HEALTH PROMOTING BEHAVIORS AMONG RN-BSN STUDENTS AT TWO PUBLIC UNIVERSITIES

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Healthcare reform refocuses attention on population level health promotion.

Majority of HP research on patients/clients:
- Women with Fibromyalgia; Patients with MS
  - Beal, Stuifbergen, & Brown (2009)
  - Bombardier et al. (2008)
- Post-Partum Depression
  - Chen, Kuo, Chou, & Chuan (2007)
- Turkish Workers
  - Beser, Bahar, & Buyukkaya (2007)
- Hong Kong Secondary School Teachers
  - Leung (2009)
- Female Academics
  - Oran, Can, Senuzun, & Aylaz (2008)
Almost 62% of 5,000 nurses in UK, Australia, & NZ study exceeded healthy range for weight
  - Bogossian et al., 2012

Nursing-- top 10 professions for alcohol abuse
  - Servodidio, 2011

Overweight Nurses less likely to discuss weight with patients; Same for smoking
  - Patients have more confidence in normal-weight nurses teaching them about diet/exercise
  - Hicks et al., 2008; Radsma, & Bottorff, 2009
Increasing pressure for RNs to complete baccalaureate degree in nursing

- More students entering RN-BSN programs
  - 55% had BSN in 2014 (HRSA)
  - 80% need BSN by 2020 (IOM)

- Majority of these RN-BSN students are “nontraditional”
  - Older, working, married/families
    - Bryer et al., 2013; Robertson et al., 2010
Health promotion is associated with maintaining enrollment in nursing school

(Al-Kandari, & Vidal, 2007).

Educational interventions with nursing students show promise in improving HP

(Belguzar, 2015).
Health-Promoting Lifestyle Profile II (HPLP II) examines health promoting behaviors

- Internal consistency (Cronbach’s alpha) for the 52-item HPLP II reported at .943
  - (Walker, Sechrist, & Pender, 1987).

- Responses to questions formatted on a 4-point Likert scale (never, sometimes, often, routinely).
  - It takes approximately 15-20 minutes to complete.

- Based on Nola Pender’s mid-range theory of health promotion (Pender, 1996; Sakraida, 2010).
Health promotion is different from simply prevention of disease
- It is a proactive, goal-directed behavior that improves health & wellbeing

Constructs include:
- Value others place on the outcome
- If the person feels a sense of self-efficacy
Decision-making phase & the action phase are part of the conceptual framework.

- Includes individual perceptions, & modifying factors---
  - Barriers & cues that can trigger the motivation to act.

(Duffy, 1988; Sakraida, 2010).
Health promoting actions can be influenced by:

a) Perceived Barriers that can hinder commitment
b) Environmental Influences (peers, situations) that can either increase or decrease commitment
c) Competing and Uncontrollable Demands that may lead to loss of attention to commitment

(McCullagh, 2004; Sakraida, 2010).
HPLP II used in numerous research studies with a variety of populations

- Health promotion research with working nurses is relatively less common than with patients

A study of acute care nurses’ health-promoting behaviors

- Differences between nurses working on medical-surgical units & critical care HPLP II scores (McElligott, Siemers, Thomas, & Kohn, 2009).

More recent study found no significant differences between PHNs & Critical Care nurses (Rector, Gilchrist, Camarena, & Cauthen, 2014).
Nursing students have been participants in a number of studies on health promotion.
- Usually ADN or BSN

Comparative study of U.S. & Kuwaiti college students had results on health promotion similar to an earlier study of U.S. nursing students (Jackson, Tucker, & Herman, 2007; Al-Kandari, & Vidal, 2007; Stark, Manning-Walsh, & Vliem, 2005).
Canadian & Jordanian nursing students’ health-promoting behaviors were compared. Jordanian students scored lower on total HPLP II & all subscales except Interpersonal Relations. Cultural differences in the definition of health as “absence of disease,” thought to contribute to differences in scores. (Haddad, Kane, Rajacich, Cameron, & Al-Ma’aitah, 2004, p. 88).
Correlational study of Kuwaiti nursing students:

- Significant relationship between higher BMI and the total HPLP II scores & Nutrition subscale scores (Al-Kandari, Vidal, & Thomas, 2008).
Bryer, Cherkis, & Raman (2013) compared health-promoting behaviors of traditional vs. nontraditional U.S. ADN students.

