

The Nursing Process

Merryl Hammond

B.Soc. Sc. (Nursing) (Natal) Sister, Renal Transplant Unit, Groote Schuur Hospital



OPSOMMING

Daar bestaan 'n dringende behoefte aan 'n gesonde balans tussen wetenskap en die mensdom. Verpleging moet nie net suiwer tegnies of meganies wees nie; die verpleegster moet haarself noodwendig as versorgende mens gee.

Die verpleegproses behels 'n verandering in die aard van die verpleegster waardeur sy daartoe kom om haarself te gee, wetenskaplik te dink en die gewoonte aankweek om as grondslag vir rasonale besluite die verband tussen algemene beginsels en onmiddellike waarneming te bepaal.

Die fases van die proses behels data-insameling, formulering van verpleegdiagnose, beplanning, uitvoering en evaluasie. Dit is 'n revolusionêre, nuwe benadering tot verpleegsorg en behels 'n nuwe verhouding tussen personeel en pasiënte — vennote wat dieselfde doel nastreef.

THE essence of the nursing process can be summed up in this quotation by Sir Francis Bacon:

"Human knowledge and human powers meet in one; for where the cause is not known the effect cannot be produced."

Arriving at a concise, accurate definition of the nursing process was, for me, an impossible task. It is altogether too vast and too personal a topic to contract down into a nifty-looking, we-pay-lip-service-to-it cliché. So what I propose to do is to present my **understanding** of the nursing process throughout this essay, and then to leave the reader with some overall, general **impression** of what it all entails.

NURSING PROCESS: BOTH SCIENCE AND HUMANITY

One of the bases of the nursing process that came home to me personally was the desperate need for a healthy balance between science and humanity. Neither one is sufficient unto itself. One of the factors that has led to major changes in health services today is the explosion of scientific knowledge. Since no-one can be expected to learn everything, this has inevitably led to specialisation, with the consequence that fewer and fewer people now view patients as totalities. Patients think nostalgically of the "good old days" when general practitioners were understanding father-figures, or the local midwife delivered three successive generations of a

family . . . But surely no-one really wants to go back to the level of medical and nursing care represented by those days! What is really required is not a regression in medical and nursing practice, but a restoration of the individual patient to his position of worth and dignity in the provision of health services. This is **not** impossible, provided that health workers develop a skill in working **with** people **as** people. Nursing must not become purely technical or mechanical. The nurse's use of **herself** as a caring individual is essential.

Using scientific principles and problem-solving techniques complements nursing the "art", and ensures that those in nursing today will be prepared to make thoughtful and intelligent decisions affecting the lives and deaths of patients tomorrow. The union of commitment to nursing and science may go slowly at first, because the nursing process involves a change in the character of the student that causes her to become involved in **giving herself, thinking** in a scientific manner, and habitually relating general principles to immediate perceptions as a basis for rational **decision-making**.

Clearly, the physical sciences have much to contribute to the nursing process, but never should the value of the social sciences be underestimated. One factor which highlights the need for skills in the psychological and social aspects of nursing is automation. This era has already begun in the field of health services. What patient would not be threatened by a visit to the ultrasound unit (complete with darkened room,

huge machine, flashing dials. . .) We have heart monitors, cardiocograph machines, artificial kidneys, electrocardiograph machines . . . and there can be no question that the introduction of numerous machines **can** further depersonalise health services. And any further depersonalisation can only stress the need for interpersonal skills that will help the patient maintain his sense of worth and dignity. Nurses must nurse people, not machines, if they are to provide the kind of nursing that society needs. How many of us can honestly say that we've never walked into a ward and checked the trip, or the urine bag, or the dialysis machine, before we stopped to greet the patient behind all the tubes?

UNIVERSAL APPLICABILITY OF THE NURSING PROCESS IN HEALTH SERVICES

In order to render effective care, the nursing process is used as a framework through which the nurse can function in order to meet specific responsibilities in the provision of patient care. It's an interactive and problem-solving process, and enables the nurse to give systematic, individualised care to her patients. This will become clear later when I discuss the various phases in the nursing process.

The focus of the nurse is obviously on the patient and the process through which his health needs may be met. The nursing process in today's complex society can be considered most realistically as part of the changing pattern of total health services. The emphasis on "total health care" is a new one, and workers now realise the importance of prevention, early recognition, rehabilitation, and so on. Whatever sphere the nurse finds herself involved in, the nursing process can be applied in order to ensure personalised, more effective care for her patients. To clarify this point, let us look briefly at the five areas which the World Health Organisation declares comprise "complete health services," with simple reference to the nursing process.

