

## Nursing and the clinical method in patients with cardiovascular disease

### *La enfermería y el método clínico en el paciente con enfermedad cardiovascular*

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#### To the Editor:

The one who knows and does explore thoroughly and conscientiously, is or will be a good doctor, because he/she has the necessary to accurately diagnose, predict correctly, and properly treat his/her patients. Instead, who clumsy, lazy and precipitated explores, usually bad, can be a formidable debater, a writer who causes admiration for the number and depth of knowledge, but never be a good practitioner. How worthy would it be to know the symptoms of all diseases, if with the patient he/she is not in a position to collect

them up?<sup>1</sup>.

This sentence, written in 1927, summarizes the basis of what we know today as the "clinical method". For nursing, this method is based on the application of the PAE (after its acronym in Spanish: Proceso de Atención de Enfermería/Nursing Attention Process), assessment, intervention and evaluation, daily performed by the clinical nurses<sup>2-5</sup>.

In the Cardiocentro Ernesto Che Guevara of Villa Clara, Cuba, are treated patients of cardiovascular surgery, interventional cardiology and electrophysiology, and the role of nurses is essential for achieving their successful evolution and discharge.

In this context, a research was performed, where 32 graduates in nursing participated and multiple diagnoses were identified, for which 167 nursing care directly related to the above procedures were analyzed.

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After having analyzed each of them, including the ones that by priority solved other problems that were resolved with other presets, nursing actions were checked to discern clearly the most adequate; a nursing optimal plan was elaborated for patients' care subjected to diagnostic and therapeutic tests in the Hemodynamics and Interventional Cardiology Unit of this center.

There was analyzed the care plan of the Intensive Care Service and 38 medical records of patients of both departments were checked, where the 14 most frequent nursing diagnoses (**Table**) were identified.

Every day in the wards of this center are identified between 5 and 7 nursing diagnoses on average per patient, many of them remain active for several days, the most enduring are the deterioration of tissue integrity related to the alteration of blood circulation or physical immobility (14 days), deterioration of skin integrity related to surgery or interventional procedure (8 days), and the potential of infection due to invasive procedures (venous catheters, endotracheal tube, arterial line, urinary catheter, surgical wound), which also lasts active, on average, 8 days.

How to detect problems of such patients and generate actions to solve them are essential requirements of our department.

There are two main ways to practice this profession: social and individual nursing. The PAE, in the second, is just the application of the clinical method; its importance in the practice of nursing care is a premise on the quality of comprehensive patient care<sup>4,5</sup>.

In order to fulfill its tasks, the practical or care nursing requires the application of a method, from which all interventions or actions can be struc-

tured in an effective way, from the first contact with the patient until the completion of the activities within its scope of responsibilities. There is now a model, based on the scientific method, which is considered the most suitable, with a logical sequence: a) understanding of the problem, b) data collection, c) hypothesizing, and d) verification of the conclusions<sup>4,5</sup>. This method, applied to the nursing field, enables a better approach to problems or needs of the patient, all leading to a maximum effectiveness and continuity of care or optimal work and coordination of the different interventions of the health team<sup>4-6</sup>.

The PAE has been legitimized as a system of practice of professional nursing in several countries since 1980. It is used for developing assistance guidelines, it has been incorporated into the conceptual system of most of the nursing curricula and included in the definition of nursing<sup>6,7</sup>.

Its approach to successive and interdependent set of activities aimed at helping the healthy person to maintain his/her balance with the environment, and to restore the sick, speeds the recovery of physical, social and mental well-being<sup>5</sup>.

**Table.** Nursing diagnoses most frequently encountered in clinical histories.

Diagnoses	Active days
Deterioration of tissue integrity related to (r/t) impaired blood circulation, physical immobility	14
Deterioration of skin integrity r/t surgery or interventional procedures	8
Infection potential r/t invasive procedures (venous catheters, endotracheal tube, blood line, urinary catheter, surgical wound)	8
Mobility disorder r/t forced to rest in bed	5
Altered cardiopulmonary tissue perfusion r/t partial obstruction of blood flow	4
Excess of fluid volume r/t alteration of regulatory mechanisms	4
Hyperthermia r/t increased metabolic activity	hours
Ineffective cleaning of airways r/t tracheobronchial secretions	hours
Constipation r/t physical inactivity	3
Alteration of renal perfusion r/t low cardiac output	2
Decreased cardiac output r/t cardiac surgery	1
Deterioration of gas exchange r/t ventilation/perfusion imbalance	3
Hyperthermia r/t infectious processes	2
Potential alteration of body temperature r/t drugs that cause vasodilation, physical inactivity	2

The PAE is the method by which the technical basis of the specialty are applied, it serves as a guide for practical work, to organize precisely observations and interpretations; it provides the basis for research, more efficient and effective practice, maintenance and health status of the individual, family and community, and synthesizes technical and practical knowledge to perform interventions<sup>6-8</sup>.

In the Cardiocentro Ernesto Che Guevara the PAE is properly used. Its benefits are detected daily in each discharged patient, in his/her opinion and that of the family, and the recognition by the medical staff. The PAE is, without doubt, essential to maintain excellent patient care by the nursing staff.

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