

Brief interventions to prevent NCDs and their nutritional complications in primary care setting

Non-communicable diseases (NCDs) have become the leading cause of death worldwide and in the WHO European Region [1]. Their prevalence is unfortunately likely to continue to increase since the prevalence of NCD risk factors is steadily growing. Among others, aging and unhealthy lifestyles play the most significant roles [1], with older adults being inevitably prone to a higher risk of chronic disease, multimorbidity and their complications. Lifestyle components contributing to the ongoing NCD epidemics include, although not limited to, unhealthy eating behaviour [2], alcohol consumption [3], tobacco use [1], and physical inactivity [1]. The negative impact of unhealthy dietary habits and insufficient levels of physical activity is also notably mediated by chronic modifications of nutritional state since overweight and obesity contribute to NCDs and related morbidity and mortality at any age [4]. With limited resources allocated to health systems worldwide, identification and modification of unhealthy lifestyle components represents a potentially effective but largely underimplemented tool to prevent NCDs and their complications. In this context, the primary care setting has a major potential role in early identification of unhealthy habits, and in promoting their modification. Promotion of primary care interventions in this field is therefore a joint priority for the World Health Organization (WHO) Regional Office for Europe, and the European Society for Clinical Nutrition and Metabolism (ESPEN). Substantial barriers however exist to the implementation of primary care strategies towards the modification of unhealthy lifestyles at the health system and at the health service provider levels.

Brief interventions are recognized by WHO as effective measures to help people quit tobacco, reduce or stop alcohol use and increase physical activity. Brief interventions can also contribute to achieve and maintain healthy eating behaviours, and may help persons living with overweight and obesity to manage weight. Brief interventions can lead to relevant health benefits by addressing modifiable risk factors in the effort to prevent NCDs at the population level. Unfortunately, the use of these interventions in the WHO European Region remains low. The main challenges at the primary care service provider level are (i) the increasing burden of patient visits and priority for curative services; (ii) time constraints during the consultation; (iii) lack of competencies and practical guiding materials to implement brief interventions; and (iv) often insufficient practice conditions for confidential, patient-centred counselling. Those barriers at the practice level are interrelated with insufficient health system levers, that hinder the effective large-scale implementation of brief intervention programmes. Challenges at the system level, among others, include (i) insufficient

structural support across the domains of organization, finance and information; (ii) lack of prioritization on the development of supportive resources, training programmes and practical tools for health service providers; (iii) lack of workforce strategies on the expansion of primary care multidisciplinary teams and alignment of team composition and competences to the needs related to unhealthy lifestyles modification; (iv) insufficient establishment of referral pathways; and (v) lack of primary care performance measurement related to modification of unhealthy lifestyles.

To promote utilization of brief interventions, the WHO European Office for the Prevention and Control of NCDs has launched the BRIEF project, which includes preparation and dissemination of relevant materials for primary care managers and providers. In November 2022, the “Integrated brief interventions for noncommunicable disease risk factors in primary care: the manual” has been launched, providing guidance for implementation of brief intervention programmes in primary care setting, including required structural support, importance of monitoring and evaluation as well as organization of training [5]. The manual aims at promoting integrated patient-centered approaches, with brief interventions comprehensively addressing main behavioural risk factors – tobacco use, alcohol consumption, unhealthy eating and physical inactivity – as well as overweight and obesity. The manual includes general background and approaches to brief intervention programmes, as well as annexes describing algorithms and detailed time-dependent guidance. Material is also provided to address behavioural and cultural aspects influencing the use of brief interventions, along with examples of existing work in the WHO European Region.

ESPEN has been involved in the preparation of the manual, in a comprehensive recognition that changes in nutrition and nutritional state should also be considered as consequences of NCDs, with the potential to negatively influence NCD outcomes. In particular, virtually all NCDs may lead to impairment of nutritional status with the onset of disease-related malnutrition (DRM) through combined low appetite, impaired nutrient utilization and consequent loss of body and muscle weight. DRM conversely enhances disabilities and frailty at any age, comorbidities, use of healthcare resources, hospitalizations and ultimately mortality [6]. Importantly, DRM and NCD nutritional complications may also occur, and are indeed common, in persons living with overweight and obesity [7]. Most importantly, DRM in NCDs is preventable and treatable through appropriate nutritional care resulting in improved clinical outcome in terms of morbidity and mortality [8]. In addition to that, such nutrition interventions have been

shown to be cost-effective [9]. The BRIEF manual takes an innovative view on this topic, by describing selected brief interventions in the field of clinical nutrition, with the potential for large-scale implementation in primary care setting. In particular, the Malnutrition Universal Screening Tool (MUST) for DRM risk screening in outpatients at risk for, or living with NCDs, as well as the Global Leadership Initiative on Malnutrition (GLIM) criteria for DRM diagnosis [10] are described in the manual. Through this initiative, WHO/Europe and ESPEN jointly promote for the first time the concept of secondary prevention of nutritional NCD complications, along with primary prevention approaches, with a focus on impaired nutritional status and DRM. Further steps are planned for dissemination of the manual, capacity building of providers and managers in primary care, and for promotion of awareness on the importance of preventable DRM in NCDs.

Conflict of interest

The authors declare that they have no competing interests regarding this work. Kremlin Wickramasinghe is the Acting Head, WHO European Office for the Prevention and Control of Noncommunicable Diseases. Regina Malykh is a Consultant, WHO European Office for the Prevention and Control of Noncommunicable Diseases. Melitta Jakob is the Head, WHO European Centre for Primary Health Care. Arnoldas Jurgutis is a Technical Officer, WHO European Centre for Primary Health Care. The authors alone are responsible for the views expressed here and they do not necessarily represent the views, decisions, or policies of WHO.

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