

# Development and validation of an instrument for initial nursing assessment

DESENVOLVIMENTO E VALIDAÇÃO DE UM INSTRUMENTO PARA A AVALIAÇÃO INICIAL DE ENFERMAGEM

DESARROLLO Y VALIDACIÓN DE UN INSTRUMENTO PARA LA EVALUACIÓN INICIAL DE ENFERMERÍA

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## ABSTRACT

The objective of this study, conducted in Bolivia from April to July of 2008, is the design and validation of an initial nursing assessment instrument to be used in clinical and educational environments in Santa Cruz (Bolivia). Twelve Bolivian nurses participated; both document analysis as well as consensus techniques were used to determine the categories and criteria to be assessed. Categories included in the nursing assessment instrument are a physical assessment and the eleven Gordon's Functional Health Patterns. The nursing assessment instrument stands out as being concise, easy to complete and utilizing a nursing approach. It does not include items for advanced nursing assessment. However, it incorporates items regarding lifestyle and the patient's autonomy. The nursing assessment instrument contributes to improving the quality of clinical records, supports the nursing diagnosis and implementation of the nursing process, promotes the nurse's role and helps to standardize practice.

## DESCRIPTORS

Nursing process  
Nursing assessment  
Nursing records

## RESUMO

Este estudo, realizado entre abril e julho de 2008, teve como objetivo desenvolver e validar um instrumento para orientar a avaliação de enfermagem em parâmetros assistenciais e docentes, em Santa Cruz, na Bolívia. Participam do estudo doze enfermeiras bolivianas, e utilizaram-se a análise de documentos e técnicas de consenso para definir as categorias e critérios a incluir no instrumento. As categorias definidas foram a avaliação física e os onze Padrões Funcionais da Saúde de Gordon. O instrumento caracteriza-se por ser breve, de fácil compreensão e por centrar-se no enfermeiro. Não foram incluídos elementos de avaliação física avançada, mas sim critérios de estilos de vida e autonomia do paciente. O desenvolvimento do instrumento contribuiu para a qualidade dos registros, favorecendo o juízo clínico e a aplicação do processo à enfermagem, reforçando o papel do enfermeiro e contribuindo para a sistematização da sua prática.

## DESCRITORES

Processos de enfermagem  
Avaliação em enfermagem  
Registros de enfermagem

## RESUMEN

Este estudio, desarrollado de abril a julio de 2008, objetiva desarrollar y validar un instrumento para orientar la evaluación de enfermería en parámetros asistenciales y docentes en Santa Cruz, Bolivia. Participaron doce enfermeras bolivianas y se utilizaron el análisis de documentos y técnicas de consenso para definir las categorías y criterios a ser incluidas en el instrumento. Estas categorías son: la evaluación física y los 11 Patrones Funcionales de Salud de Gordon. El instrumento se caracteriza por ser breve, de sencilla comprensión y por centrarse en el enfermero. No incluye elementos de evaluación física avanzada, pero sí criterios de estilos de vida y autonomía del paciente. El desarrollo de estos instrumentos contribuye a la calidad de los registros, favorece el juicio clínico y la aplicación del proceso a la enfermería, refuerza el papel del enfermero, favoreciendo la sistematización de su práctica.

## DESCRIPTORES

Procesos de enfermería  
Evaluación en enfermería  
Registros de enfermería

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## INTRODUCTION

The Nursing Process (NP) is a term used to refer to the scientific method applied to nursing practice and has been defined as a systemized humanistic care delivery method, based on the efficient achievement of objectives, which comprises five phases: assessment, diagnosis, planning, execution and evaluation<sup>(1)</sup>.

In nursing literature, a consensus exists on the utility of the NP for the advancement of the profession, research and to facilitate management<sup>(2-3)</sup>. Therefore, efforts to standardize nursing practice, using instruments that join all phases of the NP, range from primary care contexts to hospitalization rooms<sup>(4-5)</sup>, including departments as different as critical care<sup>(6)</sup>, nuclear medicine<sup>(7)</sup> or orthopedic surgery<sup>(8)</sup>.

