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The Canadian Journal of Nursing Research
Revue canadienne de recherche en sciences infirmières

Volume 20, No. 4 **Winter/Hiver, 1988**

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A DROP IN YOUR BUCKET

Last year, in an editorial for Volume 19, No. 4, I lauded the potential impact of the NHRDP/MRC development grant on nursing research in Canada. The first year of the competition is over and the results are now public. The reactions to the process and results are mixed, to say the least. Before elaborating on the topic, I would like to take this opportunity on behalf of the Journal staff and subscribers to congratulate the three researchers who won scholar awards in this competition. We are proud of the accomplishments of Dr. Celeste Johnston from McGill University, Dr. Hilary Llewellyn Thomas from the University of Toronto, and Dr. Jan Morse from the University of Alberta. We look forward to their continuing success under this funding initiative.

While we are indeed pleased that three scholar awards were obtained, we are also confronted with a discrepancy between what we had hoped for in what we perceived to be a development grant and the final results. The fact that no operating grants were funded and no infrastructure funding was given is a major disappointment. The reality is that our expectations of what is needed for the development of nursing research are only partially addressed by the NHRDP/MRC grant. There is no question that we need funded scholars in Canada, and this program is specifically designed for that purpose. Further, to realize fully the potential of this development grant, we should not only identify researchers in place but be aggressively recruiting scholars who would be successful in this competition.

Nursing in Canadian universities needs a broad range of initiatives if development of research is to meet the growing health needs of Canadians. however, because of our stage of development and our historical place in the university's pecking order, most nursing schools are underfunded and have little in the way of research infrastructure. Even our most valuable resource - our faculty - is burdened with extraordinary teaching loads.

Health and Welfare Canada recognizes, from many sources, the priorities for health research in areas such as AIDS, and the elderly and the chronically ill. Nursing research has a crucial role to play in addressing these issues. More, therefore, is needed *now* to foster the development of nursing research. Special funds are required to build the infrastructure, to develop undergraduate and graduate student research involvement, to provide pilot funding for feasibility studies and so on. A major infusion of funding is called for in order for schools of nursing to catch up in the research enterprise. If we don't do something now, the impact on the health of Canadians may be dismal.

So, what next? Continue to take advantage of the NHRDP/MRC development grant to its full potential. Then, back to lobbying - federally and provincially - for more initiatives to develop our research productivity on a variety of fronts. We may also continue to negotiate with the funding agencies to broaden the mandate of this current development grant. This has already begun on the part of the six schools that were involved in the first round of the competition. In the meantime, back to your application for the next round, which by the way is considerable clearer in its format this year. Good luck to all of you!

Mary Ellen Jeans

UNE GOUTTE DANS L'OCÉAN

L'an dernier, dans mon éditorial du n° 4 du volume 19, je n'ai pas tari d'éloges sur l'incidence potentielle des subventions de perfectionnement du PNRDS/CRM sur les recherches infirmières au Canada. La première année du concours est terminée et les résultats sont désormais connus. Les réactions suscitées par le processus et par les résultats sont mitigés, pour employer un euphémisme. Avant de m'étendre sur le sujet, j'aimerais saisir cette occasion au nom des membres et des abonnés de la revue pour féliciter les trois chercheurs qui ont obtenu des subventions dans le cadre de ce concours. Nous sommes fiers des exploits des docteurs Celeste Johnston de l'université McGill, Hilary Llewellyn Thomas de l'Université de Toronto et Jan Morse de l'Université d'Alberta. Nous leur adressons tous nos voeux de succès dans leurs recherches.

Si nous sommes heureux des trois subventions octroyées, nous regrettons l'écart entre ce que nous pensions être une subvention de perfectionnement et les résultats finals. Le fait est qu'aucune subvention de fonctionnement ni aucune subvention d'infrastructure n'a été octroyée. En fait, la subvention du PNRDS/CRM ne répond que partiellement aux besoins des recherches infirmières. Il est incontestable que nos chercheurs ont besoin de subventions au Canada, et c'est précisément ce que vise ce programme. En outre, pour tirer tout le parti de cette subvention de perfectionnement, nous ne devons pas seulement recenser les chercheurs en place mais nous devons mettre sur pied une politique agressive visant à recruter des chercheurs à même de tirer leur épingle du jeu de ce concours.

Les sciences infirmières dans les universités canadiennes nécessitent toute une gamme d'initiatives si l'on veut que l'évolution des recherches réponde aux besoins sans cesse croissants des Canadiens en matière de santé. Compte tenu de notre stade de développement et de la place historique que nous occupons dans l'ordre des préséances des universités, la majorité des écoles de sciences infirmières pâtissent d'une insuffisance de fonds et n'ont pratiquement rien en matière d'infrastructure de recherche. Même notre ressource la plus précieuse, notre corps enseignant, doit supporter le fardeau de charges d'enseignement extraordinairement lourdes.

Santé et Bien-être social Canada reconnaît la priorité des recherches dans des secteurs comme le sida, les gens âgés et les malades chroniques. Les recherches infirmières ont un rôle crucial à assumer à cet égard. Plus que jamais, nous devons favoriser le développement des recherches infirmières. Nous avons besoin de crédits spéciaux pour créer les infrastructures nécessaires, mobiliser les étudiants des trois cycles, financer des études de

faisabilité et ainsi de suite. Une injection massive de crédits s'impose pour que les écoles de sciences infirmières rattrapent leur retard dans le domaine de la recherche. Si nous n'intervenons pas immédiatement, l'impact sur la santé des Canadiens risque d'être catastrophique.

Quoi d'autre? Nous devons continuer à tirer le maximum de parti de la subvention de perfectionnement du PNRDS/CRM. Puis revenir au lobbying, à l'échelon fédéral et provincial, en vue de prendre de nouvelles initiatives pour développer notre potentiel de recherche sur toute une variété de fronts. Nous devons également poursuivre nos négociations avec les organismes subventionnaires pour élargir le mandat de cette subvention de perfectionnement. Les six écoles qui ont participé au premier tournoi du concours ont déjà pris des mesures dans ce sens. En attendant, il faut déjà commencer à remplir les demandes pour le prochain tournoi, lesquelles incidemment sont beaucoup plus claires cette année. Bonne chance à vous tous!

Mary Ellen Jeans

AGING AND LIFE EXPERIENCES OF LOW-INCOME, MIDDLE-AGED AFRICAN-AMERICAN AND CAUCASIAN WOMEN

Evelyn L. Barbee and Janet A. Bauer

The increased longevity of the population has been accompanied by increased research focus on the problems of adult aging. However, although interest in the aged has reached the status of a specialty area in nursing, the same can not be said for their concern with the middle-aged, more specifically middle-aged women. As Stevenson (1983) points out, the lack of nursing research devoted to adult development compromises the ability of the nursing profession to explain how the adult reacts under conditions of health, illness and crisis.

Not only is there a lack of nursing research on adult development, there is a lack of research on low-income, middle-aged women. In addition to the need to explore the development of low-income women, an equal exigency is to examine the variables of race and social class in the adult development of low-income women. The purpose of this paper is to contribute to the nursing literature on the adult development of middle-aged women through an exploration of the influence of life experience on the perceptions of aging in a group of low-income African-American and Caucasian women.

Theoretical perspectives

In nursing today the most prevalent approach used to explain adult development, particularly in nursing text books (Ebersole, 1979; Moore, 1980; Turner & Helm, 1983), is the normative life crisis model (Rossi, 1980). The assumptions underlying in the normative life crisis model are Erikson's (1960) stage theory of human development.

Based upon a series of chronologically-ordered developmental tasks, Erikson's (1963) theory of development, represents a dualistic determination of the interaction between an individual's psychological structures and social role structures. According to Erikson, this dualistic determination is

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psycho-social development and proceeds by critical steps. Furthermore, Erikson believed that certain life tasks were critical to and turning points for development. Erikson referred to these life tasks as moments of decision between progress and regression, integration and retardation. The underlying assumptions of Erikson are evident in studies of middle-aged men by Levinson, Darrow, Klein, Levinson and McKee, (1978) and Vaillant (1977).

Application of the normative life crisis model to middle-aged persons has been examined by a number of authors. Neugarten and Datan (1974), in their review of the research on midlife, non-clinical populations concluded that because many of the events of middle age such as empty nest and climacterium are anticipated, it is inaccurate to view middle age as a crisis period. Barnett and Baruch (1978) pointed out that the normative life crisis model's focus on chronological age and linear stages of development reflect male experience. As a result they deemed the model to be inappropriate for women because it does not take into account the varying role patterns and combinations that a woman may occupy, (e.g. career, marriage, children). In commenting upon the inadequacy of the stage model of development, Steitz (1981) pointed out that the increased pace and diversity of socio-cultural change makes chronological age inadequate as the sole basis for interpreting developmental events.

Another major criticism of the normative life crisis model is that it neglects the physiological aspects of aging (Rossi, 1980X). By neglecting these, the normative life crises model does not deal with crisis that may start because of the physical changes of aging (Basseches, 1984). The normative life crisis model describes movement from stage to stage, but it does not explain how an individual moves through the stages (Riegel, 1976). Thus life-crises are viewed as development themselves, rather than opportunities for development (Basseches, 1984). Furthermore, the normative life crisis places little emphasis on social contexts and the effects of these on adult development (Riegel, 1979).

The life course perspective, a sociological perspective on aging, is concerned with the demographic concept of cohort analysis; that is, charting the historical context in which subjects live out their adult lives (Riley & Abeles, 1982). The principle that aging is influenced by the society in which people live underscores the fact that, within the same society, different groups (African-American and Caucasian, rich and poor, male and female) age in different ways (Riley & Abeles, 1982).

Literature Review

Most of the research on middle-age is concerned with men (Vaillant, 1977; Levinson et al. 1978). More recently there has been an expansion of research

devoted to the special issues and problems of middle-aged women. Unfortunately, this research is either devoted to Caucasian middle-class women (Lowenthal, Thurnher & Chiriboga, 1976; Neugarten, 1979; Rubin, 1979; Scarf, 1980) or focuses on menopause and menopausal symptoms (LaRocco & Polit 1980; Uphold & Sussman, 1981). Both Rubin (1976) and Seifer (1976) explored life experiences among working class women. However, neither of these authors specifically dealt with adult development. As a result of this concentration on middle-class Caucasian women, our knowledge of the adult development of low-income, middle-aged women of either colour is limited.

Giele (1982a), in an examination of midlife women's life course and their social matrix, found that the increased differentiation in women's life patterns were allowing them to recombine their past experiences in new, constructive ways. Nathanson and Lorenz (1982) explored the interactive effects of gender, social role and health in middle-aged women; they concluded that the ways women experience themselves is both a biological and social process. One researcher who focused on biological and social processes of aging in middle-aged women was Rossi (1980a,b); she developed a multidimensional questionnaire on life experience and perceptions of aging. The major strengths of Rossi's work were her emphases on the physical aspects of aging and her recognition of the fact that women's lives are inextricably bound up with those of their immediate families. However, the fact that Rossi's sample was Caucasian and predominantly middle-class makes it difficult to generalize her findings either to low-income women or African-American women. Rossi's orientation to the context of women's lives is supported by McBride & McBride (1981) who viewed women's lived experiences as the starting point of all women's health efforts. Despite the research gains in the study of midlife women, there is a lack of comparative research that examines aging and life experience between ethnic or racial groups of middle-aged women in the same society. In suggesting a new research agenda for women in their middle years, Giele (1982b) points out the need for more cross-cultural studies of women's development during the middle years.

The purpose of this research was to compare the the influences of life experience on perceptions of aging in comparable samples middle-aged African-American and Caucasian women. The research posed the following questions.

1. Are there differences between the African-American and Caucasian women's reported aging signs and symptoms?
2. Do women's life experiences differ by group?
3. Do the women desire to be younger than their chronological age?

4. Are life experiences and total aging signs and symptoms associated with desires to be a younger age? If so, do these associations differ by group?

Answers to these questions will assist nurses in recognizing that middle-aged women are not a monolithic group. Recognition of these differences will assist health care professionals in developing culturally-sensitive, age-related care plans.

Method

Subjects

The convenience sample for this study consisted of 100 (54 African-American and 46 Caucasian) mothers, between 32 and 56 years of age. The sample was a convenient one. Women who met the criteria came from two ambulatory neighborhood health centers in a large Midwestern city. There are advantages and disadvantages in using a clinic population in research that includes questions about health. The disadvantage is that the results may be confounded by manifest medical status. A major advantage of using a clinic population was that the researchers had access to a population of predominantly low-income women.

Instrument

A 47-item interview questionnaire was adapted from Rossi's (1980b) 112 item instrument. It included questions about aging signs and symptoms, life experiences, demographics and age perceptions. Each woman was interviewed for approximately twenty-five minutes. Major factors that dictated the use of an interview questionnaire were low educational levels and uncorrected vision problems. This combination made it difficult for many women to either read or understand the questions. The interview protocol involved questions about being a wife and mother, sources of pleasures, worries, social activities and open-ended questions about age perceptions. Reliability was not assessed in this study because the critical issue was the women's responses at the time of the study and not the stability of her response over time. For this type of questionnaire, test-retest would be the only appropriate type of reliability assessment. The constructs being measured are not conceptually defined as stable; as such, test-retest reliability would be inappropriate from a validity perspective, unless it was done within four hours of original administration. On the other hand, test-retest over such a short interval would be contaminated by the memory of the original response.

The variables used in this study were aging signs and symptoms, desired age and life experiences. The variables were measured as follows.

1. Aging signs and symptoms: three-point rating of "better five years ago", "no change", or "better now" of health, eyesight, hearing, energy level, shape of body, sex life, hair condition, weight and teeth.

2. Total aging signs and symptoms: the number of symptoms that the women rated as having been better five years ago.

3. Life experience consisted of six items:

Daily exhaustion: rating from hardly ever to very often on a 3-item index on frequency of daily physical, mental and emotional exhaustion.

Pleasures: three-point rating (from "not at all" to a "great deal") of the following as sources of pleasures: family income, health, husband's health, children's health, children's behaviour, marriage, relationship with children, husband's relationship with children and thinking about your own future as sources of pleasures.

Worries: three-point rating (from "not at all" to a "great deal") of the following as sources of worries: family income, health, husband's health, children's health, children's behaviour, marriage, relationship with children, husband's relationship with children and thinking about your own future as sources of worries.

Social activities: four-point rating (from never to five times or more) on frequency of monthly attendance at or participation in religious services; club meetings; sports events; exercise; movies, concerts or plays; and bars, restaurants or nightclubs.

Desired age: answer to the question "If you could be any age you would like to be right now, what age would you like to be?"

Procedure

The procedures for the protection of human subject's were approved by the Indiana University School of Nursing's Human Subjects Committee. Women who met the study criteria were told of the research by a clinic staff member. Women interested in participating in the research were directed to the researcher. Each potential subject was informed by the researcher that participation involved a twenty-five minute structured interview, and the general content of the interview was described. After the study was explained, potential subjects were asked for their consent to participate in the study. Data collected were summarized by total sample and racial groups.

