

shown to affect the risk of dementia and for which substantial inequalities have existed between the sexes in previous generations.⁵ A host of behavioural and lifestyle choices, including diet, exercise, and tobacco and alcohol use, also affect vascular risk factors and the degree of disability in individuals with dementia. In brief, an individual's behaviours and experiences over the lifespan affect the brain, and many of these factors vary by sex.

Sex differences, extending from genetic to psychosocial domains, are relevant to productive and reproducible research, and they signal urgent priorities for public health planning. For example, almost all countries are facing the same demographic evolution in which women are diversifying their roles while carrying the heavier burden of caregiving. The availability of resources differs substantially across countries, yet the needs of a growing population of people with dementias cannot be met by public and social-care sectors alone, prompting important questions about the role of women in future caregiving.¹

Advances have been made in various fields, from cardiology to addiction medicine, by analysing the effects of sex on outcomes.¹⁰ The *Lancet Neurology* Commission provides a timely opportunity to embrace this approach in the research agenda for AD and other dementias.

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Fighting dementia in Europe: the time to act is now

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European policy makers don't seem to be fully aware of the huge burden that Alzheimer's disease (AD) and other dementias pose for the citizens of the European Union (EU). Although data about disease burden have been available for some time, this evidence is now comprehensibly explained by *The Lancet Neurology* Commission on defeating AD and other dementias.¹ Roughly 1.5–2% of the EU population is affected by dementia. AD is not a normal part of ageing, but old age is the primary risk factor for the disorder; without action, the prevalence of AD and other age-related dementias will increase substantially in the EU, and the cost of medical care and the societal burden of dementia will soon become unsustainable.

However, numbers alone are insufficient to push an issue to the top of policy makers' list of priorities. The translation of scientific evidence for dementia and

other major public health issues into EU policy remains a challenge because, for politicians, evidence from research is thought of as one of several knowledge sources. Policy makers also take into account other factors, including financial concerns, commonplace knowledge, ideology, constituency input, political expediency, and social interactions, among others.²

There is a tendency for policy makers to take small steps—ie, to build on existing policies rather than attempting to establish wide reforms. There are several reasons for this approach. First, policy makers often have limited time and insufficient information. Second, the organisation of the European political system disperses responsibility among EU institutions and member states. Finally, most public health policy is formulated within a small network of elected officials, interest groups, researchers, and related stakeholders,

whose knowledge is mainly focused on defined policy areas.³

Policy-making priorities are affected not only by the severity of a given problem but also by the public's perception of that problem. For example, bioterrorism can rouse disproportionate attention and fear, thereby inducing policy makers to act. By contrast, AD is a quiet but pervasive public health problem,⁴ and although public awareness of dementia has increased in Europe, it has not yet reached sufficient levels to prompt policy changes. Furthermore, the different types of discourse used by the scientific and policy-making communities can hinder progress.⁵ The language of scientists is often highly technical, whereas that of policy makers is often rhetorical. Scientific input can be difficult for people outside the community to understand and contextualise, especially because most scientists think in terms of answering questions rather than the need for action.

In this intricate context, what can be done? Scientists who want to communicate effectively with policy makers should acquire a sound knowledge of the political process. There is a risk that policy makers might rely on representatives of lobby groups, who might be more interested in promoting their interests than the common good.⁶ Scientists need to simplify their message—an approach exemplified by the *Lancet Neurology* Commission.¹ Results of studies in AD and other dementias need to be better explained to the public (the end-recipients of policy making), and such efforts might in turn encourage policy makers to make evidence-based decisions. Effective use of the media to communicate such messages is also of crucial importance for researchers to facilitate the exchange of information among scientists, policy makers, and society. This strategy is particularly relevant at a time when the media uses references to brain research as a powerful rhetorical technique in the public domain.⁷

The groups most likely to receive support from policy makers are those that are well organised and established. Therefore, groups representing people with AD and other dementias should strengthen their lobbying activities. Political champions—ie, leaders who put forward their ideas for policy change to those in positions of power—should be cultivated. These champions could advocate for and inform policy makers about dementia-related issues to move them up the



Ashley Cooper, Visuals Unlimited/Science Photo Library

policy-making agenda. Further potential actions that could confer advantages in the political marketplace include the formation of coalitions with policy makers at the beginning of the research or political process, and continuous re-engagement with newly elected representatives to mitigate the impact of a high turnover of politicians due to the electoral cycle.

Finally, it is perhaps necessary to draw attention to the issue of research priorities, which are discussed thoroughly by the *Lancet Neurology* Commission. AD research in Europe suffers from constraints that are common to European biomedical research as a whole. Europe has low levels of financial and human-capital investment by comparison with the USA, Japan, and China.⁸ Fragmentation and low coordination are other chronic bottlenecks. Research policy is set by the European Commission and by the 28 member states at national level. Roughly 85–90% of public funding for researchers is still allocated at a national level and not transnationally by the EU—a situation complicated by the absence of synchronisation between national funding programmes. The European Research Area was launched in 2000, with the aims of harmonising funding mechanisms at the European level and pooling research organisations, financing, and support capabilities from EU member states. Evidence suggests that much remains to be done to reach these objectives. In 2013, the European Parliament launched a manifesto, *Towards a Maastricht for Research*, proposing various steps to be taken to fulfil the recommendations of the European Research Area.⁹ Europe needs to introduce methods and

processes to promote the application of research results, thereby improving collaboration between academia and industry. European research infrastructures need to be strengthened. Research careers and mobility, with full freedom of movement of researchers, need to be improved. Furthermore, the recruitment process for researchers should be based on academic excellence rather than protectionism, which is still widespread in several member states.

Dementia is a global public health challenge. A range of actions is required to improve care and services for people with AD and other dementias, and their caregivers. The role of scientists is not only to gather and analyse data, but also to communicate this information in a more palatable way, and to acquire better knowledge of the political process. That said, policy innovation is subject to broad social, political, and economic forces, and the course of action is driven by political leaders with visionary ideas about the proper direction of public policy. No single country is able to stand up to the challenges of AD and other dementias alone. A unified European approach to research and innovation is needed.

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