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Assessment of the Level of Health Promotion Among Undergraduate Nursing Students at Rhode Island College

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Abstract

**Purpose.** The American Nurses Association called for 2017 to be the Year of the Healthy Nurse. The purpose of this mixed-methods pilot study was to conduct a preliminary assessment of the level of health promotion among undergraduate students at Rhode Island College. Results are analyzed and significance and possible solutions discussed. Avenues for future research/reassessment are proposed.

**Background.** Literature review was conducted using the CINAHL, Google Scholar, PubMed, PsycARTICLES, and SAGE Journals Online databases. Search terms included: health of nurses, health of nursing students, health promotion among nurses, health promotion among nursing students, what is wellness, concept of wellness, wellness model, health and wellness, wellness definitions, stress and health, stress and health effects, stress and wellness, stress and occupational health, stress and work performance. Articles of research studies from the previous ten years (2008-2018), limited to those conducted and published in the United States of America, Canada, and England, Ireland, and Scotland were included. Exceptions to the criteria were made for some articles based on their pertinence, use in other sources, and transferability. Subsequently, twenty-five articles were identified and incorporated.

Research shows a clear link between stress and health (Slavich, 2016). Health is a multifactorial dynamic state encompassing one’s social, emotional, physical, intellectual, spiritual, psychological, occupational, and environmental dimensions (Roscoe, 2009). Furthermore, one’s occupation often entails unique stressors and pressures to succeed that can exert their influence on one’s health (Molnar et al., 2012; Salvagioni et al., 2017). Nurses face many stressors and the effects of continued stress on physical health and risk for compassion fatigue and burnout have been documented (Nolte, Downing, Temane, & Hastings-Tolsma, 2017).

The American Nurses Association called for 2017 to be the Year of the Healthy Nurse. Research has shown the health of nurses to be poor. ANA Health Risk Appraisal revealed that on “nearly every indicator, the health of America’s nurses is worse than that of the average American” (American Nurses Association Enterprise, 2017). Survey participants had an average BMI of 27.6 (overweight), only 16% consumed the recommended daily amount of fruits and vegetables, 12% admitted to “nodding off” while driving during the past month, and less than half reported performing the recommended quantity and time of body-conditioning exercises (ANA, 2017).

Literature on the level of health promotion among nursing students in the United States of America is lacking. Studies show that time constraints, coursework, stress, and desire to succeed in school interfere with nursing pursuit of health (Chow & Grant Kalischuk, 2008; Van Leuven, 2006). Although some research in Canada, South America, Europe, and Asia, has been conducted regarding the state of health promotion among nursing students, the dietary, cultural, socio-political, and geographical differences between these groups pose difficulties in transferability of findings to American nursing students (Taylor, Lillis, & Lynn, 2015). Moreover, even within the US, regional differences present similar difficulties.

**Method.** All methods and materials were approved by the Rhode Island College Institutional Review Board. This study used a convenience sample of nursing students recruited via poster, email, social media, and in-person announcements. An optional $50 VISA gift card raffle was used as an incentive. Informed consent was obtained. Cross-sectional data was obtained via a survey on SurveyMonkey. Participants were presented with demographic items and were asked about their average hours of sleep...
per night and hours of exercise per week. Health promotion was assessed using the Health Promoting Lifestyle Profile II (Cronbach alpha of 0.94) developed by Pender, Noble Walker. This tool is a 52-item questionnaire which measures the level of the Health-Promoting Lifestyle and has six subscales: health responsibility, physical activity, nutrition, spiritual growth, interpersonal relations, and stress management (alpha coefficients for the subscales range from 0.79 to 0.87) (Chouhan, 2016). Participants were also asked to open two response items for qualitative analysis: (1) How do you define health? (2) Thinking of your life as a nursing student, what stressors/barriers, if any, do you face that impede your pursuit of health? Data was collected between 11/6/2017 and 12/11/2017. Nola Pender’s Health Promotion Model served as the theoretical framework for the project (Pender, 2011).

**Results.** One hundred sixty eight responses were collected between 11/6/2017 and 12/11/2017, 14.7% of the 1,145 students eligible for the survey. One hundred forty one responses were complete (completion rate 83.9%; 12.3% of the pool of eligible participants). Forty-nine identified as Intended Majors (not yet accepted into School of Nursing), 23 as sophomores, 24 as juniors, and 45 as seniors. Based on the 714 Intended Majors enrolled, the response rate from IM’s was 6.8%, 14% from the 172 sophomores, 18.5% from the 130 juniors, and 26.8% from the 168 seniors. The majority of respondents, n = 118, identified as females. Twenty males participated (14.18%), and 3 (2.13%) did not specify.

