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The Effect of a Holistic Program on Health-Promoting Behaviors in Hospital Registered Nurses

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Purpose: The purpose of the study was to examine the effect of a holistic program, the Collaborative Care Model (CCM) Program, and the development of a self-care plan on health-promoting behaviors in hospital nurses. **Design:** A quasi-experimental, pretest, posttest, repeated measure, comparison-group design was used. **Method:** The study was conducted in a large, academic medical center in the northeast. The experimental group included registered nurses (RNs) from units in one institution introduced to the CCM and development of a self-care plan in an 8-hour program. The control group received no intervention. Data were collected using the Health Promoting Lifestyle Profile II instrument (HPLP II); a 52-question Likert-type scale with six subscales examining health-promoting behaviors. **Findings:** Using repeated measures analysis of variance there was a significant increase ($p = .02$) in the overall HPLP II mean, spirituality ($p = .04$), interpersonal relations ($p = .04$), and nutrition scores ($p = .04$) of the experimental group as compared over time with the control group. **Conclusions:** The CCM plus the development of a self-care plan significantly increased overall health promoting behaviors, and spirituality, interpersonal relations, and nutrition scores in these RNs.

Keywords: *health promotion; holistic health; holistic nursing; nursing models; theoretical; self-care; health behavior; stress management; nursing assessment; education; spirituality*

Purpose

Although factors and programs influencing health promotion have been studied in many populations and work environments, only pilot studies examined the assessment of health promoting behaviors (Guidry, & Wilson, 1999; Haughey, Kuhn, Dittmar, & Wu, 1992; McElligott, Siemers, Thomas, & Kohn, 2009) and the effectiveness of programs in hospital nurses (Richards, Oman, Hedberg, Thorensen, & Bowden, 2006; Sorrells-Jones, 1993). Using the theoretical framework of the Health Promotion Model (Pender, 1996), this project studied the effectiveness of an intervention, a holistic worksite program incorporating the use of self-care plans, on health-promoting behaviors in hospital registered nurses (RNs).

The aim of the study was to answer the following research question: What are the effects of attending a holistic program, the Collaborative Care Model

(CCM) Program, and developing a self-care plan on the health-promoting behaviors of RNs employed by a northeastern medical center?

Background

Holistic nursing focuses on health promotion, viewing the individual as a whole, body, mind, and spirit (Dossey & Keegan, 2009). Health promotion may be observed through identified behaviors such as health responsibility, physical activity, spiritual growth, proper nutrition, satisfying interpersonal relations, and stress management (Pender, Murdaugh, & Parsons, 2002). Nurses often use holistic approaches to

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counseling patients about health promotion, but studies reveal poor health-promoting behaviors in nurses themselves (AbuAlRub, 2004; Geiger-Brown et al., 2004; Guidry & Wilson, 1999; Hall, 2004; McElligott et al., 2009; Moll, 1987; Richards et al., 2006). Worksite wellness programs affect health promotion and result in improved health, productivity, satisfaction, and reduced health care costs (Goetzel et al., 2007; Grosch, Alterman, Peterson, & Murphy, 1998; Naumanen, 2006; Serxner, Gold, Anderson, & Williams, 2001) beneficial for both RNs and their employers (Musich, Schultz, Burton, & Edington, 2004).

Literature Review

Studies surrounding wellness and health promotion in nurses and nursing students have varied in population, size, design, and outcomes. Survey themes ranged from operating room nurses reporting poor health-promoting behaviors such as inadequate sleep, smoking, poor eating (Moll, 1987); the need to improve health practices in critical care nurses, (Haughey et al., 1992); unsatisfactory diet and exercise activity in African American nurses (Guidry & Wilson, 1999) to the need for nurses to focus on diet, exercise, and stress management (Jinks, Lawson, & Daniels, 2003). Nurses have described work-related stress as emotional and physical exhaustion. However, they were unable to identify effective coping methods (Hall, 2004). Nurses and nursing students reported poor stress management skills and lack of physical activity (Hui, 2002; McElligott et al., 2009).

Holistic programs resulted in positive outcomes in nursing students (Downey, 2007; Stark, Manning-Walsh, & Vliem, 2005), including significant improvements in health responsibility and physical activity (Stark et al., 2005) and a positive impact on personal and professional practices. The positive outcomes were sustained from 1 to 7 years (Downey, 2007).

