

IMPORTANCE OF THE SCREENING IN TUMOUR-DISEASES PREVENTION

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Papp Katalin¹, Valérie Tóthová²

¹University of Debrecen Faculty of Health

²South Bohemia University Social and Health Faculty

Summary

The unfavourable health conditions of Hungarian population are known in Europe and over the world as well. The ratio of mortality by malignant tumours in our country is way over the European average. In Hungary, mortality ratio of cervix cancer is 3.5 times, that of cancer of lungs is 2.5 times higher, than the European average. Mortality of tumours diseases in Hungary is highest for women in cases of lungs, colorectal or breast; for men of lungs, colorectal, lips and mouth, or prostate. Approximately 67 000 new malignant tumours cases are registered yearly in Hungary and about 33 500 people die through some malignant tumours disease. The preventions have to be very effective and operative. We involved to our research 120 people how they apply for the screening test. We can tell mostly know the national screening system, but the application is not enough. The health workers have to give more information about the prevention of the tumours.

Key words: prevention – screening test – public health programme – propagated screening

INTRODUCTION

Reasons of the theme

Non-infectious diseases have taken the role of infectious diseases in mortality causes of the past decade. Frequency and mortality rates of cardiovascular and malignant tumours diseases are at extreme height almost over the world. Morbidity and mortality lists both are headed by diseases of cardiovascular origin, placed second are the tumours ones (Ottó, Kásler, 2006). This extreme frequency and role as leading mortality cause of tumours diseases is a focus point of public health matters. According to WHO estimates, diseases of tumours origin shall become the main mortality reason in the developed countries in two decades (Németh, 2003).

Cancer of lungs, breast, colon and rectum are the most frequent tumours mortality causes in the developed countries, while in the developing ones it is rather cancer of gastric, liver, lips and mouth, and of the cervix (Ottó, Kásler, 2006).

In Europe countries of Europe) approximately 1.6 million people died of malignant tumours disease in 1995. This has raised to 1.7

million by 2006. Morbidity was about 3.2 million cases (Boyle, 2007). Cancer of lungs leads the mortality rates in Europe and the world (20 %), followed by colorectal growths, and those of breast and gastric. Mortality by gastric, gall bladder and cervix cancer has decreased lately, but has raised in cases of cancer of lips and mouth and lungs. Placed first is breast cancer for women and cancer of lungs for men in matters of morbidity and mortality as well (Ottó, Kásler, 2006).

The unfavourable health conditions of Hungarian population are known in Europe and over the world as well. Large-scale occurrence of cancer diseases is the reason, why mortality – and especially early deaths – is so high, and life length invisible at birth time is so low. We are at the top of most of the morbidity and mortality statistics. International and European mortality surveys show, that we are placed 2nd in terms of women and 1st in terms of men. (Döbrössy, 2005, Ember et al., 2000).

The ratio of mortality by malignant tumours in our country is way over the European average. In Hungary, mortality ratio of cervix cancer is 3.5 times, that of cancer of lungs is

2.5 times higher, than the European average. Mortality of tumours diseases in Hungary in highest for women in cases of lungs, colorectal or breast; for men of lungs, colorectal, lips and mouth, or prostate (Demografiai évkönyv, 1975–2005, (Ottó, Kásler, 2006).

Approximately 67 000 new malignant tumours cases are registered yearly in Hungary, (except of the malignant tumours of the skin, for that is not marked by international statistics), and about 33 500 people die through some malignant tumours disease prostate (Demografiai évkönyv, 1975–2005, Ottó, Kásler, 2006, Sághy, 2007). This has stagnated since 1999, some narrow decrease 1 or 2 % is sensible. Annual numbers of mortality of cancer have raised heavily in the past 25 years. 50 % increase for women, 80 % of men (Németh, 2003).

FORMS OF PREVENTION

Primary prevention

The point: To avoid contact tumour triggering agents.

Objective: health care, prevention of health damage or morbidity (Ádány, 2006, Döbrőssy, 2004).

Means: total or partial disabilities of risk factors; setting up and raising immunity against damaging impacts (Ádány, 2006).

Primary prevention must be more emphasized in cases of tumours diseases, which can not be filtered with reliable screening tests, still the effectively of prevention can be assumed/ proven (Ádány, 2006).

