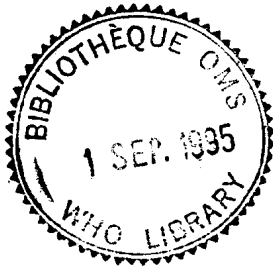


EUR/ICP/CIND 94 01/PB01
ORIGINAL: ENGLISH

Prevention in primary care

**Recommendations for promoting
good practice**



**COMPILED AND EDITED BY:
L. Döbrössy**

CONTENTS

Page

Foreword	v
Editorial Board	vii
Contributors	viii
Acknowledgements	xi
Introduction. Prevention in primary care: concepts and praxis	1

PART I: HEALTH RISKS

Chapter 1. Tobacco	7
Chapter 2. Poor diet	17
Chapter 3. Elevated cholesterol	27
Chapter 4. Obesity	35
Chapter 5. Elevated blood pressure	43
Chapter 6. Physical inactivity	53
Chapter 7. Alcohol consumption	61
Chapter 8. Drug misuse	71
Chapter 9. Ultraviolet radiation	81
Chapter 10. Sexual abuse and violence	87

PART II: MAJOR TARGET CONDITIONS

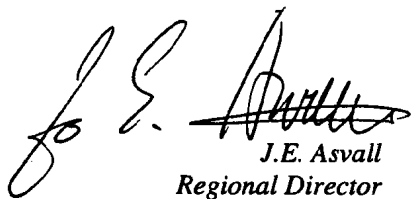
Chapter 11. Cardiovascular diseases	95
Chapter 12. Cervical cancer	107
Chapter 13. Breast cancer	117
Chapter 14. Colorectal cancer	127
Chapter 15. Oral cancer	135
Chapter 16. Prostate cancer	139
Chapter 17. Skin cancer	147
Chapter 18. Lung cancer	155
Chapter 19. Diabetes mellitus	161
Chapter 20. Depression and anxiety	169
Chapter 21. Suicidal behaviour	177
Chapter 22. Osteoporosis	189
Epilogue Putting guidelines into practice	195
Annex 1. Further reading	207
Annex 2. Age-sex charts	213

Foreword

It gives me great pleasure to introduce this publication. Noncommunicable diseases constitute the major public health problem facing European countries today. They are also responsible in large measure for widening the gap between east and west in life expectancy and mortality in Europe.

Target 4 of the policy for health for all – to reduce chronic disease – suggests an approach to this problem that "emphasizes primary care, multisectoral action and community participation". This publication is a product of the collaboration between countries and the WHO Regional Office for Europe on the countrywide integrated noncommunicable disease intervention (CINDI) programme, a network of European countries and Canada. It is the compilation of the experience of a large group of internationally recognized experts in the field of prevention, and emphasizes the measures to be introduced to promote prevention in primary care.

The book is intended as a guide to the formulation of national or local guidelines, as well as a source to which the individual reader may refer to update his or her knowledge. It should help to promote collaboration among European countries, and thus to prevent noncommunicable diseases and improve the health of the population.



J.E. Asvall
J.E. Asvall
Regional Director

Editorial Board

I. Glasunov

Regional Adviser, Countrywide Integrated Noncommunicable Disease Intervention (CINDI) programme, WHO Regional Office for Europe

W.W. Holland (*Chairperson*)

Professor, Department of Community Medicine, Guy's and St Thomas's United Medical and Dental Schools, St Thomas Hospital, London, United Kingdom

K. Holtedahl

Professor, Institute of Community Medicine, University of Tromsø, Norway

Sylvie Stachenko

Director, Preventive Health Services, National Health and Welfare, Ottawa, Canada

Hanne Thürmer

Physician and Researcher, Central National Health Screening Service, Oslo, Norway

K. van der Velden

Netherlands Institute of Primary Health Care, Utrecht, Netherlands

Contributors

The specialists listed below collaborated in the preparation of this book. Their contributions to and comments on various chapters were taken into consideration during writing and revision.

