

# DEMOGRAPHY & PUBLIC HEALTH

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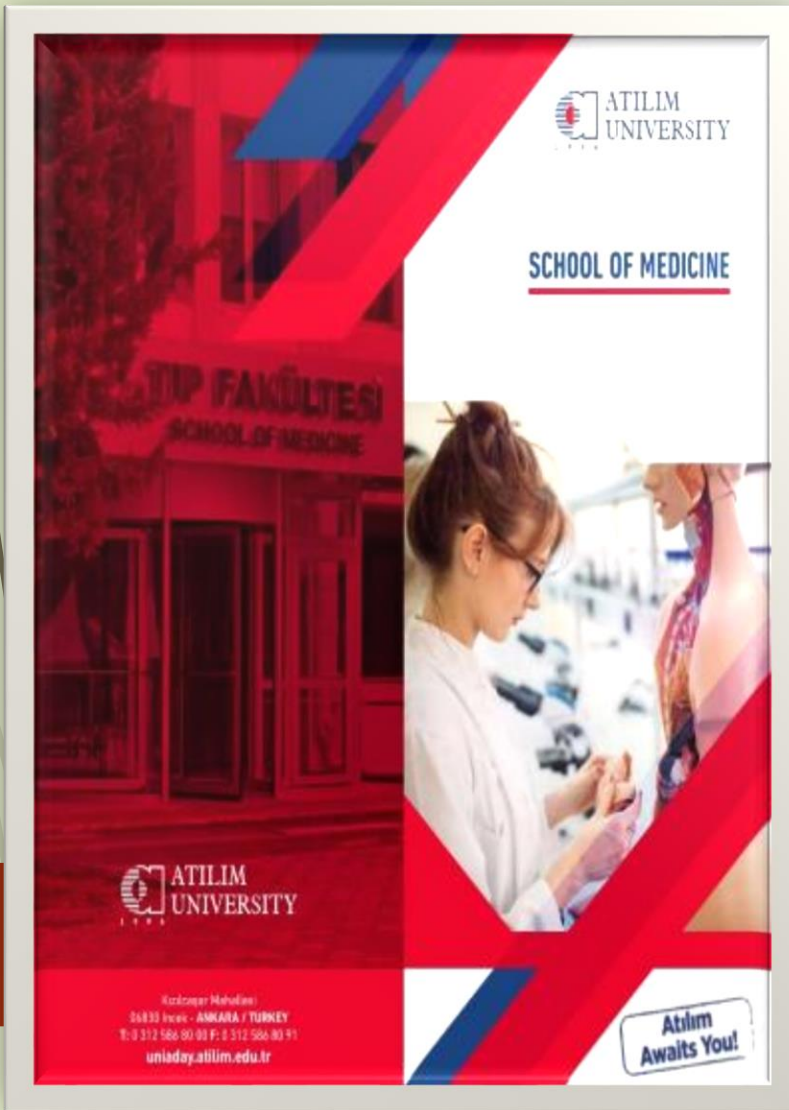
*LLM in Health Law*

*BSc in Public Administration & Political Sciences*



**Overconsumption and  
Overpopulation Underlie Every  
Environmental Problem We  
Face Today**

~ Jacques Yves Cousteau



*Phase 1 lecture, 2023 - 2024  
academic year, fall semester  
23rd Oct.2023, Ankara - TURKIYE*

# THE NOBEL PRIZE IN PHYSIOLOGY OR MEDICINE 2023

Illustrations: Niklas Elmehed



Katalin Karikó

Drew Weissman

"for their discoveries concerning nucleoside base  
modifications that enabled the development  
of effective mRNA vaccines against COVID-19"

THE NOBEL ASSEMBLY AT KAROLINSKA INSTITUTET

23.10.2023

[www.ahmetsaltik.net](http://www.ahmetsaltik.net)



***Inhuman Israeli atrocity in Gaza, October 2023***



# Learning Objectives

❑ At the end of this lecture, you will be able to :

- **Define** Demography and related key concepts.
- **Describe** *the mutual ties between Demography & Public Health.*
- **Explain** high fertility rate & MCH (Maternal & Child Health) Problems.
- **Identify** *basic demographic indicators and how to interpret them.*
- **Understand** ties between Population Growth & Community Welfare.
- **Conceive** *negative impact of population growth on Climate Disaster.*
- **Learn** the differences between Family Planning & Population Planning
- **Become** *familiar with current statistical data on Demography.*
- **Internalise** the role of Public Health Science in Population Planning.





[https://www.demogr.mpg.de/en/about\\_us\\_6113/what\\_is\\_demography\\_6674/glossary\\_of\\_demographic\\_terms\\_6982](https://www.demogr.mpg.de/en/about_us_6113/what_is_demography_6674/glossary_of_demographic_terms_6982)

- ❖ While it is widely known that **Demographers** analyze populations, they can also draw conclusions about individuals within the **population**.
- ❖ *This is because many of the figures commonly used in demography, such as **life expectancy at birth (Eo)** or the **fertility rate (TFR)**, can be translated from **demographic developments on the level of the population as a whole** into statements about the average individual.*



## What is the meaning of TFR-Total Fertility Rate?

- ❑ TFR 2.1 ensures a non-increasing population as one child replaces the mother, another replaces the father, and the 0.1 accounts for children who do not live to reproductive age.
- ❑ *The number can be higher where the child mortality rate is high, namely 2.2 or 2.3.*
- ❑ Fortunately, child mortality has dropped considerably in the past decades worldwide; thus, **2.1 is used as a target level to achieve zero population growth.**
- ❑ *We need to go further and decrease.  
This view is fully supported by the Scientists' Warning on Population.*
- ❑ The current **global TFR is 2.31**, which is remarkable given that, in the middle of the 20th century, it was over 5!
- ❑ But this mean hides significant variations between countries and geo-political regions and does not support complacency regarding world population growth, which continues at 70 to 80 million people annually. *World 2023, 4, 589–597.  
<https://doi.org/10.3390/world4030036>, 01.10.23 <https://www.mdpi.com/journal/world>, 01.10.23*

# What is Demography?

- ... is the statistical study of human populations. Demographers use **census data**, surveys, and statistical models to analyze the size of population.
- .. *the study of statistics such as **births**, **deaths**, income, or the incidence of disease, which illustrate the changing structure of human populations.*
- .. *is the science of populations. Demographers seek to understand **population dynamics** by investigating 3 main demographic processes: Birth, migration (internal-external), and aging (including death).*
- *All 3 of these processes contribute to changes in populations, including how people inhabit the Earth, form nations and societies, and develop culture.*
- Most of the discipline's research focuses on humans, but there is for example the specialized field of **Biodemography**, too.

# United Nations Population Fund

- ❖ **UNFPA** is the United Nations sexual and reproductive health agency.
- ❖ Our mission is to deliver a world where ***every pregnancy is wanted***, every childbirth is safe and every young person's potential is fulfilled.
- ❖ We promote ***gender equality*** and ***empower women***, girls and young people to take control of their bodies and their futures.
- ❖ We work with partners in more than 150 countries to provide access to a wide range of ***sexual and reproductive health services***.
- ❖ Our goal is ***ending unmet need for family planning***, **preventable maternal death**, and gender-based **violence** and harmful practices including **child marriage and female genital mutilation** by 2030.

[United Nations Population Fund | ReliefWeb - 23.10.23](#)

# Current World population

Population is a dynamic field.

There have been significant changes in *birth rates* and the population trajectories of countries and continents in recent years.

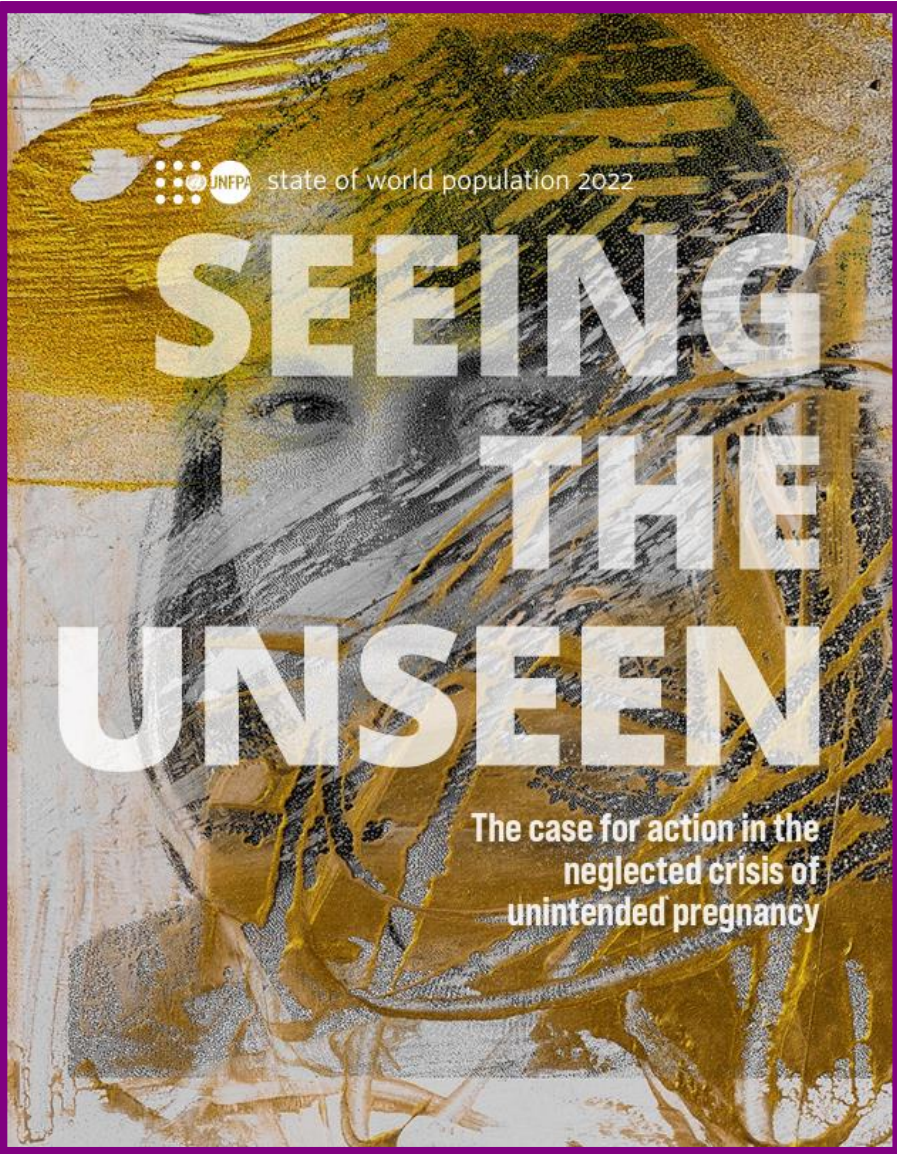
***Global population is still growing by more than 80 million a year,***

however, and is most likely to continue growing for most of this century unless we take action.

***Population: the numbers - 16.4.23***



# Annual Report 2022 by UNFPA



- ☐ *A world where every pregnancy is wanted.*
- ☐ This aim is a central pillar of our mission at UNFPA.
- ☐ *Every human being has the right to **bodily autonomy**, and perhaps nothing is more fundamental to the exercise of that right than the ability to choose whether, when and with whom to become pregnant.*

# Annual Report 2023 by UNFPA

## Determined

Report of the Secretary-General  
on the Work of the Organization

2023



- ❑ The past year was marked by increasingly complex crises for our world – **poverty**, **inequality**, **hunger** and rising **unemployment**; an uneven & uncertain global economic outlook; the escalating **climate emergency**; and conflicts, in particular the invasion of Ukraine by the Russian Federation. *(AS: provoked by NATO!)* In every case, **the poorest** and most vulnerable people and communities are hit hardest.

# Annual Report 2022 by UNFPA

- ❑ *The **basic human right** to determine freely and responsibly the number and the spacing of one's children has been recognized in numerous international human rights agreements over the past five decades.*
- ❑ *During this same period, the world has seen a vast expansion in the availability of effective, **modern contraceptives** as one of the greatest public health achievements in recent history.*
- ❑ *Why, then, are nearly half of all pregnancies **unintended**?*



- ✓ *Health systems were strained.*
- ✓ *Supply chains were disrupted.*
- ✓ *Many programmes and services were driven to a halt. Globally, a United Nations survey found 7 in 10 countries experienced disruptions in **contraceptive services**.*
- ✓ *UNFPA offices reported stark increases in domestic **violence** cases and calls for help amid **lockdowns** and movement restrictions.*
- ✓ *Disrupted services and increased vulnerabilities are projected to result in **2 million more cases of female genital mutilation-FGM** and an additional 13 million **child marriages** within the next decade that would otherwise have been averted (prevented).*



- ✓ In 1994-Cairo, the Programme of Action of the *International Conference on Population and Development (ICPD)* recognized that the **empowerment, full equality and autonomy of women** were essential to social and economic progress.
- ✓ *Today, these aims are among the cornerstones for achieving the **2030 Agenda for Sustainable Development.** (MDGs)*
- ✓ It explicitly recognizes the role of **sexual and reproductive health and gender equality** in unlocking a more prosperous future.
- ✓ *And contains specific indicators linked to women and adolescent girls' agency in making **informed decisions** regarding sexual relations, **contraceptive use** and reproductive health care.*





**HEY PRIMITIVE MEN, THEY'RE LITTLE GIRLS!**  
***NOT a commodity/good to be purchased!***  
***NOT an object of your sexual desire!***







"The women and men of the United Nations are determined in our efforts to address today's cascading crises and set humanity on a new path to peace, stability and prosperity."

