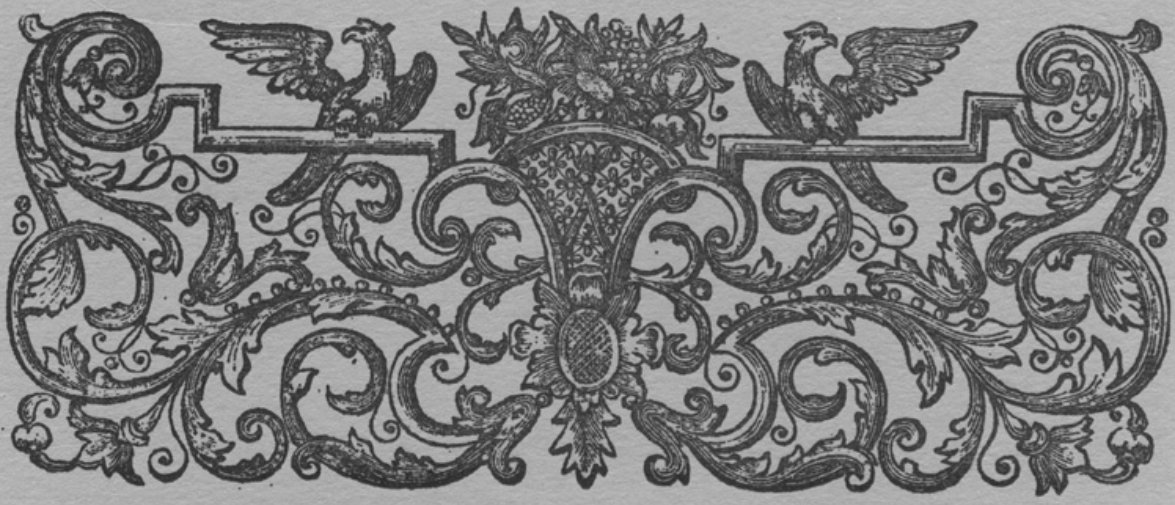

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PERSPECTIVES EN NURSING

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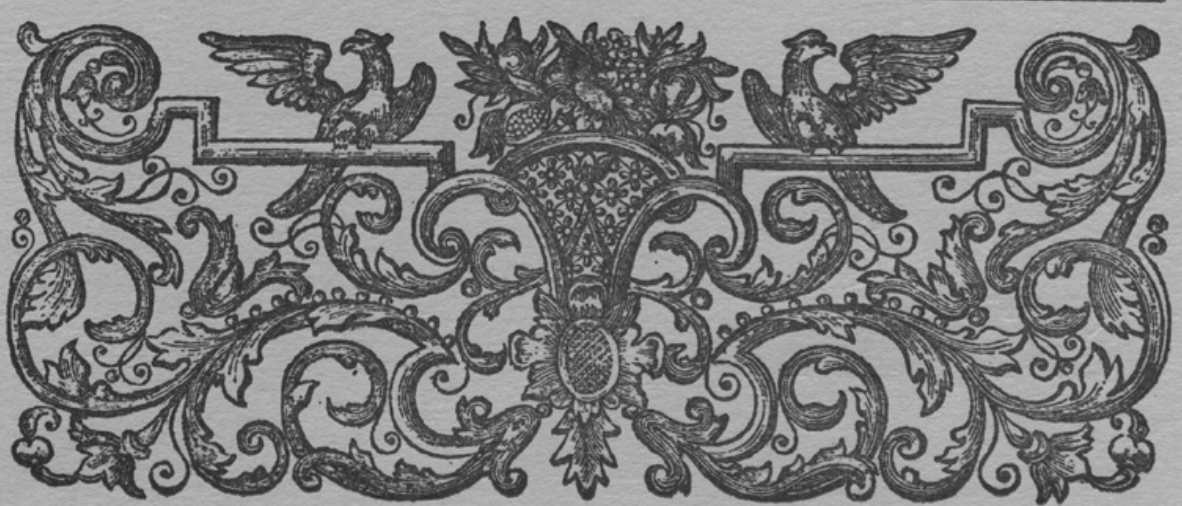

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ERRATUM

In the Winter, 1981 issue of *Nursing Papers* (Vol. 13 No. 4), we incorrectly ascribed authorship of "Nursing Diagnosis: Differentiating Fear and Anxiety" to Phyllis Jones, with co-authorship by Dorothea Fox Jakob.

The article was, in fact, written by Dorothea Fox Jakob, in collaboration with Phyllis Jones.

Contents — Table des Matières

EDITORIAL

We are pleased to announce to our readers that the Faculty of Nursing, University of Alberta, has received a grant which will allow them to finance two editions of *Nursing Papers/Perspectives en Nursing* in 1982. This is the culmination of an important initiative taken by that Faculty to provide support to our financially troubled journal and to participate in its further development.

The Canadian Association of University Schools of Nursing has provided annual grants to subsidize the publication of *Nursing Papers*, and several universities have assumed responsibility for the costs and content of single issues. We have received donations from Western Region CAUSN, from Universities and from individuals. However, joint publication between McGill and Alberta for the next year is a new and welcome initiative which will serve to make the journal truly national in origin and in commitment to dissemination of the findings of nursing research.

The specific arrangements and division of labour between McGill and Alberta are yet to be worked out as this issue goes to press. Perhaps we are on the verge of an idea whose time has come!

Joan M. Gilchrist
Professor and Director
School of Nursing
McGill University

ÉDITORIAL

Nous avons l'honneur d'annoncer à nos lecteurs que la faculté de sciences infirmières de l'université d'Alberta vient de recevoir une subvention qui lui permettra d'assurer la publication de deux numéros de *Nursing Papers/Perspectives en Nursing* en 1982. Nous voyons là l'aboutissement d'une initiative importante prise par la faculté pour apporter son appui à notre revue en difficulté et participer à son développement.

L'Association canadienne des écoles universitaires de nursing (1942) a offert des subventions annuelles pour commanditer la publication de *Perspectives en Nursing* et plusieurs universités ont assumé la responsabilité des coûts et du contenu de certains numéros. Nous avons par ailleurs reçu des dons de l'ACEUN de la région de l'ouest, de certaines universités et de particuliers. Toutefois, les efforts conjoints de McGill et de l'université d'Alberta prévus pour l'année prochaine marquent une étape nouvelle et fort bien accueillie dans la publication de notre revue. Cette initiative contribuera certainement à donner à notre revue une vocation vraiment canadienne tant par son origine que par son engagement à diffuser les résultats des travaux de recherche en sciences infirmières.

Au moment d'aller sous presse, les modalités spécifiques et la répartition des tâches entre McGill et l'université d'Alberta demeurent à préciser. Souhaitons que ces dispositions marquent le début d'un nouvel essor pour *Perspectives en Nursing*.

Joan M. Gilchrist
Professeur et directeur
Ecole des sciences infirmières
Université McGill

ÉDITORIAL*

* *L'éditorial ci-joint a paru en anglais dans l'édition de l'automne (Vol. 13, no. 3).*

Dans l'avant-dernier numéro de Perspectives en nursing, nous avons traité de la responsabilité sous divers aspects et à partir de différents points de vue.

Il convient de se rappeler que la responsabilité constitue l'un des critères sur lesquels repose le programme d'accréditation de l'Association canadienne des Ecoles universitaires de nursing. Afin de mesurer la responsabilité dans le cadre d'un programme, l'équipe responsable du processus d'accréditation cherche des indicateurs évidents qui montrent jusqu'à quel point les professeurs en sciences infirmières enseignent aux étudiants à répondre de façon individualisée au client ou bénéficiaire.*

La responsabilité se distingue de la *pertinence;* cette dernière se réfère au programme de sciences infirmières en tant que réponse à la communauté que dessert la faculté ou l'école de sciences infirmières dans l'université concernée.

Pour ce qui est de la *responsabilité,* la question est la suivante: les soins infirmiers que dispense l'étudiante répondent-ils à telle personne en particulier? Quant à la *pertinence,* la question posée est celle-ci: ce programme constitue-t-il une réponse aux besoins de la collectivité dans laquelle ils s'insère?

Les autres critères évalués dans le plan d'accréditation proposé sont la *cohérence,* et l'*originalité.* La cohérence d'un programme se réfère à l'agencement de ses divers éléments** pour qu'ils interagissent vers l'atteinte des mêmes fins, c'est-à-dire un sens d'unité et de globalité. La recherche de la *pertinence,* de la *responsabilité* ainsi que de la *cohérence* et de l'*originalité* a trait au développement et à l'utilisation des ressources*** de manière à créer un programme bien particulier à une Faculté dans sa communauté propre.

F. Moyra Allen,
Rédacteur en Chef

Traduction par Julienne Provost, professeur agrégé, Faculté des sciences infirmières, Université de Montréal.

* Le terme client ou bénéficiaire peut désigner une personne, une famille, un groupe ou une collectivité.

** Les éléments du programme comprennent les buts, l'enseignement des sciences et soins infirmiers, les plans d'étude, la pratique des professeurs et leur recherche ainsi que l'administration.

*** Il s'agit des ressources humaines: socio-culturelles, physiques, financières telles que la compétence des professeurs, les familles en santé dans la communauté, les valeurs de cette collectivité, les fondements socio-politiques, les occasions d'interventions en matière de santé, la participation des bénéficiaires, etc.

