A Comparison of Health Practices of Canadian and Jordanian Nursing Students

Linda Haddad, R.N., Ph.D.,
Debbie Kane, R.N., Ph.D.,
Dale Rajacich, R.N., Ph.D. cand.,
Sheila Cameron, R.N., Ed.D., and
Rowaida Al-Ma’aitah, R.N., Dr.P.H.

Abstract The purpose of this study was to compare health-promoting practices of Canadian (n = 49) and Jordanian (n = 44) first-year nursing students using the revised Health-Promoting Lifestyle Profile II. Results indicated significant differences between the groups on three subscales: health responsibility, physical activity, and interpersonal relations; however, both groups had similarly low scores. Implications for nurse educators are discussed from both curricular and cross-cultural perspective that focuses on health-promotion activities and programs.

Key words: health promotion, nursing, students, culture.

The increasing cost of health care, coupled with the realization that illness care is not effective, has prompted health care professionals, particularly nurses, to advocate for and promote the concept of health promotion. Attention to health risks associated with individual lifestyles has been well documented in the literature (Lalonde, 1974; Fleetwood & Packa, 1991; Pender, 1996), and it is well known that health-promoting activities and a healthy lifestyle are major strategies to facilitate and preserve health.

A health-promoting lifestyle has been defined as a “multidimensional pattern of self-initiated actions and perceptions that serve to maintain or enhance the level of wellness, self-actualization, and fulfillment of the individual” (Walker, Sechrist, & Pender, 1987; p. 77). This trend toward health and health promotion is directed toward increasing individual responsibility for health; however, knowledge of health-promoting behaviors is essential. The World Health Organization’s objective “Health for All by the Year 2000” is intended to apply to all nations and cultures. One of the strategies suggested to meet this goal is to improve education and training programs in health promotion and prevention for health professionals. Prior to implementing any program, however, the education of nurses needs to be evaluated and, perhaps, modified to prepare professionals to function within a wellness role model expectation (Lawrence & Schank, 1993).

The purpose of this study was to compare health-promoting practices of Canadian and Jordanian first-year nursing students. Our beliefs about health are influenced by culture, experiences of health and illness, and exposure to health promotion (McAllister & Farquhar, 1992). Findings from this research will assist in identifying the health practices of beginning students and help increase
intercultural understanding when promoting health practices with clients from other cultures. To be effective role models and advocate for healthy lifestyles, nurses will be expected to take an increased interest in their own health (Richter, Malkiewicz, & Shaw, 1987). With the increasing focus on health promotion, it is imperative that health-promoting behaviors be directed at beginning students, so that they are socialized at an early stage to the concept of health promotion. Further understanding of the health practices of people across cultures can better prepare educators to implement culturally appropriate programs to meet the needs of diverse populations. In addition, findings from this study will help us to identify the health practices of our own students and better prepare us to implement appropriate health-promotion programs.

LITERATURE REVIEW

Pender (1996) identifies a new era in health care in the twenty-first century, in which the focus will be to "provide access to knowledge and services that promote health and prevent disease for all segments of an increasingly diverse world population" (p. 3). Concomitantly, the World Health Organization's objective "Health for All by the Year 2000" is intended to apply to all nations and cultures. A review of the literature reveals a plethora of articles on health promotion but limited evidence of health-promotion research with nursing students and diverse populations which target culturally appropriate health-promotion programs.

In general, research on health promotion has focused on white middle-class professionals, with little emphasis on diverse populations (Levin, 1987; Weitzel, 1989; Pender, Walker, Sechrist, & Frank-Stromberg, 1990). In both the professional and popular realms, health promotion has taken root in white middle-class America, and fitness center programs have emerged, offering a kaleidoscope of activities to the public (Kerr & Ritchey, 1990). The opportunities to engage in such health-promoting behaviors, however, are not accessible to all and, perhaps, do not meet the needs of diverse populations.

