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Editorial Comment

Should the EU also wage war against cancer? And if so, how? Foreword and afterthoughts to this special issue on cancer control at the European level

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The 'Europe against Cancer' programme, which ran from 1986 to about 2002, could be considered a modest response to the American 'War against Cancer', which, after beginning in 1937 with the foundation of the National Cancer Institute, was launched in 1971. It was, at that time, a reaction to the very worrying trends in cancer mortality (later, largely attributed to the incredible tobacco consumption epidemic, Doll and Peto¹), but it also followed the increasing hope and urgent need for better therapies, initially mainly serving children and adolescents with haematological malignancies upon their stormy entrance into the care market during the late 1960s. The underlying trends, confusion and battles on causes - and the misleading role of lobbies and public relation agencies - have been wonderfully described by Robert Proctor², and cynically summarised in the famous NY Times cartoon by Herblock (Fig. 1).

'Europe against Cancer' was started about 15 years later, during the 1980s, by prominent oncologists from Italy, France and the UK, raising awareness of cancer registries, prevention and screening, and was more or less debouched in the 3rd version of the European Cancer Code.³ Recent publications state that it coincided with, or even contributed to, favourable

trends in cancer mortality, especially in the northwest and central parts of Europe.⁴ Helped by secular trends in tobacco habits, this was followed by a period of modestly EU-funded research and public health activities (future historians may uncover 'successful' activities of the various industrial lobbies in Brussels) which also stirred alarm. More or less accidentally, the funding was at a low point just before the 10 new member states, mostly from central Europe, rather gloriously entered the European Union. However, it took some time before their impressive needs in cancer care and control became clear and, in the meantime, few options arose for additional support (among others by infrastructural cancer research funding). Descriptive epidemiological research activity at the European level, essential for awareness to prevention and an integral approach to cancer control, also suffered markedly. In fact, funding for essential collaborative research with registries had even shifted to developing indicators, although the problem was rather to get the good data together in a comparative way. Investment in mass screening programmes, which can so easily be distorted by specialty interests, also suffered badly, resulting in the still rather incongruous situation of today. However, since 2004, new financial perspectives

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Fig. 1 – Figure reproduced with kind permission from The Herb Block Foundation. The original cartoon appeared in the *New York Times* on Jan 9, 1977.

have glimmered in both Brussels and Luxembourg, gradually evolving again into a variety of activities, a selection of which are described in this special issue on Cancer Control in Europe, and to which the EU-presidential meetings in Lisbon in 2007 and Ljubljana in 2008 were instrumental.^{5,6}

Better than nothing, but still far from enough.

So why so much epidemiology in this phase? Epidemiology is a basic discipline that describes the severity and size of the problem; it is the basis for prevention and screening, and it has a strong European comparative scope. Epidemiology is also a basic discipline in measuring quality of care, especially on a population basis by means of cancer registries. Therefore, the EU has logically become very important for these professionals and their databases as long as they serve the whole cancer community with their analyses. Most, if not all, papers were indeed, directly or indirectly, financed by FP5 and 6 or by the Public Health Programme of DG SANCO, and as usual, matched and driven by collaborative local expertise and funding.

However, one could wonder about which enthusiasm for which European perspective, and should this professional enthusiasm also be transformed into a European war against cancer?

Unfortunately and paradoxically, the still expanding European Union also gets confronted with expanding inequalities as a result of a multitude of reasons. The 'good' countries or regions do much better thanks to previous and ongoing investments in manpower and equipment, generated and

used optimally by broad awareness. It appears that the more one is behind, then the more difficult it is to catch up. Simultaneously, 'far from perfect' health care delivery programmes should improve rapidly for the enormous variety of cancer patients for whom diagnostic and therapeutic options are widening, together with their increasingly internet driven expectations. Improving prevention, cancer detection and care are major tasks. This usually appears easier to attain in those countries with already advanced insights and awareness based on data and infrastructure, the Scandinavian countries being the best example. They are in fact role models who have already been continuously and intensively reporting on their improving performance and weaknesses over the last three decades.

However, it does still not sound like a war game. It resembles rather the meticulous preparations in the domain of intelligence gathering and logistical planning that usually precede potential wars, or perhaps just the defence against nasty enemies like the tobacco, alcohol, obesity and asbestos driven cancer epidemics. But we prefer this kind of work, because it results in diffusion of knowledge and ideas, preferably preceding the 'blame and fame' bringing incidence and mortality 'hit' lists of countries.

Fundamental research has already, by definition, a worldwide and multi-disciplinary orientation requiring long term investment and a need to build upon research traditions at universities in most countries (increasingly drifting, for obvious reasons, from cancer institutes to universities). Basic disciplines like molecular biology, biochemistry, virology, immunology, genetics and epidemiology usually flourish better at universities, using similar techniques and being applied in, and for, patients in well controlled circumstances. Often they are an essential part of Comprehensive Cancer Centers. There is certainly added 'European value' of funding of basic research by letting our young researchers float to other European countries rather than to the USA, and this seems to be happening at a broad scale in the FP7 programme.

In this issue, several approaches to improvement of cancer control in Europe are followed, showing that different efforts might be needed in advanced and less advanced countries. However, they should always consist of thinking ahead in the application of new technologies and drugs, and of scenarios underpinning investment in training, combining expertise and adapting organisations, and always driven by a compassionate and caring attitude.

Advancing of successful health promoting strategies? The development of centres of reference (or excellence), where knowledge transfer and scientific development would be enhanced, too? Or would it be co-operation in addressing the challenges more and more frequently posed by the impressive industrial investments in the field? Only tentative answers are presented in this issue.