Barriers to health promotion for nurses included excessive work demands, injustices or unfairness, unsafe work environments, fear of errors, and poor communication (Buerhaus, Donelan, Ulrich, & Desroches, 2007; Geiger-Brown et al., 2004; Hall, 2004; McElligott et al., 2009; Moll, 1987). Studies to address these barriers have included worksite programs (Richards et al., 2006) and the development of self-care plans (Stark et al., 2005).

Healthy workplaces are cultivated by improving work satisfaction; empowerment; positive relationships

and attitudes; health screenings; employee counseling; work environment improvements; management and peer support; and work schedules, including breaks and vacation time (Geiger-Brown et al., 2004; Laschinger, Almost, Purdy, & Kim, 2004; Nikou, 1998). Models for successful worksite programs should eliminate perceived barriers to health promotion, establish convenient times and location of interventions; provide opportunities for employee self-assessment; social support; and use a holistic approach (American Holistic Nurses Association [AHNA], 2007; Grosch et al., 1998; Kruger, Yore, Bauer, & Kohl, 2007; McElligott et al., 2009; Pender, Murdaugh, & Parsons, 2006).

The Health Promotion Model (Pender, 1996) has been studied extensively since the development of the initial Health Promoting Lifestyle Profile Tool (HPLP; Walker, Sechrist, Richert, & Pender, 1987). Studies revealed the variables of perceived competence, health status, control of health, and definition of health to be predictors of health promotion in the workplace. Study outcomes involving the HPLP II (Walker, Sechrist, & Pender, 1995) varied from the identification of factors that influenced the overall health promotion score to identification of the relationship of subscale scores to the overall score.

Significance to Nursing

The U.S. Department of Health and Human Services (2009) has monitored national health objectives since 1979. Through the Healthy People 2010 program, objectives of increased quality and years of healthy life were pursued. For the next decade, Healthy People 2020 provides a framework to address risk factors and determinants of health (U.S. Department of Health and Human Services, 2009). Aligning with national goals, the nursing profession and nursing organizations identified an interest in health promotion and self-care for nurses as well as the need for nurses to model healthy behaviors (American Association of the Colleges of Nursing [AACN], 2007; AHNA, 2007; American Nurses Association's Health Care Agenda, 2005).

In the workplace, poor health-promoting behaviors in nurses were linked to stress, illness, increased health care costs, obesity, turnover, errors, and poor-quality care (AbuAlRub, 2004; Institute of Medicine, 2004). Worksite wellness programs have been shown to positively impact health promotion and result in improved health, productivity, and satisfaction and

Table 1. Theoretical Definitions

Concept	Description
Health promotion	Behavior motivated by the desire to increase well-being and actualize human health potential (Pender et al., 2006, p. 7)
Health-promoting behaviors	Endpoint in the Health Promotion Model identified as: nutrition, health responsibility, physical activity, spiritual growth, stress management, and interpersonal relations (Pender et al., 2002)
Collaborative Care Model (CCM) program	Eight-hour program created to promote a culture of caring, focusing on relationships and patient-centered care, fostering and sustaining a healing environment and a culture of safety. The program components were adapted from the <i>Holistic Nursing Handbook</i> and best practice models (Dossey & Keegan, 2009). The didactic content included interactive lectures on the CCM program, AHNA values, formation of the collaborative care council, and a code of professionalism. The experiential content included completion of the HPLP II tool, option for study participation, and experiences with imagery, appreciative inquiry, and a sharing circle
Self-care plan	A written statement describing selected goals to increase health and the activities that are needed to reach the goals (Pender et al., 2002)

Note: AHNA = American Holistic Nurses Association; HPLP II = Health Promoting Lifestyle Profiles II.

reduced health care costs (Goetzel et al., 2007; Grosch et al., 1998; Naumanen, 2006; O'Quinn, 1995). Therefore, studying the effect of a holistic program was important for three reasons:

1. Supporting the goals of Healthy People 2010/2020.
2. Providing an evidenced based intervention for nurses to address their poor health-promoting behaviors and assume responsibility for self-care and health promotion.
3. Reducing the cost of turnover (currently ranging from 8.4% to 27.0%), disability, employer health care costs, and improving the quality of care (AACN, 2007; American Nurses Association's Health Care Agenda, 2005; Goetzel et al., 2007; Institute of Medicine, 2004).

Results of the study will add to the nursing literature and be used to support or modify the CCM in 14 institutions in a hospital system, affecting more than 10,500 nurses, and 37,000 employees in a service area of 5.2 million people (North Shore Long Island Jewish Health System, 2010).

