THE PROGRAMME “STOP AND GET CHECKED” – AN ATTEMPT TO RESTORE CANCER SCREENING IN BULGARIA

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ABSTRACT

INTRODUCTION: Cancer morbidity and mortality rates in Bulgaria are growing, although the trend observed in other European countries is towards a decreasing mortality rate despite the increasing morbidity rate. Bulgaria has very low attendance rates in relation to preventive and screening examinations with an oncological focus, which results in continuing late diagnoses regardless of the development and achievements of medical science and technology. Despite the position set forward by the leading professional bodies of clinical oncology (ASCO, ESMO) in Europe and worldwide, the existence of strictly drafted quality and behavioural guidelines, as well as the Council of Europe Recommendation (December 2003) and European Commission Report (May 2008), our country has not developed an organised screening programme for the three types of cancer subject to screening - breast cancer, cervical cancer and colorectal cancer.

AIM: To present the organisation and the results, and to draw conclusions from the implementation of the „Stop and Get Checked” programme as well as the possibilities of using the infrastructure, logistics and experience built in the context of the programme.

MATERIALS AND METHODS: In 2009, a screening programme named “Stop and Get Checked” was submitted for approval and funding from the EU’s European Social Fund. This was an attempt to restore and resume population-based cancer screenings in Bulgaria. The purpose was to run a screening of 400 000 people. The programme ended in October 2014. Examinations were organised and conducted in all 28 districts of the country. The screening methods utilised were mammography for breast cancer, pap smear test for cervical cancer and testing for fecal occult bleeding for colorectal cancer. In order to present our goals, data and results of examinations and organisation programme were reviewed, summarised and analysed. Published documents and information were requested and granted by the Ministry of Health in compliance with the requirements and conditions of the legal access to personal data.

RESULTS: The invited number of people was 999 962. The purpose was to run a screening of 400 000 people. The carried out examinations/tests were 55 898, comprising:

- 12 269 in relation to localising carcinoma of the colon and rectum;
- 10 392 in relation to localising carcinoma of the milk duct;
- 33 237 in relation to localising carcinoma of the cervix.

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CONCLUSIONS: A comprehensive analysis of the programme and its results, as well as the multiple changes made to the timeframes and objectives, are required. The infrastructure, logistics and experi-

ence built during the programme can be used to further develop a comprehensive model of organised population cancer screening, taking into account the characteristics and imbalances of the current healthcare system in Bulgaria.

Keywords: cancer screening, Stop and Get Checked

INTRODUCTION

Cancer morbidity and mortality rates in Bulgaria are growing, although the trend observed in other European countries is towards a decreasing mortality despite the increasing morbidity rate (15,16). Bulgaria has very low attendance rates in relation to preventive and screening examinations with an oncological focus, which results in continuing late diagnoses regardless of the development and achievements of medical science and technology (3,4,5).

Despite the position set forward by the leading professional bodies of clinical oncology (ASCO, ESMO) in Europe and worldwide, the existence of strictly drafted quality and behavioural guidelines (7,8,10), as well as the Council of Europe Recommendation (December 2003) and European Commission Report (May 2008) (6), our country has not developed an organised screening programme for the three types of cancer subject to screening - breast cancer, cervical cancer and colorectal cancer (11,12,13). In the period between 2009 and 2014, a screening programme named "Stop and Get Checked" was submitted for EU funding approval and put into practice. This was an attempt to restore and resume population-based cancer screening in Bulgaria for the above-mentioned three cancer types. No reporting or analyses have so far been presented in relation to this programme.

AIM

The aim of the current publication is to present the organisation and the results and to draw conclusions from the implementation of the „Stop and Get Checked" programme as well as the possibilities of using the infrastructure, logistics and experience built in the context of the programme.

MATERIALS AND METHODS

The documents and information which have been published, requested and granted by the Ministry of Health in compliance with the requirements

and conditions of the legal access to personal data, were reviewed, summarised and analysed, in order to present the goals, the objectives, the data, and the results of the examinations and the organisation of the Programme.

RESULTS

The programme was submitted for funding under the Operational Programme "Development of Human Resources" in May 2009. The task set in the implementation of the programme „Stop and Get Checked" is examination of 400 000 people. The programme ended in October 2014. Examinations in all 28 districts of the country were organised and conducted. The programme goals were to restore the mass population screening in Bulgaria for the three cancer types in relation to which there is an agreement on performance - breast, cervical and colorectal cancer, as well as to build a single screening register. The screening examinations were conducted via screening tests as recommended by the EU Council on December 2, 2003, i.e. through pap smears for cervical cancer, mammograms for breast cancer and fecal occult blood analyses for colorectal cancer. The approved budget amount was 19 588 000 leva. The following parameters were set for the execution of the programme: screening for breast cancer - examination of 150 000 women; screening for cervical cancer - examination of 200 000 women, screening for colorectal cancer, 50 000 men and women.

Guides to good medical practice for cancer screening were issued. The guides included analyses and criteria for monitoring and evaluation of screening as required by the EU and the Council of Europe. Information campaigns which reached over 2 million people were organised. An information system "National Screening Registry and Notification System" was developed. A national division for the organisation and control of screening in Bulgaria was established.

