Primary healthcare services and patients with neoplastic disease

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ABSTRACT

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Introduction: The primary health care services holding the central role in the prevention of various diseases. Cancer is the second leading cause of death worldwide. Primary healthcare services, holding a coordinating role in staging, treatment and prognosis of cancer.

Purpose: To present the role of primary health care services in primary and secondary prevention of cancer.

Materials and methods: A search was made in the PubMed and Scopus databases for reports on primary health care services in cancer patients.

Results: Monitoring and early detection are some roles of care. The preventive medicine focuses on health promotion and disease prevention, helping people to enhance their own health. Specifically, majority of researches revealed that mammography ranged 44% to 69%. Also, the screening of cervical cancer by early examination of Pap smear, the percentage ranged 24% to 36%. The screening of prostate specific antigen (PSA) test ranged about 55%. The health professionals focused on individual, group and community interventions aimed at health promotion and prevention through programs and counseling.

Conclusions: The interest of the fact that the primary care services have multidimensional roles for eliminating the occurrence of cancer. Prevention and health promotion programs, informing the population, campaigns on the part of health professionals for more frequent screening and early diagnosis in general symptoms of cancer, are fundamental principles of these services.

Key words: Primary healthcare services, cancer, patient, neoplastic disease.

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INTRODUCTION

Primary healthcare services hold one of the main roles in the prevention of various diseases and conditions. Primary healthcare services referred the essential healthcare, which based on scientifically sound and socially acceptable methods and technology, which make universal health care and accessible to all individuals in a community [1]. Cancer is one of the major causes of death and is now ranked as the second cause of death worldwide [2].

Primary healthcare services focus on promoting health and preventing disease in individuals which is helping to enhance their own health. 75% of the population in the United States of America is visiting primary care providers, unlike Greece, where prevention and education programs for the prevention services lack time and practice.

Furthermore, control and early detection, screening and educational programs and vaccination programs are some methods used by primary prevention. The significance of preventive examinations in the case of cancer, the primary health care activities focus on health promotion through programs and prevention [3].

Primary care services, which encompassed health centers and outside regular hospital clinics have the coordinating role in staging, treatment and prognosis of cancer. It must be said that the prevention of cancer is classified into three levels, primary, secondary and tertiary prevention, which will be developed below [4,5].

The purpose of this paper is to highlight the key role of primary healthcare services, which uses a primary and secondary prevention approach for cancer(s) in the general population.

MATERIALS AND METHODS

A systematic search of the relevant literature was conducting using international electronic databases including PubMed/Medline, Scopus, Science Direct as well as Google Scholar. The following search terms or their combinations which using were: primary healthcare services, cancer, patient, neoplastic disease from the years 2010-2015. Exclusion criteria of articles were the language, except English and Greek. Initially, a study of all the abstracts of the articles was conducted in order to make a final choice.

Primary health care services

Primary health care (PHC) services in Greece and abroad are generally designed to provide primary and secondary cancer prevention. Primary prevention involves mobilizing the individual or "motivating" them to change their lifestyle in a better direction through an intervention program which offers education and information regarding their condition. As for secondary prevention, which is provided in primary care centres, detects the early stages of an already developing but not clinically visible disease, making them prognosis more favorable [1,7].

The services of primary care conceive a pivotal role in cancer prevention. More soon the control and early detection, surveillance, and treatment alongside with palliative care where it is given to improve the patients quality of life who have a serious or life-threatening disease, such as cancer. The goal of palliative care is to relieve, as early as possible, the symptoms and side effects of the end-stage disease, in addition to the related psychological, social, and spiritual problems. The goal is not to cure. Palliative care can also be called comfort care, supportive care, and symptom management [6,7].

Screening for breast cancer (mammogram) is a procedure included in the services of primary care [8-10]. The application of preventive services processes are established through the patient records, and an electronic form that provides information of care needs to patients through the Internet [11,12]. The coordination with proper care team(s) for the patient's needs at the right time is an appropriate precautionary measure to correct primary care [11-15]. This service, which has grown in Greece in recent years is already one of the main services and has a role providing primary care services such as medical home care, improving the quality and effectiveness of preventive services. All coordinated by the public health sector [1,15,16].

Patient education tools, alongside with decision making, and self-management are some responsibilities of the staff in primary care services. Increasing access to the community, thereby reducing structural impediments and private spending as well as increased referral, delivery and feedback of the provider are the roles to be held by primary care services and the structures of these services [16-19].

According to the Ottawa Charter (WHO, 1986), "Health promotion is the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment [11-14]. Health is, therefore, seen as a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities. Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy life-styles to well-being" [20-23].