Secondary prevention

Early recognition of tumours diseases, screening programmes on the level of the population (Németh, 2003).

MEANS OF SCREENING TESTS

Occasional screening

Based on different reasons, usually attached to medical activity of basic service. Oncological alertly and preventive approach must be expected in everyday medical activity. Screening test must be done or ordered in the field of the medical specialist, whenever the age, lifestyle, occupation of the patient justifies it (Döbrőssy, 2004). The weak point of occupational screen-

ing is that they are accidental, unorganised, and is in lack of proper registration (Döbrőssy, 2004).

Organised public screenings

Public health programme initiated by the health service system, financed from public funds, brought out with professionally reasonably frequency, in administrative units, covering the groups of population considered as threatened (Döbrőssy, 2005; Ottó, Kásler, 2005).

Requirement for screening tests

- tumours disease to screen should be major public health matter by its frequency and mortality ratio;
- scheme of development and stage of pre-clinical recognition should be known;
- early and latent phases, pre-cancer stages of the disease to be found should be known;
- early recognition and treatment should improve the natural process of the disease;
- proper technical and therapy procedure to diagnosing, further investigation and treatment of the disease should be accessible;
- screening should mean capital increase in the recovery chances and quality of life;
- should be simple, quick, easily achievable;
- should be safe;
- should have no unpleasant side effects, should cause no pain;
- the modus of examination should be acceptable for the society;
- should be reliable, authentic, repeatable, sensitive, specified and cost-efficient. Only the sufficiently sensitive and specified screenings are efficient, which provide satisfactory predictive value (Ádány, 2006, Ajkay, 1996, Döbrőssy, 2004, Németh, 2003, Ottó, 1993).

Advantages of cancer screening

- better prognoses for cases diagnosed in screening;
- localised cases can be cured with less radical methods;
- relief provided by negative results;
- reduced costs of treatment;
- the patient preserves ability to work (Jónás, 2000, Ember et al., 2000).

Disadvantages of cancer screening

- lengthened time spent in disease consciousness;
- danger of over treatment of borderline cases;
- risk of fear and disease for those with false positive results;
- danger of screening tests;
- costs of screenings (Jónás, 2000, Nemzeti Rákellenes Program, 2006).

Tertiary prevention

Involves nursing, rehabilitation and prevention of remote metastases with proper way of life (Ádány, 2006, Németh, 2003, Ottó, 1993).

Role of family doctor in prevention

Invitation signed by the family doctor motivates the invited to accept invitation to take part in screening tests. On behalf of the personal relation to the patients, the family doctor is more efficient in providing information, advising before the screening, which lessens the patients fear, anxiety. The family doctor is informed of screening results, so can take part in clinical tracking of the diseased (Döbrőssy, 2004).

Family doctors play an important role in screening tests concerning large scales of population. 1997. CLIV. Act of Health provides for the criteria of taking part in prevention:

- continuous attendance to health status of the patients;
- health education, advisory in terms of healthy lifestyle, emphasizing importance of primary prevention;
- bringing attention to the importance of screening tests, and the ways of restoring them;
- completing screening tests which have no other legally named agent to proceed;
- orienting the patient to the legally named agents which proceed screening tests;
- keeping records of screening tests executed;
- practitioner register is used as a basis for the reliable, personalized invitation system of regular invitation system (Ádány, 2006, Döbrőssy, 2004).

Public Health Programme of Hungary

Public health status of Hungarian population is widely recognised to be bad, which is in part a result of high ratio of tumours diseases. The

worrisome mortal data called for urgent arrangements from the responsible authorities (Ottó, Kásler, 2005, Nemzeti Rákellenes Program, 2006).

In 2001 the Hungarian government adopted the programme of measures titled For a Healthy Nation Public Health Programme 2001–2010. Its extended version was the Béla Joha National Programme of the Decade of Health.

The currently valid National Public Health Programme (Nemzeti Népegészségügyi Program, 2003) includes a professionally drafted, total description of arrangements on every level of prevention.

National Programme Against Cancer

Consists of the strategic actions of cancer prevention.

Priority is the re-organisation of the oncological service, also including the rejection of cancer causing risk factors, and propagation and performing of the screening tests. (10)

A highlighted objective of the actions is to reduce the mortality rate of tumours diseases by 10 % percent, through preventive actions (Nemzeti Rákellenes program, 2006).