Results

Chi-square tests were used to compare responses between the racial groups on aging signs and symptoms, income and education. Pearson r correlation coefficients were used to determine the associations among desired age, total aging signs and symptoms and life experiences. The significance level was .05. African-American women reported more aging signs and symptoms than Caucasian women. Both groups desired to be younger than their

chronological age and desired age was significantly and negatively associated with worries.

The Caucasian group was slightly older than the African-American group, bore more children, reported lower employment, lower income and generally less education than the African-American group.

Table 1

Demographic Data

	Both	African American	Caucasian
	N = 100	N = 54	N = 46
Marital Status			
Married	41.0%	33.0%	50.0%
Separated	11.0	17.0	4.0
Divorced	30.0	24.0	37.0
Widowed	11.0	13.0	8.7
Never Married	7.0	13.0	0.0
Mean Age	43.0	42.0	43.0
Mean Number of Children	4.0	4.0	5.0
Mean Number of Children Home	3.0	3.0	3.0
Religion			
Protestant	90.0	93.0	87.0
Catholic	5.0	4.0	7.0
Other	3.0	3.0	0.0
None	2.0	0.0	6.0
Employment			
Employed - Full Time	51.0	52.0	26.0
Employed - Part Time		10.0	15.0
Unemployed	49.0	38.0	49.0
Mean Yearly Income Approx	$11,350	$12,690	$9,780
Education			
Grade School or less	16.0	11.0	22.0
Some High School	40.0	33.0	49.0
High School Graduate	28.0	32.0	24.0
Some College or College Graduate	16.0	24.0	5.0

As shown in Table 1 more than half the subjects had less than a high school education, with 16% having only attended elementary school. Twenty-eight percent were high school graduates and 16% attended college; 4% of those who attended college had completed some graduate work. Family income ranged from less than $5,000.00 to approximately $25,000.00 per year, with a mean of approximately $11,350.00. The approximate mean income for the African-American women was higher than that of the Caucasian women. Fifty-one percent of the subjects were employed at the time of the study. African-American women had a higher rate of full-time employment $^2(1, \underline{N} = 99) = 5.84$, $p<.001$ than Caucasian women. There were no statistically-significant differences between the groups in income and education. The predominant religion of the subjects was Protestant.

The first question asked in this study was: "Are there differences between African-American and Caucasian women's reported aging signs and symptoms?" Table 2 displays the findings. The significant differences between the groups were in shape of body, weight and condition of teeth with African-American women reporting more negative changes in these aging signs and symptoms than Caucasian women.

The second question was "Do the women's life experiences differ by group?" The one significant difference in social activities was in terms of church attendance. African-American reported women attending religious services at a significantly higher rate $^2(3, \underline{N} = 100) = 11.66$, $p<.01$ than Caucasian women. With the exception of attending religious services, the majority of the women participated in few social activities.

Question three asked "Do the women desire to be younger than their chronological age?" Both groups desired to be younger than their chronological age. The Caucasian women's mean desired age of 27 years was 16.2 years younger than their mean age. African-American women's mean desired age of 29 years was 13.2 years younger than their mean age. In the total sample, only two women wanted to be older than age 56; both were from the African-American group. Nine subjects wanted to be less than age fifteen.

Question four was, "Are life experiences and total aging signs and symptoms associated with desires to be a younger age? If so, do these associations differ by group?" As displayed in Table 3, for African-American women, desired age was significantly correlated with total aging, social activities and worries. Total aging signs and symptoms were significantly correlated with social activities and exhaustion. Social activities was significantly correlated with pleasures and worries.

Table 2

Aging Signs and Symptoms by Group

Aging Sign/ Symptom	Group	Better Five Years Ago	No Change	Better Now
Health				
	African American	55.6%	22.2%	22.2%
	Caucasian	43.5	26.1	46.2
Eyesight				
	African American	50.0	50.0	0.0
	Caucasian	50.0	47.8	2.2
Hearing				
	African American	22.2	77.8	0.0
	Caucasian	26.1	71.7	2.2
Energy Level				
	African American	77.8	18.5	3.7
	Caucasian	67.4	21.7	10.9
Shape of Body				
	African American	81.5*	13.0	5.6
	Caucasian	50.0	32.6	17.4
Sex Life				
	African American	56.6	28.3	15.1
	Caucasian	45.7	43.5	10.9
Hair Condition				
	African American	34.0	47.2	18.9
	Caucasian	41.3	47.8	10.9
Weight				
	African American	74.1*	20.4	5.6
	Caucasian	39.1	39.1	21.7
Teeth				
	African American	63.0**	31.5	5.6
	Caucasian	34.8	58.7	6.5

*$p < .01$
**$p > .01$

Table 4 shows that, for Caucasian women, desired age was significantly correlated with worries. Total aging signs and symptoms were significantly correlated with social activities, pleasures and exhaustion.

Table 3

Correlation Coefficients: Desired Age, Aging Signs/Symptoms and Life Experiences - African-American Women (N = 54)

	Desired Age	Aging Signs/ Symptoms	Social Activities	Pleasures	Worries	Exhaustion
Desired Age		-.37**	-.25**	-.37**	.35**	
Total Aging Signs/Symptoms			.43*			-.29**
Social Activities				.53*	-.58*	
Pleasures						
Worries						

*p < .01
**p < .05

Table 4

Correlation Coefficients: Desired Age, Aging Signs/Symptoms and Life Experiences - White Women (N = 46)

	Desired Age	Aging Signs/ Symptoms	Social Activities	Pleasures	Worries	Exhaustion
Desired Age					-.38**	
Total Aging Signs/Symptoms			.31**	.57*		-.44*
Social Activities						
Pleasures					-.36**	
Worries						.36**

*p < .01
**p < .05

Discussion

This research dealt with several questions pertaining to aging and life experiences in African-American and Caucasian middle-aged women and differences between the two groups. The findings on the aging signs and symptoms suggest that the African-American women in this study perceived more negative biological changes associated with aging than the Caucasian women. The differences between the African-American and Caucasian women's reported changes in weight and shape of body is supported by

Allen & White (1983) who note that, regardless of age, African-American women are heavier than Caucasian women and consequently are more likely to be considered obese.

The finding that African-American women reported attending religious services more than Caucasian women, points out the traditional, cultural role of the church in the African-American community. In terms of reported social activities, both groups of women were not very active. The women's limited social activities may be attributable to their lack of financial resources. While some might argue that low-income women may not be inclined toward the activities dealt with in this study, their argument can be considered either presumptuous or ethnocentric. The activities were broadly defined; thus, a concert could be a gospel concert at the church and not necessarily a classical music concert. Dining out may similarly include eating at a fast food restaurant.

The correlation analyses suggest that different variables are associated with the desires of the two groups desires to be a younger age. For Caucasian women desiring to be a younger age was associated with their current experiences of more worries. On the other hand, Caucasian women with less worries desired to be closer to their own age. However, for African-American women desires to be younger were associated with more aging signs and symptoms, less social activities and less perceived pleasures and vice versa. These findings, suggest that the women's desires to be younger are more than just subscription to the American socio-cultural norm of youthfulness. Furthermore, these findings support the influence of life experience and life context on women's desires to be younger than their chronological age. The findings on desired age are consistent with Rossi (1980 a,b) who noted that some women believed that being younger would help them escape from current problems.

Large percentages of the total sample reported poorer health and energy loss; as such, the positive correlations between total aging signs and symptoms and participation in social activities suggest that the participation in social activities is associated with a sense of physical well-being. However, the negative correlations between aging signs and symptoms and exhaustion for both groups suggest that women who report more aging signs and symptoms also experience more exhaustion. For African-American women, participation in social activities was associated with their pleasures and worries. Intuitively, it makes sense that the more pleasures in a woman's life, the more she would participate in social activities. However, increased worries decreased African-American women's participation in social activities. On the other hand, more worries were correlated with more exhaustion for Caucasian women.

In summary, with regard to their life experiences and perceptions of aging, this study found both commonalties and differences between a sample of predominantly low-income African-American and Caucasian middle-aged women. Limitations of the study include that it may not be generalizable to a non-clinic population. Furthermore, some of the findings may be attributable to cohort; that is, younger versus older, effects. Theoretically, the findings of this study support the need for the assessment of personal and contextual dimensions in adult development. Through the use of a multidimensional approach, we began to identify experiences that contribute to women's desires to be younger than their chronological age, the similarities and the differences between two groups of women. Although nursing has manifested some interest in adult development, the fact remains that the majority of the literature in the field is based upon studies of Caucasian middle-class persons, male and female. If we continue to apply the findings from research with middle-class males and females to African-American and low-income women, we run the grave risk of applying cultural, economic and gender-bound concepts to a group of women who constitute a large part of our consumer population.

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RÉSUMÉ

Vieillissement et expérience de vie de femmes d'un certain âge à faible revenu chez les Afro-Américaines et chez les Americaines blanches

Des aspects multiples de la vie de femmes ont été étudiés dans le but d'explorer l'influence des expériences vécues sur la perception qu'ont les femmes d'un certain âge à propos du vieillissement. 100 femmes américaines à faible revenu ont été interviewées - 54 Noires et 46 Blanches - selon un protocole d'interview examinant la fatigue quotidienne, les activités sociales, les joies, les soucis, les signes et symptômes de vieillissement et l'âge souhaité. Pour les deux groupes, l'âge souhaité était moindre que la réalité. Les groupes différaient en termes de corrélations importantes entre l'âge souhaité et les variables des expériences vécues. Les résultats de cette étude suggèrent que la perception des femmes sur le vieillissement est influencée par les signes et symptômes biologiques aussi bien que par leurs expériences vécues.

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LIFESTYLE BEHAVIORS OF ONE BACCALAUREATE NURSING CLASS: A PILOT STUDY

Mary MacDonald and Robert Faulkner

Diseases related to lifestyle are a major cause of morbidity and mortality in Canada. The association between many health problems and behaviours such as smoking, alcohol consumption and poor nutritional habits leading to obesity is well-documented (Angel, 1978; Breslow, 1980; Cohen, 1979; Huebert, Feinleib, McNamara & Castelli, 1983; Schmidt, 1977; &, Wynder & Hoffman, 1979). Cigarette smoking is a major causal factor in the occurrence of chronic illnesses such as cardiovascular disease, respiratory disease and cancer and is the "major preventable cause of premature death in Canada" (Semenciw, 1987, p.75). Obesity is associated with chronic diseases such as atherosclerosis, diabetes, hypertension and even breast cancer (Stockwell, Periera, White & Cottreau, 1985). Unlike the above factors, physical activity is one lifestyle variable that has been shown to have many health benefits (Powell, Thompson, Caspersen & Kendrick, 1987; &, Wiley & Camacho, 1980) and, thus, promotes well-being.

Duncan and Gold (1986) state that "health promotion contributes to the growth, enlargement or excellence of health." (p.48) Nurses have a responsibility for helping consumers develop positive attitudes and strategies of health promotion for well-being. In order to meet this responsibility nurses must learn and practise preventative care as students. Olivieri and Ouellette (1986) and Gupta, McMahon and Sandhu (1986) emphasize that "faculty in schools of nursing should assume active leadership roles on a personal and a professional level, to promote the 'high level wellness' of the campus community, especially of the undergraduate students" (p.29). Carlin (1982) also advocates that nurses be role models of what they teach.

Although lifestyle and health education programs are recognized as important in nursing education, research evaluating the effectiveness of these programs on student behaviours is scarce. A Medline search for articles dealing with nursing students and health promotion behaviours, physical fitness

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and smoking elicited a limited number of studies. One study by Rausch, Zimmerman, Hopp and Lee (1987) determined that the overall smoking rate for student nurses in diploma, associate degree and undergraduate nursing programs was 26%. This is consistent with national smoking rates for females.

A study conducted by Richards (1985) examined whether the attitude of 78 nursing students towards physical fitness correlated with participation in physical exercise and with actual fitness levels. He concluded that attitude toward physical fitness was not a good indicator of commitment and actual participation in physical exercise. Another study conducted by Hadubiak (1986) involved administering a lifestyle questionnaire to a group of 59 nursing students and a group of 100 finance students. The nursing students scored significantly better on the subscales exercise, nutrition, self-care, vehicle safety, drug usage and occupational satisfaction. These results support the hypothesis that increased levels of health knowledge lead to healthier lifestyles.

The purpose of the present study was to assess changes in specific lifestyle behaviours and physical parameters over the course of one four-year baccalaureate nursing program. Specific variables were selected because comparisons to national data such as the *Canada Fitness Survey* (1981) and *The Health of Canadians: Report of the Canadian Health Survey* (1983) are readily available. This particular program has one unit in the first year nursing course that covers the concept of health and includes lifestyle education. Concepts taught in first year are then integrated into content for the remaining three years of the program.

Methods

Subjects

First year nursing students were evaluated on their fitness and lifestyle behaviours in September 1983 and 1984, as part of their first year nursing course. Fifty-four of those students tested were enrolled in the final year of the baccalaureate program for the 1987-88 term. Of these, 29 (two from 1983 and 27 from 1984) volunteered to be reevaluated using the same measurement protocols as in the pre-testing so as to provide "matched" data.

In order to assess whether or not nursing students had healthier lifestyle behaviours than other fourth year university students, the lifestyle and fitness characteristics of fourth year female nurses were compared to those of a volunteer sample (n=16) of fourth year female education students. Because the post-test evaluations were completely voluntary, it is likely that the final sample represents a healthier and more fit group than would be expected from a general population of university students.

Participation in testing was on a completely voluntary basis. Students were assured of anonymity and that participation or nonparticipation would in no way affect their course marks. Neither of the investigators was in any way associated with teaching or assigning of marks for the fourth year courses.

Measurement

The YMCA *Lifestyle Inventory and Fitness Evaluation Program* (LIFE) was developed in 1975. It is designed to evaluate the physical fitness and lifestyle habits of participants. The LIFE program has been described by Bailey, Mirwald, Faulkner, Fairbairn and Owen (1982). The lifestyle questionnaire utilized is a modification of the *Health Hazard Appraisal System* (Robbins & Hall, 1970) and includes 19 questions concerning various lifestyle and health characteristics such as family history of heart disease, cancer and diabetes and smoking and alcohol consumption practices. The *Health Hazard Appraisal* has been used extensively by clinicians and health educators. The following lifestyle parameters from the LIFE program were assessed: alcohol consumption, seat belt use, physical activity, smoking history, pap smear testing and breast self-examination.

