CONTEMPORARY MEDICINE

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POLITICAL ECONOMY OF HEALTH.
Politics as social medicine. Health and the welfare state. The national health services.

The founding text of the World Health Organization (1948) includes a sentence written by the French public health specialist Raymond Gautier in 1944: "Health is more than the absence of disease: the word health implies something positive, that is, physical, mental and moral well-being. That is the goal we must achieve, even if it goes beyond the possibilities of curative and preventive medicine."

Assuming this basic principle implies not only understanding that disease is a loss of balance by the organism – what physiologists call *homeostasis* – but also a psychological problem, a biographical break and an alteration of the social role of the sick person. The Argentinian writer Bioy Casares said that "illness is the pretext that the body gives us to die" and Susan Sontag defined disease as the dark side of life. In 1854 the German anthropologist, politician and doctor Rudolf Virchow stated that "medicine is a social science, and politics is nothing but medicine on a large scale" (1848).

All these references express the social and political dimension of health and disease. Disease manifests itself sometimes as a subjective perception, while at other times it is discovered by chance as a result of an exploratory finding, or it could be a simple accident. The affected person recognizes in himself some symptoms – sneezing, pain, fatigue, etc. – that the healthcare personnel translates into signs of illness – by means of blood tests, x-rays, etc. – and all this happens in a community setting. Depending on the context, his or her condition and personal attitudes, the patient decides: he or she can carry on with his or her normal life or assume the role of a patient following a therapeutic itinerary by visiting a healthcare center, and perhaps suspending his or her working activities. That is why disease has a biographical impact, especially in serious cases such as cancer, cardiovascular accidents, or stigmatized diseases such as AIDS, tuberculosis or syphilis. Disease does not only have an organic or biological dimension; it is also endowed with psychological and social meaning.

Religious beliefs, traditional myths and literary legends, common to all cultures, tell us about the existence of a long-lost paradise where human beings

lived in harmony with nature, but, in fact, we know that disease is a part of life. As a matter of fact, life is itself a mortal disease. But the way in which disease appears in human groups is very diverse and depends on social, cultural and environmental factors. In pre-modern societies, the predominant diseases were infectious or contagious diseases and pestilence, causing catastrophic epidemics, which together with famine and wars were the cause of very high mortality. However, in our postindustrial societies, mortality is lower, and it is cancer, cardiovascular and traffic accidents, viral infections, and other diseases associated with environmental deterioration and unhygienic habits: smoking, pollution, addictions, and mental disorders. These have become the main problem. Indeed, health and disease are intimately related to lifestyle: diet, physical exercise, alcohol consumption, tobacco, medications, etc. These are factors that are added to our genetic constitution or biological inheritance. That is why information and education are essential. But health and disease are also influenced by the living conditions deriving from social and professional status. They are also affected by climate and culture, which are different in Mediterranean, Scandinavian, Asian or Central African societies. In addition, there are national and international regulations that protect health by limiting the use of drugs, tobacco or alcohol, and others on public establishments, working conditions, polluting industries. All this comes to define how healthy the social context is.

Article 25 of the Universal Declaration of Human Rights (Geneva, 1948) states the universal right to health: "Everyone has the right to a standard of living adequate for the health and well-being of himself and his family, including food, clothing, housing and medical care and necessary social services..." The Universal Declaration of Human Rights was the result of a historical process which began at the end of the 19th century. It is the result of the emancipatory struggles of workers and women, who found in social reformism a political route to the establishment of the right to health. In industrial centers, workers' organizations promoted the first initiatives to expand healthcare, mutual aid societies, which laid the foundations for the participation of the state and the public administration in healthcare systems. Bismarck's Prussia created a system of *Krankenkassen* or sickness funds, and Czarist Russia set up the *Zetsvo* system to serve rural peasants. They were the first steps of the so-called providential or welfare state, which,

overcoming the idea of simple charity for the poor, tried to guarantee access to health and social protection to assist those suffering from the consequences of poverty and homelessness. But it was after the Second World War (1945) when efforts were made through national health services to universalize healthcare to the whole population within the framework of the welfare state. During the Cold War, a wide range of welfare models emerged. Western European countries, along with Canada, Japan, Australia, New Zealand, and others, created public services financed with state funds. The British National Health Service (1948) was a pioneer and a role model. However, in the United States, healthcare is based on hiring the services of private insurance companies and the state only intervenes in the form of the Medicaid program for certain marginal groups and Medicare, providing basic assistance for pensioners. During these years, socialist countries developed state models, which collapsed with the crisis of the communist systems at the beginning of the 1990s, causing in many cases healthcare chaos, great inequality and the return of old diseases. However, some of the formerly communist countries adopted the welfare state model. In poor countries, healthcare provision is a reflection of inequality: traditional forms of medicine and international humanitarian aid coexist with private western hospital centers for the elites and workers of multinational companies.

HEALTHCARE SITES

From the dispensary to the hospital. The world as a space for hygienic intervention: The Hygiene Committee of the League of Nations. The Rockefeller Foundation. The World Health Organization and Non-Governmental Organizations.

During the first half of the 20th century, health organizations focused on the prevention diseases. Social diseases included tuberculosis, syphilis, malaria, maternal and infant mortality, malnutrition, nutritional problems and poverty-related diseases. Preventive medicine focused on hygiene and the sanitary conditions of the natural environment (water, air, soil) and the social environment (housing, schools, public spaces, etc.).

Nineteenth-century clinical medicine was initially provided in private clinics, it being a liberal profession, and, for the poor, in hospitals and in asylums. At the beginning of the twentieth century the main conduits of health intervention were municipal dispensaries and health promotion campaigns, education in hygiene, and vaccination. This model was implemented by a poor sanitary administration, with national health institutes and others at a provincial and municipal level, managed by experts in public health and health officers. The majority of the Spanish population lived in rural communities, so that hygiene and healthcare in the rural environment became one of the political objectives. Illness and poverty were the main causes of underdevelopment. Thus, at the beginning of the 1920s a healthcare commission was created in Spain to eradicate hunger, famine, and cretinism – a long-term effect of the first two – in Las Hurdes, of which prominent doctors such as Gregorio Marañón and Ángel Pulido were members and which led to King Alfonso XIII and the Archbishop of Plasencia to visit Las Hurdes in 1922. Poverty-related diseases could be overcome by supporting the agrarian economy, fighting against hunger and ensuring clean drinking water. Diagnostic technologies and therapeutic resources were very limited, but simple interventions could have great results.