The first phase of the NP is assessment. In this phase, the nurse collects information to establish a clear image of the patient's health status, which constitutes the base for the diagnosis, interventions and which further events in the course of the care process can be compared with<sup>(1)</sup>.

This initial assessment phase, however, is not always performed systematically, either due to a lack of time<sup>(9-10)</sup> and sufficiently useful instruments to guide patient assessment<sup>(4,9,11-12)</sup> or to nurses' lack of awareness on the application of the NP or health institutions' lack of involvement<sup>(2,13)</sup>.

Another problematic aspect in the assessment is the lack of a focus on the application of the NP<sup>(9,14-15)</sup>. In that sense, some authors have appointed that the availability of a well-designed assessment instrument presupposes help for nurses to gain critical thinking skills with a view to acknowledging what is relevant<sup>(1)</sup>, integrating the patient's psychosocial and physiological responses<sup>(16)</sup>. Moreover, if a nursing model is adopted in its design, this further a consensus on what nursing terminology to use, contributing to the definition and enhancement of nurses' role<sup>(14,17)</sup>.

Although not free from obstacles, the trajectory of the NP in Western countries has been long, as opposed to countries like Bolivia, where its implantation is more limited and nurses manifest the need to adhere to a language and work method that at the same time puts them in tune with international nursing trends and results in local advances, such as greater visibility and acknowledgement<sup>(3,5,18)</sup>.

In this context, encouraged by the desire to enhance nurses' role in the Bolivian health system, nurses

in that country demand an Interuniversity and Scientific Research Cooperation Program (PCI) from Spanish cooperation with a view to the implementation of the NP. The aim of the PCI is for faculty from *Universidad Autónoma Gabriel René Moreno* (UAGRM) and nurses from affiliated health centers to put in practice the NCP and develop Care Plans in teaching to guide their professional practices, incorporate nursing registers into the patient's clinical history and reinforce the autonomous role of Bolivian nurses<sup>(5)</sup>. Initial research reveals that Bolivian nurses demand simple instruments to guide and register the different phases of the Nursing Process<sup>(18)</sup>.

The aim in this study is to design and validate the contents of an initial nursing assessment form for application in the care and teaching contexts in Santa Cruz de la Sierra, Bolivia.