Theoretical Framework

The conceptual framework for the study was the Health Promotion Model, which integrated perspectives from nursing and behavioral sciences into factors

that may influence health behaviors (Pender, 1996). Health promotion, the key concept in the Health Promotion Model is described as "behavior motivated by the desire to increase well-being and actualize human health potential" (Pender et al., 2006, p. 7). The model guides data collection, data processing, appropriate nursing activities and possible client outcomes, enabling nurses in direct care to improve health (Peterson & Bredow, 2004). The HPLP II tool, often used to study the model, identified behavioral outcomes as an overall score and subscale scores in the areas of nutrition, stress management, spiritual growth, health responsibility, physical activity, and interpersonal relations (Walker et al., 1995). Health may be improved as specific characteristics are identified for assessment, and interventions are suggested to alter perceptions and improve health-promoting behaviors (McCullough, 2004). The Health Promotion Model and the core values of holistic nursing as defined by the AHNA (2007) were key concepts in the development and evaluation of the effect of the CCM (Table 1).

Study Design

The study was a quasi-experimental, pretest, post-test, repeated measure, comparison-group design. The study was built on a pilot study conducted in the same institution where the need for interventions to support health promotion in RNs was identified (McElligot et al., 2009).

Setting

The setting was a 900-bed northeastern academic medical center, part of a 14-hospital system. The CCM program was offered in the same classroom with the same content and instructors for all RNs, who were the participants. The study was approved by the institutional review boards (IRBs) of both the northeastern university hospital and the affiliated university. A signed consent was waived by the IRBs as completion of the forms implied consent.

Instruments

The effect of the CCM was measured by the HPLP II instrument (Walker & Hill-Polrecky, 1996). The HPLP II is a 52-item Likert-type scale with six subscales. Each question is answered on a scale of 1 (*never*) to 4 (*routinely*), yielding an overall score and a score for each of the six dimensions or subscales of health-promoting behaviors. The subscales of the instrument were the variables for the study and included nutrition, stress management, spiritual growth, health responsibility, physical activity, and interpersonal relations. In examining six health-promoting behaviors, the tool offered a holistic measurement, focusing on the body, mind, and spirit of the individual, as well as the relationships with others and the environment (Pender et al., 2006). A high score indicated good health-promotion behaviors and a low score indicated poor behaviors. All scores were reported in mean value at the recommendation of the instrument's author (Walker & Hill-Polrecky, 1996).

Participants in the experimental group completed a one-page self-care plan at the end of the class. The Goal and Action Worksheet was chosen as the self-care plan as it was previously used to improve health and describe self-change commitments (Kreitzer, 2008). The worksheet requested identification and listing of personal strengths, one goal (area to improve), challenges, affirmations, action steps, and support system.

Psychometrics

The internal consistency reliability of the HPLP II measured using Cronbach's alpha was calculated at .93 for the 52 questions on the instrument (HPLP II). In the means of the six subscales, the alpha ranged from .87 (Spirituality) to .66 (Nutrition). This was consistent with the literature (Stark et al., 2005; Stuifbergen, Becker, Blozis, Timmerman, & Kullberg,

2003), which supported the validity and reliability of the tool (Stuifbergen et al., 2003; Walker & Hill-Polrecky, 1996). Approvals for use of the HPLP II and Goal and Action Worksheet were obtained from the authors.

Method

Sample

A convenience sample of RNs from the institution was divided into experimental and control groups. Experimental participants were RNs who worked on units scheduled to attend the CCM program. Control participants were registered nurses from different units in the same institution who received no intervention. Inclusion criteria were registered nurse, currently working full time or part time on selected units, and agreement to participate in the study. Exclusion criteria were per diem and/or licensed practical nurse status. The sample size was determined by Cohen's power analysis. Based on two groups using analysis of variance (ANOVA)-repeated measures within-between interactions, with a power of .80, an effect size of .2, and level of significance of .05, the appropriate sample size for each group was 50 with a total of 100 participants (Erdfelder, Faul, & Buchner, 1996).

Pretest Experimental Group

The 208 registered nurses who attended the CCM classes received surveys and were offered the opportunity to participate in the study. They formed the experimental group. The HPLP II and a demographic form were distributed, completed, and returned to the investigator prior to the beginning of the class. The cover sheet was coded without names or identifiable data. Objectives for the program were defined as participants being able to

- define the CCM as the professional practice model of the institution,
- relate the CCM to the five core values of the AHNA,
- participate in the self-assessment of personal health-promotion behaviors through tools and discussion,
- demonstrate the use of appreciative inquiry as a method of change, and
- identify one self-care health-promotion goal and one group health-promotion goal.