1. **Health Maintenance Stage:** during which workers educate people in order to help them attain their highest potential for health. A public health visitor or district or school nurse might discover (during the data collection phase) that an adolescent girl was taking a grossly inadequate diet due to nutritional ignorance. During the planning and implementation phase of the nursing process, this girl would be educated and encouraged to eat the correct food for a balanced diet. Special attention would be paid to foods rich in iron and protein, so that she would be well equipped for her future child-bearing role.
2. **Increased Risk Stage:** in which preventative measures are applied to individuals at risk in a predisease stage. Here, part of the nursing intervention on the part of a district midwife would be to supply her patients with prophylactic iron tablets throughout pregnancy.
3. **Early Detection Stage:** in which people in the early stages of disease are identified and treated promptly in order to save suffering or loss of life. In this stage, if the midwife discovered that her patient's haemoglobin check was below normal, she would immediately in-

crease the daily dosage of iron and folic acid tablets, and revise education in connection with nutrition.

4. **Clinical Stage:** to which a patient progresses if early symptoms were neither prevented nor treated. Nursing intervention here would take place in hospital, with a total dose infusion of iron or a blood transfusion to treat clinical anaemia in a patient nearing term. Regrettably, treatment costs during this advanced stage still represent most of the health budget.
5. **Rehabilitative Stage:** during which the patient is taught to cope with any residual effects of disease, or disability is prevented, or the patient is helped to face death with dignity. Nursing intervention here would entail education of the patient regarding her diet, and possibly getting a social grant to help with the buying of nutritious food.

Thus we see how the nursing process is used by the nurse to fulfil the goal of giving individualised, total patient care.

Autonomy of Patient or "Client"

Another important feature of the nursing process is the very "untraditional" relationship between patient and nurse. Most nurses of the old school tend to feel a bit threatened by this new relationship: there is no place for authoritarianism in the nursing process. Here the patient and nurse meet as equals, each with an essential contribution to make towards the ultimate goal — health of a patient. The nursing process acknowledges the autonomy of the individual, and his freedom to make personal decisions regarding his own goals and to be involved in his own care. This change is only to be welcomed — how often have patients complained that they merely get pushed around like pawns in some greater power's chess game. We rush them off to X-ray, throw pills down their throats, advance on them with shining trolleys — and never a moment's explanation! The only thing that surprises me is that so many patients are prepared to accept this as "treatment" for so long. Of course the patient should know exactly what procedures are planned, what medications he shall receive, why special investigations are ordered — and the results should be explained to him in terms he can understand. Until such an honest and mutual relationship exists, who are we as nurses to describe patients as "unco-operative?"

Some of the literature has dropped the term "patient" altogether, using "client" instead. I think this is probably a wise thing to do, for "patient" carries connotations of dependence and helplessness, and this attitude is to be discouraged when the nursing process is implemented. Together the nurse and client emerge as **partners** in a relationship built on trust and directed towards maximising the client's strengths and maintaining his integrity.

The Process of Problem-Solving

I have briefly mentioned that the problem-solving process is made use of in the nursing process. It is a scientific way of thinking and dealing with problems. There are five distinguishable steps in the process, and as I shall show, these steps are followed closely in the phases of the nursing process:

1. Observation and recognition of the problem.
2. Definition of the problem.
3. Formulation of possible solutions to the problem.
4. Implementation of solutions.
5. Formulation of conclusions.

PHASES OF THE NURSING PROCESS

Many disciplines incorporate aspects of the problem-solving process outlined above, but the nursing process is distinguished from the problem-solving process in its purpose and its methods. The **purpose** of the problem-solving process is the development of new knowledge, that of the nursing process is to maximise a client's positive interactions with his environment, his level of wellness, and degree of self-actualisation. As far as **methods** are concerned, the problem-solving process can be used in isolation, objects can be manipulated, ideas toyed with — all without interacting with other people. The nursing process, however, is **founded** on the helping, interpersonal relationship which develops between the nurse and client.

Keeping these differences in mind, let us now examine the five phases of the nursing process — noting how they approximate to the steps in the problem-solving process.

