

# Ageing and health sector policies and reforms



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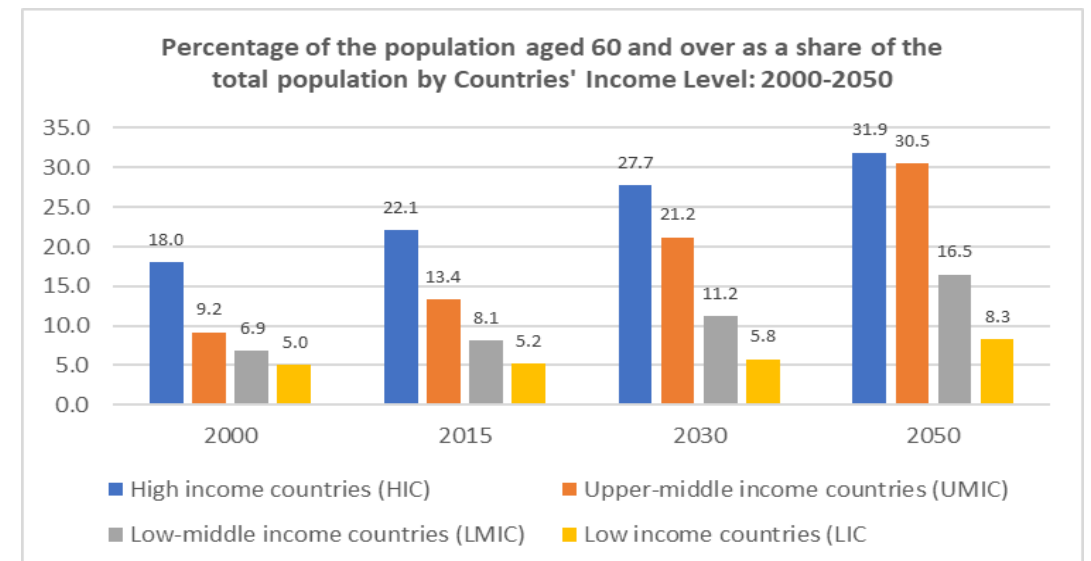
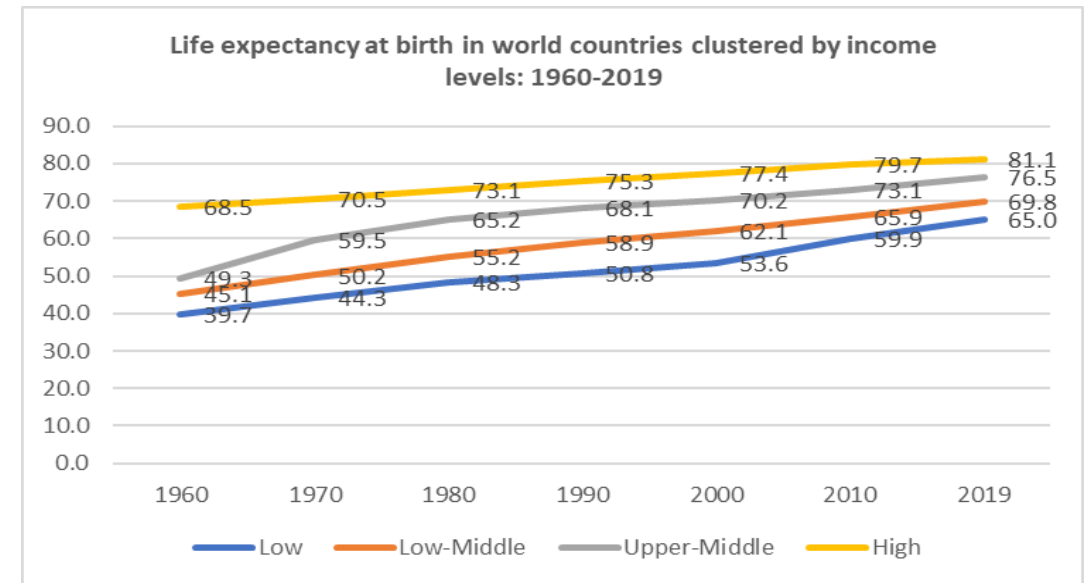
# Outline



1. Ageing trends in high and upper-middle income countries;
2. Old age early mortality and morbidity
3. Access to health care for older persons
4. Financial protection to health in old-age.
5. Lessons learned on health policies to address older people's needs
6. Impact of the pandemic in older people.

