Department of Clinical Psychology, Skubiszewski Medical University of Lublin
Medical School in Przemyśl

DAGMARA PODGÓRSKA-KOWALCZYK, ALICJA NASIŁOWSKA-BARUD

Assessment of knowledge, skills, and attitudes of nuns with regard to breast cancer prophylaxis

In Poland, mammary gland cancer is the most frequently occurring malignant tumour in women and, at the same time, the one that is the leading cause of cancer death. Breast cancer cases constitute 18.4% of the general number of diseases and ca. 14.1% of the general number of deaths (data for 1996). Epidemiological data show that the number of breast cancer cases and deaths is still alarmingly growing. It is estimated that in the nearest years every 16th Polish woman will suffer from this kind of tumour during her lifetime (6, 7).

An early detection of changes or abnormalities constitutes the basic prognostic factor and a chance for total cure. In Poland, the major method of detecting changes in breasts is still self-examination, a technique which is simple, cheap, and effective, as 90% of breast cancer cases are detected by women themselves. (1, 2) According to the prophylactic recommendations of the Polish Anti-cancer Committee, self-control should be performed every month from the age of 25 years. Complementary screening with the use of mammography should be carried out at least once between the ages of 35 and 40, then, every two years, and once a year between the ages of 50 and 65 (4). Unfortunately, access to this type of examination, particularly in small towns and villages, is very difficult, which makes self-examination the only diagnostic method available.

Breast cancer prophylaxis should include as its essential element educational activities consisting in providing women with basic information concerning risk factors and early tumour symptoms and, above all, helping them develop the habit of breast examination.

The aim of the study was to verify whether nuns are aware of the need to examine breasts and whether the level of their knowledge and skills is sufficient to carry out this examination properly.

MATERIAL AND METHODS

Subject to research were nuns from various convents in the town of Przemyśl. The sample consisted of 82 nuns aged between 23 and 78. Mean age was 39.5 years. The most numerous group consisted of nuns aged 23 to 30. The majority of 48 (58.5%) nuns had secondary education, 21 (25.6%) were university graduates, 9 (10.9%) had vocational training and 4 (4.8%) had elementary education. The research tool used was a self-developed questionnaire. The obtained material was analysed statistically and descriptively.

RESULTS

Table 1 shows the nuns' familiarity with risk factors responsible for developing malignant mammary gland cancer. The best known risk factor is a history of breast cancer in family. Seventy three (90.2%) of the nuns were aware of this fact. They also mentioned breast injuries 40 (48.7%), tobacco smoking 19 (23.1%) and other breast diseases 20 (24.3%). Late age delivery was pointed to by 13 nuns (15.8%), and lack of children by 4 nuns (4.8%).

Table 1. Familiarity with risk factors

Breast cancer risk factors	Number of responses	% *
Age	24	29.2
Heredity (breast cancer in family)	74	90.2
Late age delivery	13	15.8
Breast injuries	40	48.7
Other breast diseases	20	24.3
Tobacco smoking	19	23.1
Early menarche	-	-
Nulliparity	4	4.8

* Subjects gave more than one response

The most alarming symptom, which would make 59 (71.9%) nuns visit a doctor is thickening in the armpit. 52 (63.4%) nuns would be worried by a pain in the breast and 33 (37.8%) by a retraction of the nipple. Only 8 (9.7%) subjects mentioned lump as a potential symptom, and 7 (8.5%) listed discharge from the nipple.

Table 2. Early breast cancer symptoms, according to the subjects

Breast cancer symptoms		Number of responses	% *
Pain in the breast		52	63.4
Retraction of the nipple		31	37.8
Skin rash		18	21.9
Thickening in the underarm area		59	71.9
Breast asymmetry		18	21.9
Others	discharge from the nipple	7	8.5
	lump	8	9.7

* Subjects gave more than one response

When asked about the age at which women should start examining their breasts, 42 (51.2%) nuns mentioned the age of 25, 18 (21.9%) mentioned the age of 15, 15 (18.2%) mentioned the age of 30, and 17 (20.7%) mentioned the age of 40–50.

Over half of the respondents (54, i.e., 65.8%) stated that breasts should be controlled two to three days after the end of menstruation, 10 (12.2%) persons claimed that the control should be performed in

the middle of the menstruation cycle, and the remaining 18 (21.9%) nuns were of the opinion that time is irrelevant in this case.

Sixty-three (76.8%) of the respondents mentioned the erect and recumbent positions as necessary for self-examination, the remaining persons gave the wrong response that examination requires a seated posture or that the position does not matter, 8 (9.7%) and 11 (13.4%) respondents, respectively. More than half of the nuns correctly specified the time 54 (65.8%) and the position 63 (76.8%) of self-examination.

