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Preventing Noncommunicable Diseases in the Workplace through Diet and Physical Activity

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Executive Summary

The workplace as a health promotion setting
Workplace health promotion (WHP) programmes, targeting physical inactivity and unhealthy dietary habits, are effective in improving health-related outcomes such as obesity, diabetes and cardiovascular disease risk factors. Enhancing employee productivity, improving corporate image and moderating medical care costs are some of the arguments that might foster senior management to initiate and invest in WHP programmes.

Unhealthy diets and excessive energy intake, physical inactivity and tobacco use are major risk factors for noncommunicable diseases (NCDs). In 2005, an estimated 35 million people died of NCDs such as heart disease, stroke, cancer and diabetes. Around 80% of these deaths occur in low- and middle-income countries that also have to deal with the burden of infectious diseases, maternal and perinatal conditions and nutritional deficiencies.

Key elements of successful programmes
Key elements of successful WHP programmes include: establishing clear goals and objectives, linking programmes to business objectives; strong management support; effective communication with, and involvement of, employees at all levels of development and implementation of the WHP programme; creating supportive environments; adapting the programme to social norms and building social support; considering incentives to foster adherence to the programmes and improving self-efficacy of the participants.

The essential role of a multistakeholder approach
Addressing, comprehensively, the issues of diet and physical activity requires the involvement of a range of stakeholders. A multistakeholder approach to the development and implementation of WHP policies and programmes is key to the success, effectiveness and sustainability of the programmes. Different stakeholders that can play a role in WHP include: international organizations; ministries of health, labour and safety; local and municipal governments; nongovernmental organizations (NGOs); civil society; employers; employees; trades unions; company health insurance funds; the agriculture industry; food producers, catering and food distributors; and the sports industry.

The importance of integrated monitoring and evaluation
Monitoring and evaluation (e.g. process and output evaluation, health risk assessment and health outcomes) are essential components of the

implementation of WHP programmes and need to be integrated into the process. Monitoring and evaluation inform decision-making and document changes to the policy or programme; contribute to building evidence, to providing accountability, and lead to effective WHP programmes so that resources can be adequately rationalized.

Gaps in current knowledge

To strengthen current knowledge, particularly on effectiveness, cost/benefit analysis and the impact on health of WHP programmes, further research is needed. The development of simple and easy-to-use validated instruments for diet and physical activity evaluation is encouraged. There needs to be further exploration of how the evidence-based diet and physical activity interventions are applied in workplaces that are in different geographic locations, and that vary in terms of governmental structure, literacy levels and social norms around different health behaviours. Identifying and publishing case reports and examples of international WHP programmes can also constitute supportive information that will help planners better understand how to develop global programmes.

The information compiled in this report reflects evidence collected from WHP policies in high-income countries, primarily within the European and North American regions. The scarcity of information and case studies from low- and middle-income countries was highlighted as an important gap in the current knowledge that needs to be addressed. Despite the limits of the available evidence, all stakeholders are encouraged to develop and implement WHP policies and programmes tackling unhealthy diets and physical inactivity.

WHO/World Economic Forum report – critical on progressing the prevention of noncommunicable diseases (NCDs)

Addressing diet and physical activity in the workplace has the potential to improve the health status of workers; contribute to a positive and caring image of the company; improve staff morale; reduce staff turnover and absenteeism; enhance productivity; and reduce sick leave, health plan costs and workers' compensation and disability payments. This report – the outcome of an event jointly organized by the World Health Organization (WHO) and the World Economic Forum – summarizes the current evidence available in addressing the different dimensions of the workplace as a key setting for interventions designed to prevent NCDs through diet and physical activity.

1. Introduction

Global burden of NCDs

In 2005, noncommunicable diseases (NCDs) accounted for 60% of all projected deaths worldwide – i.e. an estimated 35 million people died of NCDs (1). Some 80% of the deaths from NCDs occur in low- and middle-income countries.

The five major NCDs are heart disease, stroke, cancer, chronic respiratory diseases and diabetes. There is strong scientific evidence that healthy diet and adequate physical activity (i.e. ≥30 minutes of moderate intensity physical activity, ≥5 days per week) play an important role in the prevention of these diseases. Furthermore, it is estimated that approximately 80% of heart disease, stroke, type 2 diabetes and 40% of cancers can be prevented through inexpensive and cost-effective interventions that address the primary risk factors.

Impact of NCDs

The burden of NCDs has an impact not only on the quality of life of affected individuals and their families, but also on the country's socio-economic structure. WHO estimates that the loss of national income of different countries will be dramatic (Table 1). For example, it is estimated that China will lose around 558 billion international dollars from 2005 to 2015 as result of the burden of NCDs (1).