- Nontraditional----older, ethnically diverse, previous education, employed, had families.

- Significant differences on total HPLP II scores & all subscales except Nutrition.
Barriers to Health Promoting Activities (BHPA) statistically overall higher scores

- Differences on lack of help, time, transportation, and support from family and friends.

Important information, as more nontraditional students are entering nursing education

- Especially common at the ADN & RN-BSN levels
British longitudinal study found a good number of nursing students are overweight & 40% never engage in physical activity (Wills - reported in Gillen, 2014).

- Early evidence indicates health of individual nurses can affect their ability to promote health among their patients & ultimately provide better nursing care

- Obese nurses & nurses who smoke may be more reluctant to broach these subjects with their patients

- A wellness website utilized for nursing students to track their progress with weight & exercise.

- Researchers advocate for health promotion at universities in order to achieve better health behaviors among students (Dooris, Wills, & Newton, 2014).
3-year study of 108 female Turkish nursing students found:

- Educational intervention to promote health behaviors was effective at conclusion of study

- HPLP II was administered yearly:
  - Significant positive differences noted on the total score and subscales of exercise, nutrition, stress management, health responsibility and self-actualization (Belguzar, 2015).
Design of Our Study

- Descriptive, cross-sectional quantitative research methodology.
- Non-randomized, convenience samples from two public universities’ RN-BSN programs.
- Permission was received from both university IRBs to conduct this study.
Students in first portion of online programs at both universities invited to participate through an email invitation from their respective faculty member.

- A link to SurveyMonkey © was provided
  - They could choose to participate or not

- Reminder emails were sent after several weeks.
Consent form was the first screen available to participants

- They could print it for their records
- Because they had to click on a button to begin the survey, participation was deemed as consent.

Anonymity was ensured, & participation was voluntary.
Minimal demographic data was requested:
- Age, Ethnicity, Gender, Family/Marital status
- Highest level of education, Years in nursing, Shifts worked, Average hours/day worked

How often do you leave unit for meals?
- Smoking & Alcohol consumption

Height & Weight
- Do you consider yourself:
  - Underweight, Normal Weight, Overweight, Obese, Morbidly Obese
40 RN-BSNs completed majority of questions

Mean age 33.26  \( (n=33; \text{sd}=7.25; \text{range}=24 \text{ to } 49) \)

Majority of respondents were \( (n=40) \):
- Hispanic/Latino (55%)
- Asian (20%)
- Black (5%)
- White (12.5%)

Over 92% Female

51.28% were married with dependents
- Over 25% were single with no dependents
Demographics 2

- All had Associate Degree in Nursing (ADN)
- 15.38% Bachelor’s Degree in another area
- 5.13% Master’s Degree in another area
- Mean 3.18 years working as an RN
  - (n=39; sd=13.31; range= <1 to 16 years)
- Majority worked 12-hour shifts (70%)
  - 47.5% worked during the day
Results 1

- How often do you leave the unit for meals?:
  - 32.5% reported *Never*
  - 35% reported *Sometimes*

- Only two smoked cigarettes
  - (n=40: 1=10/month; 1=30/month)

- Most characterized themselves as:
  - Overweight (47.5%)
  - Normal Weight (32.5%)

- Mean Height 64.34 inches
  - (s.d=2.69; range=60 to 71)

- Mean Weight 160.51 lbs.
  - (s.d=40.08; range=105 to 280)
Results 2

- HPLP II Cronbach’s alpha = .916
  - (n=33 surveys/no missing responses)
- Total HPLP II mean = 2.525 (sd= .35)

- Subscale means were:
  - Health Responsibility 2.52 (sd= .46)
  - Physical Activity 2.07 (sd=.57)
  - Nutrition 2.57 (sd=.42)
  - Spiritual Growth 3.08 (sd=.42)
  - Interpersonal Relationships 2.89 (sd=.44)
  - Stress Management 2.19 (sd=.39)
Total HPLP II Results

- **Total Mean = 2.525**
  - (n=33 out of 40 with no missing data)

- **Comparative Means:**
  - University 1 = 2.52  (n=29 out of 31)
  - University 2 = 2.54  (n=9 out of 9)
Health Responsibility

- QUESTION EXAMPLES
  - Seek guidance or counseling when necessary
  - Read/watch TV program about improving health
  - Get 2^{nd} opinion when I question advice