P. Anderson

Consultant, Prevention of Alcohol Abuse, WHO Regional Office for Europe, Copenhagen, Denmark

Joan Austoker

Director, CRC Primary Care Education Research Group, Oxford University, United Kingdom

Jolan Banoczy

Professor, Conservative Dentistry, Semmelweis Medical School, Budapest, Hungary

F.A. van den Berg

General Practitioner, Vlissingen, Netherlands

W. van den Berg

General Practitioner, Amersfoort, Netherlands

N. Cascinelli

Director, Oncological Surgery, National Cancer Institute, Milan, Italy

A. Chockalingam

Research Consultant, Preventive Health Services, National Health and Welfare, Ottawa, Canada

S. Degre

Professor, Cardiology, Faculty of Medicine, Free University of Brussels, Belgium

L. Denis

Professor of Urology, AZ Middelheim, University of Antwerp, Belgium

M.R. Eliel

Physician, Comprehensive Cancer Centre, Utrecht, Netherlands

G. Fodor

Head, Prevention Unit, Heart Disease Prevention and Rehabilitation Centre, Ottawa Heart Institute, Canada

G. Fowler

Professor of Social and Community Medicine, Department of Public Health and Primary Care, Oxford University, United Kingdom

- Linda Gask
Senior Lecturer, Department of Community Psychiatry,
University of Manchester, Preston, United Kingdom
- A. Giacosa
Chief, Department of Nutrition, National Cancer Research
Institute, Genoa, Italy
- J.A.M. Gray
Director, Regional Health Authority, Oxford, United Kingdom
- Judy Harrison
Lecturer, Department of Community Psychiatry, University of
Manchester, Preston, United Kingdom
- Anne Louise Kirkengen
Senior Lecturer, Community Health, Department of General
Practice, University of Oslo, Norway
- M. Kornitzer
Professor of Epidemiology and Social Medicine, Faculty of
Medicine, Free University of Brussels, Belgium
- M. Kunze
Professor, Institute of Social Medicine, University of Vienna,
Austria
- E. Morava
Professor, Chief Public Health Officer, Pécs, Hungary
- F. Olesen
Director, Research Unit for General Practice, University of
Aarhus, Denmark
- A. Petrasovits
Chief, Cardiovascular Diseases Prevention Unit, Health
Promotion Directorate, Ottawa, Canada
- K. Reenders
Senior Lecturer, General Practice, University of Groningen,
Netherlands
- M.B. Riemeijer
General Practitioner, Kapelle-Biezelinge, Netherlands
- D. Ruwaard
Head, Department of Public Health Analysis, National Institute
of Public Health and Environmental Protection, Bilthoven,
Netherlands
- Berit Schei
Senior Researcher, Department of Community Medicine and
General Practice, University of Trondheim, Norway

V. Semiglasov

Professor, Oncological Surgery, Petrov Research Institute of
Oncology, St Petersburg, Russian Federation

Sylvie Stachenko

Director, Preventive Health Services, National Health and
Welfare, Ottawa, Canada

B. Standaert

Professor, Epidemiology, Provincial Institute of Hygiene,
Antwerp, Belgium

E. Vartiainen

Senior Researcher, Department of Epidemiology, National
Public Health Institute, Helsinki, Finland

Acknowledgements

The editor is grateful to the following WHO staff for commenting on the manuscript:

Assia Brandrup-Lukanov

Regional Adviser, Sexuality and Family Planning

J. Goicoechea

Regional Adviser, Primary Health Care

C. Goos

Acting Scientist, European Alcohol Action Plan, and Regional Adviser, Abuse of Psychoactive Drugs

Elisabet Helsing

Regional Adviser, Nutrition

T. Piha

Regional Adviser, Tobacco or Health

J.G. Sampaio Faria

Regional Adviser, Mental Health

Aushra Shatchkute

Regional Adviser, Chronic Diseases, and

M.S. Tsechkovski

Director, Disease Prevention and Quality of Care.

The Editor is also grateful to H.M.J. Krans, Professor of Endocrinology and Metabolic Diseases, University Hospital, Leiden, Netherlands.