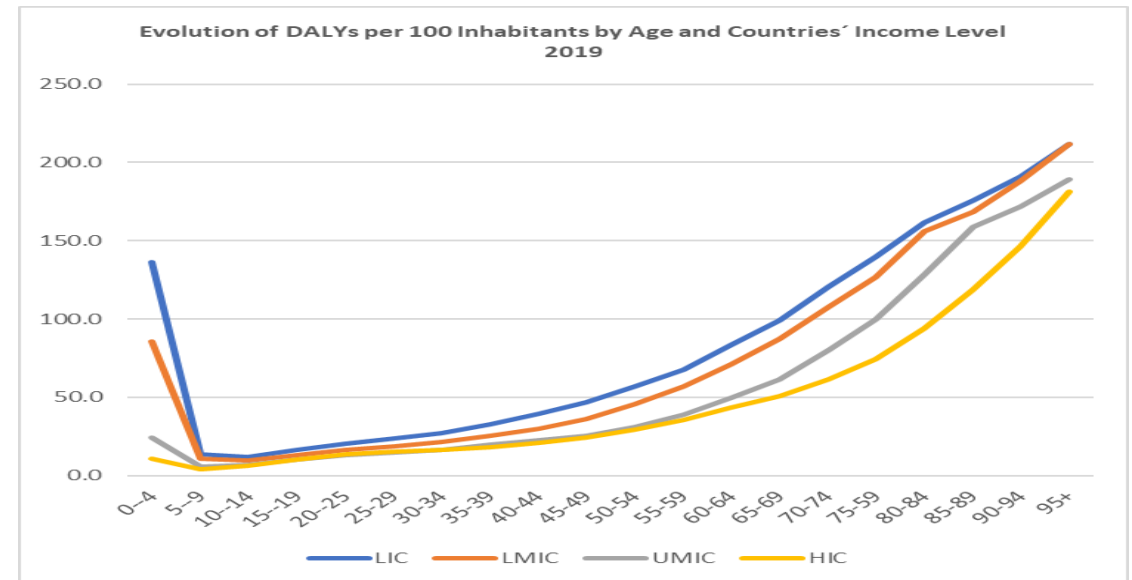
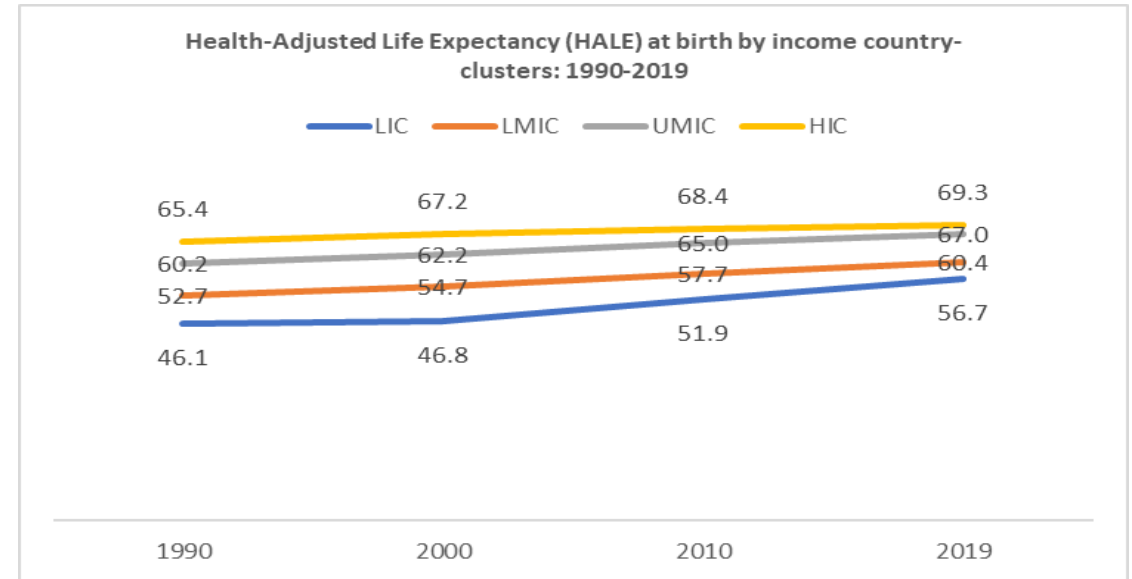
# 1. Aging trends in high and upper-middle income countries