António Guterres, Secretary-General

- ✓ Meanwhile, **human rights** are under assault, worsened by widening economic and social gaps and the lingering effects of the coronavirus disease (COVID-19) pandemic.
- ✓ *Women and young people continue to be shut out of economic, civic and social spaces, denying entire societies their contributions and ideas.*
- ✓ Shrinking civic space, the rapid spread of mis- and disinformation and rising hate speech and **misogyny** are pushing people apart at a time when we need unity and **solidarity** more than ever. (UN Annual Rep.2023)

[sg annual report 2023 en 0.pdf \(un.org\)](#), 23.10.23

# UNFPA's Executive Director, Dr. Natalia Kanem :

- ❑ “Human reproduction is neither the problem, nor the solution. When we put **gender equality** and rights at the heart of our population policies, we are stronger, more resilient, and better able to deal with the challenges resulting from rapidly changing populations.”
- ❑ “Chasing **fertility** targets and trying to influence women’s reproductive decision-making will only end in failure.
- ❑ History has shown that such policies are rarely effective and undermine **women’s rights**.
- ❑ *Investing in people and their potential is the surest path to prosperity and peace.* [sq annual report 2023 en 0.pdf \(un.org\)](#), 23.10.23



# Demographic Transition

- Today, there is growing interest among the public in **demography**,
- *As **demographic transition** has become the subject of political debates in many developed countries.*
- Most of these countries have **birth rates** below the **replacement level of 2.1 children per woman**,
- *And, at the same time, **life expectancy** has been rising considerably and continues to rise – a development sometimes called “**the aging of societies.**”*

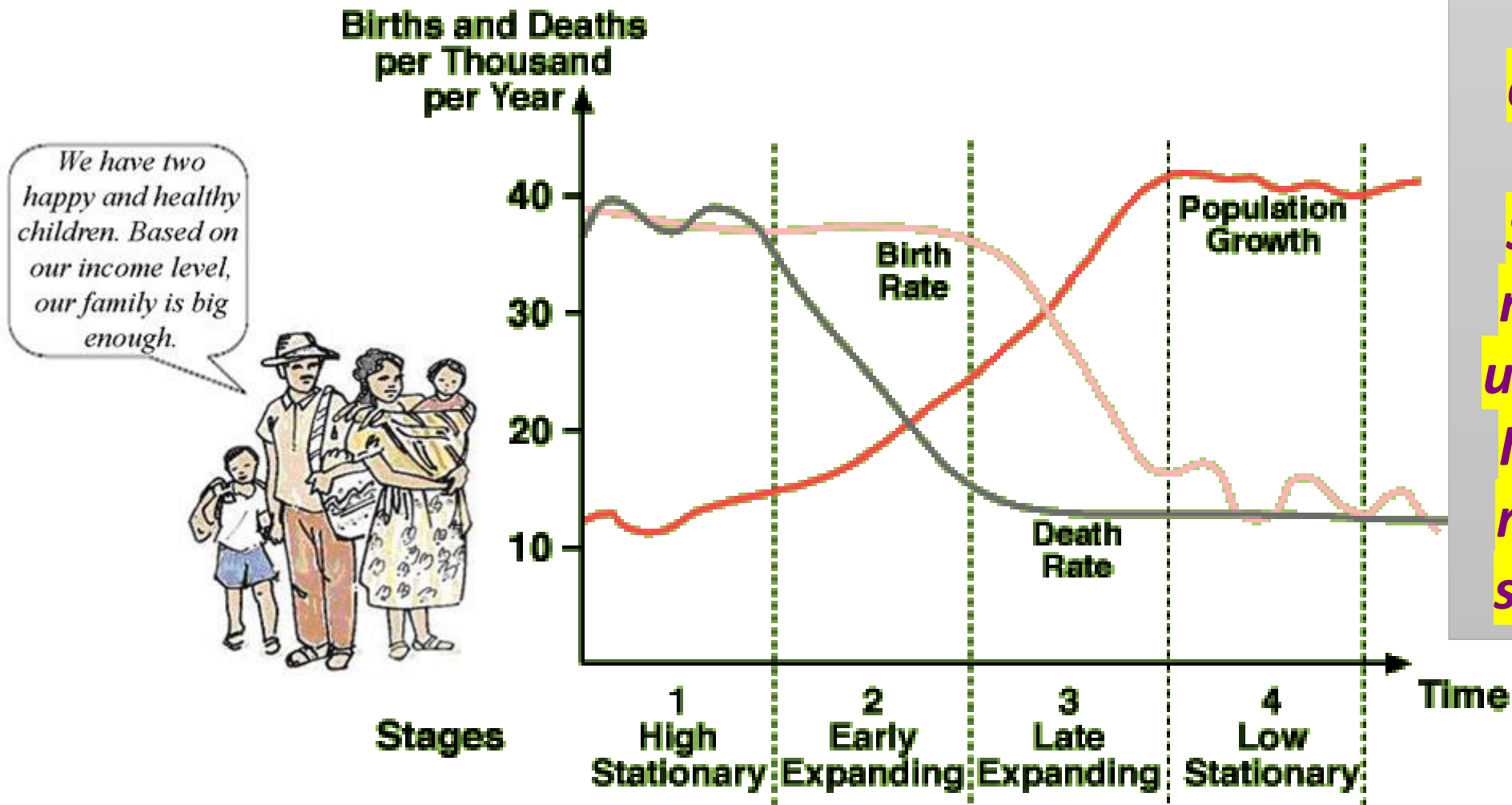


Pope Francis :

« **Catholics need not breed 'like rabbits' »** »



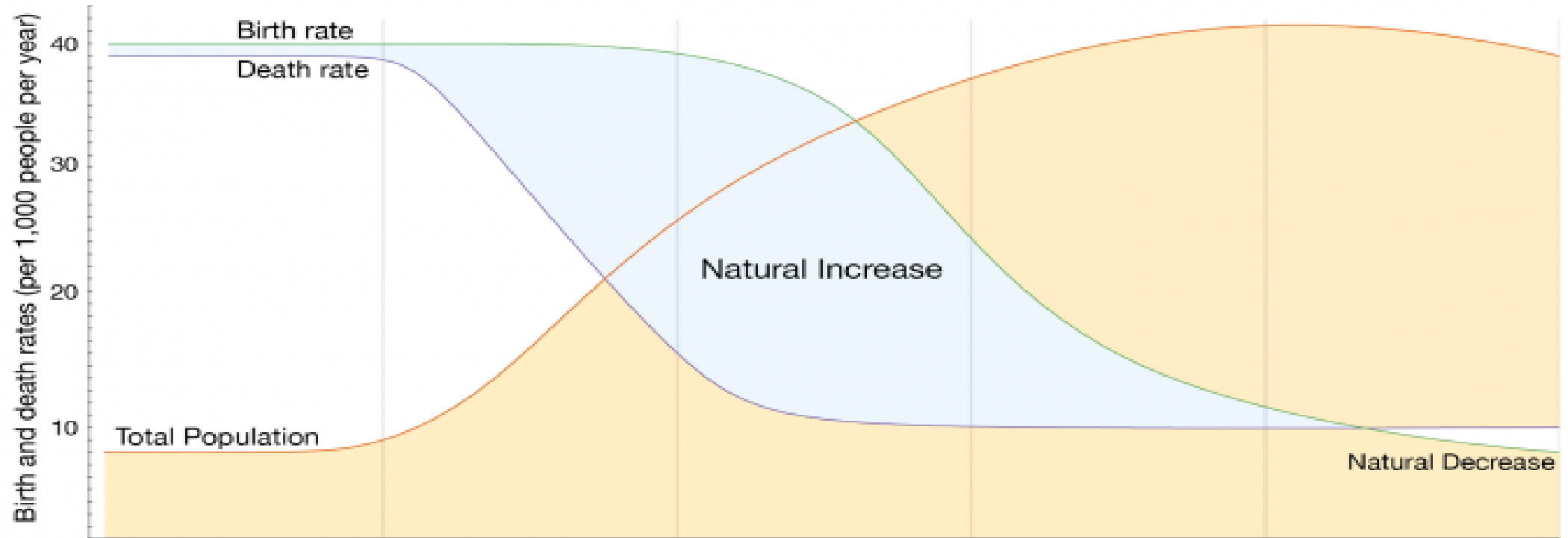
## Demographic Transition Model



*All living species are decreasing, only Homo Sapiens are reproducing uncontrolled! Is it natural, rational and sustainable?*

# The five stages of the demographic transition – Max Roser

Our World  
in Data



	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
<b>Birth rate</b>	High	High	Falling	Low	Very low
<b>Death rate</b>	High	Falls rapidly	Falls more slowly	Low	Low
<b>Natural increase</b>	Stable or slow increase	Very rapid increase	Increase slows down	Stable or slow increase	Slow increase

The author Max Roser licensed this visualisation under a CC BY-NC-SA license. You are welcome to share but please refer to its source where you find more information: <http://www.OurWorldInData.org/data/population-growth-vital-statistics/world-population-growth>

<http://ourworldindata.org/data/population-growth-vital-statistics/world-population-growth/>

# The size of the world population over the last 12.000 years

Demographers expect rapid population growth to end by the end of the 21st century. The UN demographers expect a population of about 11 billion in 2100.



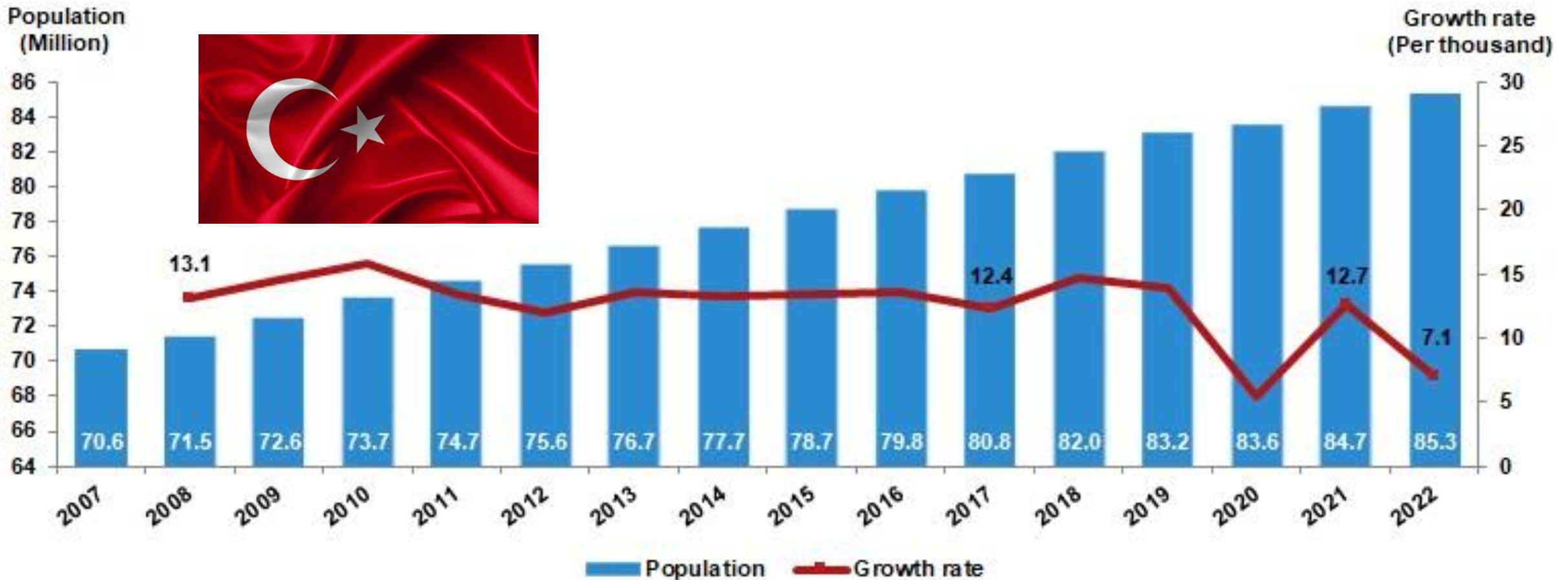
Based on estimates by the History Database of the Global Environment (HYDE) and the United Nations. On OurWorldinData.org you can download the annual data. This is a visualization from OurWorldinData.org.

