



NURSING PAPERS *PERSPECTIVES EN NURSING*

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Among Undergraduate University Students

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Competency in question

Reporting on Qualitative and Quantitative Research:
Evolving issues and criteria

Responses of Families to the Treatment Setting

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EDITORIAL REPRESENTATIVES

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EDITORIAL

One of the major problems encountered by reviewers is that some interesting research is so poorly presented that it either has to be rejected or virtually rewritten if it is to be considered acceptable for publication. The first problem is the selection of content, while the second is the need for precision in style, and in particular, in the selection of terms and the presentation of data.

Obviously, researchers are anxious to share the findings of their research but it is critical to include enough data on the tools and the method used that the analysis and findings make sense to the reader. Frequently, when a description of the tool is omitted, the reader cannot understand the data presentation and findings. When tools are presented the researcher will frequently state "Reliability and validity were established." This is insufficient information for the reader who needs to know the types of reliability and validity that have been established, including either the coefficient or where it can be found. The researcher also needs to indicate whether the reliability and validity have been established specifically for this study, or whether the reliability and validity from previous studies has been accepted.

One of the most common mistakes in writing is the use of anthropomorphism. This is the attribution of human characteristics to inanimate objects. Even experienced scholars will start an abstract, or an article, by saying: "This paper reports", or, "This article demonstrates", when it is, of course, the writer or the researcher who reports or demonstrates the facts that follow. Similarly, the researcher will state, "This study therefore proves that," when either the sample is too small or the limitations too great for the researcher to have "proven" anything. In any case, regardless of the level of scientific rigor and the type of design, at this stage of nursing research, it will be rare that a writer can conclude that a study does more than "provide direction".

Another area of imprecision arises when the author states, "By looking at Table 1 one can see that the clients valued personalization of care." Table 1 may contain a great deal of information. The reader has to examine the table and work out the possible reasons why the writer made the statement. The reader's assumption may not, in fact, be correct, but as the author has not provided the relevant information, the reader will remain unsure. Specific reference to the relevant items in the table would prevent such ambiguity from occurring.

It is relatively easy to compile a list of common terms and phrases that graduate students and researchers use incorrectly in writing a report. For example, "when looking at the data", is frequently used instead of the more scientific term, "when examining the data". "The author suggests", is more appropriate than "the author feels". Another common error is to attribute the

findings to the study: "the research found", instead of, "it was found that". A greatly overused word is the term "shows" when portrays, illustrates, or demonstrates would be a better choice. Another common problem in North America is the incorrect use of the term "methodology" when the term "methods" should have been used. Methodology means the science of method, whereas method is the process of completing the research. A description of the development of the tool and the way in which it is administered is the process of doing the research, and is therefore the method and not the methodology.

Articles containing relevant content may be rejected if the style and mode of presentation is inappropriate. Always find a colleague to read and critique your article. If you know you have difficulty writing, obtain the services of an editor, but, be sure it is someone knowledgeable about research writing.

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ÉDITORIAL

L'un des gros problèmes auxquels se heurtent les critiques d'ouvrages tient au fait que certains projets de recherche fort intéressants sont si mal présentés qu'ils doivent être soit purement et simplement rejetés, soit pratiquement entièrement réécrits avant de pouvoir être publiés. Le premier problème tient au choix du fond tandis que le deuxième a trait au besoin de précision dans la forme, et en particulier, dans le choix des termes et la présentation des données.

Manifestement, les chercheurs tiennent beaucoup à partager les résultats de leurs recherches, or il est essentiel d'inclure suffisamment de données sur les instruments et la méthode utilisés pour que l'analyse et les conclusions puissent être comprises du lecteur. Souvent, lorsque les instruments ne sont pas décrits, le lecteur ne peut comprendre la présentation des données et des conclusions. Lorsque l'auteur présente les instruments de sa recherche, il précise fréquemment que "la fiabilité et la validité de ces instruments ont été établies." Cela ne suffit pas au lecteur qui a besoin de connaître le type de fiabilité et de validité établi, notamment le coefficient ou l'endroit où on peut le trouver. Le chercheur doit également indiquer si la fiabilité et la validité ont été établies spécifiquement pour son étude, ou si c'est la fiabilité et la validité d'études antérieures qui ont été acceptées.

L'une des erreurs les plus couramment commises dans la rédaction est le recours à l'anthropomorphisme. Il s'agit de la tendance à attribuer aux êtres et aux choses des réactions humaines. Même les auteurs chevronnés commencent souvent un résumé ou un article par les expressions suivantes: "Cet article rend compte", ou "Cet article prouve", alors qu'en réalité, c'est l'auteur ou le chercheur qui rend compte ou qui démontre les faits qui suivent. De la même façon, le chercheur dira souvent "Cette étude prouve donc que", alors que l'échantillon est trop réduit ou que ses limites sont trop vastes pour que le chercheur puisse avoir "prouvé" quoi que ce soit. De toute façon, quel que soit le niveau de rigueur scientifique et le type de conception à ce stade de la recherche infirmière, il est rare qu'un auteur puisse conclure qu'une étude fait davantage que "fournir une certaine orientation."

On se heurte à un autre type d'imprécision lorsqu'un auteur déclare "qu'en examinant le Tableau 1, on constate que les clients attachent beaucoup de valeur à la personnalisation des soins." Il se peut fort bien que le Tableau 1 contienne beaucoup de données. Or le lecteur doit examiner le tableau et comprendre les raisons qui ont poussé l'auteur à formuler cette phrase. La conjecture du lecteur peut fort bien s'avérer inexacte, mais comme l'auteur n'a pas fourni les renseignements qu'il fallait, le lecteur ne peut en être sûr. Un renvoi spécifique aux rubriques pertinentes du tableau empêche ce genre d'ambiguïté.

Il est relativement simple de compiler une liste des termes et des phrases courantes que les candidats de maîtrise et de doctorat et les chercheurs emploient mal lorsqu'ils rédigent un rapport. Par exemple, "si l'on regarde les données", est couramment employé au lieu de l'expression plus scientifique, "l'on examine les données." "L'auteur suggère" convient mieux que "l'auteur estime." Une autre erreur courante consiste à attribuer les conclusions à l'étude elle-même: "cette étude a établi que" au lieu de "nous avons constaté que." On se sert beaucoup trop souvent de verbe "montrer" alors que les verbes illustrer ou démontrer conviennent généralement beaucoup mieux. Un autre problème fréquent en Amérique du Nord est l'emploi erroné du terme "méthodologie", alors que l'on devrait employer le terme "méthodes." La méthodologie est en effet l'étude des méthodes scientifiques, tandis qu'une méthode est l'ensemble des démarches que l'on suit dans le cours de ses recherches. Une description de l'élaboration de l'instrument et de la façon dont il est administré indique la démarche suivie et il s'agit donc d'une méthode et non pas d'une méthodologie.

Des articles dont le fond n'est pas dépourvu d'intérêt peuvent être refusés si le style et le mode de présentation ne conviennent pas. Il est toujours souhaitable de faire lire un article à un collègue pour qu'il en fasse la critique. Si vous savez que vous avez du mal à écrire, faites appel aux services d'un rédacteur, mais assurez-vous qu'il sache écrire des rapports de recherche.

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WE CAN FASHION THE FUTURE, BUT WHAT FASHION WILL WE CHOOSE?

Helen Glass

A response to "Fashioning the Future"* by Verna Splane

This response is to the article "Fashioning the Future" by Verna Splane in the Fall 1984 issue of *Nursing Papers*.* I have been asked to comment briefly on the article, and nursing's involvement in events sequential to the Canada Health Act (CHA). In the article Splane has brilliantly portrayed the development of the health care system in a social, political, and economic framework, identifying nursing's role in shaping the health care system up to the CHA. She has established that nursing did not have a key role. For the most part nurses provided "input" into events as they happened from 1934 to 1984. She indicates that the role of the nursing profession in this period has yet to be described, but it did progress from a representational reactive role to a proactive one, seeking to ensure influence on policy decisions on national health and advancing from a limited nursing viewpoint to a health system perspective (Splane, 1984).

The CHA activity, led by the Canadian Nurses Association (CNA) and entered into enthusiastically by provincial associations and their members, established nursing's potential for proaction. To what extent has that potential been exploited in the period following the CHA? How has nursing acted to inhibit further erosion of the health care system? How has it responded to the issues in the wake of the CHA, especially in regard to the recommendation of the Honourable Madame Bégin, the then Minister of Health and Welfare, Canada, "To use the nurse as the point of first contact and the doctor as the final point of referral" (1982, p.3-4).

Nursing has always strongly supported the Health Charter for Canadians -- universality, accessibility, comprehensiveness, public administration, and portability principles. In an effort to foster Bégin's alternative direction, CNA has continued to press the federal government through dialogue with Jake Epp, the current Minister of Health and Welfare, Canada. His responses to an interview with Allen (1985) indicate that while supporting the use of nurses as first contacts this is within a team concept, and that

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* *Nursing Papers*, 1984, 16(3), 12.

while the "legislative signal" in the CHA has been sent, the federal government "does not deliver the health care system and cannot act independently" (p.39). It will be up to nurses to convince the provinces that the position that has been taken is valid. He further reiterated the federal government's interest in models of community health. The CNA recently commissioned and has released for study a background paper on "The Future of Health Care in Canada and Nursing's Role Within It" (Glass, 1984). A Think Tank is scheduled for September, 1985, when models of delivery of nursing services will be discussed along with the numerous issues, constraints, and approaches to be taken in achieving the ideal of a strong preventive and health promotive community health care system.

There is evidence also, that the federal Department of Health and Welfare is putting out feelers about remunerating physicians for preventive and health promotive services. This would serve to entrench the medical remunerative system that exists even further, and does not acknowledge the role of nurses in prevention and promotion of health. Responses from physicians are not clear, but some maintain that they are already doing health promotion and prevention (CBC, Winnipeg, 1985). Nursing has not, to my knowledge, responded to that feeler. Clearly, there is a need for action. But what has been happening in the provinces, where action has to be initiated?

Using two provinces as examples, because of the short nature of this response, it is clear that nurses in the provinces are thinking proactively. Pat Kirby, newly elected President of the Registered Nurses Association of Ontario (RNAO), in her presidential address, noted the need to review the Established Programs Financing Act, "Because the Act provides the dollars, our involvement is even more vital than it was for the Canada Health Act" (Kirby, 1985, p.4). She listed a number of suggestions that nurses "want" the government of Ontario to do, among them, "We want the new Premier to make a serious commitment to universality and accessibility of health care in Ontario" (Pipher, 1985, p.9). Referring to the activities in which Ontario nurses are involved, she pointed out that the need for "continuing" political activity was unanimously reaffirmed at the convention (p.4). Evidence of their intent is operationalized in five political Bulletins and in other Memos. One result of this was involvement in depth in the recent provincial election (D. Dick personal communication, August 18, 1985). Some of the other activities are occurring through the new Social Policy committee which has recently been established. Broad aspects of health, such as the plight of elderly citizens, child poverty, wife assault, and increasing collaboration with others are being looked at as means of addressing specific health and social issues. The concentration on identifying community nursing needs is a healthy direction, in keeping with the community health care system, to which both the federal government and nursing are committed. The strategies and actions the RNAO uses to make changes bear watching.

The Saskatchewan Registered Nurses Association, (SRNA) almost immediately after the CHA, documented and presented to the government the functions and activities of nurses, and at its 68th Annual Meeting in Regina, passed resolutions which included: "working towards obtaining increased funding to nursing homes to provide day care, night care and safe enclosed wandering areas, approaching the government to provide funding to ambulance owners to encourage the hiring of registered nurses as ambulance crews" (News, 1985, p.14). In discussing this with Jane Knox, Executive Director of SRNA, she described a meeting that they had initiated with a variety of professional groups interested in the "health care practitioner" clauses in the CHA. It was a productive meeting and will be followed up. Further, SRNA has adopted a position paper on Primary Health Care and Nursing Services (J.Knox, personal communication, August 18, 1985). This too, supports the stance on community health services as the mode of delivery of the future. A proactive direction is evident in the declared intentions and actions of these two provinces and there is no doubt such actions are occurring in other provinces as well. Time and space do not permit their being documented here. However, the strategies nurses choose to obtain results they want will speak to how effective such intentions will be.

There are still areas where proaction is almost unknown. Splane tells us in her article that it is not only the two senior levels of government that must be approached, but other professional groups and users of health care as well, if the use of the skills and abilities of nurses is to be understood. Steps taken by CNA to come to grips with the interprofessional clinical concerns have been initiated with the Canadian Medical Association (CMA). Less headway has been made in resolving what Splane calls the "opposing views of health care" between the two professional groups. A strong reminder of that difference is the current legal suit that physicians have pending with the government in regard to extra billings by doctors. Nurses' opinions on this issue need to be heard.

Overtures have been made by the Canadian Public Health Association (CPHA), for CNA to assist in a study designed to look at what is being done in hospitals in regard to health promotion and prevention of illness and disability. Unfortunately the CNA is not able to respond since primary health care principles have not yet been entrenched as essential aspects of hospital care (D. Lafortune personal communications, August 18, 1985).

What part have Canadian Nurses played in supporting the "Health for All by the Year 2000" concept which is being adopted in both developing and developed countries? CNA has moved decisively to expand the basic tenets of primary health care (PHC), and its position statements clearly reflect this. In addition, CNA has actively engaged in workshops assisting other countries in their understanding and implementation of PHC. However, little attempt has been made to work in depth with nurses in Canada as yet.

As a member of the Canadian Delegation to the World Health Assembly in 1983, and again in 1985, I was able to see the growing emphasis on nursings' increasing role in "Health for All". Clearly nurses are leading the way and recognition of that is now given by the Director General of the World Health Organization (WHO). Mahler has stated, "...it is now time that nurses were brought in much more than hitherto 'fairly and squarely' as leaders and managers of the Primary Health Care/Health for All Team, together with others" (WHO, 1985a, p.1). It was decided that a radical change was necessary -- not only in nursing know how, but in nurses' relationship with other health personnel and the community in need of health care. How Canadian nurses will individually and collectively respond to that challenge remains to be seen.

Primary health care is articulately oriented to self-care, self-determination, self-reliance, and consumer involvement. Many of these concepts are incorporated into educational programs and nursing services. Splane, in her article, urges nursing educators to take up the challenge which faces us here in Canada. Advocacy of clients, by nurses in their care alone, may not be the answer. Participation with users and consumer involvement with the health care system is more the direction for the future of health care (Glass, 1985, p.69). Such a conceptual shift will require that all nurses, and especially nurse educators, know and understand primary health care. In service, new modes of delivery await development.

The nursing literature in Canada is replete with demonstrations of new ways to deliver nursing care. Many examples of the application of PHC exist internationally. In Portugal, for example, nurses have opened a clinic in which thirty-six public health nurses provide multi-services to the public, and they make referrals to physicians and obstetricians as needed (WHO, 1985b). This is truly an example of enabling nurses to have first contact with clients, at the same time demonstrating what nurses can do, where the people are, and where the services are needed. Such demonstrations will help bring nursing services to the attention and benefit of the public. In that way response to nursing's new initiatives can be fostered.

On balance, in this short response, there are positive and negatives in our responses to the CHA. There is a clear desire on the part of nurses to be positive. Can we move in alternative directions positively unless committed to really making change in the system and from a **united** stance? To answer begs the question even as nurses nationally are not speaking with one voice on major issues. For our potential power to be felt, it is essential to maintain a united membership, thus supporting CN's power to influence issues of national and international importance. Without this unification, we will no longer be able to lay claim to representing the nurses across Canada in our arguments for or against particular health related issues. We are given pause for thought in the light of Splane's challenging article. We can fashion the future, but what fashion will we choose?

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L'ANALYSE DES BESOINS EN SCIENCES INFIRMIERES

Raymond Grenier

Presque tous les organismes sociaux de même que plusieurs groupes communautaires ont ressenti, à un moment donné, la nécessité de connaître les besoins de leurs membres ou de leurs clientèles. Mais la tâche leurs est apparue souvent insurmontable à cause des coûts qu'implique une analyse des besoins et aussi à cause d'un manque d'expertise tant au niveau théorique qu'au niveau de la procédure à suivre.

Les sciences infirmières n'échappent pas à ces difficultés. Le personnel infirmier oeuvrant dans le domaine de l'éducation, dans celui de la recherche et dans les milieux cliniques doit planifier des programmes éducatifs ou encore des programmes de soins et pour ce faire, il doit souvent procéder, avant la phase de planification, à une analyse des besoins. Aussi, est-il d'une importance capitale d'avoir une conception claire et précise de ce qu'est un besoin. Il faut aussi savoir pourquoi l'on entreprend une analyse des besoins. S'agira t'il d'une analyse interne ou externe des besoins? Quelle approche sera utilisée? Quelle technique sera utilisée pour obtenir un consensus quant aux besoins prioritaires?

Le but de cet article est d'alimenter la réflexion du personnel infirmier intéressé par l'analyse des besoins. Différentes notions théoriques et pratiques seront discutées et certaines techniques consensuelles sont présentées.

Quelques définitions

Avant d'amorcer la discussion sur l'analyse des besoins, il convient de définir certains termes pour faciliter la compréhension des lecteurs.

Un besoin

La majorité des spécialistes de l'analyse des besoins définissent le terme "besoin" comme un "écart" (mesurable) entre "ce qui devrait être" (la situation désirée les résultats escomptés, l'idéal), et "ce qui est" (la situation actuelle, les résultats observés, le réel).

Cette définition de "besoin" exclue toute référence à des

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concepts comme un désir, une aspiration quelconque. Un "besoin" ce n'est pas non plus un but ou un objectif pas plus que ce n'est une solution ou un moyen. Un "besoin", c'est un écart.

Dans le domaine de l'éducation, un besoin "éducatif" est considéré comme un écart entre les compétences désirées ou requises et celles qui sont manifestées par les étudiants actuellement. Ces compétences sont définies en termes de connaissances (domaine taxonomique d'ordre cognitif), d'attitudes (domaine taxonomique affectif) et d'habiletés (domaine taxonomique psycho-moteur).

Les besoins "institutionnels" se situent au niveau de l'infrastructure qui soutient soit l'apprentissage, soit les soins infirmiers ou autre. Ce sont les besoins en personnel, en équipement, en matériel, etc. Les besoins institutionnels sont des écarts entre les ressources requises et celles que l'institution possède actuellement.

