

The Results of the Research on Some Aspects of Cancer Prevention and the Quality of Life of Cancer Patients

Karen Amlaev

Department of Medical Prevention and Epidemiology of Non-Communicable Diseases,
Stavropol State Medical University, Street Mira 310, 355017Stavropol, Russian Federation

Abstract: The study presents the results of a study of some aspects of cancer prevention and quality of life of cancer patients including the issues of adherence and health literacy. The accessibility and quality of care for cancer patients were estimated. The factors influencing the late request for patient care which includes family and economic status were determined. The role of different channels for informing patients about preventive measures and healthy lifestyle were studied.

Key words: Medical prevention, quality and accessibility of cancer care, oncology, treatment compliance, economic, patients

INTRODUCTION

Over the past 10 years the incidence of cancer in the world has increased by 20%. Every year 12 million new patients are diagnosed with cancer on the planet that's 4 times more than those who get infected with HIV. More than 6 million people worldwide die from cancer each year. According to the experts, 2.8 million cancer cases could have been easily prevented because they are caused by poor diet and the lack of physical activity (Askoxylakis *et al.*, 2010). In 2010 the number of registered for the first time cancer cases in Russia amounted to 517,000 people and the overall number of cancer patients registered on the books came up to 2.794,000 people. The death rate from cancer of the Russian population at the age from 0 to 64 years old is by 30% higher than in the "old" EU countries and is at the same level as the "new" EU countries. Oncological diseases in Russia are characterized by the high rate of deaths during the first year after diagnosis: for example, the percentage of deaths from lung cancer is 56, from stomach cancer-55. This indicates a late detection of these diseases. Working age men die from cancer almost two times more often than women but the incidence is higher among women (Health Insurance, 2017).

Modifiable risk factors for cancer development are connected with a wide variety of malignancies including cancer of the oropharynx, esophagus, larynx, lung, kidney, bladder, pancreas, skin, stomach, ovary, breast, cervix, prostate and colon (Stein and Colditz, 2004).

There are many risk factors for cancer development. However, according to the assessment of the WHO

experts, 74.43% of deaths from cancer are associated with the following risk factors: smoking, poor nutrition, alcohol, physical inactivity infection (hepatitis B, etc.).

An important aspect of the effectiveness of medical screening and treatment of cancer patients is their 5 years survival rate. Cancer, heart failure and stroke are among the most common causes of death worldwide. The 5 years survival rate for these diseases is about 43% for cancer, 40-68% for stroke and 26-52% for heart failure. In developed countries 5 years relative survival rate for the four most common malignancies was 12-18% for lung cancer, 73-89% for breast cancer, 50-99% for prostate cancer and about 43-63% for colorectal cancer. The results show that long-term survival rate and cancer prognosis is not necessarily worse than that of heart failure and stroke (Askoxylakis *et al.*, 2010).

MATERIALS AND METHODS

We have carried out a social study (a survey of 1000 patients of Stavropol Regional Clinical Oncological Dispensary) using a specially designed questionnaire containing several conceptual blocks:

- On the health and well-being of the respondents
- On their lifestyle
- On the environment
- On the respondent's attitude to the various social institutions and services
- On the respondent's socio-demographic characteristics
- On the quality of a medical care, access to the medical care and patient's satisfaction with it

- On the patient's ethical views
- On the patient's medical literacy
- The patient's commitment to the treatment

The number of respondents corresponds to the amount of patients treated in state-financed health institution "Stavropol Regional Cancer Center" in the period from July to September, 2012.

The study was conducted in the form of simultaneous quantitative research and structured interview (self-filling of questionnaires). In the questionnaire the respondent was asked to choose one of the several options. Patient was explained the objective of the research and offered to take part in the survey. The assessment of the answers was conducted according to the respondent's age and sex, belonging to the social groups, their educational level and places of residence, respondents and other characteristics. Working with large databases of primary information determined the choice of methods, the implementation of which became possible on the basis of algorithms and software statistical package SPSS-Version 12.