Finally, as will be discussed below, some low socioeconomic groups can contact the primary care services to inform or raise awareness about the early signs of cancer and new tests that can help reduce

elevated mortality and prevalence of various forms of cancer [24]. In addition, prevention trials in cancer screening at recommended intervals may be a contributing factor in cancer screening. But to be able to implement all that in every country, primary care services need to adjust the framework of knowledge and basic health information in education, culture, experience, media and certain other factors [25,26].

Primary care services and their contribution to cancer

Primary care services are mainly aimed at promoting health, counseling and providing educational prevention programs. The update to the whole community or individual is an important piece of knowledge. Screening people or at-risk groups is one of the basic services of primary care. As he observed in his study Oldach *et al.* a rate of 40-59% had knowledge of screening for colorectal cancer and colonoscopy and sigmoidoscopy, all associated with knowledge raised by health centers, outpatient clinics and more generally primarily services [23,24]. Also, screening for breast cancer and mammography ranged from 44% to 69% and found a strong correlation between people with poor knowledge and low screening (25). At the same time, the survey revealed that 69% carried out the screening of cervical cancer by early examination with the use of a Pap smear while the percentage of inadequate knowledge about it reached 24% to 36%. Something similar took place in cancer screening with prostate examinations. Prostate specific antigen (PSA) test with a percentage around 55% while the incomplete knowledge rate reached 36% [26].

According to Sabatino *et al.* US statistics revealed that there are differences in the way screening in any type of cancer, reducing the mortality and the incidence of cancer. Access to it but is judged by the population groups, such as people with low income or without insurance who do not have the same access to services to individuals higher socioeconomic level. The solution that was finally implemented was the creation of a training group which informs the participants, regardless of social class, of all benefits, indication, ways to overcome the obstacles with examination, and incentives screenings. Thus, improving the percentage of participants in a sensitized large population. [26-30].

In addition, several studies were found that primary care structures have effectively results in care to control and follow up in people diagnosed with cancer and had severe mental illness at the same time [30-35]. Torring *et al.* in their research showed that early diagnosis (through control) was a key factor in improving results in the treatment of cancer. It was observed that the services of primary care have been a 40% increase in patients who presented

diagnosis with symptoms indicates cancer. Information, availability of reliable histological examinations and uniform organization of primary care system has succeeded in significantly reducing the incidence of colon cancer, lung cancer, melanoma, breast and prostate cancer [36-40].

Primary services can provide a variety of procedures for the patient such as the provision of open access (the patient has an application form GP), the patient's appointment, the department ended appointment and separate services of oncological clinics that need a patient with early disease signs. In the UK primary care, a blood test with tumor markers (CA125) is conducted with a screening form for patients who may have ovarian cancer, lung and colon. This forms, the basis of the main sorting which indicates improved results for the incidence of cancer [41].

According to a survey conducted by Banks *et al.* in the United Kingdom which investigated the diagnostic for colon cancer, lung and pancreatic attendees to services of primary care. It was found that a large percentage surveyed expressed a clear preference and desire for early diagnosis and diagnostic tests of all levels with very low cost perspectives. Tests that can carry one to the specific structures found in lung cancer, a chest X-ray is recommended for patients with a persistent cough which could suspect lung cancer. While in pancreatic cancer, tests mainly focus on levels of jaundice [42].

In another survey, the US Federally certified health centers; effectively emerging medical advice driven through primary services was found to be the most important incentive for preventive behavior in individuals and controlled colorectal cancer (CRC). Strategies used in concrete structures for the purposes of control the population is to provide information on the importance of the CRC check, the different positions of the screening of CRC, the improved efficiency of the screening, the reduction of obstacles to the realization of the CRC check and finally the encouragement and support of health professionals for the completion of the audit CRC. The percentage of the population reached 89%, which carried out the inspection, which reveals that the strategies used in primary health care emerged quite effective [43,44].

Another role of primary care services in England, according to a study by Dregan *et al.* is the recording of electronic files of patients presenting with symptoms of cancer to realize screening. The electronic records and health records in primary care serve to compare annual data of these patients who came to control and monitor the incidence of cancer. This process aims to evaluate the validity of cancer diagnoses in primary care by comparing the occurrence and timing of cancer over time in accordance with the General Medical Database (GPRD) [45].

Another very common cancer is cervical cancer, which in Delhi, India has so far indicated a complete lack of detection and control in public hospitals. Early detection can be done globally by the smear test detects 100% early malformations in the neck of the uterus which may be treatable with immediate treatment. It constitutes the most effective way to control cervical cancer, as observed after regular screening per year can prevent the cancer followed stages. In another study in health centers in Turkey for early control of cancer in the uterus, a large percentage of the population reported insufficient knowledge to prevent cancer as well as insufficient practical examination. Employees of health should monitor the developments of medical and update as more can the female population about the importance of Pap tests and by extension for the screening programs regulating health and risk factors for cancer, since prevention is the role foundation for the general population [46].

