
Standardisation of nursing care amongst patients in prison

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ABSTRACT

Objective: To develop the Standardized Nursing Care Process format amongst patients in a prison.

Material and methods: Observational, descriptive study, conducted on a sample of thirty patients in Soria Prison between March and June 2011. We collected information via a review of medical records and conducted an interview of nursing assessments using functional patterns. Subsequent nursing diagnoses and interrelated problems were obtained using NANDA taxonomy.

The subsequent use of NIC and NOC taxonomy marked the activities and performance criteria for each diagnosis, in the same way as for interrelated problems.

Results: The nursing diagnoses found in the patient sample analyzed, and the frequency thereof, reveal peculiarities in terms of the health care needs of the prison population, which makes it possible to standardize nursing care plans for the population under study.

Keywords: Taxonomy; Diagnosis; Nursing care; Prisons; Nursing, Practical; Evidence-Based Nursing; Consensus; Spain.

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INTRODUCTION

Throughout the last decade, Spanish nursing has undergone a series of relevant changes by means of which it has become one of the activities with a deeper professional development. Nursing professionals who believe that nurses play an independent role as well as a collaborative one with other healthcare professionals- a justified and historical claim- are responsible for the achievements of this field throughout the years.

Correctional nursing has not remained unaware of these professional achievements and although in the last decades changes within prisons have been very important, nursing activities need to be developed according to the new nursing models. As in any other occupation, we count upon our own body of knowledge and a series of unified laws which develop some basic conceptual models essential for the performance of our daily practice in a scientific and standardized way. Such practice can serve as a research driving force, as to provide our profession with stronger soundness, granting a standard provision of care, unifying criteria, supporting the

training of nursing students and as a reference for the continuous training of all professionals.

The Nursing Process (NP) describes how nurses organize the provision of care to people, families, groups and communities. It has been broadly accepted by nurses ever since 1967. Currently it is described as a five-stage cyclical process which includes assessment, diagnosis, planning, implementation and evaluation. Nurses constantly use clinical judgment to give meaning to all data collected in the assessment stage, as a basis for the development of nursing interventions which lead to positive health results. Nursing diagnoses are no less than scientific interpretations derived from the assessment stage, which are used to guide nurses in the following stages of planning, implementation and evaluation. Clinical judgment is in fact nothing less than a nursing diagnosis (clinical judgment on the response of a person, a family or a community to life processes, real or potential health issues which provide the basis for the therapy which will lead to the achievement of objectives of which the nurse is responsible and in which she/he acts independently).

The Nursing Process together with the Nursing Diagnosis and its implementation is considered the cornerstone of the development of professional nursing and represents the basis for the professional development of this activity, regardless of the context in which it takes place. It is therefore necessary to set a nursing model based on the nursing process that will specifically and philosophically guide the practice of nursing in Spanish correctional facilities. This will lead to a professional development similar to other institutions within our National Health System (NHS)¹⁻⁶.

Some authors, like *Alfaro* and *Cardenito*, agree that the use of a list of nursing diagnoses for each group of patients would facilitate the implementation of the Nursing Process (NP). Such list of nursing diagnoses is in fact referred to as Standard Nursing Care Plans or Nursing Care Maps, for a group of patients.

A standard nursing care plan (SCP) is the result of a scientifically based work, which defines the response of a person, a family or a type group to a health issue and which specifies the nursing responsibility and intervention for each of those situations. Moreover, it uses a common language (NANDA, NIC, and NOC). A SCP is also a management tool since it identifies the situations in which nursing interventions are needed both in an independent way and as part of a team, and it determines the activities that must be carried out to achieve a series of health results. It helps to create a base of scientific knowledge by means of the generation and validation of knowledge that promotes improved results in practice and which serves as a basis for nursing theory and practice⁷⁻¹³.

The population hosted in correctional facilities in Spain, alike in other countries, have specific social and healthcare related features which entail particular nursing care needs. The belief that we are faced to a population with specific features is based upon our professional experience as well as on many studies which describe the particular health issues of such population¹⁴⁻¹⁷.

As far as social and healthcare related features are concerned we must underline the high prevalence of serious infectious and communicable diseases, which entail an important social and economic impact, such as HIV, hepatitis C, tuberculosis, and drug abuse. Moreover, more recently a high prevalence of mental disorders among patients has been noted, especially in association with drug abuse, also known as dual disorders pathology. In reference to social and economical features we must underline the high percentage of immigrants among the imprisoned

population, who mostly present higher economical needs than the general population.

As far as demography is concerned, we count upon a young population in which almost 70% are under 40, with a low cultural level, in which most of the cases the entry in prison entails the first contact with the healthcare system.

