

The Role of Nursing in Promoting Community Health Challenges and Solutions

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Abstract

Background: Health Promotion (HP) focuses on addressing the root causes of diseases to enhance individuals' well-being. Nurses play a pivotal role in delivering HP through preventive care, patient education, and disease prevention. Despite their critical involvement, preventable diseases remain a global challenge, particularly in low- and middle-income countries (LMICs). This study evaluates nurses' knowledge, perceptions, and practices related to HP, exploring their role in delivering comprehensive care.

Methods: This study was conducted among 184 registered nurses at a tertiary healthcare facility. Participants were randomly selected, excluding auxiliary nurses, student nurses, and international trainees. Data were collected using a structured, self-administered questionnaire addressing demographics, knowledge, perceptions, and practices related to HP. Descriptive statistics and bivariate analyses were conducted using IBM SPSS Statistics (Version 26.0) to explore relationships between variables.

Results: Of the respondents, 56% reported sufficient knowledge to deliver HP services, and 63.6% strongly agreed that counseling and education by nurses improve patient outcomes. Bivariate analysis revealed significant associations between professional experience, age, and knowledge with perceptions and practices.

Conclusion: Nurses' knowledge and perceptions significantly shape their HP practices, underscoring their critical role in advancing public health goals. Comprehensive training and professional development are essential to empower nurses with the latest HP strategies. Future research should focus on creating sustainable HP models to enhance nurses' contributions to public health.

Introduction

Health Promotion (HP) encompasses various strategies designed to maintain and enhance individuals' well-being by addressing the root causes of diseases rather than focusing solely on medical treatment (1). Historically, health was perceived merely as the absence of disease. However, the Ottawa Charter for HP, introduced in 1986 by the World Health Organization (WHO), shifted the global perspective on health from being an end goal to serving as a means to lead a fulfilling life (2). This change positioned HP as a critical and integral activity for modern societies. The WHO has since developed numerous initiatives and interventions to implement HP concepts in practical settings (3). Examples of these initiatives include health-promoting schools (5), health-promoting hospitals (4), workplace-based HP programs (7), and efforts to integrate HP into the Sustainable Development Goals (SDGs) (6). These initiatives have demonstrated significant success due to their positive impacts on health outcomes.

Nurses play a pivotal role in advancing HP today. Beyond their clinical duties and patient consultations, nurses actively participate in preventive care, patient education, and disease prevention (DP) services (8). Their contributions extend to improving therapeutic adherence (9), enhancing patients' quality of life (8), and offering empowerment and holistic support to individuals. Whitehead's work highlighted the evolving role of nursing in HP, exploring nurses'

knowledge, attitudes, and practices in this field (10). Research indicates that nurses employ a range of approaches to deliver HP, including general health promotion efforts, patient-focused interventions, and project-based initiatives (8).

Despite the essential contributions of nurses to public health, preventable diseases remain a significant challenge. For instance, in 2017, approximately 60% of patients in emergency departments across the United States presented with chronic conditions that were preventable, incurring costs of around \$8.3 billion (11). Preventable diseases also contribute significantly to prolonged hospital stays and higher rates of hospitalization (12). Similarly, in 2017, a significant proportion of deaths and disability-adjusted life-years (DALY) in India were preventable, highlighting the global impact of non-communicable diseases (NCDs) (13). In low- and middle-income countries (LMICs), NCDs continue to exert a devastating toll despite the availability of information on modifiable lifestyle behaviors, as this knowledge often fails to translate into actionable changes (14, 15).

In some regions, the health challenges are multifaceted, with populations facing overlapping burdens of disease, including communicable illnesses, maternal and child health issues, non-communicable diseases, and injuries or trauma (16). These intersecting challenges have prompted the adoption of long-term health policies aimed at addressing these issues comprehensively (16).

Given their diverse roles in the healthcare system and their position as patient advocates, nurses hold a unique capacity to influence HP and achieve goals such as universal health coverage (UHC). However, some reports have questioned the effectiveness of nursing practices in HP and DP. This research aims to evaluate the knowledge, perceptions, and practices of nurses in relation to HP, with a focus on their role in delivering comprehensive care.

Methods

This research employed a descriptive cross-sectional design. The study population included registered nurses working in a tertiary healthcare facility. Participants were selected through random sampling from the eligible population. The study excluded auxiliary nurses, student nurses, and nurses participating in exchange training programs from other countries to maintain consistency in the target group. Data were gathered through a structured, self-administered questionnaire. All responses were anonymized, and access to the collected data was restricted to the principal researcher. The questionnaire used was adapted from a prior study with similar objectives (17).

The survey instrument consisted of 22 closed-ended questions divided into four sections. Section A included seven demographic questions, such as age, gender, registration status, and years of professional registration. Section B (questions 8–9) assessed knowledge of health promotion, while Section C (questions 10–15) explored perceptions towards health promotion. Section D (questions 16–22) examined the practical application of health promotion by the participants.