Breast cancer is the most frequently diagnosed cancer among women (23% of all cancers) and is a major cause of mortality in women worldwide. The medical genetic counseling for breast cancer (MGC-BC) is a dominant role in primary care, including effective assessment and communication of genetic risk, and women at risk. The Advisory detect breast cancer at an early stage, thereby improving prognosis and survival and reduce mortality. Some even methods involved in screening for breast cancer are the breast self-examination and mammography. All these methods do not have great economic and social burden, which means that all the female population can have access to control whatever socioeconomic class [47].

Another UK survey highlight the importance and role of the general practitioner in primary care, where the patient closing appointment for a screening with symptoms of cancer, the physician decides and directs the patient after diagnosis for subsequent development and preventive treatment, to prevent severe stages of the disease. Key factors for the outcome of cancer patients in primary care are to understand the symptoms and the presentation and answer general medicine.

Furthermore, the content of primary care based on early diagnosis with a blood test that includes the tumor markers (CEA) and the important control event (SEA). It is a quality improvement tool designed to facilitate and improve the quality of patient care in general practice. Widely used in primary care in England and its use on the process of care are quite widespread [46,47].

Similar research in England showed that in primary care access for patients with early symptoms of various types of cancer were referred by physicians in diagnostic tests (screening) accompanied by close medical guidelines. The

option must be the reference to specific research in primary care, thereby increasing the residence time of the patient in primary care [46].

Finally, research on cancer and primary services has shown that the detection and diagnosis of a precancerous condition is an inevitable screening process. Monitoring Screening programs in clinics outside hospitals is important not only to reduce over-diagnosis, but also to minimize the adverse effects and costs. To improve the quality of screening services to breast cancer in individuals with a limited life expectancy, it was found that the risk of diagnosis and treatment growing differently in women who have been informed of mammography, the factors associated with cancer, the process, diagnosis and breast self-examination in relation to women who had complete ignorance [48-51].

CONCLUSIONS

It must be said that primary care services have multiple and multidimensional roles for eliminating the occurrence of cancer. Prevention and health promotion programs, informing the public on the part of medical personnel for more frequent screening population and the earliest diagnosis in general typical symptoms of cancer rare all fundamental principles of these services. It is very important to educate the general public in this matter and funding regular audits/ screenings because cancer has become one of the leading causes of death worldwide.

It's necessary to make further research to highlight the benefits of prevention in Greece and in Europe, as a result to clarify further the topic. Therefore more research is needed on an international level in order to assess the problems faced by patients during secondary prevention and then to design appropriate interventions to improve the services. Finally, health care professionals should acquire more knowledge and abilities for the prevention of cancer and the promotion of public health.

Conflicts of interest

The authors declare that they have no conflicts of interest in this study.

Author/ Year/ Title	Results
Evidence of increasing mortality with longer diagnostic intervals for five common cancers: A cohort study in primary care Tørring ML, Frydenberg M, Hansen R & Olesen F, Vedsted P. (2013).	40% increase in patients who presented diagnosis with symptoms indicates cancer.
Preferences for cancer investigation: a vignette-based study of primary-care attendees. Banks J, Hollinghurst S, Bigwood L, Peters TS, Walter FM, Hamilton W. (2014).	• United Kingdom investigated the diagnostic for colon cancer, lung and pancreatic in services of primary care. • A large percentage of population preferred to make the diagnostic tests of all levels in primary health care services with very low cost. The tests can prove the level of some kinds of cancer.
Situation Analysis of Existing Facilities for Screening, Treatment and Prevention of Cervical Cancer in Hospitals/Primary health Centers of Delhi-NCR Region, India. Chawla P, Chawla AK, Shrivastava R, Shrivastava A. (2014).	• There is a lack of detection for cervical cancer in Delhi. The test Pap is the most common test which done globally and it detects 100% early malformations for the uterus. • A large percentage of population in Turkey, referred insufficient knowledge for cancer prevention and for the practical examination in the primary health cervices centers.
Genetic Counseling for Breast Cancer in Primary Care: A Synthesis of Major Determinants of Physicians' Practices in Primary Care Settings. Jbilou J, Halilem N, Bloui- Bougie J, Amara N, Landry R, Simard J. Medical. (2014).	The medical genetic counseling for breast cancer (MGC-BC) is a dominant role in primary care, including effective assessment. Some methods involved in screening for breast cancer are the breast self-examination and mammography which are great economic for women and they could make in primary health centers.
Overestimated lead times in cancer screening have led to substantial underestimation of over diagnosis. Zahl PH, Jorgensen KJ & Gotzsche PC. (2013).	• Monitoring Screening programs in primary health centers are important not only to reduce over-diagnosis, but also to minimize the adverse effects and costs. • Primary health care services can improve the quality of services with information and early cancer diagnosis. Also, it could make with participation of the population in prevention programs.

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