Determining Female Physicians' and Nurses' Practices and Attitudes Toward Breast Self-Examination in Istanbul, Turkey

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Purpose/Objectives: To determine female physicians' and nurses' practices and attitudes toward breast self-examination (BSE).

Design: Descriptive, cross-sectional.

Setting: Two large, bed-capacity university hospitals and 11 smaller, bed-capacity public hospitals.

Sample: 201 female nurses and 149 female physicans who work day shift on medical and surgical wards.

Methods: Data were collected on a questionnaire form that was prepared based on information in the literature. The questionnaire had three sections: sociodemographic characteristics, health characteristics, and attitudes and practices related to BSE. Data were analyzed using t tests and chi-square tests.

Main Research Variables: Attitudes and practices related to BSE, clinical breast examination, and mammography.

Findings: Almost all of the female physicians and nurses knew how to conduct BSE but did not prioritize practicing it.

Conclusions: Female physicians and nurses in Istanbul, Turkey, did not take enough care in the proper timing of BSE (i.e., day 5 to day 7 after menstruation with the first day of menstruation being day 1) despite their knowledge about it.

Implications for Nursing: Female physicians and nurses need to improve their knowledge and sensitivity concerning breast cancer and BSE if they are to improve and maintain their own well-being as well as carry out their professional roles.

Breast cancer is the most common cancer in women in Turkey (Ministry of Health, 1998). Tumors larger in diameter and the presence of axillary lymph node involvement increase mortality rates. As a result, early diagnosis and treatment can decrease mortality from breast cancer. A diagnosis in the early stage of breast cancer has a positive effect on prognosis and allows for breast conservation surgery in appropriate cases. Breast self-examination (BSE), clinical breast examination (CBE), and mammography are the most commonly used methods of breast cancer screening (Akyolcu, 2001; Coleman et al., 2003; Igci & Asoglu, 2003; Smeltzer & Bare, 2000; Smith et al., 2003; Susan G. Komen for the Cure, 2006).

In recent years, the value of BSE and its role in reducing mortality rates from breast cancer have been controversial. Until the issue is resolved, women should continue BSE in addition to regular mammography and CBE screenings (Dirksen, 2004).

The American Cancer Society recommended that women begin BSE at age 20 (Roux, 2001). Before mammography began to be widely used, 90% of breast cancers were detected by women themselves (Igci & Asoglu, 2003). The percentage has decreased with the use of mammography, which can detect cancer before it becomes palpable (Igci & Asoglu).

A selective review of the literature showed that 19%–40% of women perform BSE regularly (Coleman, 1991). Rosvold, Hjartaker, Bjertness, and Lund (2001) reported that 44% of Norwegian female physicians regularly perform BSE; of German physicians, 86% practice BSE (Rummler & Schimpf, 1990). Devine and Frank (2000) found that fewer than half of 300 nurses and nursing students in the United States regularly performed BSE. Haji-Mahmoodi et al. (2002) stated that women in Tehran, Iran, had inadequate knowledge and behaviors about healthcare practices related to breast cancer and that their knowledge level needed to be increased. Some reasons mentioned by women who did not perform BSE included not remembering, not having enough information about BSE, lacking confidence in performing BSE, and being afraid of finding a mass (Dirksen, 2004).

The present study was conducted to determine the attitudes and practices of female physicians and nurses in Istanbul, Turkey, related to BSE. The study was designed to answer the following research questions: Do female physicians and nurses in Istanbul perform BSE? Do female physicians and nurses perform BSE at regular intervals? Do female physicians and nurses who perform BSE time BSE properly? and What are the reasons that female physicians and nurses perform BSE-related practices?

Methods

Sample

The cross-sectional descriptive study was conducted from November 2002 through May 2003 at 13 hospitals in Istanbul, Turkey. Two of the hospitals are large bed-capacity university hospitals and 11 are smaller public hospitals. The

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Quick Facts: Turkey

Geography, history, and political organization: Three percent of the total area lies in southeastern Europe, and the remainder is in southwestern Asia. The total area is 780,580 km^2, slightly larger than the size of Texas.

Social and cultural features: Turkey has a highly heterogeneous social and cultural structure, with sharp contrasts among population groups. The modern and traditional exist simultaneously within the society. Family ties are strong and influence the formation of values, attitudes, aspirations, and goals.

Economy: Turkey can be classified as a middle-income country. The rate of economic growth has been comparatively high in recent years, and the economy has undergone a radical transformation from an agricultural base to an industrial one, particularly since the 1980s.

Population: Turkey is the most populous country of the Middle East. The population was 72 million in 2005 and is expected to reach 76 million by 2010 and 88 million by 2025. Approximately 35% of the total population live in rural areas. Twenty-six percent of the total population are younger than age 15; only 7% are older than age 65.