- Upper-middle-income countries (UMIC) achieved faster growth in life expectancy at birth than any other cluster of countries by income level;
- The gap on the life-expectancy at birth between the HIC and LIC was narrowed from 25 year, in 1960 to 14 years, in 2020;
- In 2050 the population over 60 years old will be around 30%-32% of the total population in HICs and UMICs.



## 2a. Old age early mortality and morbidity

- Around 9 to 10 years of life are lost by disease. Health-Adjusted Life Expectancy at birth (meaning the healthy years expected to be lived by an average person) was in 2019 69 years in HIC countries and 57 years in LIC countries.
- Ageing is not only a chronological process, but also a process of deteriorating health and increasing severity of disease in different degrees, across countries.
- A 30-year gap separates countries with the highest and lowest ages at which people experience the health problems of a 65-year-old. An average 76-year-olds in Japan and 46-year-olds in Papua New Guinea have the same level of age-related health problems as an “average” person aged 65.
- Losses of years of life by premature death or disease (DALYs) are much higher in LICs and LMICs than in UMICs and HICs, specially for older age people.



## 2b. Five main Disease Groups Associated with DALYs Losses by Specific Age Groups in Countries Grouped by Income Level – 2019 (\*)

HIC	UMIC	LMIC	LIC
<b>Overall Population</b>			
Neoplasms Cardiovascular Diseases Musculoskeletal Disorders Mental Disorders Neurological Disorders	Cardiovascular Diseases Neoplasms Musculoskeletal Disorders Mental Disorders Other NCDs	Cardiovascular Diseases Maternal and Neon. Des. Respiratory Infections & TB Neoplasms Other NCDs	Maternal and Neon. Des. Respiratory Infections & TB Neglect. Trop. and Malaria Enteric Infections Other NCDs
<b>58% OF TOTAL DALYs</b>	<b>54% OF TOTAL DALYs</b>	<b>46% OF TOTAL DALYs</b>	<b>50% OF TOTAL DALYs</b>
<b>Population Aged 50-69</b>			
Neoplasms Cardiovascular Diseases Musculoskeletal Disorders Diabetes and CKD Mental Disorders	Cardiovascular Diseases Neoplasms Musculoskeletal Disorders Diabetes and CKD Mental Disorders	Cardiovascular Diseases Neoplasms Diabetes and CKD Chronic Respiratory Diseases Musculoskeletal Disorders	Cardiovascular Diseases Neoplasms Respiratory Infections & TB Diabetes and CKD Digestive Diseases
<b>65% OF TOTAL DALYs</b>	<b>66% OF TOTAL DALYs</b>	<b>61% OF TOTAL DALYs</b>	<b>57% OF TOTAL DALYs</b>
<b>Population Aged 70 and Over</b>			
Cardiovascular Diseases Neoplasms Neurological Disorders Musculoskeletal Disorders Diabetes and CKD	Cardiovascular Diseases Neoplasms Chronic Respiratory Diseases Diabetes and CKD Neurological Disorders	Cardiovascular Diseases Chronic Respiratory Diseases Neoplasms Diabetes and CKD Respiratory Infections & TB	Cardiovascular Diseases Respiratory Infections & TB Neoplasms Chronic Respiratory CKD Diabetes and CKD
<b>70% OF TOTAL DALYs</b>	<b>76% OF TOTAL DALYs</b>	<b>67% OF TOTAL DALYs</b>	<b>67% OF TOTAL DALYs</b>