At the time of the study, the Correctional Facility of Soria hosts 185 inmates, 5% of whom are HIV positive, 88% of whom are under Highly Active Antiretroviral Therapy (HAART). 30% of patients have a positive serology for HCV and 17% undergo methadone maintenance programs, 50% are under some kind of psychiatric medication due to a mental health disorder or due to an unresolved drug abuse problem.

The main objective of the current study is to set the hypothesis that the imprisoned population in Spain fulfills the requirements to create a series of standard nursing care plans. Such care plans would help daily nursing practice in Spanish prisons be based on scientific knowledge; it would help unify criteria, support continuous nursing care when patients are transferred to other facilities and ultimately, it would help the work developed by nurses to be acknowledged by other professionals both in our environment as well as outside.

MATERIAL AND METHOD

This is a descriptive cross sectional study which was carried out between March and June 2011 on a sample of 30 male patients hosted in the Prison of Soria. All patients were selected by means of stratified sampling, so that all the 185 patients at the time of the study were organized in different groups according to the medical pathology that they had and according to their inclusion in any of the healthcare programs of the facility such as:

(1) – HIV(+) patients, (2) – Patients with positive markers for HCV, (3) – Patients under treatment with methadone, (4) – Patients with a positive tuberculin test on the TBC program, (5) – Patients included in the Comprehensive care program for mental health problems (PAIEM in Spanish) and (6) – Patients who were recently admitted in the facility. In order to create the patient group⁶, those admitted in March 2011 were selected. March was the month before the selection of the sample. Stratified sampling was chosen so that the sample included all the specific pathologies of the imprisoned population. The final sample included 30 individuals because at the time

of the study there were five HIV positive patients in the facility, hence all of them had to be included and as to have the same number of individuals of other groups, five members of each were included in the sample. Alphabetical lists were obtained by means of the SANIT software (software used for the collection of data by Penitentiary Institutions) and five patients with odd numbers in such lists were chosen for each group. Each of the patients was assigned a number ranging between 1 and 30 and was therefore defined as case 1, 2, etc. Authorization by the General Directorate of Penitentiary Institutions was sought. Each of the patients was received information on the reasons why they were included in the study and they signed the corresponding informed consent form. Later a nursing assessment according to the eleven functional patterns defined by Marjory Gordon was carried out: I. Health perception and management, II. Nutritional and metabolic, III. Elimination, IV. Activity and exercise, V. Sleep and rest, VI. Cognitive-perceptual, VII. Self perception/self concept, VIII. Role and relationship, IX. Sexuality/relationship, X. Coping-stress tolerance and XI. Value-Belief pattern.

In order to carry out such assessment during June 2011 all inmates were interviewed by means of a specifically designed questionnaire. Medical records were reviewed and data on the immunization status against hepatitis B and tetanus were collected together with the serology for HIV, HCV, HBV and information on the TBC prevention program (PPD; chest X-ray, clinical presence of TBC).

Once the assessment had concluded, all issues included in each of the functional patterns were analyzed to determine whether there was any alteration. Together with the NANDA classification of diagnoses, as well as the definitions of each one and other related factors, we established Nursing Diagnoses for each pattern and carried out a frequency table (see Table 1). Once the nursing diagnoses had been established we also created a table with Outcome criteria (NOC) and interventions (NIC) (see Table 3). We did the same with interrelated issues (health issues in which nurses intervene although not independently but in collaboration with other healthcare professionals) concerning immunization, serology for HIV, HCV, data on TBC, etc. We created another frequency table for those issues (see Table 2) and we set a series of objectives and measures to be taken in each case (see Table 4).

RESULTS

The features of the sample under study were the following: thirty male patients, hosted in the Correctional Facility of Soria during the period March-June 2011, with an average age of 40 years whose ages ranged between 55 and 22. 60% of them were single and 40% currently were or had been married. 60% had children who lived either with their partner or some other member of their family.

As far as healthcare features are concerned, 93.3% had taken some kind of illegal drug at some point in their lives; all of them had smoked and drunk alcohol. 63.3% had been IDUs (injecting drug users) at some point although currently none used injecting drugs. At the time of the study, 40% of the patients were under methadone treatment and 83.3% under some kind of medical treatment, 66.6% of whom had been prescribed some kind of psychiatric drug (anxiolytics, antidepressants, etc.). All of the patients under study had been included in the immunization program against hepatitis B and tetanus, seven of whom had not yet completed all the doses but were in the process of doing so. 100% had undergone serological testing for HIV, HCV, VDRL/TPHA, HBsAg, HBcAb and HBsAb less than a year ago: 20% were HIV+, 60% HCV+ and only one patient presented positive results for HBsAg. Finally, as far as the prevention and control program for TBC is regarded, 100% of patients had undergone at least one tuberculin skin test, which had been positive in 16 cases (53.3%).