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Nursing Papers gratefully acknowledges a contribution made this year by CAUSN in the amount of $4,000. Thank you for your generous support.

AN INTERPRETIVE APPROACH TO CLINICAL NURSING RESEARCH

JOAN ANDERSON
Assistant Professor, School of Nursing
University of British Columbia

Within the past decade there has been heightened interest among nursing researchers in a qualitative approach to the study of problems within the domain of nursing (for example, Ragucci, 1972; Lindemann, 1974; Leininger, 1978; Davis, 1978, 1980; Field, 1981; Porterfield, 1981; Anderson, 1981). Although qualitative works show increasing variety, they share a common feature — they focus on the study of events as these are constructed in everyday social interactions.

The current interest in qualitative methodologies in nursing research parallels trends in the social sciences, and in fact seems to reflect developments in that field. Leininger (1978) points out, "both the fields of anthropology and nursing are concerned with man's health and illness behavior and this is the initial and common bond which brings the two fields closely together" (p.75). This statement also holds true for the relationship between sociology and nursing.

This paper will examine the theoretical foundations of the qualitative or interpretive methods, and discuss the implications of these methods for nursing research.

The Interpretive Perspective

Recent qualitative approaches considered to be 'interpretive' in orientation, have their genesis in phenomenological theory. This theory is derived from the seminal works of Edmund Husserl (1952), the later writings of Alfred Schutz (1967, 1973), and practicing social scientists like Cicourel (1964, 1976), and Garfinkel (1967). Although the writings of Schutz are taken as a point of departure by scholars committed to the interpretive perspective, some of Schutz's arguments have come under criticism; they are by no means held up as an unquestioned authority. But it is this very questioning which has led to the more original works. Given that there are a variety of positions in the interpretive school, there are, however, some common elements among them. They all focus on the routine features of everyday life and everyday rationality.

At the risk of oversimplifying some of the central tenets of Schutz's writings, he does place special emphasis on the inter-subjective world of daily life. Schutz argues that persons in their everyday life create meaning in interactions with others (1973, 7, 10). Meaning "is thus 'constructed' (rather than merely investigated) by those who live in it" (Skinner, 1978, 26). In Schutz's (1967) words, "meaning is ... constituted as an intersubjective phenomenon" (p.32).

This theoretical perspective stands in sharp contrast to the works of mainstream social scientists like Durkheim (1938). The structural-functionalist model which follows from Durkheim assumes that in everyday life, individual behavior is regulated by a set of rules or norms which are internalized through socialization. These rules govern behavior, and the socialized person knows the behavior which is expected in a given situation and can act appropriately. However, this perspective fails to show us how persons decide upon the applicability of a rule in a particular situation, and how they assign meaning to events and occasions in everyday life. According to Wilson (1970), the interpretive perspective has as a central theme the notion that:

> Meanings and definitions of situations are constituted and have their objectivity established through the interpretive processes of interaction rather than by reference to a body of culturally given common definitions (p.78).

This theoretical perspective gives different directives for the research endeavour than those derived from empirical natural science. Rist (1979) states:

> Of concern is always the question of *how* the world is experienced....
>
> .... in qualitative research, theory is developed from an understanding of "grounded events," i.e. *the experiences as shared and understood by the participants and the observer* (italics mine) ... The task is always one of learning how those involved interpreted and gave meaning to the situation (pp. 19-20).

This orientation to research is in contrast to that approach which aims to verify hypotheses, and in which concepts and categories derived from a pre-existing theoretical framework are developed *prior to* data collection. From the interpretive perspective, concepts and categories *are systematically worked out in relation to the data* during the course of the research. This permits the researcher to develop a grounded substantive theory in relation to the data gathered (Lindemann, 1974, 106-108). The ethnographic approach, using participant observation and unstructured interviews (preferably tape-recorded), are among the strategies employed to obtain data.

Implications for Nursing Research

We should bear in mind that the way we use the interpretive perspective in nursing may not correspond exactly with how it is used in sociological research. Although nursing and sociology share similar interests, each addresses problems peculiar to its discipline. Nursing, while using an intellectual perspective grounded in phenomenology, must find its own style for addressing problems which are nursing's prerogative. However, while nursing may develop a style of research which is appropriate to the discipline, there are some fundamental tenets of phenomenological theory which are crucial in interpretive work. Schutz, the reader will recall, has argued that persons in their everyday life create meanings in interactions with one another — *meaning is thus constructed* in day-to-day interactions (1967; 1973). This approach recognizes that each person brings to an encounter his or her own interpretation of the situation, by which events are evaluated and judged.

Social scientists and health scientists such as Kleinman (1978), Kleinman, Eisenberg, and Good (1978), and Chrisman (1977) through their work have showed that the interpretive approach has implications for the care that we provide to clients.

A central thrust in Kleinman's work is the explication of cultural meanings applied to sickness. He sees this as having considerable practical importance for health care providers and consumers. The model which he advocates is not only an appropriate analytic framework for non-western societies, but can be profitably applied to western societies. This analysis derives from the viewpoint that *all sickness is socially constructed, not just mental disorders as some claim.* A conceptual distinction is made between illness and disease. The term disease refers to sickness as it is described by western biomedical science. Illness, on the other hand, is sickness as it is perceived by the individual (Chrisman, 1977, 352). It represents personal, interpersonal and cultural reactions to disease (Kleinman, et. al., 1978, 252), and must be understood within the socio-cultural and psychological content of a person's life.

Kleinman, et. al. (1978) recognize three structural domains of health care in society: professional, popular (family, social network, community), and folk (non-professional healers). Each domain has its own explanatory system of health and illness. The patient's explanatory model, generally speaking, is embedded in the popular knowledge of daily life and the interpretations of the bio-medical model. The professional model, on the other hand, is embedded in explanations derived

from formal theories. 'Cultural' differences may occur in any encounter between practitioner and client as each has different understandings and expectations. Misunderstandings between practitioner and client often emerge, because clinical terms used and understood by practitioner may differ from how these terms are understood by the client. Furthermore, even though the client may use the same vocabulary as the practitioner, this does not always imply that they share similar interpretations of events. The model discussed by Kleinman focuses on the client and practioner's descriptions of health and illness experience. Eliciting an understanding of their sickness and their interpretations of professional models is vital if we are to negotiate culturally appropriate health care with clients.

A Study of Families With A Chronically Ill Child: A Summary

The author used an interpretive approach in her study of the social construction of illness in families with a chronically ill child (Anderson, 1981). As well as obtaining ethnographic data from four families with a child with chronic sickness, she obtained data from twelve 'well' families. This permitted her to examine the differential construction of social reality in these two groups of families.

Data were obtained through unstructured interviews and observation of parents and children in their routines of daily life in the naturalistic setting of their homes. Approximately ten to fifteen hours over three visits were spent with each family. The focus of the interviews was to elicit the parents' explanatory model of their child's illness, that is, how they understood and described the illness. these interviews, as well as the naturally occurring interactions between parents and children were tape recorded.

The data revealed some inconsistencies between the parents' verbal accounts and their actual management of everyday social interactions with the child. In their verbal accounts they stressed that they treated the child as just an ordinary child. In fact, they attempted to deemphasize the disease label. For example, one father told the researcher on her initial visit to the family that she would not learn anything about sick children because they treated their child as 'normal'. In actual practice, however, the children's lives were regulated by the parents' understanding of the biomedical model, and included time schedules dictated by the sickness. In one instance, a three-year-old child with leukemia was secluded from other children and only allowed to play with one other child, who was carefully monitored for infections. Any signs of this meant that the children were not allowed to

play together. Consequently, the sick child played mostly with her mother (and health professionals during her periods of hospitalization). This child was being socialized not into the world of other children but into the world of adults. This was unlike the 'well' children in the study whose parents put a high priority on social interactions with other children.

It could be argued that the parents' interactions with their sick child contained the essential feature of paradoxical communication. Two conflicting sets of messages were conveyed to the child — on the one hand, "you are well, you are normal," on the other "you are not well, you are different."

We should note that these parents participated in the study because they saw themselves as 'coping well' with their child's sickness. Although they had experienced periods of crises in their lives, they had settled down to the management of their child at home with a minimum of interventions from health professionals. However, though they said they treated the child as a normal child (which may reflect some ideal notion of how one ought to interact with a child in a 'normal' family), they could not in everyday life disregard the limitations put on the child's life by the sickness. The parents' interpretation of the biomedical model was deeply embedded in how they constructed the child's everyday life experiences.

Krulik (1980) in her study of chronically ill children, has focused on the normalizing tactics used by some mothers to decrease their child's feeling of being different from his/her peers. What is of interest in the present study and seems to differ from Krulik's reporting, is that the parents, in the process of constructing themselves as a 'normal family,' focused on how they treated the child as a normal child, and how they had changed their lifestyles so that the child would not stand out as being different. For example, families with a diabetic child altered their eating patterns. However, this was but one dimension of the parent-child interactions. In actual life, the child was treated differently from other children. The pattern of parent-child interactions discussed here is remindful of Alexander's (1976) description of the patient-practitioner relationship in the context of hemodialysis. Although practitioners expected their patients to live a 'normal' life by having gainful employment and the like, Alexander argues that normality was situationally denied. The patients' physiological status did not permit them to be normal in the usual sense.