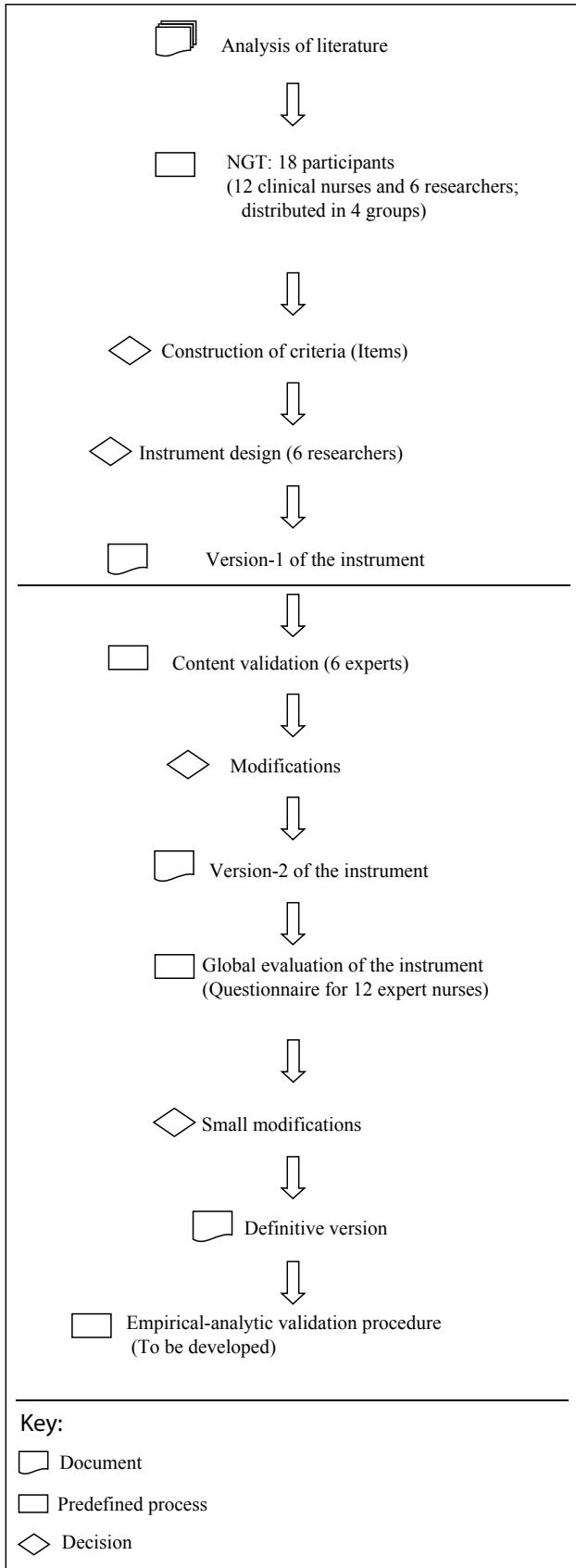
## METHOD

A mixed study was developed, including an interpretative qualitative phase to design the instrument and a quantitative phase for content validation by experts.

Study participants were 12 female clinical nurses with a mean age of 48 years and average professional experience of 21 years. The criteria to include participants in the study were: professionally active nurses with an M.Sc. degree, with hospital and community health care experience in patient assessment and care. Stratified sampling was used to represent the distinct centers that participated in the PCI: Three representatives were selected from each of the four healthcare centers where the implementation of the instrument was planned: Hospital Universitario Japonés, Hospital Hernández Vera de la Villa 1º de Mayo, Hospital Municipal San Juan de Dios and Centro de salud María Cecilia. Other participants in the different phases were the six members of the research team, all of whom are familiar with patient assessment and application of the NCP in teaching and/or health care.

In accordance with other studies on the design and validation of initial assessment forms<sup>(11,19)</sup>, the procedure was followed that is schematically represented in Figure 1, based on Pasquali's instrument construction and validation model, which includes theoretical, empirical and analytic procedures<sup>(20)</sup>. The incipient experience in instrument validation studies for the nursing process in our context justifies the choice of theoretical content validation<sup>(8)</sup>.

### Bolivian nurses demand simple instruments to guide and register the different phases of the Nursing Process.



**Figure 1** – Procedure followed for the design and validation of the *Initial nursing assessment* instrument

**Qualitative Phase. Instrument Development:** The first phase of the model involves an analysis of the literature and of participants’ clinical experience with a view to the construction of items or criteria<sup>(20)</sup>. This first phase is focused on the theoretical background of the construct for which an instrument is to be developed and involves an operational definition through the inclusion of representative items<sup>(21)</sup>. In our case, the researchers designed the instrument based on the theoretical constructs of Gordon’s Functional Health Patterns, as well as comprehensive bibliography on initial nursing assessment<sup>(1,4,7-9,14-15,17,19)</sup>. Thus, the following 12 categories are included: Physical assessment, Health perception-management, Nutritional-metabolic pattern, Elimination, Activity-exercise, Sleep-rest, Cognitive-perceptual pattern, Self-perception-self concept, Role-relationship, Sexuality-reproductive, Coping-stress tolerance and Value-belief. These patterns are concepts and, as such, they cannot be measured except through operational indicators, which in our case are the criteria or items to assess each category.

For the operational definition, the 12 categories were distributed in three work groups, each of which was coordinated by a Bolivian researcher and included a Spanish researcher and four clinical nurses (three from hospitals and one primary care nurse). To define the criteria for the assessment of each category, the Nominal Group Technique (NGT) was used, in which work group members independently write down the ideas that, according to their own clinical experience, correspond to each. Then, they compared and analyzed their data and reached a consensus on what criteria to assess in each pattern, based on the criteria’s conceptual pertinence and relation with the domains or patterns. Based on the criteria the three groups defined, the research team developed version-1 of the *Initial nursing assessment* instrument.

**Quantitative phase. Instrument validation:** The theoretical validation procedures used in this phase included content validation by experts and global evaluation, which presupposes semantic and instrument applicability analysis<sup>(20-21)</sup>.

