

The Theory of Change in Nursing Practice

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The topic I have chosen for presentation to you today is entitled, the theory of change in nursing practice or to put it into simpler words. How do new ideas in nursing get started – Where do they come from? – How are these ideas spread through the social system of nurses? – What makes some Directors of Nursing more ready to accept change than others? What factors influence than to introduce change?

The process of change has been the subject of considerable research in such diverse disciplines and fields as anthropology and rural sociology, marketing and, also, education, for many years. The studies are called “diffusion” studies, or sometimes “adoption” studies, or “adoption of innovation” studies. They deal specifically with the transmission of innovations to members of a social system, and are considered a subset of research in the general field of communication.

Although a number of studies have been undertaken in medicine, and, in the past decade, numerous ones in education, there have been few studies on the process of change in nursing.

Yet, nursing has undergone tremendous changes in the past 10 years – the nursing process has been introduced, there is the expanded role of the nurse which is rapidly becoming a regular mode of practice – and many, many more changes. We seem to be always running to try to keep up with changes that have already taken place. Yet little is known about the process of change itself – how practitioners learn about new ideas and techniques, or about the factors which influence nurses to accept some changes and reject others.

The purpose of the study I am about to describe was to analyze the process of change as it functioned in regard to nursing innovations in a selected segment of Canadian hospitals, and to relate the analysis to general research and theory about information transmission and the acceptance of change.

Three aspects of the process were investigated:

1. The flow of information about changes in nursing practice through a network of hospitals.
2. Factors influencing the adoption of changes in nursing practice.
3. Factors influencing delay in the adoption process, the rejection of changes, or their discontinuance following adoption.

The Study Design

The study used methodology developed and refined in earlier diffusion and adoption studies in rural sociology, education and medicine. These studies were based on the premise that one can measure, in quantitative terms, the extent to which change has taken place in a given community, by determining the rate of adoption of specific changes by members of the community.

During the process of change, an individual goes through a number of stages:

1. Awareness – when the individual first learns about something new

2. Interest – when he actively seeks information about it
3. Evaluation – when he tries to decide whether this idea is suitable for use in his particular situation
4. Trial – when he experiments with the idea, or tries it out on a small scale
5. Adoption – when he makes a final decision as to whether he is going use the idea on a full and continued basis.

Points may be assigned to the stage in the adoption process reached by each member of the community (or representative sample thereof) for each of the specific changes under study. The points are totalled for all innovations, so that one arrives at an “adoption score” for each participant. On the basis of the adoption scores, the population is divided into adopter categories.

Five categories are commonly used:

1. Innovators –
2. Early adopters –
3. Early majority –
4. Late majority –
5. Laggards –

The specific characteristics of each category are often investigated, as well as the mechanisms by which new ideas are spread throughout the social network of the community. In designing the study on changes in nursing, the following assumptions were made:

1. There is a definite and predictable pattern to the diffusion of innovations in the nursing community;
2. The nature of the change influences its spread through the social system;
3. Certain characteristics of the hospital and of the Director of Nursing are related to the adoption of new nursing practices.

The Director of Nursing was selected as the key member of staff because of her role as principal decision-maker in nursing matters within the hospital.

The population studied was a total population, consisting of the 85 Public General Hospitals in the Province of British Columbia, Canada. These included:

Large Hospitals (201 Beds and over)	11
Medium size Hospitals (75-200 beds)	20
Small Hospital (30-74 beds)	32
Very small Hospitals (Under 30 beds)	22
	Total 85

6 of the large hospitals operated a school of nursing and were designated as “teaching hospitals” for purposes of the study, 3 were in their largest metropolitan area of the province Vancouver, 2 on Vancouver Island, and 1 in the Interior of the Province.