An ethnographically based theoretical model of the social construction of sickness careers is being developed by this author. This knowledge should help practitioners to more fully understand how clients perceive their illness, and the coping strategies used in everyday life. Taking into account the client's perspective will enable us to provide appropriate care.

A variety of topics can be addressed within the interpretive framework. A crucial feature of this method is that researchers can make any naturally occurring event a topic for investigation and analysis. In other words, the researcher is interested in events as they occur. For example, one might study the negotiation process in the nurse-patient relationship in a clinical setting, or any of the other social organizational features of the setting. Such phenomena as coping, stress, and illness onset as a social process can also be investigated.

Concluding Remarks

The method of inquiry outlined here allows us to examine how sickness careers are constructed in the context of everyday social interactions. But perhaps one of the greatest merits of this approach is that it requires us to attend to the client's explanation and interpretation of the sickness episode. Leininger (1978) sums this up in her statement:

> In the past, the patients' behavior and illness has been described from different professional groups' perspectives. The recent interest in and importance of discovering the *patient's view of his illness* is opening new challenges to health personnel. It challenges us to understand more fully how the patient knows and understands his illness, how he desires to be helped and the ways health personnel can help him (p. 75).

Attentiveness to how sickness careers are constructed in the course of everyday social interactions may provide us with insights as to how families with a chronically sick member may best be helped in dealing with the sickness episode. Considering the trend towards home care services and the concomitant responsibility placed upon the family to manage the sick person in the home, this topic merits investigation. The interpretive perspective provides a useful approach for addressing such topics.

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RÉSUMÉ

Démarche de recherche interprétative sur les soins infirmiers

Cet article expose la tendance actuelle à utiliser des méthodes qualitatives ou interprétatives en recherche sur les soins infirmiers. Les fondements théoriques de la démarche interprétative sont examinés. On se penche également sur le travail des sociologues et spécialistes en sciences de la santé dans le but de démontrer que la démarche interprétative en sociologie est pertinente aux sciences infirmières. Le chercheur s'est servi d'une démarche interprétative dans son étude sur l'interaction sociale chez les familles où un des enfants est un malade chronique. Les données ont été obtenues au cours d'entrevues non structurées de même que par l'observation des rapports quotidiens parents-enfants.

THE DOUBLE STUDY METHOD IN NURSING RESEARCH

LOUISE DAVIS
Assistant Professor, Faculty of Nursing
University of Alberta Hospitals

INTRODUCTION

In a study on job satisfaction among Alberta nurse educators conducted in June, 1980, two separate aspects of the work situation were investigated: the "Importance" of various job characteristics to overall job satisfaction, and present "Level of Satisfaction" with these same characteristics in the context of the job the respondent is holding. Similar studies among nurse educators in the United States by Marriner and Craigie (1977), and Grandjean et al. (1976) used a single three part questionnaire for each respondent. In each study, the results indicated that the nurse educators investigated tended to be dissatisfied with what they felt was important and satisfied with what they did not feel was important. In commenting on their findings, Marriner and Craigie (1977: 359) reflected that "it may be that people regard as important only those aspects of their job which are so annoyingly unsatisfactory that they cannot be ignored." They also speculated that in applying Maslow's theory to studies of job satisfaction, it would seem logical that unmet needs would be judged to have more importance than needs that are met because they would precede others in human consciousness. Neither research group made reference to their method in interpreting their results.

METHODOLOGY

Cronback (1958: 354) refers to this type of study as "dyadic" or one in which "the score representing the distance or similarity between two perceptions of the same persons..." is compared. In this instance, the "Importance" and "Level of Satisfaction" of individual respondents is measured on the same instrument. Cronback (1958: 358-359) asserts that a difficulty arises in interpretation of these studies, unless the simple, main effects associated with the perceiver or the object of perception have been given separate consideration:

> Scores ... derived from the same instrument are not mathematically independent where errors of measurement affecting one element influence the others also, significance tests are spurious and correlations are artifactually raised or lowered ... The goal in experimental design is to make the various observations experimentally independent.

For this reason, I developed two separate three-part forms for my study on job satisfaction: Form A and Form B. Each had the following sections:

Section A asked for personal and professional data.

Section B provided a list of 57 job characteristics.

In Form A, respondents were asked to assess and rate each item for its "Importance" to job satisfaction on a Likert-type scale. In Form B, respondents were asked to rate their current level of satisfaction with each of the same items in the context of the job currently held.

Section C asked all respondents to summarize how they felt about their current jobs by rating their overall level of job satisfaction. As this question was asked on both forms, it is not part of the double study methodology.

In May, 1980, 258 questionnaires were sent to individual nurse educators in all eleven Alberta Schools of Nursing. An almost equal number of Form A (130) and Form B (128) questionnaires were distributed using a table of random numbers. This ensured that every nurse educator received either Form A or Form B questionnaires. There were 89 Form A or "Importance" questionnaires, and 91 Form B or "Level of Satisfaction" questionnaires completed and returned.

Respondents in the Form A group were statistically compared with respondents in the Form B group, to determine whether significant differences existed between them on the basis of the variables being treated. An examination of the chi square analyses for each pair of demographic variables revealed that no significant differences existed at the 0.05 level of probability.

The conclusion was that samples were drawn randomly from the same population, and findings from each sample could be generalized to the Alberta nurse educator population.

FINDINGS AND DISCUSSION

Importance and Level of Satisfaction

Table I contains items which received highest and lowest scores on both the Form A "Importance" measurement and the Form B "Level of Statisfaction" instrument. Ten items were selected from each group: five with the highest and five with the lowest rankings.

Table I

Form A "Importance" and Form B "Satisfaction" Scores for 17 Selected Questionnaire Items

Scale 1:		*Scale 2:*	
No Importance	= 1	Very Dissatisfied	= 1
Little Importance	= 2	Somewhat Dissatisfied	= 2
Some Importance	= 3	Neutral	= 3
High Importance	= 4	Somewhat Satisfied	= 4
Very High Importance	= 5	Very Satisfied	= 5

Item	Form A Importance Mean[1]	Rank	Form B Satisfaction Mean[2]	Rank
The feeling that my work is important	4.55	1	4.30	12
Opportunities for professional and personal growth	4.54	2	3.77	36.5*
Opportunity to plan and organize my own work responsibilities	4.49	3	4.47	4.5*
Freedom to choose my own instructional methods	4.46	4	4.55	2
Extent to which I am kept informed about decisions and events that affect my work	4.42	5	3.45	48
Relationships with students	4.38	8	4.73	1
Relationships with colleagues	4.28	15	4.52	3
Respect of students	4.40	7	4.47	4.5*
Social opportunities and contacts at work	2.80	57	3.83	30
Opportunities to engage in research	2.88	56	2.59	57
Institutional location of school	3.25	55	4.29	13.5*
Type of program	3.27	54	4.39	8
The community in which my work is located	3.30	53	4.02	24
Supervision and evaluation of faculty members	3.64	44	3.04	56
Course preparation time	3.97	32	3.06	55
Opportunities for promotion	3.34	52	3.07	54
Ability of dean (director, chairman) to provide educational leadership	4.02	28	3.20	53

* Indicates tied ranks.

In examining the table, it is clear that three out of five of the items rated most important to job satisfaction received rankings which indicated that nurse educators were, for the most part, satisfied with these characteristics of their jobs. Of particular note is that "Opportunities to plan and organize my own work responsibilities" and "Freedom to choose my own instructional methods, "items suggestive of work autonomy, ranked very high on both scales. This was an area which, despite its ranked importance, was found less satisfying by both Grandjean et al. (1976), and Marriner and Craigie (1977) in the faculties of nursing which they studied.

Alberta nurse educators were much less satisfied with "Opportunities for professional and personal growth" and "Extent to which I am kept informed about decisions and events which affect my work," two items which ranked second and fifth in importance.

Although most nurse educators expressed the least satisfaction with opportunities to engage in research, they also ranked this item fifty-sixth in importance to satisfaction in their present jobs. This reflects the paucity of nursing research now taking place in Alberta schools of nursing along with an adherence to the conventional professional wisdom that research is a desirable activity in and of itself. Similar findings were reported by Seyfried et al. (1976) and Grandjean et al. (1976) in their research with university educators in the United States.

Relationships with students and colleagues and the respect of students were generally considered important and satisfying. As relationships with students are at the core of the teacher's role, it is difficult to imagine a nurse educator who would be satisfied in her work without finding her contacts with students rewarding.

The value assigned to the "Ability of the dean (director, chairman) to provide educational leadership" was high in most cases, but the current level of satisfaction with this item was generally low, ranking fifty-third on the scale.

The Spearman rank-order coefficient was calculated to determine the strength of relationship between the rankings of the means on the "Importance" and "Level of Satisfaction" scales. The correlation coefficient of 0.31 indicated that there was not a strong relationship between them. One could not safely predict the level of satisfaction with a characteristic of the job from the importance that was assigned to job satisfaction.

However, for the most part, Alberta nurse educators were satisfied with those items they ranked high in importance to job satisfaction. Those items with which they were only "Neutral" or "Somewhat Satisfied" reflect deficiencies in communication, staff development and evaluation, and educational leadership in their institutions.

Overall Job Satisfaction

Respondents in both groups summarized their level of overall job satisfaction by selecting a number on a scale which most accurately represented their feelings in the job currently held. The scores ranged from 1 representing "Very Dissatisfied" to 5 for "Very Satisfied". A neutral category was not offered so that respondents would be forced to record an attitude.