Licensed under CC-BY-SA by the author Max Roser.



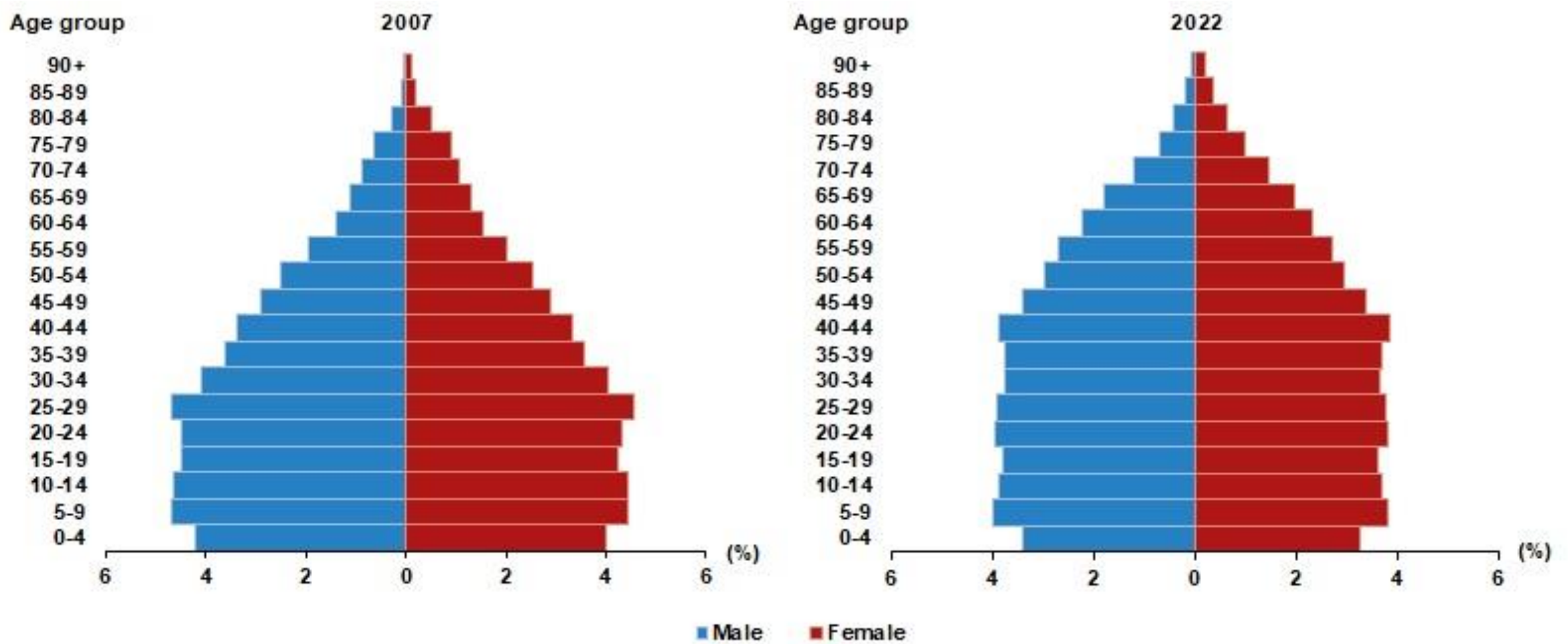
# Population % annual population growth rate, 2007-2022

*Annual population growth rate increased to 7.1 per thousand in 2022 from 12.7 per thousand in 2021???*



<https://data.tuik.gov.tr/Bulten/Index?p=The-Results-of-Address-Based-Population-Registration-System-2022-49685&dil=2> 9.5.23

## Population pyramide, 2007, 2022 by TSI (TÜİK)



<https://data.tuik.gov.tr/Bulten/Index?p=The-Results-of-Address-Based-Population-Registration-System-2022-49685&dil=2> 9.5.23

## Structural change in population pyramid continued..

*Population pyramids are the graphs that show the changes in the age-sex structure of population.*

When the population pyramids of Türkiye were compared for the years 2007 and 2022,

it was seen that the elderly population and median age increased due to the decline in

**fertility and mortality rates.**

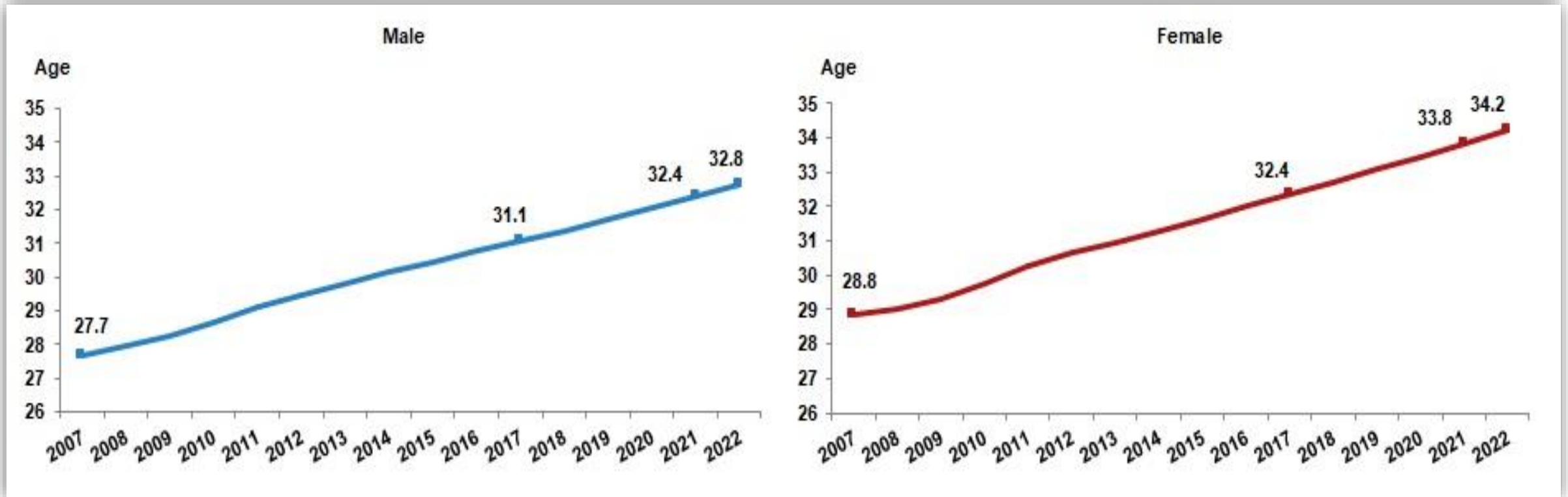
<https://data.tuik.gov.tr/Bulten/Index?p=The-Results-of-Address-Based-Population-Registration-System-2022-49685&dil=2> 9.5.23



## Median age of Türkiye's population increased to 33.5

The median age is the age of the person in the middle when the ages of all people in the population are sorted from the newborn baby to the oldest. Median age is also one of the important indicators used in the interpretation of the age structure of population. The median increased to 33.5 in 2022 from 33.1 in 2021.

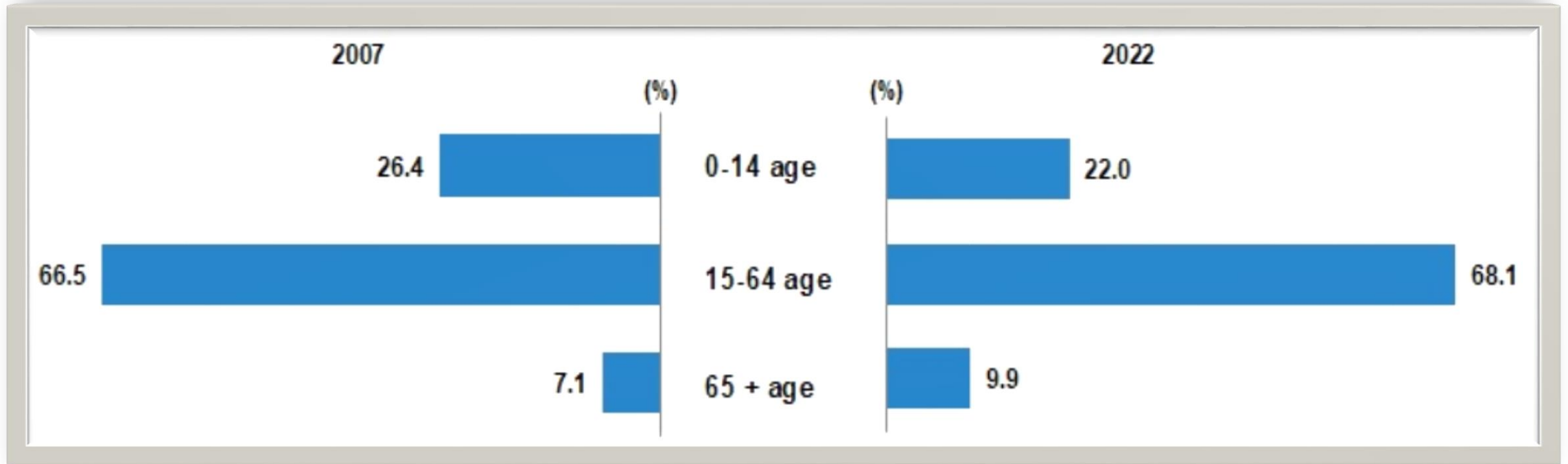
When it was analysed by sex, it was seen that the median age increased from 32.4 to 32.8 for males while it increased from 33.8 to 34.2 for females.



<https://data.tuik.gov.tr/Bulten/Index?p=The-Results-of-Address-Based-Population-Registration-System-2022-49685&dil=2> 9.5.23

## Proportion of population in working age group was 68.1%

The proportion of the working age population aged 15-64 increased from 66.5% in 2007 to 68.1% in 2022. The proportion of child population aged 0-14 decreased from 26.4% to 22%, and the proportion of *population aged 65 and over increased from 7.1% to 9.9%.*