Les besoins "communautaires" sont définis en termes de services communautaires dispensés par des professionnels à l'emploi d'un organisme communautaire (Département de santé communautaire, Centre local des services communautaires). Ils sont des écarts entre les services qui devraient être dispensés à la communauté et ceux qui sont actuellement dispensés.

Un besoin de santé est un écart entre l'état de santé optimal pour un individu donné et son état de santé actuel.

L'analyse des besoins est une démarche systématique qui consiste à identifier des besoins prioritaires. Il s'agit d'une démarche rigoureuse pour la détermination de:

1. la situation désirée ou requise;
2. la situation actuelle;
3. les écarts entre les étapes 1 et 2;
4. les besoins prioritaires.

L'analyse des besoins

L'analyse des besoins, comme l'indique la définition, est une démarche ou un processus systématique d'identification des besoins les plus prioritaires dans différents domaines. Il peut s'agir des besoins éducatifs, des besoins institutionnels, des besoins communautaires ou encore des besoins de santé.

Le processus d'analyse des besoins est considéré comme essentiel à la planification des programmes dans différents domaines dans la mesure où il génère des informations utiles et nécessaires pour la détermination des objectifs précis à poursuivre et à l'allocation des ressources disponibles (et souvent limitées) pour les atteindre (Alkin, 1969; Provus, 1971; Stake, 1967; Stufflebeam, et al., 1971).

Pourquoi une analyse des besoins?

Avant d'entreprendre une analyse des besoins, il convient de s'interroger sur les motifs qui peuvent inciter un individu ou un organisme à entreprendre une activité de cette nature. Compte tenu des ressources humaines et financières qu'exigent un tel processus, la question fondamentale qui doit être posée en premier lieu est la suivante: Est-ce le meilleur moyen pour obtenir les informations nécessaires à la prise de décisions?

Notre société semble animée du désir de changement. Mais changer pour quoi? Pourquoi changer? Si nous changeons quelque chose, qu'utilisons-nous comme base de changement? Ce sont là des questions critiques qui peuvent faire la différence entre un changement utile et un changement non-constructif (Kaufman et English, 1979).

L'analyse des besoins sert à l'identification des problèmes "réels" et "significatifs". De plus, elle fournira l'information pertinente à la détermination des interventions appropriées. S'il y a un changement qui doit s'opérer, il apparaît fondamental d'identifier correctement ce qui doit être changé; armé de cette information, nous sommes plus aptes à connaître quelles interventions doivent être sélectionnées pour opérer le changement requis.

Dans plusieurs situations, que ce soit dans le domaine de l'éducation ou dans le domaine de la pratique, les solutions aux problèmes n'ont pas toujours donné les résultats escomptés. La principale raison n'est pas qu'elles constituaient de faibles outils mais elle réside plutôt dans le fait qu'elles étaient appliquées avec beaucoup d'espoir mais sans qu'un diagnostic adéquat n'ait préalablement été posé. Nos solutions sont des moyens; elles représentent des alternatives potentielles pour atteindre les résultats anticipés. Mais trop souvent, elles ont été considérées comme des fins plutôt que comme des moyens pour l'atteinte des résultats escomptés. Pour paraphraser Albert Einstein, nous avons une prolifération de moyens et une confusion de fins.

Les fins sont les résultats qui se produisent après l'application d'une technique, d'une intervention ou d'une stratégie. Les moyens sont les procédures, les solutions et les techniques utilisées pour arriver à ces fins. Moyens et fins sont différents même s'ils sont reliés. Dans une planification adéquate, la relation entre les moyens et les fins doit être spécifique et claire. Si nous sélectionnons des moyens avant l'identification de la fin, nous risquons de dépenser des ressources et du temps inutilement.

L'analyse des besoins sert à discriminer les fins et les moyens.

Dans une société pluraliste comme la nôtre, l'évolution des mœurs, des coutumes, des traditions se fait à un tel rythme qu'il devient difficile de planifier des programmes éducatifs ou des

programmes communautaires correspondant parfaitement à cette évolution. Pour suivre cette évolution, les buts et objectifs de ces programmes doivent être révisés périodiquement. L'analyse des besoins sert à la détermination et à la validation des buts et objectifs à poursuivre et à atteindre.

Les besoins d'une collectivité sont diversifiés et ils ne sont pas tous d'égale importance; certains sont plus prioritaires que d'autres. Il importe donc de pouvoir identifier les besoins les plus prioritaires dans la mesure où les ressources humaines, financières et matérielles ne sont pas illimitées. L'analyse des besoins sert à établir l'ordre des besoins identifiés et à rationaliser les ressources humaines, matérielles et financières.

Si l'on est convaincu de la nécessité de réviser périodiquement les programmes déjà implantés, l'analyse des besoins peut servir à examiner le bien-fondé de chaque programme, à déterminer si une innovation est nécessaire ou désirable.

Dans le domaine de la pratique, l'analyse des besoins peut être un outil indispensable à l'individualisation de l'enseignement ou à l'individualisation des soins infirmiers.

En résumé, l'analyse des besoins sert à identifier des problèmes réels et significatifs; discriminer les fins et les moyens; déterminer et procéder à la validation des buts et objectifs; établir des priorités; rationaliser l'allocation des ressources; examiner le bien-fondé des programmes; déterminer si une innovation est nécessaire; et individualiser l'enseignement ou les soins infirmiers.

Considérations importantes

Siegel, Attkisson, et Carson (1978) sont d'avis que certains points devraient être considérés avant d'entreprendre une analyse des besoins. En premier lieu, il importe de ne jamais oublier que les besoins sont relatifs à ceux qui les perçoivent; ils sont basés sur leurs valeurs, leur culture, leur histoire et sur les expériences des individus formant une collectivité.

En deuxième lieu, les besoins communautaires ne sont pas des entités simples à identifier parce que les besoins de santé et les besoins sociaux sont interreliés et qu'ils sont tous les deux diffus. Dans une telle perspective, il est difficile d'établir des priorités d'une façon rationnelle et de déterminer quels organismes peuvent satisfaire le plus efficacement tels besoins.

En troisième lieu, il convient de se rappeler tout au long du processus d'analyse des besoins que les collectivités sont dynamiques et en évolution continuelle; il en est de même pour leurs besoins. Dans cette perspective, il faut s'attendre à ce que des besoins ayant servi à générer des objectifs dans un programme

peuvent ne plus exister lorsque le programme est implanter ou encore ils peuvent ne plus avoir la même magnitude.

Une dernière considération importante à retenir avant de procéder à une analyse des besoins est que le processus de la traduction des besoins exprimés en termes de programmes est influencé par diverses caractéristiques des ressources humaines, la disponibilité d'une technologie appropriée et par certaines considérations financières.

Pour sa part, Kaufman (1972) insiste pour que les données relatives à l'identification des besoins proviennent de différentes sources. De plus, les données recueillies doivent converger. Cette exigence a pour but d'éviter que les besoins ne soient formulés que par un groupe influent de la collectivité au détriment des autres groupes concernés par les programmes qui seront générés suite à l'analyse des besoins.

Quand procéder à une analyse des besoin?

Comme le précisent Siegel et coll. (1978), il est important de clarifier les buts et les usages potentiels d'une analyse des besoins. Comme le processus nécessite plusieurs ressources, l'on peut y avoir recours lorsque l'on prévoit planifier de nouveaux services à la clientèle (étudiants, bénéficiaires d'une collectivité, etc.) ou lorsque l'on anticipe de restructurer des services déjà existants à partir des besoins qui peuvent être identifiés. S'il n'y a pas ce désir de restructuration ou de planification de programmes conformément aux besoins identifiés, il est inutile d'investir des ressources humaines, matérielles et financières dans une analyse des besoins.

Catégories d'analyse des besoins

Kaufman et English (1979) identifient deux catégories d'analyse des besoins: l'analyse des besoins "interne" et l'analyse des besoins "externe".

La première catégorie est circonscrite à la réalité "interne" d'une organisation (université; collège; CLSC; etc.) Ses politiques, ses procédures et son histoire constituent le schème de référence pour penser et agir. Ils peuvent difficilement être remis en cause. Il en est ainsi des buts et objectifs de cette organisation qui sont considérés comme valides, valables et utiles. Dans un tel contexte, il est bien évident que l'analyse des besoins ne conduit pas à des changements profonds du programme.

L'analyse des besoins "externe" a comme point de départ à la planification et à la revision, la réalité "externe" de l'organisation. Dans un tel contexte, tout peut être remis en cause: les buts, les objectifs, les politiques, les procédures, etc. L'analyse des besoins

"externe" peut modifier profondément le statu quo.

Kaufman et English sont d'avis que la seconde catégorie constitue le point de départ le plus logique dans la mesure elle permet de vérifier si les buts et objectifs de la société (à l'extérieur de l'organisation) coïncident avec ceux de l'organisation. L'organisation n'est pas considérée comme une fin mais comme un moyen pour assurer à sa clientèle la capacité de survivre et de produire dans la société en évolution constante.

Les méthodologies d'analyse des besoins

De l'avis de Kaufman (1972) il existe trois grandes approches méthodologiques d'analyse des besoins.

L'approche classique: il s'agit, en fait, d'une approche qui peut être qualifiée d'intuitive dans la mesure où les données recueillies pour l'identification des besoins proviennent d'une seule source. En général cette source d'identification des besoins est le directeur d'une unité administrative ou le coordonnateur d'un programme qui, isolément et intuitivement, détermine les "besoins" que l'unité administrative ou le programme est censé satisfaire.

Il est bien évident que cette approche s'appuie rarement sur des données objectives. Malgré le fait que ce soit une approche encore très utilisée, elle n'est pas recommandée en raison de la subjectivité des "besoins" identifiés.

L'approche inductive: il s'agit d'une démarche systématique dont le point d'origine est l'état actuel des choses. En d'autres termes, les tenants de cette approche recueillent et analysent diverses données sur "ce qui est" avant d'entreprendre la formulation des buts et objectifs d'un programme d'éducation ou de services à la collectivité.

Le point de départ de cette démarche consiste donc à s'interroger sur le "vécu" c'est à dire sur ce qui ne fonctionne pas, sur les problèmes, les préoccupations et les malaises.

L'avantage de cette approche est qu'elle permet d'identifier et de documenter des problèmes réels ou observés. De plus, elle permet une implication directe des répondants au processus de planification.

L'approche déductive: il s'agit d'une démarche systématique qui a pour point de départ l'identification de "ce qui devrait être" c'est-à-dire l'identification et le choix des buts et objectifs avant la cueillette des données sur la situation actuelle prévalente.

L'origine de cette démarche est donc la détermination des normes: qu'est-ce qu'une infirmière en santé et sécurité du travail devrait savoir? Quelles seront les compétences requises d'une

infirmière dans une décennie?

Cette approche permet donc d'établir une structure d'analyse du présent. De plus, parce qu'elle suscite une réflexion sur l'avenir, elle permet de poser les jalons d'un certain renouveau. Enfin, à l'instar de l'approche inductive, l'approche déductive permet aux partenaires de l'éducation ou des services communautaires ou des services de santé de participer au processus de planification.

Des deux approches, inductive et déductive, aucune n'est supérieure à l'autre. Ces deux approches sont toutefois supérieures à l'approche classique en raison de la subjectivité des "besoins" de cette dernière approche.

Les techniques pour déterminer un consensus en analyse des besoins.

Siegel et coll. (1978) ont regroupés les différentes techniques utilisées en analyse des besoins sous trois grandes familles d'approches: a) les approches indicateurs sociaux ou indicateurs de santé; b) les approches par enquêtes sociales; c) les approches de groupes de la communauté.

Selon ces auteurs, la première famille n'est constituée que d'une seule technique de compilation et d'analyse de statistiques socio-sanitaires. Par la suite, les tenants de cette approche dérivent les besoins des statistiques descriptives en posant comme postulat que les variables descriptives constituent des indicateurs viables de besoins. Toutefois, la viabilité de ces indicateurs est dépendante de trois facteurs: a) la validité et la fidélité de l'information descriptive, b) la logique et la justesse statistique des procédures utilisées pour dériver les indicateurs socio-sanitaires pour la collectivité et c) le sens subjectif que revêt ces sources d'information pour une communauté donnée.

La seconde famille d'approches regroupe trois techniques: l'analyse des demandes de service acheminées aux organismes; l'analyse des différentes ressources communautaires pour une région donnée; et l'enquête auprès des citoyens d'une collectivité.

La première technique a pour but de reviser les services offerts dans le passé et actuellement afin de mieux comprendre le nombre et les types de demande de service dans une collectivité donnée. Il s'agit de procéder à une enquête touchant tous les services offerts pour une collectivité. Des informations sont recueillies auprès des organismes communautaires locaux et auprès des organismes extérieurs qui collaborent en offrant certains services de support. Plusieurs organismes socio-sanitaires peuvent être impliqués dans cette enquête.

Les données peuvent être recueillies à l'aide d'entrevues structurées, d'extrapolations à partir des dossiers cliniques, des

systèmes de gestion, des contrats, des buts poursuivis, etc.

L'analyse des différentes ressources communautaires régionales se fait à partir d'une énumération descriptive des organismes et des agents socio-sanitaires pour une région. Un décompte des ressources par type et par capacité permet d'identifier les écarts et les duplications au niveau des services offerts. En général, les données pour cette analyse sont recueillies à partir d'une enquête.

L'enquête auprès des citoyens d'une collectivité a pour but de faire ressortir différentes perspectives quant à la nature et à la magnitude des besoins selon les résidents d'une collectivité. L'on cherche, ici, à développer de nouvelles informations à partir d'un échantillonnage stratifié des résidents de la communauté desservie par les organismes socio-sanitaires. Cette enquête peut se faire par courrier ou à l'aide d'interview.

Dans la famille des approches de groupe l'on retrouve quatre techniques: le rassemblement communautaire; le groupe nominal; l'approche Delphi; et l'approche par groupe cible.

Le rassemblement communautaire consiste à convier tous les membres d'une collectivité à une rencontre durant laquelle les participants sont invités à exprimer leurs points de vue sur les services offerts dans un domaine social particulier. Même si cette technique est souvent utilisée pour la validation de données déjà recueillies, elle sert à la génération de nouvelles informations. L'on s'intéresse ici à l'opinion de la collectivité quant à l'accessibilité, à la disponibilité, à l'acceptabilité et à l'organisation des services offerts. Le rassemblement communautaire constitue un moyen pour identifier des problèmes et pour obtenir la réaction des citoyens relativement aux services offerts.

Le groupe nominal est une procédure non-interactive qui permet de maximiser la créativité et la productivité et de minimiser l'argumentation et la compétition que l'on retrouve dans les groupes de discussion (Delbecq et Van de Ven, 1971). Un groupe nominal est généralement constitué de huit à dix citoyens d'une collectivité. ces individus travaillent d'abord en silence sur une question ou une série de questions. Ces questions peuvent demander des solutions à un problème particulier ou peuvent demander des opinions quant à un service en particulier offert dans la collectivité. Dans d'autres cas, on peut demander aux participants d'identifier leurs propres besoins ou les besoins qu'ils perçoivent pour d'autres membres de la collectivité ou encore d'identifier des facteurs importants à considérer dans un processus de planification de programme communautaire. Cette période de silence est suivie d'une période d'échange avec les membres du groupe. Chaque participant énonce une idée de sa liste; cette procédure se poursuit sans discussion tant et aussi longtemps que toutes les idées n'ont pas été émises. après cette période, une discussion est ouverte afin de permettre aux participants de

clarifier, d'élaborer ou de défendre n'importe quelle idée émise. D'autres idées peuvent être retirées, d'autres peuvent être combinées ou condensées. A la suite de cette période de clarification, les participants sélectionnent les idées (de la liste totale) qu'ils considèrent les plus importantes. Un ordre d'importance est attribué à ces idées pour l'ensemble du groupe de participants.

Cette approche est la plus appropriée pour obtenir des intrants de la part des citoyens et des consommateurs dans les processus d'analyse des besoins et de planification.

L'approche Delphi est une procédure pour la sollicitation systématique et l'obtention de jugements informés sur un domaine particulier (Delbeck et al., 1975). Elle a trois caractéristiques: l'anonymat des réponses aux questions; rétroaction contrôlée des différents stades du processus de collecte d'information; et analyse statistique et formulation des réponses de groupe.

Cette technique implique cinq étapes:

1. Un questionnaire relatif à un problème est développé.
2. Les questionnaires sont expédiés aux membres du groupe d'experts.
3. Au retour des questionnaires, les réponses sont étudiées pour identifier les points d'accord et de désaccord.
4. Lorsqu'il y a désaccord, un second questionnaire contenant les différentes raisons données par les experts pour le premier jugement est distribué au panel.
5. Les étapes précédentes sont répétées jusqu'à ce qu'un accord se produise.

A partir des réponses des répondants, une perspective des besoins peut être dérivée.

L'approche par groupe cible permet de diriger notre attention sur les groupes identifiés comme ayant les plus grands besoins. Cette procédure permet d'impliquer ces groupes dans des activités de planification et d'évaluation ayant pour but de satisfaire leurs besoins. L'attention des investigateurs est dirigée vers les impressions et les sentiments des répondants quant à leurs besoins.

Cette approche est constituée de trois étapes:

1. Interview des personnes considérées comme des répondants de première main soit parce qu'ils habitent ou parce qu'ils travaillent dans la communauté (10 à 15 individus).
2. L'information obtenue est ensuite intégrée aux données déjà recueillies par les services publiques afin d'obtenir une meilleure compréhension des besoins.
3. Le portrait résultant de cette seconde étape est ensuite présenté à différents groupes de la collectivité pour une validation et une révision des besoins; le processus de

rassemblement communautaire est utilisé à cette fin.

Cette approche sert à l'intégration et à la validation d'information. Elle utilise des données provenant de trois sources.

Conclusion

L'analyse des besoins est une démarche systématique qui conduit à l'identification des besoins les plus prioritaires. Cette démarche n'est pas applicable uniquement dans le domaine de l'éducation. Bien au contraire, le personnel infirmier peut l'appliquer dans le domaine de la recherche et dans l'exercice de sa profession en milieux cliniques. Mais avant de procéder à une analyse des besoins, il est primordial de se poser certaines questions fondamentales et de pouvoir y répondre. Il est aussi d'une importance capitale d'avoir une conception claire et précise de ce qu'est une analyse des besoins.