Alcohol consumption consisted of three categories: nondrinker, light drinker (1-2 drinks per week) and moderate drinker (3-6 drinks per week). Seatbelt use included two categories: worn 25-75% of the time and worn 75-100% of the time. Physical activity categories were: infrequent (some but not on a regular basis), regular (2-3 times per week) and frequent (4-5 sessions per week). Smoking consisted of three categories: nonsmoker (or not smoked for past 10 years), quitter (within past 10 years) and smoker. Categories for the pap smear test were either "had" or, "not had" within the past five years, while the categories for breast self-examination were examine regularly and do not examine. Physical parameters measured included: standing height recorded to the nearest 1mm, weight recorded to the nearest 0.1kg, skinfold measures taken with Harpenden skinfold calipers at biceps, triceps, subscapular and suprailiac sites; and, predicted maximum oxygen consumption (MVO_2).

All anthropometric measures were taken by trained personnel according to the procedures outlined in the Canadian Standardized Test of Fitness Operation Manual (Government of Canada, 1986). Maximum oxygen consumption was predicted according to the procedure of Astrand and Ryhming (1954). The protocol is well-documented and has had widespread use (Bailey, Shephard, Mirwald & McBride, 1974; Shephard, 1977). Prediction of MVO_2 was made from the Astrand Rhyming monogram using an appropriate modification of the program suggested by Shephard (1970). All subjects completed a PAR Q preactivity questionnaire prior to testing.

Data Analysis

Changes in categorical lifestyle variables were assessed using a chi-square test. Comparison of these variables for the nursing students to those for the education students was done using a chi-square test of independence. Changes in MVO_2, body weight, forced vital capacity (FV) and the sum of five skinfolds (SSF) were assessed using a MANOVA for repeated measures. Comparisons of the nursing student post-values to those of the education students were also done using a MANOVA procedure.

Results

The physical characteristics of the nursing subjects for both pre- and post-testing are shown in Table 1. As displayed, there was a significant decline ($p<.05$) in SSF from 71.2 to 62.9mm. MVO_2 significantly increased ($p<.01$) from a pretest value of 33.3 to 36.9 ml/kg/minute. There was no change in FV or in body weight.

Table 1

Comparison of Nursing Student Post-test to Pre-test Physical Fitness Results (n=29)

Category	Mean		2-Tail Probability
	Pre	Post	
Weight	61.9	61.3	0.513
Sum of skinfolds	71.2	62.9	0.033
Maximum O_2 consumption	33.3	36.9	0.009
Forced vital capacity	3.6	3.7	0.178

Comparison of the lifestyle variables between pre- and post-testing for the 29 nursing students (27 female, 2 male) are shown in Figure 1. Seat belt use, pap smear tests and breast self-examination improved significantly. Seatbelt use improved from 69% using seatbelts 75-100% of the time at the pre-test to everyone using seatbelts most of the time at the post-test; 74.1% of the females had a pap smear test within the past five years in the post-test compared to only 33.3% in the pre-test; 63% regularly performed breast self-examination in the post-test compared to 40.7% in the pre-test. There were no heavy drinkers and the student who was a moderate drinker in the first year of the program switched to being a light drinker by the final year. Of twelve students who had regular exercise in the pre-testing, two increased to

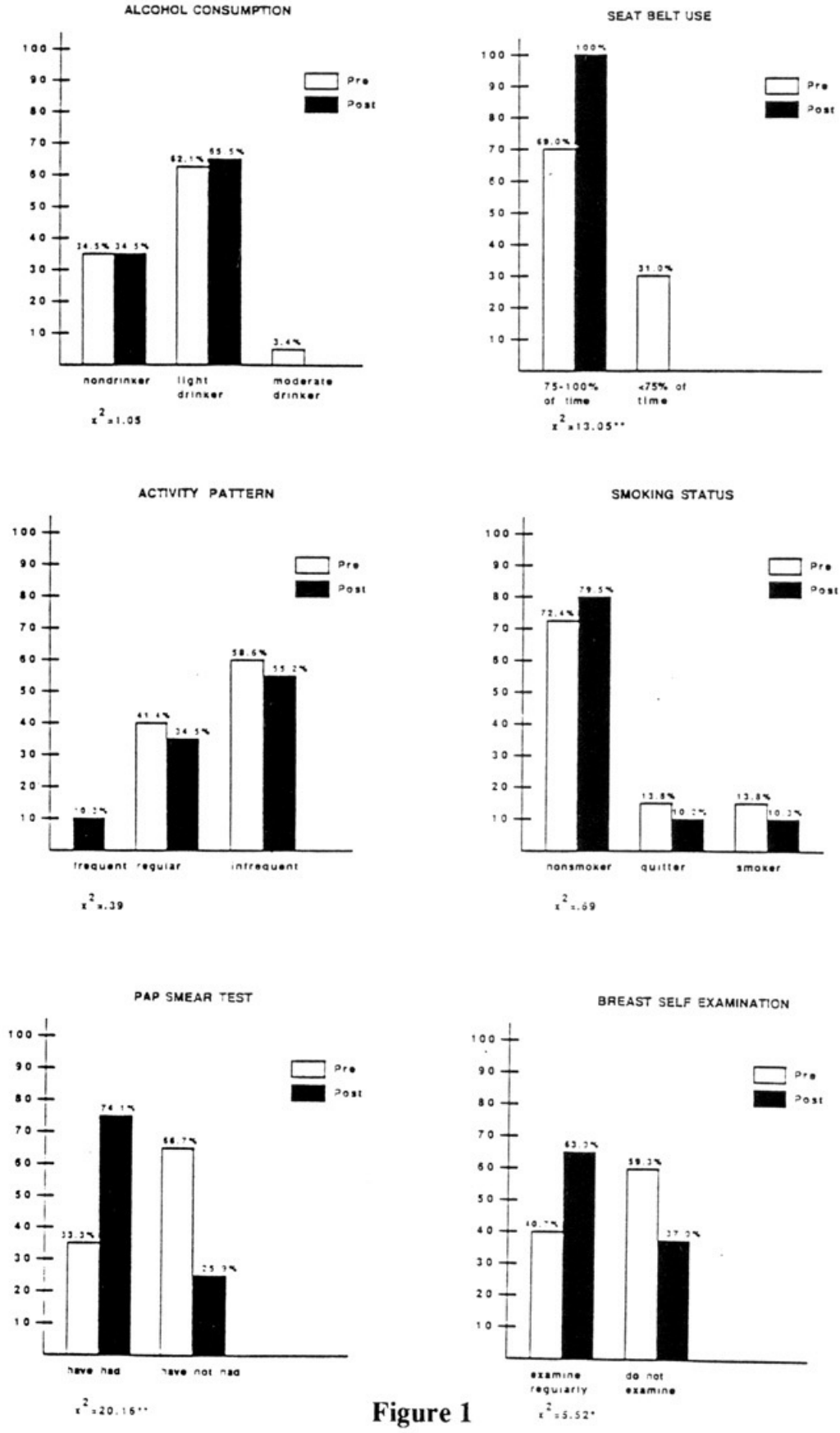
ALCOHOL CONSUMPTION
Pre
Post
nondrinker
light drinker
moderate drinker
χ^2=1.05
SEAT BELT USE
Pre
Post
75-100% of time
<75% of time
χ^2=13.05**
ACTIVITY PATTERN
Pre
Post
frequent
regular
infrequent
χ^2=.39
SMOKING STATUS
Pre
Post
nonsmoker
quitter
smoker
χ^2=.69
PAP SMEAR TEST
Pre
Post
have had
have not had
χ^2=20.16**
BREAST SELF EXAMINATION
Pre
Post
examine regularly
do not examine
χ^2=5.52*

Figure 1

frequent exercise while five decreased activity to infrequent. Of those 17 who had infrequent exercise on pre-testing, one increased to frequent exercise while five increased to regular activity. No one started smoking during the four year-program; 79.5% were nonsmokers, 10.2% had quit smoking and 10.3% remained smokers.

Results of the comparison of the fourth-year nursing data (n=27) to the fourth-year education student data (n=16) are shown in Table 2 and Figure 2. As shown, there were no significant differences between the anthropometric measures. In terms of the lifestyle factors, the nursing students were significantly more active ($p<.05$) than the education students. Most of the students in both groups reported infrequent exercise (55.2% of the nurses, 81.2% of the control), but, 44.4% of the nurses, compared to 18.8% of the control group, obtained regular or very frequent exercise. More nursing students were nondrinkers than the control group of education students (33.3% compared to 31.2%). Seatbelts were used 75-100% of the time by both groups. Of the student nurses, 92.6% were nonsmokers compared to 93.8% of the education students. More of the education students (81.3% compared to 74.1%) had a pap test within the past five years. The same is true of regular breast self-examination (68.8% compared to 63%).

Table 2

Physical Fitness Post-test Results: Female nursing students compared to female education students

Category	Mean	
	Nursing	Education
Maximum O_2 consumption	35.97	37.91
Weight	60.94	60.35
Sum of skinfolds	65.24	61.61
Forced vital capacity	3.68	4.02

Note: Analysis of variance showed no significant difference between the two groups on any of the fitness variables.

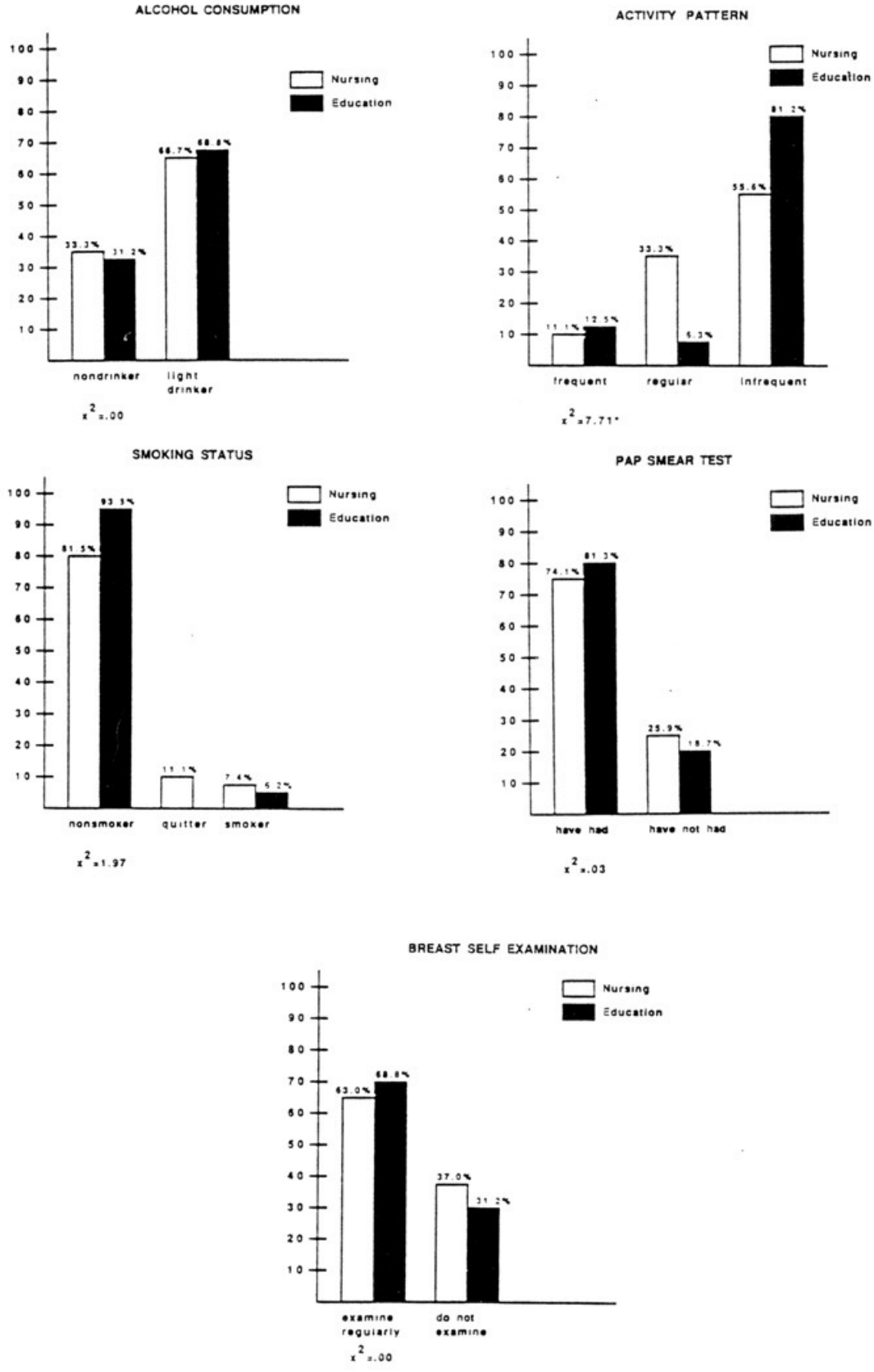
ALCOHOL CONSUMPTION
Nursing
Education
33.3%
31.2%
66.7%
68.8%
nondrinker
light drinker
x^2=.00
ACTIVITY PATTERN
Nursing
Education
11.1%
12.5%
33.3%
6.3%
55.6%
81.2%
frequent
regular
infrequent
x^2=7.71*
SMOKING STATUS
Nursing
Education
81.5%
93.3%
11.1%
7.4%
5.2%
nonsmoker
quitter
smoker
x^2=1.97
PAP SMEAR TEST
Nursing
Education
74.1%
81.3%
25.9%
18.7%
have had
have not had
x^2=.03
BREAST SELF EXAMINATION
Nursing
Education
63.0%
68.8%
37.0%
31.2%
examine regularly
do not examine
x^2=.00

Figure 2

Discussion

Of the physiological variables tested, SSF and MVO_2 changed significantly in the nursing students ($p<.05$). A possible explanation for the decrease in the sum of the five skinfolds and the increase in maximum oxygen consumption could be that the students became more active because of an increase in clinical courses and that there was more nutritious food consumption. The decrease in body weight and SSF would explain the increase in relative MVO_2.

Comparison of the nursing student results to other Canadian data is enlightening. In terms of activity, the nursing students were less active than comparative studies of Canadian females as shown in the *Canada Fitness Survey* (CFS) (Government of Canada, 1983), the *Canadian Health Survey* (CHS) (Government of Canada, 1981) and the Canadian YMCA-LIFE Program (YMCA-LIFE) (Bailey et al. 1982). The MVO_2, although lower than the desirable level for females age 20-29, was the same as the Canadian female average in the YMCA-LIFE. It may be reasoned that low physical activity is a local phenomenon as the physical education center is a long distance away and the students were too busy on wards and in classes to exercise. However, these findings are consistent with those of other Canadian studies. It has been shown that nursing students do value exercise but do not follow through with a commitment to regular physical exercise (Richards, 1985; &, Sabrina-McVety, Booth, Orban & Richards, 1988). In light of the data available, nursing educators should promote a commitment to regular exercise. Future studies could involve the implementation of an innovative lifestyle education program to test for changes in physical fitness and other lifestyle variables.