After the Second World War, technical innovations sometimes deriving from war-related activity and the new national healthcare systems put hospital institutions at the center of the welfare model, becoming the space for professional specialization and technological innovation. It was no longer viable for the most advanced medical practice to be simply a liberal profession implemented in

private medical practice. It required specialization, technology and medical equipment.

The cholera and yellow fever epidemics of the mid-nineteenth century led to restrictive national regulations on the movement of people and goods. Boats and trains were more tightly controlled. Lazarettos and sanitary cordons impeded international free trade. This was the starting point for a new diplomacy in the shape of international health conferences, hygiene and demography congresses, and international meetings on tuberculosis, charity, and school hygiene. These meetings raised the profile of public health experts and accentuated the political dimension of health. The result was the creation of an International Office of Public Hygiene in Paris (1907) and a Committee of Hygiene in the League of Nations (1920) to alleviate the devastating effects of the epidemics and famine caused by the Great War. When an immense typhus pandemic ravaged the border areas lying between Poland, the Ukraine and Russia in 1921, the Hygiene Committee recognized the international dimension of the health emergency and proceeded to organize an international conference and an settled and international commission on epidemics. The aim was to overcome diplomatic tensions and bring together international expertise to stop the threat of the spread of the epidemic throughout Europe , giving rise to an ambitious international health program funded by the Rockefeller Foundation. This program consisted of training experts in public health, the creation of an International Epidemiology Service and a World Documentation Center in Public Health at the headquarters of the League of Nations (Geneva), the advancement of biological product standards (vaccines, serums, nutrients, and medicines), and the promotion of programs for the prevention of malaria, malnutrition, opium consumption and infant mortality. The experts in international public health at the League of Nations were the forerunners of the World Health Organization (WHO, Geneva, 1946), the international advisory body of the United Nations for health affairs.

The international health conference organized by WHO in Alma-Ata (1978), capital of Soviet Kazakhstan, published a program statement that emphasized primary health care and community medicine. That Declaration opened the door to the emergence of an international health cooperation movement, featuring very active non-governmental organizations such as Médecins Sans Frontières or

Medicus Mundi. A century before, the International Red Cross had been created as a neutral organization body for the care of the wounded and sick in armed conflicts. Also, in exceptional circumstances, International Red Aid (Socorro Rojo Internacional) and the International Brigades had generated forms of health activism associated with a political commitment to human rights and democracy.

BIOGRAPHIES

Ludwik Rajchman, a prominent figure in international health.
Walter Cannon, the International Brigades and medical activism.

The generation of doctors who lived through the period bookended by the two wars (1914-1945) showed a special involvement in military and political events. The end of the Austro-Hungarian Empire, the decline of the British Empire, the crisis of colonialism, the two world wars, the rise of Nazism and the Bolshevik revolution in Russia convulsed world geopolitics, ultimately giving way to the birth of the Cold War period. The scientific and technical development of medicine was not unaffected by these events.

A prominent protagonist of the international health movement was Ludwik Rajchman, a Polish doctor who, after graduating in Krakow, specialized in microbiology at Ilya Metchnikof's laboratory at the Pasteur Institute (Paris). He was professor of bacteriology at King's College (London) between 1910 and 1913 and at the beginning of the Great War he led the Central Laboratory of Dysentery (London), where he directed strategies against Spanish flu and polio. In 1918 he returned to Warsaw to found the National Institute of Hygiene and the National School of Health (1923), funded by the Rockefeller Foundation.

Rajchman was a great promoter of international health as director of the Hygiene Organization of the League of Nations, leading the fight against epidemics, and being the true driver of the joint program with the Rockefeller Foundation. His personal involvement saw him travel for two years to China as an adviser to the Government of Chang Kai-shek, promoting an international advisory council on health issues. The advance of fascism forced him to leave the League of Nations in 1939, but with the support of J. Nehru he organized an international conference for peace. Between 1939 and 1941 he was appointed delegate for humanitarian affairs of the Polish government in exile, and in 1943 he participated in the creation of the UNRRA (United Nations Relief and Rehabilitation Administration) that provided aid to countries devastated by war. When the UNRRA was disbanded in 1946, Rajchman, with the support of former US President Hoover, launched a special fund to help children: UNICEF, of which he was the first president, urgently providing antibiotics, milk powder and vaccination campaigns against

tuberculosis. But the context of the Cold War put Rajchman under serious difficulties. In Eastern Europe, he was suspected of being a pro-American agent and his Polish diplomatic passport was confiscated; in the United States, the McCarthyists accused him of being a communist spy. In 1957 he was forced to leave America and never returned, definitively settling in France. In Paris, he founded the International Center for Children (ICC) with Roger Debré to train public health workers in poor countries or those at war in social pediatrics. He died in 1965 in Chenu (France) and the speakers at his funeral were Jean Monnet and Roger Debré. Half a century after his death, Ludwik Rajchman's tireless activism in favor of global health deserves a level of recognition he has never received.

The American physician Walter Cannon (1871-1945), professor of physiology at Harvard University, was not only a great researcher, but he also stood out for his political activism. In his early research between 1897 and 1911 on the physiology of the emotions, he discovered that emotion activates both the autonomic nervous system and adrenaline, provoking a warning reaction, similar to that provoked by a threat or fear. In 1917 Cannon was drafted into the American army during the Great War. Working as doctor in field hospitals in England and France, he investigated the consequences of traumatic shock and the concatenation of phenomena that caused it. After the war he returned to Harvard and devoted his research to analyzing the complexity of chemical neurotransmission, proposing the concept of *homeostasis* (1926), a key notion for the understanding of the mechanisms forming part of the regulation of an organism. His research shaped the concept of organic integration and opened the doors to psychosomatic medicine.

But Cannon also became an important public figure in the domain of politics and activism. He had first-hand experience of the threat of fascism in Europe, as he maintained a close relationship with researchers from all over the world. One of these was Juan Negrín, head of government of the Spanish Republic in 1936, whom he met in Leipzig when Negrín was a young researcher at the Institute of Physiology. Walter Cannon was aware of the drama that threatened the Spanish Republic, and of the nexus between the Francoist military coup of 1936 and the advance of international fascism. For this reason, he actively participated in

organizations that helped refugee doctors; He chaired the American Medical Bureau to Aid Spanish Democracy and the American-Soviet Medical Society. In contrast with the growing anti-communism of American conservatives, Cannon always defended freedom and social commitment, refusing to accept anti-democratic authoritarian positions. Along with Edward Barsky and other doctors he was actively involved in the Lincoln Brigade during the Spanish War, and very critical of the intolerable neutrality of the US government. Cannon represents the purest, most honorable scientist, not only for his contribution to science, but also for his political commitment to the values of freedom and human rights.