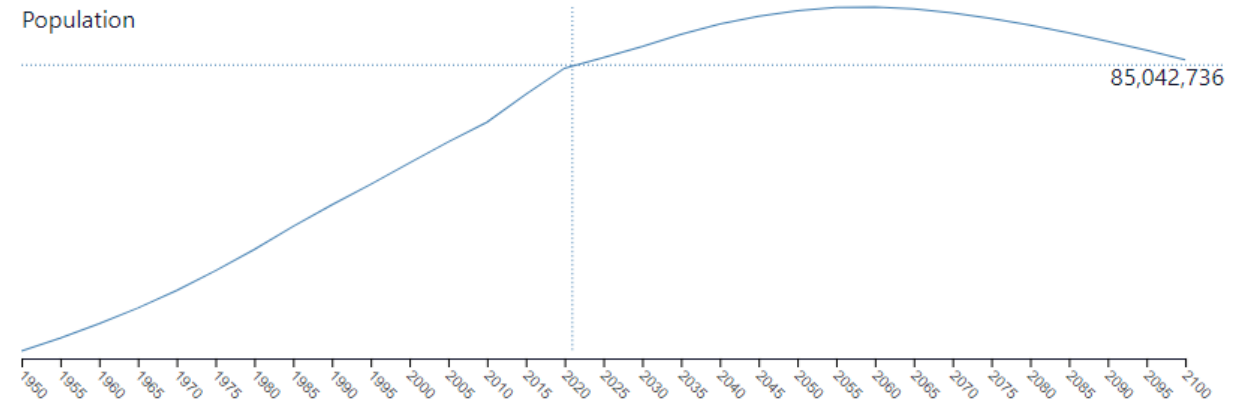
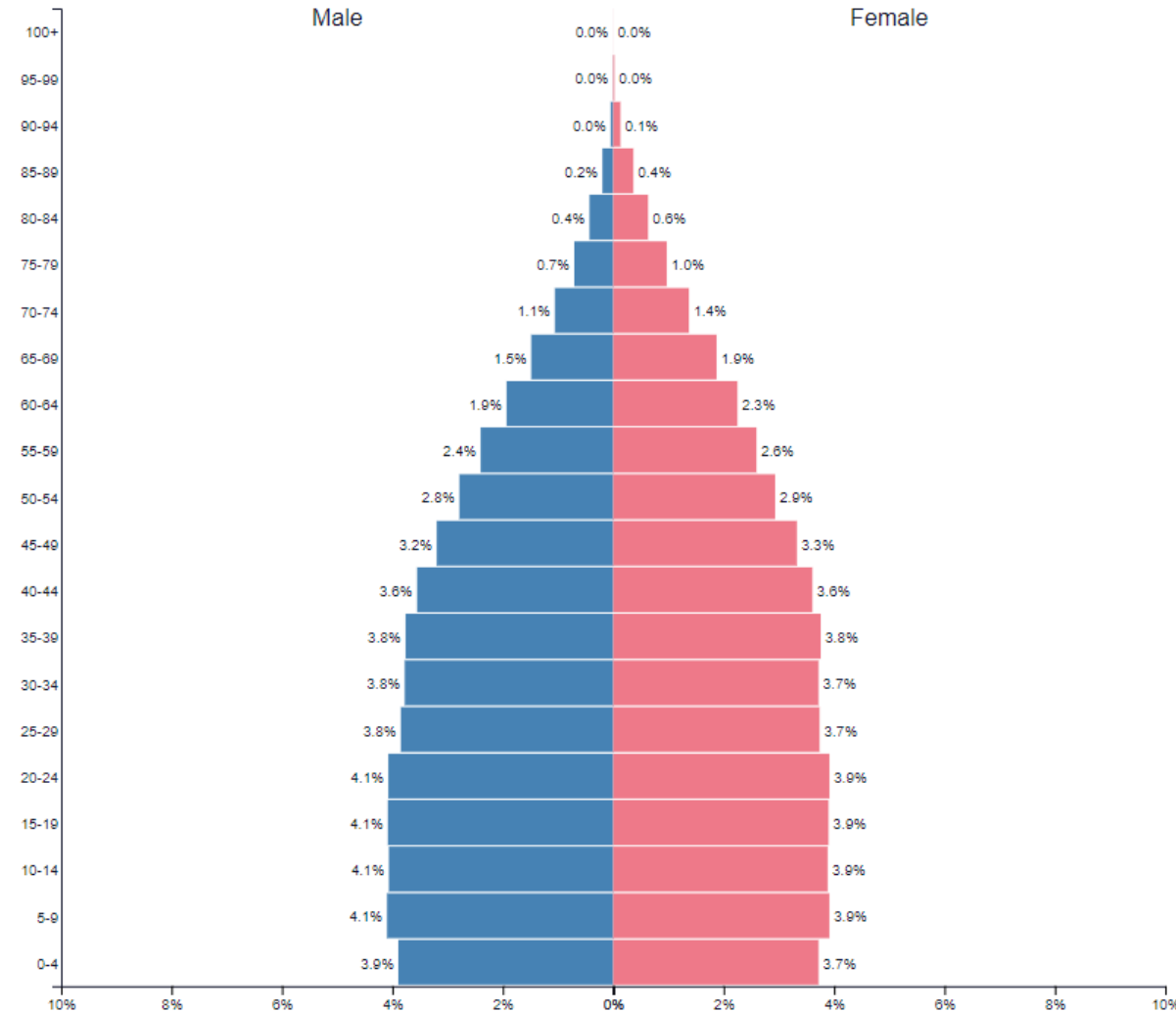


# Turkiye's Population Pyramide & demographic trend

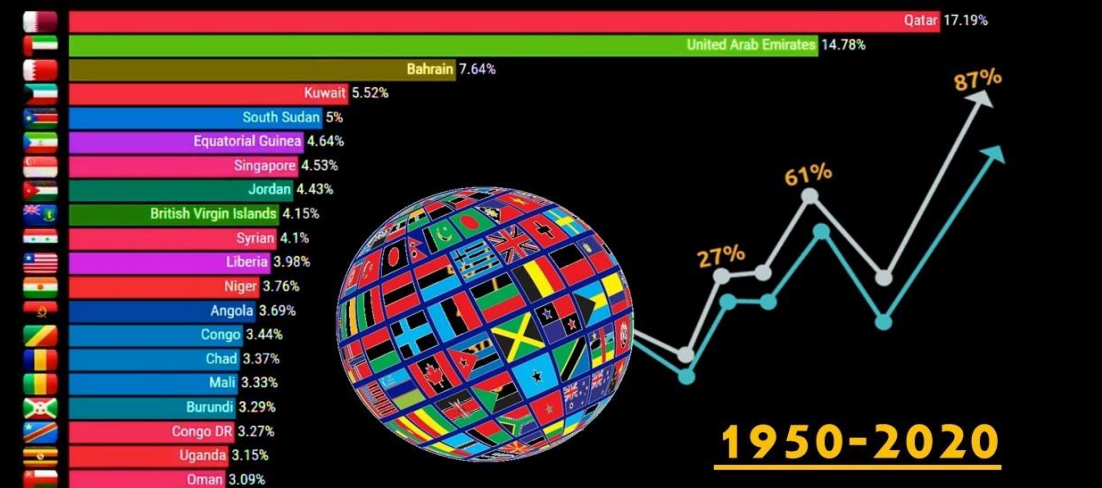
2021

Population: 85,042,735

<https://www.populationpyramid.net/turkey/2021/> 14.10.22



## Country With Highest Population Growth Rate





# Turkiye's Population Pyramide... (TSI, end of 2022)

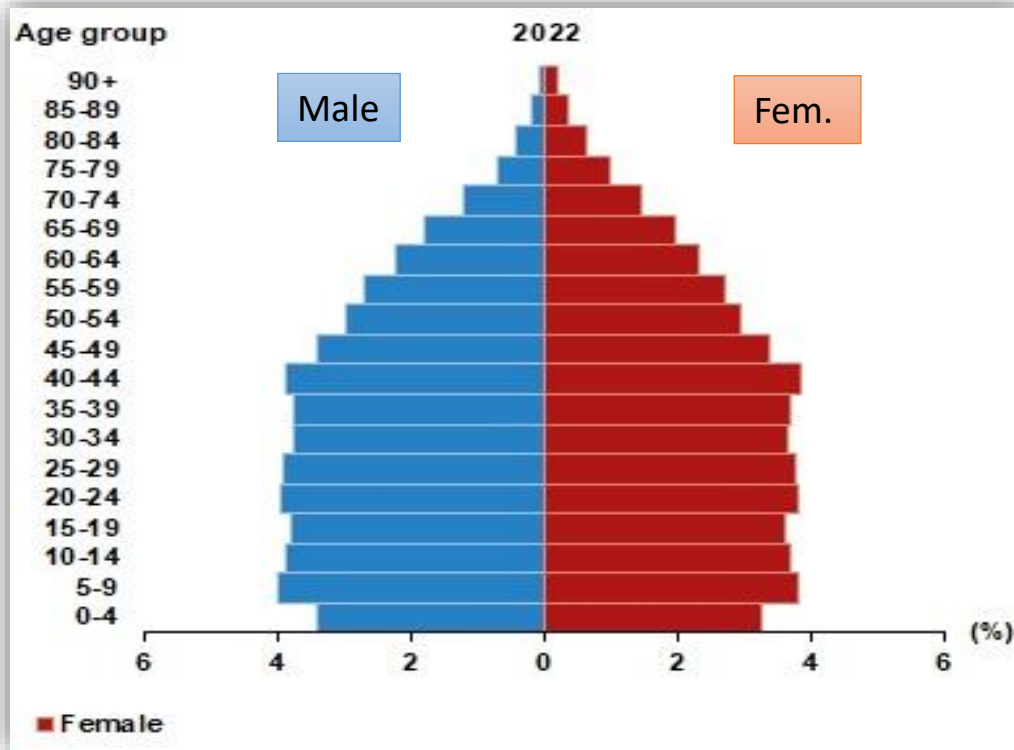
Age groups

M: 42 704 112 - 50,1 %

F : 42 575 441 - 49,9 %

<https://www.worldometers.info/world-population/>

*Please click to see how dreadfully and awfully  
World population is growing every second!*



*Turkiye is double  
fold more crowded  
when compared  
with World.  
Population density  
which is 123 in  
Türkiye, but 56  
in the World !*

**Last 6 years PGR, TR :**

2017 : 1,24 %!

2018 : 1,47 %!

2019 : 1,39 %

2020 : 0,55 % (error!)

2021 : 1,27 %

2022 : 0,71 % ???

*High and unnecessary!*

*And unstableunreliable*

At 31st December 2022, Türkiye's population is 85 279 553. Unfortunately, due to totally irrational promotion by the government, was increased 599 280 persons through 2021 due to Covid-19 deaths!

Natural PGR =  $(599\,280 / 84\,680\,273) \times 1000 = 7,1\% \text{ or } 0,71\% \text{..}$  World PGR ~1%, 80 m in 2022  
(UNFPA-2022) in Türkiye, ~10+ million Iraki & Syrian and informal (!?) population excluded..



**Contraceptive  
prevalence rate,  
women currently  
married or in union,  
aged 15-49, any  
method, percent,  
2019: 63%**



***Child marriage by age 18!***

***Unmet need for family planning, women currently  
married or in union, aged 15-49, percent, 2019: 12%***

***“Worlds Apart: Reproductive  
Health and Rights in an  
Age of Inequality.”***

**2020 Annual Report of the UNFPA-**  
<https://www.unfpa.org/data/world-population-dashboard>

**UNFPA : *World Population exceeded 8 Bn on in 2022!***

<https://worldpopulationreview.com> 04.11.2021

# 2019 Annual Report of the UNFPA

<https://www.unfpa.org/swop-2019>, 24.10.19

*Can we do better for women and girls today?  
If history is a guide, the answer is yes.*

What are some of the obstacles still standing in the way of women reaching their full potential in life?



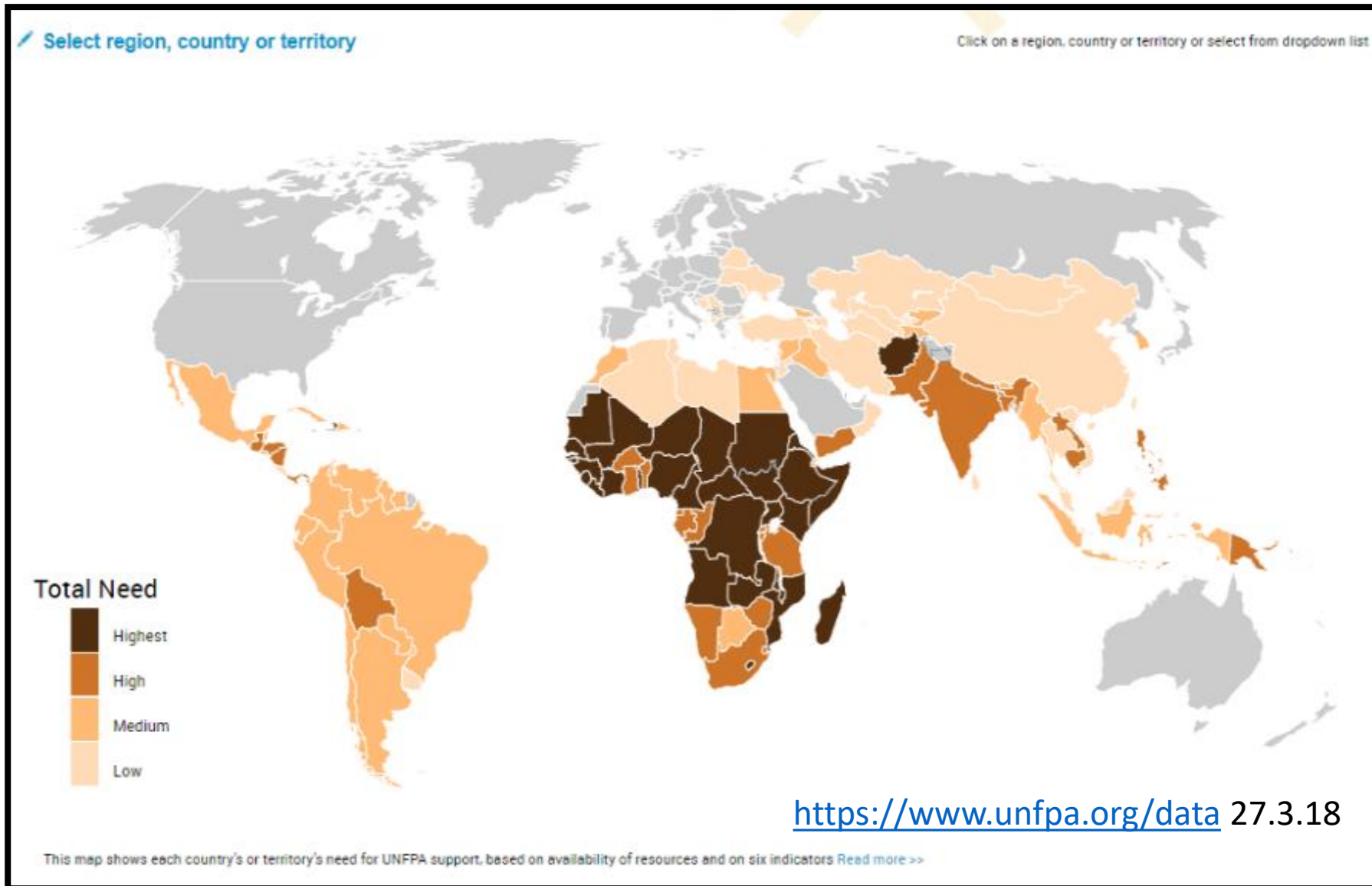
Fifty years ago, it was hard for women to obtain **contraception** and relatively easy to die giving birth. Many women were unable to decide whom and when to marry, and when or whether to have children.

