



**Alzheimer's Disease  
International**

*The global voice on dementia*

# World Alzheimer Report 2015

## The Global Impact of Dementia

AN ANALYSIS OF PREVALENCE, INCIDENCE, COST AND TRENDS

### SUMMARY SHEET

#### Background

The World Alzheimer Report 2015 updates our estimates of the global prevalence, incidence and costs of dementia, based on systematic reviews. The report also includes a review of the evidence for and against trends in the prevalence and incidence of dementia.

There are almost 900 million people aged 60 years and over living worldwide.

Between 2015 and 2050, the number of older people living in high income countries is forecast to increase by 56%, compared with 138% in upper middle income countries, 185% in lower middle income countries, and by 239% low income countries. Rising life expectancy is contributing to rapid increases in numbers, and is associated with increased prevalence of chronic diseases like dementia.

#### The global prevalence of dementia

We estimate that 46.8 million people worldwide are living with dementia in 2015. This number will almost double every 20 years, reaching 74.7 million in 2030 and 131.5 million in 2050. These new estimates are 12-13% higher than those made for the World Alzheimer Report 2009.

Our regional estimates of dementia prevalence in people aged 60 years and over range from 4.6% in Central Europe to 8.7% in North Africa and the Middle East, though all other regional estimates fall between 5.6% and 7.6%. When compared to our 2009 estimates, estimated prevalence is higher in East Asia and Africa.

58% of all people with dementia live in countries currently classified by the World Bank as low or middle income countries. This proportion is estimated to increase to 63% in 2030 and 68% in 2050.

#### The global incidence of dementia

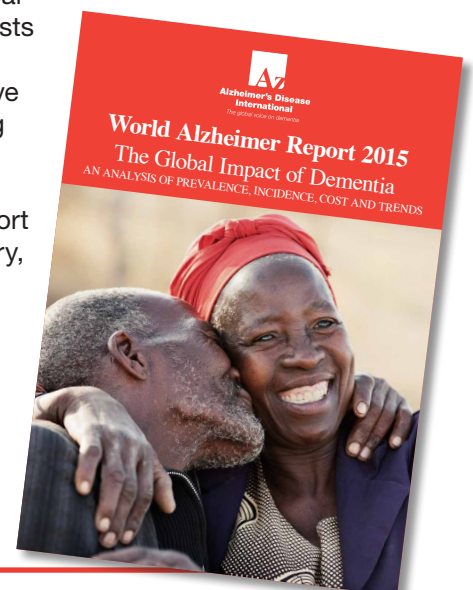
For 2015, we estimate over 9.9 million new cases of dementia each year worldwide, implying one new case every 3.2 seconds. This new estimate is almost 30% higher than the annual number of new cases we estimated for 2010 in the 2012 World Health Organization report, 'Dementia: a public health priority'.

The regional distribution of new dementia cases is 4.9 million (49% of the total) in Asia, 2.5 million (25%) in Europe, 1.7 million (18%) in the Americas, and 0.8 million (8%) in Africa. Compared to our 2012 estimates, these values represent an increased proportion of new cases arising in Asia, the Americas and Africa, while the proportion arising in Europe has fallen.

The incidence of dementia increases exponentially with increasing age, doubling with every 6.3 year increase in age, from 3.9 per 1000 person-years at age 60-64, to 104.8 per 1000 person-years at age 90+.

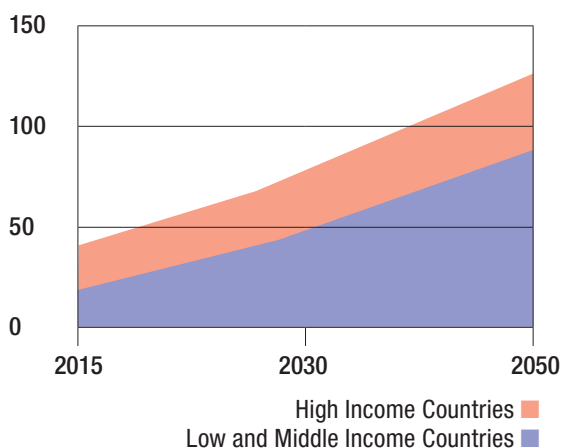
#### The worldwide costs of dementia

The estimates of global societal economic costs of dementia provided in our 2015 report have been generated using the same general approach as for the World Alzheimer Report 2010. For each country, we estimated cost per person, which is then multiplied by the number of people estimated to be living with dementia in that country. Per person