Programme proposals for population screening

Mammography screening in 2 years' cycles for the female population of the age 45–65 years (Cornides, 2005, Döbrőssy, 2005, 2004, Nemzeti Rákellenes program, 2006).

Objective: Reducing breast cancer mortality by 30 % with 60 % population involvement. (Ottó, Kásler, 2006)

Cervix screening of cytological film examination in 3 years' cycles for the female population of the age 25–65 years (Nemzeti Rákellenes program, 2006)

Objective: Reduction of cervix cancer mortality by 50 % with 70 % population involvement (Ottó, Kásler, 2006).

Colon and rectum cancer screening by indicating hidden bleeding in the guts, in two years' cycles for the female and male population aged 50–70 (Cornides, 2005, Döbrőssy, 2004, Nemzeti Rákellenes program, 2006)

Objective: reducing the mortality of colon and rectum cancer by 20 % with at least 40 % population involvement (Ottó, Kásler, 2006).

Most propagated screening proposals

- annual mammography recommended between at the age of 50–69;
- annual examination of faeces blood for every woman and man above the age of 50;
- regular cytological screening recommended for every sexually active woman. Taking part in screenings is recommended from the beginning of sexual life, at least in 3 years' cycles.

The preventive actions should reduce the tumours clinical pictures by 25 %, mortality reduction of 50 % until 2015 (Ottó, Kásler, 2006).

Aims of research

To survey and study the knowledge and habits of the people on tumour prevention screening test.

- How do they know the screening test possibilities, how important do they think these are?
- Do they take advantage of these examinations?
- What motivates people to take part?

Methods of research

The research is based on questionnaire sampling through personal asking. The questionnaire consists of 18 questions. 2 questions of 18 were completely open questions, 1 partially open, 15 preformed.

120 questionnaires were handed out, half of them to women and half to men.

With personal asking, every questionnaire was rateable, so all 120 were preceded.

The research sample: n=120.

Place of research

My survey was preceded by accidental choice between the inhabitants of Heves and Borsod-Abaúj-Zemplén counties in Hungary.

Target group

Since the screening tests focus on 25-26 years old population, the research had the objective of asking this group.

Hypotheses of research

1. We supposed, that the people would not have enough information on means and possibilities of screening test, which target the early recognition of tumours diseases

2. We supposed, the people would not know the 7 warning signs, which would draw attention to the possibility of a malignant disease
3. We supposed that women would pay more attention to health preservation than men, so more of them would attend screening tests
4. We supposed, that most of the people would not be properly informed by their family doctors about the importance and possibilities of screening tests
5. We thought, only few people would know the means of self-examination, and only a small range of people would apply their knowledge in practice

Result of research

Questionnaires were handed out to 60 women and 60 men, gender ratio 50–50 %.

Half of the research participants smoke, more than 80 % of them consume alcohol on some scale of regularity and almost half of them are overweight. It can be stated, that the asked population is highly risked, according to the present risk factors.

49 of the women, 53 of the men asked consider themselves as healthy. 11 women and 7 men do not consider themselves as healthy.

The Hungarian League Against Cancer has described 7 warning signs, which might indicate malignant mutations, and might play primary role in early recognition of disease, because they imply to contact specialist. The recovery chances are better if the disease is recognised at an early state. Sorely 31 of the answerers do not know these signs. 18 of the asked women, 13 of the men know them. 42 women and 47 men do not know them.

Of the most common examinations, both women and men all knew chest X-ray screenings. 8 men knew about the cervix screening, but – fortunately – 58 women knew about the method. 10 men knew about the controlling of the breast, 41 women knew, how it is preceded. Sorely the population has poor knowledge on the methods of the recogniser screenings of colon and rectum cancer, though these are constantly increasing in frequency. 15 men of the sample have heard about it, women who knew this screening method were only 18.

52 of the women, 29 of the men of the sample take regularly part in some screening opportunity.

Amongst women, who attended screenings, 32 went, because they treasure their health, 14 wondered, if they had any disease, 2 had complaints, 3, because the screening is obligatory, and 1 of them found it important because of family experiences. Of the men, who took part in screenings, 12 thought their health was important, 9 was whether they were diseased, and 8 because it is obligatory. Screenings thought to be obligated were the ones requested annually by the employers.