Seat belt use increased significantly ($p<.01$) over the course of the four-year program as did pap smear tests ($p<.01$) and breast self-examination ($p<.05$). More students were nonsmokers at the completion of the program. Compared to the Canadian female population for this age group, fewer nursing students smoked and consumed alcohol. This is noteworthy and indicates that the message of health promotion is getting across for these particular behaviours. It is, however, discouraging that pap tests and breast self-examination were not performed on a regular basis by all the female students. It is also discouraging that the nursing students were well below the Canadian average in respect to regular exercise. More emphasis on healthy lifestyle behaviours may be part of the answer. However, there is a gap between valuing a healthy lifestyle and commitment to that lifestyle. Research needs to be conducted to assess the relationship between the frequency of specific lifestyle variables and the Health Belief Model or Health Promotion Model. The Exercise Benefits/Barriers Scale (Sechrist, Walker & Pender, 1987) and other instruments could be utilized to examine the role of

cognition and perception as determinants of specific fitness and lifestyle behaviours and changes in those behaviours. Thus, multiple causality of health behaviour should be investigated.

The nursing students were significantly more active than the education students. While this is encouraging, it must be emphasized that both groups reported well below the average amount of exercise for Canadian females in the same age group. It was anticipated that a bias might exist in that those more physically-active students in both groups might volunteer to be tested. Based on the results, such a bias does not appear to exist. If a bias does exist, then those students who did not participate obtained even less physical activity. This is alarming.

While the results must be interpreted with caution because of the small sample size, it is noteworthy that more of the education students had a pap smear test within the past five years and performed regular breast self-examinations than did nursing students. This is discouraging in that student nurses are taught that these procedures are a necessary part of health monitoring and will be teaching clients health promotion and illness prevention strategies. How can the gap between knowledge and behaviour be bridged?

Conclusion

It must be emphasized that this was a pilot study with a small sample size and that there was not a control group for pre-testing as the LIFE program was administered only as an educational tool and not a research study. Thus, it is not known whether findings indicating no differences are a result of the small sample size or that, in fact, there were no significant differences. Future research should address this issue of power and design.

It is assumed that knowledge will result in changes in behaviour. However, research testing the link between knowledge and behaviour is limited. Pender (1987) developed the Health Promotion Model to explain motivation for health promotion behaviours. She continues, along with colleagues, to conduct research to test the applicability of the model (Sechrist, Walker & Pender, 1987; Walker, Sechrist & Pender, 1987). Future directions for nursing education should be based on research that (a) monitors different types of approaches to lifestyle education, and (b) examines what motivates individuals to commitment to health promotion behaviours. The authors are currently conducting research to examine the role of cognition and perception, including locus of control, as determinants of specific lifestyle behaviours.

The trends evidenced in this pilot study are interesting and do identify important issues for nursing education. As health care professionals, we must

ask several questions. Is there enough emphasis on lifestyle education in our programs? What can be done to promote commitment to health promotion strategies, not only among students but among those of us who are practicing nurses? Can nurses be effective advocates of health promotion strategies if they are not role models of those strategies? Educators need these answers before effective programs for health promotion education can be developed.

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RÉSUMÉ

Style de vie d'une classe d'élèves en nursing au niveau du baccalauréat - Projet pilote

Ce projet pilote s'est consacré à l'étude des variables particulières au bien-être physique et au style de vie d'une classe d'élèves en nursing au niveau du baccalauréat. Les mesures de la 1ère année furent comparées à celles de la 4e. Parmi les variables du style de vie, l'usage de la ceinture de sécurité, les tests pap et l'auto-examen des seins ont connu une forte augmentation au cours du programme, qui dure quatre ans. Il y a eu aussi une augmentation significative du niveau d'oxygène consommé et une diminution significative du total des cinq plis de peau.

Les données des étudiantes en nursing de 4e furent comparées à celles d'un groupe contrôle d'étudiantes en éducation. Les étudiantes en nursing se sont prouvées beaucoup plus actives que celles en éducation.

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Applications should include a curriculum vitae and the names of at least three referees.

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THE RELATIONSHIP BETWEEN RELOCATION AND ALTERATIONS IN MENTAL STATUS AMONG ELDERLY HOSPITALIZED PATIENTS

Dale Rajacich and Sandra Faux

Canada is increasingly becoming a country of older individuals. In 1981, almost 10% of the population was over 65 years of age as compared to 8.1% in 1971. It has been predicted that by the year 2001, the elderly will represent 11% of the total population (Statistics Canada, 1981). One consequence of an aging population is an increase in the number of elderly people admitted to acute care and chronic care institutions.

Confusion is a phenomenon that occurs often among the elderly when hospitalized in acute care settings (Foreman, 1986; Nagley, 1986; Williams, et al., 1985). Relocation may contribute to confusion in acute care settings; however, research supporting this relationship is limited (Adams, 1986; Burnette, 1986, Engle, 1986; Wolanin, 1983b). Furthermore, confusion in the elderly is often perceived as senility. The impact of relocation on mental status is therefore often not recognized by health care workers. The purpose of this study was to investigate the relationship between relocation to an acute care setting and alterations in mental status among elderly hospitalized patients. This study is a replication of research by Roslaniec and Fitzpatrick (1979) research.

Literature Review

Confusion is a nebulous term used by health care professionals to label phenomena that describe varying degrees of mental impairment. Disorientation, organic brain syndrome, clouded states, acute brain failure and pseudo-senility are examples of terms that have been synonymously used to denote confusion. Each definition represents an element of cognitive impairment; however, discrimination among these definitions is difficult because of the inconsistencies that have occurred with respect to their usage within operational definitions (Ahronheim, 1982; Black & Paddison, 1984; Burnside,

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1981; Chisholm, Deniston, Igrisan, & Barbus, 1982; Foreman, 1986; Lipowski, 1980; Nagley, 1986; Williams et al., 1979; Wolanin, 1983; Wolanin & Phillips, 1981).

Research that examines confusion is limited and documented incidence of confusional episodes among the elderly vary. Liston (1982) found that incidence rates varied from 10% to 50%. Gillick, Serrel and Gillick (1982) observed 429 general medical patients in order to determine whether certain syndromes were hospital induced. They reported that 29.5% (n = 173) of previously mentally alert patients over age 70 demonstrated some degree of confusion. In contrast, a daily prevalence rate from 0% to 13%, and averaging 5.5%, among patients over age 60 was reported by Chisholm et al. (1982).

Williams et al. (1979) investigated the phenomenon of confusion among elderly hospitalized patients who had sustained hip fractures (N = 91). Patients were studied on their first, third and fifth postoperative days in order to determine whether nursing activities were associated with the occurrence of acute confusional states as well as to determine the relationship between these activities and patients' postoperative mental status. Predictors of postoperative confusion were found to be: preoperative confusion either on admission day or during the preoperative period; the presence of postoperative urinary problems; limited mobility postoperatively; and the absence of clocks and televisions. Nursing activities that responded to patients' confusional states were: orientation measures, explanations about the environment and treatments, reassurance and restraining devices. These nursing care measures and environmental factors were positively associated with decreased levels of confusion.

Roslaniec and Fitzpatrick (1979) studied the relationship between alterations in mental status among 25 elderly medical patients and their relocation to an acute care setting. Their hypothesis that patients would experience significant changes in level of consciousness, orientation, attention or concentration, memory and higher cognitive functioning between day of admission and fourth day of hospitalization. A significant deterioration in level of consciousness, orientation and abstract reasoning was demonstrated between admission day and fourth day of hospitalization.

Engle (1985) extended the work of Roslaniec and Fitzpatrick in a nursing home setting. Elderly residents who were admitted primarily for rehabilitation following a hip fracture (N = 57) were interviewed on their first, fourth and seventh day following admission. Components of mental status were measured with the *Mental Status Examination* (Roslaniec & Fitzpatrick, 1979). Memory and higher cognitive functioning significantly improved ($p < .05$). These data contrasted with the Roslaniec and Fitzpatrick (1979) study where mental status scores decreased post-hospitalization.

Nagley (1986) used an experimental design to investigate whether selected nursing actions were effective in preventing acute confusional states in elderly hospitalized patients who were not confused pre-admission (N = 60). Sample criteria were 60 patients (30 control and 30 experimental subjects) over the age of 65 who could speak English, hear conversational speech, had sufficient vision to see the print on clocks and calendars and who had a medical diagnosis. All subjects had to score at least 4 on the *Short Portable Mental Status Questionnaire* (SPMSQ) on their admission day in order to exclude any individuals who were confused at that time. In addition, a tool designed by the investigator provided a narrative description of the subject and allowed the researchers to assess mental status on a scale that ranged from mentally alert to confused. The presence of confusion was measured on admission day and on the fourth hospital day. The experimental group (n = 30) received specific daily nursing interventions which included asking orienting questions about place, home and person once a shift, ensuring that patients had their sensory aids and placing clocks and calendars within patient's view. The effect of these nursing interventions on the patients' mental status scores were evaluated at the completion of each shift rotation. No significant differences in mental status scores were found between the groups. The generalizability of the study to patients with non-medical diagnoses is unknown. The inter-rater reliability scores for the investigator-designed instrument was high (r = .98). More information on the development of the instrument would, however, have added to its validity.

Conceptual Framework

The conceptual framework was derived from the 1979 Roslaniec and Fitzpatrick study which used a systems approach with information processing theory to demonstrate how the concepts of sensory alteration and schemata are integrated (Freedman, 1961; Suedfeld, 1969; Travers, 1970). Information about the environment is received in the form of sensory stimuli (input). This information is coded and organized (throughput) based on the concept of schemata. Schema is the integration of previous perceptions, memories and images that are used as references from which to locate further sensory stimuli. The information that is received and coded is used to choose behavioural responses (output).

Sensory alteration is "a situation in which reception or perception of stimuli is blocked or altered, or in which the environmental stimuli themselves are blocked or altered" (Chodil & Williams, 1970, p. 455). The exact causes of sensory alteration are unknown. Hospitalization affects the quality and quantity of sensory stimuli. Stimuli are increased and decreased through confinement, immobility or isolation. Individuals may not recognize new stimuli in an unfamiliar environment; as such, behaviour may become disorganized. Changes in behaviour may include alterations in level of consciousness,

attention/concentration, orientation, memory and higher cognitive functioning (Chodil & Williams, 1970; Downs, 1974; Jackson & Ellis, 1971; Roslaniec & Fitzpatrick, 1979; Zubek, 1969). Individuals experiencing sensory alterations can benefit from having stimuli organized for them by orientation to new environments. Sensory alteration can affect individuals of all ages. Elderly people may be more prone "to the confusion associated with sensory alteration because of physiologic changes within their sensory apparatus (Wolanin & Phillips, 1981, p. 179).

Research Questions

1. Is there a relationship between hospitalized elderly patients' performances on tasks of attention or concentration on the first day of hospitalization and their performances on the third hospital day?
2. Is there a relationship between hospitalized elderly patients' levels of orientation on the first hospital day and their levels of orientation on the third hospital day?
3. Is there a relationship between hospitalized elderly patients' performances on memory tasks on the first hospital day and their performances on the third hospital day?
4. Is there a relationship between hospitalized elderly patients' performances on tasks of higher cognitive functioning on the first hospital day and their performances on the third hospital day?
5. Is there a relationship between alterations in mental status on the first and third day of hospitalization and age, sex and room allocation of elderly patients?

Method

Procedure

A non-probability, convenience sample of 18 elective admission patients was selected from two medical units of an acute care teaching hospital. Sample criteria were: 65 years and older; the ability to speak and write English; admitted with a medical diagnosis not requiring surgery within the first three hospital days; mentally and physically able to participate in the study as determined by the staff nurses' assessments and investigator's clinical assessments; and admitted from a noninstitutionalized home environment.

Data collection

A total of 35 patients were requested to participate in this study. Of these individuals, six were discharged prior to the third day and the results of their first interview were not included. Six individuals refused to participate - the

predominant reason being a high anxiety level and these individuals thought that participating in a research study would be a further stress. Three individuals were omitted when they went to surgery after their first interview. Finally, two individuals were assessed as being confused prior to their first interview thus not meeting the sample criteria.

Potential subjects were visited by the investigator during the evening of their admission day and individuals who met the selection criteria were asked to participate. The first mental status interview was conducted after informed consent was obtained. The investigator returned on the third hospital day to complete the final interview. This modification to the Roslaniec and Fitzpatrick (1979) study was implemented to accommodate for the early patient discharge rate within the sample setting.

Subject ages ranged between 65 and 85 years with a mean age of 72.2 years (SD = 5.4.). Nine male and nine female subjects with medical diagnoses were admitted. Twelve individuals were admitted into a ward, and six individuals were admitted into a semi-private room.

Instrument

The Roslaniec and Fitzpatrick (1979) Mental Status Examination (MSE) was used to examine the incidence of confusion among hospitalized elderly patients. Inter-rater reliability coefficients of the MSE ranged from .96 to .99, using the Pearson coefficient. Content validity was supported by clinical mental assessment protocols and standardized tests in the literature (Roslaniec & Fitzpatrick, 1979).

Four constructs were measured in this study: attention or concentration, orientation, memory and higher cognitive functions (Table 1).

Attention was measured by a combination of scores obtained on the digit span test and the test of auditory vigilance. In the digit span test, a sequence of eight numbers was presented to the patient and subjects were asked to repeat the numbers until they were unable to complete a sequence. One point was given for each correctly answered group of numbers.

Concentration was measured by the test of auditory vigilance. Subjects were requested to identify a consistent letter among a series of letters. A score is obtained by subtracting the total errors of omission and commission from sixty.

Orientation was measured by asking the subject to respond to a series of questions related to person, place and time. One point was given for each correct response.

Table 1

MSE Components and Scale

Components	Scale
Attention/Concentration	
Digit span test	0-8
Vigilance	0-60
Orientation	
Person	0-5
Place	0-4
Time	0-7
Memory	
Story recall test	0-20
Immediate recall	0-5
Long term memory	0-4
New learning ability	0-8
Delayed story recall test	0-20
Higher Cognitive Functioning	
Abstract reasoning	
Proverb interpretation	0-4
Similarities	0-3
Conceptual series completion	0-3
Calculations	
Verbal rote	0-4
Verbal complex	0-4
Written complex	0-4

Short-term memory, long-term memory, new learning ability and delayed recall were measured. Short-term memory was measured with a story recall test as well as a list of words that were to be repeated back to the investigator. Scores were based on the number of correct items repeated.

Long-term memory tests involved a series of questions that related to past events. One point was given for each correct response. The delayed recall test involved repeating the story recall test ten minutes after the initial reading and was scored in the same manner.

New learning ability was tested by hiding items in front of the subject and asking at the end of the interview where each item was located as well as the name of the item. One point for naming the item and one point for locating the item were given.

Higher cognitive functioning was measured with proverb interpretation, similarities, numerical reasoning and algebraic calculations. A scale describing different levels of proverb interpretation (abstract, semi-abstract, concrete) and a three-point scale describing the scoring for similarities were provided in order to promote consistent scoring. All scores were totalled for an overall score.