The mean score for Form A respondents was 3.19, and Form B respondents, 3.07. The overall mean of 3.13 meant that generally, nurse educators were little more than "Somewhat Satisfied" with their current jobs.

CONCLUSION

It appears that job satisfaction is a very complex phenomenon. This study focused on specific characteristics of the job and examined separate aspects of the work situation using two separate questionnaire forms. Although results showed that many items rated high in importance were also found satisfying in the work situation, there was very little statistical relationship between the two measures. It is possible that the same results would have occurred in a study using a single instrument. However, the author believes that use of the double study method gives more credibility to the findings. A more complete examination of job satisfaction would necessitate exploration of the characteristics of individuals and the network of supportive relationships both on and off the job.

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RÉSUMÉ

La recherche en nursing: méthode à deux études

Le présent article fait état d'une méthode de recherche à deux études utilisée pour approfondir deux aspects différents de la situation professionnelle des professeurs de sciences infirmières en Alberta: l'importance de différentes caractéristiques des fonctions dans la satisfaction d'ensemble et le "niveau de satisfaction" actuel en se basant sur les mêmes caractéristiques. Compte tenu des difficultés d'interprétation qui surgissent lorsque l'on ne se sert que d'un instrument, le chercheur a utilisé deux questionnaires: un pour étudier l'importance et l'autre pour évaluer le niveau de satisfaction. Les questionnaires ont été distribués au hasard, un nombre égal de répondants recevant chacun des questionnaires. Les résultats ont indiqué que de nombreux éléments jugés "importants" étaient également liés à la satisfaction professionnelle; on n'a toutefois pas noté de rapport statistique entre les deux mesures. Il est possible que les mêmes résultats aient été obtenus à l'aide d'un seul instrument de mesure, mais la méthode à deux études donne plus de poids aux résultats.

NURSING DIAGNOSIS: DIFFERENTIATING FEAR AND ANXIETY *

PHYLLIS JONES
Dean, Faculty of Nursing
University of Toronto

DOROTHEA FOX JAKOB
Research Assistant, Faculty of Nursing
University of Toronto

As the concept of nursing diagnosis is increasingly introduced and implemented in nursing practice, many different challenges and issues will emerge for nurses. One such challenge is the fact that the accuracy of the nursing diagnosis of a presenting condition and the factors contributing to its existence, intensity and duration is prerequisite for effective nursing intervention. Yet, inherent in the diagnostic process is the difficult nursing task of differentiating which label accurately describes aspects of the client's state of health.

The process of accurate diagnosing is complicated and is fraught with many possible pitfalls, especially in view of nursing's early developmental stage and currently limited diagnostic sophistication (Field 1979, p. 501). Aspinall and her colleagues (Aspinall 1976, 1979; Aspinall, Jambruno and Phoenix 1977) have described nursing literature as containing significant gaps in regard to guiding the nurse in the diagnostic process, which is often portrayed as a simple, clear-cut and almost automatic step in the nursing process. From the findings of two investigations of the diagnostic process in nursing, Aspinall (1976, 1979) has concluded that many nurses have difficulty with this process and more specifically are "unable to utilize knowledge in the process of making a differential diagnosis of a symptom" (Aspinall 1979, p. 185). However, her research has also shown that nurses can be assisted to make better use of knowledge in evaluating clinical evidence.

Kelly (1964) suggested one possible source of inaccuracy in the diagnostic process used by nurses, i.e. the value which nurses place on certain subjective or objective patient data. She stated that "if a nurse places too much reliance on a sign or symptom that has little or no validity, or if she ignores a clue with high validity, her achievement (inferential accuracy) will be low" (p. 320). During a recent investigation, briefly described below, the data suggested that nurse-participants appeared to place low value on verbal expressions by clients about their experience of fear. This observation led to further examination of the available data and to consideration of the differentiation between fear and anxiety.

* This paper was originally accepted for publication in November, 1980.

This paper describes the project and the data related to differential diagnosing of fear and anxiety; summarizes aspects of the search of selected literature; and explores the implications for nursing care of clients experiencing either human response.

PROJECT DESCRIPTION

A brief description of the research design and central findings of the project, "An Investigation of the Definition of Nursing Diagnoses"[1], provides the background for the curiosity-provoking findings. The findings are reported in full elsewhere (Jones and Jakob 1980). The study involved the participation of 57 volunteer practising nurses, with the aim of discovering how the nurses describe the human responses for which they give care, i.e. the phenomena of nursing diagnoses and the factors associated with them.

A prepared list of nursing diagnoses (Jones and Jakob 1977, pp. 82, 83) was given to volunteer participants who used it in identifying the diagnoses of up to ten clients for whom they were giving care. Advanced nurse-clinicians (experienced nurses with baccalaureate or master's degrees) participated. The data-collection tool, designed and pretested in an earlier phase (Jones and Jakob 1977), also requested information about the nurses, the clients, and the nurses' opinions about the list of diagnosic terms. The submitted nursing diagnoses were accompanied by descriptive modifiers of intensity, duration, contributing factors and substantiating observations of behaviour.

The two investigators separately reviewed each identified diagnosis, verified that it was appropriate according to the project's definition of a nursing diagnoses, and that it was supported by the subjective or objective information provided. A nursing diagnosis was defined as the statement of a person's response to a situation or illness which is actually or potentially unhealthful and which nursing intervention can help to change in the direction of health (Mundinger and Jauron, 1975). Items which did not meet those criteria were deleted from the pool of diagnoses. In some instances, participants provided data that clearly indicated the presence of an unidentified diagnosis and the investigators added it. In other instances, participants identified a phenomenon with one label that would be named more accurately by another diagnostic label and the investigators revised it. Lastly, if a participant presented a newly-coined diagnostic label which duplicated the intent of a label from the project's diagnostic list, the investigators re-labelled it. As a result of the review process, approximately 66 per cent of the total diagnoses were identified by the participants, and 23 per cent were added, 10 per cent were revised and 1 per cent were re-labelled by the investigators. Data from all of the 57 nurse-participants on 393 clients generated 2,517 nursing diagnoses.

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As Table 1 shows, "fear" was the third most common single diagnosis occurring. The 131 instances of fear were described as being related to 293 contributing factors, or a mean of 2.2 identified factors per diagnosis of fear. "Anxiety" is shown as the seventh most common single diagnosis occurring; 98 instances of anxiety were related to 205 contributing factors, or a mean of 2.1 factors.

Table 1. Outcome of Review Process: Frequency and Percentage Distribution of Eleven Most Frequently Reported Nursing Diagnoses

Nursing Diagnosis	No.	%
Mobility impairment	198	7.9
Self-care activities: alteration in ability to perform hygiene	133	5.3
Fear	131	5.2
Pain	125	5.0
Skin integrity impairment	102	4.1
Nutritional alteration: Less than required	99	3.9
Anxiety	98	3.9
Family relationships impairment	93	3.7
Communication process impairment	88	3.5
Self-concept alteration: Role/Identity	82	3.3
Self-concept alteration: Body image	79	3.1
All Others	1,289	51.1
Total	2,517	100.0

SOME PUZZLING RESULTS ABOUT FEAR

As indicated, a total of 131 instances of fear were confirmed by means of the project's review process. The respondents submitted 65 instances, only 3 of which were unsupported by the accompanying data. In other words, when the nurse-participants labelled a clinical phenomenon as fear, the two project investigators concurred 95 per cent of the time (compared with 86 per cent overall), a high degree of agreement for these 65 submitted diagnoses. This was felt to be an encouraging indication of the clarity and appropriateness of the label, which seemed to be useful in the real world of clinical nursing. Paradoxically, the remaining results of the review process were puzzling, to say the least.

Despite the high level of agreement regarding the 65 submitted diagnoses of fear, a further 69 instances (52.7 per cent of the total instances of fear) emerged from the review process, 41 revised from other categories and 28 added by the investigators. These data are summarized in Table 2.

Table 2. Outcome of the Review Process for All Instances of Fear

Review Process Manipulation		No.	%
Submitted by nurse participants		65	47.3
Deleted by investigators	(−)	3	n.a.
Revised from another diagnosis		41	31.3
Added by investigators		28	21.4
Total		131	100.0

The unexpected rate of revision was recognized early in the review process when it became apparent that some instances of "anxiety" were being revised to "fear". At this early stage, the definitions of the two diagnostic labels were discussed by the investigators in order to confirm agreement about discrimination. Fear was defined as a client-expressed or client-confirmed response of focused apprehension toward the presence of a recognized, usually external threat or danger to one's limb, autonomy, self-image, or community with others. On the other hand, anxiety was defined as a vague, uneasy sense of worry, nervousness, or anguish which is a reaction to an anticipated (often non-specific) danger to one's expectations; needs for prestige, status, and esteem, or need to confirm one's prevailing self-views. Unrecognized or repressed fears or conflicts and interpersonal transmission were seen to contribute to the formation of anxiety. The critical aspect which differentiated fear from anxiety was seen to be the client's awareness and identification of the object of dread or apprehension.

Further examination of the original data sheets containing the revisions yielded even more interesting results. All but two of the 41 revised instances were indeed changed to fear from anxiety and Table 3 summarizes the characteristics of related supporting data for these 39 instances.

