The attitudes and activities of registered nurses towards health promotion and patient education in the emergency department

By Michelle Taggart, RN

Abstract

Emergency department (ED) registered nurses (RNs) can help empower patients toward greater well-being through health promotion and patient education (HPPE). The ED is often an individual's first and only access to the health care system, and is seen as an under-used setting for HPPE. To investigate RNs' current attitudes and activites about educating patients in the ED, 223 Canadian ED RNs were surveyed using an adapted web-based questionnaire. The attitudes of ED RNs and their current HPPE activities were examined, as was the relationship between level of nursing education and these attitudes. Results showed that perceived importance is the major variable to explain HPPE. A relationship also exists between fewer barriers and feeling more comfortable providing HPPE to patients. More comfortable ED RNs are more likely to see the importance of HPPE. A relationship between perceived effectiveness of HPPE and the frequency of HPPE was found. In general, ED RNs believe that HPPE is important, but need to perceive that what they are providing is effective.

Introduction

In Canada, between 4 and 5 million adults are without a family physician, with a significant portion of those individuals seeking medical advice at emergency departments (ED) (Bailey, 2007; Canadian Broadcasting Corporation, 2008). As a result, all types of patients come through the ED doors and an incredibly varied array of health issues are addressed by ED staff. Nurses are at the forefront, helping and caring for those patients. In a health care system that is clearly over-extended, where patients often present to the ED with non-urgent concerns, ED registered nurses (RNs) can help to empower patients to take control of their own lives through health promotion and patient education.

Literature review

The ED has long been under-used as an area for health promoting practices, although it is definitely a suitable setting for these kinds of activities (Bensberg, Kennedy, & Bennets, 2003). According to Allender and Spradley (2001), one role of the nurse is "to encourage the full development of a self-care attitude" (p. 363), and nurses can empower patients by educating them about health promotion strategies. Specifically, ED RNs are in an ideal position to promote health through education. ED RNs see a variety of patients, both men and women, ranging in age, ethnicity, and socioeconomic background. Many patients are never admitted, a large number of them being discharged home with non-acute illnesses. Often, the ED is the only place of contact with the health care system (Wei & Camargo, 2000).

Casey (2007) found there is a need for a solid nurse-client relationship in order to empower patients, as well as health education at the appropriate educational level. Whitehead, Wang, Wang, Zhang, Sun, and Xie's (2008) focus was mainly on promoting healthy lifestyle changes, with health education the most common way to do so. Wingard (2005) recommended that health education be simple and understandable so as not to overload the patient and/or the family. A skills training program prior to discharge of surgical patients has worked well and can be cost efficient (Rifas, Morris, & Grady, 1994). Is there a chance that model would be suitable for ED discharges? Emerson (2003) looked at education of patients regarding heart disease in the ED, and considers it is reasonable for RNs to discuss lifestyle issues related to heart disease with their patients. Patients who are most suitable for teaching are those who are stable, less anxious, and awaiting an admission or consult.

Kelley and Abraham (2007) found that, overall, nurses believe it is part of their role to provide health-promoting advice to their patients. However, very few actually do so on a regular basis. McBride (1994) omitted ED RNs from her study; she felt that they do not have regular contact with their patients like acute care nurses do and, therefore, need to be studied separately. Bensberg, Kennedy, and Bennets (2003) did, however, study ED RNs in relation to health promotion and patient education. They looked at barriers to its provision: lack of time, lack of patient and staff interest, fewer staff numbers, and an increased acuity of medical conditions were most common. Nevertheless, they encouraged discharge teaching in the ED, stating it leads to patient empowerment. Cross (2005) conducted the only study that could be found addressing the attitudes of ED RNs towards health promotion specifically. She concluded that more research is required not only of ED RN attitudes, but also regarding health promotional activities in order to highlight barriers to its provision.

The study

This study investigates relationships among the frequency of providing health promotion and patient education to adult patients by RNs in the ED. In particular, perceptions of effectiveness and its importance were explored, as well as comparisons made regarding demographic characteristics, and perceived barriers.

The research questions for the study were:

1. What are the attitudes and activities of ED RNs regarding the offering of health-promoting advice in the ED?
2. What relationships do age, level of education, years of experience as an RN, years of experience as an ED RN, and perceived importance have with the frequency of providing health-promoting advice?
3. What relationships do age, level of education, years of experience as an RN, years of experience as an ED RN, and perceived importance have with the perceived effectiveness of providing of health-promoting advice?