- Total Mean = 2.57 (n= 38; s d .46)
- University 1 = 2.26 (n=29 out of 31)
- University 2 = 2.25 (n= 9 out of 9)
Physical Activity

- QUESTION EXAMPLES
  - Follow a planned exercise program
  - Do stretching exercises at least 3x/week
  - Check my pulse rate when exercising

- Total Mean = 2.067 (n=37 out of 41; sd = .57)
- University 1 = 2.10 (n=29 out of 31)
- University 2 = 1.95 (n=8 out of 9)
QUESTION EXAMPLES

- Limits use of sugars & sweets
- Eat breakfast
- Eat 2-4 servings of fruit each day

Total Mean = 2.57 (n=37 out of 41; sd = .46)

University 1 = 2.59 (n=28 out of 31)
University 2 = 2.48 (n=9 out of 9)
**Spiritual Growth**

- **QUESTION EXAMPLES**
  - Believe that my life has purpose
  - Feel content and at peace with myself
  - I feel that I am growing/changing in positive ways

- **Total Mean = 3.08 (n=38 out of 41; sd = .42)**

- **University 1 = 2.72 (n=30 out of 31)**
- **University 2 = 2.79 (n=8 out of 9)**
Interpersonal Relationships

- QUESTION EXAMPLES
  - Spend time with close friends
  - Find ways to meet my needs for intimacy
  - Maintain meaningful/fulfilling relationships

- Total Mean = 2.89 (n=38 out of 41; sd = .44)

- University 1 = 2.57 (n=20 out of 31)
- University 2 = 2.63 (n= 9 out of 9)
Stress Management

- QUESTION EXAMPLES
  - Get enough sleep
  - Balance time between work & play
  - Take some time for relaxation each day

- Total Mean = 2.19 (n=36 out of 41; sd = .39)
- University 1 = 2.16 (n=28 out of 31)
- University 2 = 2.33 (n=8 out of 9)
No prior research on RN-BSN student health promotion found.

**In this study:**
- RN-BSNs not practicing health promotion behaviors that they teach clients
- Not leaving their units for meals
  - May affect nutritional status
  - Possibly affects cognitive ability & RN functioning
- Stress Management & Physical Activity subscales low (*sometimes*)
Comparing the total mean score to other research with nursing students:

- Result is only slightly higher than the 2.47 mean among nontraditional ADN students
- Mean is lower than traditional students mean of 2.74 in Byer et al. (2013) study
- Lower mean than for junior level college nursing students in the Midwest
- HPLP II total mean score of 2.84 reported vs. 2.525 in this study
  - (Stark, Manning-Walsh, & Vliem, 2005)
Kuwaiti study of 2nd semester college nursing students reported HPLP II means between 2.5 (17-20 age group) & 3.0 (31-35 age group), with means increasing for each successive age group.

Al-Kandari, Vidal, and Thomas (2008)

Other studies of working nurses higher:

- Hensel (2011) reported mean of 2.80 in a study of hospital nurses.
- McElligott et al. (2009) study of acute care nurses had 2.6 mean.
Majority of RN-BSN students are employed RNs returning to college
  Stressors from both work and school
Often have family responsibilities & juggle multiple roles; financial concerns
Poor Health Promotion of RNs:
  Impact on HC System
    (illness/absences)
  Impact on Patient Safety
  Impact on Health Promotion
    Wills, & Kelly, n.d.
Discussion & Implications 5

- Understanding their health-promoting behaviors & providing interventions to promote healthy behaviors
  - May foster educational goals & improve their nursing practice
- More research is needed on methods that inspire RN-BSNs to be more health conscious & better role models for their patients.
201 undergraduate health professions students (Nursing, Occupational Therapy, & Speech-Language)

Pre- & Post-Test; Health Promotion Intervention
- Nursing & OT Treatment; Speech-Lang Comparison

Significant increases in Health Responsibility
- Treatment Group by end of semester

Decrease in HPLP II, Physical Activity & Nutrition
- Comparison Group pre- & post-test

Suggestions

- Health Risk Assessments
- Health Promotion Education & Ongoing Assessments
- Organization/Agency Efforts
  - Diet, Exercise, Stress Management, Relaxation
  - Unhealthy environments
- Nursing Education
  - Incorporate Health Promotion into Curriculum
  - Role Modeling; Health Education
  - Encourage Self-Care (Code for Nurses)


References


References 3


References 4