Demographic data included age, sex and room allocation. The variable age was measured to examine whether alterations in mental status was age dependent. Similarly, sex was recorded to identify differences in mental status relative to this variable. Finally room allocation was recorded since it is likely that interactions with other patients would alter the environment to which subjects were exposed.

Data analysis

These data were analysed using SPSS. Descriptive analyses included means and standard deviations. Paired t-tests ($p < .05$) were computed to compare each individual score on the MSE and the subcomponent of attention or concentration on day one and day three. The Wilcoxin signed-rank test was used to describe the subcomponent scores of orientation, memory and higher cognitive functions because of the narrow range of possible points within the subcomponent. Differences in MSE scores and the demographic variable of age were examined using Pearson correlation coefficients. Finally, significant relationships between MSE scores and the demographic variables of sex and room allocation were tested using t-tests.

Findings

Paired t-tests used to compare the results of each individual score of the MSE showed that there were no significant differences for attention or concentration and for orientation on Day 1 and Day 3 (Table 2). Within the higher cognitive functioning component there was a significant improvement only for the subcomponents of similarities ($p < .01$) and conceptual series ($p < .05$). The memory component of the MSE supported a significant difference with a t-value of -4.40. Improved memory scores resulted from the immediate story recall ($t = -4.54$; $df = 17$) and the delayed story recall test ($t = -2.24$; $df = 17$) (Table 3). Each successive story recall test resulted in an increase in this score. Finally, there were no significant differences between the variables of age, sex and room allocation and the MSE scores on day one to day three.

Table 2

Comparison of MSE Means for Elderly Hospitalized Patients on Day 1 and Day 3 (N = 18)

Component of MSE	Day 1 Mean	Day 1 Standard Deviation	Day 3 Mean	Day 3 Standard Deviation	t (df=17)
Attention/ concentration	63.78	1.96	62.94	3.04	1.25
Orientation	15.61	.60	15.56	.78	.29
Memory	23.44	10.33	30.00	13.90	-4.40*
Higher cognitive functioning	20.11	8.20	21.11	8.00	-1.53

*p <.05

Table 3

Comparison of Selected Subcomponent Means of the MSE for Elderly Hospitalized Patients on Day 1 and Day 3: Immediate Story Recall and Delayed Story Recall (N = 18)

Subcomponent of MSE	Day 1 Mean	Day 1 Standard Deviation	Day 3 Mean	Day 3 Standard Deviation	t (df=17)
Memory					
Immediate story recall	3.39	4.0	8.0	5.81	-4.54**
Delayed story recall	7.33	5.74	9.33	7.07	-2.24**

*p <.05
**p <.01

Discussion

No significant deteriorations in mental status were identified in this study; this is consistent with the work of Engle (1985) and Nagley (1986). The first major finding of the study was related to the significant improvement in the participants' memory from Day 1 of their hospitalization to Day 3. This finding is consistent with the work of Roslaniec and Fitzpatrick (1979). They

suggested that memory may have improved as a result of the repetition of the same story for both interviews because the results on the other subcomponents of memory tasks approached significance in the direction of a poorer performance. In this study, however, there was no evidence of a poorer performance in the other subcomponents of memory. The improvement on the story recall test scores may be related to the individuals' abilities to receive and code information when it was presented in serial repetition. Each successive time that the story was told, individuals were able to code, reorganize and recognize additional stimuli. Correct responses may have been increased through the schemata promoting additional opportunities for memory retrieval. To test this phenomenon further, different stories might be used for the two interviews (Roslaniec & Fitzpatrick, 1979). The results of this study however, support the idea that repetition may improve elderly patients' abilities to remember information that is presented to them.

A significant improvement in higher cognitive functioning (similarities, conceptual series) was also evident from Day 1 to Day 3 of the hospitalization experience, whereas, the other subcomponents remained consistent. This contrasts with the Roslaniec and Fitzpatrick (1979) results in which abstract reasoning decreased significantly over four hospital days. A plausible explanation for these improvements may be the nature of these items. Individuals may have had difficulty determining what data from within their schemata were immediately necessary to elicit appropriate responses. In addition, individuals may have thought about these items between interviews and this may have facilitated an accurate immediate recall from their schemata.

Attention or concentration remained constant; this is supported by the Roslaniec and Fitzpatrick (1979) study although they reported additional significant deteriorations within the subsection of orientation. Plausible explanations for the differences between the two studies could be related to a larger sample size (N = 25) and to the longer time period of four days over which their study occurred. In addition, their sample included medical and surgical patients admitted after midnight and before 5:30 p.m. In this study, only medical patients who were elective admissions were approached. Elective admissions would have had time to prepare themselves for the relocation into an acute care setting. Furthermore, all of these individuals had been previously hospitalized; this would allow them to integrate past memories and images into their schemata that could then have been used as reference points for this present hospital admission. Thus, one can speculate that surgery and/or emergency admissions could distort incoming sensory stimuli because these circumstances would introduce additional stressors into the new environment.

Implications for nursing practice

The MSE was found to be advantageous for clarifying the concept of confusion. This instrument is useful for measuring selected aspects of mental status among elderly hospitalized patients. It has a high inter-rater reliability and is easily administered, requiring approximately 15 minutes to complete; therefore it is feasible for use in the clinical setting during the initial nurse-patient interview. It can also provide health care professionals with a means of assessing confusion in elderly patients in order to plan effective nursing interventions tailored to patients' needs. This would also help to provide criteria to evaluate the nursing interventions. In addition, use of one standardized instrument would facilitate reliability and consistency in clinical assessment of confusion when patients are relocated to another unit or hospital (Engle, 1985). Reliable data provide a consistent base from which nursing actions could be developed to promote continuity of care.

The second implication focuses on patient teaching. In this study, a significant improvement in memory tasks was found when the story recall test was repeated. Nurses are responsible for providing information to patients, thus, they must select appropriate teaching strategies to facilitate learning for elderly hospitalized patients. If this trend is supported in future studies, teaching strategies that allow for repetition of material may be warranted.

Limitations

The results of this study may be generalized only to elderly patients who are electively hospitalized for a medical illness. All these patients had some time to prepare for their admission and were able to control their levels of anxiety about the stressors associated with their temporary relocation. The risk of confusional states among the individuals who were more anxious and who consequently refused to participate in this study is unknown. All sampled patients were also highly mobile and it is unknown if this variable would effect the results. The small sample size reduced the generalizability of these findings. Finally, the shorter time interval between interviews may have influenced the results.

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RÉSUMÉ

Relation entre la relocalisation et les modifications du statut mental chez les hospitalisés âgés

Dans cette étude nous avons voulu reprendre la recherche de Roslaniec et Fitzpatrick (1979) sur les changements du statut mental chez les patients âgés, qui concluait que la désorientation augmentait et que la mémoire s'améliorait durant quatre jours d'hospitalisation. Pour notre étude, l'échantillon consistait de dix-huit patients âgés entre 65 et 85 ans admis dans un centre de soins intensifs. Le statut mental de chaque individu a été évalué le jour même d'admission ainsi que le troisième jour d'hospitalisation, utilisant le MSE (1979), conçu pour évaluer le niveau d'attention-concentration, d'orientation, de mémoire et de fonctionnement cognitif poussé. Les variables démographiques âge, sexe et allocation de chambre ont été examinées. Les analyses de données utilisées étaient le test-t ($p < .05$) et le coefficient de correlation produit-moment de Pearson ($p < .05$). Les éléments attention-concentration, orientation et fonctionnement cognitif poussé n'ont pas révélé de différences significatives entre le jour d'admission et le troisième jour d'hospitalisation. L'élément mémoire a révélé une différence significative, avec une valeur t de-4.40. Ces résultats pourraient influencer l'éducation des patients et contribuer à clarifier le phénomène de confusion.

ANALYSIS AND EVALUATION OF PARSE'S THEORY OF MAN-LIVING-HEALTH

Marlaine C. Smith and Jacqueline Hatfield Hudepohl

The evolution of nursing as a scientific discipline is dependent upon the development of its unique theoretical base and the extent of the utilization of this substantive knowledge in practice and research. Nursing's scientific community has a responsibility to appraise its developed conceptual models critically. Melnyk (1983) asserted that, despite the importance of the analysis of nursing theory, there is a paucity of literature critically evaluating the substance, structure and utility of nursing theories for scholarly inquiry and professional application. Melnyk's criticism rings true today. There have been few published critiques in the nursing literature on emerging nursing theories or conceptual models.

Man-Living-Health, a theory of nursing developed by Rosemarie Rizzo Parse, was introduced to the nursing community in her 1981 text. In the eight years of its public life, the theory has been read; reviewed and studied by nursing scholars and graduate students; foundational to qualitative research studies whose results have been published and presented at various symposia; adopted and tested as a model for nursing practice in long-term and acute care settings; and translated and disseminated to the international nursing community. Yet, only a few critiques (Limandri, 1982; Cowling, 1988; Phillips, 1987; Winkler, 1983) appear in the literature. These critiques lack some detail about the evolution, substance and pragmatics of the theory.

The purpose of this article is to analyze and evaluate Parse's (1981, 1987) theory of Man-Living-Health according to the criteria explicated in Fawcett's (1989) book, *Analysis and Evaluation of Conceptual Models of Nursing*. Fawcett's criteria were developed from a review of extant evaluative schema and a general dissatisfaction with their abilities to address the unique qualities of conceptual models in nursing. The strength in her criteria lies in the attention to processes of both analysis and evaluation, the specificity of its questions to the phenomena of concern to nursing, and the openness of its questions that are applicable to general conceptual frameworks. Fawcett

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defines analysis as explicating concepts, relationships among concepts and the structure of ideas in a conceptual model. The analysis requires a non-judgmental, detailed examination of the [substance and structure] of the conceptual model"(Fawcett, 1989, p. 44). In contrast, evaluation is judgmental, in that it arrives at conclusions about the worth of the model through a process of examining the framework against clearly articulated criteria.

It is important to clarify the meanings of conceptual model and theory as used by Fawcett and Parse. Fawcett differentiates a conceptual model and a theory based on the level of abstraction and specificity of phenomena addressed. To Fawcett, a conceptual model develops a perspective on the metaparadigm concepts of the discipline in abstract terms. Parse (1987) defines theory as "a set of interrelated concepts at the same level of discourse that explains, describes or makes predictions about the phenomena of a discipline" (p. 2). Certainly, Parse's meaning and use of "theory" does fit a broader definition and, therefore, Fawcett's criteria are applicable to it. Throughout this paper, then, the use of "theory" will be consistent with Fawcett's definition of "conceptual model".

This article will answer each of the questions articulated by Fawcett in the aforementioned schema. The questions for analysis and evaluation will not be stated. It is assumed that the reader is familiar with the major tenets of Parse's theory of Man-Living-Health. Figure 1 diagrams the relationships among the assumptions, principles, concepts and theoretical structures; the substance of these concepts and statements may be articulated only as examples supporting the analysis and evaluation.

Analysis

Historical evolution of the theory

Although the formal publication of *Man-Living-Health: A Theory of Nursing* occurred in 1981, Parse's commitment to the development of a unique knowledge base for nursing began in the early 1970's. In Parse's first book, *Nursing* Fundamentals, published in 1974, she stated five major premises related to nursing.

1. Nursing is a human science profession primarily concerned with the care of unitary man as he evolves from conception through death.
2. Man and his environment evolve mutually and simultaneously in an organized, unidirectional fashion.
3. The nurse interrelates with clients and families to help them to describe health-related experiences, to evaluate alternatives and to mobilize resources.
4. Man is a thinking, feeling being who bears responsibility for his decisions.

5. Health is the state of well-being as experienced by the client. (Parse, 1974, p. 3)

These premises from her early thinking reflect the major influences of Martha Rogers (1970) and the existential philosophers Heidegger, Sartre and Merleau-Ponty. During this time, Parse was on the faculty of Duquesne University, an internationally recognized center in existential-phenomenology. Her extensive study in philosophy and psychology led to a synthesis of these ideas into her philosophical assumptions, a perspective of nursing as a human science and a strong value for phenomenology as a research method. From 1975 through 1979, Parse's theory, then called "Human science nursing", grew from a set of assumptions, postulates and dimensions of practice, to specific concepts, principles and theoretical structures. The theory of Man-Living-Health evolved as a nursing model, separate and different from the focus of the natural science perspective of medicine. Parse (1981) conceptualized the person as interrelating with the environment while cocreating health. The title of the theory "Man-Living-Health" reflects the world view of the author and the focus of the content of the theory: that through being in the world, man (generic human beings) participates in creating the uniquely-lived process of health. In 1985 Parse co-authored a text in qualitative research methods containing the reports of studies that utilized the theoretical perspective of Man-Living-Health as a frame of reference (Parse, Coyne & Smith, 1985). In her 1987 work, *Nursing Science: Major Paradigms, Theories and Critiques,* Parse presents the refinements in her model along with developed research and practice methods specific to the model. A 1989 paper on "Health as Personal Commitment" (Parse, 1989) extended and refined the concept of health through integrating the results of qualitative research studies that have explored several health-related human experiences from the Man-Living-Health perspective.

Approach to knowledge development

Parse has described her experience of theory construction as a rhythmical process of induction-deduction (Parse, 1980). From her observations in practice, she concluded that health was not lived as a dichotomous reality; that people experienced health through clarifying and living life according to their values and commitments, and not by following directives imposed by health practitioners. As she articulated the philosophical assumptions underpinning her world view of health and the person-environment interrelationship, she began to specify the principles and concepts of the theory further. Refinements were made as she practised from this perspective and through discussions with others about the lived experience of health. Middle range theory in Parse's model has been developed through the results of qualitative research.

Basic scientific assumptions of the model

Man-Living-Health is rooted in the human sciences. The assumptions of this belief system include the assertion that any science generating and organizing knowledge about human beings must preserve the essence of humanity or personhood in that scholarly pursuit. Reductionistic or mechanistic structures and modes of inquiry are inconsistent with a human science perspective. Persons are evolving, complex beings, interconnected with the universe. People are viewed as subjects, and the personal meanings of their realities are considered of primary importance in the investigative and practice dimensions of a human science discipline (Giorgi, 1970; Watson, 1985).

Parse (1987; Parse, Coyne & Smith, 1985) has identified two major competing world views existent in nursing: the totality and the simultaneity paradigms. She views Man-Living-Health as assuming the simultaneity paradigm beliefs that human beings are more than and different from the sum of parts, inseparable from their environment and evolving patterns that reflect their health.

