# Monographic section

# IMPROVING PREVENTION AND CARE OF DIABETES

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# Preface Diabetes: a case study on strengthening health care for people with chronic diseases

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### **INTRODUCTION**

On the whole, people are healthier, wealthier and live longer than 30 years ago but the nature of health problems is changing. Healthy life years may be not increasing in line with life expectancy: along with demographic change and population ageing, the burden of chronic diseases increases, individuals present with complex symptoms and multiple illnesses, and the substantial progress in health is deeply unequal [1]. Noncommunicable diseases (NCDs) are becoming the leading causes of morbidity and mortality, and the four major NCDs, cardiovascular diseases, cancers, respiratory diseases and diabetes, are responsible for 82% of NCD deaths [2].

Diabetes is often considered as a paradigmatic example of a chronic disease. It is a common and serious disease: diabetes increases the risk for many serious health problems (e.g., hypertension, cardiovascular diseases, eye problems, neuropathy, foot complications, nephropathy), but can be prevented and effectively controlled using available knowledge. With the correct treatment and recommended lifestyle changes, many people with diabetes are able to prevent or delay the onset of complications.

The global prevalence of diabetes, in the year 2014,

was estimated to be 9% among adults 18 years and older. In 2012 diabetes was the direct cause of 1.5 million deaths, and more than 80% of these deaths occurred in low and middle-income countries. World Health Organization (WHO) estimates that diabetes will be the 7<sup>th</sup> leading cause of death in 2030 [3].

In the European Region there are about 60 million people with diabetes with national prevalence ranking from 2.4% in the Republic of Moldova to almost 15% in Turkey [4].

The challenge facing decision-makers and leaders in health care, is how to strengthen chronic disease prevention and control efforts, and how redesign health care system to better meet complex needs of persons with chronic diseases like diabetes. Persons with chronic diseases require not only effective treatment, but also continuity of care, and adequate information and support, so that they can achieve self-management to the greatest possible extent. A redesign of the care system is needed: a shift from fragmented health care delivery to an organized prevention based multicomponent approach is necessary, along with a real partnership between citizens and health professionals, and between primary and secondary care, so as to achieve long-term coordinated care.



### THE SCENARIO

In 2011, the General Assembly of the United Nations adopted a political declaration on the prevention and control of noncommunicable diseases [5]. World leaders committed themselves to:

- reduce risk factors and create health-promoting environments in order to reduce the impact of the common noncommunicable disease risk factors, namely tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol;
- strengthen national policies and health systems to pursue health systems that support primary health care to deliver effective, sustainable and coordinated responses, acknowledging the importance of promoting patient empowerment, and a life course approach;
- strengthen international cooperation, including collaborative partnerships in support of national, regional, and global plans for the prevention and control of noncommunicable diseases, through the exchange of best practices in the areas of health promotion, legislation, regulation and health systems strengthening, training of health personnel, and development of appropriate health care infrastructure.

Recently, the 2014 European summit on chronic diseases stressed the need for joint efforts, at European level, to optimize resources and energy to address major chronic diseases [6], acknowledging the need for a coalition across society to prevent chronic diseases, preserving the best state of health and sustainability of a modern health system, with objective of maximizing the years of healthy life of European citizens.

The launch, in 2014, of the European Joint Action on Chronic Diseases and Promoting Healthy Ageing across the Life Cycle (JA-CHRODIS), is a response to the objectives set by the United Nations and the European Commission (www.chrodis.eu). The JA-CHRODIS has received funding from the European Union, in the framework of the Health Programme (2008-2013). The goal of the JA-CHRODIS is to promote and facilitate a process of exchange and transfer of good practices among countries and regions, for effective action against chronic diseases, with a specific focus on health promotion and chronic disease prevention, on co-morbidity and diabetes.