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ABSTRACT

Analysis of requirements in nursing

The analysis of requirements constitutes a systematic process of identification of the most crucial needs. This process is deemed essential to the planning of any program in the different fields, in as much as it generates useful and necessary information to determine precise goals and to allocate available resources towards these goals.

This article aims at fostering debate among nurses who are concerned with the analysis of requirements. Various theoretical concepts and practices are discussed, and a few consensus techniques often used in this process are described briefly.

IDENTIFICATION OF HEALTH RISK FACTORS AMONG UNDERGRADUATE UNIVERSITY STUDENTS

Anna Gupta . Sharon McMahon . Gurpal Sandhu *

The tensions and anxieties which university students experience and their unhealthy mechanisms for coping with them have come to the attention of the nursing faculty at the University of Windsor.

There exist on campus the usual student services, including Dean of Students, Medical Officer, University Chaplains, and Psychological Centre where students may go for assistance with their problems. Other programmes such as the recreational and exercise activities at the Faculty of Human Kinetics, stress and health hazard appraisals at the School of Nursing, and occasional alcohol and drug abuse forums are also available.

The nature of these services is disjointed and independent. No collaborative and coordinated interdisciplinary holistic type of programme is available on a regular basis. Students continue to express worry and dissatisfaction over their stress and maladaptive behaviours, and the researchers took heed of the expressed concerns and needs. With a desire to examine these student health related problems, a three-pronged descriptive survey was launched. It is anticipated that factual data would facilitate the development, streamlining, and coordination of ongoing services to meet students' health wellness related needs.

The 1970s brought a new perspective, known as "prospective medicine", to the process of promoting health and wellness. Harold Leppink (1982) writes that prospective medicine involves detecting precursors and operative risk factors in the patient's life, and attempts to reduce these risks by some type of intervention that has behavioural change as the expected outcome. He defines the steps in prospective preventive medicine as (1) screening for risk factors: agents of disease or precursors, rather than symptoms and signs of overt disease; (2) quantification and appraisal of the degree of risk; (3) systematic risk reduction planning; (4) risk-specific health education aimed at permanent behavioural change; and (5) societal support to sustain change (p.42).

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This concept led the researchers to decide that, as a first phase in meeting the needs of the students, steps one and two would be undertaken with undergraduate students of the University of Windsor. With input from faculty and student representatives, a further decision to conduct a holistic study through a three stage approach was also made.

Stage 1 of the research concerns an assessment of the type and magnitude of stressful life events (SLES) experienced during the previous year (April 1981 to March 1982), by a sample of the University of Windsor undergraduate students. Stage 2 deals with identification of the health risks for individual students for 12 specific diseases that are identified as the 12 highest causes of mortality by disease in Canada. Students who attended the Health Hazard Appraisal (HHA) clinics on campus in the 1980-82 period constitute the sample for this study. Stage 3 is a pilot project to develop a tool for appraisal of the general lifestyle and health related behaviours of individual students.

The following study deals exclusively with Stage 1. Subsequent reports will examine Stages 2 and 3.

Assessment of Stress

We sought to answer two questions: what are the magnitude and types of SLE experienced by students? and, are there differences in the magnitude of stress, experienced by students, that are related to demography and/or programme.

For most university students, the experiencing of developmental crises has come to be associated with transition from secondary schools to higher educational institutions. Greenberg (1981) speaks of sudden changes of support groups, friends, and residence; and of unfamiliar educational resources, increased financial responsibilities, and career preparatory activities as some of the stressors that the commencement of university life brings. Guntur, (1969) identifies anxiety, nervousness, depression, and restlessness as being present in the majority of his sample of 120 sophomore students. Together, Greenberg and Guntur also noted that these students contracted more illness and disease than those with less stress.

This study uses Hans Selye's (1974) definition of stress, as the "non specific response of the body to any demand made upon it". This demand requires adaptation to a stressor irrespective of what that stressor may be.

Levi (1972) reports numerous replications and applications of Selye's original research in the adrenal and cerebral responses of rats to specific stressors; i.e. adrenomedullary hyperplasia increases hormonal release that promotes lipolysis (fat breakdown) and the energy preparatory stages that are needed to ensure alert alarm

and survival of the "threatened" individual.

Wilmore et al. (1980) write that in situations of overwhelming stress such as sleep deprivation, the major bodily response could progress from general alarm alertness to total vascular collapse. To counteract the overwhelming physical response, the body responds with hormonal and neural changes designed to re-establish homeostasis. These fluctuations from a balanced state can be measured by blood pressure and by monitoring nutrient, antigen, and other hormonal release into the blood stream (p.266).

Selye (1976) emphasizes that the presence of "adaptive energy is finite." When on the wane, the body and mind become increasingly susceptible to external stressors, and more prone to physical and mental exhaustion or illness. Ambiguous and unidentified sources of stress prolong maladaptation and alertness. If new stressors are added to uncertain states, the individual requires longer time to restore a "normal" healthy baseline of function and response. Maladaptation to stress is currently believed to be linked to many cardiovascular, endocrine, gastrointestinal, rheumatic, allergic, and mental disorders (Pelletier, 1977; Selye in Levi, 1972; Selye, 1976, 1974; Walker, 1979).

Howard (1978) states that in addition to physical, social, psychological, and emotional responses, cognition could also be upset by stressors of noxious types, duration, and scope. Cognitive functioning is increasingly impaired in efficiency, speed, and complexity, as stressors become uncomfortable.

Rahe, Holmes, Kjaer, Meyer, and Smith (in Dohrenwend & Dohrenwend, 1974) say that a cluster of social events that require change in on-going life adjustment is significantly associated with the time of illness onset (p.47).

While there is a considerable amount of literature available on stress-related research with various populations, there is hardly anything available on Canadian university students. Thus, there exists a great need for such research.

Method

Instrument

Development of the Social Readjustment Rating Scale (SRRS), as a self-administered questionnaire for assessing the magnitude and types of SLE, was founded on the work of Meyer, Holmes, and on Holmes and Rahe's Life Charts (Dohrenwend & Dohrenwend, 1974). Holmes (1980) says that the salience of events was established by using a method derived from psychophysics that generates a ratio scale. The scale has been validated by cross-cultural studies that indicate a universal consensus about the rank order and relative magnitude of the amount of readjustment required by each life

event. The scale provides a quantitative measure for the risk of onset of both serious and minor disease, in relation to events in the patient's life (p.351-52).

Holmes and Rahe's (Dohrenwend & Dohrenwend, 1974) research and replicated studies show that a total value of 300 or more life change units (LCU), during a two year period, create prime high risk conditions for high frequencies of major illness. Scores of 200-299 show medium risk, 150-199 indicate low risk, and those under 150 have more healthy profiles. They also found that a one to two-year life change base predicts the onset of serious disease for the next two years, and that a six-month base predicts the onset of moderately serious disease for the next six months (Holmes 1980; Stone, 1982; Walker, 1979).

Kanner, Coyne, Schaefer and Lazarus (1981) point out that the dominance of the SLE reporting approach to stress assessment arises from the difficulty in studying stress perception, personification, and expression in more sophisticated and complex ways. Ethical and practical constraints prevented intrusive procedures with participants. The self-report is a significant, safe, ethical instrument. Kanner et al. (1981) assert that "hassels" and "uplifts", which are day to day events that ultimately accumulate, should also be assessed. This and other emerging viewpoints about stress and its assessment may have implications for future studies. At this time, the researchers of the current study chose to use Holmes and Rahe's SRRS with minor modifications that seem appropriate for a university student population.

The modified tool is named Student Academic Readjustment Rating Scale (SARRS) (1). The changes made are as follows. A few of the life events have been partially or wholly rephrased with items more applicable to a large majority of university students; and seven questions relevant to life events of students have been added at the end of the stressful life events.

Subjects and Selection

Approximately one seventh of the target population of 7,000 students was randomly selected from a computer-generated list of registrants, resulting in a total of 969 names as sample subjects. The computer listing, though continuous numerically, was grouped under the various academic programmes offered at the university. This ensured a proportionate distribution of subjects from each of the programmes. It also may mean that there is no representation from some of the programmes that have smaller classes; those with less than 10 registrants. Demographic characteristics of the sample are described in Table 1.

Table 1
Demographic Variables

Gender: M = 43.96% (n 426)
F = 56.03% (n 543) = n 969

<u>Age</u> :	<u>Years</u>	<u>(%)</u>	<u>Marital Status</u>	<u>(%)</u>
	Under 18	= 3.92	Single	= 81.82
	19-22	= 62.54	Married	= 10.32
	23-27	= 22.39	Divorced	= 0.49
	28-33	= 6.19	Common Law	= 1.60
	34-39	= 2.37	To be Married	= 4.55
	40-50	= 1.96	To be Divorced	= 1.23
	51+	= 0.62		
		<u>100%</u>		<u>100%</u>

<u>Years of Study at University (%)</u>	<u>Professional Work Experience</u>	
	<u>Years</u>	
	<u>(%)</u>	
1st year = 51.91	0	70.02
2nd year = 14.45	1-2	12.78
3rd year = 16.41	3-5	10.57
4th year = 16.10	6-9	2.21
5th year = 1.14	10-15	2.83
<u>100%</u>	16+	1.60
		<u>100%</u>

Procedure

Each SAARS score sheet provided blank spaces for filling in subject's age, sex, and programme of study. It was also headed with a statement about voluntary participation and maintenance of confidentiality of the participant. A brief instruction about how to answer the questionnaire and space for the participant's signature were also included.

The necessary approval of the Campus Research Ethics Committee, heads of department, and professors concerned were obtained for administration of the SARRS during the 10 minutes interval between classes.

The questionnaires were labelled for name, programme, year of study, and telephone number as obtained from the registration list. The forms were assembled into common faculty and common programme categories.

It was hoped that the subjects could be contacted personally through class visits by the researchers. However, after attending five different classes, and having great difficulty locating the subjects who were named specifically, the researchers met to discuss the problem of logistics. Because of student absenteeism, transfer, drop-out, or illness, it seemed impossible to trace an adequate number of the selected sample. Therefore, a compromise was decided upon. Names were deleted from the questionnaires and the researchers continued to appear in classrooms 10 minutes before sessions started. They requested those students who were early arrivers to be the sample subjects. The proportionate number of subjects to be selected from various programmes was maintained by taking subjects on a "first come first serve" basis from each class. The short preamble of purpose, instructions, and so forth was read out; added explanations were given as needed at the

start. The students complied with the requests very eagerly. It took five to seven minutes for each group to complete the forms; most often the procedure was over before the arrival of the professors.

During the process of administering the SARRS, it was discovered that 155 of the 969 students had completed the forms already as part of their HHA clinic services. Therefore, they did not complete a second form. Instead, their forms were pulled out from their HHA files and included in the total sample. These 155 were analyzed separately as well, to make comparisons with the rest of the sample. Because of highly vocal complaints from nursing students about stress, all students in the School of Nursing completed the SARRS for comparison within the school itself, in addition to their representative numbers in the 969 sample.

Results

Using SPSS, cross-tabulations of frequency and percentage were computed. Of the 969 total sample subjects, 34.9% show a cumulative magnitude of stress of over 300 LCU, indicating prime high risk conditions for high frequencies of major illness (see Table 2). Gender variables indicate 31.7% of the male, and 37.40% of the female subjects are above the 300 limit. The highest percentage (66.7) of students over the 300 limit is in the 51+ year old group, with the lowest (17.4%) being in the 34-39 year old group.

In the year of study categories, half the five years and over group (5+) are over the 300 limit. The next largest over this limit are those in first year (42.7%), and those in second year are the lowest (24.3%).

Table 3 shows high percentages of subjects over the 300 limit. (Of these, the group that has the highest percentage (76.7%) of subjects over the 300 limit is that which reported experiencing a change in academic performance (2).

For a clearer picture of the types of SLE that the students experience, the 43 events in the SARRS have been stratified into 9 categories. Paykel's grouping described in Dohrenwend and Dohrenwend (p.137) was used as a pattern for this stratification (see Table 4).

Results reveal that, overall, there exists a statistically significant positive relationship in the magnitude and types of SLE experienced by subjects for the various variables under study, but for a few exceptions.

TABLE 2

CUMULATIVE MAGNITUDE OF LCU VALUES OF SLE:

Cumulative of LCU Values	GENDER		Percentages n = 969	AGE GROUPS								YEAR OF STUDY				
	Male n = 426	Female n = 543		18 + below n = 38	19 - 22 n = 606	23 - 27 n = 217	28 - 33 n = 60	34 - 39 n = 23	45 - 50 n = 19	51 + n = 6	Year 1 n = 504	Year 2 n = 140	Year 3 n = 159	Year 4 n = 156	Year 5 n = 10	
0 - 99	17.14	11.42	13.83	5.26	14.03	13.82	6.67	30.42	31.58	16.67	8.33	12.85	22.01	23.72	10.00	
100 - 199	28.40	24.68	26.32	18.43	26.40	28.11	26.67	26.09	21.05	16.66	21.63	35.00	30.82	30.13	30.00	
200 - 299	22.77	26.51	24.87	39.47	24.42	25.81	23.33	26.09	10.53	0.00	27.58	27.86	18.87	20.51	10.00	
Total %	68.31	62.61	65.12	63.16	64.85	67.74	56.67	82.60	63.16	33.33	57.54	75.71	71.70	74.36	50.00	
300 - 399	15.73	18.61	17.33	15.79	16.83	18.43	18.33	8.70	26.32	33.33	20.24	7.86	16.35	16.03	40.00	
400 - 499	9.15	9.95	9.60	7.89	9.90	9.22	10.00	8.70	5.26	16.67	12.30	9.29	4.40	6.41	10.00	
500 - 599	4.00	6.82	5.57	10.53	5.62	3.69	10.00	0.00	5.26	16.67	6.75	5.72	5.66	1.92	0.00	
600 - 699	0.93	1.29	1.14	2.63	1.32	0.46	3.33	0.00	0.00	0.00	1.59	0.71	1.26	0.00	0.00	
700 - 799	1.18	0.55	0.83	0.00	0.99	0.00	1.67	0.00	0.00	0.00	1.19	0.71	0.63	0.00	0.00	
800 - 899	0.23	0.00	0.10	0.00	0.00	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.00	
900 - 999	0.47	0.00	0.21	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.00	
1000-1099	0.00	0.18	0.10	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.00	
Total %	31.69	37.40	34.88	36.84	35.15	32.26	43.33	17.40	36.84	66.67	42.46	24.29	28.30	25.64	50.00	

TABLE 3
CUMULATIVE MAGNITUDE OF LCU OF SLE

Cumulative LCU Values	QUESTIONS 44 - 48										WORK EXPERIENCE (2149)						MARITAL STATUS (2150)						
	Change in Academic Performance (Kib) n = 437	Job Hunting - Yes n = 437	Job Hunting - No n = 437	Marriage Plan-Year n = 193	Marriage Plan-No n=21	Change in Residence-Year n = 301	Change in Residence-No n = 513	Via Student - Yes n = 101	Via Student - No n = 713	Physical Discomfort Yes n = 296	Physical Discomfort No n = 520	None n = 570	1 - 2 Years n = 104	3 - 5 Years n = 86	6 - 9 Years n = 18	10 - 15 Years n = 23	16 + n = 13	Single n = 666	Married n = 84	Divorced n = 4	Common Law n = 13	No Be Married n = 37	To Be Divorced n = 10
0-199	4.12	11.97	14.65	11.40	14.00	9.97	15.40	9.90	13.88	7.14	16.93	15.96	5.78	9.30	0.00	4.35	23.08	12.61	22.62	0.00	15.39	16.22	0.00
200-299	19.22	25.00	28.38	23.83	27.70	21.93	29.63	21.78	27.69	23.47	28.65	26.84	22.11	26.74	38.89	30.43	38.46	25.68	23.81	25.00	15.38	29.73	50.00
Percent	23.34	36.97	43.02	35.23	41.70	31.90	45.03	31.98	41.37	30.61	45.58	42.80	27.89	36.04	38.89	34.78	61.54	38.29	46.43	25.00	30.77	45.95	50.00
300-399	24.71	28.19	23.80	19.17	26.02	29.24	23.98	29.70	25.39	24.15	26.92	24.39	25.00	36.05	33.33	34.78	15.38	26.58	25.00	0.00	15.38	27.03	30.00
400-499	21.74	15.96	17.62	22.28	15.14	18.27	15.98	16.85	17.11	19.05	15.58	16.84	25.00	12.79	5.56	8.70	7.69	16.82	19.05	50.00	15.38	18.92	0.00
500-599	16.70	10.64	7.78	14.51	7.41	10.30	8.38	12.97	8.56	12.93	6.92	8.42	8.65	11.63	11.11	13.04	15.38	10.21	3.57	0.00	23.69	7.70	0.00
600-699	8.69	6.38	4.81	5.70	5.48	7.30	4.48	5.94	5.47	9.52	3.27	4.91	10.58	3.49	5.56	8.70	0.00	5.11	5.95	25.00	15.38	5.41	20.00
700-799	2.29	1.06	1.37	2.59	0.81	1.66	0.98	1.98	1.12	2.38	0.56	1.23	1.92	0.00	5.56	0.00	0.00	1.50	0.00	0.00	0.00	0.00	0.00
800-899	1.83	0.53	1.14	0.52	0.96	1.00	0.79	2.98	0.56	1.02	0.77	1.05	0.96	0.00	0.00	0.00	0.00	1.05	0.00	0.00	0.00	0.00	0.00
900-999	0.23	0.00	0.23	0.00	0.16	0.00	0.19	0.00	0.14	0.00	0.19	0.18	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00
1000-1099	0.46	0.27	0.23	0.00	0.32	0.33	0.19	0.00	0.28	0.34	0.19	0.18	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00
Percent	26.66	63.03	56.98	64.77	58.30	68.10	54.97	68.42	58.63	69.39	54.32	57.20	72.11	63.96	61.11	65.22	38.46	61.71	53.57	75.00	69.23	54.05	50.00

NOTE: Total n = 814 (Q's 44 - 50 have not been given to the clinic population).