Content validity is the extent to which an instrument contains an adequate set of elements or criteria to represent the construct under evaluation<sup>(19)</sup>, in this case the criteria of the patient assessment instrument. For content validity assessment, version-1 of the instrument was submitted to experts, based on the selection criterion of knowledge on patient assessment and the NP in nursing teaching or care. An adequate number of experts ranges between three and ten<sup>(19)</sup>. In this study, six judges were selected, who assessed all criteria included in each category. In version-2, only those criteria were maintained on which agreement levels were superior to 80%.

For the global assessment, version-2 was forwarded to all participating clinical nurses (n=12), in order to get to know the criteria all groups had defined. The participants answered a questionnaire to indicate their level of disagreement-agreement with five statements on the instrument's pertinence, simplicity and applicability and the understandability, clarity and appropriateness of its assessment elements or criteria, using a scale from 1 to 10, in which 1 indicated total disagreement and 10 total agreement with the statement. Means ( $\bar{x}$ ), standard deviations (S) and coefficients of variation ( $CV = S/\bar{x} * 100$ ) were calculated for each questionnaire item. A mean score of 7 or higher and variation coefficient below 15% are accepted as satisfactory for each investigated aspect. The general validity score was obtained by adding up the scores for the five questions<sup>(22)</sup>. In addition, the participating nurses could comment on or suggest changes, which were debated on and incorporated if 100% of the experts agreed, resulting in the final version of the instrument.

### Ethical aspects

The study received approval from the Research Ethics Committee at the School of Human Health Sciences of UAGRM on March 12<sup>th</sup> 2008, under protocol number 37/08. Participation was voluntary and confidentiality and anonymity were guaranteed. Participants were informed that they could drop out of the research at any time and signed an informed consent term.

## RESULTS

In the instrument design, all groups agreed to include criteria to facilitate the nursing focus and application of the NP, such as lifestyles, personal resources or degree of autonomy. The use of a checkbox was proposed as the preferred completion method, as well as a space to mark the date, name and signature of the nurse performing the assessment. In total, version-1 included 205 criteria, distributed among 12 categories, resulting in an average 17 assessment criteria per category.

In the expert evaluation of the first version, advanced or specialized assessment criteria were eliminated, considering that these were characteristic of a medical assessment. Also, criteria were eliminated which the experts considered of little prevalence or relevance. The second version consisted of 145 assessment criteria, with an average 12 per category. The expert considered that the appropriate instrument size would be an A4 page, front and back, and agreed to include a blank space in each category, under the title

*Other considerations*, to mark data not included in the instrument, but which could be relevant for a given case.

Table 1 displays the mean agreement level among the six experts about the criteria in each category, which was high for more physiological categories, such as Physical assessment, Elimination pattern or Nutritional-metabolic pattern, but lower for more psychological and social categories like Role-relationship, Coping-stress tolerance and Value-belief patterns.

**Table 1** – Mean inter-rater agreement level on the contents of each Initial assessment category

Category	Inter-rater agreement (%)
Physical assessment	93%
Health perception-management pattern	85%
Nutritional-metabolic pattern	92%
Elimination pattern	93%
Activity-exercise pattern	85%
Cognitive-perceptual pattern	83%
Sleep-rest pattern	82%
Self-perception-self concept pattern	82%
Role-relationship pattern	81%
Sexuality-reproductive pattern	85%
Coping-stress tolerance pattern	81%
Value-belief pattern	80%

The 12 clinical nurses' global evaluation results of the instrument are displayed in Table 2.

**Table 2** - Mean( $\bar{x}$ ), Standard deviation (S) and Coefficient of variation (CV) for each evaluated aspect and the general instrument

N°	Question	$\bar{x}$	S	CV (%)
1	The instrument is pertinent for nursing care	9.6	0.62	6.4
2	The instrument is simple and easy to apply in practice	8.9	1.2	13.4
3	The assessment criteria are understandable	9.7	0.64	6.6
4	The instrument elements are expressed clearly	9.3	0.75	8.0
5	The criteria are adequate for initial patient assessment	9.1	0.8	8.7
Global		46.6	3.5	7.5

In this phase, small modifications were proposed, such as including an option to mark if the assessment of a specific pattern is not pertinent or does not offer data of interest and space to summarize the most relevant assessment information. The assessment criteria for each category included in the final version are displayed in Figures 2 and 3.