Blood pressure was measured in all cases and five patients had levels over 140/90.

In regard to medical treatment, twenty-five patients had been prescribed some kind of medication, twenty-three of whom involved psychiatric medication so that only two of them took another kind of medication. Eleven patients were under treatment with methadone.

The analysis of all data obtained by means of the assessment questionnaire including M. Gordon's eleven functional patterns identifies nursing diagnoses for each patient as well as interrelated issues.

As we can see in Table 1 there are four diagnoses which outstrip the rest regarding their frequency: Risk for intoxication, Impaired dentition, Imbalanced nutrition: more than body requirements and dysfunctional family processes. There is another group of diagnoses with a frequency which we could consider mostly standard: Risk for infection, Impaired recreational activity, Disturbed sleep pattern and Anxiety. The frequency of such diagnoses leads us to believe that this group of patients has healthcare

need which fit a pattern, hence more likely to be standardized. Other diagnoses are more rarely found, in one or two patients, a fact which only means that we must not forget that ultimately, care plans have to be

individualized for each patient. Although it may seem contradictory, care plans can be standardized and yet be implemented individually in patients according to particular features and with their consent to do so.

Table 1: Nursing Diagnoses in the sample and frequency

Gordon's functional health patterns	Nursing Diagnosis	Number of patients
Health perception and management	Risk for intoxication	27
	Risk for infection	6
	Ineffective self-health management	1
	Risk-prone health behavior	5
Nutritional and metabolic	Impaired dentition	30
	Imbalanced nutrition: more than body requirements	17
	Imbalanced nutrition: less than body requirements	2
	Impaired swallowing	1
Elimination	Impaired urinary elimination	1
Activity and exercise	Deficient diversional activity	5
	Impaired physical mobility	2
Sleep and rest	Disturbed sleep pattern	5
Cognitive-perceptual	Impaired memory	1
Self perception/self concept	Readiness for enhanced self-concept	1
	Situational low self-esteem	1
	Anxiety	7
Role relationship	Impaired social interaction	2
	Dysfunctional family processes	23

Table 2: Interdisciplinary problems in the sample and frequency

Interdisciplinary problem	Number of cases	% of patients
Incomplete immunization	7	23.3
Serology of under one year	30	100
HIV+	5	23.3
HAART	6	20
HCV+	18	60
HBsAg+	1	3.3
PPD+	16	53.3
BP over 140/90	5	16.6
Medical treatment	25	83.3
Psychiatric treatment	23	76.6
Methadone	11	39.9

Table 3: Nursing Diagnosis: Outcomes Classification (NOC) and Interventions Classification (NIC)

Nursing Diagnosis	NOC	NIC
Risk for intoxication	1812 Knowledge: Substance Use Control 1808 Knowledge: Medication 1904 Risk Control: Drug Use	5510 Health Education on substance abuse 2300 Directly observed Medication Administration
Risk for infection	1807 Knowledge: Infection Management 1813 Knowledge: Treatment Regimen 1823 Knowledge: Health Promotion 1805 Knowledge: Health Behavior	5510 Individual or group Health education 8820 Communicable Disease Management 2802 Community Risk Control: Communicable Disease 6540 Infection Control: HIV, HCV, TBC 7910 Consultation: treatment adherence 2300 Medication Administration 6530 Immunization/Vaccination Management
Ineffective self-health management	1803 Knowledge: Disease Process 1813 Knowledge: Treatment Regimen 2801 Community Risk Control: Chronic Disease 1811 Knowledge: Prescribed Activity	5510 Individual health education 5602 Teaching: Disease Process 5616 Teaching: Prescribed Medication 2380 Medication Management
Risk-prone health behavior	1824 Knowledge: Illness Care 1602 Health Promoting Behavior	5510 Individual or group Health education 6610 Risk Identification 5430 Support Group 4410 Mutual Goal Setting 4920 Active Listening 8700 Program Development
Impaired dentition	1603 Health Seeking Behavior 1602 Health Promoting Behavior 0308 Self-Care: Oral Hygiene	5510 Health education on oral hygiene, promoters of caries 1710 Oral Health Maintenance
Imbalanced nutrition: more than body requirements	1812: Weight management 1802 Knowledge: Diet 1008 Nutritional Status: Food & Fluid Intake 1009 Nutritional Status: Nutrient Intake 1005 Nutritional Status: Body mass 1811 Knowledge: Prescribed Activity	5614 Teaching: Prescribed Diet 5612 Teaching: Prescribed Activity/Exercise 2240 Nutrition Management 1280 Weight Reduction Assistance
Imbalanced nutrition: less than body requirements	1812: Weight management 1005 Nutritional Status: Body mass 1008 Nutritional Status: Food & Fluid Intake 1009 Nutritional Status: Nutrient Intake 1811 Knowledge: Prescribed Activity	5614 Teaching: Prescribed Diet 5612 Teaching: Prescribed Activity/Exercise 2240 Nutrition Management 1240 Weight Gain Assistance
Deficient diversional activity	1604 Leisure Participation: use of diversional and recreational activities according to age and situation	5510 Health education on the activities which can be developed in the centre and personal preferences 8700 Activity Program Development, mutual planning 4310 Activity Therapy
Impaired physical mobility	0208 Mobility 2004 Physical Fitness 0211 Skeletal Function	5510 Health Education 0200 Exercise Promotion 0140 Body Mechanics Promotion 0201 Exercise Promotion: Strength Training 3420 Amputation Care