Most of the people asked went to the screenings because they found their health important. Our hypothesis, that women would pay more attention to their health conditions, so would attend screening centres more often, is justified. 1/5 of the asked people were interested, if they had any disease. Only few went, because they thought it was obligatory, and even less because they had complaints.

8 of the women, 31 of the men did not take part in any screening test.

Of the women, 1 did not go, because it is not obligatory, 3, because they had no complaints, 3 of them were afraid, that some disease would be shown, and 1 lady was not convinced, if the screening had no unpleasant effects.

5 of the men did not go to screening, because it is not obligated, 14 had no complaints, and 12 were afraid, they would turn out to have some disease.

The results matched our ideas in the matter of the reasons, why people do not go to screenings: most of them had no complaints, or were afraid to turn out to be diseased.

Sorely, the dogma, that cancer equals death is still strongly stated, so it is important part of the prevention work, to inform the population properly and fully, emphasizing the importance of screenings and the advantages of early recognition.

From whom did they know about the screening methods, opportunities?

12 women and 12 men heard from friends, relatives, people they knew. 14 women and 16 men were informed by their family doctors, while 32 women and 9 men learnt them from other health professionals. 12 women and 10 men got to know about screenings it form pla-

cates, 8 women and 15 men from flyers. Media provided information to 40 women and 37 men. The internet was the source of 1 woman and 1 man.

According to the answers given in the survey, most of the population knowledge on screenings is gained from the media. The information provided to women by other health professionals is satisfactory, but the effectiveness of family doctors' work should be strengthened. The way of information is observable also in the informal personal networks. The information provided by the colored flyers and placards pasted in health institutions can be accepted, but is not satisfactory. The results of school education are extremely sad, though the most important impacts can be performed in public education. Health education should be started at the earliest age possible, and this is the business of not only the pedagogues, but also of graduate health professionals.

12 women and 3 men of the ones asked perform self-examinations. 4 women and 1 man perform the self-examination of the skin on a monthly frequency. Self-examination of the breast is performed by 12 women, and 2 men check their testicles regularly.

38 people of the ones asked knew the method of the self-examination, but only 15 apply their knowledge in practice.

Most of the people asked found screenings important, 54 women and 49 men gave positive answer, though only 52 women and 29 men are involved in screening tests. Sorely 6 women and 11 men do not find screenings important.

Conclusions

Considering our experiences of the research and procedure of the literary basis, the most important task in prevention of tumours diseases is the full-scale informing of the population, which can be proceeded with high level health education.

Recommendations

Education of a healthy lifestyle must be started the earliest age possible, way from kinder garden.

Elementary schools can shape the proper health culture of the child, with the contribution of the pedagogies, school doctors and parents. It concerns the proper eating habits,

proper physical activity – the joy of exercise – environmental consciousness, and conditions of mental health.

For the adolescent, the prevention of addictions must be focused, since the earlier the damage of the body starts, the bigger the risk of malignant mutation is.

Primer tasks of preventions are the education of self-examination and recognition of symptoms at an early stage. The attention of girls must be brought to the self-examination of the breast; boys must learn the means of self-examination of the testicles. Theoretical introduction and practical mastering of the means and steps of self-examination. Self-examination of the skin is highly important for both sexes.

The most important for the adult population is the promotion of screening test programmes. The importance of test in prevention must be emphasized. People must be fully informed of the possibilities of screenings, their advantages, and the disadvantages of the dismissal. Informing programmes at the workplaces implied by the employer, due to the profile (women/men, overweight, occupation hazards, smoking ratio etc.) of the workplace, organised and brought out by the health administration. Attached with family programmes or in the forms of public forums with informational screenings, in administrative units. The role of community nurses and family doctors in health education must be highlighted.

Media must take part in guidance. Almost the whole population is reached in these means of information transmission. A well fashioned and proceeded advertising campaign involving celebrities, actors and sportsmen can have an impact on masses of population.

To our mind, the non-organised popular screenings based on risk research will fade in the close future. The graduate health professionals, accompanied by the primary care system will play a great role in grounding the examinations, inquiring the health status of the

population, informing and setting the per formative order of examination.

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*Papp Katalin a Valérie Tóthová
tothova@zsf.jcu.cz*