Table 4
SLE Compared Between The Given Variables

<u>Variable</u>	<u>Mean</u>	<u>STD</u>	<u>Median</u>	<u>r_s</u>
<u>Gender</u>				
Male	19.24	11.15	18.31	M & F = 0.90 *
Female	22.46	15.11	21.80	
<u>Year of Study</u>				<u>Years</u>
1.	24.41	16.23	22.16	1 & 2 = 0.83 *
2.	19.70	13.40	18.71	1 & 3 = 0.83 *
3.	19.66	12.49	18.35	1 & 4 = 0.75 *
4.	16.68	9.81	15.72	2 & 3 = 0.91 *
				3 & 4 = 0.92 *
<u>Clinic vs. Non Clinic</u>				
Non clinic	21.55	13.56	20.39	Ncl & Cl = 0.94 *
Clinic	22.27	14.69	19.35	
<u>Visa vs. Non Visa</u>				
Visa	23.34	15.83	23.76	V & NV = 0.89 *
Non Visa	20.98	13.11	20.89	

* $P > |r_{-s}| 0.0001$ for each variable

Table 5
SLE Compared Intra & Inter Faculty and School Basis

<u>Faculty</u>	<u>Mean</u>	<u>STD</u>	<u>Median</u>	<u>r_s</u>
<u>Social Science</u>				<u>Years</u>
Year 1	20.97	13.51	19.82	1 & 2 = 0.62 *
2	22.79	23.56	20.00	2 & 3 = 0.59 *
3	12.00	7.45	10.71	1 & 4 = 0.64 *
4	16.55	11.99	17.65	3 & 4 = 0.56 *
				1 & 3 = 0.76 *
<u>Arts</u>				
Year 1	18.38	12.81	17.28	1 & 3 = 0.80 *
3	20.64	13.05	20.83	
<u>Math & Science</u>				
Year 1	21.09	16.34	18.06	1 & 2 = 0.84 *
2	17.66	11.41	18.75	2 & 3 = 0.67 *
3	15.18	12.31	14.71	1 & 3 = 0.81 *
4	16.60	11.17	17.27	3 & 4 = 0.78 *
				1 & 4 = 0.66 *
<u>Non Dept. Faculty</u>				
Year 1	22.74	14.42	22.07	1 & 2 = 0.33 ***
2	6.83	5.87	6.25	1 & 3 = 0.42 **
3	10.93	11.92	10.00	1 & 4 = 0.64 *
4	11.96	7.59	10.84	2 & 3 = 0.49 **
				3 & 4 = 0.50 **
<u>Schools</u>				
Year 1	19.69	13.99	17.82	1 & 2 = 0.69 *
2	15.02	11.48	14.49	1 & 3 = 0.66 *
3	14.11	12.62	11.90	1 & 4 = 0.62 *
4	21.86	14.86	21.21	2 & 3 = 0.78 *
<u>Inter Faculty Comparison</u>				
Social Science vs. Arts				0.93 *
vs. Math & Science				0.94 *
vs. Non Departmental Faculties				0.89 *
Arts vs. Math & Science				0.93 *
vs. Non Departmental Faculties				0.88 *
Math & Science vs. Non Departmental Faculties				0.83 *
vs. Schools				0.89 *
Non Departmentalized Faculties vs. Schools				0.84 *
Social Science vs. Schools				0.90 *

* $P > |r_{-s}| 0.0001$

** $P > |r_{-s}| 0.0008$

*** $P > |r_{-s}| 0.0299$

The Non-departmentalized Faculties (3) in Table 5 show the lowest positive r_s , ranging from 0.33 to 0.50. This low figure indicates that there is considerable difference in stress that is experienced by students in the various years of these faculties, except for the first and fourth years where the relationship is greater.

In Nursing Plan I, a correlation coefficient of 0.49 between Year 1 and Year 4 suggests that there is some difference in the stress experienced by students in these two years. Also, an r_s of 0.49 between Year 4 of Plan I and Year 3 of Plan II (both seniors) indicates some difference in the stress that is experienced by these two groups.

With regard to the types of SLE experienced by the subjects, Figure 1 demonstrates that students who reported a "change in academic performance" are most prevalent in the "Education" category. Visa students stand highest in the "Lifestyle" category. Female students show a slight increase over males in education and lifestyle, which may account for the slight increase in their cumulative magnitude of LCU as compared to that of male students.

Among the age groups (Table 7), those under 18 years old are the highest in education category. Most of these students are in their first year, with a very few in preliminary and second years of study. The 28 to 33 year age group is the highest in lifestyle events, whereas the 34 to 39 year old group is the highest in employment related events. The latter two groups are composed of students who have returned to school because of job loss, for specific career related education (such as the Law students), or for continued education as in the case of some post R.N. nursing students. The 40 to 50 year old students are the highest in health and lowest in education categories. The 50+ year old group is the highest in loss and lowest in financial and family categories. These 6 subjects are probably the retired, senior age students.

Across the marital status variable (Table 8), single students have the highest percentages in education and in loss, with lowest in lifestyle categories. This group constitutes the bulk (80%) of the sample, and very likely, education being their main concern, the subjects face pass-failure and competitive "mark" related anxieties and tensions. The married group is the highest in the health category. Divorced students are the highest in family, employment, and financial areas, whereas the to-be-divorced group is the highest in legal and social categories. The common-law group is the highest in lifestyle events.

Table 6
SLE Compared Within and Between Nursing Programmes
and Years of Plan I and Plan II

Variable	Mean	STD	Median	r_s
Plan I				Years
Year 1	21.54	16.60	19.67	1 & 2 = 0.67 *
2	19.45	16.01	18.18	1 & 3 = 0.64 *
3	15.92	13.95	13.64	1 & 4 = 0.49 **
Totals	19.10	13.33	17.07	2 & 3 = 0.74 *
				3 & 4 = 0.56 *
Plan II				
Year 1	20.01	19.70	14.29	1 & 2 = 0.70 *
2	17.47	19.99	11.76	1 & 3 = 0.53 *
3	19.19	17.69	8.33	2 & 3 = 0.82 *
Totals	18.85	17.18	12.94	
Plan I & II (Total students in each plan)				
Years 1 & 2				0.78 *
2 & 2				0.76 *
3 & 3				0.59 *
2 & 3				0.72 *
4 & 3				0.63 *
				0.49 ***
* $P > r_s $	0.0001			
** $P > r_s $	0.0009			
*** $P > r_s $	0.0010			

Note: Plan I is the generic B.Sc.N. and Plan II is the post RN B.Sc.N. programme.

FIG. 1 CATEGORIZED TYPES OF SLE FOR VARIABLES AS PER LEGEND

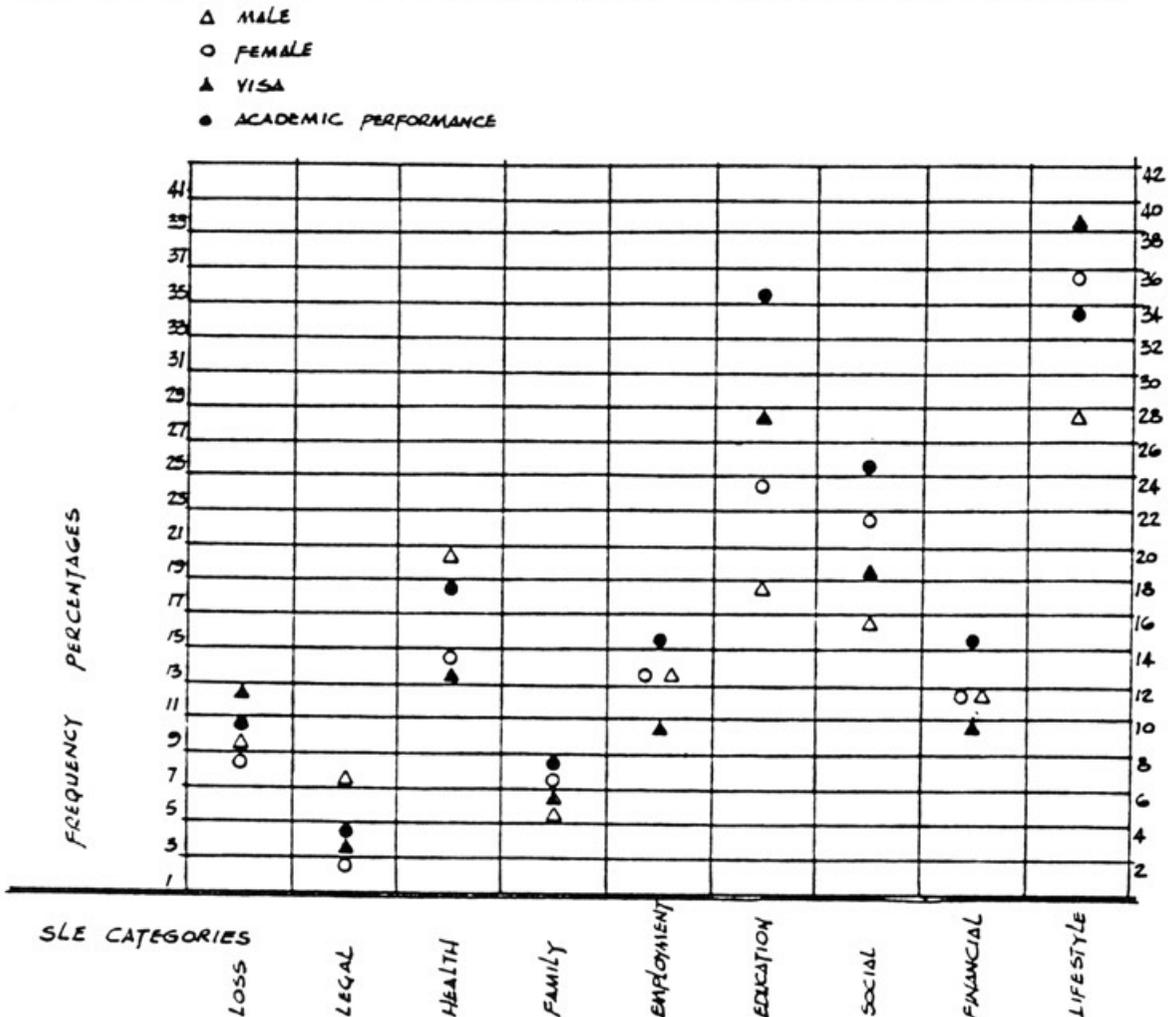


Table 7
Frequency Percentages of Categorized Types
of SLE Across the Age Variable

Category	Age Under 18	19-22	23-27	28-33	34-39	40-50	50+
	n = 38	606	217	60	23	19	6
1 Loss	4.95	4.27	4.65	2.44	4.97	5.52	7.59
2 Legal	1.56	1.47	1.84	1.53	1.86	2.07	1.51
3 Health	6.67	5.90	6.11	5.80	4.35	6.90	6.03
4 Family	5.99	8.06	6.22	3.97	0.62	7.59	3.02
5 Employment	3.65	5.31	1.79	5.80	9.31	8.97	3.02
6 Education	29.95	24.21	24.96	22.59	22.98	19.31	27.15
7 Social	15.37	16.65	16.92	16.03	18.01	15.17	15.53
8 Financial	4.69	6.00	5.80	5.04	3.73	5.52	3.02
9 Life Style	27.16	27.63	31.71	36.79	34.16	28.97	33.18
	100%	100%	100%	100%	100%	100%	100%

Table 8
Frequency Percentages of Categorized Types
of SLE Across Marital Status Variable

Category	Single	Married	Divorced	Common Law	To Be Married	To Be Divorced
	n = 666	84	4	13	37	10
1 Loss	4.31	3.98	0.00	0.68	3.60	2.12
2 Legal	1.52	2.06	0.00	4.10	0.98	4.24
3 Health	5.52	6.73	4.00	5.47	6.22	3.19
4 Family	6.87	4.67	8.00	3.43	6.88	7.44
5 Employment	5.00	6.31	10.00	4.79	7.86	8.51
6 Education	27.25	23.70	18.00	22.60	22.29	18.08
7 Social	14.67	13.59	18.00	13.01	13.44	18.08
8 Financial	5.33	3.98	8.00	6.84	6.88	3.19
9 Life Style	29.50	35.57	34.00	39.04	31.80	35.10
	100%	100%	100%	100%	100%	100%

Discussion and Conclusion

The findings of the study support students' perceptions that university life presents numerous stressors, which cause undue tensions and anxieties for a vast majority of the student population. It should be of grave concern to all who are interested in students' health and wellness, that more than one third of the student population is at prime high risk, and that more than two-thirds of the student body is at moderate risk for high frequencies of major illness. Also, a large number of students within the various subgroups under study, such as those responding to "change in academic performance", visa students, and first year students, in general, indicate high vulnerability.

It is particularly evident that overall, education and lifestyle categories of events show the highest peaks for most variables.

Lansing Lamont (1979) reports, in his observation of many prestigious universities in the U.S.A., that many students are unhappy, beset with tension, trapped in insecurity and frustration (p.2). University students are subjected to economic, racial, environmental, sexual and academic pressures. Competition for grades, and dread of failure lead to increased suicides, vandalism, abusive drinking, cheating, and sabotage. Although these problems exist in Canadian universities, the researchers are not aware of any studies done in this area.

As Jane and Harry Chapman caution, "The need to 'listen' for early complaints of students; the need for particular attention to be given to those who seek assistance after experiencing stressful life events; the need for an interpersonal process of great depth that allows advocates to get close to, understand, and humanistically relate to students; are all too vital to be ignored or haphazardly dealt with" (1975, p.118).

Recommendations

1. A "stress-awareness" programme should be included as part of the yearly student orientation activities of the university. The focus of the programme should be to foster an understanding of stress and its impact on university student life, positive coping mechanisms, and effective use of resources.
2. Students should be encouraged to use The Student Academic Readjustment Rating Scale to monitor periodically their Life Contentment Unit values and to seek assistance as needed.
3. An immediate follow-up survey should be conducted to appraise incidents of illness among the first year sample subjects of the present study.

4. A longitudinal quasi-experimental study should be carried out to evaluate effectiveness of a "stress-awareness-management" programme.
5. A credit course on "Stress of Life" should be offered as an elective, open to meet the option requirements of any undergraduate programme in the university.
6. This research should be replicated in other universities for comparative purposes.

The above recommendations may be carried out as collaborative endeavours of Nursing, Psychology, or other concerned departments.

A final and overall summary of conclusions and recommendations will be made after presenting the reports of the second and third stages of the project.

NOTES

1. The modified SARRS has been done with input from students and faculty, and with the special assistance of Tom Carney of the Department of Communication Studies, University of Windsor.
2. Whether the change in academic performance was for better or worse is not specified.
3. Non-departmentalized Faculties include the Faculties of Engineering, Human Kinetics, and Law. Although the Faculty of Education is also non-departmentalized, their programmes are considered graduate programmes and hence are not included in the study.

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RÉSUMÉ

Identification des facteurs de risque de maladie chez les étudiants de premier cycle universitaire

L'importance et les types d'événements stressants de la vie (SLE) de 969 étudiants de premier cycle choisis au hasard ont été évalués dans la première phase d'une étude en trois volets sur l'identification des facteurs de risque médicaux chez les étudiants d'université. Une version modifiée du questionnaire SLE de Rahe a été utilisée pour évaluer le stress. Les observations confirment la perception des étudiants qui trouvent que la vie universitaire est très stressante. Les résultats ont démontré que plus de deux tiers de la population de l'échantillon présentait un risque modéré et que plus d'un tiers des étudiants consultés présentaient un risque élevé de maladies graves. Par ailleurs, on a établi des corrélations hautement significatives lorsqu'on a procédé à des comparaisons des stress ressentis par les étudiants des différentes facultés, écoles ainsi que des différentes variables démographiques. Toutefois, de plus grandes différences ont été constatées entre les étudiants des différentes années d'études au sein des facultés sans département et notamment de la faculté de génie, de cinétique humaine et de droit. Dans l'ensemble, les catégories d'enseignement et de modes de vie des événements stressants ont été associées au plus fort pourcentage de fréquence pour la plupart des variables même si certains sous-groupes ont démontré que d'autres catégories, tels que l'emploi, les aspects judiciaires, pécuniaires, sociaux, médicaux et familiaux ainsi que le sentiment de perte suscitaient les stress les plus marqués.

POSTER SESSION: CALL FOR ABSTRACTS

The Third Annual Boston University Nursing Science Colloquium, Strategies for Theory Development III, being held in Boston April 3 & 4, 1986, is seeking abstracts for a poster presentation. Abstracts are sought that illustrate or describe working theory development, including but not limited to concept analysis, theoretical formulation, or empirical testing of theory. Deadline for submission is January 15, 1986. For information contact: Nancy Wells, Boston University School of Nursing, 635 Commonwealth Ave., Boston, Ma. 02215.

A COMPARISON OF THE COMMUNICATION SKILLS OF PRACTISING DIPLOMA AND BACCALAUREATE STAFF NURSES

Carroll Iwasiw . Joanne Olson

The Canadian Nurses' Association has passed a resolution that a baccalaureate degree in nursing will be required for entry to the nursing profession beginning in the year 2000. Although strong philosophical support exists to raise the educational level of new entrants to the profession, there exist no conclusive research findings to support the belief that baccalaureate nurses provide higher quality nursing care than do diploma nurses, or indeed, are different from diploma nurses.

In Canada there are three types of educational programs that prepare university nurses: the university generic baccalaureate nursing programs, the community college diploma programs, and hospital diploma programs. The baccalaureate nurse's preparation includes a broad base of courses in the humanities, social sciences, and sciences, along with a theoretical approach to the practice and discipline of nursing. This education prepares the baccalaureate nurse to practise nursing in a wide variety of settings and to be responsible for planning care for individuals, families, and groups at all levels of health or illness. Diploma nursing, on the other hand, focuses on the technical aspects of care to the institutionalized ill individual. It is possible for diploma registered nurses to obtain a baccalaureate degree in nursing through programs that vary in length from two to four years.

Purpose of the Pilot Project

In spite of the differing levels of skill and preparation, and despite the large differences in the functions they are prepared through their education to perform, the two groups of nurses are often hired for the same positions. For example, both diploma and baccalaureate graduates function as staff nurses, team leaders, and head nurses throughout all clinical areas of a hospital.