Nursing Diagnosis	NOC	NIC
Disturbed sleep pattern	0003 Rest 0004 Sleep	5510 Health education on sleep hygiene 1850 Sleep Enhancement 2380 Medication Management 6040 Relaxation Therapy
Impaired memory	0900 Cognition 0905 Concentration 0908 Memory	4760 Memory Training 8700 Program Development, schedules
Readiness for enhanced self-concept	1205 Self-Esteem 1409 Depression Self-Control	5400 Self-Esteem Enhancement 4350 Behavior Management 5220 Body Image Enhancement
Anxiety	1402 Anxiety Self-Control 1404 Fear Self-Control 1702 Health Beliefs: Perceived Control	5880 Calming Technique 5820 Anxiety Reduction 5230 Coping Enhancement 6000 Guided Imagery 6040 Relaxation Therapy
Impaired social interaction	0902 Communication 1503 Social Involvement	4362 Behavior Modification: Social Skills 5100 Socialization Enhancement
Dysfunctional family processes	2606 Family Health Status 2603 Family Integrity 1500 Parent-Infant Attachment	7200 Normalization Promotion 7150 Family Therapy

Table 4: Interdisciplinary problems detected in the sample, objectives and nursing activities to be developed

Interdisciplinary problem	Objectives	Nursing activities
Incomplete immunization	To complete immunization against HBV, HAV and tetanus	Provide the corresponding doses of each vaccine
Latent TBC Infection	Early detection of TBC	Monthly/Biannual control
HCV Infection	Early detection of severe hepatic alterations	1. Health education on habits that damage your liver 2. Standard monitoring 3. Administration of therapy according to medical regimen
Hypertension	Keeping blood pressure under control	1. Periodical monitoring of blood pressure 2. Health education on eating habits and exercise
Musculoskeletal pain	Pain control	1. Health education on posture and exercise 2. Medication administration
Hyperlipidemia	Keeping cholesterol levels under control	1. Health education on diet and exercise 2. Standard monitoring 3. Treatment adherence control
HIV infection-AIDS	Keeping appropriate immunity levels	1. Monitoring 2. Nursing consultation on treatment adherence 3. Health education on transmission of the disease
Upper abdominal pain	Pain control	1. Health education on eating habits 2. Administration of prescribed medication

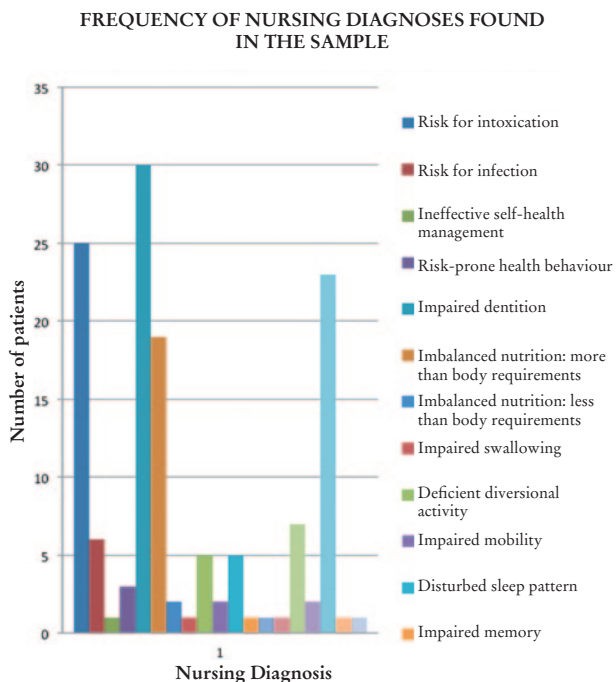


Figure 1.