Espacio para logotipo e identificación de la Institución	<b>IDENTIFICACIÓN DEL PACIENTE</b>
	Apellidos:..... Nombre:.....
	Edad:..... Dirección:.....
	Teléfono:..... N° H°C.....
	Servicio:..... Planta:..... Habitación:..... Cama.....
	N° Identificación..... Afiliación:.....
	Motivo de ingreso..... Fecha de Ingreso:...../...../.....

**VALORACIÓN INICIAL DE ENFERMERÍA**

<b>00. VALORACIÓN FÍSICA</b>
Peso..... Talla..... IMC..... Pupilas..... Temperatura..... TA..... FC..... FR..... Tipo de respiración..... Tos: <input type="checkbox"/> Seca. <input type="checkbox"/> Productiva. Expectoración:..... Auscultación:..... Piel: <input type="checkbox"/> Hidratada. <input type="checkbox"/> Deshidratada <input type="checkbox"/> Integra. <input type="checkbox"/> Cianosis. <input type="checkbox"/> Ictericia. <input type="checkbox"/> Palidez <input type="checkbox"/> coloración normal Edemas (localización)..... Varices (localización)..... Heridas: (localización)..... Tipo..... Presencia de UPP (localización):..... Riesgo de UPP (escala.....)..... Tratamiento médico:
<b>01. PATRÓN PERCEPCIÓN-MANEJO DE SALUD</b>
Describe su estado de salud: <input type="checkbox"/> excelente <input type="checkbox"/> bueno <input type="checkbox"/> normal <input type="checkbox"/> malo. <input type="checkbox"/> Da importancia a su salud. <input type="checkbox"/> Acepta su estado de salud <input type="checkbox"/> No participa en aspectos relacionados con la enfermedad. <input type="checkbox"/> No sigue el plan terapéutico. Motivo: <input type="checkbox"/> Desconocimiento. <input type="checkbox"/> Incapacidad <input type="checkbox"/> Olvido <input type="checkbox"/> Falta de motivación. <input type="checkbox"/> Necesidades económicas <input type="checkbox"/> Necesita o desea más información sobre su salud: <input type="checkbox"/> Medicación. <input type="checkbox"/> Enfermedad. <input type="checkbox"/> Signos de riesgo <input type="checkbox"/> autocuidados Alcohol: <input type="checkbox"/> consumo esporádico. <input type="checkbox"/> A diario. <input type="checkbox"/> Excesivo en fines de semana. <input type="checkbox"/> intoxicación etílica en el último mes Tabaco: <input type="checkbox"/> Exfumador. <input type="checkbox"/> Fumador. <input type="checkbox"/> > de 10 cigarros/día. <input type="checkbox"/> < de 10 c/día. <input type="checkbox"/> Desea dejar de fumar. <b>Otras sustancias:</b> ..... Alergias. <input type="checkbox"/> Alimentos..... <input type="checkbox"/> Medicamentos..... <input type="checkbox"/> Otras..... Otras consideraciones:..... <input type="checkbox"/> NADA A DESTACAR
<b>02. PATRÓN NUTRICIONAL METABÓLICO</b>
Nutrición artificial: <input type="checkbox"/> Sonda Nasogástrica <input type="checkbox"/> Nutrición parenteral <b>Apetito:</b> <input type="checkbox"/> Aumentado <input type="checkbox"/> Normal <input type="checkbox"/> Disminuido. Dificultad para: <input type="checkbox"/> Tragar <input type="checkbox"/> Masticar <input type="checkbox"/> Beber. <b>Intolerancia a la ingesta:</b> <input type="checkbox"/> Náuseas. <input type="checkbox"/> Vómitos <input type="checkbox"/> Regurgitaciones Problemas de dentición: <input type="checkbox"/> Prótesis <input type="checkbox"/> Faltan piezas <input type="checkbox"/> Caries. <b>Problemas en la mucosa oral(describir):</b> ..... Higiene bucal: <input type="checkbox"/> Diaria. <input