RESEARCH COMMUNICATION

Knowledge and Concerns about Cancer in Patients with Primary Gynecologic Cancers

Zahra Eftekhar,* Fariba Yarandi**

Abstract

Objective: The aim of this study was to measure the level of knowledge about cancer among patients with primary gynecologic cancers and the rate of awareness for diagnosis.

Methods: Two hundred patients with primary gynecologic cancers in Vaie Asr & Mirza Kochak Khan hospitals, Tehran/Iran, participated and entered the study and were interviewed by trained nurses. The interview included questions about knowledge of their cancer and risk factors.

Results: One hundred fifteen of 200 subjects (58%) knew that their disease was malignant, of which 56 were aware of the exact diagnosis. Fifty six percent of the subjects believed that doctors must say the true diagnosis. The level of general knowledge about cancer was poor in 34%of cases. Regarding cancer risk factors, 47% had a poor level of knowledge. Misconception about injury and depression as predisposing factors were common. Level of general knowledge was significantly higher in younger than in older patients ($p<0.05$). Also patients with a greater length of formal education had a higher level of knowledge ($p<0.0001$). Patients who received information from medical personnel and who were aware of diagnosis had a higher level of knowledge ($p<0.0001$).

Conclusion: The level of knowledge about cancer should be promoted in both the general public and in patients. Medical personnel may play a great role in this field.

Key Words: Gynecologic cancer - knowledge - misconceptions

Asian Pacific J Cancer Prev, **5**, 213-216

Introduction

Planning and conducting health care programs such as cancer screening and also cancer treatment have raised awareness of the need for the public to be well informed about cancer and for patients to be educated about their disease and treatment. Most patients request such information. Moreover well informed patients more actively take part in treatment decisions and can maintain their hope even they have received partly negative information about their disease (Machoki and Rogo, 1990; Carlson and Strong, 1997; Cassileth et al., 1981; Reynolds et al., 1981; Brant, 1991; Wallberg et al., 2000).

Cassileth et al (1981), Von Essen and Sjoden (1991) and Suominet et al (1992) have concluded that cancer patients and their families consider information to be of great importance. Misconception about cancer may increase the level of fear in the general public and render coping more difficult (Carlson and Strong, 1997). Helping patients become well informed although perhaps contrary to common belief, assists in sustaining hopeful attitudes according to Cassileth et al (1981) Medical personnel may have a great role in this field (Carlson and Strong, 1997).

The purpose of this study, firstly, was to assess the level of knowledge in women with primary gynecologic cancer and the rate of awareness of diagnosis, and secondly to find which factors may be related to the level of knowledge.

Materials and Methods

This prospective study was conducted on women with primary gynecologic cancer who attended a gynecology oncology clinic or were hospitalized in related wards in Vai-e-Asr & Mirza Kochak Khan hospitals through the year

**Mirza Koochak Khan Hospital and Vali-e-Asr Reproductive Health Research Center Tehran University of Medical Sciences, Tehran, Iran **Corresponding address: Fariba Yarandi, MD, Assistant Professor of Gynecology & Obstetrics, Tehran University of Medical Sciences, Mirza Koochak Khan Hospital and Vali-e-Asr Reproductive Health Research Center, Tehran, Iran Phone: 0098-21-8904172, E-mail: valrec2@yahoo.com*

2000. The inclusion criterion was a histologically confirmed gynecologic cancer. Patients gave oral consent to being included in the study.

Two hundred patients entered the survey consecutively and completed the study questionnaire through interview. The questionnaire was designed based on a comprehensive review of the literature and the opinions of experts in gynecology oncology. It consisted of questions about cancer in general and cancer risk factors, which was pilot tested on 20 patients. The questions were based on general facts that should be well known and also on common misconceptions prevalent in the population. Each question was answered as yes/no/I do not know or agree/disagree/no idea as alternatives.

The scoring of the questionnaire was performed using a weighted scoring system. Sum scores were calculated for each respondent. Ranging from zero to twenty. In presentation of results, missing answers were defined as a poor level knowledge with sum scores less than 10.

Descriptive statistics were generaled for the patient's characteristics and level of knowledge. Chi-square test or fishers exact test were performed whenever appropriate and significance concluded at a level of $p<0.05$.

Results

The age of patients ranged from 14 to 83 years with a mean of 50.7±15. Most of them were married (96%) and members of households (86%). Seventy two women were illiterate. Forty eight patients were educated up to primary school, 72 up to secondary school and 8 patients had university degrees. The site of cancer was the cervix in 85, the endometrium in 55, the ovary in 50 and the vulva, vagina and fallopian tubes in 10 patients. The median time interval from diagnosis was 5 months (range: 0-24).