Healthcare system priorities and programs: The Ministry of Health is officially responsible for designing and implementing nationwide health policies and delivering healthcare services. The Ministry also regulates prices of medical drugs and controls drug production and the operation of pharmacies. Health institutions that provide medical care and preventive health services include inpatient institutions (hospitals and health centers) and outpatient institutions (health units, health houses, infirmaries, mother and child health centers, and dispensaries). Services provided by the institutions include personal health cards, which are sent to the Ministry monthly together with information on health status. Mean life expectancies for women and men are 74.0 years and 69.1 years, respectively, with an overall mean of 71.5 years.

Education: Formal education includes preschool, primary school, secondary school, and higher education institutions. Eighty-seven percent of the population are literate.

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study sample was composed of female physicians and nurses who work day shift on the medical and surgical wards of the hospitals. Participants included 201 female nurses and 149 female physicians; 81% worked at a large hospital, and 19% worked at a small hospital.

Instruments

Data were collected on a questionnaire that was prepared based on information in the literature. The questionnaire had three sections: sociodemographic characteristics, health characteristics, and attitudes and practices related to BSE.

Sociodemographic characteristics included age, years of employment, educational status, marital status, and current place of employment. Health characteristics included age at menarche, parity status, breast-related illnesses, family history of cancer, and breast cancer. Attitudes and practices related to BSE were determined via questions such as "Do you perform BSE?" "How often do you perform BSE?" "When do you perform BSE?" "Why do you not perform BSE?" "Have you had a physician give you a breast examination?" and "Have you had a mammogram?"

The questionnaire form was pilot tested on a sample of 40 participants (20 female physicians and 20 female nurses) to check clarity of the items. No revisions were necessary.

Procedure

Permission to conduct the research was obtained from the hospitals before data were collected. The purpose of the study was explained to potential participants. Those who agreed to participate were given the questionnaire to complete. The data were collected one time in an appropriate room on the ward where participants worked. The form took approximately 15–20 minutes to complete.

Data Analysis

Descriptive statistics were used to analyze sociodemographic variables and variables related to general health. A student t test and chi-square test were used to determine differences between groups. The overall significance level was set at 0.05.

Results

Of the 350 healthcare professionals included in the research, 57% were nurses (n = 201), and 43% were physicians (n = 149). The mean age of the nurses was 30.59 years and the mean age of the physicians was 28.65 years. The majority of physicians (78%) had worked for 1–5 years; 36% of nurses had worked for 1–5 years, and 30% had worked for 11–15 years. Forty-five percent of nurses (n = 89) and 21% (n = 31) of physicians had given birth to a child. The overwhelming majority of subjects in the sample (86% of nurses, 93% of physicians) had not had any breast-related disease (see Table 1).

Eight percent of nurses (n = 15) and physicians (n = 12) stated that they had a family history of breast cancer, and of those, the majority involved second-degree relatives (e.g., grandmother, aunt).

Twenty-eight percent of nurses and 32% of physicians did not practice BSE. When asked why they did not, 27% of nurses

Table 1. Subject Risk Factors

	Nurses (N = 201)		Physicians (N = 149)	
Variable	**$\bar{X}$**	**SD**	**$\bar{X}$**	**SD**
Age at menarche (years)	13.20	1.25	12.87	1.18
Age at first pregnancy (years)	24.93	3.43	26.77	2.47
Variable	**n**	**%**	**n**	**%**
Childbirth				
Yes	89	45	31	21
No	110	55	118	79
Breast-related disease				
Yes	29	14	11	7
No	172	86	138	93
If yes, treatment				
Excision of mass	2	1	2	1
Fibroadenoma	6	3	3	2
Breast abscess	7	4	3	2
Fibrocystic disease	13	7	3	2
Other	3	2	–	–

and 24% of physicians stated that they could not find the time, 7% of nurses said that they did not know how to perform BSE, 64% of nurses and 68% of physicians said that they did not take BSE seriously, and 2% of nurses and 6% of physicians said they did not believe that BSE is beneficial (see Table 2).

Seventy-two percent of nurses (n = 145) and 68% of physicians (n = 102) practiced BSE, but 80% of nurses (n = 116) and 63% of physicians (n = 64) did not know the frequency with which they performed it. Physicians (34%, n = 35) regularly performed BSE more than nurses (15%, n = 22).

Forty-one percent of nurses (n = 60) and 35% of physicians (n = 36) did not perform BSE at a specific time, but 40% of nurses (n = 58) and 38% of the physicians (n = 39) performed it at the proper time. Most nurses (96%, n = 192) and physicians (95%, n = 142) said they would go see their physicians if they felt any abnormality in their breasts.

