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Recommendations and policy

Introduction



Key points

- Noncommunicable diseases (NCDs) are a huge health burden, responsible for 86% of deaths in Europe. Respiratory disease costs the EU more than €380 billion a year, directly and indirectly. Governments need to devote specific resources to these diseases, improve data collection and surveillance and work with patient groups, NGOs and other stakeholders to coordinate a national response.
- Lack of surveillance data is a major hindrance to attempts to tackle the problem of respiratory disease in Europe: lack of awareness leads to a lack of policy interventions.
- Tobacco is a major risk factor for most major NCDs. The Framework Convention on Tobacco Control provides a robust basis for reducing tobacco use and its health consequences, but some countries have still not signed up and in others its implementation is inadequate.
- Although most Europeans are aware that air pollution is a major respiratory health issue, European air quality standards fall short of the WHO recommended levels. This needs to change, and governments must make air quality an integral part of transport, industrial and energy policy.

Every breath is as important for life as each heartbeat. Yet respiratory disease is one of the major health challenges of the 21st century, mainly because its health and socioeconomic impact is still greatly underestimated. Some 10 years have passed since the publication of the first White Book in 2003 which showed the enormous burden of lung diseases in Europe. Despite this overwhelming burden, there is still a general lack of understanding among patients and the general public about the range and impact of respiratory disease, and this is mirrored at the political level. To give a few examples, how many policy-makers know that pneumonia is the world's number one killer of children under the age of 5 years, accounting for more childhood deaths than malaria, AIDS and measles combined? How many know that, in 2010, chronic obstructive pulmonary disease (COPD) was estimated to have cost the global economy \$400 billion (€300 billion at 2010 prices) or that chronic respiratory disease, together with other noncommunicable diseases (NCDs) such as cancer or cardiovascular disease, make the largest contribution to global mortality? As the legitimate European voices for people with respiratory illnesses and the professionals that treat them, the European Lung Foundation (ELF) and the European Respiratory Society (ERS) are working to change this situation, to prevent people from becoming ill and to improve the condition of the millions who live with respiratory illnesses. But we cannot do this alone.

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Tobacco use in the EU is responsible for 9.94 million lost life-years annually

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Approach

In order to evaluate whether there has been any progress since the publication of the first White Book, it is necessary to assess the policy landscape and what has happened in terms of policy in the past 10 years. This chapter attempts to identify key policy measures (recommendations, actions plans or strategies) that have been discussed and put in place by governments in Europe and at the global level in the past decade. We would stress that this chapter does not give specific policy recommendations for every individual respiratory disease. Rather, we focus on 'horizontal' policy measures that could improve the health of individuals with any of several respiratory diseases. Specific policy recommendations for particular disease areas are laid out in earlier chapters and in the ELF publications that complement this book.

Policy context

In the past 10 years, the World Health Organization (WHO) and some individual countries have introduced measures to lighten the burden of respiratory disease in Europe. While it is still too early to evaluate the impact of these policies, we recognise that there has been progress. However, a number of problems have emerged, including ever-growing concerns regarding the alarming increase in the number of individuals with NCDs, financial difficulties over the sustainability of health systems, the increasing resistance of infectious agents to antibiotics and the re-emergence of tuberculosis (TB) as a worrying infectious disease.

Noncommunicable diseases

In 2011, attention to NCDs reached unprecedented levels during the first United Nations (UN) high-level meeting on NCDs. The global community and all European leaders can no longer ignore the fact that, globally, 36 million deaths (63% of the total of 57 million deaths that occurred in 2008) were due to NCDs. Data reported at the summit showed that the death toll due to NCDs is mainly due to four classes of disease: cardiovascular disease (48%), cancer (21%) – with lung cancer having the highest mortality rate – chronic respiratory disease (12%) and diabetes (3.5%). In the WHO European region, this broad group of disorders accounts for 86% of deaths and 77% of the disease burden.

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It is also noteworthy that NCDs are linked by common risk factors and underlying determinants, such as smoking and air pollution, which can be addressed by horizontal policy interventions, and which, in turn, could reduce premature death and preventable morbidity and disability. This is true at the global, European and national levels.