The majority of 64 (78.0%) nuns were also of the opinion that the skill of self-examination is very important and necessary. Sixty (73.1%) nuns believe that a woman can detect cancer by herself and as many as 78 (95.1%) state that cancer is a curable illness but only when diagnosed early.
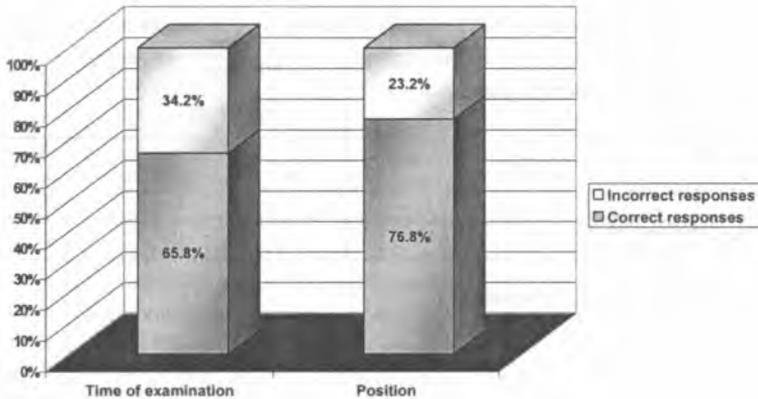

Fig. 1. Correct responses regarding the position and time of self-examination

Three (3%) nuns have admitted to regular breast examination. 50% do not examine themselves at all, and 46.3% do it sporadically. Seventeen (20.7%) subjects feel endangered by breast cancer, 34 (41.4%) do not have a sense of personal jeopardy, and 31 (37.8%) have no opinion on this matter.
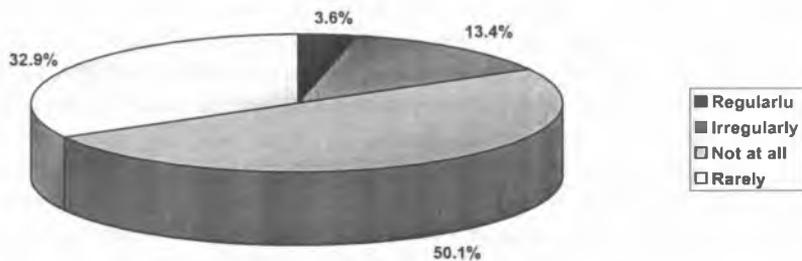

Fig. 2. The frequency of self-examination by nuns

According to 45 (54.9%) respondents, mammography is the basic test in detecting breast cancer; 18 (21.9%) believe self-examination to be the elementary form of screening; 13 (15.8%) mention computer tomography; and 6 (7.3%) breast ultrasonography.

For 56 (68.2%) respondents, the main source of information was their vocational experience. The knowledge of 17 (20.7%) respondents came from their personal experience and that of the remaining 32 (39.0%) persons from the mass-media – press, radio, literature.
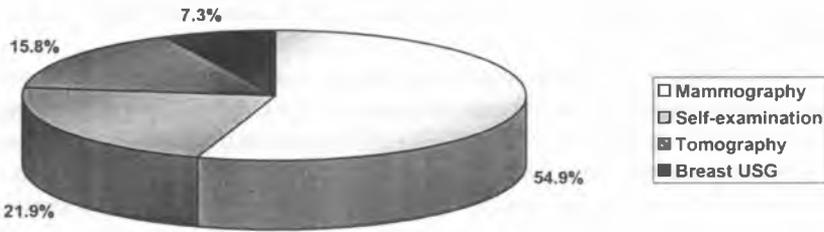
Fig. 3. The basic screening method in detecting breast cancer in the respondents' opinions

Table 3. The respondents' sources of information about breast cancer

Source of information	Number of responses	%*
Mass-media	32	39.0
Personal experience	17	20.7
Vocational experience	56	68.2

* Subjects gave more than one response

DISCUSSION

Mammary gland tumour prevention comprises all the activities aiming at decreasing the risk of developing breast cancer. One of the important prevention strategies is determining the risk factors for a given population and their elimination from the environment of the endangered persons (2, 4, 5, 6).

The basic independent risk factor is a woman's age. Epidemiological studies show that the frequency of developing malignant breast tumours increases rapidly after the age of 35, and very high incidence of the disease persists until old age (7). There also exists a correlation between cancer incidence and lack of children. Because of the accumulation of the above factors, the examined sample is a high-risk group. Unfortunately, the obtained results have not confirmed the respondents' awareness in this matter. Only one third of the nuns mentioned age and merely 4 (4.8%) of them listed lack of offspring as higher-risk factors. The most well-known and empirically confirmed risk factor is family history. The presented results show a high awareness of the nuns in this matter.