Introduction: concepts and praxis

This book focuses on what the primary care team – mainly physicians and nurses – can do to prevent the most common noncommunicable diseases, such as cardiovascular diseases, cancer, diabetes and some mental health disorders. This introduction summarizes the most basic concepts underlying the preventive practice in primary care.

Causes of disease

The causes of these 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.

Most of these diseases can be prevented. 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 diet, excessive drinking, little physical activity, and risky sexual and reproductive behaviour. The adoption of these lifestyle-related determinants of disease is largely voluntary, although influenced by the social environment, and they can be modified. Thus, the risk of disease development can be substantially reduced. In contrast, environmental hazards are considered to have a relatively small impact on total disease burden.

Prevention

Aim and measures

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 "causes", thereby preventing the onset of the disease (primary prevention). Another aim is favourably to modify the course of disease development by detection and treatment in an early, preclinical stage, when the disease is more responsive to curative treatment, thereby preventing clinically manifest, advanced disease (secondary prevention).

A wide range of intervention measures is available to accomplish the aims of disease prevention, including:

- (a) healthy public policy and government action, such as legislation and regulatory measures in major areas (action against tobacco, and the promotion of healthy nutrition and health and safety in the workplace, etc.);
- (b) public education to encourage people to maintain and promote their health by adopting personal habits that are conducive rather than damaging to health;
- (c) the identification of certain health risks that may lead to disease, and the prompt application of measures to correct any deviation from healthy behaviour and good health; and
- (d) the search for and identification of asymptomatic, early stages of disease in order to treat them.

The last of these can be done through: case-finding (applying suitable test(s) to individuals, taking advantage of their visits to a physician for other reasons) and screening (applying a suitable test of proven effectiveness to a large proportion of the population in the community in an organized manner).

Strategies

Preventive strategies can focus on the population as a whole (through government regulatory action or health education of the public, for example) or on the people identified as being at high risk of certain diseases. Individuals or groups at high risk can be offered face-to-face advice and personal guidance on changing their behaviour, further tests and care. The high-risk approach, however, may treat people as patients, even if they are not ill (medicalization), which may result in adverse psychological effects. Further, the identification of individuals or groups at high risk is not always simple and unequivocal. "Selective screening" of people at high risk cannot therefore be generally applied.

For obvious reasons, the high-risk strategy has come to dominate the medical approach to prevention. If prevention is to be effective, however, it must address the risk status of the population (smoking prevalence, dietary patterns, etc.). Primary physicians and nurses must play their part in providing education in healthy living. This influences not only the people who receive it directly but also their families and the community. Health care workers are thus role models, opinion formers and leaders in all matters that influence health.

Services

The primary care team should be concerned with controlling chronic disease risks under normal practice conditions and over the years. Physicians and nurses are ideally placed to deliver preventive services through regular interaction with their registered patients. Any patient population includes the full range of target groups to be addressed:

- normal, healthy people;
- well people at risk (people with health-damaging behaviour);
- apparently healthy people with 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 or conditions that constitute or indicate a risk to a person's health, and the estimation of the level of risk and the likelihood of health consequences that may result from the exposure. This may include, for example, asking and recording whether the patient has a personal or family history of certain disease, recording smoking history and dietary habits, and measuring height and weight, and blood pressure and cholesterol levels. Owing to the multifactorial causation of noncommunicable chronic diseases, the assessment should consider all interrelated risks. Both risk status and disease need to be understood in their social context.

Risk assessment should be accompanied by practical advice on how to control interrelated risks. For example, when measuring height and weight, the health worker should advise the patient on diet (energy intake) and physical activity (energy expenditure); when measuring blood pressure, the health worker should advise on factors that contribute to elevated blood pressure: alcohol and salt intake, obesity and lack of physical activity. The advice should be appropriate to the individual level of risk and to the patient's particular circumstances.

Third, promoting healthy behaviour and helping patients to change their behaviour (in eating, drinking, smoking, taking physical exercise, taking medication and other areas of lifestyle) are challenging tasks. Information, if received from a respected source, can be sufficiently compelling to produce change. In negotiating behaviour change, the health worker should remember to strike a balance between the future benefits of change and the immediate personal implications and costs. He or she should give advice on

lifestyle in a way that is caring, persuasive and tailored to the individual. People are likely to accept advice but reject "orders". Negotiating skills are particularly important in dealing with people with addictions.