Source: Author's Elaboration based on data from the Institute of Health Metrics and Evaluation (IHME), accessed in May 10, 2021. (\*) The red boxes represent cases where the majority of the burden of diseases is related to NCDs; the yellow boxes represent burden of diseases in transition and the green boxes represent cases where the majority of the burden of diseases is related to transmissible diseases, maternal and neonatal and nutritional conditions.

## 2c. Ten major world health risk factors in 1990 and 2019 according DALY losses: Population aged 50-74

Ten Leading Risk Factors 1990	Associated DALYs (%)	Ten Leading Risks Factors 2019	Associated DALYs (%)
Smoking	19,4	High Systolic Blood Pressure	16,1
High Systolic Blood Pressure	16,8	Smoking	15,5
Household Air Pollution	8,5	High Fasting Plasma Glucose	12,2
High Fasting Plasma Glucose	8,3	High BMI	11,8
High BMI	7,6	Ambient Particulate Matter	6,8
High LDL Cholesterol	7,0	High LDL Cholesterol	6,2
Alcohol Use	5,1	Alcohol Use	5,0
Ambient Particulate Matter	4,7	Kidney Disfunction	4,7
High Sodium	4,0	Household Air Pollution	3,5
Kidney disfunction	3,7	High Sodium	3,4
<b>TOTAL</b>	<b>85,1</b>	<b>TOTAL</b>	<b>85,2</b>

Source: Author's Elaboration based on data from the Institute of Health Metrics and Evaluation (IHME), accessed in May 10, 2021. (\*) The red boxes represent cases where the majority of the burden of diseases is related to NCDs; the yellow boxes represent burden of diseases in transition and the green boxes represent cases where the majority of the burden of diseases is related to transmissible diseases, maternal and neonatal and nutritional conditions.