Table 3. Characteristics of the Supporting Data in Instances of "Fear" which Were Revised by the Investigators from Nurse-Participant Submissions of "Anxiety"

Type of Supporting Data	No.	%
Contained the words "frightened", "scared", or "afraid"	9	23
Implied a high probability of the presence of fear	23	59
Implied a moderate probability of the presence of fear	7	18
Total	39	100

As can be seen in Table 3, in nine instances the nurse supported the diagnosis of anxiety with subjective and objective information which included specific statements by the client using the words "frightened", "scared", or "afraid". In a further 23 instances, the supporting data implied a high probability of the presence of fear rather than anxiety. These supporting data often were in the form of quotations from patients couched in questions or statements and accompanied by nurse observations. Examples included:

> a man acutely ill with heart disease who is apparently terrified that he may worsen his condition by moving: he "doesn't initiate any activity (even minor) without questioning if it's alright".
>
> a new mother apparently afraid that she may be unable to sufficiently nurse her baby during a growth spurt and thereby adversely affect its health: she "verbally expressed anxiety about her abilities to nurse and about the baby's health".
>
> A young woman apparently afraid that she is undesiredly pregnant: she's "worried; wringing hands, tense".

Examples of the supporting data felt by the investigators to be indicative of a moderate probability of the presence of fear as opposed to anxiety (7 instances) were:

> a man awaiting an impending cardiac catheterization with apparent fear: he "fantasized that the future will be OK".
>
> a man post-amputation awaiting hospital discharge and apparently afraid that he will not be able to manage at home: " 'How will I manage at home?' Plaintive tone of voice, frowning".

Finally, of the 28 instances of fear added by the investigators (Table 2), 21 were identified from data sheets containing client quotations with the words "afraid", "scared", or "frightened".

REVIEW OF SELECTED LITERATURE

Before considering any explanation of the paradoxical situations just described, selected literature about fear was reviewed. It was interesting to note that the earlier volumes of the *Cumulative Index to Nursing and Allied Literature* (Seventh Day Adventist Hospital Association 1956-1968) contain the following reference at the end of the listings under the subject heading of Fear: "see also, Anxiety". From 1969 to 1972 that same cross-reference was placed under the subject heading of Fear, before the listing of any articles. After 1972, no mention of Anxiety is made as a possible cross-reference for fear. These reference changes within the index suggest an evolution in the differentiation of the concepts of anxiety and fear within nursing. In addition to perusal in nursing resources, inquiry was also made through selected literature in the disciplines of psychology and psychiatry.

Johnson's comments about anxiety can effectively introduce the ambiguous characterization of anxiety: "Anxiety is perhaps the most frequently appearing phenomena in psychological literature. Its theoretical and operational definitions are laden with semantic confusion. This has led to vague and interchangeable use of the term in research literature" (Johnson 1979, p. 7). Much of what was found in the literature about understandings of fear and anxiety can be characterized in one of three ways. Most commonly, fear and anxiety are used as declared or undeclared synonymous, interchangeable concepts (Creighton and Armington 1965; Doerr and Jones 1979; Graham and Conley 1971; Janis 1977; Johnson 1979; Magill 1967). A second type of characterization involves a clear distinction between fear and anxiety (Danesh 1977; Isard 1977). The ambiguity is enlarged with a third treatment of anxiety (neurosis) as being associated with objectless fear, i.e. fear activated in the absence of a discernable object (Isard 1977, pp. 355-384).

All was not totally filled with confusion as the literature seemed in agreement about the similarities shared by "anxiety" and "fear", i.e. the subjective experience of tension as well as activation of the autonomic system. In supporting their study of pre and post operative fear anxiety, Graham and Conley (1971) concluded that the verbal

content of client statements offered the most useful and frequently occurring indicators of preoperative anxiety and fear. Although our data were not analyzed in a way that allows comparison, we would suggest that they might support Graham and Conley. A second widespread agreement in the literature involved most classifications of fear stimuli utilizing two basic origins: (1) innate or natural origins such as sudden noise, heights, sudden loss of support, and pain; and, (2) learning modes, such as classical or operant conditioning or modeling of others.

Although this literature leads to some confusion regarding the definitions of fear and anxiety, some recent discussion among nurses attending the Fourth National Conference on Classification of Nursing Diagnoses suggests some emerging clarity. At that conference the work group recommended definitions for Fear as "a feeling of dread related to an identifiable source which the person validates", and for Anxiety as "a symptom of ineffective coping, knowledge deficits or a precursor to fear. Once the source of anxiety is identified, the problem becomes one of fear" (Kim and Moritz 1982, p. 280).

RELATIONSHIP BETWEEN DIFFERENTIAL DIAGNOSING AND NURSING CARE

Bloch (1980) has stated that

> ...concern about words and definitions is more than semantic. A term's definition goes to the heart of understanding the concept underlying the term. Such understanding and defining is necessary for adequate operationalization of a concept (Bloch 1980, p. 69).

Such clarity of understanding and defining could also have important implications for the quality of nursing care, as consideration of anxiety and fear will show. There is agreement that appropriate nursing care for individuals experiencing fear and for individuals experiencing anxiety differ considerably.

After establishing sufficient interpersonal trust with an anxious client, nursing intervention involves three basic steps (*American Journal of Nursing 1965*). Initially, the client is helped to recognize clues that indicate that he is indeed anxious. From that point, the client can be helped to gain insight into the etiology of his anxiety and to utilize constructive coping strategies to effectively deal with and perhaps master the threat he faces. Effective intervention in regard to anxiety aims at the identification of a specific threat or conflict, which leads to a revision of the earlier diagnosis of anxiety. Anxiety, as such, often seems to be a preliminary nursing diagnostic label, which must lead to the identification of a more precise concern, if effective nursing care

has in fact been provided. Then, intervention proceeds in regard to that newly identified patient problem. From the vantage point of her mental health practice, Weber makes very similar observations:

> Although diagnosis may have been correct given the information the client was able to reveal, continued contact shows "layers" of problems or causes...
>
> As the data base grows and becomes refined and as interventions are evaluated, new diagnoses may be identified and current diagnoses may be changed or verified... (Weber 1979, pp. 534-535).

As Shipley (1977) clearly identified, effective care of the fearful client involves identification of the type of etiological factors. Is the fear a reflexive response perhaps to threatening or unknown sounds, sights or changes in body position? Does it result from Pavlovian conditioning such as a child's fearful response to anyone wearing a white uniform or anyone approaching a bedside? Is operant conditioning more descriptive of the etiological mechanism, as with the individual who regularly obtains a reward from others when exhibiting fear? Or perhaps a vicarious learning experience has occurred via the mass media, observation, or the modeling or others. Knowledge of the etiological mechanism involved offers clues to direct the nurse's intervention with the goal of reducing or extinguishing the fear response, as well as enhancing the client's coping strategies. Use of stimulus exposure to extinguish fear is commonly found in the preparation of the pre-operative clients, and with each exposure, the fear-eliciting properties of the stimulus should be further extinguished (Shipley 1977, p.87). Learning theory is also useful in the positive innoculation of individuals, such as children, for potentially fearful situations, such as hospital environments. Once fear is reduced to a manageable, restricted excitation, the client may be motivated to participate actively in ways to lower the risk of the threat and maximize his resiliency by means of physical exercises, nutritional supplementation, imagery and relaxation, learning of new skills, etc.

IMPLICATIONS

What are some possible explanations for diagnostic confusion between fear and anxiety? We do not know, and the only way to address the phenomenon, we believe, is for studies to be formulated to specifically examine the existence and origins of our findings. Our data suggest that many nurse participants, perhaps unintentionally, downplayed or ignored overt, verbal expressions of fear by clients and did not arrive at a diagnosis of fear. Our data did not provide us with any clues about factors commonly associated with this phenomenon.

It seems likely that more than one factor contributes to the type of diagnostic confusion described here. The literature clearly depicts different directions of thought about fear and anxiety, surely of some influence on the student of nursing. In addition, professional versus lay semantic and conceptual differences may be involved, for example, the familiar and popular usage of "I am anxious" meaning "I am afraid" or "I am impatient" or vice versa. Finally, it is also possible that fear involves a significant societal taboo, similar to those of death and sex, as well as an association as a "negative" emotion.

In conclusion, the findings reported here raise questions about the extent to which nurses validate with the client the data which lead to the nursing diagnoses: what is the level of congruence between the client's and the nurse's perception of the client's human response? Consideration of these findings also suggests that, if nurses are to be assisted to "better utilize knowledge" (Aspinall 1979, p. 185) and to minimize inaccuracies in diagnoses, it is important to delineate the meanings that diagnostic terms have for nurses. This requires repeated observations and testing in clinical practice.

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RÉSUMÉ

Diagnostic de l'infirmier — distinction entre la peur et l'anxiété

Compte tenu de l'importance croissante du diagnostic de l'infirmier dans les soins aux malades, la nécessité de poser un diagnostic précis comme base d'une intervention efficace de la part du personnel infirmier apparaît comme un défi de taille. Dans une phase d'une étude conçue pour découvrir la terminologie utilisée par les infirmiers pour décrire les réactions humaines qui les intéressent (diagnostics des infirmiers), 57 infirmiers posèrent 2 517 diagnostics à la suite de 393 rencontres infirmier-client. Sur ces diagnostics de l'infirmer, 131 faisaient état de peur et 98, d'anxiété ou d'angoisse. La revue et l'analyse de ces cas de peur et d'anxiété, les facteurs jugés contributifs, les données sur lesquelles s'appuyait le diagnostic et le niveau d'accord entre le réviseur et le répondant semblent traduire une certaine confusion au niveau de ces deux concepts chez les infirmiers participants. Ces observations sont exposées à la lumière de la littérature pertinente et soulèvent des questions concernant la démarche diagnostique des infirmiers; elles reflètent par ailleurs la nécessité de définir ces termes avec beaucoup plus de précision par le biais d'études cliniques.