This pilot project, therefore, was developed to investigate one aspect of nursing care: communication skills. Specifically, the purposes of the project were to determine if differences in communication skills exist between baccalaureate and diploma nurses, and if so, to determine if this would be a fruitful area for further enquiry.

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Conceptual Framework of the Study

Interpersonal skills are those skills which promote good relationships among people. Health professionals require these skills to establish, maintain, and terminate effective helping relationships with clients, and to establish and maintain collaborative relationships with each other. Elkes states, "Good interpersonal skills can be profoundly therapeutic. They enhance trust; they promote a partnership between an informed provider and an equally informed consumer. In a health care team they favor cooperation rather than wasteful overlap, and a win/win rather than a win/lose solution" (Gerrard, Boniface, & Love, 1980, p.xii).

Communication with colleagues and with clients is a major focus for nurses (Edwards & Brillhart, 1981, p.v). It is the basis of all nursing care and is "one of the primary methods used to accomplish specific and general goals with many different kinds of people" (Murray & Zentner, 1979, p.62). Communication is such an essential part of the practice of nursing that one of the four standards for nursing practice in Canada deals solely with the helping relationship: "Nursing practice requires that the helping relationship be the nature of the client-nurse interaction" (Canadian Nurses Association, 1980, p.14). In addition, the three other standards all include aspects of communication with clients and colleagues.

Gerrard et al. (1980) describe several interpersonal skills as being essential to the practice of any health professional. Among these skills are:

1. Facilitation skills, including inviting requests, responding with information, responding with action, warmth, and active listening.
2. Assertion skills, including being confrontive, saying no, making requests, expressing opinions, initiating conversation, self-disclosing, and expressing affection.

Interpersonal communication is composed of specific behavioural skills the presence or absence of which can be objectively observed. Observation of these discrete skills provides one avenue for differentiating between the practice of baccalaureate and diploma nurses.

Literature Review

Many studies have been done that attempt to differentiate between professional and technical nursing. Few have included actual behavioural measures; nor have they focused on communication as an area of study.

Gray, Murray, Roy, and Sawyer (1977) found that in a written test, baccalaureate senior students more frequently described the appropriate nursing actions as including behaviours such as teaching, eliciting information from the patient, and reflecting feelings and concerns, than did associate degree senior students.

Chamings and Teevan (1979) surveyed deans of American baccalaureate and associate degree programs. In 8 of 24 "human competencies" (including "help client deal with stress", "motivate client to solution", "collaborate with clients and colleagues"), the deans expected baccalaureate nurses to perform better; but they expected both groups to perform equally well on the dimensions of "feeling warmth, concern, and respect", "develop rapport by listening", and "evoke emotional data by listening".

Howell (1978) surveyed the directors of nursing of 86 Oregon hospitals and had them rank their perceptions of the performance of new graduates of associate degree, of diploma, and of baccalaureate programs. The directors ranked baccalaureate nurses highest on the item, "allows for open communication between self, staff, and clients". Zarrett (1980) surveyed 323 Pennsylvania directors of nursing to rate the performance of the three groups of graduates. The diploma nurses were rated significantly higher on 6 of 11 activities, including communication skills. In a survey of the perceptions of graduates of baccalaureate, associate degree, and diploma programs and of the perceptions of their supervisors, Nelson (1978) found that baccalaureate nurses perceived their communication skills to be better than those of other nurses, and that the supervisors concurred.

Beanlands and McKay (1981) observed and audiotaped nurses' interactions with one patient. The verbal responses of the nurses were classified and 52% of 123 interactions were described as "active listening". A description of the subjects was not provided. Using the Hogan Empathy Scale, Forsyth (1979) found that baccalaureate nurses achieved significantly higher levels of empathic ability than diploma nurses.

Hills and Knowles (1983) analyzed nurses' responses to 17 of the 28 situations of the Behavioral Test of Interpersonal Skills. Data about nurses' levels of empathy and respect are reported for three groups according to the types of communication practice they had in their nursing programs. Data were not analyzed according to the nurses' level of educational preparation.

In an extensive review and critique of the literature on the effects of nursing education on job effectiveness, McCloskey (1981) surveyed 30 studies from 1967 to 1981. She concluded that methodological and conceptual problems in the studies made it impossible to conclude that differences in skill or practice actually existed among nurses with different educational

backgrounds.

Hypotheses

Four hypotheses were tested:

1. That practising baccalaureate nurses will obtain higher scores than practising diploma nurses for the categories "feeling" and "invites to talk further" as measured by the Behavioral Test of Interpersonal Skills (BTIS) (© Reston Publishing).
2. That diploma nurses will receive higher scores than baccalaureate nurses on the categories of "suggests alternative solution" and "gives information" as measured by the BTIS.
3. That there will be no difference between baccalaureate and diploma nurses in non-verbal warmth (warm face, smile, warm voice tone) as measured by the BTIS.
4. That baccalaureate nurses will obtain higher scores than diploma nurses in the category "assertiveness" as measured by the BTIS.

Method

Study Sample

The pilot study sample was drawn from staff employed in an acute care hospital. A list of nurses admissible to the study was prepared by hospital personnel. With the exception for those working in psychiatry, intensive care units, and operating and recovery rooms, all baccalaureate and diploma nurses who had been employed full time by the hospital for at least one year, who were working as staff nurses, and who were graduates of Canadian nursing programs, were considered eligible. Nurses working in the aforementioned clinical areas were omitted from the sampling procedure because of the extensive or very limited opportunities for verbal interaction with their patients. The list included all eligible baccalaureate nurses (n=31) and every second diploma nurse (n=100), grouped by clinical area.

A letter introducing the researchers and inviting the potential subjects to an informational session about the study was mailed to these 131 nurses. Thirty-five nurses attended these sessions. Thirteen nurses who indicated an interest in learning about the study, but who were unable to attend the sessions, were contacted individually by the researchers.

Sixteen nurses agreed to participate in the study. Three later cancelled their videotaping appointments. The study sample was composed of seven diploma and six baccalaureate staff nurses.

Clinical areas represented were medicine, surgery, emergency, and an investigational unit.

The diploma nurses had a range of 3-13 years of nursing experience with a mean of 8.85 years. Two of the seven diploma nurses had obtained Bachelor of Arts degrees. None was enrolled in an educational program. Two had participated in non-credit courses related to communication skills.

The baccalaureate nurses had a range of 1-15 years of nursing experience since their nursing degree, with a mean of 6.5 years. Two of the baccalaureate nurses had a previous nursing diploma and the other four were generic baccalaureate graduates. At the time of the study, no baccalaureate nurses were enrolled in educational programs. Five had participated in non-credit courses related to communication skills.

Instrumentation and Data Collection Procedures

"The Behavioral Test of Interpersonal Skills for Health Professionals... is a test that can be used to assess the interpersonal/interviewing skills of any health professional student or practitioner. The test consists of 28 common patient and health professional situations which have been role-played by actors and actresses and recorded on color videotape" (Gerrard & Buzzell, 1980, p.1). Concurrent and construct validity of the tool are described in the **BTIS User's Manual**. The BTIS content analysis allows for the scoring of eleven behavioural categories.

Each subject was seated in front of a TV monitor. As the TV played back each of the recorded problem situations, subjects were required to make a verbal response to the situation as though they were interacting with a real person. There was 30 seconds in which to respond to each situation. Each subject was alone in the room and was videotaped as he/she responded to the BTIS.

Videotaping of the subjects provided a means of direct behavioural observations without the intrusion of following and observing subjects in a clinical setting. However, the BTIS does not allow for on-going dialogue between the subject and the videotaped actor.

The content of each situation is general enough to be of relevance to nurses working in any clinical situation. For example, in one situation a patient states, "I feel awful. I feel terrible. You've got to do something for me please. I feel so sick" (Gerrard & Buzzell, 1980, p.61).

Data were collected in the summer of 1983. No monetary compensation or time off work was given for participation. Written consent and personal data were obtained from each

participant at the time of videotaping.

Analysis of the Videotapes

The co-investigators established inter-rater scoring reliability through analysis of videotapes of 10 volunteers unrelated to the pilot study. Scoring was based on guidelines in the **BTIS User's Manual**. Kappa statistics of 1.00 (0.80 is acceptable) were achieved on all BTIS categories. Although only Olson scored the pilot project videotapes, inter-rater reliability was considered essential to ensure that her analysis of pilot study videotapes was accurate.

Kappa statistics of intra-rater reliability (based on initial scoring and re-scoring one week later) for Olson ranged from 0.83 to 1.00 on the 11 behavioural categories of the BTIS. A total of 110 hours of videotape analysis was done to establish rating reliability.

Analysis of the pilot videotapes was done by Olson from October to December, 1983.

Results, Exploratory Analysis, and Discussion

Each component of hypotheses 1, 2, and 4 was tested by means of a one-tailed t-test. Hypothesis 3 was tested with a two-tailed t-test. In addition, communication categories not included in the hypotheses but measured by the BTIS, were scored and differences between diploma and baccalaureate nurses were analyzed. Significance levels above .05 were rejected. Results are presented in Table 1.

Hypothesis 1 was rejected although the t-test for the category of "feeling" (any relevant reference to the speaker's feelings) was significant. There was no difference between the two groups of nurses in the category "invites to talk further". The relatively low mean score for the baccalaureate group in the "feeling" category was surprising, since it had been believed that baccalaureate education would have prepared these nurses to acknowledge the expressed feelings in most situations. The low mean scores for the category "invites to talk further" raise questions about the data collecting and/or joint problem solving skills of both groups of nurses.

Although not included in the hypotheses, a t-test was done on the category "don't feel" (attempt to suppress, or discourage expression of feelings). The result was statistically significant ($p=.01$). The diploma nurses verbalized statements to belittle or discount expressed feelings (e.g. don't worry; you shouldn't be upset; calm down) almost four times more frequently than baccalaureate nurses. This result, along with higher scores for

Table 1. Range, Mean, Standard Deviation and t-test for Diploma and Baccalaureate Staff Nurses

BTIS Category	Maximum Scores Possible	Diploma n = 7			Baccalaureate n = 6			Value of t-test (df = 11)	Level of Significance* 1 tailed 2 tailed
		Range	X̄	S.D.	Range	X̄	S.D.		
Feeling	24	2-8	4.42	2.060	3-13	7.83	4.05	1.7989	.05
Content	24	7-19	13.71	3.918	6-19	13.67	4.714	.0154	ns
Don't Feel	24	1-6	3.14	1.551	0-2	.83	0.891	2.9665	.01
Invites to Talk Further	24	0-9	4.86	3.136	1-7	4.83	1.863	.0189	ns
Suggests Alternative Solution	20	5-13	9.71	2.490	4-17	8.00	4.434	.8043	ns
Gives Information	24	15-21	19.57	1.909	13-23	18.67	3.249	.5660	ns
Warm Face	28	19-28	23.42	2.555	18-28	24.67	3.249	.7155	ns
Smile	28	3-9	6.29	2.373	5-20	10.33	5.153	1.7191	.20
Warm Voice	28	22-28	26.00	3.251	26-28	27.67	0.746	1.1800	ns
Assertiveness	16	5-14	11.14	2.747	4-15	10.67	4.109	.2260	ns
Speech errors	20	0-9	4.00	3.505	0-26	9.17	8.877	1.3070	ns

*p = .05 at t-test value of 1.796 for 1 tailed test

p = .05 at t-test value of 2.201 for 2 tailed test

"feeling", suggests a very real difference in the way that the two groups of nurses respond to the emotions expressed by others, with the baccalaureate nurses' being more skilled in identifying and stating the feelings expressed. The ability to communicate empathy promotes trust in a relationship and is one of the facilitation skills associated with positive outcomes (physical, psychological, or behavioural changes) for patients (Gerrard et al., 1980).

Hypothesis 2 was rejected, although the data suggest a trend in the direction of higher scores for diploma nurses in the category of "suggests alternative solution" (appropriate suggestions to resolve the speaker's problems). Both groups obtained notably higher mean scores in the categories of "suggests alternate solution" and "gives information" than in the category of "invites to talk further". It may be that these responses are antithetical. Since the actors on the videotape could not engage in dialogue, it is possible that the nurses felt that giving information or suggesting a solution was a more appropriate response than inviting more discussion.

Hypothesis 3 was supported. Both groups of nurses displayed approximately the same levels of non-verbal warmth, with the baccalaureate nurses' obtaining higher scores in the behavioural category "smile". This similarity in non-verbal warmth may be due to the socialization processes all nursing students and graduates experience, or it may be related to the type of people who enter nursing.

Hypothesis 4 was rejected. The scores in the category of "assertiveness" are affected by the scores in the category of "speech errors". More than 4 speech errors negate an assertiveness score in each of the BTIS situations. The high number of speech errors made by baccalaureate nurses therefore detracts from the assertiveness score. The baccalaureate nurses were often more tentative in their responses and the speech errors (including "um") may indicate a thoughtful approach and/or a desire for accuracy in their responses. Conversely, the fewer speech errors made by diploma nurses can be interpreted as meaning greater precision and confidence in their responses.

The value of the t-test for the category of "speech errors" suggests a trend in the direction of more speech errors for baccalaureate nurses. These errors may indicate a tentativeness that is intended to convey concern, or they may indicate a lack of confidence. It is of note that the high mean score for baccalaureate nurses in this category was strongly influenced by the score (26) of one individual.

Conclusions

Generalizations from the small sample are not possible. However, the data do suggest that differences in empathy between baccalaureate and diploma nurses may exist.

Limitations of the Study

1. The small sample size may have prevented the emergence of significant findings.
2. The small sample size precluded control for variables such as age, clinical area or length of work experience.
3. Although Olson (who did the scoring) did not know any of the participants, the possibility exists that she detected cues about their educational preparation during the informational sessions.
4. The grouping of the behavioural categories in the hypotheses according to expected scores, rather than solely according to conceptual similarity, resulted in some difficulty in hypothesis testing.
5. Study findings may be delimited by the type of instrument used.

Summary

This behavioural study of communication skills indicates that real differences between baccalaureate and diploma nurses may exist. A larger study has been initiated by the authors. Achievement of the entry to practice resolution will not occur until government ministries that control educational and health funds are convinced that baccalaureate nurses provide both superior and needed services to clients. Research into the practice of diploma and baccalaureate nurses is one step in amassing the data required to demonstrate measurable differences.

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RÉSUMÉ

Comparison des aptitudes à la communication des infirmiers détenteurs d'un diplôme pratique et des infirmiers détenteurs d'un baccalauréat

Les tentatives visant à distinguer la démarche professionnelle des infirmiers détenteurs d'un diplôme de celle des infirmiers détenteurs d'un baccalauréat ont rarement été fondées sur des mesures du comportement spécifique. Dans la présente étude pilote les auteurs ont proposé de comparer les aptitudes à la communication d'infirmiers détenteurs d'un diplôme et d'infirmiers détenteurs d'un baccalauréat par le biais d'un test de comportement sur les relations interpersonnelles (Behavioral Test of Interpersonal Skills). L'analyse des données a révélé des différences significatives au niveau de la sympathie exprimée par les deux groupes d'infirmiers et de la fréquence des tentatives visant à supprimer l'expression des sentiments chez les clients. Ces observations allaient dans le sens de l'orientation différente des deux types de programmes infirmiers. Il faudra avoir recours à un échantillon plus important pour généraliser ces observations.

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INJECTION GIVING: THE EFFECT OF TIME LAPSE BETWEEN LEARNING AND ACTUAL PRACTICE ON STUDENT CONFIDENCE

Judith Mogan . Sally Thorne

Beginning nurse practitioners, regardless of their educational preparation usually seek initial employment in hospitals at the staff nurse level (Kramer, 1978; National League for Nursing, 1978). In that setting, the most common criterion for job performance tends to be skill competence (Ford, 1977; Hurd, 1979; Kitzman, 1974). Confidence in psychomotor skill is also identified as a significant factor in successful work performance for new graduates (Kramer, 1970). Furthermore, it has been shown that, although competence in psychomotor skills may be adequate, if self-confidence is severely lacking there is a significant negative pressure on work performance (Hurd, 1979; Kaelin and Bliss, 1979). Therefore, it behooves the nursing educator to be accountable not only for the graduates' skill competence, but also for their confidence in performing nursing psychomotor skills.

This article describes a study that investigated the degree to which time lapse between laboratory learning and actual practice affects students' perceived success in injection-giving. More specifically, we sought to determine how soon after laboratory learning students should give an injection to a patient, in order to experience the best possible success.

Background from the Literature

Several factors are believed to affect the retention of initial psychomotor skill learning. "Knowledge of results" is often assumed to be among the most potent of these factors. This form of information feedback is also believed to be profoundly important in determining the nature of learned psychomotor knowledge that is retained. Specificity, precision, and immediacy of critical feedback protect against the acquisition of erroneous information of skill execution habits which would impair correct learning (Welford, 1976).

The length of the time between original learning and recall is related to the degree to which "forgetting" is permitted to occur. When a psychomotor skill has been partially learned, brief time lapses may actually improve skill performance through the processes of "reminiscence" or "mental practice" (Singer, 1980). Forgetting is frequently a product of the degree to which activities

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occur between learning and later performance. The strongest inhibitor to learning is the introduction of new information that is moderately similar to target skills (Cratty, 1967). Motor tasks with a cognitive component, such as injection skills, are subject to this interfering effect because of the vast amount of cognitive information daily confronting the average learner (Schmidt, 1975).

The mechanisms and principles of transfer of learning are less well understood. High anxiety is believed to interfere with the ability to adapt learned skills to novel situations (Cratty, 1967). Evidence is contradictory as to whether initial learning for the purpose of transfer should occur in ideal learning conditions, or in those that most closely approximate reality (Schmidt, 1975). The most common theory of transferability relies upon generalization of capacities to comprehend principles and to solve problems in alternate situations. Singer (1980) reports, however, that new evidence invalidates the applicability of this theory, although it has been used as a theoretical basis for much of classroom teaching strategy.

Emotional and attitudinal variables also have an impact upon both initial learning and transfer of skills. McCaughan and Gimbert (1981) claim that expecting to succeed is an attitude conducive to optimal retention. Lawther (1968) suggests that initial successes at skill performance increase the learner's motivation to excel, particularly when initial success allows such ego reinforcements as prestige and status within the reference group. Thus confidence not only facilitates initial learning, but also triggers on-going motivation to excel.