Definitions

Health promotion refers to supporting individuals to make healthy choices, and **patient education** is providing the information and rationale for one to do so. According to the World Health Organization:

Health promotion supports personal and social development through providing information, education for health, and enhancing life skills. By doing so, it increases the options available to people, to exercise more control over their own health and over their environments, and to make choices conducive to health" (World Health Organization, 1986, p. 3).

Methodology

The study was approved by the University of Victoria Human Research Ethics Board, covering all health regions across Canada. Data were collected using a convenience sample of ED RNs, mainly through the National Emergency Nurses Association (NENA) membership. An e-mail was sent out to NENA members by NENA executive on behalf of the researcher. Participation in this study was voluntary and responding to it implied consent.

The questionnaire was adapted from Yeazel, Lindstrom, and Center's (2006) Preventive Medicine Attitudes and Activities Questionnaire (PMAAQ), then tested on a pilot group of ED RNs at Foothills Medical Centre in Calgary, Alberta. The modified PMAAQ consisted of 17 questions divided into three sections. The first eight questions related to the demographic characteristics. In the second part of the survey, eight questions were posed. The topics related to overall prevention behaviours, weight management, tobacco cessation, hypertension management, perceived effectiveness of providing health promotion advice, perceived importance of providing health promotion advice, comfort when providing health education, and perceived barriers to health promotion. Each of these questions is further divided into items related to each scale, for a total of 76 items. The third portion of the survey included a comments section.

(In general, how important is it for ED registered nurses to provide health education to their patients about the following?)

Individual Item Scores for Perceived Importance Scale (measured on 4-point scale)

Item	Mean	Std Dev
Alcohol Consumption	3.17	0.87
Safe Sex Practices	3.15	0.92
Illicit Drug Use	3.22	0.86
Exercise	2.88	0.99
Healthy Diet	2.90	0.99
Tobacco Use Cessation	3.12	0.94
Weight Reduction	2.81	0.98
Seatbelt Use	3.51	0.76
Stress Management	2.86	0.91
Injury Prevention	3.43	0.80
Violence Prevention	3.28	0.84
Sun Exposure	2.72	0.97
Hypertension Management	3.43	0.76
Depression Management	2.99	0.87
Helmet Use	3.50	0.78
Total	3.14	0.69

(Regardless of whether you see the patients again or not, as an ED RN, how effective do you feel you are in changing your patients' behaviour with respect to the following?)

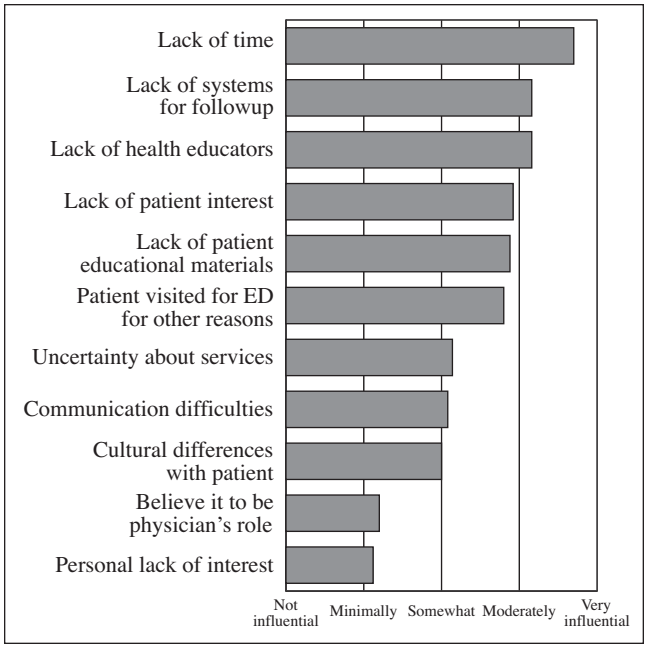
Individual Item Scores for Perceived Effectiveness Scale (measured on 4-point scale)

Item	Mean	Std Dev
Alcohol Consumption	1.33	0.60
Safe Sex Practices	1.69	0.75
Illicit Drug Use	1.30	0.52
Exercise	1.52	0.63
Healthy Diet	1.60	0.68
Tobacco Use Cessation	1.55	0.73
Weight Reduction	1.34	0.58
Seatbelt Use	2.22	1.05
Stress Management	1.61	0.70
Injury Prevention	2.15	0.98
Violence Prevention	1.71	0.81
Sun Exposure	1.67	0.86
Hypertension Management	2.31	0.87
Depression Management	1.71	0.76
Helmet Use	2.20	1.04
Total	1.70	0.54