While studies of health-promotion practices within particular cultural groups have been conducted, findings remain limited. Kerr and Ritchey (1990) investigated the health-promoting behaviors of 36 English- and Spanish-speaking Mexican-American migrant farm workers using a Spanish version of the Health-Promoting Lifestyle Profile (HPLP) (Walker et al., 1987). The researchers concluded that the items were culturally relevant and practiced by the least acculturated Spanish-speaking workers. The study's English-speaking migrant workers scored significantly lower on the areas of self-actualization, exercise, and stress management. Results of both the groups were compared to those of a group of 438 non-Hispanic middle-class midwesterners and found to be lower (Walker et al., 1987). Duffy, Rosow, and Hernandez (1996) studied the health-promoting lifestyle behaviors of 397 employed Mexican-American women and compared their results with studies conducted on women, from other published reports that had used the HPLP. The Mexican-American women had the highest scores of all minority groups but lower scores than those reported for predominately white groups.

Ahiyevych and Bernhard (1994) used the HPLP to investigate the health-promoting behaviors of 187 African-American women. Subscales with the highest means were self-actualization and interpersonal support, while the exercise subscale had the lowest mean. When compared to reports of HPLP scores of other groups, total HPLP and subscale scores of these women were generally lower. Al-Ma'aith, Haddad, and Umlauf (1999) used the HPLP to investigate the health behaviors of Arab Muslim women (n = 512) in Jordan. Results showed intermediate levels of health-promotion behaviors in the areas of self-actualization, nutrition, interpersonal support, and stress management and lower scores for health responsibility and exercise. The health-promoting lifestyle behaviors of the Jordanian women in the study tended to be lower in comparison to other groups reported in the literature.

McAllister and Farquhar (1992) identified and compared the health beliefs of 23 Asian and 14 white indigenous women residing in an inner London borough through in-depth semistructured interviews. The majority of both groups were housewives, and both groups were seeking health advice/treatment. The Asian women rated their health as worse than the white group, and this warrants further investigation. The authors question whether the findings are specific to these ethnic groups or to women living in an inner London borough and suggest that further research be conducted with larger samples. They also conclude that health needs as defined by the community may not be the same as those of health care professionals and that skills in cross-cultural consultation may be warranted when interacting with clients from different ethnic backgrounds.

There is a paucity of research studies investigating the health-promotion practices of nursing students. Boyd (1988) studied the impact of a health-promotion-focused curriculum on the personal health habits of 60 baccalaureate nursing students' level of wellness. The results indicated that health behaviors improved for the nursing
group compared to a control group of non-nursing students. In a longitudinal study, the attitudes toward health promotion of two student cohorts were examined (Donaghue, Duffield, Pelletier, & Adams, 1990). While entering students valued the health-promotion functions more frequently than students at program completion, the authors posit that this change is related to the lack of health-promotion content in senior clinical placements.

Lawrence and Schank (1993) investigated 76 young adult women (38 nursing and 38 non-nursing students) to identify their current health status, health perceptions, and general health behaviors, as well as to identify whether differences existed between nursing and non-nursing students. While these women viewed health as being very important and generally had positive health practices, several of the negative practices identified could impact on their morbidity and mortality statistics, e.g., nonperformance of self breast examination and poor dietary and exercise habits. No significant differences were noted between nursing and non-nursing students, and career choice did not appear to make a difference in health practices.

El-Qaderi (1997) assessed the level of health awareness of 139 students enrolled in the Department of Journalism and Mass Communication in Jordan. The instrument used was the Health Awareness Test (HAT), which measured six major areas of public health: child health, disease prevention, environmental health, women’s health, nutrition, and general personal hygiene. Students’ scores on the HAT were lower than the acceptable criterion score, and females scored significantly higher than males in the sample. There, however, was no significant difference between male and female performance with regard to academic level. When asked what sources they used to gain health awareness, 90.6% responded as from the mass media, followed by self-education (85.6%), academic preparation at the university (53.3%), family and peers (41.7%), and cultural events at the university (17.2%). The author concluded that universities have a role to assume in health promotion and general awareness among their students and emphasized the importance of mass media in the diffusion of health awareness to the public.

In summary, there is limited research on health-promotion practices of nursing students or cross-cultural research conducted with nursing students. The purpose of this study was to examine the health practices of first-level Canadian and Jordanian nursing students to (a) increase understanding of health and health practices in first-level nursing students and (b) gain a perspective of similarities and differences of nursing students’ practices across cultures.