While the WHO has taken steps to encourage European countries to do more, the European Union (EU) has been very slow to act. The Council of the EU, under the Belgian presidency in 2010, invited the member states and the European Commission to initiate a reflection process on chronic diseases. Yet, in 2013, the EU still does not have a strategy.

In terms of policy developments related to NCDs, European countries have shown a growing interest, mainly developed in partnership with the WHO. We do not aim to list all the NCD policy documents that have emerged in the past 10 years, but we would draw particular attention to the following: first, the WHO European NCD action plan 2012. This is notable because it was developed against a backdrop of other key European policies and strategies in the past 10 years (Health 2020, the First Global Ministerial Conference on Healthy Lifestyles and Noncommunicable Disease Control, the United Nations High-Level Meeting on Noncommunicable Diseases) and because it takes into account the existing commitments of European countries and focuses on specific priority action areas and interventions for the next 5 years (2012–2016). The second document of note is the first draft of the Global Action Plan 2013–2020 (GAP), which builds upon the Zero Draft published in October 2012 and takes into account outcomes of consultations with member states, UN agencies, nongovernmental organisations (NGOs) and the private sector in 2012.

An overall assessment of the different NCD policy developments shows that European countries now have a greater understanding of needs, capacities and gaps in implementation. However, it should be noted that coverage of interventions for NCD prevention and care is still very patchy. Notably, the overall picture of the disease burden and risk factors remains incomplete and the harmonisation of data collection instruments and definitions is still a key challenge, particularly for respiratory diseases. Indeed, the morbidity and mortality related to respiratory diseases are still grossly underestimated. This conclusion is unambiguous if one takes a closer look at the WHO global report on NCDs published in 2011. This report provides estimates for each member state on the burden of NCD mortality, prevalence and trends of selected major behavioural and metabolic risk factors and the country's capacity to respond to the NCD crisis. Focusing more specifically on chronic respiratory disease, the country profiles reveal worrying problems, in terms of both diagnosis and basic care. Firstly, proportional mortality due to chronic respiratory diseases is systematically higher in countries where surveillance and diagnosis are most accurate. (For instance, in Sweden, the proportional mortality due to chronic respiratory disease is 4%, while in Latvia, where tobacco prevalence is much higher (27.8%), the reported proportional mortality due to chronic respiratory diseases is only 1%. In addition, Spain and the UK report the highest level of proportional mortality due to chronic respiratory disease (9% and 8%), yet these countries have chronic respiratory disease-specific policies/programmes/action plans.) Secondly, only 10 of the 28 EU member states have developed an integrated or topic-specific policy/programme/action plan for chronic respiratory disease. This indicates a worrying vicious circle: the lack of surveillance data leads to a lack of awareness which in turns leads to a lack of policy interventions.

If European countries genuinely wish to reduce the toll of chronic respiratory diseases, the following recommendations should be implemented urgently:

- Dedicated NCD units should be set up in health ministries, paying special attention to chronic respiratory disease. As discussed above, this is often completely overlooked in European countries. These units should have suitable expertise, resources and responsibility for needs assessment, strategic planning, policy development, multi-sectoral coordination, implementation and evaluation.
- Each special unit should first conduct an assessment of epidemiological and resource needs in order to inform the development of national policies and plans to address chronic respiratory disease.
- Where data collection and surveillance is inadequate, this should be given a high priority. The government should allocate a budget commensurate with identified gaps in surveillance.
- Identified human and other resources needed to implement the national action plan for prevention and control of chronic respiratory disease should also be allocated a specific budget.
- Health systems for the care of people suffering from chronic respiratory disease should be improved.
- Countries should make sure that the health workforce is adequately trained and appropriately deployed, if necessary revising and reorienting the curricula of medical, nursing and public health institutions in order to deal with the complexity of issues relating to chronic respiratory disease.
- Finally, all governments should work in partnership with stakeholder groups that are already supporting and contributing to a national response to chronic respiratory disease (e.g. patient groups, NGOs, civil society and academic research centres).