Data were unanalyzed using SPSS, Version 16. Frequencies and descriptive statistics were calculated for the demographic data, as well as for individual items in each of the scales: overall prevention behaviour, weight management, tobacco cessation, hypertension management, perceived effectiveness, perceived importance, personal comfort, and reported barriers. The first four scales were summed to create one scale: combined prevention behaviour, and was used for further analysis rather than including the four individual scales. Pearson's correlations were calculated among years of experience as an RN, years of experience as an ED RN, and age with the various subscales in the survey. Correlations were also calculated among nursing activities (combined prevention scale) and attitudes (effectiveness, importance, comfort, and barriers) in providing health-promoting advice. Multiple regression analysis was performed with the frequency of giving health advice (combined prevention scale) as the dependent variable and demographic characteristics (age, level of education, experience) and perceived importance as the independent variables. Another analysis was conducted to examine the effect of personal comfort and reported barriers on the prevention scale. Regression analysis was also conducted with perceived effectiveness as the dependent variable and demographics, importance, barriers and comfort as independent variables. A final regression equation was calculated with personal comfort as the dependent variable and demographics and barriers as independent variables.

Findings

The sample consisted of 223 ED RNs from across Canada. Participants ranged in ages between 24 and 63 years (M = 42.2; SD = 9.07). Ninety-one per cent (91%) of respondents were female. The participants' years of experience as an RN ranged from 1 to 42 years (M = 18.4; SD = 9.89), and their years of experience as an ED RN ranged from 0 to 40 years (M = 12.8; SD = 8.74). Almost 65% of the respondents had basic nursing education. The remainder had completed post-RN speciality courses, mainly specific to the ED environment (22.9 %), or graduate studies (8.1 %). One respondent had her PhD in nursing.



Perceived Barriers by the ED RN to Health Promotion and Patient Education Provision (N=223)

Attitudes were measured through the following scales: perceived effectiveness, perceived importance, personal comfort, and reported barriers to the provision of health promoting advice.

ED RNs found themselves to be most effective at changing their patients' behaviour when it comes to blood pressure management (41.3% *moderately* or *very effective*), but were found to believe they are only *minimally* or *somewhat effective* at changing their patients' behaviour when it comes to alcohol consumption (92%) and illicit drug use (93.7%). Overall, most respondents reported that they were *minimally effective* to *somewhat effective* at providing health-promoting advice to their patients.

It was found that most respondents believed that the provision of health-promoting advice to their patients and families is a *moderately important* to *very important* role of the ED RN. Specifically, ED RNs found it *moderately* or *very important* to focus on seatbelt use (87.4%), helmet use (87.0%) and injury prevention (86.1%). Of lesser importance were weight reduction (60.9%), stress reduction (60.5%), and sun exposure (57.0%).

Seventy-seven point two per cent (77.2%) of respondents *somewhat* or *strongly agree* with the statement: I feel comfortable discussing illicit drug use with patients, and 70.9% of respondents *somewhat* or *strongly agree* with the statement: I feel comfortable discussing sexual health practices with patients. On the other hand, 66.8% of respondents answered that they *somewhat* or *strongly disagree* with the statement: Most patients try to change their lifestyles if I advise them to do so.

Lack of time was the most frequently reported perceived barrier, rated as *moderately* or *very influential* by 92.8% of respondents. The next two most frequently reported barriers were having a lack of health educators (rated *moderately* or *very influential* by 78.5% of respondents) and having a lack of support systems for patient follow-up (rated as *moderately* or *very influential* by 74.0% of respondents). The least-reported barrier was the RNs' personal lack of interest in health promotion and patient education. It was rated *not influential* by 40.4% of respondents.

Health promotion activities were measured individually through four scales: overall prevention behaviour, weight management, tobacco cessation, and hypertension management. The combined prevention behaviour grouping incorporated all four scales into one.

It was found that, on average, respondents reported providing health-promoting advice to their patients and families less than *half of the time*, and they were very *rarely* found to provide health-promoting advice regarding weight management to their overweight and obese patients who visited the ED. Respondents more commonly advised their patients to quit, however were found *rarely* to refer them to a program, provide the tobacco users with self-help materials, or prepare them for withdrawal symptoms. There was a range of answers but, on

average, hypertension management activities were done about *half of the time*. Referrals to the patients' general practitioner and encouragement to continue with their prescribed medication routine were the most common activities reported by ED RNs in relation to hypertension management.

Demographic characteristics were found to have little relationship with the ED RNs' frequency of providing health-promoting advice. Weak, but statistically significant correlations were noted among years of experience as an RN, years of experience as an ED RN, and age with the activities of providing health-promoting advice. No relationship was found to correlate with any of the attitudes examined.