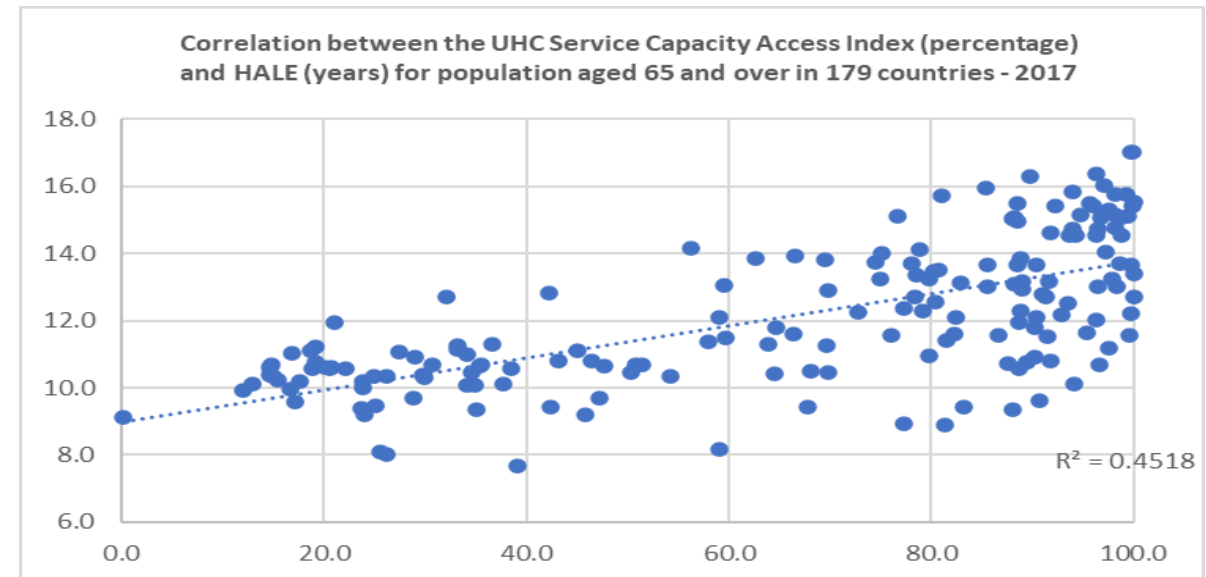
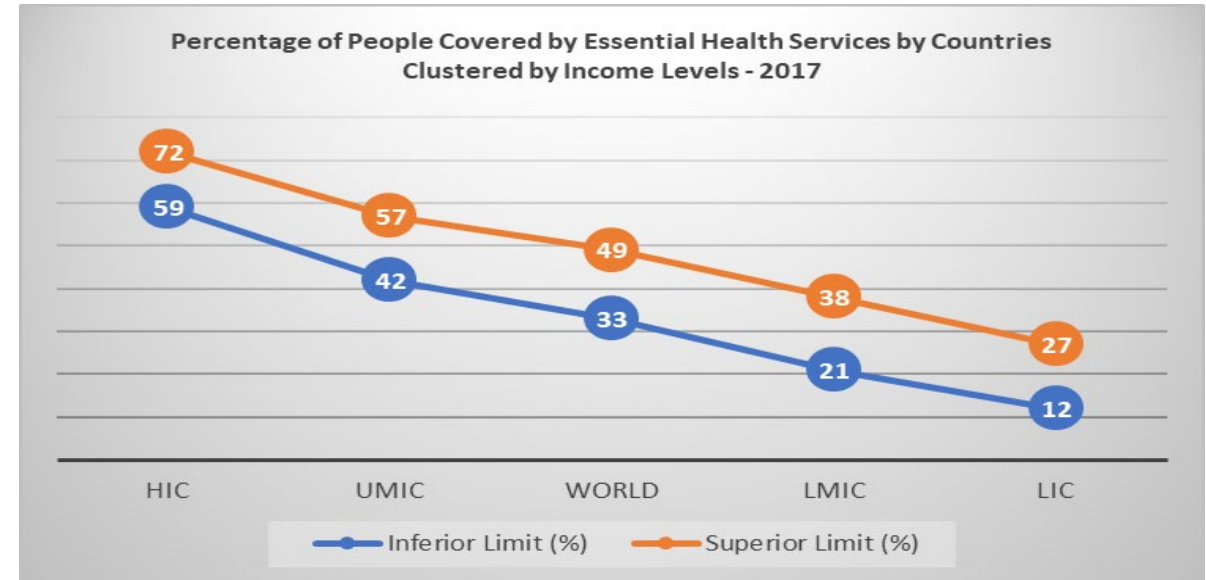
## 2d. Ten major world health risk factors in 1990 and 2019 according DALY losses: Population aged 75 and older

Ten Leading Risk Factors 1990	Associated DALYs (%)	Ten Leading Risks Factors 2019	Associated DALYs (%)
High Systolic Blood Pressure	22.0	High Systolic Blood Pressure	19.1
Smoking	14.8	High Fasting Plasma Glucose	13.5
High Fasting Plasma Glucose	10.5	Smoking	12.3
High LDL Cholesterol	9.2	High BMI	7.3
Household Air Pollution	7.8	High LDL Cholesterol	7.2
High BMI	5.7	Ambient Particulate Matter	6.7
Ambient Particulate Matter	5.2	Kidney Disfunction	5.9
Kidney disfunction	5.1	Low Temperature	3.4
Low Temperature	4.6	Household Air Pollution	3.1
Low Whole Grains	3.5	Low Whole Grains	3.0
<b>TOTAL</b>	<b>88.4</b>	<b>TOTAL</b>	<b>81.3</b>