Participants received their HPLP II scores prior to the completion of the self-care plan. It was suggested that self-care goals be based on the information provided by the returned HPLP II scores or other insights into personal wellness needs. Whereas 185 surveys were returned by the experimental group, only 73 care plans were complete and included in the study.

Pretest Control Group

RNs from four units comprised the control group and those participants received 200 survey packets over a 1-week period. The information, coding, and announcement letter were the same for both groups. The control group had not participated in the CCM program and did not complete a self-care plan. The control group returned 85 completed surveys over a 1-month period.

Data Management

For the experimental group, scored sheets were returned prior to the start of class, while copies of the self care plans were collected at the end of the class. The study packets for the control group were collected weekly over 1 month. Sheets were scored and returned to the individuals in a sealed envelope according to the assigned code.

Follow-Up (Posttest) Data Collection

The procedure for the follow-up was identical for both the experimental and control groups. Three months after the pretest, the investigator read a letter of invitation for follow-up at a staff meeting and then posted the letter in the unit lounge, leaving study packets for 408 possible participants to complete. The investigator collected the packets three times a week for 2 months for both groups. The total number of returned matched surveys from the experimental group was 52. The control group returned a total number of 51 matched surveys. Therefore, the study included 103 participants.

Data Analysis

SPSS version 15 was used for data analysis. After the measures of central tendency were determined from the demographic data, analysis of variance was used to determine differences, if any, between the

experimental and the control group. Analysis then progressed to the HPLP II scores for multivariate analysis using repeated measures ANOVA. The reliability of the HPLP II was supported by the calculation of alpha coefficients for both the experimental and control groups.

Results

Demographics

The participants included a convenience sample of mainly female nurses (95%). Their ages ranged from 23 to 64 years with a mean age of 39 years. The predominant race was Caucasian (64%) with a smaller number of Asian (18%), African American/Black (11%), and Hispanic (3%) nurses. Educational preparation ranged from master's (7%) and BSN (58%) to 34% of the sample reporting either an associate or diploma degree. While 99% of the sample was RNs and 1% nurse practitioners, positions ranged from staff nurse (86%), advanced practice nurse (3%), management (10%), and other positions (1%). The majority of nurses (92%) worked 12-hour shifts with 52% working days, and 40% working nights. In all, 8% of the nurses worked an 8-hour shift in the evening. The majority of the nurses were married (65%), and 67% of nurses reported having dependents. Twelve percent of the nurses in the sample were in their current position for less than 1 year, 36% from 1 to 5 years, 43% from 6 to 20 years, and 10% for more than 21 years in their current position. Few nurses in the sample group (4.9%) reported a recent illness in the past 5 months, or received holistic training (10%) prior to the class.

Previous literature identified confounding demographic variables for health promotion. Demographic characteristics were not significantly correlated to HPLP II results in this study. There was a significant difference (.001) between the group ages, based on a *t* test of the experimental group (mean = 36, *SD* = 7.7) and control group (mean = 43, *SD* = 12) at baseline. Using the Pearson correlation coefficient, there was no significance ($p < .05$) between the variable of age and HPLP II scores at pretest (.248) or posttest (.345). The tests of between-subjects effects examined the groups at baseline. There was no significant difference (.773) between HPLP II scores of the experimental and the control group at baseline where $F = 0.083$, with one degree of freedom.