In the regression analysis, it was found that age, education, and experience alone were not significant predictors of the overall combined prevention score (frequency of ED RNs providing health-promoting advice). However, adding the importance category made the overall regression equation statistically significant. The variables explained 24.1% of the variance of frequency of providing health-promoting advice. As well, when analyzed together, the perceived comfort and perceived importance of offering health promotion advice were found to explain 27.2% of the variance of the frequency of providing health-promoting advice.

There was no correlation between the demographic characteristics or reported barriers and perceived effectiveness in providing health-promoting advice. However, it was found that there were statistically significant correlations between perceived effectiveness of the provision of health-promoting advice and combined prevention behaviours (r = .518; p = 0.01), perceived importance (r = .388; p = 0.01), and personal comfort (r = .312; p = 0.01).

In the regression analysis, it was found that perceived importance explained the perceived effectiveness of health-promoting advice, when demographic characteristics were controlled. This equation explained 17.7% of the variance of perceived effectiveness.

Discussion

Perceived importance is the single most significant variable in explaining the frequency of health-promoting advice. Still, while a large number of ED RNs believe that health promotion and patient education are important, it does not necessarily get carried out in practice. ED RNs are faced with barriers to providing health-promoting advice. They also need to feel that the health-promoting activities they are providing are effective and not a waste of their time. ED RNs who are more comfortable with its provision are more likely to see it as an important aspect of the nursing role. Once they feel that they are actually making a difference in their patients' lifestyle, there is a greater likelihood that health promotion and patient education will occur more frequently.

Limitations

For one, this study's focus is on adult populations only. It would be interesting to compare health promotional activities in adults with those in child populations. Secondly, a convenience, not random sample was obtained with NENA nurses. One could argue that there is bias with nurses who are members of NENA, and that those who are willing to participate in a survey are more likely to be motivated toward health-promoting activities. Thirdly, in review of the comfort scale, it appears that the last three questions are not measuring personal comfort. Therefore, these questions should be redone should this study be repeated. Finally, the instrument adapted for this study was based on a questionnaire designed for primary care physicians, not emerge nurses. GPs tend to see their patients again and often deal with more chronic issues. ED RNs tend to see their patients just once, usually during an acute crisis. Therefore, the instrument may not have captured all the aspects of health promotion important for ED RNs.

Conclusion

This study reports findings from ED RNs regarding their attitudes and activities towards health promotion and patient education within an adult population. The findings show that, overall, ED RNs believe that health-promoting activities are important, but need to feel that what they are providing is effective. It was reported that barriers, most reportably time, make it difficult for ED RNs to provide health promotion and patient education. There is a relationship between overcoming these barriers in practice and feeling more comfortable providing health-promoting advice to patients. ED RNs who are more comfortable are also more likely to see the importance of health-promoting activities. Feelings of importance are the most important predictor of providing health-promoting advice. The level of education of the ED RNs was not found to significantly predict health-promoting attitudes, and no relationship was found between years of experience as an ED RN and the perceptions of effectiveness in providing health-promoting advice.

The results of this study have implications for nursing policy and practice, suggesting that believing that health-promoting activities are important may increase the frequency of ED RNs providing health-promoting advice. Current emergency departments can be transformed into ones that support health promotion and patient education. Health-promoting activities should become an expectation of employment, reinforced at initial hire, orientation, and annual recertification. ED RNs already agree that health-promoting activities are important, now they need to become comfortable through practice. With the necessary support, resources, and training available, these ED RNs will be more comfortable and effective in their role as a patient educator. A culture of health promotion within EDs needs to be encouraged. If policy change elicits a trend toward regular health promotion and patient education provision as a socially acceptable norm, then other ED RNs will follow suit. Still, barriers to health promotion and patient education must be kept in mind when developing new policies.

It may also be valuable in EDs, particularly in larger centres, to create a new position for an RN to specifically offer health promotion and patient education regularly. The patient education nurse would be someone who has the time to spend

with patients and their families while in the waiting room or while in the department waiting for test results, providing them with information about their health, tailored to their needs. In smaller hospitals, the staff nurse educator could supply ED RNs with the appropriate education and suitable resources for them to provide health promotion and patient education. While it is still the role of every RN to provide health-promoting advice to her patients, this new role may assist in overcoming some barriers.

Recommendations for future research include examining the qualitative data for prominent themes and patterns, exploring other variables not included in the study such as ED RNs' knowledge of health promotion and patient education topics, and the evaluation of implemented programs of health promotional activities in the ED. A study of the overall effectiveness of health promotion and patient education in EDs that looks at outcomes and rates of return to the department would be worthwhile.