Metaparadigm concepts

Fawcett (1989) defines four metaparadigm concepts in the discipline: person, environment, health and nursing. Parse (1981) defines nursing as a scientific discipline whose ontological focus is the nature of human beings' patterns of living health. To Parse, the metaparadigm concepts of the discipline of nursing are human beings, environment and health. Because nursing is viewed as a discipline, Parse believes it is inappropriate to include nursing as one of the metaparadigm concepts. For example, psychology is the discipline concerned with the study of mental processes influencing the behaviour of human beings; the metaparadigm for psychology would not include psychology, the discipline, even though it has a practice dimension. Person-environment, to Parse, is a unified concept. In this way, she uses the term "man" throughout the theory referring to human beings interrelating with the environment. According to Parse, then, the metaparadigm consists of person and environment (viewed as a unity) and health. To be consistent with the theory, the concepts will be explicated in this way. Although she doesn't consider nursing as a metaparadigm concept, an analysis of Parse's perspective on the nature of nursing practice is described in this section.

Person-environment: Parse's (1981) view of person-environment is articulated in four of her nine original assumptions and reflects a synthesis of Rogers' (1980) concepts of energy field, open systems, pattern and organization and four-dimensionality with existential-phenomenological concepts of coconstitution, coexistence and situated freedom. For Parse, person is a

living unity who through an open interchange with the environment, cocreates rhythmical patterns. Human beings live in relation to others and freely choose meaning in any situation, meaning that reflects values and structures a reality unbounded by three-dimensional spatial-temporal limits. Persons are continuously becoming as they tacitly and explicitly choose among the multiple unfolding possibilities within a multidimensional universe. This nursing model offers a distinctive view of person as synergistic, open, negentropic and creative.

Health: In the theory of Man-Living-Health, the metaparadigm concept of health is defined as "an open process of becoming, experienced by man" (Parse, 1981, p. 25). Health becomes known to another only through describing a personal reality. Health is not the absence of pathology, a point on a health-illness continuum, or complete physical, mental and social well-being defined by adherence to norms of a healthy lifestyle. Five of Parse's original nine assumptions describe health (Figure 1). Health is a rhythmical pattern of living personal value priorities. Persons participate with the environment in choosing ways of living health. Health is becoming through transcending with imagined and valued possibles. "This is in contradistinction to a paradigm that views man as the sum of parts, acted upon and delimited by such terms as disease and pathology" (1981, p. 7). "Health, then, from the perspective of this theory of nursing...is not the opposite of disease or a state...but, rather, a continuously changing process....Disease, from this perspective is not something a person contracts, but rather a pattern of man's interrelationship with the world " (1981, pp. 40-41). Health evolves through a multidimensional process of coming to know, toward transformation of self. In a more recent paper, Parse (1989) developed these ideas further in describing health as a commitment, an expression of life values reflective in personal choosings. Parse's phenomenological study of the lived experience of health generated the following nondirectional hypothetical definition of health: "Health is harmony sparked by energy leading to plentitude" (Parse, Coyne & Smith, 1985, p. 33-34). This structural definition of health, empirically supported by the descriptions of 400 subjects' experiences of health, is congruent with the theoretical contention that health is not being free from illness, but is a reflection of the person's participation with the environment; health is not experienced as being within the norms, but as a process of being connected with one's world while actualizing life projects; health is not experienced in physical, mental or social dimensions of self, but with the whole being.

Nursing: According to Parse (1987) nursing practice is the application of the theoretical base of nursing in promoting health or quality of life. She defined the practice method of Man-Living-Health through explicating the dimensions and processes of this theory-based practice. These are described in detail later in this paper. This practice method flows from the theory.

Parse views the nursing process that focuses on assessing, diagnosing, planning, implementing and evaluating, as being incongruent with this theory. The nursing process is based on the natural science method, which is founded on very different assumptions about person-environment and places the "observer", nurse, outside of the relationship with the individual. It implies that health can be "diagnosed" by the nurse. Instead Parse proposes that the nursing process, though now a major vehicle for practice that is linked to all the nursing paradigms, if syntactically analyzed, is only a problem-solving process, not a method derived from the ontological premises of nursing paradigms. The nursing process is rooted in the logical positivistic school of problem-solving. It is not a unique practice tradition of any of the nursing theories. Mitchell and Santopinto (1988) expand on this position, clearly distinguishing the incongruencies between nursing diagnosis and Parse's theory.

Relational propositions linking metaparadigm concepts

The designated name of Parse's theory of nursing, Man-Living-Health, illustrates the view that the metaparadigm concepts are inextricably interwoven in the fabric of the discipline of nursing. Parse's nine original assumptions were structured so that the first four state her fundamental beliefs about human beings and environment; the last five integrate her beliefs about health with those of human beings (Figure 1). In a later work (1985), she synthesized the nine assumptions into three, stating her beliefs about the conceptual unity, rather than man and health separately.

Areas of concern identified by the conceptual model

The unique areas of concern identified by Man-Living-Health may be gleaned from the assumptions, principles and posited theoretical structures (Figure 1). The principles articulate the unique themes as structuring meaning of a personal reality, rhythmical patterning with others in the world and moving beyond what-is by pursuing valued hopes and dreams. The model is concerned with health as a subjective experience of the quality of living, illuminated through personal description; patterns in the person-environment relationship that reflect health; health as transcendence and transformation; personal choice and commitment as health; and the paradoxical nature of the lived experience of health. Theses unique areas of concern differentiate Man-Living-Health from other conceptual models of nursing.

Evaluation

Assumptions

Parse (1981) clearly, explicitly and schematically identifies the assumptions of Man-Living-Health (Figure 1). She explains how the assumptions were

derived from Rogers' (1980) building blocks and the tenets and concepts of existential thinking. The inclusion of these concepts within each assumption is diagrammed in three tables within Chapter III, clearly leading the reader to the origin of the ideas. Each assumption connects three specific concepts from the foundational concepts (from Rogers and existential-phenomenology) in a unique way, and each concept is related at least once with each of the others in the creation of the nine assumptions.

Parse (1981) describes the meaning of each of the assumptions in a substantive narrative. The descriptions are clear and assist the novice in comprehending the assumptions; however, the descriptions are abstract, and those unfamiliar with Rogers' (1980) Science of Unitary Human Beings or existential-phenomenology may require study and review in order to truly comprehend the foundations of the theory. In refinement of the theory (Parse, 1987, Parse, Coyne & Smith, 1985) she collapsed the assumptions so that each of the three new assumptions is basic to one of the principles of the theory (Figure 1). These three assumptions crystallize the essences of her previous nine assumptions, eliminating some repetition of ideas. However, it may be advantageous for the beginning student of Parse to return to the original assumptions for a sense of the basic beliefs related to man-environment and health. The new structure simplifies, clarifies and more uniquely identifies the basic underpinnings of Man-Living-Health.

Comprehensiveness of descriptions of concepts and propositions

Parse (1981) provides complete descriptions of the metaparadigm concepts within her discussion of the assumptions. These assumptions link the metaparadigm concepts. Man-Living-Health has three principles relating to general themes of meaning, rhythmicity and transcendence. These themes are foundational to the theoretical assertions of Man-Living-Health and relate the concepts of imaging, valuing, languaging, connecting-separating, enabling-limiting, revealing-concealing, originating, transforming and powering. The first principle is: "Structuring meaning multidimensionally is cocreating reality through the languaging of valuing and imaging" (p. 42). The three concepts of imaging, valuing and languaging specify the principle and are comprehensively described. For example, in the explanation of the first principle Parse states: "In the man-environment interrelationship, one chooses from many options simultaneously available in multidimensional experiences as one originates a worldview and constructs a person reality" (p. 42). Parse draws upon the works of Dilthey (1961), Polanyi (1959), and Greene (1978) among others to elucidate the concept of imaging and its relationship to structuring a personal reality. This same pattern characterizes the explanations of each of the concepts and principles. Once again, the concepts may be unfamiliar to the reader, and the descriptions are at an abstract level of discourse in keeping with appropriate rules of theory development. Refer-

ring to some of the cited primary sources may increase understanding of the meaning of the concepts.

Propositions are derived by linking any three of the nine concepts of the theory, one from each principle. These propositions are named non-directional theoretical structures (Figure 1). Non-directional propositions are acausal, congruent with the world view of the theory. Although Parse offers three theoretical structures, students, researchers and practitioners are invited to create their own theoretical structures through linking concepts in the theory. This contributes to the heuristic open process of theory development. The structures are still at an abstract level of theory and must be made more concrete in order to guide research or practice.

Logical congruence

This area of theory evaluation investigates the coherence of the structure and substance of the theory. Kaplan (1964) suggests that coherence is a function of the clarity, internal consistency and esthetics of the theory. The internal structure of Man-Living-Health is clear, logically developed and esthetically pleasing. The clarity and symmetry of the structure is striking. The three assumptions that synthesize the fundamental philosophical concepts from Rogers (1980) and existential-phenomenology are foundational to the three principles explicating the themes. Each principle links three major concepts within the three themes. The nine concepts may be related in theoretical structures by linking one concept from each of the three principles. The language of the theory is at a consistent level of discourse. The diagrams within the book in schemas 6, 7 and 8 clearly map and depict the logical relationships among the derived assumptions, principles, concepts and theoretical structures.

The substance of the theory is internally congruent. Although the two foundational sources for the assumptions (Rogers and existential thought), are viewed by some as incongruent, the synthesis of selected concepts into the assumptions creates a coherent logical "translation of diverse perspectives" (Fawcett, 1989, p. 49). The content of the statements and concepts reflect the basic assumptions and world view underpinning the theory. Parse is specific with the language of the theory, using the prefix "co" in such works as "cotranscending" and "cocreate" to indicate the participative and inseparable nature of the person-world interrelationship. The concepts within the theory, such as languaging, valuing and originating are stated as participles. This denotes the meaning of health as an evolving, dynamic process that is congruent with the assumptions of the theory.

Rogers		Existential-Phenomenology	
		Foundations	
Principles	Concepts	Concepts	Tenets
Helicy	Energy field	Coconstitution	Intentionality
Complementarity	Openness	Coexistence	Human Subjectivity
Resonancy	Pattern & Organization	Situated freedom	
	Four Dimensionality		

Assumptions (1981)

1. Man is coexisting while coconstituting rhythmical patterns with the environment.
2. Man is an open being, freely choosing meaning in situation, bearing responsibility for decisions.
3. Man is a living unity continuously coconstituting patterns of relating.
4. Man is transcending multidimensionally with the possibles.
5. Health is an open process of becoming, experienced by man.
6. Health is a rhythmically conconstituting process of the man-environment inter-relationship.
7. Health is man's patterns of relating value priorities.
8. Health is an intersubjective process of transcending with the possibles.
9. Health is unitary man's negentropic unfolding.

Assumptions (1984)

1. Man-Living-Health is freely choosing personal meaning in situations in the intersubjective process of relating value priorities.
2. Man-Living-Health is cocreating rhythmical patterns of relating in open interchange with the environment.
3. Man-Living-Health is cotranscending multidimensionally with the unfolding possibles.

Principles:	Structuring meaning multidimensionally	Cocreating rhythmical patterns of relating	Cotranscending with the possibles
Concepts:	Imaging Valuing Languaging	Revealing-concealing Enabling-Limiting Connecting-Separating	Powering Originating Transforming

Theoretical Structures:
Powering is a way of revealing and concealing imaging.
Originating is a manifestation of enabling and limiting valuing.
Transforming unfolds in the languaging of connecting-separating.

Adapted from Parse (1981, pp 70-71) and Parse (1987)

Figure 1.
Structure of the Theory of Man-Living-Health

Social congruence

Nursing is still largely practised through applying the knowledge of medicine and the natural and behavioural sciences to the treatment of persons whose total plan of care is directed by the physician. In most settings nursing is not practised autonomously because the knowledge base utilized is not nursing's; therefore, expertise within the knowledge base lies within other disciplines. Society continues to view nursing as the profession concerned with activities involved in caring for the sick and assisting people through the rehabilatitive phases of illness. This perspective is not congruent with the practice of nursing using the theory of Man-Living-Health.

Growing dissatisfaction by the public with the medico-technological health care system has contributed to an emerging revolution in consumer expectations. These emergent social values are more congruent with nursing practice guided by the theory of Man-Living-Health. Ferguson (1980) predicts that a new breed of consumer is emerging, one who is knowledgeable, sophisticated and more concerned about health; one who is concerned about the quality of life; one who seeks a partner in the health-promotion process who will offer humane and sensitive alternatives within a growing technological delivery system. Naisbitt (1982) corroborates this view in his prediction of an evolving "high-tech-high-touch" culture. Smith (1984), Watson (1985) and others describe how these megatrends relate to the discipline of nursing. They state that nursing will be increasingly responsible for providing the leadership in promoting a caring focus for the quality of life for persons and families. A practice of nursing based on the theory of Man-Living-Health is congruent with these emerging societal expectations of experiencing the "interhuman processes of caring and healing...as nursing guides families in choosing among possibilities in the changing health process" (Smith, 1984, p. 29).

Social significance

Man-Living-Health is socially significant. The practice of nursing is the application of nursing theory in service to society. The Man-Living-Health practice tradition has been developed from the theory, itself; therefore, the service that it renders is unique, creative and transformative.

Professional nursing practice becomes unique when guided by this model in that it is unlike the practice of any other discipline. Nursing activities are unique; the nurse does not ask the same questions as the physician or "assess" parameters that judge pathology. The nurse guides the individual in choosing possibilities in the changing health process. Through being truly present in the intersubjective nurse-person process, the nurse engages the person in reflecting on and describing the multidimensional meaning of the

experiences. The nurse with person mobilize the process of change as they are confronted with the possibilities inherent in the not-yet. This offers individuals a new way of living their lives--their health. No other discipline focuses on enhancing quality of life in this way. (Parse, 1987)

The practice of nursing is creative when guided by this theory in that it is "unencumbered by prescriptive rules" (Parse, 1981, p. 81). There are no standard diagnoses, "canned care plans" or "bag of tricks" that can be quickly accessed and used. Nursing practice requires an intense interpersonal involvement with the client where the nurse lives a true presence with the client while uncovering a profile of the changing health process. These emerging health patterns reflect the paradoxical nature of lived experiences. The nurse and person discover ways of transcending with the opportunities and limitations in the moment through choosing new ways of becoming. This improves the quality of life.

Finally, the practice of nursing from the perspective of Man-Living-Health is transformative. Regardless of the person's present health experience, the nurse and person engage in a process of cocreating new possibilities for change that will improve the health of the individual. These transformative processes are founded on the theoretical structures evolved from the theory. Some of these processes may be finding ways of increasing energy, experiencing different life rhythms, or exploring the paradox of a lived experience. This cocreates new perspectives for the person, mobilizing transcendence, moving beyond the limited vision of the current moment toward actualizing new possibilities (Parse, 1987).

Social utility

Nursing practice: The theory of Man-Living-Health does provide guidelines for practice. Very broad guidelines appeared in the 1981 text and have evolved to become more refined and sophisticated through the continued testing of the theory in practice. In 1981 Parse stated:

> The principles of Man-Living-Health, then, guide nursing practice in a unique way. Paramount in this theory is man's participation in and perspective of health as it is cocreated through illuminating and mobilizing... interrelationships in light of meaning assigned to health and its possibilities languaged in the...patterns of relating (p. 82).