THE HOSPITAL AND THE MEDICAL SPECIALTIES

The technological revolution

Since the late nineteenth century the advance of medical research, technological development and social demands derived from the recognition of the universal right to health boosted professional specialization among the health professions. In the Middle Ages there had been a plethora of healers such as physicians, surgeons, barbers, tooth-removers, algebraists, veterinarians, apothecaries and midwives, but in the 19th century the first medical and surgical specialties were created, such as gynecology, pediatrics, psychiatry, dermatology and syphilography, dentistry, and ophthalmology, which would later give rise to other specialties and subspecialties in response to new technologies and social demands.

Pre-modern hospitals were based on the charity of certain religious orders and municipal bodies and they were places in which social care was provided to the poor, the excluded, orphans and vagabonds, mitigating the impact of social exclusion. Nineteenth-century liberal reformism promulgated anti-poverty laws, often called *Poor Laws*, transforming hospitals into charitable institutions, along with asylums for children, the elderly and the excluded. In some cases, they were places of isolation and seclusion, such as lazarettos, psychiatric asylums and maternity homes. They were institutions of social control where medical and surgical practice were not essential, but rather secondary.

During the nineteenth century, clinical medicine was practiced in private surgeries and in general hospitals. From the late 19th century onwards, the development of experimental medicine based on laboratory techniques transformed healthcare institutions. One of the consequences was professional specialization, partly resulting from the expansion of knowledge and new technologies, but also due to new social and economic demands. Contagion, infectious diseases and epidemics were reinterpreted according to the new microbial paradigm, and physiology and therapeutics acquired an experimental dimension that required new facilities, laboratories and methods of analysis, diagnosis and therapy. All this favored technological development and more local perspectives of the human body and its diseases.

Furthermore, epidemiological records allowed the identification of social diseases, proving solid grounds for social medicine policies. The consolidation of the health professions legitimized their monopoly on healing practices and their capacity to implement social barriers to guard against encroachment into the professions and quackery. Organizations were created, such as professional associations for specialists in pediatrics, gynecology, traumatology, venereology, and others, accompanied by the emergence of specialized publications, congresses and training programs for specialists, research institutes and hospital services. This process of specialization was consolidated in the mid-twentieth century within the framework of national health care systems, in which the new hospitals became the space for the development of the most innovative technologies and the unstoppable process of medical specialization. New areas such as allergology, rheumatology, oncology, hematology are some examples that allow us to understand the sub-specialization process that in recent years has led to the appearance of specialties such as transplant surgery, sports medicine, or palliative care.

The universalization of the provision of healthcare and the technological revolution promoted by the health industries has transformed the profession, especially since the middle of the 20th century. First came the use of X-rays (1896) and electrocardiography (1903); later, huge strides were made in the use of pharmaceutical products (antibiotics, analgesics, vitamins, tranquilizers, neuroleptics, chemotherapy, etc.), leading to the establishment of a major international industry; and finally there was a revolution in diagnostic techniques on the basis of developments in computing and applied physics. The 1950s saw clinical tests, ultrasound and laser surgery emerge as new technologies in medical practice, and since 1970 information technology, microelectronics and particle physics together have revolutionized the ability to visualize and intervene inside the human body. A series of new technologies were applied to medical practice: the scanner, endoscopy techniques, the pacemaker, computerized axial tomography (CAT), magnetic resonance imaging (MRI) or positron emission tomography (PET).

BIOPOLITICS AND MEDICAL POWER.

Health and control over the body. The power of health and its industries. Reproduction and sexuality. Healthy nutrition.

Health technology has had a spectacular impact on our ability to monitor and modulate the human body. The capability of technology to completely replace organs or functional deficits has been an important development in this respect. This occurred decades ago in the case of diabetes, as it was found that the external supply of insulin could alleviate pancreatic dysfunction, but a succession of techniques designed to replace damaged organs have also been developed. Early examples include the iron lung and the pacemaker, followed by kidney dialysis and, later, artificial respirators, hormone replacement therapy and transplants. All of these share a common characteristic: the chemical or mechanical substitution of the activity of an organ or its complete replacement. So-called regenerative medicine, which uses tissue banks selected by genetic compatibility techniques and stem cell culture, promises a hopeful but also controversial future.

Since the 1970s, hormone replacement therapy has revolutionized methods of contraception. The contraceptive pill not only gave women greater freedom to express their sexuality and their capacity to control procreation, but also reduced birth rates and opened up unprecedented social and labor expectations for women. In the 1980s, new techniques of in vitro fertilization and assisted reproduction created new possibilities and forced states to establish regulations on the use of human embryos and the limits of animal cloning. In recent years, the cultivation of pluripotent cells and adult embryonic cells have opened up new possibilities in the field of regenerative medicine. The main goal is the cultivation and production of tissues compatible with the biological identity of the patient, so that by means of their own biological materials or histo-compatible tissues, damaged organs and tissues can be restored to health. The mastery of medical technology over the human body has reached levels which were unthinkable just a few decades ago thanks to molecular diagnostics, the creation of genetic identity cards and sequencing technologies. This new scenario has led the consideration of disease within the domain of molecular pathology, which will revolutionize the treatment of many diseases that have been incurable so far.

From the first decades of the twentieth century, diet and nutrition became essential health considerations. The Universal Declaration of Human Rights left no room for hunger and famine as a cause of death and disease. After the devastating effects of the two world wars and the Great Depression of the 1930s, the new experimental science of nutrition tried to respond to the physiological needs for food of a hungry population. First, the concept of the calorie was formulated, the key basic unit for measuring the energy needs of the human body. Then, research focused on nutrients: proteins, fats, carbohydrates, minerals and vitamins. Experimental and clinical research enabled the assessment of their metabolic importance and the pathological effects of deficits in the form of deficiency diseases, and that of starvation derived from chronic malnutrition. During the Second World War, concentration camps provided an excellent opportunity to study the pathological effects of hunger. Afterwards, the physiology of nutrition established patterns for optimal diet and minimum diet, which served as a point of reference for the policies of rationing in supply crisis, war and postwar periods.

Since then the nutritional properties of food have been analyzed, a codex alimentarius has been published and updated, and the relationships between diet and certain diseases were properly established. The relationship between fat intake and vegetable insufficiency was associated with cardiovascular accidents, which highlighted the benefits of the Mediterranean diet and its positive effects on health.