The primary source of data was the Director of Nursing at each hospital. An analytical survey method was used, the unit of analysis being the hospital. A scheduled interview was designed to collect data from the Directors of Nursing. A list of 9 new changes in nursing practice was developed to use as tools to study the change process. These included:

A. Changes in nursing techniques

1. The Australian life – a method for lifting and moving helpless patients;
2. Boxing glove mitts – a safety device for restraining confused patients;
3. Sheepskin pelts – a protective pads for used under bedridden patients to prevent decubitus

ulcers;

4. The "closed glove" technique — a method of donning gloves in the operating room;
5. Disposable syringes.

B. Nursing Routines

1. "Open visiting";
2. Elimination of the 6 a.m. temperature taking routine;
3. Elimination of drawsheets as a must on all beds;
4. Use of colored dresses by nurses working on children's wards.

Each hospital was visited, and a personal interview held with the Director of Nursing together data about the sources of information used by the DONs, the stage in the adoption process reached for each of the 9 innovations, and personal characteristics of the DON which could be factors influencing the decision-making process.

Findings

From the findings of the study, it was evident that:

1. A definite process was involved in the flow of information about new idea changes in nursing practice through the network of hospitals;
2. Certain characteristics of the hospitals, and of their Directors of Nursing influenced the adoption of changes;
3. Factors influencing the delay in the adoption process, or the rejection or discontinuance of changes after adoption, were related both to characteristics of the innovation and to characteristics of the individuals involved in making the decision to adopt, or not adopt the change.

The Process of Information Flow

A marked similarity was noted in the responses of DONs to questions about the sources of information they used, sufficient to suggest that there is a logical pattern to information gathering about new ideas and techniques in nursing.

New ideas may originate within the social system of the hospital itself, or may come from an outside source. The Directors reported that they might learn of something new through an article in a professional journal, through attending a short, continuing education course, or a professional meeting; the visit of a nursing consultant; talking with a patient; seeing a film; or reading one of the new textbooks.

Once the DON heard of something new, and was interested in learning more about it, she would seek information from a source she considered credible and reliable, such as the DON at another hospital.

When information about the innovation had been gathered, it was evaluated in terms of its usefulness in the particular hospital. This assessment was an internal one, the DON conferring with her nursing staff and other professional colleagues within the hospital.

If, following this assessment, a decision was made to try the change, additional information was sought, particularly from other Directors of Nursing who might have had experience with the innovation — or from commercial agents, if it was a new piece of equipment. Subsequent to the trial, a decision would be made either to adopt the practice on a full scale or to reject it.

During this final decision-making stage, the DONs again consulted their colleagues within the hospital – their nursing staff, the medical staff, the administrator, and sometimes the Hospital Board.

Sources of Information

Of primary importance in the diffusion of information about changes in nursing practice was the role of personal communication with colleagues. Other Directors of Nursing were named as the principal referents for information and advice on innovations in nursing. Staff within the hospital the nurses, the doctors, the administrator were the chief persons consulted when decisions were made to try, or, subsequently, to adopt a new nursing practice. In addition, informal communication with colleagues was reported as a valuable means of adding to knowledge about innovations. As one DON put it, "You can learn an awful lot of new ideas over a cup of coffee with someone one from another hospital."

Continuing education course were cited frequently as an important initial source of information about changes in nursing practice.

The role of the salesman from the hospital supply house was also significant in drawing the DON's attention to innovations, particularly new equipment, in furnishing information at the interest stage, and technical assistance at the trial stage.

The most important impersonal sources of information about new ideas and techniques in nursing were; were nursing journals, stage, and technical supply houses, hospital journals and films.

The Pattern of Adoption

The pattern of adoption for each of the innovations included in the study, showed the typical "S-shaped" curve found in other research studies in other fields. Initially, there is a slow period following the introduction of a new idea or technique, when a few people try it out. Then, the number of people using it begins to increase rapidly until most of the people in the system are using it. Then, there is another relatively slow period when the idea spreads throughout the remainder of the system.

The diffusion of any single change in nursing practice would appear to take a number of years from its first introduction in a given community to its acceptance by the majority. Even with the most rapidly diffused innovation in this study, the process took 10 years from first introduction to full and widespread adoption by 80% of the hospitals.

It was evident that the rate of adoption was much more rapid where there had been a systematic diffusion of information, as, for example, by the hospital supply companies about the sheepskin pelts.