FACILITATING THE INTEGRATION OF THEORY, PRACTICE AND RESEARCH IN NURSING EDUCATION: A LOOK AT ONE GRADUATE PROGRAM

ROSELLA CUNNINGHAM
Professor, Faculty of Nursing
University of Toronto

If the integration of nursing theory, practice and research is to be a reality, it is important that it be fostered in nursing education. This paper explores how the Graduate Department of Nursing, University of Toronto, which is committed to this integration, attempts to facilitate it in its Master's Program.

THE MASTER'S PROGRAM

The Master's Program in the Department of Nursing is built on the philosophy of the Faculty and specific beliefs regarding graduate education. The "Goals of Graduate Education" and "Expectations of the Graduate of the Master's Program" reflect the philosophy of the program, and indicate the anticipated integration of theory, practice and research. (See appended Figure 1). The program enables students to develop depth of knowledge and special expertise in an area of clinical practice and to contribute to the refinement of knowledge through research.

On application to the Graduate Department of Nursing, each candidate must declare the intended area of clinical specialization. The available areas of clinical specialization in nursing are medical-surgical, mental-health psychiatric, parent-child, gerontology and community health. On admission, programs of study are individually planned by the students and their advisers on the basis of the students' interests and in relation to meeting the goals of the Program and the requirements for the degree. Each student is required to complete an Advanced Nursing Course (clinical and theory) in the selected area of clinical specialization, Research Methodology in Nursing, a minimum of two full graduate courses (selected by the student) and a thesis on her research in a nursing problem.

Each student has an adviser (usually a staff member who teaches in the clinical specialty area) who assists the student in choosing electives and in planning clinical experiences which support the student's area of interest. Appointments with the adviser are made on request as well as being scheduled two or three times monthly. These individual conferences allow for suggestions which may broaden the student's approach, for example calling attention to bibliographies which may

foster learning in research and the understanding of theories underlying the student's specific clinical interest, or suggesting consideration of a variety of innovative nursing interventions. Through these discussions, students are helped in developing researchable questions as well as in gaining new perspectives.

The Advanced Nursing Courses

The advanced nursing course is selected according to the student's area of clinical specialization. The purposes and objectives of each of the advanced nursing courses indicate the potential for the integration of theory, research and practice. For example, one of the objectives of the Advanced Community Health Nursing Courses states: "The student is expected to analyze nursing care given to families based on nursing process and related to theories and research."

The advanced nursing courses have two main components, core and clinical. "Core" is the name given in this graduate program to the conceptual framework developed by the faculty (Arpin and Parker, 1976). It is built around three elements: the focus — Man; the goal — Health; and the process — Nursing Acts. Key concepts describing the characteristics of each of the elements have been developed. The key concepts which characterize Nursing Acts are caring and facilitating, based on the belief that these behaviours influence Man, the recipient of care, toward the goal of Health.

The core classes provide a forum for examining concepts and theories in terms of their potential for shedding light on clinical practice. Core assignments are designed to provide students with opportunities to analyze nursing and other theories for their internal and external validity.

The clinical component in the advanced nursing courses is planned to include concurrent clinical practice one day per week during the academic year and one month at the close of the spring term. This clinical practice is arranged in the area of the student's interest and provides opportunities to test concepts, theories, and research while analyzing methods to provide and improve the quality of care. Seminars in the clinical specialty areas are aids to increase knowledge and integrate both components.

Electives

Students may choose their elective course from any graduate department in the University, with the approval of the professor teaching the course. They are encouraged by faculty advisers to choose electives to support the clinical area and the problem selected

for investigation. In a review of records of students enrolled in the Graduate Program, Department of Nursing, 1970-77, it was noted that the 61 students who had completed all degree requirements had enrolled in 108 courses in 12 graduate departments other than Nursing (Cunningham, 1979, p. 9). Departments where students frequently selected electives included Educational Theory, Community Health, Physiology, Sociology, Social Work and Pharmacology.

Research Methodology in Nursing

This required course assists the student in gaining knowledge of the research process, as well as in defining and planning the investigation of the selected nursing problem. All parts of the research process — the description of the problem, the review of the literature, the conceptual framework, the design, data collection and analysis, as well as writing the report — contribute to the students' integration of theory, research and practice.

The Thesis

Perhaps the investigation of a nursing problem and writing of the report provide the greatest stimulation to the student to integrate theory, research and practice. The "Guidelines for Master's Research and Theses", states that the purpose of this research is to provide a learning experience in which the student uses clinical experience and theoretical knowledge in the investigation of a nursing problem. The intent is to stimulate students to gain experience in conducting and reporting research that will extend nursing knowledge and lead to the improvement of nursing care. The research requirement is also directed toward increasing the student's ability to evaluate research done by others.

Each student selects a research committee of a minimum of three members who assist her in the development of her proposal and protocol, as well as during the entire project. The student is also required to defend her research at a meeting with her committee and an appointed additional professor. The theses guidelines describe the purpose of this defense as follows: "The oral defense provides an opportunity for the committee members to consider the extent to which the candidate has met the expectations of the program as evidenced in the thesis. In her presentation, the candidate indicates the depth of knowledge she has attained in the field under study, her competency and understanding of the research process, the nursing implications of the findings of her study, and her scholarly attributes of intellectual honesty, excitement and curiosity."

It is anticipated that the student's research assists her to realize the importance of research to both theory and practice. As Stevens (1979, p. 195) says: "Theory, then, invents or discovers explanations of a

phenomenon: research seeks to warrant these explanations. Theory provides the image (or world) to which research applies: research confirms that the world operates (or fails to operate) as the theory predicts." Since the phenomenon being investigated or explained is a nursing problem (or concepts or principles related to this nursing problem) the relation of nursing theory, research and practice is clear.

STUDENT A'S PROGRAM OF STUDY

In exploring how students' programs are planned and carried out to facilitate the integration of theory, research, and practice, one student (referred to as Student A) is used as an example. Student A's experience and interest led her to select Community Health Nursing as her area of clinical specialization. Her specific interest was the health care of Canadian Indians in the urban setting. The faculty adviser sought ways to assist her in gaining knowledge in this area in the Advanced Community Health Nursing Course, in the selection of elective course and in planning for her thesis.

Advanced Community Health Nursing Course

Student A attended core classes with the students enrolled in the Master's Program. Her clinical practice provided opportunities for her to apply and test core concepts, theories and research findings while analyzing methods to provide high quality nursing care. Evidence of the integration of theory, research and practice was apparent in the course assignments. Course assignments included seminar presentations as well as written papers: two major papers and six brief papers.

Arrangements were made for Student A to provide community health nursing service to an Indian family comprising a pregnant woman, her common law husband and two-year-old child, who had moved from an Indian Reserve to the city several times. The nurse in the Official Health Agency was concerned about the possibility of both child abuse and alcohol abuse. During the month of May, the student worked at the Alcoholic Drug Research Centre seeking to increase her family therapy skills as well as her knowledge about individuals with the problems of alcohol abuse. When possible, she selected Indian families to work with.

Seminar presentations

To facilitate the integration of theory and practice, each student is required to lead a seminar relating one of the key factors of core to practice. The core seminars led student A to explore man's interaction with his environment, and to relate this interaction to health. Student A very ably led a seminar relating the concept of health and its sub-

concepts to Community Health Nursing Practice, using examples from the care of the Indian family. In this seminar, health and belief models and a variety of definitions of health (related to attitudes, beliefs and culture) were analyzed; discussion was based on the review of current research and theories of change, teaching, learning and adaptation as well as the theoritical framework of the Faculty of Nursing. At the conclusion of this seminar, the community health students identified additional subconcepts and suggestions were made to consider these additions as a development of the faculty conceptual framework.

Each student is also required to present a clinical seminar. The directives states, "This seminar should be based on a framework of concepts related to clinical practice and include advanced clinical knowledge. The theoretical framework, clinical practice and research should be integrated in each seminar." The seminars given by faculty are based on the same criteria and it is hoped they set a model for students to follow. While no grade is given for the seminars, each student completes an evaluation form, which includes the plan, content, and conduct of the seminar as well as how theory, research and practice were integrated.

The Indian family cared for by Student A was frequently upset by problems related to urbanization and alcoholism. Her clinical seminar based on this situation was entitled: "Stress — A concept relevant to nursing practice and research." The student introduced the seminar by initiating a review and discussion of stress theories; other theories ("system" and "change") as well as current research were also included. The group explored approaches to the stressful situations in the family. It was noted that a family was considered an open system (Fawcett, 1975), capable of change. The seminar participants analyzed the role of the nurse in the therapeutic management of stress, relating the approach to change theories as well as noting the reciprocal interaction of man and his environment. Assessments of the family and plans for intervention were based on models presented by Tapia (1972) and Meister (1977) as well as the developmental approach described by Duval (1971).