Most theorists recognize that optimal conditions, timing, and feedback schedules for each specific psychomotor skill must be determined independently (Jensen, Picado & Morenz, 1981; Sage, 1977; Singer, 1980). Much of the research on factors influencing retention and transfer has focused on generalized verbal learning or the learning of discrete mechanical motor tasks (Sage, 1977). Thus, the applicability of general psychomotor skill principles to such complex and emotionally-charged nursing procedures as injections is a relevant focus of study. By examining the actual practice of such skill learning, the applicable principles and factors may be identified.

Research Questions

The following research questions were tested:

1. Will students who are able to give injections within one to two weeks after laboratory learning rate themselves as more successful than students who have to wait more than two weeks before giving an injection to a patient?
2. Will students who are able to give injections within three to

four weeks after laboratory learning rate themselves as more successful than students who have to wait more than four weeks before giving an injection to a patient?

3. Will students who are able to give injections within five to six weeks after laboratory learning rate themselves as more successful than students who have to wait more than six weeks before giving an injection to a patient?

Definition of Terms

For purposes of this study the following terms are defined:

Administration of medication: accurate, safe and efficient preparation of medication following the laws and regulations governing drugs, including giving the correct medication, to the right patient, at the right time, via the right route.

Aseptic technique: use of sterile technique in parenteral medication administration including clean hands, sterile hypodermic needle and syringe, sterile medication, and disinfected injection site.

Injection-giving skill: ability to give a parenteral medication via intramuscular or subcutaneous route.

Injection site: a body part for giving an intramuscular or subcutaneous injection, that assures optimal absorption and prevention of a reaction that could cause pain, tissue damage, or disfigurement.

Performance: insertion of a hypodermic needle through the skin and deposition of medication into the correct tissue (subcutaneous fat or muscle) in such a manner as to reduce pain and tissue damage.

Success: student's perception of the degree of skill competence as measured by the score on the injection rating scale.

Method

Forty-six female students (70% of eligible subjects), ranging in age from 17-25 years (mean age 19.6), volunteered and were included in the study. All participants were second-year university nursing students who had not previously administered parenteral medications.

For the first 6 injections indicate your level of success by circling the number that best describes your performance:

Date	Injections given:	Date of 1st Injection	Date of 2nd Injection	Date of 3rd Injection	Date of 4th Injection	Date of 5th Injection	Date of 6th Injection
	Administration of Medication	1	1	1	1	1	1
	1. Instructor had to correct me	2	2	2	2	2	2
	2. made an error and corrected it myself	3	3	3	3	3	3
	3. correct, but hesitant performance	4	4	4	4	4	4
	4. faultless performance						
	Aseptic technique						
	1. contaminated equipment and instructor noticed	1	1	1	1	1	1
	2. contaminated equipment and corrected myself	2	2	2	2	2	2
	3. sterile technique but clumsy	3	3	3	3	3	3
	4. sterile technique	4	4	4	4	4	4
	Injection site						
	1. was unable to find correct site	1	1	1	1	1	1
	2. instructor had to help find site	2	2	2	2	2	2
	3. found correct site after some difficulty	3	3	3	3	3	3
	4. found correct site easily	4	4	4	4	4	4
	Performance						
	1. unable to give injection	1	1	1	1	1	1
	2. instructor helped to penetrate skin	2	2	2	2	2	2
	3. felt clumsy penetrating skin	3	3	3	3	3	3
	4. injected easily, and faultlessly	4	4	4	4	4	4

Figure 1

A questionnaire (see Figure 1) was developed to monitor the confidence and competence of injection-giving skills. It contained a rating scale asking students to evaluate their own performance in four areas: 1) medication administration, 2) aseptic technique, 3) injection site, 4) actual performance. Ratings ranged from "Instructor had to correct me", the lowest (1), to "Faultless performance", the highest rating (4). No names or other identifying data were included in the questionnaire.

Test-retest reliability was determined by having thirteen students (who had learned injection giving the previous semester) score their performance on two injections immediately after the performance, two days later, and one week later. Pearson correlation coefficients between the mean scores at 2 days and one week were .96 (N=13) and .78 (N=12) respectively.

Content validity of the instrument can be assumed to have been met in two ways: items on the questionnaire were based on skill evaluation tools used in three nursing schools; items common to two of the three schools were included in the questionnaire. Three experienced nursing instructors judged the instrument to be a valid measure of confidence and competence in injection skills.

Procedure

Students at our university are initiated to acute care nursing during the second year of the program. During the eight-month academic year, clinical experience was offered on medical-surgical and psychiatric wards. Groups of seven to nine students (randomly assigned to these groups) followed different rotations of six to eight weeks. The many psychomotor skills to be learned were taught to all students at the same time. Thus, students who learned parenteral medication administration while they were on a surgical ward had the opportunity to give an injection soon after they had learned the skill. However, for students who were on a psychiatric ward while this skill was taught, the opportunity might not have presented itself till the next rotation, a few weeks later.

Basic injection skills were taught at a parenteral medication administration laboratory. This laboratory was given in two three-hour lessons, which included lectures, demonstrations, and supervised practice of different types of injections. Students were also encouraged to practice using a syringe at home and/or during scheduled practice time. At the end of the second laboratory session, students had the opportunity to give each other an injection, or alternatively, give an injection to a "model". Students practised until the instructor deemed them "safe" to give an injection to a patient in the hospital.

Before the first laboratory session, the study was explained to students and the questionnaires were distributed. Students were asked to score their own performance for each of the first six

injections they gave in the clinical area. Completed questionnaires were presumed to imply consent to participate. This procedure was accepted on ethical grounds by the university's Screening Committee.

Limitations

Generalizability of the findings is limited by the following factors. First, the time lapse between learning and giving of injections was not experimentally controlled and might have been due to other influences than chance. Although the opportunity to give injections was largely dependent on the subject's clinical rotation (students on a surgical ward could hardly have avoided giving an injection, while students on a psychiatric ward had little chance to use this psychomotor skill), and although assignments to different rotations were based on random distribution, it is conceivable that students more adept at psychomotor skills sought and thus found the opportunity to give injections sooner than the less skillful or confident students.

Results

Secondly, the degree of mastery of the skill during laboratory practice, or through independent practice by an individual student, was not independently assessed and may have been a confounding factor.

The students were divided into four groups according to the length of time between learning to give an injection and giving the first injection to a patient.

Twenty-one students who gave their initial injection within two weeks were placed in Group I. Ten students who gave their first injection within three to four weeks were placed in Group II. Eight students who gave their initial injection within five to six weeks before giving an injection to a patient were placed in Group IV.

The time frame for the series of six injections varied from a few hours (one subject in Group II gave all six injections on the same day) to more than six weeks. The majority of subjects (48%) gave the six injections within five to six weeks. Time intervals between injections also varied from a few hours to a maximum of four weeks. All students except one were able to give the first two injections within a week. There were no systematic differences between the groups of this variable.

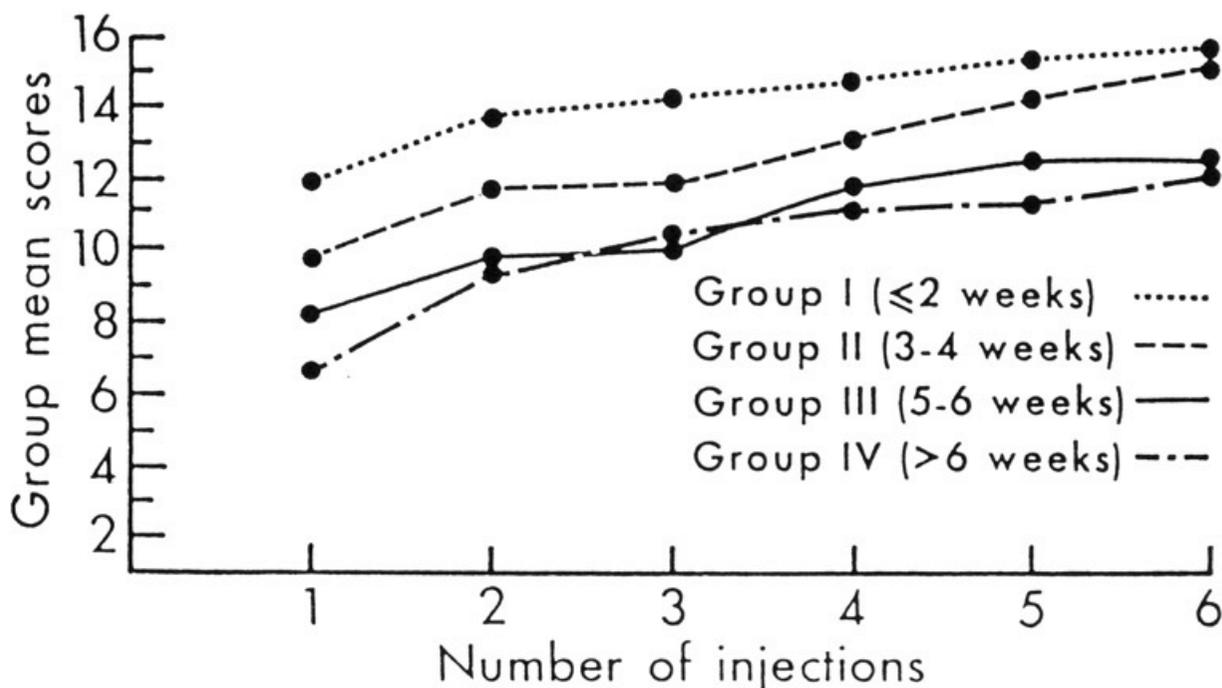
The results of the questionnaire were tabulated to show each student's over-all assessment of her "success". Individual scores for all six injections combined varied from 49 to 93, out of the possible maximum score of 96. Analysis of variance indicated that

there was a statistically significant difference between the group means ($F(3,42)=28.6, p < .001$). Mean scores were highest for Group I ($M=85$) and lowest for Group IV ($M=61$). Mean scores for Group II and III were 77 and 67 respectively. Scheffe's procedure for the comparison of multiple means indicated the mean for Group I differed statistically from the mean from Group II ($p < .05$), and the Group II mean differed from that of Group III ($p < .05$). The difference between the Group III and IV means was not statistically significant.

In view of the small number of subjects in Groups II, III and IV, the three groups were collapsed into Group II (subjects who gave their first injection after two weeks), and the 25 subjects' scores for each of the six injections was compared to the 21 subjects' scores in Group I (subjects who gave their first injection before two weeks). Analysis of variance using a repeated measurement design indicated significant difference between subjects' scores in the two groups ($F(1,44)=44.3, p < .001$). Difference in scores from one injection to the next was also significant ($F(5,220)=59.8, p < .001$). Finally, the group times injection interaction was significant as well ($F(5,220)=3.3, p < .007$).

Looking again at the four original groups when each of the six injections was considered separately, the same general relationship among groups was obtained: Group I achieved better scores at each injection than Group II. Group II achieved better scores than Group III, and Group III in turn achieved better scores than Group IV. (See Figure 2).

Figure 2



Discussion

The results clearly answered the research questions: the sooner students were able to apply their newly learned injection skill to a patient, the more confident they felt in their ability to apply the skill. This remained true even though the time lapse between subsequent injections was sometimes extended. In this study, the time before giving the first injection appeared to be the most significant factor. Time lapse between giving the first and giving subsequent injections did not significantly influence success in giving a parenteral medication.

The above findings can be explained by considering the literature on retention and forgetting. Cratty (1967) and Schmidt (1975) both demonstrated that forgetting can occur through retroactive inhibition, especially in motor tasks with a cognitive component. Since the difference between study groups in the degree of time lapse between laboratory learning and clinical trial of the injection, and, since in any nursing program the acquisition of moderately similar knowledge increases with time, the potential for retroactive inhibition increases proportionately. The findings of this study thus might be attributed to "forgetting".

However, differences in retention might also have contributed to the results. Theorists agree that feedback is most effective in promoting retention when it is "meaningful" to the learner (Singer, 1980). If experience in laboratory learning does not meet this criterion of meaningfulness to the learner, the feedback provided may be inadequate for skill retention. It is possible that no feedback short of actual clinical success meets the injection-learners criteria for meaningfulness.

Confidence arising from initial success is likely to promote skill retention (McCaughan and Gimbert, 1981). Students who experienced early initial successes were better able to retain their skill than students who had to wait, even when the time lapse between subsequent injections was lengthy. Since the target skill is often perceived by students as being crucial to clinical nursing competence, early success may well have brought peer- and self-esteem to those lucky enough to perform early clinical skill trials. Such ego involvement would be highly conducive to the motivation to excel, thus explaining why long waiting after the initial trials seemed not to deter subsequent successes.

The findings of this study strongly suggest the advisability of encouraging clinical execution of the injection within two weeks of the laboratory learning experience.

Most psychomotor skill research findings described in the literature are concerned with skill transfer in discrete motor tasks, verbal learning, and sports or military activities. None of these include the emotional and motivational properties inherent in many

of the intrusive nursing skills such as giving injections, catheterization, or changing of dressings.

Although nursing has long been actively involved in research that compares and evaluates various learning strategies, rarely has the criterion of success been that of actual transfer to practice settings. In view of the increased use of campus laboratories as the initial training ground for many psychomotor skills, the ideal timing and scheduling principles for transfer of skills to the clinical setting should be tested.

In summary, this investigation points out the great need for further studies of nursing psychomotor skill learning. Only such studies could effectively generate a body of specific knowledge that would provide students with efficient and effective psychomotor skill learning experiences.

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RÉSUMÉ

Injections: Effets du temps écoulé entre l'apprentissage en laboratoire et la pratique réelle sur l'assurance de l'étudiant

L'effet du temps qui s'écoule entre l'apprentissage en laboratoire et la pratique clinique des injections a été vérifié chez 46 étudiants de deuxième année d'un programme universitaire de sciences infirmières. Les sujets ont été répartis en quatre groupes selon le temps écoulé entre l'apprentissage et l'administration d'une injection à un malade. Six injections ont été évaluées par les sujets selon une échelle mis au point pour l'étude en question. Les résultats ont nettement démontré que plus vite les étudiants mettaient en pratique les compétences qu'ils venaient d'acquérir, meilleures étaient leurs aptitudes. On a considéré que l'assurance qu'ils tiraient de leurs premiers succès était l'explication la plus probable des succès durables dont faisaient état les étudiants qui avaient mis très tôt en pratique leurs compétences.

PARENTS OF HOSPITALIZED CHRONICALLY ILL CHILDREN: COMPETENCY IN QUESTION

Carole A. Robinson

Health care professionals are striving to offer family-centered care. In the care of a sick child, the family, and more specifically the parents, play an important role in promoting wellness. In fact, when a chronically ill child is cared for in the home, the parents fill the role of full-time, primary health care providers. Not only does illness become integrated as an on-going facet of daily living, but repeated hospitalizations often become a significant aspect of family life. As such, the parents' relationships with professional health care providers become a special part of the experience with illness.

This article is based on a research project that explored the views of parents of hospitalized chronically ill children. Through the in-depth interviews involved, it became evident that such parents often find themselves in complex, contradictory situations. They must retain a sense of the on-going care of the child, and they must relinquish the short-time care to professionals who are more accustomed to dealing with short-term, acute illnesses. The article also explores the use of "double bind" theory to show how the dilemma may be better understood and resolved. This is a new application of an old theory (Bateson, Jackson, Haley, and Weakland, 1956; 1963; Watzlawick, 1963). Double bind refers to a pattern of communication where individuals are caught in a system of sequenced messages that are contradictory and are associated with punishment. A "no-win" situation is created in that punishment is unavoidable. Bateson and colleagues (1956) originally proposed the theory as an explanatory device for the development of schizophrenia. The double bind has since been recognized as a facet of much normal human communication. Following years of empirical testing, the validity of the theory in relation to schizophrenia remains inconclusive; however, its clinical usefulness is clearly documented (Jones, 1977; Olson, 1972; Schuham, 1967; Watzlawick, 1963).

Double bind situations result in distress in relationships, and relationships in health care are no exception (Alexander, 1976; Bateson et al., 1956; Carter, 1981). This view of the dynamics operating between parents and professional health care providers offers a way of interpreting parental behaviours that are often

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viewed as "interfering." Further, it directs nurses' efforts toward developing more satisfying, effective relationships with these parents.

The Research Study

The data for this article were accumulated in a qualitative study of parents having a hospitalized, chronically ill child, which was carried out in a large, metropolitan children's hospital in Western Canada. These parents had assumed the role as primary health care providers, with regard to the day-to-day management of their children's illnesses, for periods ranging from 3 months to 21 years. All of the children were diagnosed as having different long-term illnesses such as muscular dystrophy, meningomyelocele, and toxoplasmosis. Intensive, long-term clinical work with several families that had a chronically ill child supported the formal interview data.

Kleinman's (1977, 1978) work in the area of cross-cultural medicine provided the conceptual framework for the study. He postulates that Western Society's view of the health care system, and of illness, has been dominated by the professional medical institutions and their focus on objective, scientific, biomedical explanations for illness. He proposes that the health care system is much more inclusive than these professional institutions and, in fact, that it "represents a total cultural organization of medically-relevant experiences, an integrated system of social (and personal) perceptions, use, and evaluation" (p.414). He conceptualizes the health care system as composed of three different but interacting sectors, which are socio-culturally shaped and defined by their own beliefs, roles, behaviours and institutions. The sectors are: The professional medical care system; a popular culture system, which is individual and family based; and, a folk care system.

Kleinman (1978) views all attempts to understand illness and treatment as "explanatory models", that differ among the sectors because of differing health value hierarchies. Individuals in the professional medical sector explain, understand, and respond to illness in terms of the biological and psychological phenomena of disease; whereas, the popular medical culture bases its explanatory models on personal and social experience. Kleinman, Eisenberg, and Good (1978) assert that neither the professional view nor the popular view of illness are sufficient to explain the phenomena. However, the dominance of the professional view of illness has resulted in a consistent disregard in both practice and research for the illness experience. Health professionals are coming to realize that an understanding of the client's explanatory model is necessary to the negotiation of mutually satisfying and efficacious care (Leininger, 1978). Kleinman (1978) states that "explanatory models can be objectively elicited as more or less formally structured coherent accounts of reality, though they may be and often are ambiguous and changing" (p.421).