type="checkbox"/> Después de comidas. <input type="checkbox"/> Ocasional/nunca Sigue algún tipo de dieta: <input type="checkbox"/> De adelgazamiento. <input type="checkbox"/> Diabética. <input type="checkbox"/> Colesterol. <input type="checkbox"/> Hiposódica. <input type="checkbox"/> Otra..... Enumere lo que come en un día: Desayuno..... Comida (almuerzo)..... Cena..... Otras..... Suplementos:..... Consumo de líquidos diarios: Agua..... Refrescos..... Leche..... Mates (infusiones)..... Café..... Otros..... Expresa satisfacción con su peso <input type="checkbox"/> Sí. <input type="checkbox"/> No. Otras consideraciones:..... <input type="checkbox"/> NADA A DESTACAR
<b>03. PATRÓN ELIMINACIÓN</b>
<b>HÁBITO INTESTINAL:</b> Frecuencia..... Consistencia: <input type="checkbox"/> Líquida <input type="checkbox"/> Formada <input type="checkbox"/> Dura <b>Color</b> ..... <input type="checkbox"/> Dolor al defecar. <input type="checkbox"/> Hemorroides <input type="checkbox"/> Gases <input type="checkbox"/> Presencia de sangre en heces. <input type="checkbox"/> Ostmias (tipo)..... <b>Autonomía para la defecación:</b> <input type="checkbox"/> No precisa ayuda. <input type="checkbox"/> Ayuda parcial. <input type="checkbox"/> Dependiente total <input type="checkbox"/> Usa pañales Otras consideraciones:..... <input type="checkbox"/> NADA A DESTACAR <b>HÁBITO URINARIO:</b> Frecuencia..... <b>Color y aspecto de la orina:</b> ..... <input type="checkbox"/> Signos de retención de líquidos. <input type="checkbox"/> Incontinencia (tipo)..... <input type="checkbox"/> Sondas vesicales (tipo)..... Fecha último cambio:...../...../..... <b>Autonomía para la eliminación:</b> <input type="checkbox"/> No precisa ayuda. <input type="checkbox"/> Ayuda parcial. <input type="checkbox"/> Dependiente total <input type="checkbox"/> Usa pañales Otras consideraciones:..... <input type="checkbox"/> NADA A DESTACAR
<b>04. PATRÓN ACTIVIDAD - EJERCICIO</b>
Actividad física habitual: <input type="checkbox"/> Sedentario <input type="checkbox"/> Paseos ocasionales <input type="checkbox"/> Paseo diario (tiempo:.....) <input type="checkbox"/> Pratica deporte (especificar:.....) Situación actual: <input type="checkbox"/> Deambulante. <input type="checkbox"/> Sillón. <input type="checkbox"/> Cama <b>Dificultad para:</b> <input type="checkbox"/> Moverse <input type="checkbox"/> Levantarse <input type="checkbox"/> Sentarse <input type="checkbox"/> Caminar. Nivel funcional de movilidad: <input type="checkbox"/> No precisa ayuda. <input type="checkbox"/> Ayuda de dispositivos <input type="checkbox"/> Ayuda de personas y dispositivo <input type="checkbox"/> Dependiente total Ayuda para vestirse: <input type="checkbox"/> Autónomo. <input type="checkbox"/> Ayuda parcial. <input type="checkbox"/> Dependiente total <b>Vestido no adecuado:</b> <input type="checkbox"/> Sí. <b>Calzado no adecuados:</b> <input type="checkbox"/> Sí. Ayuda para el baño e higiene: <input type="checkbox"/> Autónomo. <input type="checkbox"/> Ayuda parcial. <input type="checkbox"/> Dependiente total <b>Higiene general:</b> ..... Otras consideraciones:..... <input type="checkbox"/> NADA A DESTACAR

Figure 2 – Front side of the initial nursing assessment form

**05. PATRÓN SUEÑO-DESCANSO**

Nº de horas que suele dormir al día.....  Interrupciones de sueño (nº Veces.....) Necesita Ayuda para dormir (Tipo).....