Examples of two clinical seminars led by other students in the same group illustrate how these seminars, while specifically related to the presenting student's clinical experience, can be generalized to assist with the practice of other students. One was entitled, "A Study of the Process of Adaptation." The seminar plan directed the students to examine Roy's Model of Adaptation (1970) in the light of man as an open system. This model and the seminar discussions were related to the clinical practice of the presenting student but were very applicable

to Student A's practice since the Indian family was having difficulty adapting to urban life. The clinical seminar presented by another student entitled "Compliance — Is it a goal of Nursing?" initiated much discussion related to human rights and factors affecting "compliance", especially with minority groups and those with cultural and ethical differences. The discussion was very pertinent to Student A's family. Theories of teaching-learning as well as ethical issues and related clinical research were reviewed. Knowledge from the various electives taken by students is shared and contributes to the depth of discussions in all seminars. Students learn to examine the possibilities within the ideas expressed, and to respond rather than react to critical questioning.

In planning an appropriate sequence of seminars, the students and the faculty member responsible for the course discuss the linkage of concepts to identify suitable sequence or continuity to enhance learning.

Additionally students in the Advanced Community Health Nursing Course meet approximately twice a month. These group discussions are less formal than seminars but a focus or topic is defined, as this appears to increase the depth and value of the discussions related to clinical practice.

Written assignments

The major papers provide opportunities for comprehensive original discussion of topics related to the clinical work. The course outline states that these papers provide a vehicle to analyze the relationship of research, theory and practice.

The major paper submitted by Student A at the end of the first term was entitled "A Study of the Concept 'Stress'." In it the student reviewed the theories related to both "stress" and "adaptation". She described the implications of these theories for nursing practice, and then specifically for her practice in the care of the Indian family. This discussion led to identification of the implications for research. The student viewed stress and adaptation as intertwined, reporting that, "both had physiological and psychological responses or changes in the individual." She stated, "An examination of their cyclic relationship provides clues for nursing diagnoses and intervention". Student A also used Chrisman and Riehl's Stress Reaction Index (1974), finding it useful in assessing the effect of stress on the individual. The student applied Neuman's Health Care Systems Model (1972), quoting Neuman, who says it "provides a frame of reference for the practice of nursing based on processes related to universal stressors, and reconstruction factors following a reaction" (p. 265). This comprehensive paper, clearly integrating theory, research and practice, was basic to the development of Student A's thesis later in the two-year program.

Student A's second major paper reviewed a variety of approaches to the treatment of alcoholism by other disciplines. Then, based on the conceptual framework developed by the Faculty, the student further explored her interest in man's reciprocal interaction with his environment. The related nursing acts were studied in greater depth with the assistance of Neuman's model (1972); this model helped the student to identify stressors and possible lines of resistance and defense. The student sought ways to decrease the former and increase the latter.

The guidelines for writing the "six brief papers" state: "Each student will describe planned nursing intervention based on a critical analysis of an event or issue in clinical work that stimulated learning." Students frequently report the testing of concepts, theories, and research in their concurrent clinical work. Two of the papers submitted by Student A were entitled "An Analysis of Culture in Determining Patterns of Family Living", and "Analysis of the Family Coping Skills". The latter paper analyzed the value of the tool, "Family Coping Estimate" (Freeman, 1970, p. 60). Both these papers contributed to the development of a nursing care plan for the Indian family and also provided some indication of the value of nursing intervention. The papers stimulated the student to write another small paper entitled "Family Therapy by Public Health Nurses", where she analyzed various approaches and interventions with the family. It was felt these papers helped the student plan nursing care based on theory and research findings, and contributed to formalizing the research questions basic to her thesis.

Electives

Student A selected a course from Anthropology, "Canadian Indian and Inuit Change"; and two half courses, one from Educational Theory, "Small Group Experience and Theory", and one half course from Community Health, "Health Attitudes and Behaviour". These courses all related to the student's clinical area of interest and her concern for improving the health care of Canadian native people. This selection of courses outside the Department of Nursing seemed wise, for as Hoskins (1979, p. 180) states, "Knowledge of the behavioral and biological sciences is often needed to supplement nursing knowledge in the theory building process. Nurse researchers need knowledge both from within and outside the discipline of nursing to develop nursing theory. Findings from other disciplines may be considered relevant to a particular aspect of nursing practice which requires further clarification. The means of clarification is the research process generating, sorting, testing and relating theory and fact."

The course taken in the Anthropology Department assisted the student in exploring cultural aspects and their implications for nursing care and research. The other two elective courses, "Small Group Experience and Theory", and, "Health Attitudes and Behavior" helped the student analyze her nursing interventions with individuals and groups of Indians.

Research Methodology in Nursing

Student A examined many research reports related to Canadian Indians while she identified the problem that she wished to investigate. The seven course assignments on the various phases of the research process (e.g., the problem, sample selection, data analysis etc.) applied to the student's selected area of study led her through the research process, helping her to limit her problem, define the sample selection criteria, develop the instrument, design the investigation and plan the report.

This course, with its emphasis on clinical research, assists the student in relating research and improved quality of nursing care. As Treece and Treece (1973, p. 17) state, "New methods and techniques in patient care must be developed as nursing responsibilities change and expand. Nursing research must provide the foundation for these changes."

Thesis

Student A's thesis was entitled "Acculturation Stress and Alcohol Usage among Canadian Indians in Toronto." The conceptual model was adapted from the Neuman Health Care Systems Model (1972). Members of the student's thesis committee include professors teaching research, community health nursing and anthropology. The student concluded her thesis with the statement, "The current investigation can be considered as a pilot study which has not only taken the initial step to identify specific acculturation stressors among Canadian Indians in Toronto, and their use of alcohol as one reaction to stress, but has also suggested directions for nursing practice and further research."

The thesis and oral were based on the content, assignments, elective and research courses in Student A's program, with evidence to prove that the objectives of the program had been achieved. The responses to questions provided the student with an opportunity to describe the nursing knowledge gained from the integration of theory, research and practice related to the health care of Indian people as well as the synthesis of her total program.

CONCLUSION

Examples of student programs might have been selected in any of the clinical specialty areas. Student A's program was chosen as it was familiar to the author. It is anticipated that the interested reader will be able to visualize similar programs in other nursing specialty areas; and may suggest additional innovative ways to facilitate the integration of theory, research and practice.

For faculty advisers, it is interesting and stimulating to note how students' care-giving undergoes changes in the course of the program. Toward the end of the program, students consciously base their care-plan on their knowledge of theories and research; earlier, care-giving is frequently built on basic knowledge and experience; although recognition of the underlying theories and research may have been evident in their post-care evaluations.

The integration of theory, research and practice can be facilitated in nursing education by the philosophy and design of programs, and fostered by faculty who are committed to such integration. In particular, student advisers can assist each student in planning and completing a program of study which continuously encourages the interaction of these three integral components of nursing. The integration of theory, research and practice can assure the evolution of nursing science as well as the improvement of nursing care.

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Beliefs Regarding Graduate Education

1. Graduate education embodies specialization and implicit, in such specialization, is depth of knowledge in a selected area of nursing and creative professional activity in the application of this knowledge.
2. Graduate education involves the acquisition and analysis of principles and theories that contribute to an understanding of nursing.
3. Graduate education attempts to foster intellectual excitement, curiosity and honesty which leads to scientific inquiry and underlies professional responsibility.

Goals of Graduate Education

1. The preservation, differentiation, refinement and extension (discovery) of knowledge of nursing:
   a) knowledge of the forces that enhance or undermine man and his health.
   b) knowledge of nursing's actual and potential contribution to the protection and enhancement of life and well-being.
2. The use of nursing knowledge as a positive force in the improvement of the human condition.

Expectations of the Graduate of the Master's Program

1. Has an educational base with depth of knowledge in a selected area of nursing which enables her to assume leadership in a variety of roles.
2. Has special expertise in the practice of a selected area of nursing.
3. Contributes to the refinement of nursing knowledge through systematic research and inquiry.
4. Contributes to innovations in health care by discriminative use of research findings.
5. Facilitates innovative approaches to healt care by collaboration with other disciplines.
6. Influences the future direction of nursing by assuming leadership in the profession.

Figure 1:

Beliefs Regarding Graduate Education, Goals of Graduate Education, Expectations of the Graduate of the Master's Program, 1979.

RÉSUMÉ

Faciliter l'intégration de la théorie, de la pratique et de la recherche dans l'enseignement des sciences infirmières: examen d'un programme de 2e cycle

Dans le présent article, les auteurs analysent comment le département d'études supérieures en sciences infirmières de l'université de Toronto tente de favoriser l'intégration de la théorie, de la pratique et de la recherche en sciences infirmières chez les étudiants de 2e cycle. Les grandes lignes du programme, de même que le cours d'un étudiant illustrent comment on arrive à faciliter cette intégration.

Les auteurs révèlent que l'intégration de la théorie, de la recherche et de la pratique dans l'enseignement des sciences infirmières peut être facilitée par l'orientation et la conception des programmes et favorisée par des professeurs qui croient à sa nécessité. En particulier, chaque conseiller pédagogique, puisant dans ses vastes connaissances spécialisées et dans les ressources de l'université est en mesure de guider l'étudiant dans l'élaboration et la réalisation d'un programme qui favorise continuellement l'interaction de ces trois aspects des études infirmières. L'intégration de la théorie, de la recherche et de la pratique peut assurer l'évolution de la science infirmière ainsi que l'amélioration des soins infirmiers.