For the Health Promoting Lifestyle Profile-II, a 1=rarely, 2=sometimes, 3=often, 4=routinely. Health Promoting Lifestyle scores were 2.54 All Participants, 2.59 Intended Majors, 2.53 Sophomores, 2.47 Juniors, 2.52 Seniors, 2.53 Females, 2.56 Males. Health Responsibility: 2.26 All Participants, 2.37 IM, 2.22 Sophomores, 2.16 Juniors., 2.18 Seniors., 2.26 Females, 2.28 Males. Physical Activity: 2.20 All Participants, 2.28 IM, 2.38 Sophomores, 1.87 Juniors, 2.16 Seniors, 2.16 Females, 2.45 Males. Nutrition: 2.48 All Participants, 2.39 IM, 2.59 Sophomores, 2.55 Juniors, 2.48 Seniors, 2.47 Females, 2.52 Males. Spiritual Growth: 3.01 All Participants, 3.05 IM, 2.97 Sophomores, 3.04 Juniors, 2.96 Seniors, 2.99 Females, 3.04 Males. Interpersonal Relations: 2.99 All Participants, 3.02 IM, 2.81 Sophomores, 3.01 Juniors, 3.05 Seniors, 3.02 Females, 2.81 Males. Stress Management: 2.23 All Participants, 2.37 IM, 2.19 Sophomores, 2.08 Juniors, 2.11 Seniors, 2.22 Females, 2.24 Males.

Formatted as an open response question, participants were asked: *How do you define health?* Qualitative analysis of participants’ responses was conducted and the principle theme of health being constituted one’s physical, emotional, social, and spiritual wellbeing emerged. For perceived barriers to pursuing health in while in nursing school, the following two major themes were identified: *lack of time*, and *stress*. Additionally, a growing theme of *guilt* was detected. Often these themes overlapped within individual responses.

**Discussion.** Findings show that this sample of nursing students on the whole understand that health encompasses more domains than solely physical wellbeing, but includes areas such as spiritual, emotional, social, and mental health. Analysis of the two highest scoring subscales on HPLP-II (*Spiritual Growth and Interpersonal Relations*) as compared to the other subscales (*Health Responsibility, Physical Activity, Nutrition, and Stress Management*) indicates a disturbing reality. Students in the sample displayed higher scores in the areas that involved caring for others but their lowest scores were in the areas that dealt exclusively with care for their own person.

Pender’s theory postulates that engagement in health promotion behaviors is influenced by perceived barriers, competing demands, and more attractive activities (Pender, 2011). Participants indicated three perceived barriers to their pursuit of health: *stress, lack of time, and guilt*. Stress and lack of time were attributed to the rigors of coursework, exams, work, and family obligations. Pender states that competing demands that require immediate attention will likely take precedent regardless of one’s commitment to health promotion activities. Attempts by participants to care for self with activities such as going to the gym, taking time to cook healthy meals, and taking time for relaxation were complicated by feelings of guilt because it was not time spent in studying for nursing exams. An overall downward trend in health promotion scores is noted from the Intended Major group to the Junior group, with a slight increase in the Seniors. Pointedly, it can be interpreted that participants viewed academic excellence and self-
care/health promotion as rival pursuits. Considering the body of literature on the detrimental impact of unmediated stress and compassion fatigue on health and wellness, this is cause for concern.

**Conclusion.** Given the implications of the stressors nurses face on their health and the results of this pilot study, it behooves nursing schools to consider incorporating the cultivation of personal health promotion into the nursing curricula to increase students’ sense of competence in and value of health promoting activities. Incorporation of self-care into the nursing curriculum has shown to be successful. A study at Georgetown University was conducted. Researchers reported that students “were better able to use assessment instruments effectively with patient’s, and generally felt more comfortable discussing personal wellness issues of patients in the clinical arena” (Yearwood & Riley, 2010, p. 1361). Relationships between students and faculty were also enhanced (Yearwood & Riley, 2010).

Another study of incorporating self-care and health promotion into an established nursing course at Western Michigan University was also successful in increasing students’ health behaviors (Stark, Hoekstra, Hazel, & Barton, 2012). Overall, the students in the intervention group displayed significantly improved scores on the HPLP-II at the end of the semester (Stark et al., 2012). In contrast, students in the comparison group had lower scores than the intervention group and also scored lower on the nutrition and physical activity subscales at the end of the semester than they had at the beginning (Stark et al., 2012).

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**Title:**
Assessment of the Level of Health Promotion Among Undergraduate Nursing Students at Rhode Island College

**Keywords:**
Health Promotion, Nursing Education and Nursing Students

**References:**
References

American Heart Association (2017). American Heart Association recommendations for physical activity in adults. Retrieved from: [http://www.heart.org/HEARTORHG/HealthyLiving/PhysicalActivity/FitnessBasics/American-Heart-Association-Recommendations-for-Physical-Activity-inAdults_UCM_307976_Article.jsp#.Wq2ComX4T8c](http://www.heart.org/HEARTORHG/HealthyLiving/PhysicalActivity/FitnessBasics/American-Heart-Association-Recommendations-for-Physical-Activity-inAdults_UCM_307976_Article.jsp#.Wq2ComX4T8c)


**Abstract Summary:**
With the rising concern regarding the personal health and wellness of nurses, an assessment was conducted of the level of health promotion among undergraduate nursing students using a quantitative survey and qualitative open response items. Results are analyzed, significance emphasized, and impact on nursing education and practice explored.