**METHODOLOGY**

**Instrument**

The revised HPLP II (Pender, 1996) was used to measure nursing students’ health practices. The revised tool consists of 52 items, rated on a four-point response format (never, sometimes, often, and routinely) and consists of six subscales intended to measure the following components of a healthy lifestyle: health responsibility, physical activity, nutrition, spiritual growth, interpersonal relations, and stress management. Means can be obtained for each subscale separately or on the total instrument to calculate an overall health-promoting lifestyle score. Back translation was carried out by a bilingual Jordanian expert to maintain instrument integrity and ensure equivalence of meaning between the English and Arabic version. The validity and reliability of the original HPLP, which was translated into Arabic, were assessed with a sample of 950 Jordanian women and deemed to be satisfactory (Haddad, Al-Ma’aitah, Cameron, & Armstrong-Stassen, 1998).

**Sample**

HPLP II was distributed to first-year nursing students in both Canada and Jordan. Students were approached during class time and asked to participate in the study. A verbal as well as a written explanation as to the purpose of the study was given by one of the researchers. Implied consent was given through return of the instrument.

The sample included 49 Canadian and 44 Jordanian female baccalaureate first-year nursing students. Male student responses are not reported here because the Canadian sample of male students was too small to permit comparative analysis. The average age of students was 21 years for Canadian and 19 years for Jordanian students. It should be noted that while the Jordanian sample was a homogenous Arabic Muslim group, the Canadian students were a culturally heterogeneous group. Neither group of students had taken any nursing courses focused on health promotion. Students had completed their first semester of nursing studies but had not had any clinical nursing experience.

**RESULTS**

Data were analyzed using descriptive statistics and MANOVA. Table 1 summarizes the means and standard deviations and F values for each of the six subscales of HPLP II for Jordanian and Canadian nursing students. Pillai’s trace indicated a significant difference between the groups on HPLP II total score. ANOVA indicated that there
were significant differences between the groups on three subscales: health responsibility, physical activity, and interpersonal relations.

**DISCUSSION**

Previous researchers have concluded that one’s definition of health influences whether one engages in health-promoting activities (Gillis, 1994; Pender, 1996) and exposure to health promotion (McAllister & Farquhar, 1992). This, of course, suggests that it is important to explore how nursing students define health. In Jordan, it is still the norm to define health as the absence of disease and little attention is given to health and health-promoting behaviors. Furthermore, the issue of counseling and psychological services is not well accepted, and few of these services are available. Jordanians visit the physician only when they are ill and, in general, have absolute trust in the physician. Health education programs are not offered in schools, and there is limited media coverage on health issues. While these descriptions of Jordan’s health beliefs sound contrary to health-promotion practices, in actuality, it was not that long ago that these descriptions would have accurately depicted Canadian and American populations.

It should be noted that the significant difference in the health responsibility subscale scores may be an indication of the poor fit of the HPLP II questionnaire for samples from developing countries. As discussed by Kitts and Roberts (1996), there are a number of prerequisites to actualizing one’s ultimate wellness, such as adequate shelter, nourishing food, good hygienic practices, clean and abundant water, peace, freedom from violence, and social justice. In light of the political unrest alone, health promotion may recede in its importance for citizens of this Middle Eastern country. The difference in health responsibility scores may be a reflection of poor cultural sensitivity in translating the questionnaire. HPLP II was back-translated into Arabic, but on face validity alone, one must question the use of all of the indicators; for example, two of the indicators ask how often the participants read or watch TV programs about improving health and whether they attend educational programs on personal health care. Such shows and educational programs are limited, and, perhaps, universities should play a key role in health-promotion campaigns that target university students as well as the general population. The item related to inspection of the body for physical changes/danger signs may not have been answered correctly by this group of women. In the Muslim religion, modesty is an important cultural value, especially for females, and participants may have been reluctant to answer this question (Luna, 1989).