DATA ANALYSIS

Data analysis was performed using IBM SPSS Statistics for Windows, Version 26.0 (IBM Corp, 2019). Descriptive statistics were applied to summarize data across the four sections: demographics, knowledge, perceptions, and practices. Bivariate analyses were used to examine the relationships between demographic factors and knowledge, perceptions, and practices. Additional analysis explored the associations between knowledge and practice, perceptions and practice, and knowledge and perceptions.

Results

The survey received responses from 184 nurses. Of these, 82.6% (n = 152) were female, 7.6% (n = 14) were male, and gender was unspecified for 9.8% (n = 18). A majority of the participants, 72% (n = 133), were aged 40 years or older. Additionally, 35.9% (n = 66) of respondents reported being registered as nurses for 10 years or less

Among the 184 respondents, 56.0% (n = 103) indicated they had sufficient knowledge to manage conditions commonly encountered in their units and to deliver HP services effectively. A total of 63.6% (n = 117) expressed strong agreement that counseling and health education provided by nurses could significantly improve patient outcomes. Furthermore, 51.6% (n = 95) of the nurses reported encouraging patients to participate in fitness assessments and health screenings. A detailed summary of responses is provided in Table I.

At a 5% significance level, a notable association was found between the duration of professional registration and having adequate knowledge to deliver HP services for conditions within the unit (p = 0.015). Similarly, age showed a statistically significant relationship with the perception that healthcare facilities are an ideal setting for HP activities (p = 0.006). No demographic factors were significantly linked to HP practices.

When examining the relationship between nurses' perceptions and HP practices, 21 statistically significant factors were identified. Among these, four associations were related to the perception that understanding disease processes is essential for patient care, four were linked to the perception that hospitals are suitable venues for HP, and four were associated with the belief that patients with unhealthy lifestyles would not benefit from HP. Additionally, two significant factors emerged regarding the perception that health counseling and education from nurses enhance patient outcomes, and seven were linked to the belief that patients are disinterested in receiving health education. However, no significant relationships were observed between the perception that HP is unimportant and HP practices.

Tab. I. Knowledge, perception and practice of health promotion.

Variables	Responses				
	Strongly Disagree n. (%)	Disagree n. (%)	Neutral n. (%)	Agree n. (%)	Strongly Agree n. (%)
Knowledge Variables					
I have adequate knowledge necessary for HP provision	3 (1.6)	7 (3.8)	12 (6.5)	103 (56.0)	55 (29.9)
I am aware of the importance of providing HE to patients	0	0	2 (1.1)	57(31)	121 (65.8)
Perception Variables					
A holistic knowledge of disease processes is a pre-requisite for patient care	0	0	2 (1.1)	70(38)	112 (60.9)
Hospital is an ideal place for HP	1 (0.5)	15 (8.2)	11 (6.0)	70 (38.0)	83 (45.1)
Health promotion is a waste of time	129 (70.1)	41 (22.3)	5 (2.2)	2 (1.1)	2 (1.1)
Patients who engage in an unhealthy lifestyle will not benefit from HP	60 (32.6)	45 (24.5)	13 (7.1)	29 (15.8)	31 (16.8)

Health education and counseling from nurses could enhance patients' health	1 (0.5)	3 (1.6)	1 (0.5)	59 (32.1)	117 (63.6)
Patients do not want health education from nurses	71 (38.6)	78 (42.4)	17 (9.2)	7 (3.8)	6 (3.3)
Practice Variables					
I educate my patients on medication and how it works	0	2 (1.1)	6 (3.3)	74 (40.2)	98 (53.3)
I educate my patients about their disease conditions	0	2 (1.1)	14 (7.6)	84 (45.7)	80 (43.5)
I provide my patients with necessary guidance about diet and lifestyle	2 (1.1)	2 (1.1)	15 (8.2)	76 (41.3)	86 (46.7)
I educate my patients on the need for a routine checkup	1 (0.5)	4 (2.2)	13 (7.1)	73 (39.2)	89 (48.4)
I use my smart phone/devices to search for key information for my patients	10 (5.4)	16 (8.7)	36 (19.6)	74 (40.2)	43 (23.4)
I encourage my patients to engage in the healthiest lifestyle they can attain	0	1 (0.5)	12 (6.5)	94 (51.1)	74 (40.2)
I encourage my patients to observe fitness assessments and health screening	0	3 (1.6)	26 (14.1)	9 (51.6)	57 (31.0)

Tab. II. Relationship between responses on health promotion perception and practices by nurses

Perception	Practice	SDA	DA	N	A	SA	p-value
A holistic knowledge of disease pathology and processes are vital for effective care of patients	I educate my patients on medication	0	0	2	69	109	0.001
	I educate my patients on need for checkup	0	0	2	69	109	0.008
	patients encouraged to engage in healthy lifestyle	0	0	2	68	111	0.004
	I encourage my patients to observe fitness assessments and health screening	0	0	2	68	111	0.049
Hospital is an ideal place for HP	I educate my patients on medication	1	5	10	67	83	0.010
	I educate my patients on need for checkup	1	15	10	67	83	0.044
	I use my smart phone/devices for supportive information on HP	1	14	10	68	82	0.004

