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Foreword: Implementing cancer prevention in Europe

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ABSTRACT

The understanding of risk factors underpinning the aetiology of many common cancers is well established, yet the conversion of this knowledge into prevention lags considerably behind. The title of this Special Issue - Implementing cancer prevention in Europe - captures the central theme within; namely, the translation of cancer epidemiology into public health policy. The Special Issue is supported by focused evidence-based case studies of how these processes might be best taken forward.

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‘Despite the scarcity of funds and the governmental priorities on economic recovery [in the current economic crisis] cancer prevention is more relevant now than ever.’ This is the timely starting point for this Special Issue on cancer prevention, which aims to address the rising cancer burden in Europe and the known risk factors through a practical, cost-efficient public health policy approach.

Following on from the extensive literature on cancer aetiology, including the World Cancer Research Fund report,¹ and the review in this issue (Section 2) from the European Prospective Investigation on Cancer (EPIC) investigators,² this Special Issue turns to the translation of this knowledge into public health policy, examining how social, political and environmental factors interact with these transitions. Discussion of risk factors and policies to tackle them is not exhaustive here; space limitations prevent deserving topics such as HPV vaccination, sun exposure and menopausal hormone therapy from more than a brief mention, despite their unquestionable relevance. Instead, the papers delve into the complexities of reducing lifestyle risk factors, including how

to tackle the growing problem of obesity and physical inactivity, in light of evidence indicating that cancers caused by life-style choices are rising across the continent.

Martin-Moreno and colleagues³ begin the issue in Section 1 by describing the choices facing policy makers in the context of the current economic environment in Europe, arguing that the financial crisis represents a unique opportunity to make necessary reforms to rationalise health services while reinforcing efficient, long-term prevention policies.

Section 2 focuses on measuring exposures. Boniol and Autier⁴ identify the challenges in determining comparable prevalence data for many risk factors across European countries – a clear prerequisite in evaluating population impact statistics. Following an overview perspective on the role of diet in cancer from the EPIC group,² Kjaerheim and colleagues⁵ provide a rare glimpse at the associations between occupation and cancer occurrence.

Section 3 makes up the core of the Special Issue with several case studies of smoking, diet and lifestyle cancer risk factors, including projections on how modifications could

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impact future cancer incidence. Friedenreich and colleagues⁶ began with an overview of the epidemiologic evidence on physical activity and cancer prevention, thereby also giving an estimate of the current cancer cases related to physical inactivity. This is followed by de Vries and colleagues⁷ who introduce us to the use of PREVENT modelling (http://www.epigear.com/index_files/Prevent.htm), a health impact assessment tool developed to assist policy makers through EUROCADET. PREVENT allows the dynamic and holistic modelling of one or more risk factors, their impact on cancer and other chronic diseases. Results show that policies targeted at increased physical activity and avoidance of weight gain are potentially more valuable in terms of cancer incidence reduction whereas only a modest net benefit on future cancer incidence due to increased consumption of fruit and vegetables.⁸ Renehan and colleagues⁹ qualify these arguments by reminding us of the potential pitfalls of population impact modelling; citing the example of obesity and cancer risk, they make a plea for conservative estimations.

A second paper led by Soerjomataram et al.¹⁰ introduces robust data from Denmark on smoking and alcohol prevalence trends into PREVENT modelling, illustrating how the future burden of lung and breast cancer could be markedly reduced by intervening on these risk factors. Papers led by Menville et al.¹¹ and Aarts et al.¹² follow, showing the importance of the interaction between socio-economic determinants, cancer risk factors, awareness and ultimately cancer incidence.

Finally, Arnold and colleagues¹³ conclude the issue by examining cancer risk diversity in non-Western migrants in Europe, highlighting the need for culturally sensitive approaches to cancer prevention which take into account individual risk patterns and specific health care needs – a more ‘personalised approach’ to cancer prevention.

In this sense, the final paper touches on an ongoing debate, implicit throughout this thematic issue: the interplay between policy, public health and personal responsibility. Each sphere plays a role in cancer aetiology; thus achieving progress in prevention depends on engaging policy makers, health professionals and individuals as equal partners in the quest for better health. We hope that this Special Issue serves to elucidate some of the obstacles hindering progress today and to chart a way forward.

Conflict of interest statement

None declared.

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