As hospitalization is often a repeated aspect of long-term experience with illness, and because little is known about how it affects day-to-day family life, this study was designed to explore parents' views. The phenomenological paradigm of research methodology directed both the processes of data collection and data analysis (Knaak, 1984; Schwartz and Jacobs, 1979). Nine parents from six families participated. They were selected by virtue of being "expert witnesses" with regard to the research question (Pearsall, 1965).

The data were collected from the parents' accounts of their experiences during the children's hospitalizations. A semi-structured question guide adapted from Kleinman et al. (1978) was used to initiate interaction. Once data collection began, the researcher's questions were generated in response to the parents' explanations. This permitted in-depth exploration of the participants' perspectives. The researcher validated the accuracy of her understanding of the parents' experiences throughout the interview process. A total of fourteen interviews took place.

Verbatim transcripts of the parents' accounts were subjected to constant comparative analysis throughout the research process (Lofland, 1971). As it was the researcher's intent to present data that increase understanding of the shared aspects of the parents' perspectives, analysis resulted in a framework of themes that were common to the participants' accounts. The process is one of interpreting the phenomenon under study, through immersion in the construction of accounts (Davis, 1978), and thus, through intimate familiarity with the data (Lofland, 1971).

One of the common themes was the dilemma parents face about their competency as integral members of the health care team. All of the parents explained their experiences differently. However, at some point, all described being caught in the situation of not knowing what to do for their hospitalized children because it seemed that every attempt was denigrated or disregarded. The parents who had long-term experiences described the dilemma retrospectively, while the parents who were relatively new to the experience of chronic illness described actively being caught. Double bind theory has proven helpful in interpreting the dynamics from the parents' perspective.

The Beginning of the Double Bind

When asked to describe and explain their experiences with hospitalization, the participating parents invariably began their stories by placing hospitalization in the context of their on-going experience with chronic illness. Thus, hospitalization is viewed in the context of day-to-day illness management. It cannot be seen as an isolated incident as would an acute episodic illness.

This is where the double bind begins. Parents recognize that

they are expected to be competent primary health care providers in the day-to-day management of illness problems of a chronically sick child. There are few resources available on a 24-hour basis. That is the reality of living with chronic illness. The problems require continuous attention. Parents must be competent. As they stated over and over, "There is no other choice - you manage because you have to." The professional medical system requires that parents be competent because it cannot assume daily management of the chronically ill. This expectation is reinforced by the inherent threat that if they are not, their child's health will suffer.

When parents decide, in consultation with professional health care providers, to admit their child to hospital, several points are critical. The first is that hospitalization is only one facet of the larger, continuing experience with illness. It is viewed in relation to the effect it has on the child's on-going long-term illness experience, and primarily its effect on those problems in daily living that arise from being sick (Kleinman, et al., 1978). The second point, a basic extension of the first, is that parents have a holistic understanding of their child, knowing the past experiences and anticipating likely future implications. A third point is that parents view hospitalization from their position as competent health care providers who take responsibility for the majority of the illness management for their child. Thus, they enter the realm of professional health care providers assuming that, for a short time, they will be relinquishing their job as primary health care providers. However - and this is a most important aspect for health care professionals to understand - they assume that the responsibility for managing the child's illness will be shared, and that mutually satisfying care will be negotiated.

Initially, the parents believed that their overall understanding of the child, the illness, and the home circumstances contributing to illness management would be recognized and valued in the hospital setting. Instead, the parents explained that their perspective was often systematically disregarded by professional health care providers. How often do nurses hear parents say "I know my child best" and how often is this put aside? As one mother explained:

I live with the child for twenty-four hours of the day, and I know the child, and I know what he's capable of doing, and what he does and doesn't do when he's sick. I mean I've been around him for five years when he's in and out of hospitals all the time.

Adversarial Situations

Parents reported a sense of being under-valued within the professional medical system. This led to dissatisfaction with the health care received, and promoted an adversarial relationship with professional health care providers. This is the essence of the double bind situation. Parents say they get a subtle message in

the professional care setting: They are no longer competent health care providers. Instead, they are to leave the care of their child in the hands of the "experts". "Doctor knows best." "Nurse knows best." The parents' fear is that non-compliance with the hidden message to leave illness management to the professionals may result in suffering for the child. From the parents' perspective, there are long-term risks associated with this approach as the illness is not self-limiting. One mother expressed her fears this way: "You hate to really say anything because if you're not here you don't know what they could be doing to your kid, you know." Thus, all the elements of a full double bind are present. The first injunction, "You must be competent," is contradicted by the second more subtle injunction, "You must not be competent," and both are qualified by punishments. Furthermore, most parents feel caught in the situation because their child's long-term prognosis depends to some measure on professional intervention.

The parents' accounts emphasized the important role their evolving long-term relationships with professional health care providers plays in the experience with illness. Initial uncertainty about how the hospitalization would progress prompted an extensive search for information by the parents while they patiently waited for opportunities to actively participate in managing the child's illness experience in hospital. At this point, the parents described themselves as seeking involvement, but having difficulty sorting out their role because information was hard to get, hard to understand, and often incomplete. Beck, Rawlins, and Williams (1984) state that "communication patterns in which only one person has access to the truth rely on trust as the basis for action" (p.606). Apart from their experience, many parents had become exceedingly well informed about the disease process. However, despite feeling under valued in the hospital setting, their trust in the "good intentions" of the professional health care providers usually promoted compliance and patience, and they continued to wait for information and recognition.

Experience teaches the parents that the medical focus on disease often does not take into account the child's experience with illness. Trust is then shaken and the "no win" situation becomes operational. Parents are faced with the dilemma of either complying with the unspoken professional medical injunction to relinquish responsibility, or of assuming a non-compliant position by actively advocating a more positive involvement with the illness. Either action carries the inherent threat of causing suffering for their ill child.

Beck and colleagues (1984) state that "double bind interactions occur rather commonly in normal human interactions both within and outside the family. When caught in a double bind, a healthy individual usually responds defensively or literally. The individual experiences discomfort, but corrective interactions . . . prevent a pathological state" (p.606). In their allegiance to the sick children, the parents uniformly responded defensively. As a group, they

were united in their sense of being responsible for insuring a positive experience in hospital. One mother explained it this way:

Maybe I'm more protective than I should be when he's in the hospital, because I do have to make sure that he never has a bad experience - because of the time he does spend in hospital.

The ill children are viewed as vulnerable and in need of protection. The adversarial relationships with professional health care providers are associated with parental feelings of anger, uncertainty, helplessness, hopelessness, and confusion. One mother vividly described the relationship this way:

We, parents, were talking the other day in the parents' room and we were saying, "We think the nurses have a conspiracy phone the doctors and say "Okay, they're gone, you can come up and do it without the mum in the way."

The predominant emotional response was one of anger.

Sometimes when we're sitting there we'll be really calm and stuff - then it starts to build up to where you get so mad at these people because they treat you like a nobody it seems.

Much of the defensive behaviour that the parents described is traditionally viewed by health care professionals as "interfering". The parents became extremely vigilant in their role as advocate: questioning, observing, spending long periods of time in hospital, and "interfering" in decisions about care. As one mother explained, "I realize now that you really have to fight if you want something." All of the parents expressed concern about the routine occurrences that health care professionals consider simply "part of being in hospital."

Well I think we're trying to avoid anything that isn't really necessary. I guess it bugs him a bit, you know, to be poked around and that kind of stuff - and if it isn't really necessary. In the beginning we didn't mind because they can learn from it. So we can appreciate the fact that they need somebody to be a guinea pig but it comes to, after so much of it, it's just go and find somebody else to poke around now.

It is the parents' view that if they are not with the child, he or she will have to go through the experience alone.

Implications for Nursing

Clearly, this double bind situation has a negative impact on relationships in the health care setting. This has significant implications for nurses who are committed to the provision of high

quality, family-centered care. The cycle of conflicting expectations must be broken through the negotiation of mutually satisfying care. Traditional ways of dealing with "interfering" families, which are focused on re-establishing compliance and trust by simply reducing or eliminating the "interfering" behaviours, do not promote understanding of the parents' perspectives.

The first step in the negotiation process involves gaining an understanding of the parents' views. This attention reinforces the importance of the parents' position in the health care team, and the value of their unique perspective of the ill child. It requires on-going, active listening on the part of the nurse. Pediatric nurses must recognize that parents of chronically ill children are different, and that their needs are different from those of parents of children with acute, episodic illnesses.

Parents must also be given the information about their child's experience that will permit informed decision making. In other words, what are the benefits and risks to the daily problems of living that arise from being chronically ill? As one set of parents stated: "You don't know what to do when you don't know."

The study also revealed that discussion between the nurse and the parents is an essential element in the care of the chronically ill. Nurses should ask parents questions that indicate a desire to understand their perspective and which may provide information that sheds light on the implications of medical management for the child's experience. It is also a nursing responsibility to promote parental understanding of the professional medical perspective, which includes acknowledging the limitations of medical management. However, again, mutual understanding is not enough. Parents must also feel that their concerns are attended to, and thus viewed as valid. This may be as simple as maintaining the child's usual diet to reduce the likelihood of vomiting.

You walk in here and you tell them the answers to all the questions they ask. They put it on the chart but nobody reads the chart. I say I've told them three times, "Don't give him homogenized milk, it makes him too phlegmy," but it's still coming up on his tray.

Nurses are in a position to increase parental competence by assisting them in planning for management concerns that are likely to arise after hospitalization. This is part of recognizing the on-going nature of the chronic illness experience and of acknowledging the parents' health care responsibilities. Unfortunately, the opportunity is often missed. One father explained his experience this way:

The hospital is concerned with any immediate illness that is going on with him. Then they'll do something about it. But as far as trying to set out a diet or a lifestyle for him, to pattern him after - they're more concerned when things are

already wrong, like his asthma. That's an immediate thing. But as far as seeing what they can do to develop him like a normal kid they don't seem to do much in that aspect. Somewhere along the line they've got to start preparing him for his future, and giving us some kind of idea of what we can do to develop his future as normally as possible.

When chronic illness is involved the children do not get well but they do go home to the care of their parents.

Summary

When a foundation of mutual respect and understanding is established it is possible for parents and professional health care providers to negotiate care that is mutually satisfying. Under these circumstances the double bind is eliminated. Parental competency would be recognized as a valuable adjunct to illness management in the professional setting.

Given that high quality, family-centered care is a priority for pediatric practitioners, it is imperative that good working relationships be promoted with families of sick children. In the opinion of parents in this study of hospitalized chronically ill children, health care professionals must recognize the long-term nature of the family's experience with illness and the implications in terms of sharing illness management. When these parents feel that their competence as health care providers is in question, and that their role on the health care team is under valued, a complex double bind situation results. The cycle of dissatisfaction that arises for parents and nurses under these circumstances can be broken, and in the process family "interference" in professional health care can become productive. The key is negotiation.

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RÉSUMÉ

Parents d'enfants hospitalisés a la suite d'une maladie chronique: remise en question de la compétence

Le présent article fait état des résultats d'une étude qualitative conçue pour explorer les expériences des parents alors que leur enfant atteint de maladie chronique était hospitalisé. Aujourd'hui, un nombre croissant d'enfants atteints d'une maladie chronique sont soignés à la maison. Dans ces cas, les parents jouent un rôle primordial dans la presentation des soins quotidiens. Ces parents deviennent rapidement des experts sur les effets de la maladie, le traitement et les réactions de l'enfant aux soins. L'hospitalisation, un aspect souvent répété de la maladie au long cours, exige des parents qu'ils cèdent leur rôle de premier plan dans la presentation de soins. Il s'ensuit que les parents éprouvent des sentiments ambivalents complexes, car ils se sentent dévalués et ignorés au sein de l'équipe de soins. Ce sentiment entraîne une insatisfaction qui influe de manière négative sur les rapports qui lient les membres de l'équipe de soins. La compréhension du point de vue de la famille permettra aux infirmiers d'entretenir des rapports plus satisfaisants et plus efficaces avec ces parents.

CALL FOR ABSTRACTS

The Council on Nursing and Anthropology and the Transcultural Nursing Society are sponsoring a one-day conference, "International Nursing: The Cross-Cultural Context" on May 6, 1986 at the Convention Center, Edmonton, Alberta, CANADA. This conference precedes the Second International Nursing Research Conference. Abstracts of one page or less should be received by February 1, 1986. Send abstracts to:

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RESPONSE

REPORTING ON QUALITATIVE AND QUANTITATIVE RESEARCH: EVOLVING ISSUES AND CRITERIA

Sharon Ogden Burke

A look at recent nursing research in Canada in our two national publications, and also at national, regional, and local nursing research conferences shows a major shift from more hard-nosed, purely quantitative approaches toward more context-embedded, qualitative methods of enquiry. The preceding paper is an example of this trend. Nursing is not alone in this shift. It is seen in other professional disciplines, such as education, as well (Miles and Huberman, 1984).

Like our early efforts at experimental and descriptive research, we have borrowed our methods from other disciplines. It took time to develop a body of nursing knowledge that built on, and refined for our use, the theories and methods needed to deal with quantitative nursing data. This body of nursing literature is now expanding to include more theory and methods of qualitative inquiry (Glaser and Strauss, 1966; Knafl and Howard, 1984), but it is still immature and incomplete.

There are many controversies and issues behind, and generated by, this shift. For example, are these dichotomous approaches, or is there a continuum of qualitative through to quantitative approaches; is one method generally better than the other for nursing problems; can these methods be blended as some have recommended (Miles and Huberman, 1984; Sieber, 1983), or will the epistemological ecumenicalism dilute the effectiveness of both approaches; and are there some types of problems, situations, researchers, phases in the development of a theory, or patients who lend themselves better to one method over the other? I suspect a consensus will emerge in time that views the two families of approaches along a multifaceted continuum or matrix with both having relevance for nursing research. The necessary methodological directions as to when which type of approach is best suited to various research situations and the people involved are even now beginning to emerge.

As this evolution takes place, what can we do to communicate more clearly our qualitative research findings? Criteria for the presentation of quantitative studies, from the statement of the problem and review of the literature, to the discussion of findings and conclusions, can be found in a wide variety of texts and journals. However, qualitative researchers, understandably, have

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tended to reject these criteria because the specifics do not fit their work. Nevertheless, the concepts behind such criteria are applicable. For example, the purposes of qualitative studies tend to be more diverse; such as developing baseline data for future research, providing a descriptive base for practice, developing a concept, or generating a theory (Knafl and Howard, 1984). The purpose is stated in a more narrow quantitative style which is an uncomfortable fit with the qualitative nature of the study. The purpose of the paper above seems to be to develop a concept for clinical use with the parents of hospitalized chronically ill children, but is not stated as such.

Methods and analyses also require clear descriptions for a research report, because the specifics of how these are performed are highly varied. For quantitative data collection and analysis, the terrain is well marked, and indeed we have developed almost a shorthand to communicate this to each other. In qualitative studies, the procedures and thought processes used must be made more explicit. Qualitative reporting conventions are scant at present. This lack of guidelines is reflected in the scattered methods reported above. A parallel occurs in the reporting of analysis procedures. This is further confounded as analyses probably occurred more in concert with data collection than ordinarily is the case in quantitative work. This paper, like many others, struggles to make the data collection procedures clear.

The crux of the concern over the methods portion of the article is the internal validity of the conclusions, i.e., how did the author collect and record her data, how did she get from what must have been a mountain of data to her conceptual conclusions? At what point was "double bind" first considered, and what were her decision rules or points as to whether or not it truly fit her data? How, when, and in what way did her previous experience and thinking come into play? This author is not alone in grappling with these issues (Trend, 1978). The nursing research literature lacks a body of clearly defined methods for drawing valid meaning from qualitative data (Miles and Huberman, 1984).

Rich use of raw data to lend validity to a report is a hallmark of qualitative study and is well used above. Quantitative researchers might consider this reporting strategy which has been lost in our rush to be concise and objective.

Looking into my crystal ball, I suspect criteria for reporting qualitative research will emerge first and be used along with, but separate from, existing quantitative criteria. However, the fundamental principles behind both sets of criteria are very similar and they probably will merge as we become more comfortable as nurse researchers, in using, reporting, and reading a variety of research methods.

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RESPONSES OF FAMILIES TO THE TREATMENT SETTING

Linda E. Rose

Families of psychiatric patients have many problems and concerns as a result of their relatives' mental illness and subsequent hospitalization. Living with a mentally ill relative for months or even years prior to treatment may result in disruption of social and personal routines; it may create physical and emotional stress; and it may cause financial and occupational difficulties (Robin, Copas & Freeman-Browne, 1979). Their initial encounters with the psychiatric hospital occur at a time of crisis, when they may be feeling guilty and ashamed for having contributed to the illness, and they may be apprehensive about the future (Leavitt, 1975). They may also feel inadequate and helpless because they lack information about the illness and its treatment (Lewis & Zeichner, 1960). The hospitalization presents families with the task of acknowledging the relative as "mentally ill", a task which is a major component of the crisis (Clausen & Yarrow, 1955; Mechanic, 1967). Families therefore try to make sense of events and people encountered during the hospital experience in order to help them with this task (Perelberg, 1983).

Families often arrive at a psychiatric hospital following a circuitous and frustrating route of seeking help from various agencies and professionals. The families' views of the hospital as a last resort, as well as their attitudes about mental illness, contribute to their feelings of guilt with the result that the family is "thrown out of balance" by the hospitalization (Fleck, 1965; Zwerling & Mendelsohn, 1965). Anderson (1977) noted that families felt isolated from the hospital, they experienced few opportunities to express their feelings or request support, and often they appeared resistant to therapy because of their fears and anxieties about the illness. Leavitt (1975) found that families maintained their feelings of confusion and fear throughout the hospitalization, and concluded that hospital staff had not been effective in supporting the family.