RESULTS AND DISCUSSION

All of the respondents suffered from cancer of varying severity. Maximum of the respondents suffered from localization process in the gastrointestinal tract-39.4%, of respondents with the localization process in the mammary glands, the genitourinary system and the lungs were respectively-18.8, 16.4, 14.4%. Cancer of other localization was diagnosed among 11.1% of respondents. The number of respondents according to their age group increased progressively with age, peaking in two groups 56-60 years 21.8% and over 65 years 26.2%. An average sampling error is 0.6. Women accounted for 69.7, men-30.3%, an average sampling error-2.2. The majority of respondents lived in officially registered marriage-56.7, 21.5% were widowed, other categories were presented by the unmarried-6.3%, cohabitants-7.6%, divorced-7.8%, respectively. An average sampling error is 1.2. The maximum number of the respondents had specialized secondary and higher education-38.7 and 29.9% respectively. Complete secondary education was observed among 16.4% of the respondents. In total, 15% of the respondents had no secondary education. An average sampling error is 0.8.

Currently 21.8% of non-smokers among the respondents have smoked before. An average sampling error is 2.0. The overwhelming majority of the respondents-55.5% was not exposed to harmful exposures or was not aware of it. The maximum percent of the

respondent's answers in relation to harmful for them "hazards" got air pollution and street noise-17.3%. An average sampling error is 1.0.

We have evaluated the availability of cancer care for the population. The respondents noted that they have difficulties with hospitalization to cancer hospital-29.8 and 21.7% could not answer this question.

For more information the respondents were asked about their trust to official medicine. Fully trust 49.5%, 36.2% trusts with reserves, almost 4% of the respondents do not trust the official medicine and 10.4% could not determine their answer.

About 46.8% of the respondents do not use unconventional help to get rid of diseases, meanwhile, 2% of the respondents go to psychics and 12.9% rely on priests and 39.3% use herbs, minerals. Their hopes for the support during the disease including financial help, respondents mainly impose on their relatives-88.2%. Actually, Cancer Center patients received assistance including financial, from their relatives-81.2%, from the head-7.1%, from friends and colleagues-16.6%. At the same time, 13.1% of the patients did not receive any assistance. An average sampling error is 1.9.

We found a correlation between the level of the respondent's income and the number of respondents who sought medical advice late due to the fact that they feared "serviceability" of the forthcoming treatment. There are 17% in the subgroup of the respondents who have no money for basic essentials in the subgroup of respondents who have money only for essentials-10.3% and in the subgroup of those who "do not have financial constraints"-0%.

The respondent's marital status is a statistically significant factor for the late visit to the doctor due to the fact that the respondents thought that the disease would "pass by itself". Most of such patients were among "singles" or "cohabitants"-44.4 and 45.5%, respectively. Such cause occurs in the responses of widowed patients the least often.

For respondents the main role in choosing a hospital plays its reputation. A correlation between patient's level of education and the importance of this criterion was revealed. While in the subgroup there are no more than 27% of the patients with complete and incomplete secondary education who hold onto this opinion in the subgroup of patients with higher education it is 38.8%. Pearson's Chi-squared test-16.429. Satisfaction with the quality of treatment in cancer center also, depends on the patient's place of residence. Urban residents of Stavropol Region demonstrate greatest satisfaction with the quality of treatment-52.6% and patients from other regions-55.8%. However, in these subgroups is the greatest number of

those who is not fully satisfied with the quality of treatment: in the cities of Stavropol Region-6%, from other regions-4.7%. Pearson's Chi-squared test-22.67.

At the same time, 59.6% of patients are completely satisfied and 22.6% more satisfied than not with the patient's in the hospital. Only 12.2% of the respondents are not satisfied with the treatment towards patients in the hospital.

At the same time, only 36.9% of men and 52.2% women are satisfied with the amount and quality of information received from the doctors. It is obvious that women consider their disease more responsibly and try to "get" more information from health workers. More than half of cancer center patients would like to receive psychological aid-52.8%.

Respondents were characterized by emotional problems in the form of depression (according to respondent's opinion) other emotional experiences. 60.7% of the respondents presented respective complaints. A typical complaint among respondents is a constant or frequent dejection. It was presented by 51%. An average sampling error 1.3.

The answer to a set of questions arouses a considerable interest. They characterize the relationship "doctor-patient", also with regard to informing and improving patient's adherence to the treatment. For example, often the attending physician does not consider it necessary to tell the details about the disease to the patients or their relatives. There are from 47.8% of such patients in the groups with low levels of education to 13.2% with higher levels of education. Pearson's Chi-squared test 16.39.