The book 'Responding to the Challenge of Cancer in Europe' in the framework of the European Observatory on Health Systems and Policies, proudly presented in Ljubljana, gives an excellent overview of the various underlying and sometimes diverging trends and conditions.⁷ The bottom line is, however: variety and cross-border learning, which also matters within most countries, especially the larger ones. Also, for the first time, there is a contribution by repre-

sentatives from the patient coalition (ECPC), closely liaising with the MEP's against Cancer (MAC).⁸ Coming from the more advanced countries they find progress too slow and focus on raising awareness, patient support and capacity development. Interestingly, the topic of cancer prevention in children was also chosen as a priority, which seems most difficult because avoidability of childhood cancer seems rather modest and incidence rates are only increasing with birth weights across Europe.⁹ Furthermore, the topic of prostate health, for which 'Europa Uomo' has been founded, was considered important (less intensive PSA screening would also help here). Also, they advocate lobbying with EMEA and the EU for less or better rules in drug development and testing. But how should that be attained, consciously taking into account the consequence of more risks? In the long run most gains might be attained with professionalism of the biomedical research enterprise and an adequate infrastructure of data.

The Lisbon and Ljubljana meetings of July 2007 and February 2008, respectively,^{5,6} mainly addressed essential policy oriented topics or necessary conditions like cancer registries, still only covering about 40% of the European people, and mass screening programmes for breast and cervical cancer, for which extensive quality manuals have been developed.^{10,11} Interestingly, despite the relatively good examples from Finland and the Netherlands, e.g. in cervical cancer screening¹², such screening programmes are still being applied with staggering variation.¹³ Prostate cancer may be an exception because one large randomised screening trial was started 15 years ago¹⁴ and is likely to bring light to the tunnel of over detection and treatment in 2009, fortunately with lower prostate cancer mortality.⁴ However, the only route to take is to intensify the learning processes, so that vested special interests can be transformed into constructive forces. Another lesson is never to embark on such extensive programmes without applying the scientific rules of engagement and realising the necessary investment in qualified manpower.

It is not such a bad idea to intensify all these processes, using the European cancer data 'reservoirs' and repositories to show good practices to be followed, the papers of Auvinen and Zatonski et al. being good examples in the domain of screening and prevention.^{15,16} The legal constraints to collaborative research also merit special attention¹⁷ for which the recipe of the author seems to be more professional self-regulation, whether or not in the presence of European guidelines, or even preceding them, to avoid disharmonisation such as that found after the EU Clinical Trial Directive 2001/20/EC or the one on privacy in 1995. We can conclude that, in the absence of strong professional self-regulation, such directives lead to less harmonisation.

Back to the real thing: Everybody knows that there are issues involved with infrastructure (major investments in training, often costly equipment and housing, e.g. of radiotherapy, and infrastructure for research, etc.) and processes (adequate professional and public organisation, often culturally determined). Can anyone explain the differences between the domains covered by the various oncologists across Europe, other than historical reasons or power play? We also know that private and commercial initiatives (if developing or

needed at all) flourish better in an infrastructure of well trained and optimally collaborating professionals.

1. Europe as a learning paradise?

An extremely interesting aspect of Europe is the enormous variation in disease occurrence and care delivery.^{18,19} They are, to a large extent, determined by widely varying past long term investments in manpower and capital-intensive resources like radiotherapy²⁰ but also by widely varying professional idiosyncrasies. The latter are so interesting because there are so many international bonding connections by means of congresses, meetings, literature and even the internet. On the one hand, contrasts in incidence and prognosis of cancer between and within countries tend to become smaller,¹⁸ but on the other hand this might not be true for differences according to socio-economic status.²¹ The fortunately smaller, lower-SES groups in various countries may have lost their upwardly mobile people, which inevitably presents a serious challenge in reaching protecting them against becoming victims of choice, because choice also encompasses advertising pressure of relatively useless goods and unhealthy habits. It will certainly be an extra reason to keep primary prevention on the agenda, to which the paper of Moreno et al. gives a very good update.²²

2. What is new in this special issue?

The paper on most recent trends in incidence and survival, and consequently mortality, for 17 major tumour sites in 20 European countries develops, for the first time, a comprehensive framework for interpretation by systematically designating the various determinants, like carcinogenic exposures, detection, distribution according to sub-site, sub-type, etc, and also treatment, usually changing over time.¹⁸ The next version of the European Cancer Code could not do without this approach. The difficulty in interpreting the survival changes is also detailed in the paper by Gondos,²³ which is the most recent version of the Eurocare project, but now covering the diagnostic period up till 2004.

The emphasis on palliative care is also crucial, because adequate palliative care is a vital condition for a positive, less fearful, way of looking at cancer, which is also vital for fundraising. And fundraising is vital for improving care and doing practical things for the quality of life, in survivors and in those who will die from their cancer.¹⁹

It is clear that in the near future much emphasis should be placed on the introduction of mass screening for colorectal cancer, for which not only is improving awareness important. Of course, more modalities might be applicable as 'roads leading to Rome', but having one 'thing' in common: adequate provision with endoscopy facilities for detection, removal of polyps and surveillance.²⁴ Then, last but not least, the populations of Europe are greying and many study questions arise regarding the applicability of cancer treatments in the elderly. Issues of co-morbidity and care complexity also arise that need to be addressed.²⁵ In case they are not answered by patient research, they will increasingly become moral problems.

To conclude: this issue contains a wealth of information stimulating to common research and development and offers learning from countries that are more advanced in organising cancer control than others, which is surely one of the possible positive answers to the questions we posed earlier.

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