1. Data collection.
2. Formulation of a nursing diagnosis.
3. Planning of nursing care for the individual patient.
4. Implementation of nursing action.
5. Evaluation of nursing assessment, care plan and actions.

We shall examine each phase more closely shortly, but I shall first just outline a few other basic principles of the nursing process. Firstly, the nursing process can be used with an individual client, or his family, or any group for that matter. And as I have already shown, it can be applied at any point on the health-illness continuum. The setting and the client's particular needs will determine whether the process is directed towards primary, secondary or tertiary prevention.

Used as a basic framework for nursing, this process is a means of providing quality, professional care. It requires that the nurse has a substantial knowledge base, can communicate effectively, think logically, be technically efficient, and receptive to internal and external evaluation. Hence Glover Mayers states that the nursing process relies on three major components.

- (a) **Technical skills:** which include all the multitude of tasks a nurse is called on to perform practically. Of course such skills must be used with intelligence and flexibility.
- (b) **Behavioural skills:** Here the need for effective communication, good interpersonal relationships, leadership qualities and ability to co-ordinate actions are important.
- (c) **Intellectual skills:** 1) *Lateral thinking* — this type of thinking occurs first, with the creation of new ideas, variations, new applications of old knowledge, and the ability to consider all various possibilities of a situation. The next step is 2) *Vertical thinking* — or problem-

solving. Here, the problem is defined, solutions are determined, various methods considered, and the effectiveness of actions is evaluated. Finally, there is — 3)

Discriminate thinking — once problems are defined, some will be seen to be more urgent than others, some may not be problems at all — and so effective overall action can be planned and instituted.

Clearly, the nurse requires skill in all these spheres if she is to function effectively, and the nursing process depends on all three components.

A final point to make is that because the process is a disciplined approach to the care of the patient, the nurse must be able to demonstrate flexibility, openness, creativity and leadership in directing change. It offers an immense challenge to any of us who are confident and secure enough to let go of rigidity, routine, and authoritarianism. And the gains to be had by our heretofore ill-treated patients are enormous.

Phase 1 — Data Collection

It is important to note that the phases of the process do not necessarily follow each other in strict order, but are interdependent and overlap or are continuous. For simplicity's sake, however, I shall discuss each phase in turn as a separate entity.

In the initial phase — data collection — it is important that the nurse should have a **broad** view of the patient — each patient should be viewed as part of a health-illness ecology. Each individual is involved in biomedical, psychological and social environments, and nurses must take these into account when assessing patients in order that their specific needs may be met. No two clients will be the same, so stereotyping has no place in the process. (No more "asthmatics always get worse during the doctors' round — just want attention" and so on). It goes without saying that the nurse will need a lot of tact if she is to get the necessary information from the client — she must observe carefully, listen intently, and be receptive to the many non-verbal clues that a client may communicate. For a sound theoretical base to guide her during the data collection phase, the nurse needs knowledge of biological, physical and behavioural sciences.

The client should be interviewed by the nurse in a comfortable, private room where a relaxed yet interested atmosphere prevails. If possible, there should be a place for the nurse to undertake a physical examination of the patient. During the interview, the nurse should obtain information regarding the client's past medical history, his present situation, and — importantly — his health care expectations. To complement the information thus gained, the nurse can ask relatives and friends to give additional facts, or previous medical records could be consulted.

The nurse also reviews the biological aspects of the client. A background of his anatomy, physiology, chemical and genetic make-ups is required.

The psychological component is also taken into account. The client's mental development is assessed, as is his behaviour, motivation, and coping responses. All these facts will influence the nursing care plan, for different souls need very different handling.

Socially, note should be taken of his religion, culture group, occupation, interests and hobbies — all may have relevance to the care plan. The names and addresses of close relatives or friends should be kept in case any serious changes affecting the client are made.

The accuracy and completeness of this phase cannot be sacrificed, for if data concerning the patient is precise, standardised and organised the nurse will be able to **identify**, and thereafter meet, the client's particular needs.

2. — Formulation of the nursing diagnosis

Once the data is collected, the nurse can compare the information with documented norms of health and wellness, making adequate allowance for individual differences. Based on this, she can formulate inferences regarding the client's health problems and needs. Many decisions are made, and hence the need for logical thought based on knowledge, rather than intuition, tradition or bias.