Tobacco

It is widely accepted that tobacco use is one of the most important NCD risk factors: it is estimated that, every year, approximately 700 000 EU citizens die prematurely because of tobacco consumption (a loss of up to 10 years of life

'Willingness to pay'

To evaluate the cost of premature mortality due to smoking, the EU analysis used a 'willingness to pay'-based methodological approach. A value is attached to each life-year lost based on what society would have been ready to pay to regain that life-year, not on what that life-year's loss has cost society. The EU uses the values established in its ExterneE research project, according to which the typical range for the value of one life year (VOLY) is €50 000–100 000. The EU sets the intangible value of the loss of 1 year of life at €52 000, irrespective of the age or country of residence of the victim. Peto's 'Smoking Attributable Fraction' (SAF) is a key component of the costing model used. The SAF is an estimate of the proportion of those who died due to a given condition that can be attributed to smoking. It is based on the fact that smokers are more likely to develop certain life-threatening conditions.

expectancy is estimated in smokers). According to data available in 2003, (when the EU comprised only 15 countries), at least 13 million people suffered from one or more of the six main disease categories associated with smoking, including bronchitis and other lower respiratory infections, COPD, asthma and lung cancer. If the 2003 estimate was 13 million, what is the figure today with 28 countries? The picture is dramatic: today, tobacco is responsible for 9.94 million lost life-years annually which, according to the EU, is equivalent to a cost to society of €517 billion (see 'Willingness to pay').

In this context, one of the major advances of the past 10 years has been the ratification of the WHO Framework Convention on Tobacco Control (FCTC). The FCTC is a powerful legal instrument to help fight the tobacco epidemic. In the WHO European Region, 48 countries plus the EU itself have ratified the treaty. However, seven countries are still not party to the FCTC, and in some of the others translation of commitment into action has been relatively weak. There has, however, undoubtedly been progress: many European citizens can now enjoy clean air when they go to a restaurant or bar. The ERS is very proud of this development as it is one of the very few European medical organisations that constantly supported and funded action in support of tobacco control in Europe, including the setting up and constant support (in collaboration with Cancer Research UK, the European Heart Network and Action on Smoking and Health UK) of the Smoke Free Partnership (www.smokefreepartnership.eu), which aims to promote tobacco control at EU and national levels. The ERS will continue to strengthen its tobacco control activities by facilitating access to scientific evidence on the link between tobacco consumption and respiratory diseases and supporting the implementation of the FCTC.

- European countries should strengthen their tobacco control laws and introduce stronger measures such as higher taxation and pricing, more restrictive rules on advertising, plain packaging, more prominent health warnings, a ban on smoking in public places and support for people who want to kick the habit.
- The success of the FCTC depends on everyone – civil society, medical organisations, researchers, health professionals and the public – but it cannot be achieved without policy-makers.

Air quality

Some 87% of Europeans consider that respiratory disease related to poor air quality is a serious problem in their country. Given that even short-term increases in air pollution have been associated with respiratory symptoms and temporary decreases in lung function, there appears to be good reason for their concern. According to the Organisation for Economic Co-operation and Development (OECD), air pollution will be the biggest environmental cause of premature death by 2050. Millions of Europeans live in areas where simply breathing the air around them is damaging to their health. The effects should not be underestimated. Air pollution can reduce lifespan and cause serious heart and lung disease. It is estimated that poor air quality in Europe leads to an average loss of 8.6 months' of life expectancy. The pollutants of most concern for human health across Europe are airborne particulate matter (PM), nitrogen dioxide (NO₂) and ground-level ozone (O₃). Inhalation of PM causes irritation and damage to the lungs. Excessive O₃ in the air triggers asthma, reduces lung function, causes breathing problems and even causes lung disease. Short-term exposure to NO₂ is associated with reduced lung function and airway responsiveness to natural allergens (see chapter 6). These pollutants increase the death rate, especially in sensitive population groups such as the elderly, or those suffering from respiratory ailments. Recent studies show that in times of high air pollution there

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is a marked increase in hospital admissions for respiratory and cardiovascular conditions. Despite these health impacts, current EU legislation allows for higher levels of damaging pollutants than those recommended by the WHO.

