

Use of a summary measure of population health in France for the period 2000-2001

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Introduction

- Needs for summary measure of population health in order to evaluate public policy
- Why DALYs ?
 - Permit ranking of diseases
 - Easily understandable
- Project of French National Health and Medical Research Institute (Inserm) and the Ile-de-France Regional Health Observatory
- Funded by the French Ministry of Health
- Use of WHO estimates for France or need to collect specific data ?

Methods (1)

- YLL calculation with :
 - Average mortality by causes in France for years 2000 and 2001
 - Standard life tables used in the GBD (Coale & Demeny, West level 26)

YLLs = $N \times L$, where N is the number of deaths due to a given cause and L is standard life expectancy for the corresponding sex and age.

Methods (2)

- YLD calculation using :
 - WHO estimates of disability weights, incidences and durations for France 2002

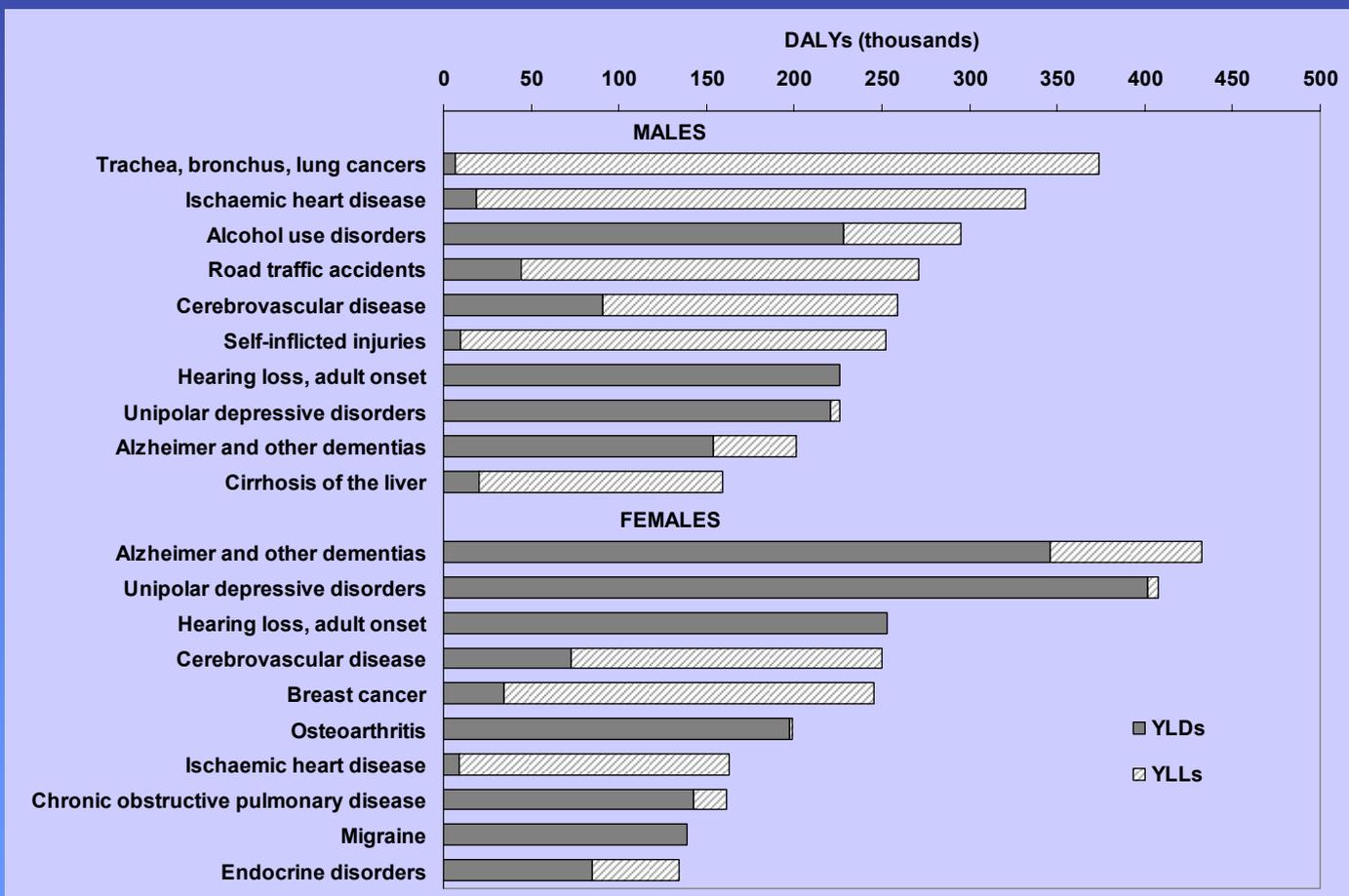
YLDs = $I \times d \times DW$, where I is the incidence, d the duration and DW the disability weight