The explosion of the food industry has had its most recent expression in the so-called functional foods, which are enriched with minerals, vitamins or other substances beneficial to health, and there are also other foods in which negative components for the health of certain consumers have been suppressed. Products without gluten or lactose, or those enriched with omega 3 fatty acids, lactobacillus or folic acid point to a new era in food production. Currently, the food industry and environmental concerns reveal a duality within the global food market: the ability to select industrially improved foods, but also a desire to return to using local products.

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Part 1. Health, Disease and Society
(A Sociological Approach to Health & Medicine)

1. **Health, human rights and citizenship**
2. **Discussing the concepts of health, normality and disease**
3. **Dimensions of health and disease**
4. **Social diseases and epidemiological patterns**
5. **Health transition, demographic transition, risk transition, nutrition transition**
6. **Public health and health policies**
7. **Globalization and health**
8. **Determinant factors and political strategies**
9. **Health care systems: past, present & future**
10. **International organizations and health**
11. **Health and social inequalities**

1. Health, Human Rights and Citizenship
Universal Declaration of Human Rights (Geneva, 1948)

- **Article 25**
- (1) Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.
- (2) Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock, shall enjoy the same social protection.

1. Health, Human Rights and Citizenship

- Triple dimension of the concept of citizenship:
- 1st is the **civil dimension**: freedom of speech and thought, as well as freedom of movement and assembly.
- 2nd is **political dimension**: ability to participate in the election of the government and the political bodies, where decisions are made and taken. Parliamentary democracy articulates different options of political citizenship.
- 3rd is **social and economic citizenship**: right to enjoy minimum standards of living and the necessary social protection. In Marshall's words: "the right to a modicum of economic welfare and security ⋯ and to live the life of a civilised being according to the standards prevailing in the society."

Marshall, T. H. *Sociology at the Crossroads*. London, Heinemann, 1963

2. Discussing the Concepts of Health, Normality and Disease

"For health is more than the absence of illness: the word "health" implies something positive, namely, physical, mental and moral fitness. This is the goal to be reached; but it lies beyond the possibilities of curative and preventive medicine."

Raymond Gautier, Report on "International Health of the Future", Rockefeller Archive Center (1944), p.1

World Health Organisation (WHO)

Health means well-being in three dimensions

physical/biological **psychological** **social**

Normality: Statistical concept

biological normality

psychological normality

social normality

Patterns of normality

individual dimension -- collective dimension

2. Discussing the Concepts of Health, Normality and Disease

- **Health and Disease**: process/condition resulting from the relationship between human/living beings and the environment (physical, cultural, social)
- **Disease**: Absence of ease; uneasiness, discomfort; inconvenience, annoyance; disquiet, disturbance; trouble.
- **Illness:** 1. Bad moral quality, condition, or character; wickedness, depravity; evil conduct; badness.

  2. Unpleasantness, disagreeableness; troublesomeness; hurtfulness, noxiousness; badness.
- **Sickness:** The state of being sick or ill; the condition of suffering from some malady; illness, ill-health.

2. Dimensions of Health and Disease

1. Biological and social dimensions:

- loss of homeostasis, i.e. organic, morphological and functional balance

- inadaptation, alteration of the social role

2. Psychological and personal dimensions:

-"Sickness in those days was a special place, a place apart, where no one else could enter, not the doctor with his shiver-inducing stethoscope or even my mother when she put her cool hand on my burning brow. It was a place like the place where I feel that I am now, miles from anywhere, and anyone." [John Bainville, The Sea]

“Illness is the night side of life, a more onerous citizenship. Everyone who is born holds dual citizenship, in the kingdom of the well and in the kingdom of the sick. Although we all prefer to use the good passport, sooner or later each of us is obliged, at least for a spell, to identify ourselves as citizens of that other place.”

[Susan Sontag, *Illness as Metaphor*]

3. Dimensions of Health and Disease

Handouts: “Virtual patient”, “Daily problems & mental disorders”

1. Different ways of disease emerging & of assuming the role of patient:

- Individual perception (feeling sick) + cultural context
- By chance: exploration, blood test, etc.
- Accident

2. Biological dimension: → signs: objective, measurable
symptoms: subjective

Shaped by family, community environment, cultural context

Personal decision: Options

- Conservation of everyday life
- Assuming the role of patient/sick person: therapeutic itinerary

Self-treatment Official medicine Others

Biographical consequences: personal, social and occupational

4. Social Diseases and Epidemiological Patterns

Social disease: ***characteristic*** of a society, social group, territory (urban, rural, etc.)

Criteria to define a social disease:

* statistics: incidence, prevalence, mortality, etc.

* medical and therapeutic

* psycho-social: morality, fears, culture, etc.

Social diseases determine patterns:

* **demographic patterns:** define the internal structure of the population (global, age group, sex, level of income, etc.)

* **epidemiological patterns:** distribution of types of disease

4. Social Diseases and Epidemiological Patterns

a) Widespread and acute infectious-contagious epidemics/plagues

b) Chronic infectious-contagious diseases

c) Health transition, demographic transition, risk transition, nutrition transition

d) Non infectious-contagious diseases and accidents

e) Globalization and new health problems (since 1980s): new epidemics (virus pandemics, etc.), mental disorders, addictions, car accidents, pollution:

emergence of new diseases and re-emergence of previously controlled diseases

4. Social Diseases and Epidemiological Patterns
(Western Industrialized Countries)

a) Widespread and acute infectious-contagious epidemics/plagues

- From Antiquity (Neolithic societies) until the end of the 19th century in Western, industrialised countries. Also poor countries in present times.

Main social diseases: plague, yellow fever, smallpox, cholera…

b) Chronic infectious-contagious diseases

- Closely linked to industrialization and deficient sanitation

Main social diseases: tuberculosis, malaria, typhoid fever, diphtheria, venereal diseases, infections in children, etc.

4. Social Diseases and Epidemiological Patterns
(Western Industrialized Countries)

c) Non infectious-contagious diseases and accidents

Industrialized societies during Cold War times (1945- 1980s)

Main social diseases: Cancer, heart attacks, brain vascular accidents, traffic accidents, industrial accidents, drug addiction…

d) Globalization and new health problems (since 1980s)

emergence: new epidemic diseases (virus epidemics)

new health problems

due to social habits: toxicomany, anorexia, obesity, mental disorders

derived from aging: diabetes, cancer, arthrosis

re-emergence of previously controlled diseases (tuberculosis, diphteria, STD...)

crisis of national health care systems

migrations and social inequalities

climatic and ecologic change: environmental impairement

4. Health Transition, Demographic Transition, Risk Transition, Nutrition Transition

Starting 19th C. → Inter-war Period → Mid 20th C.

