Quantifying the burden of premature mortality at national level in France in 2016

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BACKGROUND:

Efforts to accurately measure premature mortality are important to monitor the impact of diseases and injuries on population health and to set policy priorities.

OBJECTIVE:

To provide the first national estimates of Years of Life Lost (YLLs) for all causes of death in France in 2016

METHOD:

- Data from the French national health data system (SNDS) that includes Center for Epidemiology on Medical Causes of deaths (CépiDc)
- Underlying causes of death coded according to WHO ICD-10 codes 2016
- Ill-defined deaths (IDDs) were identified using GBD (Global Burden of Disease) study 2019*.
- National sex-specific life expectancy tables (2018) were used.
- Crude mortality rates were calculated and compared with YLL by age and sex.
- No redistribution of IDDs was performed.

*[Global burden of 369 diseases and injuries in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019: GBD 2019 Diseases and Injuries Collaborators]

RESULTS:

- In 2016, we estimated approximately 7.3 million YLLs (586,519 registered deaths)
- Of which 35.1% were due to neoplasms and 17.8% to cardiovascular diseases (respectively 34.5% and 17.3% in men; 35.8% and 18.4% in women).
- Approximately 27% of the deaths registered were IDDs, representing approximately 1.8 million YLLs.
- The proportions of identified IDDs includes the GBD level 1 (57%), 2 (11%), 3 (25%) and 4 (7%).
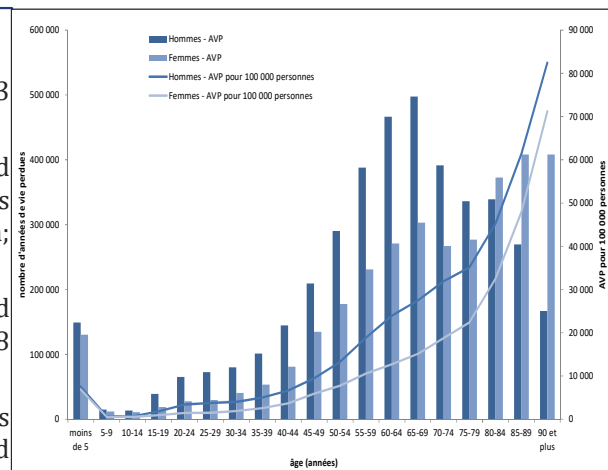
YLLs according to age and sex in France in 2016

NEXT STEPS:

- Identify the target codes (i.e., valid ICD-10 codes) using secondary direct causes of death
- Define the proportions of IDDs to redistribute them according to the distribution of target codes in original mortality database by age-group and sex
- Apply the proportional distribution method and recalculate the YLL