Source: Author's Elaboration based on data from the Institute of Health Metrics and Evaluation (IHME), accessed in May 10, 2021. (\*) The red boxes represent cases where the majority of the burden of diseases is related to NCDs; the yellow boxes represent burden of diseases in transition and the green boxes represent cases where the majority of the burden of diseases is related to transmissible diseases, maternal and neonatal and nutritional conditions.

### 3. Access to health care for older persons

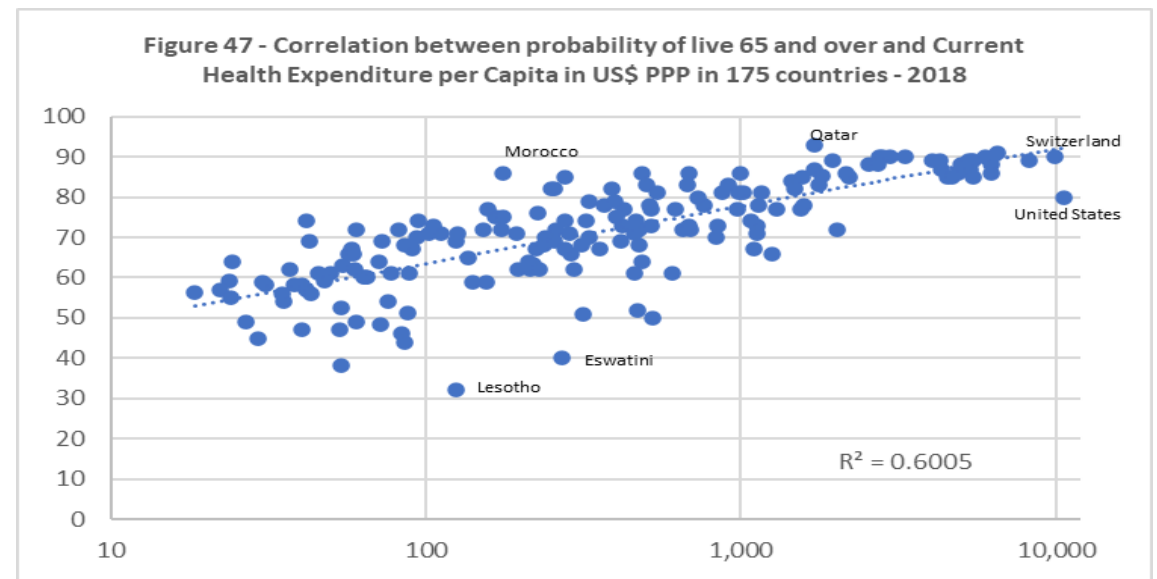
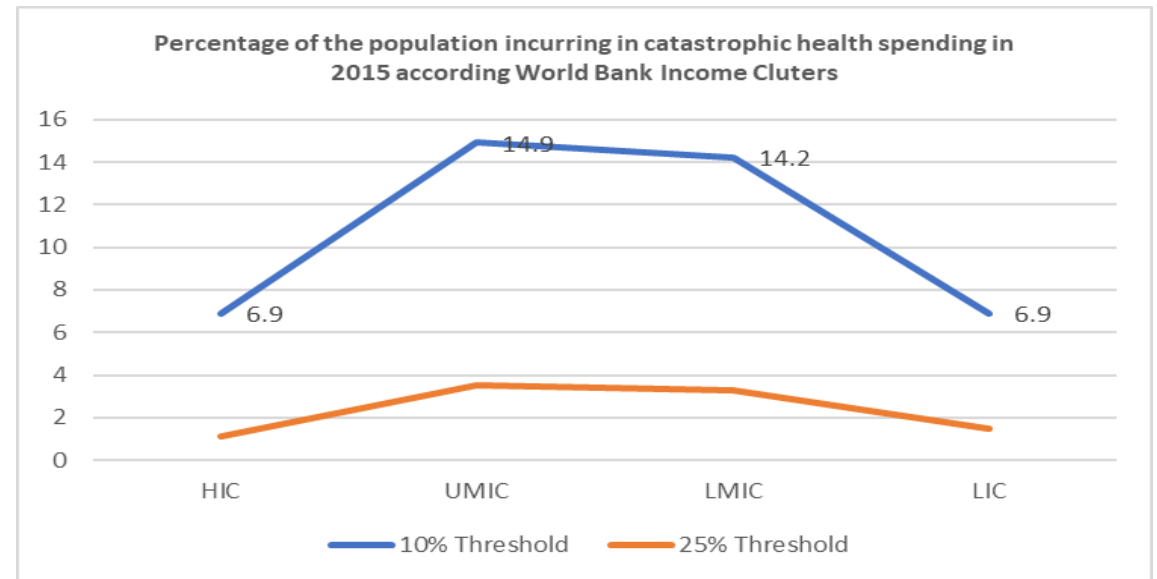
- Universal Health Coverage - UHC (based on access of essential health services) is one of the SDG goals where there is huge discrepancy among countries according income and age groups.
- The highest coverage of essential services was in the Americas (Northern America and Latin America and the Caribbean) and the lowest in South Asia and Sub Saharan Africa. The services coverage index in high-income countries is more than twice that observed in low-income countries.
- A statistical analysis of the services coverage index and the HALE in 179 countries shows that, although there are significant variations between countries and regions, there is a positive correlation between these two variables.
- In countries like Japan and Singapore, where the health service capacity access index reaches almost 100% of the population, a person aged 65 or over is expected to live 17 additional years of healthy life, while in countries like Somalia, the Central African Republic and Chad, where the service capacity index does not even reach 30% of the population, the HALE at age 65 years is less than half, or about 8 years of healthy life.