Patients who deliberately engage in an unhealthy lifestyle will not benefit from health promotion	I educate my patients about their disease condition	60	45	13	28	31	< 0.001
	I provide necessary guidance about diet and lifestyle	60	45	13	29	31	0.007
	patients encouraged to engage in healthy lifestyle	60	44	12	29	31	0.026
	I encourage my patients to observe fitness assessments and health screening	60	44	13	29	30	0.031
	patients encouraged to engage in healthy lifestyle	1	15	10	69	82	< 0.001
Health education, advise and counseling from nurses could positively enhance patients' health	I educate my patients on medication	1	3	1	58	117	0.007
	I educate my patients about their disease condition	1	3	1	59	116	0.048
Patients do not want health education from nurses	I educate my patients on medication	71	77	17	7	6	0.049
	I educate my patients about their disease condition	70	78	17	7	6	0.016
	I provide necessary guidance about diet and lifestyle	71	78	17	7	6	0.012
	I educate my patients on need for checkup	70	78	17	7	6	0.011
	I use my smart phone/devices for supportive information on HP	70	77	17	7	6	0.037
	patients encouraged to engage in healthy lifestyle	71	76	17	7	6	< 0.001
	I encourage my patients to observe fitness assessments and health screening	70	77	17	7	6	0.001

SA: Strongly Agree; A: Agree; N: Neutral; DA: Disagree; SDA: Strongly disagree.

Discussion

This research explored the perspectives of nurses regarding their knowledge, attitudes, and practices related to health promotion (HP). The findings indicated that the nurses believed they possessed sufficient understanding of patients' medical conditions to deliver effective health promotion. They also viewed healthcare facilities as suitable environments for HP and actively

encouraged patients to adopt healthier lifestyles. Supporting these professionals with resources and training is critical to sustaining and improving their contributions to HP.

The analysis demonstrated that longer professional experience was linked to greater knowledge in health promotion, highlighting the value of experience in developing nursing expertise and skills (18). As noted by Lartey et al., experienced nurses bring significant wisdom and competence, which is crucial for delivering high-quality care (19). However, experience alone may not suffice; nurses require specific exposure to health promotion and health literacy to develop the necessary knowledge in these areas (20).

The study further underscored the role of nurses' perceptions in shaping their HP practices. For instance, nurses who recognized the importance of understanding disease processes were more likely to educate patients on medication adherence, routine check-ups, and healthy behaviors. This aligns with the findings of Al-Noumani et al., which showed that belief in the value of medication adherence improved compliance (21). In contrast, a study by Ojong et al. highlighted a gap between knowledge and practice, as good awareness of routine check-ups did not always translate into action (22). This discrepancy may be influenced by contextual factors, such as institutional support or access to resources (23, 24).

A key finding in this research was that nurses' perceptions, shaped by both their education and practical experiences, significantly influenced their HP efforts. For example, the belief that healthcare facilities are ideal settings for HP encouraged some nurses to use technology to access relevant information and educate patients. Previous studies have similarly demonstrated the effectiveness of integrating organizational support into HP initiatives (8, 15). Educating patients remains an integral part of healthcare delivery, with nurses playing a pivotal role in shared decision-making, enhancing treatment adherence, and improving patient satisfaction (27).

This study's findings resonate with those of Timmers et al., who observed that educating patients at the point of care, facilitated by accessible medical information via smart devices, enhances compliance and health outcomes (28). However, this study did not find a significant relationship between the perception of hospitals as ideal settings for HP and educating patients about their conditions. This may reflect gaps in nurses' specific knowledge about certain health issues (29). Nikitara et al. emphasized that patient education by nurses, particularly for chronic diseases like diabetes, empowers patients to manage their conditions effectively (29).

The study also identified a positive correlation between nurses' knowledge and their HP practices. Adequate understanding of patients' conditions was strongly associated with providing guidance on lifestyle changes such as smoking cessation, diet, and physical activity. Previous research has shown that sufficient knowledge is essential for effectively addressing these aspects of patient care (30, 31). Although some nurses argued that dietary counseling falls within the purview of dietitians, equipping nurses with the necessary knowledge is a cost-effective strategy for reducing healthcare expenses (30, 32). Enhanced training can enable nurses to confidently fulfill their HP responsibilities, particularly in guiding patients toward healthier lifestyle choices (32).

Conclusion

This study examined the impact of nurses' knowledge and perceptions on their health promotion practices. The results highlighted that nurses' understanding of HP significantly influenced their attitudes and actions toward promoting patient health. HP plays a vital role in advancing public health goals and achieving universal health coverage. Given their frequent interactions with patients, particularly those managing chronic conditions, nurses are uniquely positioned to lead and deliver HP interventions. Comprehensive training programs, both at the undergraduate level and as ongoing professional development, are essential to ensure that nurses remain informed about the latest HP strategies. Future research should explore the

development of sustainable models to enhance HP practices and drive meaningful reforms in the field.

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