Once nursing diagnoses had been defined, we established care plans which we considered necessary to solve the health issues identified. Realistic objectives need to be set: currently these objectives are in fact referred to as Nursing Outcomes Criteria (NOC). NOC are actually defined as the “client’s status after a nursing intervention”. The evaluation of NOC will be carried out by means of a five-point Likert scale. Later we will define nursing activities and interventions (NIC) (Nursing Interventions Classification) which we believe should be implemented in each case.

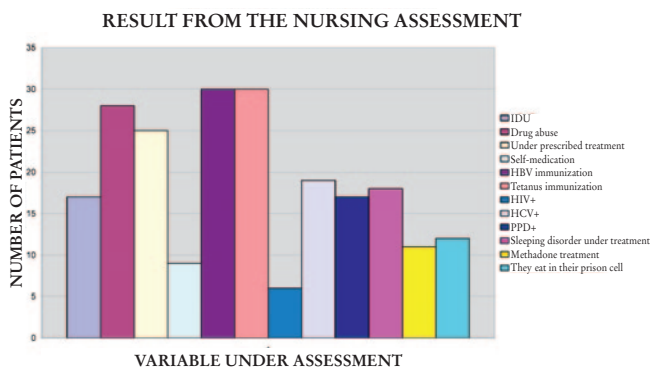


Figure 2.

As with nursing diagnoses, interrelated or multidisciplinary issues are determined (see Table 4) and defined as those issues for whose resolution nurses

need another healthcare professional or previous orders, protocols or programs. Such is the case of Penitentiary Institutions, where there are specific programs for some health issues and in which case nurses can’t and must not independently prescribe a treatment, determine the corresponding vaccine or request other tests since they are interdependent issues and delegated tasks and therefore, the nursing diagnostic taxonomy will not be used since they are physiopathological situations which already have a medical name¹⁸⁻²³.

DISCUSSION

One of the problems which correctional nursing currently faces is the isolation between professionals in each facility. This leads to the fact that in each facility work is done differently, according to criteria set by those in charge or by healthcare professionals themselves. Our patients move from one facility to another and in many cases, care is discontinued, mainly because of a lack of effective communication. Every time, those in charge of the patient must create their own care plan, therefore entailing an implicit amount of work and time lost. On the other hand, the software we count upon- valid and useful for so many other purposes and without which many of us would not be able to keep working- does not take into account that nurses play an independent role as well as a collaborative one with other healthcare professionals and does not facilitate their work as far as the Nursing Process is considered. This leads to the fact that in most of the cases, nurses develop their collaborative tasks and when they actually develop independent activities they are not understood nor acknowledged. As a consequence, nursing clinical records in many cases lack information or in other cases there is a limited amount of it or it is badly organized. This is certainly not because nurses do not do their job but because nursing tasks in correctional facilities mainly consist of tasks delegated by physicians, which are important but not exclusive.

We know that our patients have particular features as far as prevalent pathologies are concerned. In the sample under study, albeit small, there are a series of nursing diagnoses such as “Risk for infection”, “Impaired dentition”, “Risk for intoxication” or “Disturbed sleep pattern” which are most frequently found, something which leads us to believe that it is a consistent group as far as care needs are concerned and hence, suitable for the use of standardized nursing diagnoses.

The standardization of nursing care would help us create our own body of knowledge, targeted at professionals who develop their work within correctional facilities. It could facilitate our daily work as well as nursing research activities and it would also allow to measure and improve the quality of health-care provided.

We must take into account that this study is biased, since it only includes males due to the fact that the Correctional Facility of Soria is a male prison. This is why within the nursing assessment the sexuality reproductive pattern did not include exclusively female issues. Another problem is that the sample is too small, although stratified sampling was carried out in order to include all the prevalent pathologies in this background. In the bibliographic review carried out at the beginning of the study we could observe that all studies concerning the standardization of care had been executed by expert professional groups which share their knowledge on the group of patients under study. Nevertheless, this study has been carried out by only one professional, with whatever consequences this may entail, despite a long experience in the correctional background. This can also entail a bias. Yet, this study only intends to serve as a starting point for other correctional nurses who may be interested in further developing this line of work as part of their professional development and to set specific care plans for our patients with the support of our management bodies. I firmly believe that this would not only benefit our patients but it would also enhance the development of the nursing profession in correctional facilities and it would improve our skills to face healthcare challenges over time and circumstances, it would improve our motivation and with it, the development of our professional work in the facilities.

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