

Prevention of cancer in primary care: principles and practices

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This paper focuses on what the primary care team – physicians and praxis nurses – can do to prevent the most common non-communicable diseases, particularly cancer. The most basic concepts underlying the preventive practice in primary care are summarized.

Risk factors

The causes of diseases are not sufficiently understood. Epidemiological evidence, however, has suggested that many different factors are not necessarily causal agents but are associated, individually or in combination, with an increased probability or risk of the occurrence of certain diseases. These are widely, even if loosely denoted as determinants, or predisposing, or risk factors.¹

Most of these diseases *can be prevented*, as an important role in their development has been attributed to a variety of personal and social habits, behavioural patterns and culturally influenced factors, such as smoking, poor or unhealthful diet, excessive drinking, physical inactivity, being overweight, risky sexual and reproductive behaviour, etc.; all these can be summarized as *lifestyle-related risk factors*. (For the lifestyle-concept, see Mark Lalond's paper.²) The adoption of these lifestyle-related determinants of disease is largely voluntary, although influenced by the social environment, therefore they can be modified, thus, the risk of disease development can be substantially reduced. According to epidemiological researches, intrinsic factors and environmental hazards are considered to have a relatively small impact on total disease burden.

Prevention: aims

The ultimate aim of disease prevention is to avoid or at least to reduce by proper intervention the exposure of individuals and the community to known, avoidable "casuses", thereby to prevent the biological onset of the disease ("primary prevention"). Another aim is to favourably modify the course of disease development (i.e. natural history) by early detection when the disease is more responsive to curative treatment, thereby preventing clinically manifest, advanced disease ("secondary prevention").⁴

Strategies

Preventive strategies can focus on the population as a whole, such as government regulatory actions and public education ("population strategy") (see below), or on the individuals identified as being at high risk of certain disease ("high-risk strategy"), offering face-to-face advice and personal guidance on changing behaviours.⁵

The latter, however, may treat people as patient, even if they are not ill ("medicalisation"), which may result in adverse psychological effects.

Measures

A wide range of intervention measures is available to accomplish the aims of disease prevention, including: (*) healthy public policy and government actions, such as legislation and regulatory measures in major areas (i.e. action against tobacco, promotion of healthy nutrition, health and safety in workplace etc.); (*) public education to encourage people to maintain and promote their health by adopting healthy personal habits that are conducive rather than damaging to health; (*) the identification of certain health risks that may lead to disease, and prompt application of measures to correct any deviation from healthy behaviour and good health; and (*) the search for identification of asymptomatic, early stages of disease (screening tools) in order to treat them.

The last of these can be done through case-finding, applying suitable tests to individuals taking advantage of their visit to a physician for any other reason (opportunistic screening), and organized screening applying a suitable test of proven effectiveness to a large segment of the population in the community.⁶

Services

The primary care team should be concerned with controlling cancer risk (or risk of other non-communicable chronic diseases) under normal practice conditions and over the years. Physicians and nurses are ideally placed to deliver preventive services through regular intervention with their registered patients. Any patient population includes full range of target groups to be addressed, i.e. (*) normal, healthy people; (*) well people at risk (people with health-damaging behaviour); (*) apparently healthy people with hidden preclinical conditions; and (*) people with complaints and symptoms pointing to a particular disease.

Physician-patient encounters

Consultations or home visits provide ample opportunities for five types of service. The first is *individual risk assessment*, or identification of the habits, behavioural patterns that indicate a risk to a person's health. Risk assessment should be accompanied by practical advice on how to control interrelated risks. Promoting healthy behaviour and helping people to change their behaviour should be the third.

The fourth type of preventive services is the early detection of asymptomatic conditions by applying suitable tests or motivating and stimulating the people to accept the offered screening. Finally, the early referral of patients with symptoms to the diagnostic process, specialist consultation or treatment is vital.



Ethical responsibilities

Preventive practices carry considerable ethical responsibility to do more good than harm, or no harm at all. The primary care team that provide preventive services to people who are or believe they are healthy have an ethical responsibility to maximize the benefit of the intervention and minimize its potential harmful effects. To this effect, certain ethical standards should be introduced and met. For example, no measure should be offered without conclusive evidence of its effectiveness in reducing incidence or mortality, or improving the quality of life by permitting less aggressive treatment.

The primary care team must respect patient's right to be fully informed about the possible limitations of the tests and hazards of the procedures, and to make informed decision about whether to accept the offered measure. In any communication with individuals, team member have to deliver advice on lifestyle in a way that the recipient feel is not intrusive and authoritative but personally relevant.

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