The conducted survey volumes did not meet the forecasts. This required a reduction in the number of indicators for the number of screening examinations and tests (1). This has led to a corresponding reduction in the project budget from 19 558 300 leva to 7 520 821 leva. The programme was repeatedly extended. The objectives were also repeatedly amended. The last correction was in May 2014. The total number of examinations has been reduced from 400 000 to 100 000 - 20 000 of which were for breast cancer, 55 000 for cervical cancer and 25 000 for colorectal cancer. Following the completion of the project the results are the following: 55 898 examinations/tests were performed, of which: 12 269 for colorectal cancer; 10 392 for breast cancer; 33 237 for cervical cancer.

The number of people sent for further examination was 2 993, of which for colorectal cancer; 566, for breast cancer, and 1621 for cervical cancer.

The total number of identified cancer cases was 304, of which: 41 – colorectal cancer, 92 breast cancer and 171 cervical cancer.

At this stage there is no information that the work on screening examinations will be continued as part of the programme and what the status of the screening register is. According to unofficial information, the examinations have been discontinued upon completion of the programme as well as the registry, which is still with the Directorate of International Projects at the Ministry of Health.

Project management was centralised. Regional coordinators who were employees of the regional health inspections were designated. The programme was set to include individuals invited by standard personal notification letters for the relevant types of examinations. Invitations were sent to 999 962 people. The examinations were carried out by 152 contractual partners. There is no information of any publicly presented results or reports, or an analysis of the programme following its end. An official information from the Minister of Health from March 2015 presented by way of a response to a parliamentary question about the results and scope of the programme, presented the results from the programme (1).

DISCUSSION

The programme “Stop and Get Checked” is a long-awaited attempt to restore the organised population-based cancer screening in Bulgaria, particularly given the possibility of funding from sources which are external to the healthcare system. Regardless of that, the programme saw an adjustment of tasks and indicators, the changing of deadlines and loss of serious gratuitous financial resource of nearly 12 million leva. The comparison between the number of invited individuals (999 962), the target number of examinations (400 000) and the actually achieved examinations (55 891), suggests a participation level of only 5.5% of invitees.

The causes for the failure to meet the initial objectives may be of a different nature (organisational model; information campaign; attitudes towards participation in preventive activities).

The analysis of the organisation of „ Stop and Get Checked” suggests that a centralised model for the management of the programme was applied, with centralised funding, notification and control as well as positioning of specialists in outpatient care. There is no commitment of GPs, or of the authorities at regional and local levels, except for the commitment of a representative from the regional health inspections as regional structures of Ministry of Health. There is no participation of representatives from local communities based on regional specificities. The overwhelming majority of medical specialists involved in the medical examinations as part of the Programme were concentrated in medical centers located at a distance from the residing places of the individuals invited for examination.

The objectives and indicators, as well as the deadline were repeatedly changed due to the low interest levels from the invited. There is a huge difference between the numbers of individuals who were invited and those who responded (999 962-55 891) whilst the individuals attending examinations made up just 14% of the planned number.

Experts who monitor the system of cancer care in Bulgaria were asked to evaluate the “Stop and Get Checked” programme and comment on whether such an organisational model should continue as part of qualitative research conducted with semi-structured interviews in 2015. Experts in Bulgar-

ia have been informed and have followed, to the extent of publicly available information, the “Stop and Get Checked” programme and assessed it as an attempt to restore organised screening in Bulgaria. The recommendation of the experts is to identify the errors- incorrect selection of executors (medical specialists), the lack of coherence in the notification, the excessively high distrust of the citizens in the health care system in general, etc. The necessity to remove these errors and to emphasise the positive potential of the model were highlighted. For example, an effort should be made to form a habit in citizens to attend health examinations. The emphasis is on the fact that this type of examinations offers organisational ground for work and action for all healthcare professionals including nurses in the out-of-budget sphere, NGOs and the structures of the Ministry of Health, whose resources can be organised and involved. The model suitable for application in Bulgaria, shaped by the answers of the respondents (who were asked about all the details of an organisational nature), has different characteristics to the one which was applied.

A cross-sectional study of the attitudes, awareness and preventive behaviours among 2016 women in Bulgaria, conducted between March and June 2015 in the districts of Sofia, Silistra and Razgrad (2) determined that a vast majority of the women, regardless of their education, ethnicity, residence and preferred information channels are not informed about and have not heard of the national programme „Stop and Get Checked”. At the same time, the respondents share extremely serious positive attitudes towards visiting prophylactic, respectively screening examinations, if such were organised in the place where they live - 82.9%.

CONCLUSIONS

1. There is a need for public report on the implementation and critical analysis of the programme „Stop and Get Checked”.
2. There is a need for review of the organisational model applied in the implementation of the programme, which would include taking into account the specifics of the modern health care system and access to it.
3. The screening model suitable for Bulgaria has the following characteristics:

- ◇ a programme implemented with coordination between general practitioners (GPs), specialists in outpatient care, oncological centers and hospitals,
- ◇ central organisation,
- ◇ targeted funding as a national programme of the Ministry of Health ,
- ◇ notification of individuals at the local (regional) level,
- ◇ programme management at local level (with possible central *coordination*).

Quality assurance and standards must be the responsibility of government institutions on the basis of the European and international rules of good practice, but adapted to the specificities of our health system.

4. The created infrastructure, logistics and experience can be used to further develop a comprehensive model for organised population-based cancer screening, consistent with the characteristics and imbalances of the current healthcare system in Bulgaria.
5. There is a need for the use of specific impact-based information channels, and combining them.

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