Table 2. Health Promoting Lifestyle Profiles II Scores

Scale	n	Mean (SD)			Roy's Largest Root		Tests of Between-Subjects Effects
		Pretest	Posttest	Groups	Difference Over Time	Difference Between Group/Time	
Overall HPLP II score							
Experimental	52	2.62 (0.38)	2.81 (0.36)	2.72 (0.05)	<i>F = 15.4,</i>	<i>F = 5.55,</i>	<i>F = 0.08,</i>
Control	51	2.67 (0.44)	2.72 (0.43)	2.70 (0.05)	<i>p = .000,</i>	<i>p = .02,</i>	<i>p = .77,</i>
Total (within-time mean)	103	2.65 (0.41)	2.77 (0.40)		<i>df = 1</i>	<i>df = 1</i>	<i>df = 1</i>
Health responsibility							
Experimental	52	2.50 (0.53)	2.63 (0.47)	2.57 (0.07)	<i>F = 5.2,</i>	<i>F = 1.76,</i>	<i>F = 0.02,</i>
Control	51	2.53 (0.59)	2.57 (0.56)	2.55 (0.07)	<i>p = .022,</i>	<i>p = .187,</i>	<i>p = .88,</i>
Total mean	103	2.52 (0.55)	2.60 (0.51)		<i>df = 1</i>	<i>df = 1</i>	<i>df = 1</i>
Physical activity							
Experimental	52	2.21 (0.72)	2.33 (0.64)	2.27 (0.09)	<i>F = 4.73,</i>	<i>F = 0.37,</i>	<i>F = 0.17,</i>
Control	51	2.18 (0.67)	2.25 (0.76)	2.21 (0.09)	<i>p = .032,</i>	<i>p = .541,</i>	<i>p = .67,</i>
Total	103	2.19 (0.69)	2.29 (0.70)		<i>df = 1</i>	<i>df = 1</i>	<i>df = 1</i>
Nutrition							
Experimental	52	2.59 (0.39)	2.78 (0.42)	2.68 (0.05)	<i>F = 10.97,</i>	<i>F = 4.06,</i>	<i>F = 0.82,</i>
Control	51	2.72 (0.48)	2.76 (0.48)	2.74 (0.05)	<i>p = .000,</i>	<i>p = .04</i>	<i>p = .37,</i>
Total	103	2.65 (0.44)	2.77 (0.45)		<i>df = 1</i>	<i>df = 1</i>	<i>df = 1</i>
Spiritual growth							
Experimental	52	2.95 (0.54)	3.19 (0.51)	3.07 (0.06)	<i>F = 9.75,</i>	<i>F = 4.16,</i>	<i>F = 0.04,</i>
Control	51	3.02 (0.57)	3.07 (0.55)	3.04 (0.07)	<i>p = .002,</i>	<i>p = .044,</i>	<i>p = .82,</i>
Total	103	2.98 (0.56)	3.13 (0.53)		<i>df = 1</i>	<i>df = 1</i>	<i>df = 1</i>
Interpersonal relations							
Experimental	52	3.05 (0.55)	3.22 (0.43)	3.13 (0.06)	<i>F = 2.86,</i>	<i>F = 4.11,</i>	<i>F = 0.12,</i>
Control	51	3.17 (0.50)	3.16 (0.51)	3.16 (0.06)	<i>p = .094,</i>	<i>p = .045,</i>	<i>p = .72,</i>
Total	103	3.11 (0.53)	3.19 (0.47)		<i>df = 1</i>	<i>df = 1</i>	<i>df = 1</i>
Stress management							
Experimental	52	2.12 (0.44)	2.34 (0.44)	2.23 (0.06)	<i>F = 17.3,</i>	<i>F = 3.18,</i>	<i>F = 2.04,</i>
Control	51	2.06 (0.50)	2.15 (0.51)	2.11 (0.06)	<i>p = .000,</i>	<i>p = .077,</i>	<i>p = .15,</i>
Total	103	2.09 (0.47)	2.24 (0.47)		<i>df = 1</i>	<i>df = 1</i>	<i>df = 1</i>

Note: Experimental group $n = 52$; control group $n = 51$. p values given in italics indicate significance ($p \leq .05$).

HPLP II Data

There was a significant difference at the $p \leq .05$ level (.02) between the overall pretest (2.62) and posttest (2.81) mean scores of the HPLP II in the experimental group when compared with the pretest (2.67) and posttest (2.72) mean scores of the HPLP II in the control group over time (Table 2). The observed power was .97. The F value was 5.55 with one degree of freedom.

The outcome variables of the HPLP II are described by an overall score and a score for each of the six subscales of health responsibility, physical activity, nutrition, spiritual growth, interpersonal relationships, and stress management. Both groups increased their overall scores from a mean of 2.65

pretest to a mean of 2.77 posttest. As noted below, the mean subscale scores increased for all experimental group participants. The scores for the control group increased in all areas except interpersonal relationships, where there was a slight decrease from 3.17 to 3.16. In comparing the subscale differences between groups over time, mean subscale scores from pretest to posttest, a significant increase in the experimental group scores were noted in the areas of interpersonal relations, spiritual growth, and nutrition (Table 2).