Fifty six patients were aware of the exact diagnosis, 59 patients stated that they had had a malignant disease, 75 believed their disease was benign and 10 were unaware of their disease. Sixty six percents of patients stated that they were interested in being informed if they got a malignant illness and 58% agreed with this statement that "doctors must say the true diagnosis to their patients". The main source of health information was "word of mouth" from family and friends (46%), closely followed by television, radio, magazines and books (40%). Information was obtained from medical personnel in 10% of cases whereas 46% of respondents believed that medical personnel are the best source for obtaining health information. Fifty seven percent of patients agreed with the statement that "if we know more about cancer, our fear of cancer decreases". The percentages of correct answers to general statements about cancer are summarized in Table 1 and about cancer risk factors in Table 2.

Sixty seven percent knew that cancer was not contagious. Fifty one to 60% of the respondents were well informed about issues such as capacity for metastasis, prognosis and the Pap-smear test. Only 20% of patients knew (correctly) that cancer is not the most common cause of death among Iranian women. The rate of correct answers related to cancer progression was also low at 21% (Table 1).

A great majority knew smoking to be a risk factor. But most patients thought (wrongly) that physical injury or depression may lead to development of cancer (Table 2)

Thirty three percents stated that low marriage age may be a risk factor for gynecologic cancer, and 40% answered correctly no to the question about oral contraceptive pills as a risk factor.

The level of general knowledge differed significantly according to age, length of formal education and source of information (Table 3).

With increasing age more patients labeled as poor level knowledge (50% in ages>49 versus 30% in ages <30, $p<0.05$). In contrast with higher length of education this rate deceased (13% in university educated versus 58% in primary/illiterate one, $p<0.00001$).

The rate of poor level knowledge was 16% when information were received by medical personnel, it was 31% and 53% when information was obtained from TV/Radio or publications ($p<0.0001$).

Poor level knowledge was present in18% of patients who knew that they had had a malignant disease. This rate was 57% in unaware patients ($p< 0.0001$) (Table3). There was no significant relationship between level of knowledge and time from diagnosis.

The level of knowledge about cancer risk factors did not significantly differ according to age, length of formal

Table 1. Percentage of Correct Answers to Statements about General Knowledge of Cancer

Questions about general knowledge about cancer (correct answer)	Number (Correct %)
Cancer is the most common cause of death among Iranian women (No)	39 (20)
Cancer is a contagious disease (No)	133 (67)
Cancer can spread to other organs (Yes)	102 (51)
Usually cancer tumors rapidly grow (No)	41 (21)
If a gynecologic cancer is diagnosed at an early stage, the prognosis is very good (Yes)	120 (60)
Patients may be cured from cancer and will never develop recurrent disease (Yes)	93 (47)
Pap-smear is an useful test for early detection of cervical cancer (Yes)	117 (59)
If we know more about cancer our fear of cancer tends to decrease (Agree)	113 (57)
Doctors should inform the patients of the exact diagnosis (Agree)	115 (58)

Table 2. Percentages of Correct Answers to Statements about Cancer Risk Factors

Questions about general knowledge about cancer (answer)	Number (%)
Physical injury may induce cancer (No)	76 (38)
Depression give rise to cancer (No)	43 (22)
Are these cancer risk factors?	
Smoking (Yes)	159 (80)
Breast feeding (No)	164 (82)
Oral contraceptive pills (No)	80 (40)
Abortion (No)	87 (44)
Low marriage age (Yes)	66 (33)
Positive family history (Yes)	98 (49)
Illegal sexual behavior (Yes)	94 (47)

education and source of information. Only patients who were aware of their malignant disease, had a lower rate of poor level knowledge than unaware patients (37% versus 60%, $p<0.003$)

Discussion

Fifteen (58%) patients knew that they had a gynecologic malignant disease, but only 56(28%) were aware of the exact location. These data indicate that our patients were spared from exact diagnosis, compared with Canadian study where 98% of the patients knew that they had a cancer and 87% were able to name the exact location (Mackillop et al., 1988) and in Turkish study in which 84% of the cancer patients were aware that they suffered from a malignant disease (Derman and Serbest, 1993). This rate was only 38% in an Italian survey (Ponzato et al., 1994).

We must consider that 66% of our patients were interested being informed if they had a malignant disease and 58% believed that the doctors must say the true diagnosis to them. Correct response rate about smoking as a risk factor was in good agreement with Maria et al findings (Carlson and Strong, 1997) but the misconception that physical injury or depression give rise to cancer was common in our study. In contrast, Carlson and Strong (1997) found only 7 and 3% of patients, respectively, believed it. In a similar Saudi Arabian study 48-62% was uncertain or gave the wrong answer about physical injury (Ezzeldin et a.,l 1991).