In 1987 Parse further explicated the practice of Man-Living-Health. The dimensions of the practice method are illuminating meaning, synchronizing rhythms and mobilizing transcendence. These three dimensions were defined and further specified through processes:

1. Illuminating meaning is shedding light through uncovering the what was, is, and will be, as it is appearing now; it happens in explicating what is. *Explicating* is making clear what is appearing now through languaging.

2. Synchronizing rhythms happens in dwelling with the pitch, yaw and roll of the interhuman cadence. *Dwelling with* is giving self over to the flow of the struggle in connecting-separating.

3. Mobilizing transcendence happens in moving beyond the meaning moment to what is not-yet. *Moving beyond* is propelling toward the possibles in transforming. (Parse, 1987, p. 167)

This has been utilized in various settings. Mitchell (1988a, 1986) and Butler (1988) have described their practice with clients and families using Man-Living-Health as the theoretical base. Theory-based practice models based on Man-Living-Health have been piloted in two long-term settings and one acute care setting. Parse suggested a process for implementing her theory in these practice settings. The nurse derives theoretical structures from the theory. These theoretical structures are stated as propositions that can guide nursing practice. Through individual or group encounters in structured contexts, the nurse engages the person or group in discussions related to themes surfacing in their patterns of living. Through being truly present with others the nurse elicits the significance of their health experiences, relationships with others and plans for change. A health profile emerges related to the themes of meaning, rhythmicity and transcendence. In the nurse-client discussion the nurse may ask the client:"What makes you feel happy, sad, angry, afraid? What do you like to do with others? and What do you want to change about yourself or your situation?" These possible questions are not rigid interview or assessment items, but may be guides to the novice in engaging the client, family, or group in describing their health experiences from this perspective. This discussion leads to the client-nurse's identification of health patterns that are consistent rhythmic ways of being characterized by speaking and moving. The client and nurse suggest activities or participative encounters related to the individual's health patterns that may improve quality of life through actualizing hopes and dreams.

Nursing education

Man-Living-Health can serve as an organizing framework for nursing curricula. It is most appropriate for study at the masters and doctoral levels. Some baccalaureate programs are demonstrating an interest in using the theory as the conceptual framework for their programs. Parse's (1981) text includes a sample curriculum based on the theoretical foundation of Man-Living-Health. A similar curriculum was initiated in a graduate program at Duquesne University in Pittsburgh from 1975 through 1981. The program was highly successful in preparing teachers, administrators and some practitioners in family health nursing from a nursing theoretical base, as is shown by program evaluation data.

Nursing administration

Increasingly, nursing administrators are becoming aware of the value of professional practice models. Theory-based nursing practice may promote an independent nursing practice, improve the morale and self-esteem of the staff, offer a consistent approach to practice and improve the quality of care.

Man-Living-Health was implemented as a model for practice with long-term care patients with primary psychiatric diagnoses. During the implementation of the model, nurses on the unit reported differences in both patients and staff. Although research on this pilot is incomplete, subjective reports from nursing staff and nursing administration supported the value in utilizing the model. Nursing administrators and practitioners reported some similar changes for staff in models implemened at Boca Raton Community Hospital, Florida and in Victoria Hospital, London, Ontario. Another implementation study is now in progress at St. Michael's Hospital in Toronto.

Nursing research

Parse (1987) states that the research method adopted to answer the questions of the theory or model should reflect the beliefs of that model. For this reason, she has proposed a unique research method consistent with the theoretical structure and belief system of Man-Living-Health. The phenomena for study are lived experiences of a universal nature. The paradoxical structure of lived experiences are considered in exploring the phenomena.

The processes of this research method include participant selection, dialogical engagement, extraction-synthesis and heuristic interpretation. These processes are fully described in Parse's 1987 publication. Several studies (Smith, 1986; Parse, 1987; Smith, 1988; Mitchell, 1988; Liehr, 1988) utilizing this new method are completed and have been delivered at various symposia. The phenomena studied have been the lived experiences of feeling restricted, hope, struggling through a difficult time, living day by day and living on the edge. Various groups, such as persons on hemodialysis, unemployed persons, institutionalized elderly and persons awaiting heart transplants, served as subjects for the studies.

In addition to the studies using Parse's specified method, eight published and other completed and reported studies have utilized other qualitative research methods from the human sciences such as the phenomenology, ethnography, descriptive case-study and descriptive exploratory methods with Parse's theory as a researcher's perspective or framework. In Parse, Coyne & Smith (1985), six qualitative research studies utilizing Man-Living-Health

are presented in abbreviated forms. In addition, Santopinto (1989) and Banonis(1989) published phenomenological studies the results of which were interpreted from a Man-Living-Health perspective.

Man-Living-Health has fostered intensive, rigorous and prolific research activity in its eight years of its public existence. The publication of the 1985 research text and the development of a unique research method support the comprehensiveness and value of Parse's theory to the expanding body of knowledge that constitutes the scientific discipline of nursing. Parse offers a unique perspective of nursing, one that asks us to study health as the quality of living and becoming. The theory is heuristic in its spawning of possible research questions, and propositions to guide practice and further add to theory development.

> [Man-Living-Health] provides a foundation from which new questions can be raised about...nursing. The emergence of nursing as a science and an art is through creative conceptualizations in research, practice and education. Nursing is unfolding in simultaneous and mutual interchange with the world transcending with greater diversity and complexity. Nursing is all at once what it was, is and will become, growing ever more explicit, but always with the mystery of the not-yet. (Parse, 1981, p.172).

Parse's theory of Man-Living-Health has been evaluated using Fawcett's framework to examine the foundations of the theory, the scientific assumptions underpinning it, the approach to theory development and the uniqueness of the conceptual model as compared with others in the discipline. The evaluation of the theory revealed a substantive, unique, coherent and heuristic framework that has merit for study, nursing practice, research, administration and education. Man-Living-Health offers promise to a generation of nurses who seek challenge, scholarship and creativity within the professional discipline of nursing.

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RÉSUMÉ

Analyse et évaluation de la théorie de Parse Homme-Vie-Santé

De nombreux chercheurs et professionnels utilisent la théorie de Parse Homme-Vie-Santé comme guide dans leurs enquêtes et activités cliniques. Cet article utilise les critères de Fawcett pour présenter une analyse critique et une évaluation de cette théorie. L'analyse examine l'évolution historique, les suppositions scientifiques, l'approche envers le développement des connaissances, la perspective des concepts metaparadigmatiques des sciences infirmières et les secteurs d'intérêt particulier de cette théorie. Le processus d'évaluation examine la substance, la logique, la clarté de présentation, ainsi que le mérite du modèle d'étude, la pratique professionnelle, la recherche, l'éducation et la gestion.

CURRICULAR CONTENT OF CANADIAN UNIVERSITY SCHOOLS OF NURSING ON LAY SUPPORT GROUPS

Miriam Stewart

Self-help, mutual aid, strengthened social networks and public participation are widely thought of as mechanisms with which to effect health promotion and primary health care (see, for example, Canadian Nurses Association, 1988; Epp, 1986; World Health Organization, 1984). Nevertheless, not all professionals who might aid this process do so. From the professional viewpoint, lay help groups can seem to be a social movement that challenges professional beliefs, methods and prerogatives (Todres, 1982). Self-help groups hope to demystify professional expertise by shifting power to consumers and altering traditional roles of lay people and professionals (Gartner & Riessman, 1984; Katz & Levin, 1980).

Clearly, social support networks should be of particular interest to health professionals because of their impact on health, on health behaviour and on health services utilization (Berkman, 1985; Cohen & Wills, 1985; Gourash, 1978). As Katz (1985) predicts, "The self-help phenomenon is here to stay and professionals must pay attention to how mutual aid ideas and organizations can be more fully used in serving clients" (p.129). Effective public participation requires that professionals be knowledgeable about community groups and willing to participate in a collaborative, facilitative, consultative, partnership relationship with lay helpers (Government of Canada, 1983; Reid, 1986; Stott, 1983).

Some consider the greatest obstacle to collaboration with lay persons or groups to be a deficiency in professionals' knowledge and skill base (e.g. Gartner & Riessman, 1984). Tensions between different types of knowledge and values, including ideological assumptions about the helping process (Kurtz, 1984) and about respective roles, make partnership difficult. In this context, health professionals are traditionally socialized and educated in the "expert" provider role (Rappaport, 1985; Schon, 1987). This education is incompatible with the consultative, partner role recommended for primary health care work with lay helpers.

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Interviews and surveys of professionals working with mutual-aid self-help groups and of self-help group members reveal a prevalent perception of a professional knowledge gap, with the vast majority of professionals reporting little or no coverage in their educational programs, rating their current knowledge as either fair or poor and desiring further information about such groups (Black & Drachman, 1985; Farquharson, 1981; Gottlieb, 1982; Levy, 1978; Miller, 1983; Todres, 1982; Toseland & Hacker, 1985).

The foregoing suggests the need for professional education in appropriate knowledge, roles, skills and attitudes. Indeed, the World Health Organization (1984, 1985) recommended changes in professional training, internationally and nationally, to enable health professionals to develop knowledge and understanding of self-help groups. Hence, pertinent content should be included in health professional curricula. If one function of curriculum content is to teach students about professional practice and thereby to improve the quality of professional praxis, there is a need to assess curriculum content to determine whether or not appropriate didactic and experiential elements are incorporated.

A few successful examples of curricula that achieve this W.H.O. goal, to a greater or lesser extent, are emerging. However, none of these curricula and programs have been empirically evaluated according to short- or long-term modification of roles, knowledge, attitudes and skills. For example, consultation skills do not appear to be stressed in curricula, so consultant roles may be infrequently assumed in practice. Further, the self-help literature reflects a predominant emphasis on social worker education and on physician preparation (Bremer-Schulte, 1983; Goetzel, Shelow & Croen, 1983; Gottlieb & Farquharson, 1985; Traunstein, 1984). The single largest health professional group that might interact with and contribute to self-help groups--nurses--has been overlooked.

Initial basic education of nurses at the undergraduate level about the role and impact of lay helping and support networks and about appropriate professional roles and relationships with these networks thus appears advisable; however, only one nursing program that encompassed some social-support relevant content has been briefly outlined by Tilden (1985). Accordingly, the purpose of this descriptive study was to identify curricular content in Canadian university schools of nursing germane to lay support groups.

Method

To determine the extent to which the curricula of Canadian university schools of nursing include theoretical and clinical content specifically oriented towards and relevant to those dealing with lay helping networks,

questionnaires were distributed to all 26 deans or directors at a recent annual meeting of the Canadian Association of University Schools of Nursing. This was accompanied by the expressed support of the Association's executive director and by a request that the deans or directors or a knowledgeable member of their faculty respond to the questions on curriculum content relevant to social support and self-help groups. A follow-up reminder letter, with an enclosed stamped and addressed envelope, was mailed one month later to increase the return rate. Twenty-four completed questionnaires and one program description were returned, constituting a response rate of 96%.

Most questions were closed-ended to facilitate computer coding and data analysis. However, an "other" category was consistently included to permit flexibility and freedom of response. In addition, one question solicited opinions regarding desirable curriculum content and an "other comments" question also promoted unrestricted answers. The "nonempirical" papers that proposed curricula for social workers (e.g., Gottlieb & Farquharson, 1985) served as a guide for some questions, but most were specifically designed for this study. Information regarding relevant didactic and experiential learning experiences, clinical or field assignments and desired curricular change was elicited.

Results

Seventy-one percent of the schools integrated some curriculum content concerning self-help groups in their undergraduate programs; only six (26%) reported having a separate course on this subject. Forty-two percent of those schools that had graduate programs integrated relevant content. Only two schools (8.7%) had continuing-education programs that made reference to self-help groups.

Relevant classroom content

Most curricula (62.5%) included definitions of self-help groups. Such groups are commonly defined as "voluntary, small group structures for mutual aid and the accomplishment of a specific purpose. They are usually formed by peers who have come together for mutual assistance in satisfying a common need, overcoming a common handicap or life-disrupting problem and bringing about desired social and personal change. The initiators and members of such groups perceive that their needs are not, or cannot be, met by or through existing social institutions." (Katz & Bender, 1976, 9)

The socioeconomic and political forces that led to the historical evolution of such groups were addressed by less than half (41%) of the nursing programs. Common stages in the development of self-help groups -- origin

(25%), informal organization (29%), emergence of leadership (33%) and beginnings of formal organization (25%) -- were identified in less than one-third of the curricula.

Nurse educators stressed the following characteristics of self-help groups in the curricula: membership limited to those with similar problems (66.6%) and informal help (54.1%) (reflecting common definitions of self-help groups) rather than reciprocal help (41.6%), experiential knowledge (41.6%), role models (29.1%) and the helper principle (29.1%). There was comparable emphasis on the following benefits of self-help groups: opportunity to share experiences (66%), informational support and emotional support (62.5% each), reference group and vehicle to aid coping (54.1% each). Fewer cited appraisal (feedback) support (29%) and instrumental (material) support (42%) as benefits. House and Kahn (1985) conceptualize social support as encompassing emotional, informational, instrumental and appraisal support.

Germane theoretical foci frequently identified in curricula were coping theory (100%), self-care theory (91.3%), community organization (87%), social-support theories (87%), change theory (87%), primary health care (82.6%) and group process theories (79.2%). Social-learning theory (58.3%), loneliness theory (50%), the lay helper principle (33.3%), attribution theory (29.2%) and social-distance theory (20.8%) were included in some curricula. Social-movement theory (12.5%), social-comparison theory (4.3%) and equity theory (4.3%) were generally overlooked. One respondent identified deviance theory under the "other" category, which implies premises congruent with self-help groups constituted for the socially isolated and with loneliness theory. Table 1 gives definitions and shows the relevance of several of these theories.

Classroom content on the linkage or connection between professionals and self-help groups emphasized the manner in which self-help groups influence professional services (54.2%) more than professional impact on lay helping groups (37.5%). Natural tensions between professionals and non-professionals (stemming from differences between ideologies, control and knowledge) were examined in less than half (45.8%) of the nursing curricula. Self-help groups were sometimes (41%) portrayed as "an extension of professional services".

Of 19 professional roles that nurses might have in dealing with self-help groups, only three — consultant, information resource and facilitator — were reported as being identified in didactic form in the curricula of more than half of the reporting schools (Table 2). Initiator and leader roles were rarely identified.