## IMPROVE THE CARE FOR PEOPLE WITH DIABETES

Chronic care model and disease management have emerged, in the last decades, as models of care delivery for people with chronic diseases: the former relying principally on the targeting of high-risk subjects, and the latter on comprehensive system change [7-9]. The two models share the objective of improving the quality of care for people with chronic diseases while optimizing health care expenditure. Moreover, the proactive relationship of the care team and the support for empowerment and self-management, can contribute to reduce inequalities in health care. The evidence strongly suggests that to improve the quality of care for people with diabetes, and for most people with chronic diseases, we need to reshape our health care systems to facilitate the transition from fragmentation to integration of care,

including prevention efforts, and incorporating community resources, in order to ensure a seamless care coordinated with and around the needs of people with chronic diseases [10-12].

In the frame of the JA-CHRODIS, diabetes is considered a case study on strengthening health care for people with chronic diseases. The project on diabetes focus on all the major aspects of a serious disease like diabetes: identification of people at high risk, prevention and early diagnosis, health promotion, comprehensive multifactorial care, prevention of complications, educational strategies for people with diabetes and training for health professionals. The Joint Action is not a research project, thus its main objective is to use the knowledge already available, to improve coordination and cooperation among countries to act on diabetes, including the exchange of good practices, and to create ground for innovative approaches to reduce the burden of chronic diseases. Special emphasis is also given to support the development and implementation of National Diabetes Plans (NDP). In 2006, the Resolution adopted by the General Assembly of the United Nations [13] encouraged "Member States to develop national policies for the prevention, treatment and care of diabetes in line with the sustainable development of their health care systems".

In this issue of the *Annali* three papers address effective diabetes prevention and care with particular attention to prevention targeted at people at high risk, health promotion, education for people with diabetes and health professionals' training. The papers focus on the aspects of "quality criteria" and "indicators" as essential tools to monitor the quality of care for people with diabetes. A fourth paper on National Diabetes Plans outlines the relevance of NDP as a comprehensive action plan to improving diabetes policy, services and outcomes.

### Diabetes prevention targeted at people at high risk

The role of prevention in the contrast of diabetes is stated fundamental. Type 2 diabetes, in particular, is preventable through lifestyle interventions, aiming at relatively modest lifestyle changes, provided for people at high risk to develop the disease. The paper by Lindstrom and colleagues [14] addresses the issue of quality assurance for prevention programs, and the identification of indicators to monitor, evaluate and improve the quality of diabetes prevention. The structure, process and outcome indicators presented in the paper may constitute a first step toward the definition of a core set of European indicators.

### Health promotion

Health promotion is the process of enabling people to increase control over, and to improve their health. It moves beyond a focus on individual behaviour towards a wide range of social and environmental interventions. Health promotion goes beyond healthy life-style to wellbeing and aims at reduce inequity in health. Accordingly, health promotion should be not only oriented towards individuals, but should include population-based strategies that target major risk factors of

disease, mostly through efforts to change health-related behaviours. Sørensen and colleagues [15] reviewed the most commonly used health promotion interventions for people with type 2 diabetes, and the related quality criteria and indicators.

### Patients' education and health professionals' training

Education for people with diabetes is considered an integral component of diabetes care, and it's intended mainly to develop skills in self management and contribute to the patient empowerment. Effective education provision needs trained health professionals, with expertise in education and diabetes management. Kuske and colleagues [16] present a review of quality criteria for patient education and health professionals' training programs, and summarized the different lists of criteria, derived from published guidelines and systematic reviews, in a set of 14 common criteria. The proposed list lays the groundwork for the definition of a set criteria, which could be applied in European countries.

### National Diabetes Plan

In the last decade, European countries have developed national guidelines, registers, national plans on prevention, and other initiatives in the framework of diabetes policy, but the degree of policy development varies widely, and NDP is not yet adopted as a standard

tool to support the organization, accessibility, and quality of diabetes care. Zaletel and colleagues [17] discuss how NDP development may hold a great potential not only to improve prevention and care for type 2 diabetes, but also for transforming health care delivery toward a comprehensive care provision, and drive the change toward innovative models of care for people with chronic diseases.

### **CONCLUSIONS**

All the criteria identified, and described in the subsequent papers [14-16], will contribute to the definition of a core set of quality criteria to assess whether a program/practice/intervention/strategy can be regarded as a "good practice". In the JA-CHRODIS the process of identifying good practice assessment criteria will follow a Delphi methodology involving key experts in the field of prevention and care of diabetes.

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