Main features:

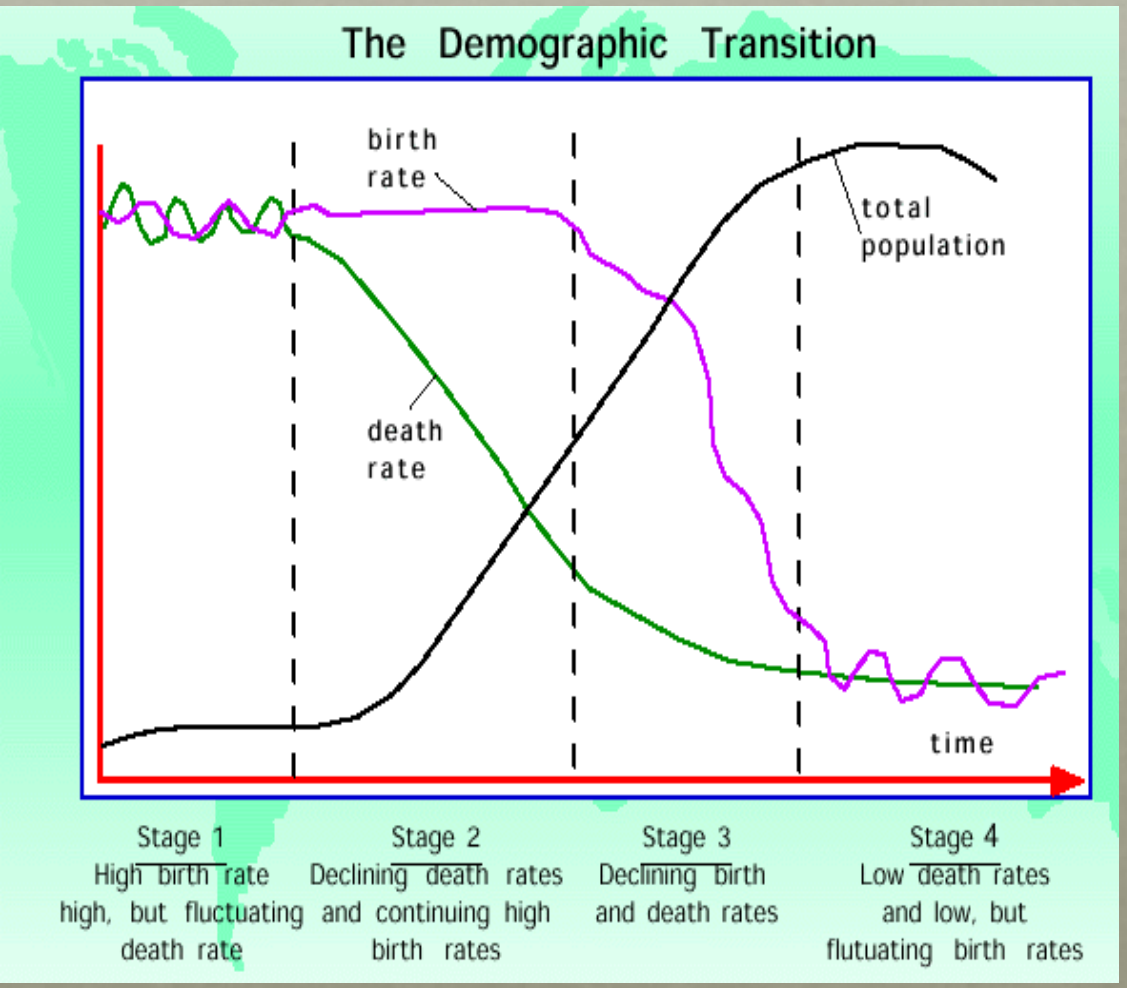
* Decrease of global mortality
* Decrease of infant and child mortality
* Increase of life expectancy
* Improvement of sanitation, housing, and working conditions

consequences → new epidemiological patterns

demographic changes

aging of the population

4. Health Transition, Demographic Transition, Risk Transition, Nutrition Transition



Transition from “old” to “modern” mortality and fertility patterns


Risk Transition
Traditional risk
Risk
Modern risk
Risk overlap
Development

Source: WHO, *Health and Environment in Sustainable Development. Five years after the Earth Summit,* 1997

Traditional Risks

Lack of access to safe water

Inadequate basic sanitation

Food contamination with pathogens

Indoor air pollution

Inadequate solid waste disposal

Working accidents

Natural disasters

Disease vectors

Modern Risks

Water pollution from industry and agriculture

Urban air pollution

Solid and hazardous waste accumulation

Chemical and radiation hazards

(Re-)Emerging infectious diseases

Deforestation, land degradation

Climate change


STALE VEGETABLES
IMPURE
TAINTED
MEAT
&
FISH

6. Public Health and Health Policies

(Handout: “Health: a geopolitical challenge”)

A. Main factors boosting the epidemiological transition:

A – Sanitation (urban and rural districts): pipes, sewage systems, housing, control of water supplies, management of waste and filth, etc.

B – Health care and welfare systems

C – Municipal preventative policies (social medicine) & new bacteriology: vital statistics, epidemiological records, health promotion campaigns, vaccines, sera, antibiotics, etc.

6. Public Health and Health Policies

(Handout: "Health: a geopolitical challenge")

B. Consequences of the health transition

-Decrease in large bacterial epidemics and pandemics (plague, cholera, yellow fever, smallpox, etc....)

-Demographic increase

-Decrease in global mortality and infant mortality

-Increase in life expectancy

-Predominance of infectious, chronic diseases such as tuberculosis, malaria, syphilis, etc., some of which are associated with poor hygiene and facilities (typhus)

-First viral epidemic outbreaks (influenza, 1918)

7. Globalization and Health

(Handout: "Challenges of the Millennium United Nations")

What do we mean when we talk about "globalization"