# 4. Financial protection to health in old age

- The middle-income countries (UMIC and LMIC), considered both thresholders, had the higher proportion of the population under catastrophic health spending in 2015. Even been the countries with higher concentration of population, they represented 87% e 94% of the population with catastrophic health spending at the thresholders of 10% and 25%, respectively.
- In the HICs, health expenses affect the seniors' life more intensively than other age groups. A recent study in Italy shows that spending on health proportionally leads to more reduction in the quality of life of the old-agers than other variables, such as life expectancy and GDP per capita (Lopreite & Mauro, 2017)
- A 2016 study analyzing 15 Europeans countries found that being diagnosed with diabetes mellitus and cardiovascular diseases was associated with catastrophic health expenditure among older people even in countries with developed risk-pooling and health insurance mechanisms.
- Older people diagnosed with diabetes mellitus in Portugal, Poland, Denmark, Italy, Switzerland, Belgium, the Czech Republic and Hungary were more likely to experience catastrophic health expenditure. Similar results were observed for diagnosed cardiovascular (Arsenijevic et al., 2016).
- South-East Asia is the Region with the highest percentage of people who fell below the poverty line in 2015 due to high health expenditures, when using the \$1.90 and \$3.20 poverty lines



## 5a. Lessons learned on health policies to address older people's needs – key elements

1. **Financial Protection**, through affordable and equitable health insurance programs that meet the specific health standards and needs of older people;
2. **Managing NCDs**, by designing cost-effective healthy aging policies in order to manage long-term NCD patients, especially older persons. Key elements are promotion, risk prevention, early detection, treatment and rehabilitation to improve health conditions of the older population, targeting the main risk factors that lead to heart disease, stroke, diabetes and cancers;
3. **Health Information Systems**, including demographic and epidemiologic data and electronic medical records. Areas such as artificial intelligence, information technology (such as telemedicine) and big data systems, as well as analytical tools and research to monitor and understand patterns of health, social relationships and well-being in old age, are essential to ensure that older people will be included in the health protection policies, and;
4. **Infrastructure and Virtual Access to Health**, by building well-located facilities, a national health infrastructure and easy access to telemedicine and telehealth to meet the health needs of older persons would go a long way to provide financial protection, quality access and cost-effective health services for them.

## 5b. Lessons learned on health policies to address older people's needs – main principles

1. **Primary health care (PHC)**, is key to meeting most of the healthcare needs of older persons, as it provides the first and foremost source of communication, and access to educational information, promotion, prevention, early detection and treatment of most of their health problems.
2. **Health education systems**, including universities, technical education and community colleges, need to prepare qualified workforce on the front-lines to meet the needs of the older population, including community (voluntary or not) health workers.
3. **Information kits and tools** (such as electronic patient portals, with easy access to medical information, on-line training for patients, and others) are essential to inform, respond to targeted questions and reduce health illiteracy. Improved tools and online platforms are essential to provide all people, including older persons, easy ways to access, understand and manage (to the extent possible), their health risks and conditions;
4. **Governments' policies, plans and regulatory frameworks** should address healthy environments for the older population, and implement monitoring and evaluation processes about the obtained results;
5. **Integration and “continuum of healthcare”** strategies are important to effectively address and accommodate the health needs of older persons. The fragmentation of healthcare delivery should be replaced by an integrated care approach, based on the population and centered on the patient needs;
6. **Assessment to the social needs** of older people, involving and empowering individuals, families and communities in the management of their health to allow better decisions and choices about the health care of older persons and their caregivers.

## 6. Impacts of the pandemic in older persons

- The Covid-19 pandemic probably affected life expectancy at birth in 2020, which could be reduced 2 years, in some countries. Since about 80% of the deaths are of people over the age 70 years old, it seems unlikely to have a major long-term demographic impact.
- Until June 9, 2021, 1.4 million of the cumulative 34.9 million cases of Covid-19 in United States occurred in LTC institutions for older people (5%). However, 183.9 thousand of the 574.6 thousand deaths by the pandemic occurred in the same institutions (32%), and this proportion surpass 50% of the total deaths for Covid-19 in some states (as can be seen in figure 49) demonstrating the fragility of the level of sanitary insecurity of this kind of institutions, as mentioned previously.
- In China, the first country affected by the pandemic, data accumulated up to October 2020 showed that 45% of Covid-19 patients required hospitalization in Wuhan-China and 80% of those who died due to the pandemic were 65 years or older. In Italy, which was the second country with a dramatic increase in Covid-19 cases, the reported fatality rate until August 2020 (7.2%) was higher than that recorded in China (2.3%) due to an aging demography. In Europe, at the end of April 2020, half of the Covid-19 deaths were associate with old citizens living in institutions providing LTC
- The Covid-19 pandemic created unexpected effects in the morbimortality of seniors given by the cancellation of elective medical procedures and surgeries, in hospitals and out-patient units, as required by patients or mandatory requirements for health services safety. Most of these cancelations have been reduced NCD medical care, worsening the health conditions of the older people and generating an eventual increase of early mortality associated with NCD, due to the lack of access of treatments along 2020 and 2021.
- Older persons are more vulnerable than other age groups to lost their income and living standards, especially those who do not receive a pension. They are also more likely to experience mental issues due to physical distancing measures. Lockdowns and strict social distancing increased the older persons' risk of abuse and negligence. Among older people living alone, the limitations or inability to use electronic devices (including computers and smart phones during prolonged lockdowns), could well have led to increased depression, loneliness and neglect.



# Thank you

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