Limitations

The study was conducted in a hospital setting, necessitating a convenience sample, limiting the

generalizability of findings. Data were self-reported. The return rate was a limitation as the initial return rate was 39.5% for the experimental group and 42.5% for the control group; the final return rate was 28% for the experimental group and 26% for the control group. The recruitment process was complex and dependent on the institution's plans for class attendance. Only short-term sustainability was measured 3 months after the intervention. Long-term results remain unknown.

Discussion

Participants who attended the CCCM program and developed a self-care plan (experimental group) reported significantly ($p = .02$) increased overall health-promoting lifestyle behavior scores as measured by the HPLP II. In addition, increases were significant in the experimental group's subscale scores of spiritual growth ($p = .04$), interpersonal relationships ($p = .04$), and nutrition ($p = .04$) compared with the control group over time. These findings were consistent with the findings of a program designed for nursing students (Stark et al., 2005), where overall HPLP II scores increased after completion of a wellness program and development of a self-care plan. The Stark et al. (2005) study also reported a significant increase in health responsibility and physical activity scores, where the current study noted a significant increase in interpersonal relations, spiritual growth, and nutrition over time in the experimental group. Pender, Walker, Sechrist, and Frank-Stromborg, (1990) examined enrollment in a 3-month workplace health-promotion program and reported a significant increase in health responsibility and stress management as opposed to spiritual growth and interpersonal relations. Unlike the study on nursing students, age was not significantly related to the HPLP II scores in the present study. Stress management, physical activity, and health responsibility were the lowest scores of the nurses, consistent with prior findings (McElligott et al., 2009). They were also similar to the findings of Jinks et al. (2003) where the need to focus on stress, diet, and exercise was identified. Each of the subscale scores for the experimental group increased, accruing evidence for the holistic model. Core concepts of the CCM focused on health promotion in each of the subscale areas and described the interrelation and balance essential to health.

Implications

The significant results of increasing health-promoting behaviors support the application of the Health Promotion Model in the design and evaluation of the CCM. These results have implications for nursing practice, education, and research. Nursing constantly seeks evidence-based practice and these results offer evidence to support the program. The significant scores of the younger nurses may assist with recruitment and changing the culture of the institution, decreasing turnover and increasing collaboration. Holistic nursing recognizes the complexity of wellness and the challenges of acute care nursing. Supporting staff in identifying the core values of holistic nursing and aligning them with the goals of the institution facilitates the incorporation of holistic nursing in the acute care setting. These findings support the use of self-care plans and the CCM as a health promotion model for nursing, and may suggest the use of this model for other disciplines, patients, and communities.

Implications for education include incorporating the principles of holistic self-care in undergraduate nursing curriculum, providing nurses with the necessary skills for health promotion as they enter the workforce. Key to this success is the development of curriculum and instructors in the areas of holistic nursing and health promotion.

Implications for research include generating evidence to support the use of specific, measurable, holistic interventions, which have a positive impact on RNs' self-care behaviors. Future research can examine the impact of holistic programs and interventions to improve health care institutions' financial performance, retention, nursing quality indicators and patient experiences. Future studies should evaluate the long-term effects of the program in larger populations.

Conclusion

Although nursing is inherently holistic and often focuses on health promotion for patients, there is little evidence supporting interventions that enhance the health-promoting behaviors of nurses. This study examined the effect of a holistic program, the Collaborative Care Model Program, and the development of a self-care plan on the health-promoting lifestyle behaviors (as measured by the HPLP II) of RNs. There was a significant increase in the overall pretest to posttest HPLP II scores of the experimental

group as compared with the control group over 3 months. In addition, there were significant increases over time in the interventional group in spirituality, nutrition, and interpersonal relations.

Results lay the foundation for program expansion and further studies. Through assessment, education and focus on health promotion, institutions may assist nurses in identifying self-care needs and supporting health-promotion behaviors. Outcomes from studies on health promotion provide knowledge for national and international organizations. Holistic nursing programs, grounded in nursing theory, may provide support for the future health of the nursing profession.

Although Florence Nightingale identified the importance of supporting self-care and health promotion (Dossey & Keegan, 2009), the actual practice is new to acute care nurses. This study provides evidence of the effectiveness of the CCM and self-care plan in improvement of self-care health behaviors in RNs. As the objectives of Healthy People 2010 fold into the objectives of Healthy People 2020, health promotion is on the forefront with citizens shaping the efforts. As nurses model self-care and "walk the talk" of health promotion, they not only improve their own health, but they model healthy behaviors for others. Can nurses now model health promotion for the nation and lead the Healthy People 2020 initiative?

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