Despite cancer, respondents were asked about the necessity of information about healthy lifestyle. 58.1% of respondents said they would like to receive information about healthy lifestyle.

Most of the respondents would like to receive such information from specialists (46.2%), then in descending order from: television, radio programs-36.2%, non-fiction-33.1%, the Internet-20% (An average sampling error-1.9). At the same time, the real situation with informing patients about healthy lifestyle is different from the desired by patients. Thus, 28.1% get information from experts, television and radio programs-50.6%, non-fiction-33%, the internet-20%. So, 20% less than the number of patients who want to receive this information from the experts get this opportunity and the amount of patients, receiving medical information from TV, radio programs is actually more by 14.4% than those who would like it (An average sampling error-1.9).

A significant number of patients who use of the internet would like to receive information about their disease on their email address-39.4%. It is almost two times higher than the number of those, who actually receive information about healthy lifestyle through the Internet.

The higher the level of education, the higher the percent of respondents willing to receive information about their disease and recommendations for healthy lifestyle on their email address in the internet (Pearson's Chi-squared test-20.39).

CONCLUSION

Accessibility level of cancer care to the population of the region remains low (29.8% of the respondents noted that they have difficulties with hospitalization).

Credibility of official medicine for patients with cancer remains low, there are cases of asking for help the representatives of religious cults, psychics, etc. Analysis of the reasons for the late seek of cancer care showed that one of the reasons is the fear of necessity "to pay for the treatment". The correlation between these concerns and the economic status of respondents was revealed. The worse the patient's financial situation, the more frequent are concerns about payment for medical treatment which implies a delay of seeking of medical help. Frequent cause of late seek of treatment is also respondent's hope that the disease will pass by itself. This cause is found mostly among "singles" or "cohabitants". Patients are not fully satisfied with the volume and quality of the information received from doctors. The degree of satisfaction is higher among women who are likely to be more active in seeking this information.

Cancer Center patients are characterized by the symptoms of depression (dejection, apathy, etc.). Many respondents in this regard would like to receive qualified psychological assistance. Despite cancer, more than half of the respondents would like to receive information about healthy lifestyle. Sources for such information are extremely varied from communication with healthcare professional to television and the internet. There is a growing role of the internet in spreading of the information, especially for the patients with higher education and young people.

Long and serious disease isolation from familiar surroundings, the risk of surgery and even death cause changes in the patient's personality, changing of their attitude towards the world. Improving the cancer patient's quality of life is an integral part of the struggle with the disease (Amlaev *et al.*, 2012, 2013a, b).

RECOMMENDATIONS

The patient should be adequately informed about their illness, taking into account psychological characteristics, socio-economic status and educational level. Medical cancer prevention should be based on the strengthening of timely informing about disease risk factors, the need for reasonable medical screening using all possible channels to report relevant information. Urgent task of the health care system is increasing of the availability of cancer care. An important area of work is also general medical culture education for the population and improving patient's adherence to the treatment.

REFERENCES

- Amlaev, K.R., A.A. Koichuev, K.V. Khurtsev, S.M. Koichueva and Z.D. Makhov, 2013b. [Actual aspects of epidemiology, treatment and prophylaxis of colorectal cancer and prostate cancer (In Russian)]. *Sci. Think Caucasus*, 1: 171-188.
- Amlaev, K.R., A.A. Koichuev, Z.D. Makhov and S.M. Koichueva, 2012. [Lung and breast cancer: Epidemiological, diagnostic, rehabilitation aspects (In Russian)]. *Sci. Thought Caucasus*, 4: 103-110.
- Amlaev, K.R., A.A. Koichuev, Z.D. Makhov, S.M. Koichueva and K.V. Khurtsev, 2013a. [The results of studying some aspects of the prevention of cancer and the quality of life of cancer patients (In Russian)]. *Kuban Sci. Med. J.*, 140: 1-21.
- Askoxylakis, V., C. Thieke, S.T. Pleger, P. Most and J. Tanner *et al.*, 2010. Long-term survival of cancer patients compared to heart failure and stroke: A systematic review. *BMC Cancer*, 10: 1-8.
- Health Insurance, 2017. The concept of development of health care until 2020. Health Insurance, USA. (In Russian) <http://www.zdravo2020.ru/>
- Stein, C.J. and G.A. Colditz, 2004. Modifiable risk factors for cancer. *Br. J. Cancer*, 90: 299-303.