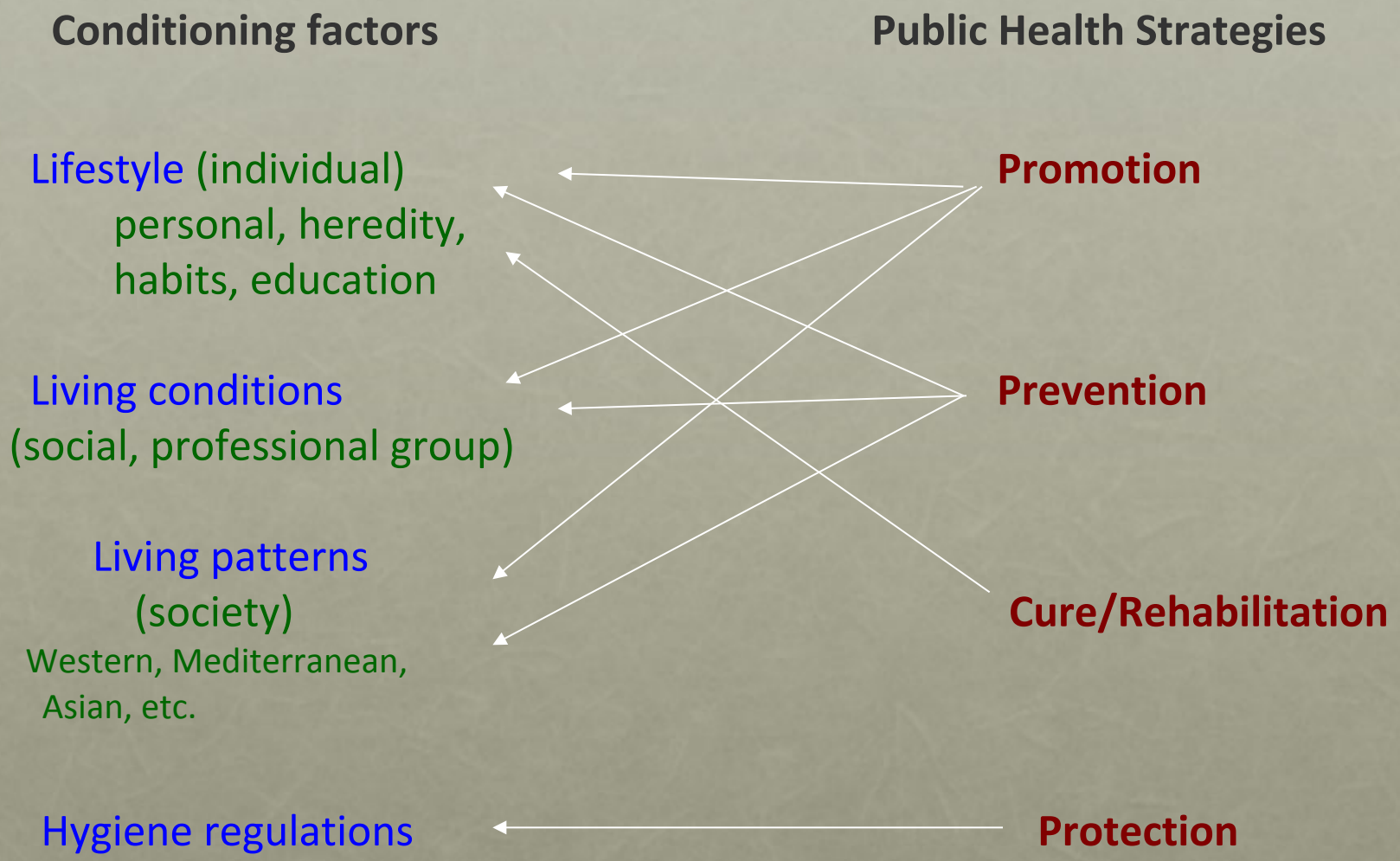
A) Factors involved

- Economy, finances & market: global regulations (or lack of them) multinational corporations, energy model, criminal economy, etc.
- Mass media, social networks and global communication (internet)
- Migration and movement of people
- Technologies (vaccines, pharmaceuticals, devices, prostheses, biological products, cell technologies, weapons, etc.)

B) Consequences

- Crisis of national/state-based regulations
- Crisis of traditional international organisations (UN, WHO, ILO, etc.)
- Non-sustainable development: environmental destruction & ecological crisis
  (Handout: "El 24% de las muertes en el mundo se debe a problemas del medio ambiente")
- Crisis in the productive and energetic patterns
- Increase of inequalities
- Emergence and re-emergence of diseases
- New threats, hazards, risks and opportunities

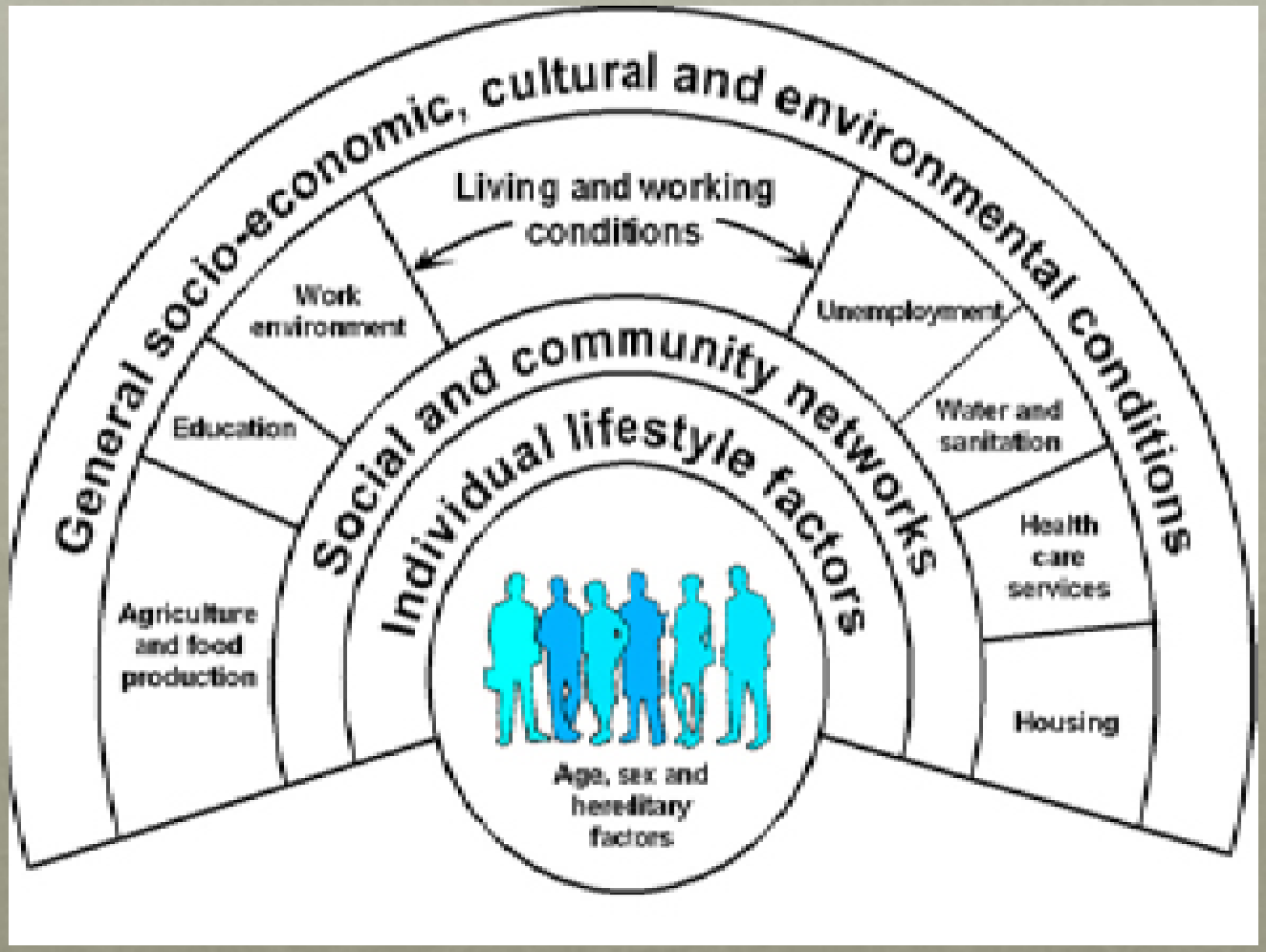
8. Determinant Factors and Political Strategies