Se levanta descansado.  Somnoliento durante el día  Tiene períodos de descanso relax.  Es capaz de autorrelajarse

Otras consideraciones:.....

NADA A DESTACAR

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**06. PATRÓN COGNITIVO-**

Déficit de visión (especificar).....  Déficit de audición (especificar).....

Nivel de consciencia:  Consciente  Somnoliento  Obnubilado  Estuporoso  Comatoso

Nivel de escolarización:  Leer y escribir  Estudios primarios  Estudios secundarios  Analfabeto

Nivel de orientación:  Orientado  Desorientado:  Tiempo.  Espacio  Personas

Pérdida de memoria:  No.  Memoria reciente  Total

Dolor:  No  Agudo  Crónico. Intensidad (EVA 1-10)..... Localización.....

Comunicación: Dificultad de  Compresión  Expresión  Aprendizaje  Idioma (.....)  Lenguaje incoherente

Sensibilidad térmica: **Al frío**  aumentada  disminuida. **Al calor**  aumentada  disminuida.

Otras consideraciones:.....

NADA A DESTACAR

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**07. PATRÓN AUTOPERCEPCIÓN AUTOCONCEPTO**

Tiene sensación de aprensión, malestar o amenaza de origen inespecífico:  No  Ocasional  Frecuente

Expresa sentimiento frecuente de:  Temor  Enfado  desilusión o desgana  Cambios bruscos de humor

Desagrado con su imagen corporal  No se siente útil

Otras consideraciones:.....

NADA A DESTACAR

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**08. PATRÓN ROL RELACIONES**

Vive:  Solo  Familia  Otros..... **Nº Miembros de la familia.....**

Manifiesta o refiere:  Carencia afectiva  Problemas de integración  Problemas familiares (tipo).....

Personas a su cargo:  Niños pequeños.  Ancianos.  Discapacitados

Especificar el cuidador principal de la familia.....

Situación Laboral:  Trabaja (.....)  Jubilado  Desempleado.  Ama de casa  Invalidez

Estudiante  Otros.....  El trabajo influye en el estado de salud:  Sí  No

Condiciones del hogar No adecuados de:  Habitabilidad  Seguridad  Salubridad

Otras consideraciones:.....

NADA A DESTACAR

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**09. PATRÓN SEXUALIDAD-REPRODUCCIÓN**

Edad menarquia:..... Edad menopausia:..... Embarazos..... Abortos.....

Problemas en la menstruación (especificar):.....

Métodos anticonceptivos:  No utiliza.  Utiliza (especificar).....  Insatisfacción con el método utilizado

Relaciones sexuales:  De riesgo.  Insatisfactorias (Especificar por qué).....

Disfunción reproductiva (especificar):.....

Otras consideraciones:.....

NADA A DESTACAR

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**10. PATRÓN ADAPTACIÓN-TOLERANCIA AL ESTRÉS**

Su Situación actual ha alterado sus:  Ideas/Creencias.  Relación familiar.  Trabajo.  Ocio

Cambios vitales en los dos últimos años:  Pérdida de familiares.  Enfermedad de familiar.  Enfermedad propia.  Cambios de trabajo

Adaptación a esos cambios:  Adaptado.  Cree que necesita ayuda

Otras consideraciones:.....

NADA A DESTACAR

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**10. PATRÓN VALORES-CREENCIAS**

Sus ideas o creencias influyen en:  Su alimentación  Los cuidados de salud.  Otros.....

Es religioso:  No.  Sí (Especificar religión).....

Otras consideraciones:.....

NADA A DESTACAR

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OBSERVACIONES/DIAGNÓSTICO:.....

Datos obtenidos de:  Paciente  Familia  Hª Clínica  Otras

Fecha...../...../..... Hora.....

Enfermero/a:.....

Firma:.....