Breast injuries and smoking, frequently mentioned by the nuns, may be connected with the potential risk of developing breast cancer, but their value is difficult to estimate quantitatively. Most studies of this subject do not confirm the existence of a correlation between the above-mentioned factors and developing a malignant breast tumour (2). It may be the case that the nuns' decision to place tobacco smoking as the second most important risk factor after family history had been influenced by the commonly available information about the detrimental effects of smoking and its influence on developing other cancerous diseases.

Familiarity with early tumour symptoms is a very important element of prophylaxis. The knowledge of the changes constitutes the basis of a properly conducted self-examination and of a positive prognosis. The changes that one should pay attention to include the shape and symmetry of breasts, the occurrence of lumps and skin changes, the appearance of nipples and areolas, and atypical pain in the breasts (4, 6). The presented results regarding the familiarity with the early symptoms of the tumour are worrying; the more so that two thirds of the nuns considered thickening in the underarm and pain in the breasts to be early symptoms of the tumour. These symptoms, according to clinicians, signal a more advanced

stage of the illness and, hence, a worse prognosis (3). It is also worrying that almost 80% of the subjects were able to enumerate only one symptom, while the remaining respondents mentioned two or rarely three symptoms. The obtained results regarding the knowledge of warning signals of malignant breast tumour correlate with the results regarding self-examination. In the studied sample only three (3.6%) nuns admitted to regular breast examination.

It may be assumed that nuns do not control their breasts because they do not know what exactly they should be controlling and consciously brush aside the thought of being personally endangered by the illness. The results confirm this hypothesis as almost 80% of the nuns do not feel personally endangered by cancer or do not have any opinion on that matter.

Regular self-examination carried out at an appropriate time and in an appropriate position allows one to detect a lump two times smaller in diameter than in the case where no self-examination has been performed (7). The diameter of the lump is a basic prognostic factor, hence, the immense rank of self--examination. The material presented in the study shows that most of the nuns know when and in what position breasts should be examined. The majority of them are also convinced that a woman can detect cancer by herself and that cancer is curable as long as it has been early detected. It is, therefore, surprising that in spite of their great knowledge and awareness, they do not appreciate the importance of self--examination. Among the familiar methods of breast cancer detection, self-examination was ranked much lower than mammography. It was considered a basic diagnostic method only by every fifth nun.

Because the examined nuns belong to convents where caring for the sick is a priority, it is hardly surprising that what they know about breast cancer is based on "professional" experience. However, their knowledge is incomplete and does not ensure appropriate orientation in the investigated issue. It should be stressed that nuns, living in isolation and according to certain rules, have limited access to oncologic information from educational TV programmes, newspapers, leaflets, posters, and so their knowledge is limited.

Examination of the dependence between the age of respondents, education, time spent in the order and the knowledge of breast cancer prophylaxis has not shown any significant differences.

CONCLUSIONS

1. The nuns' level of knowledge concerning the risk factors and early symptoms of tumours is unsatisfactory.

2. The prevailing majority of nuns, in spite of their knowledge of the rules of self-control, do not perform it on a regular basis.

3. The awareness of the need of breast control is high but does not affect the regularity of examination.

4. There is a need to include nuns in educational campaigns concerning breast cancer prophylaxis because of their unsatisfactory knowledge of the issue and an accumulation of risk factors of this tumour in the investigated social group.

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SUMMARY

The aim of the study was to verify whether nuns are aware of the need to self-examine their breasts and whether their level of knowledge and skills is sufficient to carry out the control properly. Subject to the study were nuns from various convents from the town of Przemyśl. The sample consisted of 82 nuns. The research tool used was a self-constructed questionnaire. On the basis of the study, it has been found that the subjects' level of knowledge regarding breast cancer is unsatisfactory and, although the awareness of the need of self-control is high, it does not influence the regularity of performance thereof.

Ocena wiedzy, umiejętności i postaw zakonnic wobec profilaktyki raka piersi

Celem pracy było zbadanie, czy siostry zakonne są świadome potrzeby wykonywania samokontroli piersi i czy poziom ich wiedzy oraz umiejętności jest wystarczający, by prawidłowo tę kontrolę wykonywać. Badaniem objęto zakonnice z różnych zgromadzeń zakonnych Przemyśla. Grupę badawczą stanowiły 82 zakonnice. Narzędziem badawczym był kwestionariusz ankiety konstrukcji własnej. Na podstawie badania stwierdzono, że poziom wiedzy badanych z zakresu raka piersi jest niezadowalający i choć świadomość potrzeby samokontroli jest wysoka, nie wpływa to na regularne jej dokonywanie.