- No discounting, no age-weighting

Mortality, premature mortality and YLLs France, 2000-2001

rank	Deaths		Deaths occurring before 65		YLLs	
	cause	Per cent of total deaths	cause	Per cent of total deaths before 65	cause	Per cent of total YLLs
1	Ischaemic heart disease	9,1%	Trachea, bronchus, lung cancers	9,4%	Ischaemic heart disease	6,9%
2	Cerebrovascular disease	7,7%	Self-inflicted injuries	7,0%	Trachea, bronchus, lung cancers	6,7%
3	Trachea, bronchus, lung cancers	5,0%	Ischaemic heart disease	5,5%	Cerebrovascular disease	5,1%
4	Alzheimer and other dementias	4,4%	Road traffic accidents	5,4%	Self-inflicted injuries	4,9%
5	Colon and rectum cancers	3,2%	Cirrhosis of the liver	4,9%	Road traffic accidents	4,5%
6	Lower respiratory infections	3,1%	Breast cancer	4,0%	Breast cancer	3,1%
7	Breast cancer	2,2%	Cerebrovascular disease	3,0%	Colon and rectum cancers	3,0%
8	Diabetes mellitus	2,2%	Colon and rectum cancers	2,8%	Cirrhosis of the liver	3,0%
9	Self-inflicted injuries	2,0%	Mouth and oropharynx cancers	2,4%	Diabetes mellitus	2,0%
10	Prostate cancer	1,8%	Alcohol use disorders	2,1%	Alzheimer and other dementias	2,0%

The Burden of Disease in France 2000-2001



Comparison between French data and WHO's estimates

Rank	Mortality data observed, France 2000-2001	Per cent of total deaths	WHO estimates, France 2002	Per cent of total deaths
1	Ischaemic heart disease	9,1%	Ischaemic heart disease	9,1%
2	Cerebrovascular disease	7,7%	Cerebrovascular disease	7,5%
3	Trachea, bronchus, lung cancers	5,0%	Trachea, bronchus, lung cancers	5,2%
4	Alzheimer and other dementias	4,4%	Lower respiratory infections	3,9%
5	Colon and rectum cancers	3,2%	Colon and rectum cancers	3,5%
6	Lower respiratory infections	3,1%	Alzheimer and other dementias	3,4%
7	Breast cancer	2,2%	Chronic obstructive pulmonary disease	3,2%
8	Diabetes mellitus	2,2%	Breast cancer	2,5%
9	Self-inflicted injuries	2,0%	Diabetes mellitus	2,3%
10	Prostate cancer	1,8%	Falls	2,0%

- Underestimation of 6.5% of total deaths by WHO
- Difference exceed 25% for some categories: skin diseases, musculo-skeletal diseases, endocrine disorders and respiratory infections

Future works

Importance to use French epidemiological data in order to calculate Burden of disease and use it as a tool for national program evaluation

Complete calculation of the burden of disease based on local for France is a major undertaking

→ selection of a few causes on which future work should focus

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