Figure 3 – Back side of the initial nursing assessment form

## DISCUSSION

The instrument we designed attended to the shortness, easy completion and nursing focus criteria the Bolivian nurses demanded in the care and teaching contexts<sup>(5-18)</sup>. It will serve for these nurses to improve their documentation, starting with registers on the first phase of the NP. The choice of the Functional Health Patterns provides a standard assessment framework independently from the patient's age, care level or clinical problems. Another advance of its choice is that it facilitates the use of international taxonomies for nursing diagnoses like NANDA, whose *Domains* correspond to Gordon's Functional Health Patterns.

An instrument can be considered valid<sup>(22)</sup> when the experts' mean scores correspond to 80% or more of the maximum possible score and the coefficient of variation remains below 10%. The scores obtained in our study (46.6 points out of 50 and a CV of 7.5%) confirm its validity for use by nurses in clinical practice, as a guide and document to register the initial nursing assessment, and in teaching about nursing assessment as the first phase of the NP.

The utility and goal of good clinical records have been widely described in literature: they support care planning, provide information on patients' evolution, attend to legal requisites, enhance care continuity, offer information for clinical and resource management purposes, for service evaluation, for performance audits, for quality policies and research<sup>(2-3,12)</sup>. Moreover, improvements in patient evaluation and concomitant documentation can influence the general quality of patient care<sup>(3,9)</sup>.

As some authors have alerted<sup>(2,16)</sup>, however, with a view to the success of attempts to put in practice or modify registration systems, it is important to guarantee the nursing staff's participation in their design and development. Also, nursing education is important, which is why NP implementation experiences are frequently accompanied by educational workshops<sup>(4-5,11,13)</sup>. This additional education by itself does not guarantee success but, without it, we assume that changes will happen individually and without coordination<sup>(16)</sup>. In our case, at the same time as nursing faculty and clinical nurses were involved in our design of an initial assessment form, educational activities on the NP were programmed, which included clinical interview workshops for assessment purposes, which were extremely important for the nurses to incorporate a structured initial assessment in their care delivery<sup>(5,16)</sup>.

The attempt to achieve a nursing focus is a growing concern in the orientation of nursing assessment<sup>(4,9,11)</sup>.

The inclusion of physical assessment among nursing competencies is a process with some history in Western countries. Nevertheless, nursing assessment is frequently put on a level with physical assessment, so that the assessment nurses are taught is based on medical models, in which they learn procedures that are part of physicians' competency and which nurses will rarely use<sup>(9,14-15)</sup>. Therefore, the inclusion of physical assessment to complement psychological and social evaluation is recommended to guarantee comprehensive instead of fragmented care<sup>(12,16-17)</sup>. In that sense, the initial assessment instrument we have designed includes criteria related to lifestyles, autonomy level and dependence for activities of daily living, besides a succinct physical assessment.

The participating nurses identified the shortness of the instruments as a requisite for its successful implementation. Also, they manifest the need for easy completion, using checkboxes and short open spaces to include brief textual clarifications. That is in line with other studies and published forms<sup>(7)</sup> and can encourage professionals who argue that they do not apply the NP nor complete the records due to lack of time or simple instruments<sup>(9-11)</sup>.

### Limitations

Among the present study limitations, its local context and reduced sample are highlighted, which is why our results cannot be generalized and are only applicable to the context in which the action research was developed. Another limitation is that the instrument was only submitted to theoretical expert validation, but not to empirical-analytic validation.

## CONCLUSION

The design of an initial assessment tool with the help of the nurses involved represents a necessary base to put in practice the Nursing Process and to improve the quality of clinical patient files by incorporating nursing activities. The instrument's nursing focus contributes to the development of nurses' own role and to its incorporation into the international nursing trend that enhances the standardization of practice and the development of a universal nursing language to express nursing phenomena.

The assessment instrument we designed received approval from the clinical history commissions at the participating centers and was incorporated into clinical patient files as the base of nursing records. After the approval of the new study plan for the Undergraduate Program in Nursing at *Universidad Autónoma Gabriel René Moreno*, it has also been used as a tool to teach subjects like Nursing Fundamentals or Medical-surgical Nursing.

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### Acknowledgements

To the participating nurses, faculty and academic authorities at UAGRM and to the Spanish International Cooperation Agency for funding this study through PCI A/6907/06 and A/8374/07.