Since 1969, when **UNFPA** was established, much has been accomplished. But there is still more to be done before *all women and girls are able to exercise their rights.*

**UNFPA : *World Population exceeded 8 billion at the end of 2022!***



# World Population Density and...



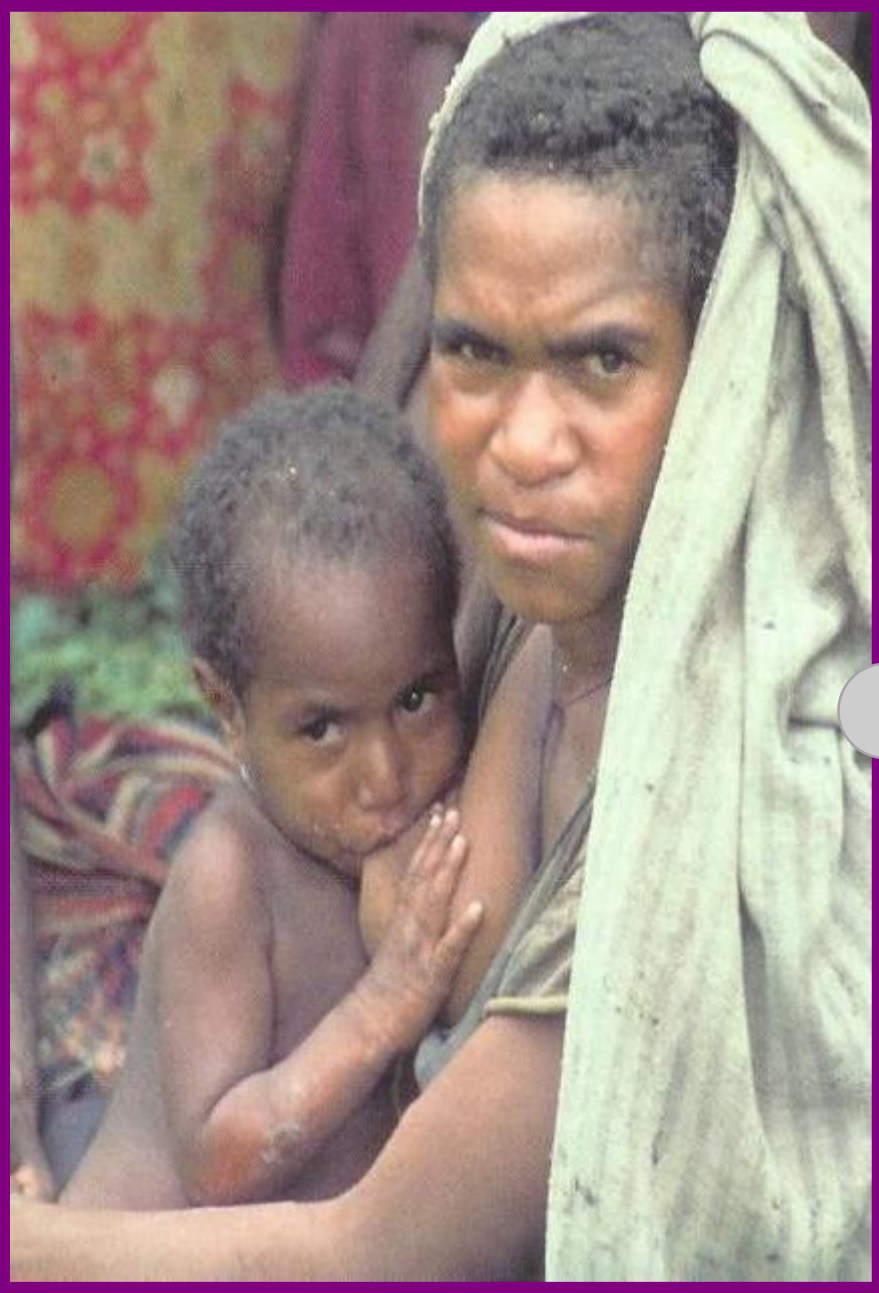
*World population density :  
8+ billion population /  
144 million km<sup>2</sup> land surface  
= 55,6 person per km<sup>2</sup>*

*Turkiye's **population density** :  
86+10 million migrants /  
780 000 km<sup>2</sup> land surface  
= 123 person per km<sup>2</sup>!*

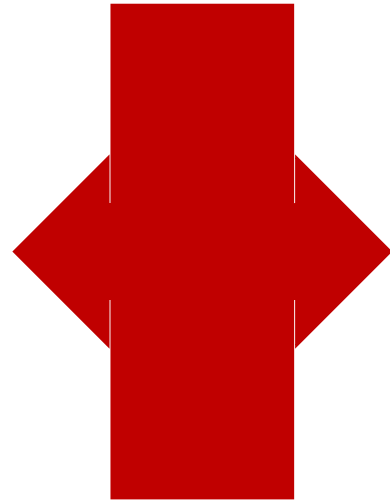
*Turkiye's population /  
World population = 1,1 %  
But Türkiye has only 0,2% of  
World energy resources and  
only 0,6% of water resources!*

*Turkiye's population growth  
rate is 0,7% (2022) ??????  
World population growth rate  
is ~1 %.. 80 m ↑ every year.*

*Having average number of  
**unwanted child** for families  
=0,3 due to **unmet family  
planning requirement!**  
(TDHS 2018)*



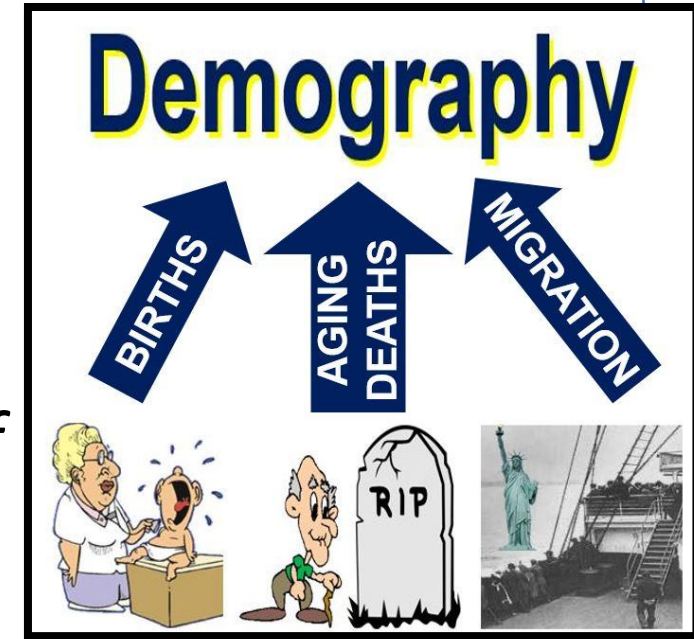
*Dichotomous,  
miserable  
status quo  
of the  
Humanity  
in the dawn of  
the 21st century.*



# Demography and public health-1

Chapter: Demography and public health Author(s): Emily Grundy  
DOI:10.1093/med/9780199218707.003.0044

- *The health and healthcare needs of a population cannot be measured or met without knowledge of its size and characteristics.*
- Demography is concerned with this essential 'numbering of the people' and with understanding **population dynamics** how populations change in response to the interplay between **fertility, mortality, and migration**.



<http://oxfordmedicine.com/view/10.1093/med/9780199218707.001.0001/med-9780199218707-chapter-0702> 19.02.2019



# Demography and public health-2

Chapter: Demography and public health Author(s): Emily Grundy

DOI:10.1093/med/9780199218707.003.0044

- This understanding is a pre-requisite for making the forecasts about future population size and structure which should underpin **healthcare planning**.
- *Analysis of both the present and the future necessitates a review of the past.*
- The number of very old people in a population, for example, depends on the number of **births** eight or nine decades earlier and risks of **death** at successive ages throughout the intervening period.

<http://oxfordmedicine.com/view/10.1093/med/9780199218707.001.0001/med-9780199218707-chapter-0702>19.02.2019

# Demography and public health-3

Chapter: Demography and public health Author(s): Emily Grundy DOI:10.1093/med/9780199218707.003.0044

- The *proportion* of very old people depends partly on this numerator but more importantly on the denominator (the size of the population as a whole) -itself a function of **reproductive behaviour**, **mortality**, and net migration from yesterday back through time.
- *The number of births in a population depends not just on current patterns of family building, but also on the number of women 'at risk' of reproduction -itself a function of past trends in fertility and mortality.*
- Similarly, the number of deaths (*and their distribution by cause*) is strongly influenced by age structure.

<http://oxfordmedicine.com/view/10.1093/med/9780199218707.001.0001/med-9780199218707-chapter-0702>19.02.2019

# Demography and public health-4

Chapter: Demography and public health Author(s): Emily Grundy DOI:10.1093/med/9780199218707.003.0044

- ❑ Formal or pure Demography is largely concerned with answering questions about *how populations change and how these changes can be measured*. The broader field of population studies embraces the questions of *why these changes occur*, and with what consequences.
- ❑ This chapter presents information on demographic methods and data sources, in the context of their application to health and population issues, together with information on demographic trends and their implications and the major theories about demographic change in order to elucidate the *complex inter-relationship between population change and human health*.

<http://oxfordmedicine.com/view/10.1093/med/9780199218707.001.0001/med-9780199218707-chapter-0702> 19.02.2019



# Top 10 Most Common Health Issues

1. *Physical Activity and Nutrition*
2. *Overweight and Obesity*
3. *Tobacco*
4. *Substance Abuse*
5. *HIV/AIDS*
6. *Mental Health*
7. *Injury and Violence*
8. *Environmental Quality*
9. *Immunization*
10. *Access to Health Care*

*Our Planet is extremely crowded,  
It is limited but packed with people.  
She is full of people which not capable of  
take care, feed, clean air-water.. so on!*



**1 child for 1 family; no delay!**

<http://www.urmc.rochester.edu/senior-health/common-issues/top-ten.cfm>, 01.06.2021

# Family Planning :

## Contraceptive prevalence rate and unmet need

**CPR any method 63%; Unmet need 12%**

- Contraceptive prevalence rate, women aged 15-49, any method, per cent, 2017: • 63
- Contraceptive prevalence rate, women aged 15-49, modern method, per cent, 2017: • 58
- Unmet need for family planning rate, women aged 15-49, per cent, 2017: • 12
- Proportion of demand satisfied, women aged 15-49, per cent, 2017: • 85
- Proportion of demand satisfied with modern methods, women aged 15-49, per cent, 2017:

<https://www.unfpa.org/data/world-population-dashboard> 27.3.18

# The State of World Population 2021

<https://in.one.un.org/news/unfpa-launches-the-state-of-world-population-report-2021-my-body-is-my-own/> 4th Nov 2021

PRESS RELEASE - 14 April 2021



- *For the first time, a United Nations report focuses on **bodily autonomy** – the power and agency to make choices about your body without fear of **violence** or having someone else decide for you.*
- A serious lack of **bodily (somatic, physical) autonomy** has had far-reaching implications much beyond the profound harm to individual women and girls that include potentially depressing economic productivity, undercutting skills, and extra costs to health care and judicial systems.



# The State of World Population 2017

<https://www.unfpa.org/press/state-world-population-2017>



- Unchecked **inequality** and failure to protect the *rights of poorest women* could **undermine peace** and ***World's Development Goals***, new UNFPA report warns.
- Only about half of the World's women hold *paid jobs*
- Globally, women earn 77 % of what men get.
- 3/5 women worldwide lack *maternity leave*, many pay "***motherhood penalty***»!

# The State of World Population 2017

<https://www.unfpa.org/press/state-world-population-2017>



The costs of **inequalities**, including in sexual and *reproductive health* and rights, could extend to the entire global community's goals, adds the new UNFPA report, entitled,

***“Worlds Apart: Reproductive Health and Rights in an Age of Inequality.”***

Failure to provide reproductive health services, including **family planning, to the poorest women** can weaken economies and sabotage progress towards the *number one sustainable development goal*, to **eliminate poverty**.

# The State of World Population 2017

<https://www.unfpa.org/press/state-world-population-2017>



Economic **inequality** reinforces and is reinforced by other inequalities, including those in women's health, where only a privileged few are able to control their fertility, and, as a result, can develop skills, enter the paid labour force and gain **economic power**.