The fourth type of preventive service is the early detection of asymptomatic conditions by applying suitable tests (such as blood pressure measurement or digital rectal examination) whenever appropriate, and promoting screening by motivating and educating people to accept organized screening (such as the Pap test or mammography) or by inviting them to participate.

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 provides preventive services to people who are or believe they are healthy have an ethical obligation to maximize the benefits of the intervention and to minimize its potentially harmful effects.

While people may see public information, education or advice on lifestyle issues as an uninvited intrusion of medicine into their personal lives, it alerts them to how dangerous they can be to their own health. As a result, people's sense of wellbeing declines. Encouraged to look for warning signs and danger signals in their bodies, well people suffer mental unrest, fear and anxiety about the chance of having some dreadful disease sometime in the (remote) future. Further, people are supposed to consider all information and advice as a positive contribution to their health, because the intention is to benefit them by promoting and protecting their health.

Screening to detect asymptomatic conditions is different from the "traditional" patient-physician interaction. The physician invites a healthy or apparently healthy person to come in and take a test. The person would not have turned up on his or her own, and has no idea of what is going to happen or what is the meaning of an "abnormal" finding. Each test has inherent limitations, and the procedure has proven adverse effects, such as anxiety and fears due to uncertainties before the test or while waiting for the test results, and distress caused by abnormal, particularly by false-positive test results and the process of verification. For example, people may be labelled as hypertensive when mildly elevated blood pressure is found, or as having "precancer" when mild or moderate dysplasia is "diagnosed".

Certain ethical standards should be introduced and met. For example, no measure should be offered without conclusive evidence of its effectiveness in reducing incidence and mortality, or improving the quality of life by permitting less aggressive treatment. The primary care team must respect patients' right to be fully informed about the possible limitations of tests and hazards of procedures, and to make informed decisions about whether to accept the offered measures. In any communication with individuals, team members have to deliver advice on lifestyle in a way that the recipients feel is not intrusive and authoritative but personally relevant. Team members should make every effort to balance the benefits and adverse effects of any preventive intervention measure.

Prerequisites for effectiveness

The European Region has a wide variety of health care systems. Organizational patterns, financing and payment systems, information systems for patient registration and recording, and provisions for education and training differ from country to country. So do the "priority" health problems.

In any circumstances, however, the prerequisites for effective prevention in primary care are: teamwork, which means defining roles and responsibilities of various categories of health care professional (physicians, nurses, community nurses and midwives, and home visitors) and establishing close cooperation between them; the proper use of practice registers and patients' records in identifying and following up patients at risk; and quality control and evaluation.

Integration into clinical practice

Primary care physicians and nurses are increasingly urged to integrate preventive services into their clinical practice; this book is one of the attempts to facilitate this process. Its aim is to disseminate the knowledge of available intervention measures to help individual physicians and nurses to decide which one to use for each of the various categories of patient population in their day-to-day primary care practice.

This book is based on a thorough review and critical appraisal of the pertinent literature, guidelines developed by other authoritative groups and, most importantly, a synthesis of the scientific evidence of the effectiveness of various measures. It summarizes the current knowledge on which health workers can act, and makes recommendations on good practice in primary care for the most modifiable health risks and the major preventable noncommunicable chronic diseases.

Guidelines for practice

To be effective, guidelines for preventive practice must be developed in the areas in which they will be used. They must be based on the health-related problems and needs of a country or region, and on the organization of health services and the available resources. These model guidelines are presented to stimulate countries to use them in evolving their own guidelines for primary care based on prevention, suited to their needs and opportunities. It is hoped that this book will help to promote preventive practice in primary care in the European Region. A list of recommended reading comprises Annex 1. Annex 2 summarizes many of the recommendations made in the chapters in age-sex charts. Annex 3 is a glossary that explains many of the terms used.