- European countries must support the implementation of the WHO recommended air quality guidelines for outdoor and indoor air – through an ambitious revision of limit values for ambient air pollution.
- European countries should reinforce their efforts to reduce source pollution from all sectors – industrial, transport and energy.
- European countries should make air quality an integral part of their transport, industrial and energy policies and ensure that the correct level of governance – national, regional or local – is equipped to tackle sources of pollution. States also need to improve cooperation on cross-border pollution and ultimately must undertake to implement and enforce air quality legislation.

Tuberculosis

Communicable diseases recognise no borders and TB continues to pose a serious threat to individuals and public health across the world. Despite notable efforts from WHO Europe, which has worked in partnership with several European countries to improve the situation, there is still room for improvement in order to tackle the spread of TB in Europe and across the world.

The WHO estimates that there were 8.7 million new TB cases and 1.4 million deaths due to TB across 204 countries in 2011. Of these, 380 000 new patients and 45 000 deaths due to TB come from the European region. Perhaps more significantly, many come from migrant communities. 15% of new cases and 44% of previously treated cases are multi-drug resistant (MDR-TB), of which about 10% are extensively drug-resistant (XDR-TB). The proportion of tested TB patients in the WHO Europe region who are co-infected with HIV has increased from 2.8% in 2006 to 6.5% of in 2011 (~20% per year). While these alarming statistics may partly reflect better surveillance and monitoring, the figures clearly show that TB is one of the most important indicators of health inequalities across the world. Indeed, TB is particularly prevalent among vulnerable populations with a lower socioeconomic status (e.g. people who have no identity documents and no access to healthcare, and people subject to discrimination, hostility or economic adversity).

A recently published consensus paper in the *European Respiratory Journal* describes in detail the minimum package

of cross-border TB control and care needed to improve the situation in Europe. The report was prepared by a task force following a literature review, and with input from managers of national TB control programmes and the Wolfheze 2011 conference. Several issues were identified in cross-border TB control and care, including limited access to early diagnosis, lack of continuity of care and information during migration, and the availability of and access to health services in the new country. The recommendations are clear and should be taken on board by all governments in order to address this current problem. They are not listed in detail here but they can be grouped into three pillars:

- Political commitment (including the implementation of a legal framework for TB cross-border collaboration and tobacco control).
- Financial mechanisms.
- Adequate health service delivery (prevention, infection control, contact management, diagnosis and treatment, and psychosocial support).

Conclusion

This chapter began by stressing that the size and the toll of the epidemic caused by respiratory disease are still overlooked and that there is a general lack of understanding among patients and the general public, which is mirrored at the political level.

Disease surveillance has been recognised as a key priority by the European Centre for Disease Prevention and Control (ECDC), which has developed a strategy for infectious disease surveillance in Europe, to direct the long-term development of the European surveillance system. The ECDC states that the overall goal of the strategy is *'to contribute to reducing the incidence and prevalence of communicable diseases in Europe by providing relevant public health data, information and reports to decision-makers, professionals and health care workers in an effort to promote actions that will result in the timely prevention and control of communicable diseases in Europe. High validity and good comparability of communicable disease data from the Member States are imperative to reach this goal.'*

Accurate information upon which to base improvements for prevention and care, as well as to monitor progress on political commitments, is essential in order to estimate the magnitude of specific problems, determine the distribution of illness, portray the natural history of a disease, generate hypotheses, stimulate research, evaluate control measures, monitor changes and facilitate planning. A read through this and earlier chapters confirms a critical lack of national capacity to collect, interpret and use comparable data accurately and transparently across different sectors and between countries. Since formulation of optimal policy demands accurate and up-to-date information, it is of paramount importance that all European governments improve and standardise surveillance and data collection relating to respiratory diseases as a top priority and a matter of urgency.

We hope that European governments will implement all the policy interventions recommended in this and the preceding chapters, including the provision of adequate clinical facilities for investigating and treating respiratory disease and increased funding for basic, translational and epidemiological research, and that in the future, based on better surveillance data, the quality of care in respiratory disease and comorbidities will become uniformly harmonised at a high level.



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