Acknowledgement

The researcher would like to thank her supervisors and committee members: Anita Molzahn, Laurene Sheilds, Michael Prince, and Kelli Stajduhar, NENA for its assistance, Donald Schopflocher for his help with statistical analysis, the five experienced RNs who reviewed the adapted survey prior to its test pilot, and the management and staff of the Foothills Emergency Department for their support throughout her Master's degree.

About the author

Michelle Taggart is a registered nurse at the Foothills Hospital in Calgary, Alberta. She carried out the above research for her thesis in completion of her Master's of Nursing, Advanced Practice Leadership through the University of Victoria.

References

Allender, J., & Spradley, B. (2001). The community as client: Assessment and diagnosis. In J. Allender & B. Spradley (Eds.), **Community Health Nursing**, (5th ed., pp. 353–374). Philadelphia, PA: Lippincott.

Bailey, T. (2007). Waiting for a family doctor. **Canadian Family Physician, 53**, 579–580.

Bensberg, M., Kennedy, M., & Bennets, S. (2003). Identifying the opportunities for health promoting emergency departments. **Accident and Emergency Nursing, 11**, 173–181.

Canadian Broadcasting Corporation. (2008, June 18). **4.1 million Canadians with family doctor: StatsCan**. Retrieved from www.cbc.ca/health/story/2008/06/18/doctor-statcan.html

Casey, D. (2007). Nurses' perceptions, understanding and experiences of health promotion. **Journal of Clinical Nursing, 16**, 1039–1049.

Cross, R. (2005). Accident and emergency nurses' attitudes towards health promotion. **Journal of Advanced Nursing, 51**(5), 474–483.

Emerson, D. (2003). Promoting health for patients with coronary heart disease. **Emergency Nurse, 11**(6), 19–21.

Kelley, K., & Abraham, C. (2007). Health promotion for people aged over 65 years in hospital: Nurses' perceptions about their role. **Journal of Clinical Nursing, 16**, 569–579.

McBride, A. (1994). Health promotion in hospitals: The attitudes, beliefs and practices of hospital nurse. **Journal of Advanced Nursing, 20**, 92–100.

Rifas, E., Morris, R., & Grady, R. (1994). Innovative approach to patient education. **Nursing Outlook, 42**(5), 214–216.

Wei, H.G., & Camargo, C.A. (2000). Patient education in the emergency department. **Academic Emergency Medicine,** *7*(6), 710–717.

Whitehead, D., Wang, Y., Wang, J., Zhang, J., Sun, Z., & Xie, C. (2008). Health promotion and health education practice: Nurses' perceptions. **Journal of Advanced Nursing, 61**(2), 181–187.

Wingard, R. (2005). Patient education and the nursing process: Meeting the patient's needs. **Nephrology Nursing Journal, 32**(2), 211–214.

World Health Organization. (1986). **Ottawa Charter for Health Promotion**. Retrieved January 31, 2007, from www.euro.who.int/AboutWHO/Policy/20010827_2

Yeazel, M.W., Lindstrom, K.M., & Center, B.A. (2006). A validated tool for gaining insight into clinicians' preventive medicine behaviors and beliefs: The preventive medicine attitudes and activities questionnaire (PMAAQ). **Preventive Medicine, 43**, 86–91.

Clinical tip: Hypothermia

By Elizabeth Hextall

On a cold January day, our ER treated the fourth patient with hypothermia (core temp 27°C) of the winter. To infuse warm solution into the bladder, we applied principles borrowed from intra abdominal pressure monitoring. We hung a litre of NS put through a Hotline warmer with a stopcock on the end of the IV tubing. The sampling line on the Foley catheter has a clear link design so the stopcock (or IV tubing) connects directly. We then clamped (using plastic forceps) the drainage tubing to the catheter bag and infused 500 ml warm NS into the bladder and let it dwell 20 minutes.

Then we closed the stopcock connected to the sampling port, unclamped the drainage tubing and let the saline drain into the catheter bag. Once drained, we reclamped the drainage tubing and infused more warm saline to repeat the process.

The core temp increased one degree within minutes following bladder infusion. Prior to bladder instillation, the patient had warmed intravenous infusing and our Blanketrol had been applied. The biggest bonus of infusing saline into the bladder this way is that the warmth of the solution is controlled, and it frees up a pair of hands to do other nursing tasks. The down side is that you have to have more than one Hotline warmer in your ER…

About the author

Elizabeth Hextall, RN, is the Program Educator Critical Care in the CS1-ER Brandon Regional Health Centre in Brandon, MB.