Seventeen percent of nurses (n = 35) and 15% of physicians (n = 23) had had a breast ultrasonogram or mammogram, but the majority of physicians (65%) and 36% of nurses only had it done once; 30% of nurses (n = 10) had it done once every two years. Seventy-five percent of physicians (n = 151) and 80% of nurses (n = 119) stated that they had not previously had a CBE by a physician; of those who did, 50% of nurses (n = 23) and 63% of physicians (n = 17) only had it done once. Eighty-one percent (n = 22) of participants who had a family history of breast cancer regularly performed BSE, but only 70% (n = 224) who did not have a family history of breast cancer regularly performed BSE (see Table 3).

Discussion

BSE-related attitudes and practices of female physicians and nurses who teach BSE to the public were determined. Most nurses and more than half of physicians in the sample reported that they practice BSE. No significant difference existed between the two groups in regard to BSE status.

Contrary to the results of Rosvold et al. (2001), who found that only 6% of female physicians believed that BSE was unnecessary, most physicians and nurses (65% and 70%, respectively) believed that BSE was unnecessary. On the other hand, Haji-Mahmoodi et al. (2002) determined that most healthcare practitioners (63%–72%) did not practice BSE because it takes time, is difficult to perform, and is too much trouble. In the present study, female physicians performed BSE regularly more than nurses. The finding suggests that female physicians are more sensitive to BSE and may have been affected by having a family history of breast cancer, even though the actual percentage was low (8%). Chong, Krishnan, Hong, and Swah (2002) found that 94% of community health nurses in Singapore performed BSE, and in a Turkish study by Karahan, Topuzoglu, and Harmanci (2002), half of the nurses regularly performed BSE. Devine and Frank (2000) found that almost all of the nurses regularly practiced BSE in their study conducted in the United States. Thirty-five percent of healthcare center employees in Greece in a study by Patistea, Chliaoutakis, Darviri, and Tselika (1992) practiced BSE regularly. In the present study, only 25% of physicians and nurses performed BSE on a regular basis. In contrast, Haji-Mahmoodi et al. (2002) determined that 6% of healthcare practitioners in Tehran, Iran, performed BSE on a monthly basis.

The finding that most physicians and nurses did not regard BSE as important suggests that healthcare professionals need to change their attitudes and behaviors regarding BSE and continuing education programs should focus more on it. In addition, physicians and nurses who perform BSE regularly are responsible for teaching patients. In a study by Rosvold et al. (2001), physicians stated that they forgot to perform BSE regularly and that they may have difficulty motivating their patients to perform BSE as a result. The finding that only 25% of female physicians and nurses had had a CBE is similar to results by Odusanya and Tayo (2001) in which only 30% of 204 nurses had had a CBE.

Table 2. Physicians' and Nurses' Performance of Breast Self-Examination (BSE)

		Nurses (N = 201)		Physicians (N = 149)	
Question	**Answers**	**n**	**%**	**n**	**%**
Do you perform BSE?	Yes	145	72	102	68
	No	56	28	47	32
If no, why?	I can't find the time.	15	27	11	24
	I don't know how to do it.	4	7	–	–
	I don't take it seriously.	36	64	32	68
	I don't believe that it is beneficial.	1	2	3	6
	No answer	–	–	1	2
If yes, with what frequency?	Regularly, every month	22	15	35	34
	When it comes to mind	116	80	64	63
	Once a year	6	4	3	3
	Other	1	1	–	–
When do you perform BSE?	When it comes to mind	60	41	36	35
	At the start of menstruation	5	4	3	3
	After menstruation	2	1	–	–
	Immediately after menstruation	19	13	21	21
	Day 5 to day 7 after menstruation[a]	58	40	39	38
	No answer	1	1	3	3

[a] First day of menstruation is day 1.

Table 3. Practice of Breast Self-Examination (BSE) According to Family History of Breast Cancer

	Family History (N = 27)		No Family History (N = 319)	
Variable	**n**	**%**	**n**	**%**
Performed BSE	22	81	224	70
Did not perform BSE	5	19	95	30

The finding in this research that 8% of the participants had a history of familial breast cancer is consistent with the literature. Most physicians and nurses with a familial history of breast cancer performed BSE; however, the researchers expected all healthcare professionals who are educated on the subject to perform BSE.

Limitations

The study was conducted with a sample of female physicians and nurses who work the day shift on surgical and medical wards in 13 hospitals in Istanbul, Turkey, 11 of which were public hospitals. The sample reflected a profile of university hospital employees. The study findings cannot be generalized to include all female physicians and nurses in Turkey.

Implications for Nursing

Although female physicians and nurses had knowledge of BSE, the frequency with which they performed it was not optimal in the two groups, nor did they attach enough importance to when and how often to perform the examination. Most subjects with familial breast cancer history, on the other hand, performed BSE every month. Continuing education programs on BSE should be developed to educate physicians and nurses in public and university hospitals to improve and maintain the well-being of patients.

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