Forty percents of our respondents answered correctly no, when asked about possible relationship between using O.C.P. and developing gynecologic cancer. It is a confusing issue for most women in Iran, because they have heard about the possible association between using O.C.P. and breast cancer through the media. On the other hand the majority of our patients were not able to distinguish between different types of female cancer. Also our question was not detailed regarding the kinds of hormonal pills.

In our study near 60% of respondents were aware of utility of Pap smear as a screening test for early detection of cervical cancer. This rate is somewhat better than a Keynesian study which reported the majority of women with cervical cancer did not know Pop smears. (Machoki and Rogo, 1990)

In the current study most information appeared to be being passed on by "word of mouth" from family and friends whose understanding is restricted. This may result in misinformation and negative attitudes to cancer reinforced. Other common sources of information were TV/Radio and publications, these are sources that have a variable degree of accuracy, and which may be motivated to highlight the

Table 3. The Level of General Knowledge According to Characteristics of the Patients

Patient Characteristics	Number (Percent) Poor level (score: 0-9)	Moderate&Good level Scores> 10	p-Value
Age (years)			
14-29	6 (30)	14 (70)	$P < 0.05$
30-49	22 (32)	46 (68)	
≥ 50	56 (50)	56 (50)	
Education			
Illiterate/Primary	69 (58)	51 (42)	$P < 0.00001$
Secondary/Tertiary	14 (19)	58 (81)	
University degree	1 (13)	7 (87)	
Source of information			
Family/Friends	25 (31)	55 (69)	$P < 0.0001$
TV/Radio/Publications	49 (53)	44 (47)	
Medical personnel	3 (16)	16 (84)	
Awareness of diagnosis			
Are aware	20 (17)	95 (83)	$P < 0.0001$
Unaware	48 (57)	37 (43)	
Time for diagnosis			
0-12	54 (33)	108 (67)	Not significant
13-24	11 (32)	23 (68)	

more dramatic aspects of cancer and its treatment.

We found that younger and higher educated patients had higher level of general knowledge about cancer, which are in good agreement with data from the Cassileth et al (1981) and Wallberg et al (2000) studies. We mentioned that in Iran younger generation has more length of formal education than older. Our patients who received information from medical personnel had a higher level of general knowledge. Also women who were aware of their diagnosis did so.

Conclusion

Our patient's knowledge about cancer and its risk factor was relatively poor; they were not well informed about diagnosis. It shows there are still shortcomings in the delivery of information on cancer. In order to give more opportunities to patients for participating in their treatment decisions and initiate coping processes, it seems we ought to improve the communication between patients and medical personnel. Also we need promote the level of knowledge about cancer in general public, with special interest on lower educated women.

References

Brant B (1991). Informational needs and selected variables in patients receiving Brach therapy. *Oncol Nurse Forum*, **18**, 1221-7.

Cassileth BR, Zupkis RV, Sutton-Smith K, March V (1980). Information and participation preferences among cancer patients. *Ann Intern Med*, **92**, 832-6.

Carlson ME, Strong PM (1997). Facts, misconceptions and myths about cancer. What do patients with gynecological cancer and the female public at large knows? *Gynecol Oncol*, **65**, 46-53.

Derman U, Serbest P (1993). Cancer patients' awareness of disease and satisfaction with services: The influence of their general education level. *J Cancer Educ*, **8**, 141-4.

Ezzeldin I, Hassan A, Akram A, et al (1991). Women's knowledge of and attitude toward breast cancer in a developing country: Implications of program interventions-Results based on interviewing 500 women in Saudi Arabia. *J Cancer Educ*, **6**, 73-81.

Mackillop E, Stcwart W, Glinsburg A, Stewart S (1988). Cancer patients' perception f their disease and its treatment. *Br J Cancer*, **58**, 355-8.

Machoki JMN, Rogo KO (1990). Knowledge and attitudinal study of Kenyan women in relation to cervical carcinoma. *Int J Gynecol Obstet*, **34**, 55-9.

Ponzato P, Bertelli G, Losrado P, Landucci M (1994). What do advance cancer patients know of their disease? A report from Italy. *Support Care Cancer*, **2**, 242-4.

Reynolds PM, Sanson-Fisher RW, Poole AD, Harker J, Byrne MJ (1981). Cancer and communication: information-giving in an oncology clinic. *Br Med J (Clin Res Ed)*, **282**, 1449-51.

Suominen T (1992). Breast cancer patients' opportunities to participate in their care. *Cancer Nurs*, **15**, 68-72.

Von Essen L , Sjoden PO (1991). Patient and staff perceptions of caring: Review and replication. *J Adv Nurs*, **16**, 1363-74.

Wallberg B, Michelson H, Nystedt M, et al (2000). Information needs and preferences for participation in treatment decisions among Swedish breast cancer patients. *Acta Oncol*, **39**, 467-76.