The nursing diagnosis is thus the independent judgement of a nurse through which the nursing problems of the client are identified. The medical diagnosis focuses on the "cure" role, or the diagnosis and treatment of medical problems. The nursing diagnosis, however, refers to nursing problems concerning areas in which the client's health may be promoted or in which the client needs help in his biopsychosocial adaptation to stress. Obviously, in maximising the health of the client, medicine and nursing are interrelated and interdependent. Each profession serves as a resource to the other as both doctors and nurses collaborate for the improved health of the client.

The nursing diagnosis, if it is to be complete, states the identified nursing problems — overt, covert, existing and potential. In general, the personnel in health services have not been too skilled in the identification of covert (i.e. social and psychological) nursing problems. Faye Abdallah did a study in 1957 (quoted in "Fundamentals of Patient-centred Nursing") relating to the perception of covert problems by patients, nurses and doctors. "It is significant to note that 80—84% of the emotional nursing problems described by patients were not mentioned by doctors or nurses," she concludes. Of course, physical or overt problems are usually much easier to identify, and their treatment is often more specific and more direct. Nurses do need to develop more skill in indirect approaches — listening, paraphrasing, reflecting, and open-ended questioning are essential methods in the identification of covert problems. I think nurses often shut themselves off to covert problems deliberately — either they fear "emotional involvement" with their patients, or they consider such problems out of their sphere. These attitudes must change if total care is to be rendered. Nurses must be made to view a patient as a totality — with physical, emotional and social needs. Concentration on one aspect of the client to the exclusion of the others immediately rules out the possibility of truly effective care.

Once the nursing diagnosis has been made, an essential step is to go back to the patient in order to validate the identified problems, and to rank them in order of importance. If this stage is omitted, the whole care plan could be inappropriate, being based on inaccurate information.

3 and 4. — Planning and Implementation

The nursing care plan is based on the application of theory from nursing and related physical and behavioural sciences to the unique needs of the individual client.

The first step is the development of clearly stated objectives or goals for nursing care. A primary concern is the development of objectives that can be evaluated as regards the degree of accomplishment. The more specifically an objective can be stated, the more useful it is. For example, the following statement, although it sounds good, is actually vague and very difficult to validate: "The client will provide her baby with a sense of security." A much better goal is: "The client will learn to hold her baby in a safe and secure manner."

In order to keep expectations realistic, it is advisable to plan nursing care in terms of a series of short-term goals that lead to a long-term terminal goal. This is done by identifying the objective with the ultimate objective that the client is to achieve; then the component behaviours that must occur before the final goal is reached can be identified. In this way, small successes are constantly perceived — and such progress is of infinite value to the morale of both client and staff.

The active involvement of the client is also needed at this stage. The care plan must be validated with the client in case it is unrealistic due to finance, life-style, religion, or personal preference. Also, if the client is involved and can contribute to the plan, he will be more motivated to achieve the stated goals. It is no good having the entire nursing team working well towards a goal if the client himself has no interest or motivation to achieve it as well.

The nursing diagnosis will have made it obvious that some goals should take preference over others. But because the nursing care plan is dynamic, these priorities will change constantly. Nursing care is thus personalised, and the client can co-operate maximally.

After such a nursing care plan is decided on, the nurse must decide on appropriate actions that will lead to goal achievement. There are many factors to be considered when planning nursing action — e.g. availability of equipment, resources, money, time and staff. The nursing staffing patterns in hospitals may affect the implementation of the care plan. Typically, there are three methods of assigning patient-care responsibilities.

- (a) **The case method** in which one nurse is responsible for all the services given to a particular patient. The advantage of this method is that she is in close contact with the patient and is able to ensure that total care is given. She can assess progress better, since she compiled the care plan, and implements it from day to day. Unfortunately it is usually not administratively or economically possible for this method to be generally adopted in hospitals. At the other extreme is the:
- (b) **Functional method:** Here the nurse gives medicines or treatments to several patients, but does not give all the care to any one patient. In this method the nurse does tend to become expert in a particular task, but she does

not usually have opportunity for more than fleeting contacts with patients. In the mid-way, is the:

- (c) **Team method:** which is patient-centred even if several nurses give the care. The professional nurse leads the team, and she directs the care. Other team members may be students, assistants, or other professional nurses. Every member knows of the patient's condition, and his treatment and progress. This method is clearly to be desired if good and total care is to be rendered.