**1 child for 1 family; no delay!**



***"Worlds Apart:  
Reproductive Health  
and Rights in an  
Age of Inequality."***



# The State of World Population 2017

<https://www.unfpa.org/press/state-world-population-2017>



“**Inequality** in countries today is not only about the haves and have nots,”

UNFPA Executive Director Dr. Natalia Kanem says.

“**Inequality** is increasingly about the cans and cannots.

*Poor women who lack the means to make their own decisions about family size or who are in poor health because of inadequate reproductive health care dominate the ranks of the cannots.”*

In most developing countries, **the poorest women** have the fewest options for family planning, the least access to antenatal care and are most likely to give ***birth without the assistance of a doctor or midwife.***

PRESS RELEASE - 30 March 2022

# The State of World Population 2022

Nearly half of all pregnancies are unintended—a global crisis, says new UNFPA report



***Nearly half of all pregnancies are unintended  
—a global crisis, says new UNFPA report!***

**Nearly half of all pregnancies, totalling 121 million each year throughout the world, are unintended.**

For the women and girls affected, the most life-altering reproductive choice—whether or not to become pregnant—is no choice at all, explains the State of World Population 2022 report, released by UNFPA, the United Nations sexual and reproductive health agency.

The groundbreaking report, **«Seeing the Unseen»**:

The case for action in the neglected crisis of ***unintended pregnancy***,” warns that this ***human rights crisis*** has profound consequences for societies, women and girls and global health.

Over 60 per cent of unintended pregnancies end in **abortion** and an estimated 45 per cent of all abortions are **unsafe**, causing 5 - 13 per cent of all **maternal deaths**.

# The State of World Population 2017

<https://www.unfpa.org/press/state-world-population-2017>



“Countries that want to tackle ***economic inequality*** can start by tackling other inequalities, such as in reproductive health and rights, and tearing down social, institutional and other obstacles that prevent women from realizing their full potential,”

**The UNFPA report** recommends focusing on the furthest behind first,

in line with the United Nations blueprint for achieving ***sustainable development*** and inclusive societies by 2030. The 2030 Agenda for Sustainable Development has “envisaged a better future, one where we collectively tear down the barriers and correct disparities,”

the report states. “***Reducing all inequalities*** needs to be the aim.

Some of the most powerful contributions can come from realizing...

***women’s reproductive rights.***”

# The State of World Population 2021

<https://in.one.un.org/news/unfpa-launches-the-state-of-world-population-report-2021-my-body-is-my-own/> 4th Nov 2021 PRESS RELEASE - 14 April 2021



- The report shows that in countries where data is available:
- *Only 55% of women are fully **empowered** to make choices over health care, contraception and the ability to say yes or no to sex.*
- Only 71% of countries guarantee access to overall **maternity care**.
- *Only 75% of countries legally ensure full, equal access to **contraception**.*
- Only about 80% of countries have laws supporting **sexual health** and well-being.
- *Only about 56% of countries have laws and policies supporting comprehensive **sexuality education**.*
- Lack of access to related services, such as affordable child care, also stops women from seeking jobs outside the home. For women who are in the labour force, the absence of *paid maternity leave* and **employers' discrimination against those who become pregnant** amount to a **motherhood penalty**, forcing many women to choose between a career and parenthood.

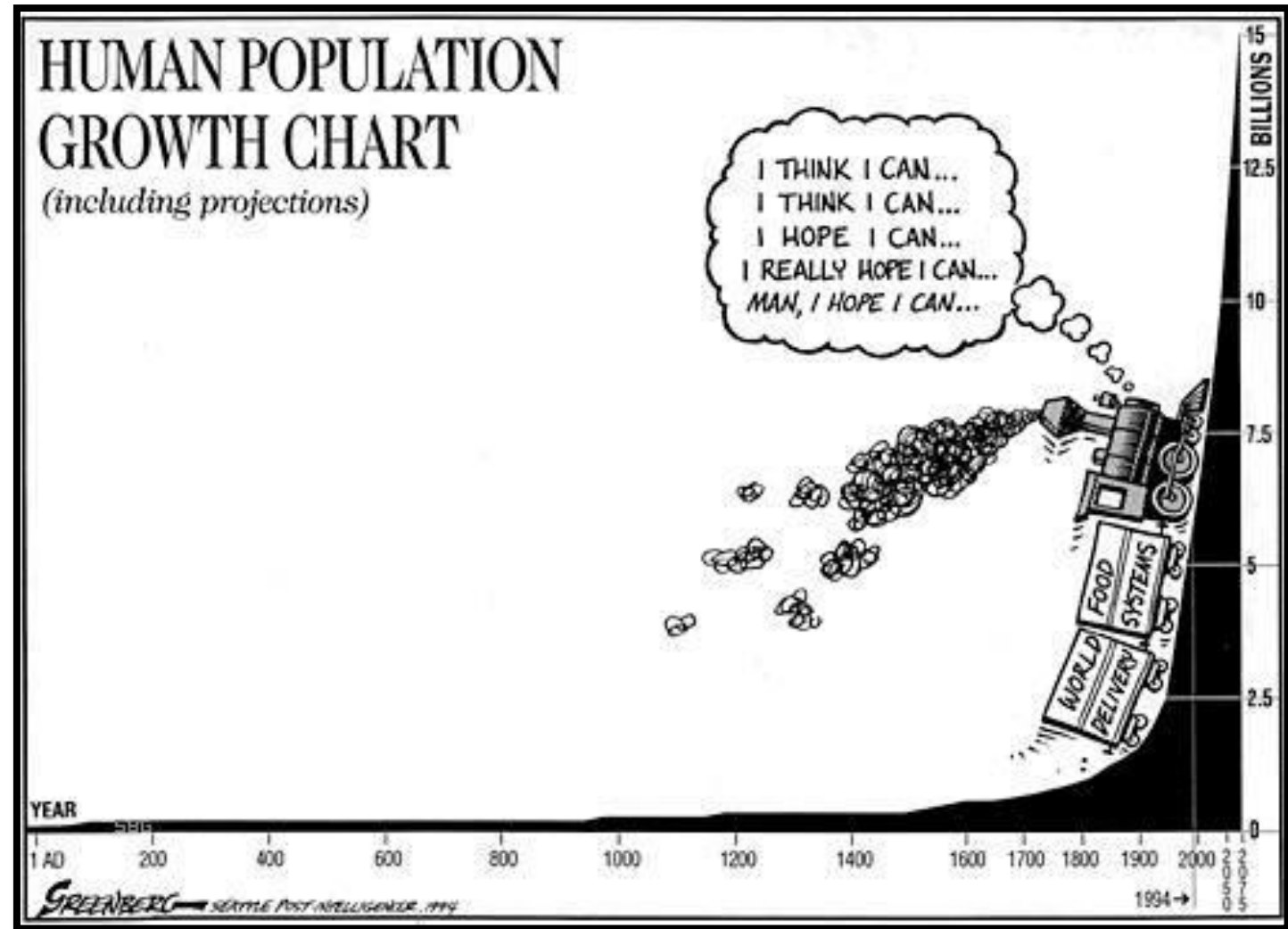


# Total Population of the World by Decade

1950 – 2050 U.S. Census Bureau, International Database.

[www.infoplease.com/ipa/A0762181.html](http://www.infoplease.com/ipa/A0762181.html), 17.01.09

Year	Total world population (mid-year figures)	10 year growth rate (%)
1950	2,556,000,053	18.9%
1960	3,039,451,023	22.0
1970	3,706,618,163	20.2
1980	4,453,831,714	18.5
1990	5,278,639,789	15.2
2000	6,082,966,429	12.6
2010	6,848,932,929	10.7
2020	7,584,821,144	8.7
2030	8,246,619,341	7.3
2040	8,850,045,889	5.6
2050	9,346,399,468	—



# World population characteristics-1

- **Armed conflict** continues to blight the lives of millions: since 1990, 3.6 million people have died as a result of **civil wars and ethnic violence**, more than 16 times the number killed in wars between states.
- **Civilians** have accounted for more than **90% of the casualties** - either injured or killed- in post-cold war conflicts.
- 90 countries are affected by **landmines** and unexploded ordinance, with rough estimates of 15,000 to 20,000 mine victims each year.

[www.infoplease.com/ipa/A0004373.html](http://www.infoplease.com/ipa/A0004373.html), 17.01.09



# World population characteristics-2

## HIGHEST GDP PER CAPITA (PPP in U.S. dollars)

1.	<a href="#">Luxembourg</a>	143,304
2.	<a href="#">Ireland</a>	137,638
3.	<a href="#">Singapore</a>	133,108
4.	<a href="#">Qatar</a>	118,894
5.	<a href="#">Switzerland</a>	107,882
6.	<a href="#">UAE</a>	89,982
7.	<a href="#">San Marino</a>	87,000
8.	<a href="#">Norway</a>	85,000
9.	<a href="#">Denmark</a>	81,000
10.	The Netherlands	80,000

23.10.23

## LOWEST INFANT MORTALITY RATE (deaths per 1,000 births)

1.	<a href="#">Iceland</a>	1.54
2.	<a href="#">San Marino</a>	1.56
3.	<a href="#">Estonia</a>	1.65
4.	<a href="#">Slovenia</a>	1.76
5.	<a href="#">Norway</a>	1.79
6.	<a href="#">Japan</a>	1.82
7.	<a href="#">Singapore</a>	1.85
8.	<a href="#">Finland</a>	1.88
9.	<a href="#">Montenegro</a>	1.95
10.	<a href="#">Sweeden</a>	2.15

[www.ahmetsaltik.net](http://www.ahmetsaltik.net)

## Lowest GDP per capita (with US \$, ppp)

1.	Burundi	261
2.	Cent. Afr. Rep.	376
3.	South Sudan	410
4.	Malawi	478
5.	Mozambique	516
5.	Sierra Leone	518
7.	Madagascar	534
8.	Niger	538
9.	Liberia	556
10.	Dem.Rep.Congo	576

46

1 child for 1 family; no delay!

# World population characteristics-3

Overall rank	Country	Overall life expectancy
1	Hong Kong	85,83 y
2	Macao	85,51 y
3	Japan	84,95 y
4	Switzerland	84,38 y
5	Singapore	84,27 y
6	Italy	84,20 y
7	South Korea	84,14 y
8	Spain	84,05 y
9	Australia	83,90 y
10	Iceland	83,88 y
11	Israel	83,80 y
12	<u>Sweden</u>	83,77
13	France	83,75 y
14	<u>Canada</u>	83,74 y
15	Norway	83,72 y
16	Greece	83,71 y



Country	Life expectancy at birth (years)
1. Chad	54,5
2. Nigeria	54,7
3. Lesotho	551.1
4. Cent.Afr. Rep.	53.9
5. South Sudan	55.0
6. Somalia	55.3
7. Eswatini	57.1
8. Cote d'Ivoire	58.6
9. Mali	59.2
10. Burkina Faso	59.3