Taking population ageing and risk factors into account, deaths from noncommunicable diseases are projected to increase by 17% in 2005-2015 while during the same time period, deaths from communicable diseases, maternal or perinatal-related conditions and malnutrition are projected to decrease (1).

Table 1
Projected loss of national income attributable to heart disease, stroke and diabetes, selected countries, 2005-2015 (billions of constant 1998 international dollars) (1)

Country	Estimated income loss in 2005	Estimated income loss in 2015	Accumulated loss in 2005 value
Brazil	2.7	9.3	49.2
Canada	0.5	1.5	8.5
China	18.3	131.8	557.7
India	8.7	54.0	236.6
Nigeria	0.4	1.5	7.6
Pakistan	1.2	6.7	30.7
Russian Federation	11.1	66.4	303.2
United Kingdom	1.6	6.4	32.8
United Republic of Tanzania	0.1	0.5	2.5

[1]An international dollar is a hypothetical currency that is used as a means of translating and comparing costs from one country to the other using a common reference point, the US dollar. An international dollar has the same purchasing power as that of the US dollar in the United States.

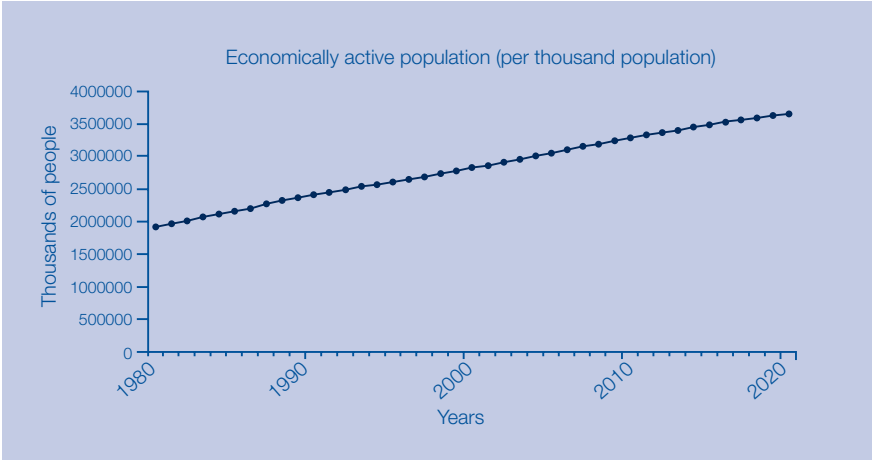
Economically active populations

Through workplace environments, it is possible to influence the health behaviours of large proportions of the population and to conduct repeated multilevel interventions to influence health behaviours (2, 3).

Data on rates of economically active populations indicate that, globally, approximately 65% of the population aged over 15 years is part of the workforce (4). The "economically active population" comprises all people of either sex who supply labour for the production of goods and services during a specified time-referenced period.

Figure 1 shows the global estimates of, and projections for, the economically active population from 1980 to 2020. In 2007, nearly 3.1 billion people were economically active; this figure is estimated to exceed 3.6 billion in 2020 (4).

Figure 1
Global estimates and projections for the economically active population, 1980-2020 (4)



Background

The workplace has been recognized internationally as an appropriate setting for health promotion. The importance of workplace health promotion was addressed in 1950 and later updated in 1995 in a joint International Labour Organization/World Health Organization session on occupational health (5).

Since this time, health promotion in the workplace has been broadly recommended by international bodies through numerous charters and declarations, including the 1986 Ottawa Charter for Health Promotion (6), the 1997 Jakarta Declaration on Leading Health Promotion into the 21st Century (7) and the 2005 Bangkok Charter for Health Promotion in a Globalized World (8).

The European Network for Workplace Health Promotion has similarly issued a number of statements in support of workplace health promotion, including the Luxembourg Declaration on Workplace Health Promotion in the European Union, the Lisbon Statement on Workplace Health in Small and Medium Sized Enterprises and the Barcelona Declaration on Developing Good Workplace Health Practice in Europe (9).

DPAS

In response to the global burden imposed by noncommunicable diseases, WHO developed the Global Strategy on Diet, Physical Activity and Health (DPAS), which was adopted by the 57th World Health Assembly in May 2004 (10). The goal of DPAS is to promote health by guiding the development of an enabling environment for sustainable actions at individual, community, national and global levels which, when taken together, will lead to reduced disease and death rates related to unhealthy diet and physical inactivity.