Significant differences in the physical activity subscale are consistent with the findings of Al-Ma’aaitah et al. (1999) and Gharaibeh (1995). In the study conducted by Gharaibeh (1995), exercise was never mentioned by Jordanian women as an element of health. In this study, the differences found in the category of physical activity can be attributed to cultural differences in lifestyles and the interpretation of some of the items. While a commitment to health promotion is evident through Canadian sports facilities and exercise programs, such physical activity programs are not widely available in Jordan. One of the items in the exercise subscale asks participants whether they take part in light-to-moderate physical activity. Because many Jordanians do not own cars, they do a great deal of walking during their normal day and may not have associated this with a form of physical activity. It has been suggested by Haddad, Al-Ma’aaitah, and Umlauf (1999) that if an additional item was included, asking “How far do you walk each day,” respondents might achieve higher scores. Another item in the physical activity subscale asks whether respondents do stretching exercises at least three times per week. In the Muslim religion, it is customary to pray five times a day. This requires a series of kneeling and standing over a period of time and can constitute a form of stretching

<table>
<thead>
<tr>
<th></th>
<th>Windsor (n = 49)</th>
<th>Jordan (n = 44)</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health responsibility</td>
<td>2.37 (0.51)</td>
<td>2.07 (0.54)</td>
<td>7.46*</td>
</tr>
<tr>
<td>Physical activity</td>
<td>2.42 (0.73)</td>
<td>2.12 (0.46)</td>
<td>5.58†</td>
</tr>
<tr>
<td>Nutrition</td>
<td>20.58 (0.63)</td>
<td>2.40 (0.45)</td>
<td>2.50</td>
</tr>
<tr>
<td>Spiritual growth</td>
<td>2.97 (0.52)</td>
<td>2.98 (0.53)</td>
<td>0.008</td>
</tr>
<tr>
<td>Interpersonal relations</td>
<td>3.12 (0.52)</td>
<td>2.78 (0.47)</td>
<td>11.00*</td>
</tr>
<tr>
<td>Stress management</td>
<td>2.46 (0.47)</td>
<td>2.58 (0.56)</td>
<td>1.14</td>
</tr>
</tbody>
</table>

*Note: Pillai’s trace $F(6, 86) = 4.46$, *p* < 0.001, †*p* < 0.1.
exercises. Perhaps, participants did not view praying as a form of exercise.

A significant difference in the subscale of interpersonal relations was noted in this study. Moderate scores in this subscale have been reported by Al-Ma’a’itha et al. (1999) and Haddad, Al-Ma’a’ithah, and Umlauf (1999). These findings are surprising and must be interpreted with caution. In general, Arab Muslims highly value family ties and loyalty to family is paramount (AbuGharbieh, 1998). For this group of students, however, school responsibilities are very demanding, and, perhaps, they did not feel that they were meeting this expectation. Another explanation for this score can be related to the wording of some of the items that are not reflective of the culture, e.g., meeting needs for intimacy and being touched by people they care for.

In spite of the impact of culture on the health-promoting behaviors of the Jordanian students, the scores for each group of nursing students were very similar, both residing in the low-to-moderate range. Thus, there are a number of implications for nursing faculty in both Canada and Jordan. Owing to the complexity of changing human behavior, health-promotion content is often included in the senior-level courses (Boyd, 1988). There is a need to include promotion theory beyond an introductory level earlier in nursing courses and emphasize health promotion, if this is seen as a desirable behavior for comprehensively educated nurses (Donaghe et al., 1990). Stockhausen (1994) describes a health-promotion wellness project that provides first-year nursing students with an opportunity to examine health promotion as an active process throughout the lifespan and could be incorporated into first-year nursing programs without major curriculum changes.

Encouraging role modeling among students and professors is another suggestion for enhancing health promotion within the student body; however, it may require some self-reflection and self-discipline on the part of faculty to “practice what they preach.” To be effective role models, nurses will be expected to take increased interest in their own health (Richter et al., 1987).

An additional strategy that could be useful in promoting wellness within the interpersonal domain is to plan workshops for beginning students to facilitate social networking and communication. Such workshops could also provide a forum for empowering students to become advocates of their own health and to take control over and personal responsibility for their own health. In addition, students will then be poised to play a significant role in health-promotion activities.

In summary, the findings of this research support the need to further investigate the health practices of nursing students within a cultural context. While there were significant differences in HPLP II subscales between the groups, both groups had similarly low scores. One question whether this is unique to nursing students, and as such, comparison to other non-nursing student groups is warranted. Further research with larger samples will also test the applicability of this instrument especially in developing countries.

REFERENCES