SCHOLARLY PURSUIT OF EXCELLENCE: DOCTORAL EDUCATION IN NURSING

FLORIS E. KING*
Professor, School of Nursing
University of Minnesota

Doctoral education is the scholarly pursuit of excellence in a defined discipline. Doctoral education in nursing provides an opportunity for nurses to study, test and evolve theories, to conduct research, and then to translate theoretical concepts and research findings into care of clients and patients.

To discuss this scholarly pursuit of excellence, the following areas will be reviewed: the growth of doctoral programs in nursing, development of nursing science, and finally, the continued growth of scholarly excellence in nursing.

Growth of Doctoral Education Programs in Nursing

Doctoral education in nursing has evolved with the development of the discipline. Nursing began as a practice-oriented discipline consisting of technically trained apprentices. It slowly eased into academia and professional education by incorporating relevant knowledge from the arts and sciences, by conducting research on practice, and by developing theory which could be translated into practice. Such progress was not without resistance:

> The education of nurses in an academic setting, however, was not encouraged due to the fear by some health-related groups that nurses would become too knowledgeable and hospitals might suffer an economic loss in its dependable source of workers needed to staff the agency.[1]

As early as 1923, the Goldmark Report advocated moving the control of nursing education from hospitals to institutions of higher learning.[2] That report and many others that followed had little impact. It was not until the end of World War II when large numbers of nurses eligible for G.I. benefits enrolled in colleges and universities, that the growth of schools of nursing and institutions of higher education began to move forward. Consequently, this expansion of university based undergraduate programs for nurses stimulated a greater need for graduate level studies designed to prepare nurses for teaching or administrative roles. As a result, master's level programs in nursing were established or expanded in every region of the United States and Canada during the decade of the 1950's.

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* Dr. Floris King organized the first National Conference on Research in Nursing Practice held in Ottawa in February, 1981. She was at that time on faculty at the University of British Columbia.

During this period, nurses began to enroll in a wide variety of doctoral programs — in education, natural and social sciences. The Nurse Scientist Training Act supported doctoral programs offering the doctorate of philosophy in the health, the natural, and the behavioral sciences related to nursing. Matarazzo and Abdellah stated this development very succinctly:

> First generation nurse scientists sought their doctoral training predominately in education and the behavioral and social sciences. A few pursued the biological sciences. More recently, doctoral training in the clinical specialities has produced clinical nurse specialists. These kinds and combinations of training have produced hybrid teachers (second generations). Such individuals are nurses, but they are also scientists and clinical specialists. From these programs will come the third generation, teachers of Ph.D. in nursing.[3]

Cleland also noted the importance of these initial academic steps:

> Women are considerably more welcome in academia today... In fact, with the current uneasiness about too many people with doctorates, the qualified nurse applicant is especially attractive, because job placement in nursing is not a problem. In addition, nurses have proven themselves as able students who also possess easy access to the health care system for research purposes.[4]

Readiness for doctoral educational growth is reflected in many ways. Job requirements are demanding that nurses have doctoral preparation in the roles of educator, administrator, research or clinician.[5] Nurse scholars, in whatever role, seek to study behavioral and physiological phenomena that would add to or validate previous knowledge about human phenomena, and thereby contribute to theory development relevant to nursing practice.

Conferences and seminars have been conducted to further support doctoral education growth in Canada and the United States. For example, Canada's first National Conference on Research in Nursing Practice was held in Ottawa, February 16-18, 1971 with over 300 present. This unique conference focused on research in nursing practice, essential to doctoral education.[6] The Kellogg National Seminar on Doctoral Preparation for Canadian Nurses, held in 1978, also provided much impetus for the consideration of developing doctoral education in Canada for nurses.[7]

The type of doctoral preparation that is considered, is significant in directing the evolution of scientific systems. Nursing science needs persons with doctoral education in nursing; there is also a need for doctorally prepared persons in all nursing-related disciplines. However, the critical need at the doctoral level is not the area of preparation but the commitment to develop science in nursing.

Development of Nursing Science

The ultimate goal of nursing's scholarly pursuit of excellence is the development of nursing science. There are several stages to this scientific development.

Science is an attempt to organize experience. Frank states:

> science advances through the formulation of a body of postulates and assumptions, a conceptual framework... (which) provides a coherent, internally unified way of thinking about the events and processes in each discipline for which it is relevant. This approach fosters the conception of science as a systematic and never ending endeavor...[8]

Frank's conceptualization suggests that science is a *product* that advances, as well as the *process* by which it evolves.

Kuhn, in *The Structure of Scientic Revolutions*[9] states that the early stage of scientific development is the pre-paradigm stage. This is characterized by divergent schools of thought which, although addressing the same range of phenomena, usually describe and interpret these phenomena in different ways. Through accumulation of knowledge, testing and retesting, a metaparadigm evolves. This is considered the broadest consensus within a discipline. In general, the metaparadigm or prevailing paradigm: 1) is accepted by most members of the discipline, 2) serves as a way of organizing perceptions, 3) defines what entities are of interest, 4) tells the scientists where to find these entities, 5) tells them what to expect, and 6) tells them how to study them.

Although the period of theory development in a discipline is characterized by ambiguity and uncertainty, nurse scientists can help build the knowledge base that will help formulate an acceptable paradigm. They can do this by being well informed in a substantive area and participating actively in both theory construction and research.[10]

To select only one paradigm for the discipline of nursing is questionable. This may be restrictive. The body of knowledge of nursing science must ultimately withstand the repeated investigation of theoretically based problems. In this way knowledge is redefined as research results accumulate. Several paradigms will evolve.

Theoretical formulations are already evolving within the discipline. A sample of related discipline theories used in nursing research today include: the disengagement theory, cognitive dissonance theory, theory of status consistency, systems theory, communication theory, self-actualization theory, and grief and loss theory. Some select nursing theories include the following:

- Roy (1976): Man, as a holistic being in constant interaction with the environment, adapts through mechanisms that manifest themselves through adaptive modes: physiological, self-concept, role function, and interdependence.
- Orem (1978, 1980): Individuals have self-care that facilitates self-care health practices. If this agency is insufficient to meet self-care demands, then self-care limitations occur that legitimate a relationship with a nurse.
- King (1971, 1978): Man operates in social systems through communication in terms of perceptions that affect his health.
- Paterson and Zderad (1976): Nursing is an intersubjective transaction that occurs in "the between" of the nurse-nursed and through which nurturance occurs.
- Johnson (1974): Man is a behavioral system composed of seven subsystems. If the behavioral system is functioning effectively (ineffectively) in meeting subsystem goals, then the system is in balance (imbalance).
- Rogers (1970, 1978): The life processes are unidirectional along the space-time continuum where continuous interactions between man and environment are characterized by wave patterns.

There is an interrelatedness of theory and experience. The discipline includes nurses who are clearly "doers" or practitioners. The discipline must also include scientists dedicated to generating knowledge. Nursing practice and nursing science are not antithetical — each depends on the other. Doctoral education provides the bridge.

The Continued Growth of Excellence in Nursing

The continued growth of excellence evolves from the practice of nursing, the research which is conducted on nursing phenomena and their interrelationships, and the rigorous testing for developing theories in nursing. The fruits of the refinement of nursing science is not only reflected in — but actually enjoyed and further tested in nursing practice. This organization of postulates and assumptions in a systematic structure is continuously tested as it relates to the real world of practice.

Doctoral education provides the level of scholarly endeavor toward this pursuit of excellence. As Ralph Waldo Emerson stated: "The office of the scholar is to cheer, and to guide men by showing them facts amidst appearances."[11]

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RÉSUMÉ

La recherche de l'excellence en milieu universitaire: programme de doctorat en sciences infirmières

Les études qui mènent au doctorat traduisent la recherche de l'excellence en milieu universitaire dans un domaine donné. Les sciences infirmières ont connu, au cours des années, une évolution en ce sens. D'abord axée sur la pratique, cette discipline s'est progressivement engagée sur la voie de la recherche, de la théorie et de l'application des résultats à l'administration des soins infirmiers aux clients, aux malades et à leurs familles.

A la fin de la Seconde Guerre mondiale les études de 1er, 2e et 3e cycles connurent un essor qui est à l'origine de la présence d'universités dans toutes les régions des Etats-Unis et du Canada. C'est

à cette époque que la Loi sur la formation scientifique des infirmiers (Nurse Scientist Training Act) aux Etats-Unis appuya les programmes de 3e cycle menant à un doctorat (Phd) en sciences de la santé, sciences naturelles et en sciences du comportement pertinentes aux sciences infirmières. Des conférences et des séminaires stimulèrent également le développement des études de 3e cycle en sciences infirmières. Au Canada, la première conférence nationale sur la recherche en soins infirmiers s'est tenue à Ottawa en 1971 et le Séminaire national Kellogg sur les études de 3e cycle pour les infirmiers canadiens en 1978. Ces instances étudièrent l'objectif ultime de la recherche de l'excellence chez les infirmiers: le développement des sciences infirmières. Les connaissances se développent grâce aux échanges au sein du milieu infirmier et les perfectionnements théoriques sont atteints dans le cadre d'une structure axée sur la recherche. Les rapports étroits entre ces deux aspects sont les fondements de la formation de 3e cycle qui inscrit la poursuite de l'excellence dans un cadre universitaire.

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