The lack of attention paid to the needs of families of psychiatric patients during hospitalization, both in research and clinical practice has been noted (Harbin, 1979). The development of an understanding of those needs involves an examination of the families' responses to the setting in which treatment occurs, since many of the problems that families encounter in dealing with the illness may be related to the hospital itself. The author of this article will discuss the results of a recent study designed to explore families' perspectives of their experience of the psychiatric hospitalization of a relative. A major finding of the study has

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indicated that families were actively involved in making sense of the hospital experience - a process that was influenced by their desire to understand and become a part of the treatment. The problems they experienced related to the hospital setting will be identified, and the relationship of these problems to the cultural elements of the psychiatric hospital will be shown.

Theoretical Perspective

The objective of the study was to elicit the families' perspectives of their experiences of mental illness and its treatment. Their subjective responses to events and situations encountered in the treatment setting were considered important to the development of an understanding of the meaning of the experience for them, and to its subsequent influence on their behaviour. The perspective of phenomenology as developed by Schutz (1962) was seen as appropriate to the study objective and was therefore chosen as the basis for the qualitative research design.

Qualitative methods based upon phenomenology go beyond the objective observation of behaviour that are typically done in quantitative studies, and attempt to explain phenomena by eliciting the subjective, inner experience of the participants (Rist, 1979). The phenomenological approach precludes the use of hypotheses or other preconceived notions, biases, or assumptions, and the researcher is open to all reports from the participants that might constitute "data" (Omery, 1983). Reality of the situation under study is therefore socially constructed by those within it (Davis, 1978). Methods of data collection are guided by the aim of the researcher to understand how the participants "make sense of" or construct this reality, based upon their subjective interpretations (Cicourel, 1968; Schutz, 1962). If interviews are chosen as the method of data collection they are usually unstructured, to allow the participant to focus on aspects of the experience important to them, and to encourage description of individual interpretations and meanings (Omery, 1983).

It should be noted that when the method of data collection is in-depth interviewing, the number of participants is in part determined by the extent of the data obtained, and the degree to which the researcher is satisfied that the participant's perspective is understood. The aim is not to determine cause and effect, but rather to glean the essence of each participant's unique experience (Colazzi, 1978; Omery, 1983).

Method

Families of adult psychiatric patients whose duration of hospitalization was likely to be four to six weeks during the time allotted for the study, were asked to participate. It was felt that such a period was representative of the average length of stay of patients in an acute care psychiatric setting. Families had to be able to converse in English in order to articulate their experience to the researchers, and they had to reside in the local metropolitan area. The basis for these criteria was the desire for a homogenous group, in terms of length and quality of hospital contact, as well as to allow the researcher ample time to conduct the in-depth interviews in the families' homes during the hospitalization period.

Data Collection.

Initial contact with families meeting the criteria was made by the researcher after receiving consent from the patients and hospital staff to do so. Two interviews were conducted with families during the hospitalization period. These interviews were essentially open-ended and unstructured, although as phenomenology directs, the initial interview was guided by the review of the literature, the researcher's personal experience, and the work of other researchers (Colazzi, 1978). For example the families were asked to describe their reactions to admission, the treatment process, their involvement in treatment, and the impending discharge (Anderson, 1977; Harbin, 1979; Kleinman, 1978; Leavitt, 1975). The purpose of the initial interview was to discuss events leading up to and including hospital admission. As well, the researcher tried to elicit families' perceptions of the hospital environment and the effect of the hospitalization on their everyday lives. The timing of the initial contact varied, but, as much as possible, occurred during the first two weeks of the patient's hospitalization. An important methodological consideration within the phenomenological perspective, this schedule aided the families and the researcher in "exploring the meaning of that experience as it unfolds for the participants" (Omery, 1983, p.54).

While conducting these interviews, the researcher was actively involved in identifying her own subjectivity, and attempting to recognize its influence on the research process. Possible assumptions or biases were recognized, and every effort was made to examine them and to set them aside in order to be completely open to the families' view (Davis, 1978). Words and phrases that might have different meanings, or for which there was a danger of assuming shared meaning, were clarified with the families in the subsequent interviews.

Ten family members of seven patients participated in the study, representing various relationships to the patients: wives

(2), parents (3), siblings (1), daughters and sons (3), and grandmother (1). They ranged in age from twenty to seventy, and could broadly be described as lower- to upper-middle class. One family was Hungarian, another Chinese, and the remainder were Canadian. Patients represented a variety of diagnostic categories but all were experiencing their first hospitalization.

Data Analysis

The qualitative research design, based upon the phenomenological perspective, involved an inductive and interpretive approach to data analysis (Anderson, 1981). It is closely related to the methodology of grounded theory research in which content analysis of data, such as that gained through in-depth interviewing, results in the emergence of dominant themes descriptive of the participants' experience (Glaser & Strauss, 1967). To use this qualitative approach to data analysis is to engage in a process of "living with" the data, reflecting upon its meaning, pulling out the salient categories or themes, and attempting to conceptualize them to represent the participant's experience. Thus, the emerging theory of a phenomena is "grounded" in the data of the participant's experience (Stern, 1980). The process was further enhanced through constant comparison of all data; as interviews were completed and transcribed, they were simultaneously compared and contrasted with other data, to support or refute themes tentatively identified (Glaser & Strauss, 1967). Since the basic tenet of the phenomenological approach is validity of the client's perspective, an important component of data analysis was the follow-up interview, or contact with study participants, to "check out" the researcher's interpretations. Sharing conceptualizations with colleagues who were familiar with the method and area of study also helped to reduce the erroneous interpretations of a single researcher.

The Families' Accounts

Through the inductive analysis of the interview data just described the concept of assimilation was identified as describing the families' experiences in the hospital setting. The process of assimilation is offered by the researcher as a way of explaining one source of families' problems and concerns. Analysis of their accounts of personal experiences in the psychiatric unit highlighted the families' wish to become active participants in their relatives' treatment, and their need to determine their role within the setting.

As families engaged in the assimilating process, they seemed to be involved in several activities; first, they were learning to identify and adjust to necessary changes in their relationship to the ill relative, particularly when visiting the patient in hospital;

secondly, they were involved in identifying the role of various staff in the setting, for example nurses, psychiatrists, psychiatric assistants and clerks; thirdly, they were using informal methods of gathering information about the hospital routine, philosophies and such; and finally they were continually evaluating the reasons and methods concerning treatment as it applied to their relative. For the purpose of clarity these activities can be viewed separately, but in actuality they occurred more or less simultaneously and influenced each other; for example, the families' view of the staff role affected their own information gathering behaviours.

Identifying Families' Roles

The ease of assimilating into the setting was affected by the degree of uncertainty families felt about their own roles. Families' beliefs about the causes of mental illness, and their concerns about their own contributions, created feelings of uncertainty during their initial visits with the patient. Questions they had about their role in relation to the patient in the hospital setting were focused on their verbal responses and general attitudes toward the patient. They asked questions about resuming a parent role, or assuming responsibilities normally fulfilled by the patients. One family decided that, "You just have to treat them like small children," while another family was confused about their role: "I don't know what to say to him, I don't know how to handle it."

Families were also confused about their role in relation to the staff on the unit. They looked for rules in the setting that might direct their actions, and none were clearly evident. Families described feelings of guilt and remorse for their possible contributions to the patient's illness, and expressed a need to be involved in the patient's care because of these feelings. They were hesitant to request such involvement however, and questioned its acceptability from the staff's point of view. Should they call the unit, for example, and request a progress report? Others asked questions about what was expected of them when the patient returned home for a temporary pass, or whether they were expected to volunteer information about the patient's past. Such concerns, and the lack of help they received in dealing with them, made their assimilation into the setting more difficult. The unanswered questions affected their ability to interact comfortably and assertively while in the hospital setting. As one family described, "I suppose you're groping; you don't really know what you're to ask." But the belief in the importance of a clear role for families was evident, as one family member expressed, "It's my life too."

Identifying Roles of Others

The families' prior beliefs and assumptions about the roles and functions of various health professionals, developed in other, more "medical" settings, further affected their attempts to assimilate this new experience. Staff were initially viewed as "experts" who would be able to answer clearly their questions about the cause, prognosis, and treatment of mental illness. One family member described her initial notion that professionals "know how to handle people, talk to people because they know what goes on in people's minds." Families consistently reported that their preconceived notions did not apply in the psychiatric unit. Experiences in the setting resulted in disappointment for many when concrete, definitive answers to their questions were not offered. They were uncomfortable in the day-to-day interactions with staff, as evidenced by uncertainty and insecurity in identifying and approaching the "right person" or the staff member "in charge" of their relative's care. "I'm sometimes a little doubtful about the right person to talk to," one family admitted. Assumptions that they used to govern their actions resulted in the decision that nurses were not allowed to provide any information about the relative's progress. Families who lacked clear directives about the roles of staff expressed feelings of isolation from the hospital.

Information Gathering

An inability to define their roles in the unfamiliar surroundings was most apparent when families described their circui0ous methods of information gathering. Information was gained through their observations of staff interacting with patients. Patients were questioned about ward events or treatment modalities such as group therapy or medications. Other patients were observed in informal encounters and compared to a family's relative in order to help them make some judgement about the severity of the illness. Making sense of the physical environment was important to their decisions about how they should act. The presence of a "lounge" or common area, for example, meant for some that they should spend time there with other patients and families. "We go there because we don't want to appear separate from the others," one family explained. Such a sensitivity to cues in the environment highlighted the families' efforts to understand the norms and values of the unit.

Treatment Issues

Families had difficulty understanding and accepting the treatment plans when the values on which they were based were not easily identified, or were in conflict with their own value system. They described their surprise and doubt when they realized the staff expected more of a patient than they did.

Other patients were judged as "worse", or their relative was viewed as "different" in some way and therefore, families concluded, required different treatment. As one family observed, "I couldn't really see where there was very much that's going to be able to happen for him, because he isn't psychotic, like a lot of the people there." They examined how the patients "looked" or responded to them during visits and made their own judgements about their progress, which they did not always share with staff.

Communication between families and staff was further hampered when families were not committed to the treatment methods and goals. Few families could specifically describe what the therapies were designed to do for their relative. One family that was informed by staff that the relative was participating in group therapy, had no notion of what that was or how it was supposed to help. Other families voiced skepticism about the relevance of the group approach to their relative's problems. They hesitated to disagree with or question staff treatment methods however, and instead patients were asked to describe what had transpired. As one family concluded: "I don't think that it helped him to stay there. I came out of there feeling quite depressed, because I thought, to be in that environment all day... I couldn't really see where it would do anybody any good."

While "improved communication" or "getting along with others" was acknowledged as important, other aspects of treatment, such as "forced" interactions between their relative who was "not up to it" and others were not. The experiential techniques used were viewed critically, and staff lost credibility because they valued them more highly. "It was funny, some of the things they picked up on," one family observed, while another concluded that the hospital was "a place where you just talked with other patients, and ate and slept." A third family stated: "I thought they would have more individual discussions, to see if they couldn't get to the bottom of things." Another family described the home and hospital as "two different worlds", and did not place any value on her relative's responses in group therapy since they were "out of context" of the patient's home environment.

Discussion

Among psychiatric hospitals there may be a variety of treatment philosophies which influence organization. The choice of an overall treatment philosophy, such as a therapeutic community model, determines the nature of the unit as a social system. Kraft (1976) emphasizes the importance of considering the socio-cultural elements of a unit when he describes how the values and norms governing behaviour, the distribution of power among staff, and the beliefs about mental illness upon which treatment is based must influence one another. These factors which highlight the social nature of the system are sources of

problems and concerns for families in their initial exposure to the psychiatric unit, when they see little that is familiar or easily understood. While staff and patients become aware of their role through the legitimacy given to them, families do not enjoy such a benefit in settings where no formal structure exists for their involvement.

In this study, families described feelings of discomfort, insecurity and isolation from the hospital because they were unsure of their role or the role of the staff, and they had many doubts and questions about the therapies used with their relatives. They realized that they never felt a part of the setting, and as Leavitt (1975) described in an earlier study, they concluded that the hospital was only concerned about the patient (p.38). This attitude seemed to be a result of failure of the staff to involve the family in the patient's treatment plan.

While the issue of the family's desire or lack of desire for involvement has been argued by other researchers (Krajewski & Harbin, 1982), and indeed the families' motives for involvement have been questioned (Greenley, 1972), it seems clear from the accounts of the families in this study that they wanted to understand what was happening to their relative and to be included in planning for the future. They wanted to become assimilated into the social system of the psychiatric unit, so that they could help their relative during and after the hospitalization. A consequence of a failure of families to become a part of the setting -- to obtain the necessary information and support -- is that they may experience alienation from the system (McFarlane, 1982, p.105). Feelings of powerlessness, a lack of meaning attached to events they encounter, and isolation seem to summarize the problems that these families had in their attempts to become assimilated into the social system.

Families felt powerless when they perceived a lack of control over events in the setting, such as the treatment of their relative, or when they were uncertain that their requests for involvement would be acknowledged and met. The lack of assistance from professionals in understanding the illness, or in providing directions for how to act toward their relative hampered their ability to see meaning in the experience. They lacked confidence in their own actions and decisions in the setting. This was accentuated when the patient's treatment seemed to have little relevance to the family's life outside the hospital.

Differing beliefs and values of families and professionals about mental illness and how it should be treated can be a source of conflict, contributing to families' feelings of isolation from the system. As families evaluated staff expectations of the ill relative and interactions and this interaction with them, they were struggling with their own belief system, which often

involved a lack of trust of of the patient, decreasing expectations, and a cautious approach in interactions. The differences in approaches to mental illness were noted by families but not immediately understood.

The families in this study, then, clearly identified their sense of isolation from the hospital, and went on to describe their emotional responses of sadness and helplessness. Their lack of involvement in treatment resulted in little or no new knowledge about how to deal with the patient or the illness -- which they perceived as contributing to a pervading sense of pessimism about the future.

Families arrived at the psychiatric setting with emotional burdens of guilt and shame. The lack of a clear message from professionals, that they were not to blame for the relative's illness, increased the burden. They actively sought ways in which they could now positively influence the patient's recovery and expressed a strong desire to be involved in this way.

Implications for Nursing

The families in this study have illustrated the extent of the impact of the social system of the psychiatric unit on their lives and on the difficulties they experienced in understanding its characteristics. The families' accounts of the problems they encountered in becoming assimilated into the system suggests several directives for nursing practice, to improve the quality of the experience for families.

A comprehensive family orientation has been suggested as a means of reducing the families' anxieties and developing a working alliance among staff, patient, and family (Anderson & Reiss, 1982). Rather than hastily dismissing a family as resistive or uninterested, an exploration of their feelings and attitudes toward the setting is needed. During an orientation, discussion of the overall unit philosophy and specific goals of treatment could occur. Their input, questions, and evaluative statements should be encouraged. Ideally this first contact should be made by the nurse who will be most closely involved with the patient, and who will then serve as a contact person for the family for the remainder of the hospitalization. Roles of the various professionals on the unit could be explained, and support staff that families will encounter when visiting could be introduced.

On-going involvement with families is important to alleviate their feeling of isolation. Multiple family groups can be effective mechanisms for meeting families' needs for support and involvement (Atwood & Williams, 1978; McFarlane, 1982) as well as providing an opportunity to re-evaluate their own feelings of guilt and shame and thus decreasing feelings of self-blame. Such groups would also provide a legitimate role for families in the

hospitalization of their relative. The legitimization however, needs to be continually reinforced through individual contacts with families, both formal and informal. Encouraging them to voice their attitudes and beliefs about mental illness, and to discuss their relationship with the patient in a non-punitive manner, may help to increase the meaning of the hospitalization for them. Giving them permission and encouragement to approach staff would help to clarify their role as valuable members of the unit.

Before any of these interventions could be instituted, however, an analysis of attitudes of staff toward family involvement should occur on all levels. How do nursing staff on the unit, for example, respond to an anxious or even hostile relative during visiting hours? An understanding of the family's feelings of powerlessness and isolation might help the nurses to respond more therapeutically to those families, instead of dismissing them as "problems". Further research could focus on such staff attitudes and interactions; additionally the questions could be asked: Does the development of a formal program for family involvement decrease family concerns? Or do family groups only occur for those obviously in need of family therapy? Nurses should be given the time and support to be actively involved in family programs. In a recent involvement with such a support group by this author, it was apparent that its on-going success was dependent upon administrative support.

Conclusions

The increasing complexity of the health care system can create feelings of alienation for any consumer of its services. While the effect of dependency and passivity on patients has been acknowledged, less consideration has been given to the responses of families. Particularly for families in psychiatric hospital settings, the lack of a legitimate role and a poor understanding of treatment contributes to feelings of isolation and hampers their ability to support the patient. For these families, feelings of alienation from the hospital are increased because of their emotional responses to the illness, the nature of the mental illness and its treatment, and the families' strong desires to become a part of the treatment process. Their assumptions that they must be part of the solution if indeed they were part of the problem create turmoil when they are not included.

The families' experiences of alienation were discussed in this article as a way of understanding the responses of families to the psychiatric hospitalization of a relative. Assessment of families' needs and the development of family-oriented treatment units can be greatly facilitated by the consideration of factors that hamper assimilation, and that contribute to their feelings of powerlessness, isolation, and lack of meaning. We can

effectively address these concerns of families, if we are sensitive to their needs to understand the norms and values governing behaviour in the setting. It is ultimately a benefit to the patient to include the family in treatment if the family can share the treatment goals. If families can find relevance and meaning in the therapeutic approaches used and in the changes made by patients during hospitalization, they will then be better equipped to support the patient in the crucial post-hospital adjustment.

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RÉSUMÉ

Réactions des familles de malades psychiatriques au milieu thérapeutique

Dans le présent article l'auteur fait état des résultats d'une étude récente sur les expériences vécues par les familles de malades psychiatriques et traite plus spécifiquement des expériences qu'ont vécues les familles en milieu thérapeutique et de leurs réactions à l'unité psychiatrique en tant que système social. L'article décrit les tentatives des familles pour parvenir à l'assimilation au sein du système culturel que représente l'unité, et identifie les domaines de préoccupation spécifiques qui apparaissent au fur et à mesure qu'elles participent au processus d'assimilation: les rôles des familles et du personnel, les demandes de renseignements et les modalités de traitement. L'aliénation est présentée comme la conséquence de l'incapacité des familles de s'intégrer à part entière au milieu. L'isolement, les sentiments d'incompréhension et d'impuissance sont examinés à la lumière des rapports des familles; les conséquences de ces données dans le cadre de la pratique infirmière font l'objet d'une discussion.

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