003).

Some concerns have been expressed about standardization of language, especially in relation to nursing care plans, revolving around whether or not it might stifle critical thinking. Some ask whether nursing nomenclature is really necessary, on the basis that it may be merely an intellectual exercise by nurse academicians to imitate their physician colleagues (Clark 1999). Concerns about critical thinking can be countered with the argument that even when nursing nomenclature and care is provided, nurses do not operate in a vacuum. The efficacy of care continues to be dependent on analysis and creative application of knowledge.

Conclusion

Since nursing began to systematize its practice several decades ago, we have been better able to defend our work and our knowledge in the political arena. This has been shown in successful lobbies for improvements to nursing practice, in the move toward university education in most countries, and in better articulating our role to the general public. Structured approaches, such as ICNP, provide a vehicle to extend and expand this type of public and professional awareness. If we collect data in all nursing spheres: education, research, management and clinical practice, we have a more substantial basis for future lobbying, and for advocacy for health.

The ICNP system is useful in that it spans clinical practice, management, research and education. ICNP can be helpful as a repository for gathering updated and contextualized information for in-depth investigations of nursing practice. This can enhance visibility and help to avoid the scientific domination of nursing research by others, while it is defining our unique contribution in health care. It is a particular challenge to investigate our knowledge base in today's dynamic professional environment. Pedagogic use of the system can help to strengthen the linkages between education and practice. To cultivate logical reasoning and critical thinking, ICNP should be introduced into learning environments to ensure that student nurses are learning to observe in a more analytical way, and to recognize what is important in those observations. It can also help to achieve consistency in the way we *grow* our learners, to reduce the number of obstacles they encounter in trying to defend nursing practice.

At its present stage of development, the ICNP must be seen as a dictionary that needs refining. It is imperative that we continue its development, particularly with international collaboration, to reflect the globalization of nursing practice and to represent the synthesis of our profession and its ongoing development.

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