8. Determinant Factors and Political Strategies

- WHO Commission on Social Determinants of Health, 2008

- What are the social determinants of health? *Dalghren & Whitehead (1991)*



8. Lifestyle: Habits Affecting Health

- Diet, nutritional habits
- Physical activity/sedentary lifestyle
- Tobacco, alcohol, drug consumption
- Violent behaviour
- Sexual habits
- Medication consumption: use and abuse

8. Healthcare Systems: Past, Present and Future

Historical origins

Before 1900: liberal patterns + initiatives from the *providential state*

resulting from industrialization and trade:

Krankenkassen, Zestvo, Igualas, Societé de Socors Mutus, etc.

1900-1929: State-regulated health insurance

Seguro Obligatorio de Enfermedad (SOE)

persistence and extension of previous experiences

1929-1945 (Interwar years): Health Organization of the League of Nations

Preventative medicine: National Institutes of Hygiene, National Schools of Hygiene

Dispensaries, "Casas de Socorro", General Hospitals, Municipal and Provincial Institutes of Hygiene, Sanitary Campaigns, Cottage Hospitals, Asylums, Spa Establishments, etc.

After 1945: diversification:

- State-founded health care: URSS, socialist countries, etc.
- Welfare state model based mainly on health care (mixed financial system)
- USA: private insurance - state exclusion

Decolonization in wide regions: health for local elites and humanitarian care

8. Healthcare Systems: Past, Present and Future

International Patterns

A) Western Europe, Canada, Japan, Australia, New Zealand

Welfare state, public service, financed by taxes & contributions by corporations, public administration and workers

Public and private health care is available

Health conceived as a civil right endowed with legal recognition

B) USA: Private healthcare insurance system.

State provides *medicaid* (warrants, homeless) and *medicare* (retired)

Health conceived of as a commodity

C) Eastern Europe and former communist countries (Cuba, North Korea, China)

Until 1990: universal and free, public health service
After 1990: Destruction of previous public system, including health care.
Variable situation in different countries, with some maintaining the previous model

Huge inequalities: social stratification regarding effective right to health

D) Third World (poor regions): Duality - traditional forms of medicine available to the population and private Western hospitals for the local elites and international workers

Humanitarian, philanthropic medicine, missionaries…

Huge inequalities, exclusion and social stratification regarding effective right to health

Healthcare Systems in Poor & Developing Countries

Level 1: Rich families demanding high quality services

Level 2: Middle-Income Families. Civil servants, employees in big factories and companies. Two options:

Agreement with the best private and public centers

Paying for their own medical centers/insurance companies, better than public ones

Level 3. Poor and Lower Income Families. Most of the population attended to in public hospitals and healthcare centers.

Non-Governmental Organizations (NGO)

Joseph Stiglitz, 1999

Healthcare Systems under the Welfare State

Four pillars of the welfare state: social security system

- Unemployment (compensation salary for the unemployed)
- Retirement (pension)
- Health care (universal, citizen's right)
- Dependence (disability assistance)

Universal Health Care

Citizens' right to health is recognized in the Spanish Constitution, 1978

Ability to meet all healthcare demands:

Need for regulation

Are there limits? Which? Who decides?

All citizens without any distinction?

Workers, retired, unemployed, immigrants, etc.

Funded with the public budget? To what extent?

-Public budget derives from taxation

-Does co-payment or setting limits to consumption make sense?

Healthcare Systems under the Welfare State

- **PUBLIC HEALTHCARE SYSTEM**
- **Healthcare Funding: contributions from workers and employers (corporations)**

  Direct taxation system:

  VAT/IVA, equal for all consumers (market products)

  economic, cultural, financial activities

  Indirect taxation system:

  Salaries (rentas del trabajo): IRPF (income tax) = salary scale based level

  Taxation on assets

  Inheritance

- **GENERAL BUDGET OF THE SPANISH STATE:**

  Expediture on Health Care represents 5-7% of the total

Healthcare Systems under the Welfare State

State/Public Health Insurance

-Universal access to services in accordance with needs and not with purchasing power

- Implies solidarity by:
  - the healthy with sick people
  - the young with the old
  - the rich with the poor

- Public funding is the only one based on equal solidarity.

Healthcare Structure in Spain

Public system + public management

Public system + private management

- **All services?**
- **What services?**

Insurances companies (private)

Private → paying cash

Private surgeries

Insurance companies

- Hospitals
- Healthcare centres (GP surgeries)
- Healthcare staff
- Pharmacy
- Ambulances
- Complementary services (cleaning, washing, security, canteen, etc.)

Public healthcare system

- Primary health care (healthcare centres)
- Specialized care centres
- Hospitals
- Staff
- Services: pharmacy, transportation, etc.