Table 1

Theories Relevant to Teaching Regarding Self-help Mutual Aid Groups

Theory	Reference	Definition	Relevance to Self-help/ Mutual Aid
Attribution	Heider (1958) Kelley (1967) Brickman (1982)	Attribution is the assignment or appraisal of responsibility, for causing and solving a person's problems, to the person or the environment.	Can enable explanation of motives of donors, the phenomenon of helpseeking and helping, and the possible negative effects of support efforts.
Coping	Lazarus & Folkman (1984 a, b)	"Constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person."	Demonstrates how social support and coping interface in the stress process by acknowledging individual and environmental perspectives, adds a cognitive dimension to support, and considers costs of support efforts.
Equity/Social Exchange	Adams (1963) Blau (1964) Homans (1961)	Desire to maintain balance and reciprocity of exchanges in relationships.	Explains reactions to support from donor and recipient viewpoints, the reciprocal nature of social support, its impact on help seeking, and its beneficial and detrimental features.
Loneliness	Peplau & Perlman (1982) Peplau (1985) Rook (1984) Rook (1985) Weiss (1973)	A subjective, unpleasant experience resulting from a perceived deficit in social relationships or relational provisions.	Attests to the significance of social relationships, takes into account the individual's contributions to the network and vice versa and emphasizes the affective dimensions of support.
Social Comparison	Festinger (1954) Suls (1977)	Process by which individuals evaluate themselves through comparison with others to validate and define reality.	Helpful in interpreting and evaluating positive and debilitating effects of support when the donor is a peer.
Social Learning	Bandura (1977, 1986)	Postulates that personal and situational influences alter coping behaviour and that transactions with environment and perception of capabilities affect behaviour and thinking in stressful situations.	Concepts relevant to self help mutual aid groups include: role modeling, reciprocal determinism, vicarious experience, social persuasion, collective comparison, collective efficacy, experiential knowledge (specialized information of a phenomenon based on first hand experience).
Social Movement	Melucci (1985) Touraine (1985) Smith & Pillemer (1983)	Structures directed toward social change, collective action, and conflict expression for control of resources	The self help movement satisfies some social movement criteria: networks of groups, ideology, opposition from society (real or perceived), sense of common purpose, need for both individual and social change, empowerment.
Social Support	House & Kahn (1985) Pearlin (1985) Tardy (1985) Wills (1985)	Emotional, appraisal, instrumental and informational assistance provided by kin, friends, neighbours, co-workers, community leaders, indigenous lay helpers, volunteers and self help mutual aid groups.	Self-help mutual aid groups are one prevalent type of social support network. Health effects of social support are interpreted by two hypotheses: indirect/ buffering and direct/main effect models.

Relevant learning experiences

All school curricula included a mixture of didactic and experiential learning experiences. The three most frequently cited learning experiences relevant to self-help groups were visits to agencies that have mounted support groups of clients who share similar problems (66.7%), invitations of group members to attend lectures or tutorial sessions (66.7%) and attendance with permission at open meetings of self-help groups (54.2%).

Role playing and creation of self-help groups for students themselves (33.3% each) were employed as strategies in fewer instances. Only 16.7% used videotaped role playing or films on self-help groups. One respondent indicated that professionals who worked with self-help groups were invited to speak to students.

Clinical assignments

The reported skill emphasis in field assignments for professional role development was on group work (62.5%) and leadership skills (58.3%), rather than on community organization (33.3%) and consultation (25%) skills. The types of groups with which students had contact were, in most cases, the elderly (75%), the chronically physically ill (66.7%), childbearing individuals or couples (62.5%), those with chronic mental llnesses (62.5%), new parents (58.3%) and caregivers (54.1%). Some curricula offered students opportunities for contact with groups of the bereaved (45.8%), children (45.8%) and the victims of abuse (41.6%).

The only written clinical assignments incorporated in most of these curricula were community-needs assessment (58.3%) and observation and assessment of self-help group work and group dynamics (54.2%). Identification of specific self-help groups in the community (33.3%) and of tensions and prospects for partnership between professionals and lay group members (33.3%) were less frequently assigned as learning experiences (see Table 3).

Desired changes

When nurse educators were asked if there were specific classroom or clinical content foci that should be included in their curricula in the future, one each identified skill development, student contact with all types of self-help groups, assessment of current self-help groups and models and invitation of self-help group members to lectures or to tutorial groups. Two respondents indicated that their programs would include more content relevant to self-help groups as a result of planned curricular changes.

Table 2

Professionals' Roles/Functions in Self-Help Groups that are Identified in Didactic Form in Nursing School Curricula

Role/Function	Curricula identifying		Category
	No.	%	
Consultant	16	66.6	Partner[1]
Facilitator	12	50.0	Partner
Information Resource	12	50.0	Partner
Advisor	11	45.8	Partner
Linker	9	37.5	Partner
Catalyst	7	29.2	Partner
Sponsor	7	29.2	Partner
Validator	7	29.2	Partner
Advisory Board Member	5	20.8	Provider[2]
Evaluator	5	20.8	Provider
Researcher	5	20.8	Provider
Referral Agent	4	16.7	Partner/Provider
Skills Developer	4	16.7	Provider
Normalizer	4	16.7	Provider
Initiator	3	12.5	Provider
Organizer	3	12.5	Provider
Group Leader	3	12.5	Provider
Trainer of Group Leader	2	8.3	Provider
Provider of Aid	1	4.2	Provider

Sample = 24
1Partner (non-directive roles)
2Provider (directive roles)

Discussion

This is the first national study of the lay-help group content of university curricula for students in a human-service profession. Furthermore, only Black & Drachman (1985) have investigated the specific educational preparation of professional practitioners for working with self-help groups. This study, therefore, attempted to establish baseline data, given the state of virtual ignorance that exists with respect to professional education to prepare for working with lay groups. This Canadian study was designed to determine available educational resources for preparing nurses for such work.

Table 3

Field/Clinical Assignments for Professional Role Development in Relation to Self-Help Groups (SHG)

Clinical Assignments	Curricula identifying	
	No.	%
1. Conduct community needs assessment to determine available services and service gaps around which SHG might be developed.	14	58.3
2. Observe group meetings and describe group dynamics and group members' roles	13	54.2
3. Case studies of existing groups	11	45.8
4. Make oral presentation on activities associated with SHG	11	45.8
5. Distinguish professional intervention from lay helping patterns	11	45.8
6. Use community organization concepts and skills to identify natural resources and to develop/ maintain SHG	10	41.7
7. Assess current SHG and models	8	33.3
8. Identify and develop list of SHG in community	8	33.3
9. Identify tensions between professional and informal (lay) health services and prospects for professional-lay partnership	8	33.3
10.Describe roles played by professionals at various stages of development of SHG	7	29.2
11.Assess organizational settings for possible introduction of SHG	7	29.2
12.Spot and encourage leadership in SHG	4	16.7
13.Conduct public opinion surveys regarding necessity for SHG	3	12.5
14.Germinate SHG with agency/clinic and transplant them in community	3	12.5
15.Videotape actual SHG interactions using guidelines to examine group dynamics	3	12.5

Researchers in the self-help field have typically not used theoretical frameworks and none have specifically asked which theories are relevant to the teaching of this concept and of the professional or self-help group interface. Only balance, attribution and exchange theories have been used as frameworks for more general studies of professional and self-help group relations. This study attempts to overcome this omission. For example, although there is some evidence that social-learning theory could have a considerable affect on attempts to develop theoretical formulations of self-help and mutual aid (Katz, 1985), this has been overlooked in empirical studies to date. Therefore, the survey instrument included references to this theory and others.

Most curricula included some of the theories pertinent to lay-support groups but overlooked the relevance of others. The virtual absence of social-comparison theories (4%) seems incongruent with the fact that in most curricula self-help groups are identified as points of reference or comparison with peers. The premises of reciprocity or equity theories, so relevant to mutual aid groups, are addressed only by a minority of the schools, according to these respondents. It seems surprising that the most commonly identified benefit is experience sharing, while experiential knowledge and social-learning theories are less often identified in curricula (56%) and likewise, that only half identify the self-help group as a coping aid, when all curricula include stress and coping theories. Lastly, the minimal recognition of these groups' appraisal-support function (29.1%) reflects the infrequent inclusion of attribution theories (29.1%) that interpret appraisal. Thus, instruction regarding practice may sometimes be inadequately grounded in theory. On the other hand, there may not be uniformity in understanding the conceptualization and characteristics of self-help groups.

The most frequently cited benefits of self-help groups that were relayed in curricula were emotional support, opportunity to share experiences and informational support. Although other disciplines recognize the primary benefit of emotional support, they also emphasize normalization and decreased stigmatization (e.g., Miller, 1983; Toseland & Hacker, 1985). In contrast, self-help group members, while recognizing the benefits of shared experience and informational support, perceive reciprocal or bidirectional help as the greatest benefit of membership (e.g. Kurtz, 1984; Romeder, 1982).

There could be increased experiential emphasis on the natural tensions between professionals and nonprofessionals and on professional partnership relationships with self-help groups. Regrettably, less than one-third of the curricula included the partnership relationship and determination of appropriate professional roles as clinical assignments. In contrast, many of the roles frequently identified in the classroom could be categorized as indirect partner roles rather than direct or directive provider roles (Table 2).

The CNA (1988) recommends "equal emphasis in professional educational institutions...on partner, consultant, referral, advocate and educator roles along with traditional caregiver (provider) roles" (p.20). However, nursing curricula rarely conveyed the referral agent role (16.7%), which is unfortunate given the frequent identification of this facilitative role in self-help group studies. The most commonly conveyed professional role, the consultant role, is also emphasized by other disciplines and self-help group members (e.g. Cherniss & Cherniss, 1987; Gottlieb, 1982; Toseland & Hacker, 1985).

The traditional focus on developing group-work and leadership skills, rather than on community-organization and consultant skills, is perhaps misplaced in light of the skills reinforced in the self-help mutual aid literature. For example, Zarem (1982) found that social workers required educational preparation in group-work and community-organization skills for work with self-help groups. Group stability, growth and innovation were associated with consultation between self-help group members and professionals in the study by Cherniss and Cherniss (1987).

The predominant mixture of didactic and experiential learning experiences reflected educational recommendations in the self-help group literature (Bremer-Schulte, 1983; Gottlieb & Farquharson, 1985). However, observational and assessment learning experiences were more frequently used than role playing, videotaping and direct role implementation. "Passive" observation of self-help group meetings was also the most prevalent form of professional nurses' contact with self-help groups (Stewart, 1989). One-sixth of the schools employed videotaped role-playing sessions as a teaching technique, which have also been incorporated in the one documented curriculum for social workers (Gottlieb & Farquharson, 1985). Nevertheless, given the paucity of information on social-work and medical curricula about self-help groups, and given the fact that what has been reported has not been evaluated, these comparisons may not be useful.

Finally, the fact that 71% of the responding schools reportedly include some content relevant to self-help groups in their undergraduate curricula is encouraging in light of the World Health Organization (1985) recommendation referred to earlier. Yet relevant continuing education courses offered by a logical vehicle, university schools of nursing, are virtually nonexistent in the country, in spite of the probable need. Most nurse educators (e.g. Bevis, 1982) advocate integrated curricula; as such, it is not surprising that the undergraduate content relevant to self-help groups is usually integrated rather than presented in a separate course. However, such curricula may inadvertently ignore certain content areas; this would be less readily discernible than in curricula that have separated subjects.

Potential limitations of method

In this needs-assessment (goal-free) approach to curriculum "evaluation", the researcher was independent from faculty, and outcomes were elicited by means of supplementary open-ended queries rather than prespecified intents only. Witkins' (1984) discussion of needs assessment in educational programs included surveys (questionnaires and interviews) as one of five methods of gathering data about needs. Hence, the strategy employed in this study appeared appropriate. However, a survey does not yield the same in-depth insights as an interview approach.

In this context, the quantity and quality of specific content is difficult to determine, partly because of the nature of the measuring instrument. Having the dean or director or the faculty member most familiar with the "self-help relevant content" serve as representative respondent or key informant could be seen as a limitation, but with the ready availability of standardized documentation regarding each school's curriculum as a validity check, this sampling technique seemed realistic, accurate and cost-effective.

Implications

In summary, most Canadian university schools of nursing legitimately include theoretical and clinical coverage regarding mutual-aid self-help groups in their undergraduate curricula. However, some didactic and experiential deficits identified in this preliminary assessment suggest implications for nursing curricula. This review of the relevant curriculum foci of Canadian schools of nursing in conjunction with another preliminary assessment of the learning needs of a sector of the Canadian nursing population (Stewart, 1989) supplemented the creation of a conceptual framework for undergraduate nursing education (Stewart, in press). The framework portrayed a philosophy of consumer input and collaboration with lay helpers. Implementation is presently under investigation.

While several relevant theories are taught, some theoretical premises germane to comprehending and conceptualizing social support (e.g. social-movement, social-comparison and social-exchange or equity) were overlooked in most nursing curricula. The range and influence of existing self-help and peer helping groups, referral and consultation skills, linking clients to self-help networks and establishing joint lay-professional linkages should be emphasized increasingly in educational programs. Thus, experiential learning experiences could be expanded to include more direct involvement or linkage with self-help groups and greater preparation for the roles of part-

ner and consultant. The potential conflict between distinctive knowledge bases, ideologies and roles of lay and professional helpers and the requisite collaborative, partner roles for nurses should be addressed to a greater extent in curricula, if nursing students are to prepare for the challenge of consumer-participation movements and appropriate primary health care roles.

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Portions of this study were reported in an invited presentation at the National Meeting on Self-Help Mutual-Aid, sponsored by the Canadian Council on Social Development, in Ottawa in March 1987.

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RÉSUMÉ

Contenu du curriculum se référabe aux groupes de soutien non-professionnels dans les écoles universitaires de nursing au Canada

Les soins de santé primaires, reflétant une philosophie de collaboration avec des non-professionnels, sont utilisés de plus en plus couramment par les professionnels de la santé. Pour déterminer jusqu'à quel point le contenu du curriculum des écoles universitaires de nursing au Canada contient un caractère théorique et clinique s'adressant spécifiquement aux réseaux d'aide non-professionnelle, des questionnaires ont été distribué aux 26 doyennes et directrices lors d'une récente réunion de l'Association canadienne des Ecoles universitaires de Nursing. Des 25 écoles qui ont répondu au questionnaire, 71% avaient dans leur curriculum une partie se rapportant aux groupes auto-soignants. Dans la plupart des cas, on y retrouvait des théories pertinentes aux groupes de soutien non-professionnels mais on y négligeait la pertinence des théories équitables et socio-comparatives. On pourrait souhaiter plus d'emphase sur les tensions qui se créent tout naturellement entre les professionnels et les non-professionnels ainsi que sur les relations entre partenaires. Le rôle professionnel identifié le plus souvent, celui du conseiller, était identique à celui approuvé par d'autres disciplines et groupes d'auto-soins décrit dans les études empiriques qu'on retrouve dans la littérature. L'enseignement par sessions d'observation et d'évaluation y figurait plus fréquemment que les psychodrames, les enregistrements par video et les réalisations par rôle direct. L'accent qu'on met traditionnellement sur le développement du travail d'équipe et des aptitudes de leadership, plutôt que sur l'organisation communautaire et l'exercice du conseiller, est peut-être déplacé en vue des aptitudes d'aide mutuelle renforcées par les publications de groupes d'auto-soignants.

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