**1 child  
for  
1 family;  
no delay!**



Mr. President. This is The Abortion Bill  
which was just sent up from Congress



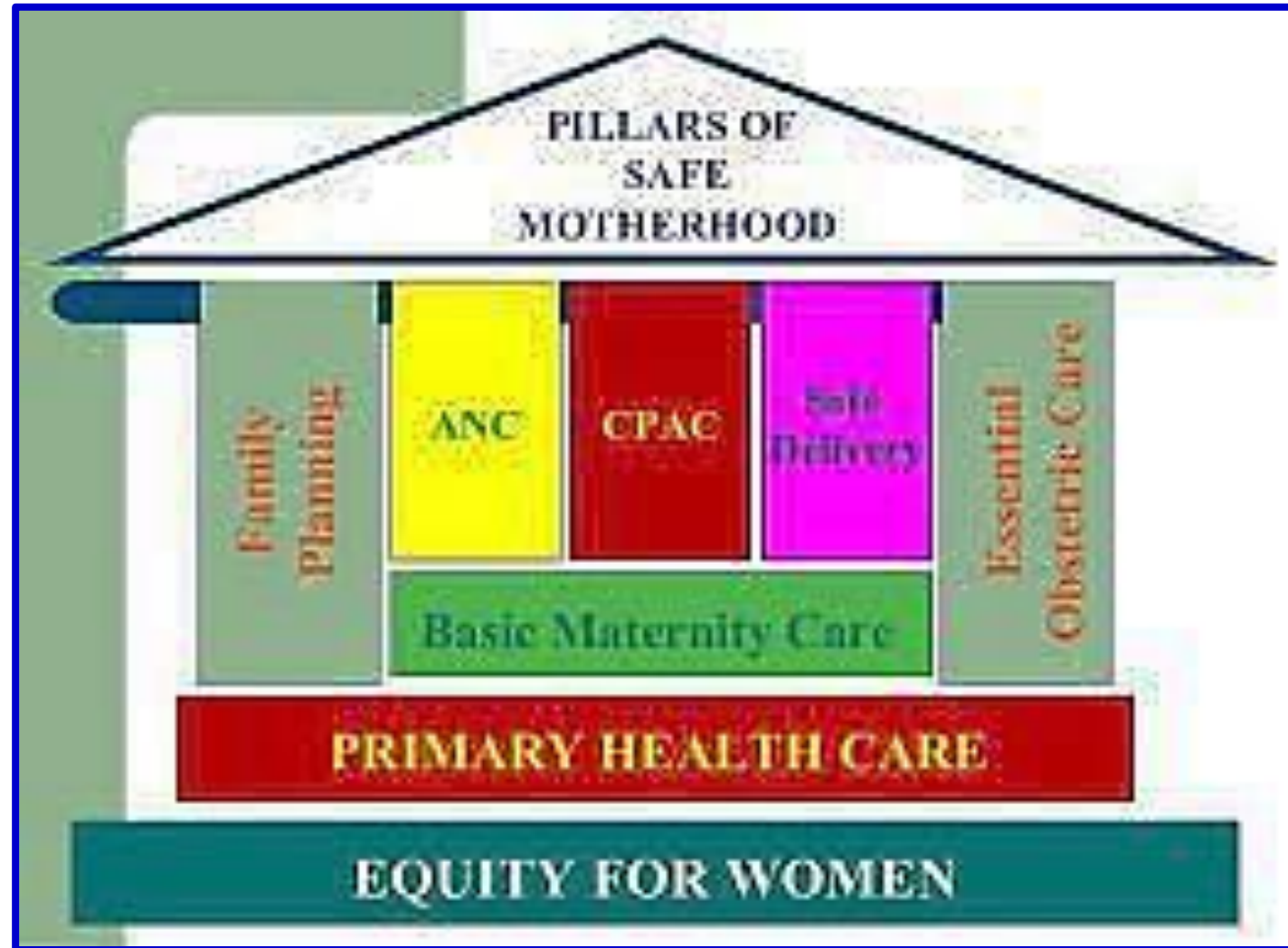
The Abortion Bill?  
I thought I paid that!!

Robots & AI- artificial  
intelligence will take  
over 800 -push out of  
employment- million  
people by 2030!



# Making childbirth safer..

<http://www.unfpa.org/public/> 22.5.22



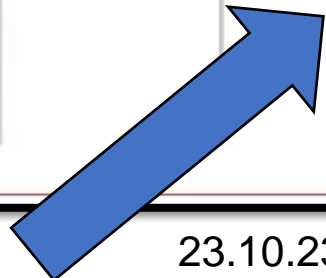


# Essential Health Benefits

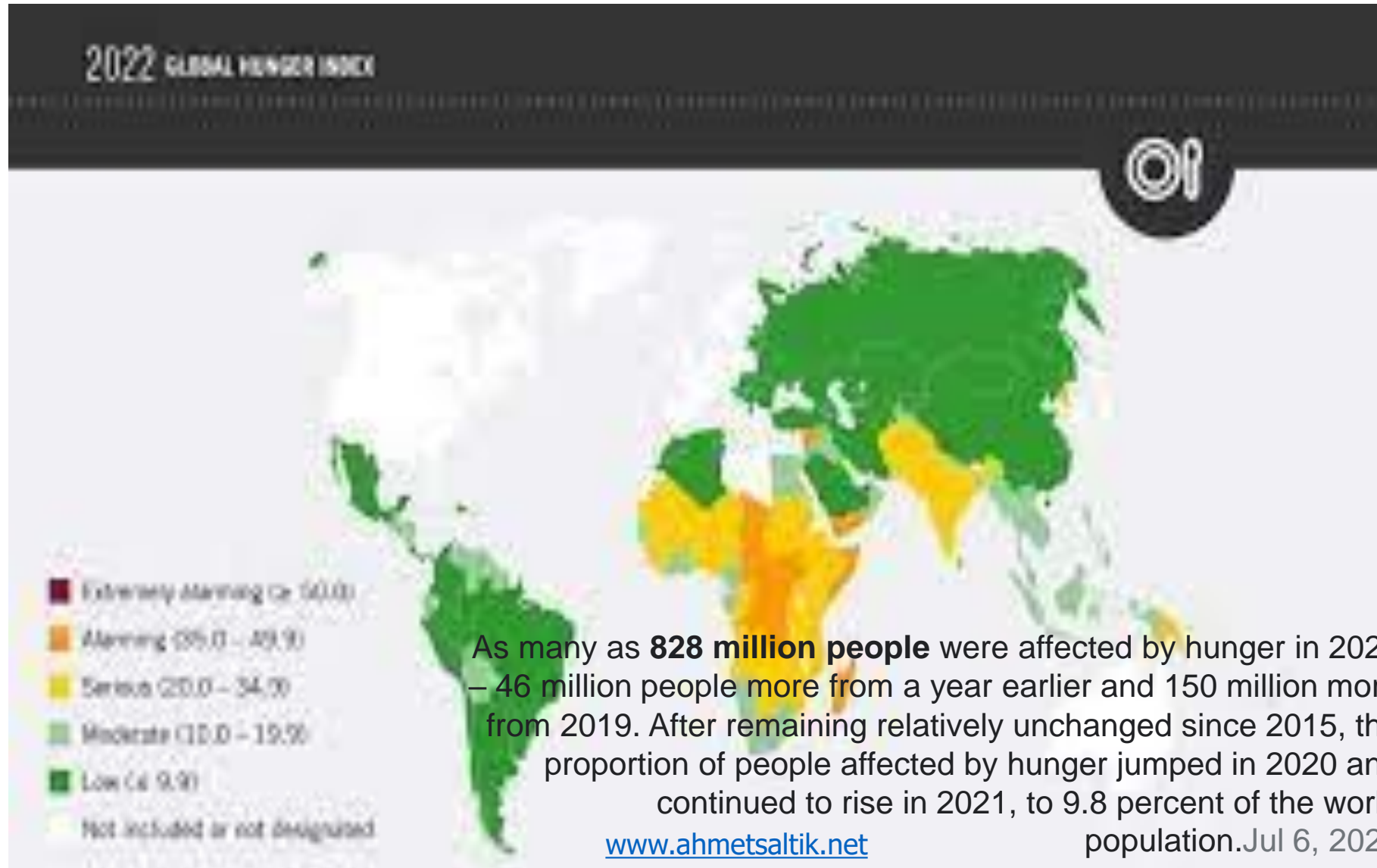
✓ Plans must cover 10 categories of mandated essential health benefits:

## Essential Health Benefit Categories

1	2	3	4	5	6	7	8	9	10
Ambulatory patient services	Emergency Services	Maternity and newborn care	Pediatric services including dental and vision care	Rehabilitative/habilitative services and devices	Mental health and substance use disorder services, including behavioral health treatment	Preventive and wellness services and chronic disease management	Hospitalization	Prescription Drugs	Laboratory services



# 2022 Global Hunger Index by Severity



**FOR DECADES, THE  
NUMBER OF HUNGRY  
PEOPLE HAD BEEN  
DECLINING - THIS ISN'T  
TRUE ANYMORE**

**MORE THAN 820  
MILLION PEOPLE DO  
NOT HAVE ENOUGH TO  
EAT**

**AT THE SAME TIME, NO  
REGION IS EXEMPT  
FROM THE EPIDEMIC OF  
OVERWEIGHT AND  
OBESITY**

<http://www.fao.org/state-of-food-security-nutrition/en/>, 9.5.23





Pope : **Catholics need not breed 'like rabbits'**

Pope Francis, after a visit to the largest Catholic nation in Asia, says Catholics may have a moral responsibility to limit the number of their children and **need not reproduce "like rabbits."**

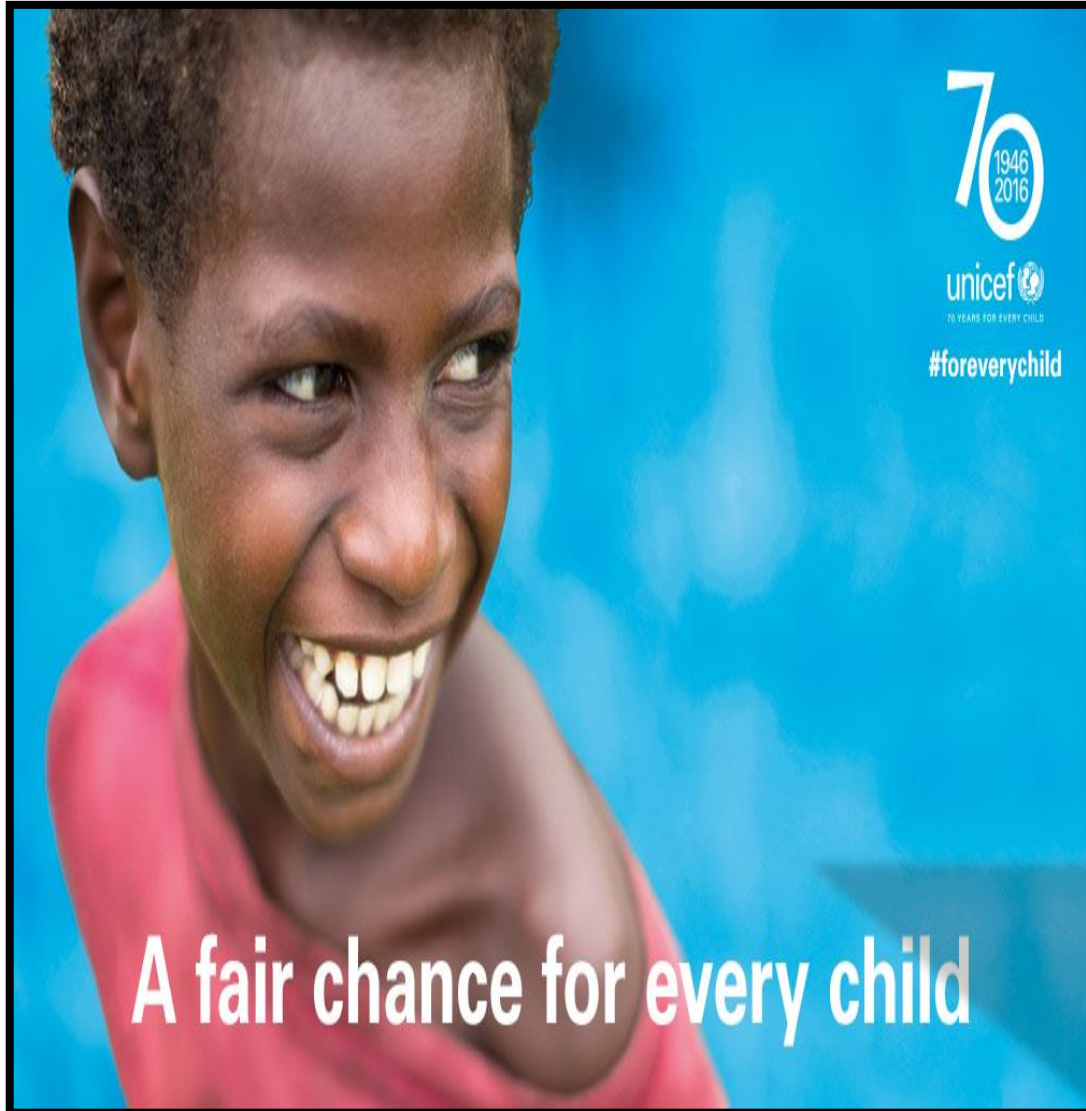
**«Some think that -excuse the word- that in order to be good Catholics we have to be like rabbits. No.»**

USA TODAY Jan. 19, 2015

<http://www.worldometers.info/world-population/>  
<http://www.worldometers.info/world-population/turkey-population/>



# The STATE of WORLD CHILDREN : UNICEF 2019 & 2023



## ***The State of the World's Children 2023: For Every Child, Vaccination***

# The UNFPA : FEMALE GENITAL MUTILATION; *CUT, SCRAPED, STITCHED*

Female genital mutilation-FGM, is an invasive procedure which entails partial or total removal of female external genitalia or other injury to female genital organs for non-medical reasons. The procedure is mostly carried out on young girls between infancy and age 15.