The Communication Network

In the hospitals studied, it was apparent that 2 cycles of influence were operating:

1. From the major teaching and research centres in Vancouver;
2. From the larger, centrally located hospitals in various districts in the interior of the Province.

Four sequential steps were identified:

1. The focal point for information about new nursing practices was Vancouver where the principal teaching and research centres are located;
2. The coordinating body for new information in nursing appeared to be the Registered Nurses Association, which had taken much of the responsibility for continuing education programs for nurses;
3. From the coordinating body, information seemed to flow directly to the larger hospitals within each district of the Province;
4. From these hospitals, it fanned out to the smaller hospitals within the district.

Characteristics of the Hospitals and the Directors of Nursing

With regard to the hospitals, the teaching hospitals were the most up-to-date, next, the large non-teaching hospitals. The medium size hospitals, who were often the largest hospital within a district, were not always the next most innovative – although they wielded the most influence over the small hospitals within their area and had the role frequently of disseminating new information to other, smaller hospitals. Often, it was in the smaller hospitals socialer, who were more up-to-date. But, the smallest ones among the hospitals studied, that is, those under 30 beds, were the least innovative.

Accessibility to information sources appeared to be a key factor in learning about innovations, with those hospitals farthest away from the major centres and, often, geographically isolated, being the last to learn about new ideas and techniques.

With regard to the Directors of Nursing, on the whole, earlier adopters tended to be younger – but not the youngest – and to be better prepared academically than later adopters. They were predominantly single, and had uninterrupted careers in nursing – that is, had not taken time off to stay at home and raise a family and then come back to work. Also, these earlier adopters attended more continuing education programs and went further afield for them than later adopters.

Earlier adopters also participated more in the professional nursing association through attending meetings, serving as committee members, or holding office. They also subscribed to more nursing journals.

Characteristics of the Innovation

A significant finding in regard to factors influencing the spread of information about innovations in nursing was the lack of communication of information, particularly to the small, isolated hospitals far from the major centres. A large number of them were unaware of many of the innovations included in the study. Accessibility to information sources appeared to be a very important factor in whether a DON was up-to-date with new nursing practices.

With regard to the characteristics of the innovation itself, a key question was, “Is this practice really better safer than that already being used?”

Other factors mentioned by the DONs were costs, ease of putting the new idea into practice and, in the case of the nursing routines – such as open visiting – compatibility with existing routines. Only in the case of elimination of the 6 a.m. temperature taking routine was the nursing decision over-ruled by doctors – and than, only occasionally.

Implications of the Study

The most important thing about any research is its usefulness. Although this study was done in one Province of Canada, the findings were sufficiently consistent with the findings of previous workers in other fields to suggest that the process of change, as it operates in regard to nursing innovations, would be similar in any nursing community.

The study indicated a serious problem in the communication of information about new ideas in nursing, particularly with respect to nurses employed in small hospitals, where there is minimal contact with other hospitals and other nurses.

Implications of the study included:

1. The need for a structure of Continuing education programs, particularly Regional workshops, conferences and seminars, so that more nurses from the smaller hospitals in outlying districts can participate;
2. The need for an information retrieval centre, which can act as a repository for professional literature, and, also, as a dispersal centre for the distribution of information to practitioners in the field;
3. The need for better utilization of existing communication channels, such as the nursing journals, and more opportunities for nurses to get together to discuss mutual problems and share ideas;
4. The need and "change agents," persons specifically charged with the task of disseminating new information in nursing. For example, nursing consultants in government, faculty in university schools of nursing, staff of the professional nursing association have frequently been used in other situations.

Conclusion

This study was a broad preliminary examination of the process of change as it operates in regard to the spread of new ideas and practices in nursing. It was concerned primarily with the transmission of information to Directors of Nursing in public general hospitals in the province of British Columbia, Canada. It is hoped that the findings will provide some insight into the process by which information about innovations in nursing practice is communicated to members of the nursing profession. It is also hoped that these findings will be useful to those desirous of bringing about changes in nursing practice.