**Content Outline:**
*Assessment of the Level of Health Promotion Among Undergraduate Nursing Students at Rhode Island College*

**Purpose**
- American Nurses Association 2017 Year of the Healthy Nurse
- Pilot study
  - Preliminary assessment of level of health promotion of nursing students at RIC
- Results hold significance for nursing education and future research

**Background**
- **Literature Review**
  - CINAHL, Google Scholar, PubMed, PsycARTICLES, SAGE Journals
  - Health of nurses, health of nursing students, health promotion among nurses, health promotion among nursing students, what is wellness, concept of wellness, wellness model, health and wellness, wellness definitions, stress and health, stress and health effects, stress and wellness, stress and occupational health, stress and work performance.
  - 25 Articles Identified
  - Health multifactorial dynamic construct:
    - Social, emotional, physical, intellectual, spiritual, psychological, occupational, and environmental dimensions (Roscoe, 2009).
  - Detrimental effects of stress on health (Slavich, 2016)
  - Occupational Stress and Health
    - One’s occupation has unique stressors that may negatively impact one’s health (Molnar et al., 2012; Salvagioni et al., 2017).
  - Occupational Stress of Nurses
    - Nurses face many stressors and the effects of continued stress on physical health and risk for compassion fatigue and burnout have been documented (Nolte, Downing, Temane, & Hastings-Tolsma, 2017).
  - Health of Nurses
    - Research shows American Nurse health to be poor
    - ANA Health Risk Appraisal revealed that on “nearly every indicator, the health of America’s nurses is worse than that of the average American” (American Nurses Association Enterprise, 2017).
    - Survey participants had an average BMI of 27.6 (overweight), only 16% consumed the recommended daily amount of fruits and vegetables, 12% admitted to “nodding off” while driving during the past month, and less than half reported performing the recommended quantity and time of body-conditioning exercises (ANA, 2017).
  - Health of Nursing Students
• Literature on the health of nursing students in America is lacking
• Studies show that time constraints, coursework, stress, and desire to succeed in school interfere with nursing pursuit of health (Chow & Grant Kalischuk, 2008; Van Leuven, 2006).
• Sociocultural, economic, and regional differences, etc., pose difficulties with transferability of findings of studies in other countries and areas of the United States.

Method
• Approved by RIC IRB
• Convenience Sample of undergraduate nursing students
• Mixed Methods
  ▪ 52 item Health Promoting Lifestyle Profile-II for quantitative analysis
    ▪ Six subscales: health responsibility, physical activity, nutrition, spiritual growth, interpersonal relations, and stress management (alpha coefficients for the subscales range from 0.79 to 0.87) (Chouhan, 2016).
  ▪ 2 open response items for qualitative analysis
    ▪ (1) How do you define health? (2) Thinking of your life as a nursing student, what stressors/barriers, if any, do you face that impede your pursuit of health?
• Nola Pender’s Health Promotion Model served as the theoretical framework for the project (Pender, 2011).
• Data was collected between 11/6/2017 and 12/11/2017

Results
• 168 responses; 14.7% response rate from 1,145 eligible students
• 141 complete responses were used for analysis (completion rate 83.9%; 12.3% of eligible pool)
• HPLP-II Scores
  ▪ Health Promoting Lifestyle
  ▪ Health Responsibility
  ▪ Physical Activity
  ▪ Nutrition
  ▪ Spiritual Growth
  ▪ Interpersonal Relations
  ▪ Stress Management
• Definition of Health
  ▪ Qualitative analysis of participants’ responses was conducted and the principle theme of health being constituted one’s physical, emotional, social, and spiritual wellbeing emerged.
• Perceived Barriers to Pursuit of Health
  ▪ For perceived barriers to pursuing health in while in nursing school, the following two major themes were identified: lack of time, and stress. Additionally, a growing theme of guilt was detected.

Discussion
• Adequate understanding of the construct of health
• Tendency towards showing care for others while neglecting self-care
  ▪ Spiritual Growth and Interpersonal Relations were the highest scoring subscales
• Participants regarded academic excellence and self-care/health promotion as rival pursuits
  o Felt guilty about taking time to go to the gym or cook healthy meals rather than use the time for studying.

Conclusion

• Nursing schools ought to consider infusing the curriculum with topics concerning personal care and health promotion to increase student competence and engagement.
• Studies at Georgetown University and Western Michigan University have demonstrated the positive effects of incorporating topics concerning personal health promotion into nursing curricula (Yearwood & Riley, 2010; Stark, Hoekstra, Hazel, & Barton, 2012).

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Professional Experience: I received my bachelor of science in Nursing degree in May 2018 from Rhode Island College. I also hold a bachelor of arts in Music from RIC. My NCLEX is scheduled for June 18, 2018. I graduated with Honors in Nursing for my honors project Assessment of the Level of Health Promotion Among Undergraduate Nursing Students at Rhode Island College. That project forms the basis of this presentation.

Author Summary: Luke is a native of Fall River, Massachusetts. He received his BSN summa cum laude in May 2018 from Rhode Island College. Luke also holds a bachelor of arts in Music from RIC. Today he will share the findings of his senior honors project he completed under the direction of Dr. Joanne Costello. Luke ultimately plans to pursue a Doctor of Nursing Practice and become a nursing professor.