**The full report can be downloaded from the ADI website  
[www.alz.co.uk/worldreport2015](http://www.alz.co.uk/worldreport2015)**

## Number of people with dementia (millions)



costs are divided into three cost sub-categories: direct medical costs, direct social care costs (paid and professional home care, and residential and nursing home care) and costs of informal (unpaid) care.

The global costs of dementia have increased from US\$ 604 billion in 2010 to US\$ 818 billion in 2015, an increase of 35.4%. Our current estimate of US\$ 818 billion represents 1.09% of global GDP, an increase from our 2010 estimate of 1.01%. Excluding informal care costs, total direct costs account for 0.65% of global GDP. Cost estimates have increased for all world regions, with the greatest relative increases occurring in the African and in East Asia regions (largely due to higher prevalence estimates for these regions).

Distribution of costs between the three sub-categories (direct medical, social care, and informal care) has not changed substantially. Direct medical care costs account for roughly 20% of global dementia costs, while direct social sector costs and informal care costs each account for roughly 40%. The relative contribution of informal care is greatest in the African regions and lowest in North America, Western Europe and some South American regions, while the reverse is true for social sector costs.

## Trends in prevalence and incidence

Almost all current projections of the coming dementia epidemic assume that age- and gender-specific prevalence of dementia will not vary over time, and that population ageing alone drives the projected increases. The prevalence of any condition is a

product of its incidence and the average duration of the disease episode. Changes in either or both of these indicators could lead to changes in age-specific prevalence.

One should not expect that secular trends will be the same across all world regions, or even among different population subgroups within one country. Experience with changing rates of cardiovascular disease, obesity, diabetes and cancer shows this clearly. The considerable variability in secular trends for these chronic diseases reflect different degrees of progress in improving public health, and in improving access to healthcare and strengthening health systems and services to better detect, treat and control these conditions.

Findings across the identified studies (mostly conducted in high income countries) are currently too inconsistent to reach firm and generalisable conclusions regarding underlying trends. Studies that use fixed methodology to estimate changes in dementia prevalence, incidence and mortality over time, in defined populations, are valuable and it is important that more are commissioned.

## Recommendations

The report includes Alzheimer's Disease International's (ADI) recommendations, including; that dementia risk reduction should be an explicit priority in work led by the World Health Organization (WHO), with clear linked actions including targets and indicators; that research investment for dementia should be scaled up, proportionate to the societal cost of the disease; and that this investment should be balanced between prevention, treatment, care and cure. Epidemiological research is particularly sparse in Central Asia, Eastern Europe, Southern Latin America, and Eastern and Southern sub-Saharan Africa.

ADI applauds the action taken by the G7 in launching a 'Global Action Against Dementia', and calls for this initiative to be continued with a broader agenda and wider representation from the countries and regions most affected by the ongoing dementia epidemic. ADI advocates for a transfer of political leadership to the G20 nations. ADI endorses the 'call for action' agreed at the WHO Ministerial Conference on Global Action Against Dementia (March 2015), which needs to be translated into operationalised plans with clear targets and deliverables at international and national level.

Alzheimer's Disease International (ADI) is the international federation of Alzheimer associations throughout the world. Our vision is an improved quality of life for people with dementia and their families.

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The World Alzheimer Report 2015 was independently researched and authored by Prof Martin Prince, Prof Anders Wimo, Dr Maëllenn Guerchet, Miss Gemma-Claire Ali, Dr Yu-Tzu Wu, Dr Matthew Prina and other contributors, on behalf of the Global Observatory for Ageing and Dementia Care hosted at King's College London.

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