Another point to consider when planning and implementing care is the personalities of the nurses and clients. Wherever possible, "compatible" personalities should work together. The nurse has to undertake many different roles in the nursing process, and she should be prepared for the emotional strain that this can produce; to the doctor she is viewed as an assistant; to the hospital administrator she's the responsible guardian of equipment; to a sick child she is a loving "mother"; and so on. As far as the patients are concerned, there is a great need for a therapeutic environment in hospitals — created by the attitudes and actions of the nurses in the first place. Perhaps no other aspect of medical and nursing therapy is more neglected than the social setting in which it is given. Most hospitals are organised and operated for efficiency, but make it very difficult for the clients to maintain any sense of self-identity or importance. How often is a patient referred to as "the prostatectomy in the corner," or "B4 says he's cold" On arrival, they are stripped of all personal belongings, and all normal human rights to privacy and respect. They are clearly expected to adopt a subservient, helpless role — to have everything **done** to them, while they passively offer themselves up for whatever comes their way. What an unhealthy state of affairs: we clearly need to re-examine many of our "traditional" practices and attitudes if patients are to gain the benefit of an enlightened approach like the nursing process.

Every nursing action should be supported by a rationale. Thus it is essential to keep up to date about new techniques, new developments — so the clients benefit maximally from what medical science has to offer. Never should routine overrule reason: things must be done for the patient's sake, not for the nurse's convenience.

I have mentioned the role of specialisation; obviously many such specialists may be consulted — the entire health team is needed, with the nurse co-ordinating all the actions and constantly evaluating progress.

In "Nurse-Client Interaction," the authors suggest having a written format for the nursing care plan, so that people can question various points, and revisions can be made. They suggest using four headings: (SOAP).

- Subjective:** anything reported by the client.
Objective: data that supports the client's subjective information gained by any member of the health team (e.g. laboratory results, facts from physical examination, diagnostic tests).
Assessment: refers to the analysis of data relative to the problem under consideration. Initially, the data relative to the problem under consid-

eration. Initially, the data would come from the S and O columns, but later, as intervention with the client occurs, evaluation is also included.

- Plan:** includes all proposed interventions related to the problem. Here it is important to include education of the client, as a client who understands the therapy is far more co-operative.

5. — Evaluation

Finally the nursing care rendered is never complete unless it is systematically evaluated. Evaluation includes an element of reassessment as well.

Once care has been implemented, the client's reaction must be analysed, objectively and subjectively (e.g. if eye drops were instilled, it is necessary to know whether the eye is less puffy and red, as well as whether it now feels less painful). The success or failure of nursing intervention may reflect the adequacy of the assessment, or the analysis of the data (nursing diagnosis) — all this will have to be rechecked if failure occurs. Even the care plan may be unsuitable — there are usually a number of alternative approaches to a client's problem: the first used need not be the best. Also the **approach** to intervention must be assessed. An inefficient (in terms of time or cost of energy) approach needs revision even if it is successful. And finally, the client's needs must constantly be evaluated — the whole care plan may be made unsuitable if, for example, the client suddenly inherits a lot of money, or is suddenly widowed, and so on. Thus we see that constant evaluation and validation is required throughout the process.

The staff would require a lot of meetings and discussions: these allow new ideas to be put forward, a sharing of experiences, and prevent the process from becoming stale or developing habits. Members can give each other support and encouragement, which leads to the development of a good ward morale — success is far more likely in such a positive atmosphere.

In conclusion then, it is clear that the nursing process is a revolutionary, new approach to the rendering of nursing care. It involves scientific principles coupled with much human caring — and so nurses will need training in both physical and behavioural sciences in order to cope effectively. And it involves a completely new relationship between staff and patients — one of equal partners working towards a common goal; that of maximising the client's level of wellness and his degree of self-actualisation. This goal clearly entails a lot more effort than nurses' aims in previous times — merely to get the patient over his present disease-state. The challenge has been laid down — all that remains now is for us as nurses to accept it.

REFERENCES

1. *M. Glover Mayers: A Systematic Approach to the Nursing Care Plan* (1972)
2. *Aragg and Rees: Scientific Principles in Nursing*, 6th edition (1970)
3. *Matheny, Nolan, Ehrhart, Griffin: Fundamentals of Patient-centred Nursing* (1968)
4. *Bundeen, Stuart, Rankin, Cohen: Nurse-Client Interaction: Implementing the Nursing Process* (1970)