## MEDICALIZATION

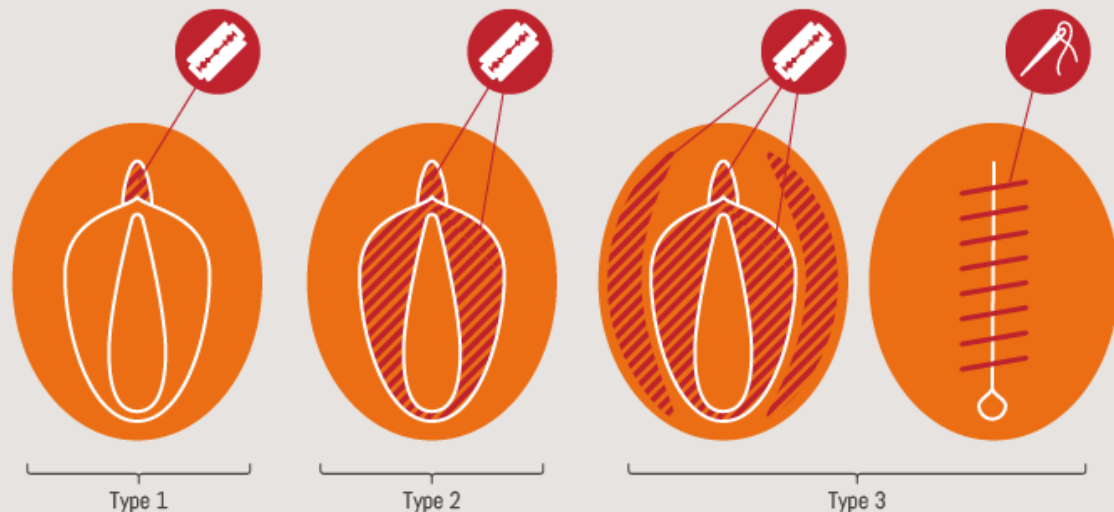
Artwork by Fatma Mahmoud Salama Raslan, Egypt  
Health-care providers are increasingly involved in performing “medicalized” FGM, viewing medicalization as a method of harm reduction. But even when the procedure is performed in a sterile environment by a health services provider, FGM can never be “safe”; there is always a risk of health consequences immediately and later in life.

An estimated 52 million women and girls have undergone FGM performed by doctors, nurses or midwives.

***Under any circumstances, FGM violates human rights and violates medical ethics!***

<https://www.unfpa.org/pcm/swop-2020> 01.06.2021

Different types of female genital mutilation



# THREE ZEROS BY 2030

*UNFPA has set out to achieve 3 world-changing results by 2030:*

- 1. Zero unmet need for family planning,*
- 2. zero preventable maternal death, and*
- 3. zero gender-based violence,*  
*including harmful practices like child marriage*  
*and female genital mutilation.*



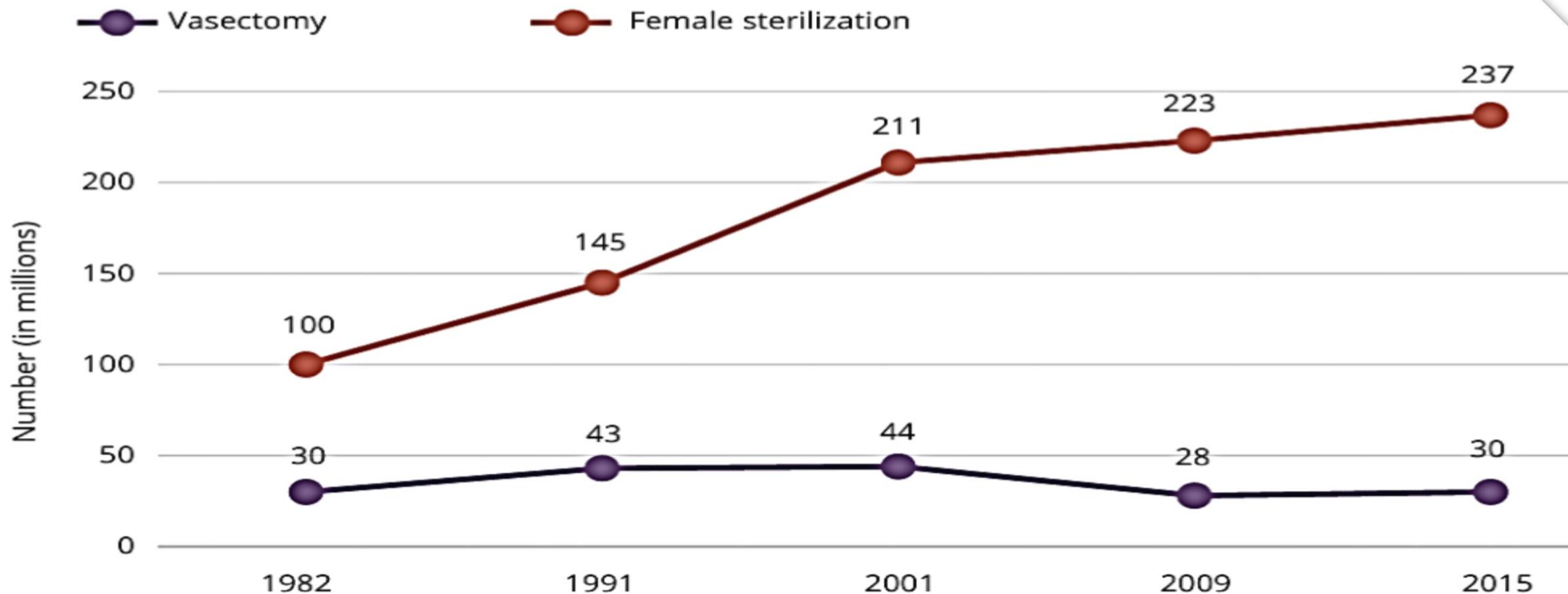
# Annual Report 2022 by UNFPA

## Autonomy is at the heart of rights-based family planning

Family planning programmes typically use modern contraceptive method use as a primary marker of success. The focus on increasing contraceptive use can lead observers to regard non-use as a failure, but in fact it can be a legitimate choice for a woman. Researcher Leigh Senderowicz suggests the creation and use of a new indicator called "contraceptive autonomy", defining contraceptive autonomy as "the factors necessary for a person to decide for themselves what they want in relation to contraception and then to realize that decision" (Senderowicz, 2020). This type of perspective could better align programmes with a rights-based approach. Calculating this indicator would require adding questions to population-based surveys such as the DHS.

# Annual Report 2022 by UNFPA

Trends in worldwide use of permanent contraceptive methods



Shelton and Jacobstein, 2016.

# Annual Report 2022 by UNFPA

- ❑ *Now is the time to **accelerate**, not retreat, to transform the lives of women and girls and reach those furthest behind.*
- ❑ **Preventing unintended pregnancies is a nonnegotiable first step.**
- ❑ *When individuals are able to exercise real **informed choice** over their health, bodies and futures, they can contribute to more prosperous societies and a more sustainable, **equitable and just world**.*

State of World Population 2023

# QUICK REMINDERS-1

- ☐ *Demography helps us measure the health status and needs of a population.*
- ☐ For example, by using demographic data such as age, sex, ethnicity, education, income, and location, we can calculate indicators such as life expectancy, mortality rates, morbidity rates, disability-adjusted life years (**DALYs**), and health-adjusted life expectancy (**HALE**) for different groups of people.
- ☐ *These indicators help us monitor and compare the health outcomes and inequalities of different populations over time and across regions*



## QUICK REMINDERS-2

- ❑ **Demography** is the scientific study of human populations, and it is very important for public health because it helps us understand the size, structure, and dynamics of populations and *how they relate to health and disease*.
- ❑ Here are some of the reasons why demography matters for public health:
- ❑ ***Preventing unintended pregnancies is a non-negotiable first step.***

## QUICK REMINDERS-3

- ❑ **Demography** helps us plan and evaluate health interventions and policies.
- ❑ *For example, by using demographic data such as **fertility**, **mortality**, and **migration**, we can project the future size and composition of a population and estimate the demand and supply of health services and resources.*
- ❑ This helps us design and implement appropriate and effective health programs and policies that meet the needs and preferences of the target population.

## QUICK REMINDERS-4

- ❑ **Demography** helps us understand the determinants and consequences of population change.
- ❑ *For example, by using demographic data such as **birth rates**, **death rates**, and **migration rates**, we can analyze the causes and effects of **population growth**, decline, aging, urbanization, migration, and diversity on health and well-being.*
- ❑ This helps us identify and address the challenges and opportunities that population change poses for public health.

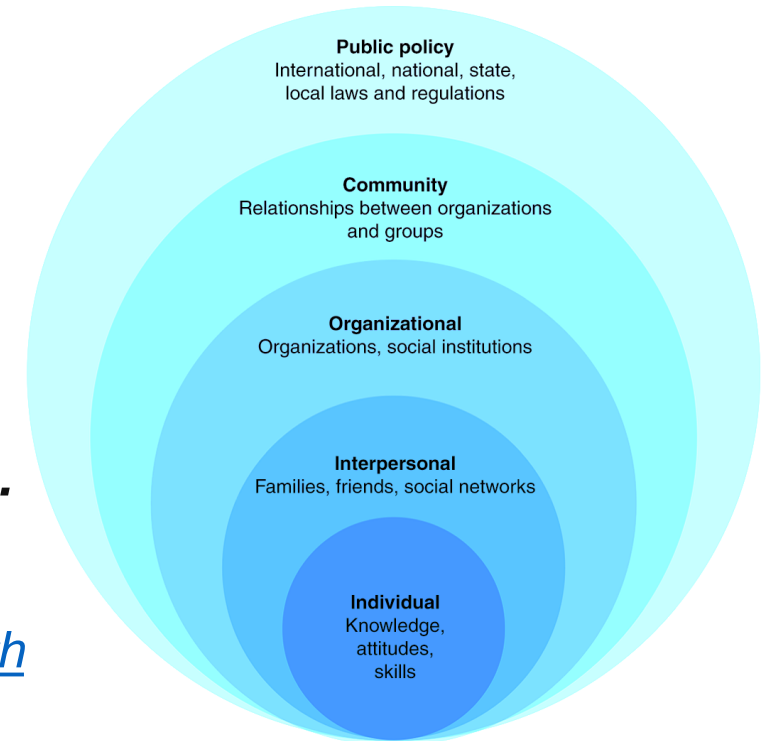
# QUICK REMINDERS-5

## □ Demography ***is a vital tool for public health***

that enables us

- *to measure,*
- *plan,*
- *evaluate,*
- *understand,*
- *and improve the **health of populations.***

- [Demography and public health|Oxford Textbook of Public Health](#)
- [Demography \(Chapter 2\) - Essential Public Health](#)
- [Demography: A Very Short Introduction](#)

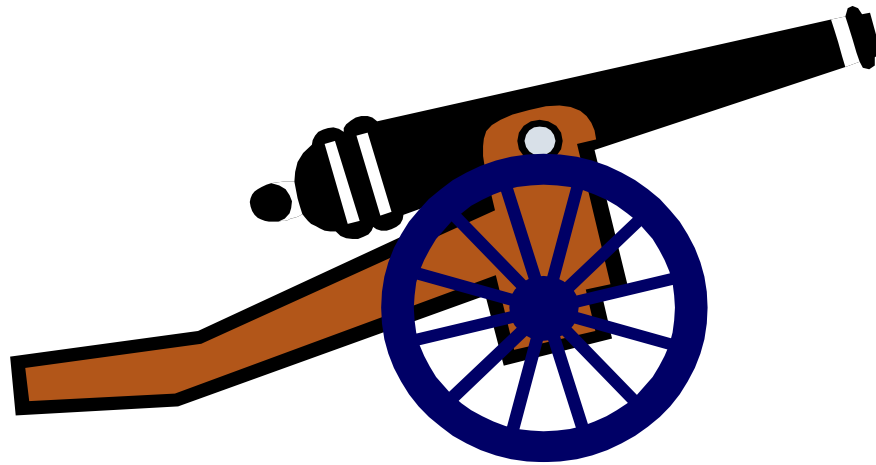
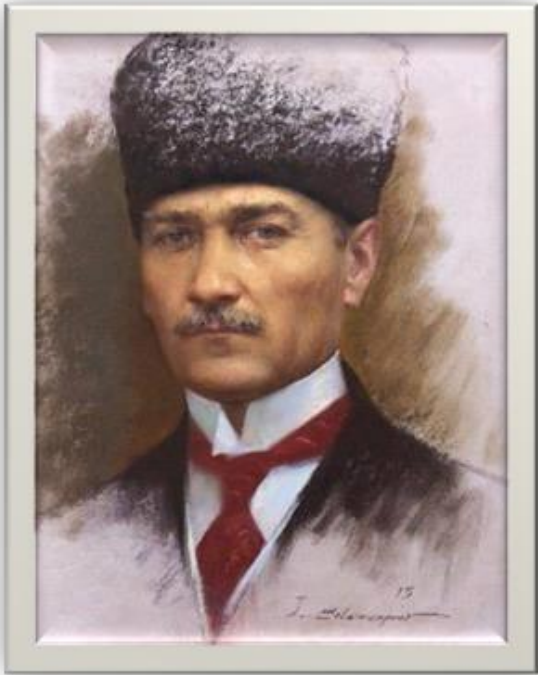




# ***Lifestyle Factors***

***“Genes load the gun.  
Lifestyle pulls the trigger”***

**Dr. Elliot Joslin**



***Thank you for your attention...***