10. International Organizations and Health

Historical evolution

1. International Sanitary Conferences (1851-1911)
2. International Conferences of Hygiene & Demography, Cancer, Tuberculosis, etc. (2nd half 19th C.- first decades 20th C.)
3. Office Internationale d'Hygiene Publique (Paris, 1907)
4. Health Organization of the League of Nations (1920-1945)
5. Philanthropic organizations: Red Cross, Carnegie Foundation, Rockefeller Foundation, NGOs, Missionaries, International Brigades
6. Panamerican Health Organization (PHO, 1902, 1946)
7. International Labour Office (since 1919)
8. Food and Agriculture Organization (Rome, 1946)
9. World Health Organization (1946, Geneva, WHO) (http://www.who.int/en)

10. International Organizations and Health

(Handout: Challenges of the Millennium)

United Nations 8 Goals for the Millennium:

- Eradicate extreme poverty and hunger
- Achieve universal primary education
- Promote gender equality and empower women
- Reduce child mortality
- Improve maternal health
- Combat HIV/AIDS, malaria and other diseases
- Ensure environmental sustainability
- Develop a global partnership for development

21 targets and 60 quantifiable indicators

11. Health and Social Inequalities

Handout: Inequalities

Aula Virtual: Handout: Governing for the elites (Intermon Oxfam)

-Inequalities manifest themselves in several areas:

Living and social conditions

Economic and fiscal policies (adjustment)

Wealth/economy inequalities:

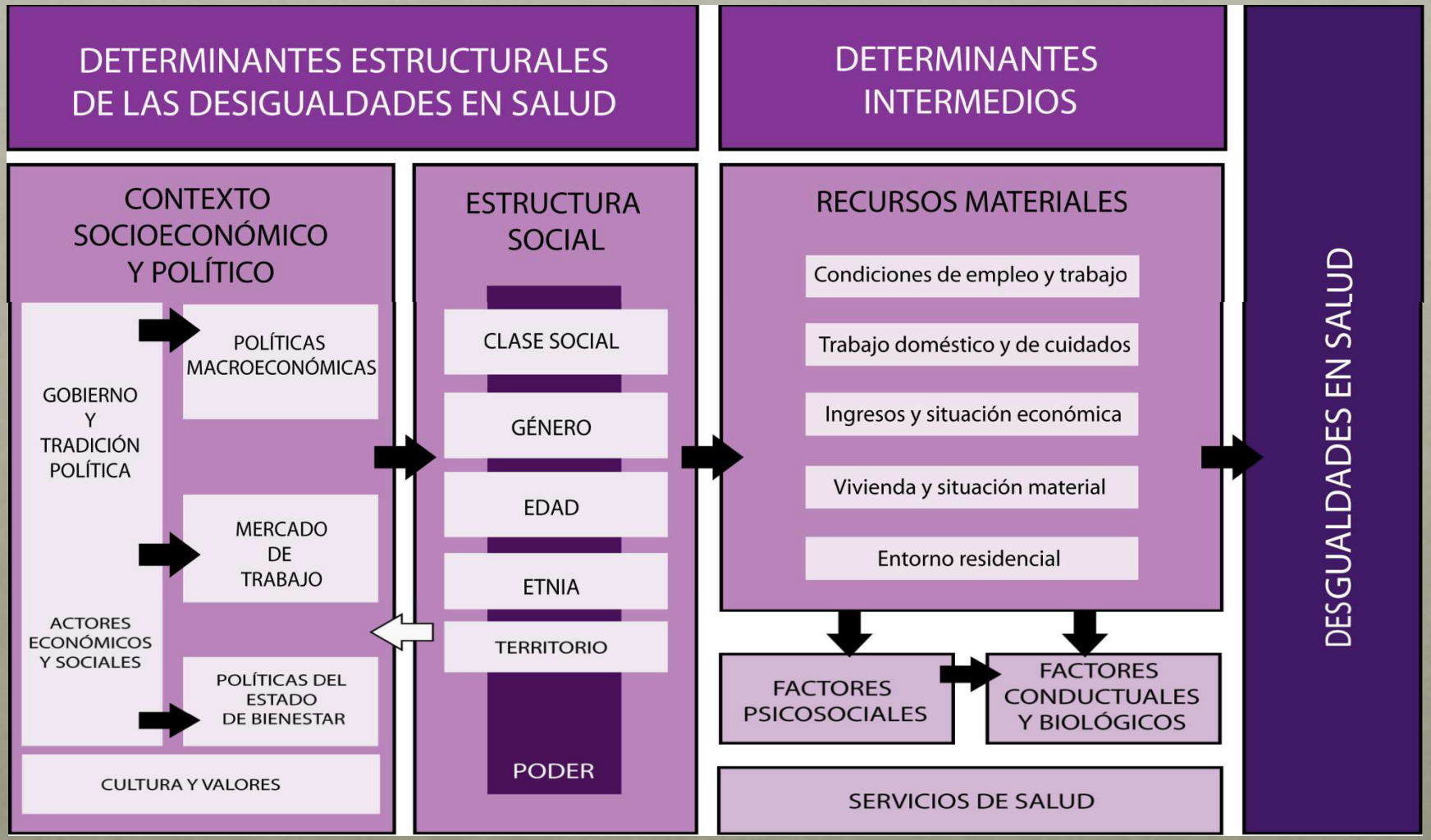
- 1.8 billion people live under miserable conditions: 1/3 of the global population
- Tendency: 25 million people increase per year
- 1960-1990: wealth has doubled for the richest 20% in comparison with the poorest 20%: polarization of inequalities
- Europe: famine and social exclusion in Greece

  c. 25 % poverty & exclusion in Spain

  reduction in healthcare services

Trend: increasing polarization between poor/rich & disappearance of middle classes

11. Health and Social Inequalities in Spain



11. Health and Social Inequalities in Spain

European AROPE index (At Risk of Poverty & Exclusion)

Report for 2009-2013

Records obtained from the Instituto Nacional de Estadística (INE)

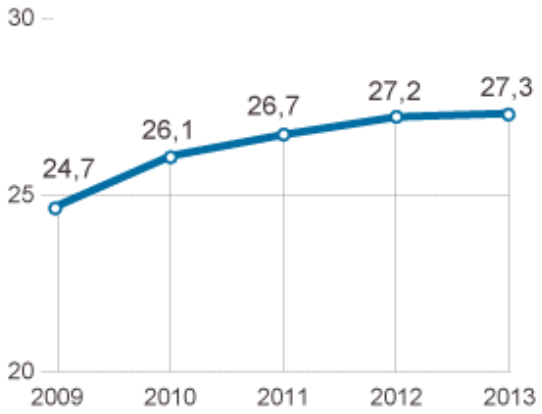
- 12,866,431 (27.3%) citizens threatened by poverty/exclusion in 2013
- 9,600.000 below poverty line
- 2,800.000 severe lack of resources
- Period 2009 to 2013: 1,300.000 increase

- Elements of exclusion:
  - Expulsion from the labor market (unemployment)
  - Lack of access to basic goods (energy poverty, essential foodstuffs, etc.)
  - 15.7% families with no-one in employment
- Severe material deprivation: 38% increase between 2009 – 2013
- 67% of the population admit to problems living on their monthly salary

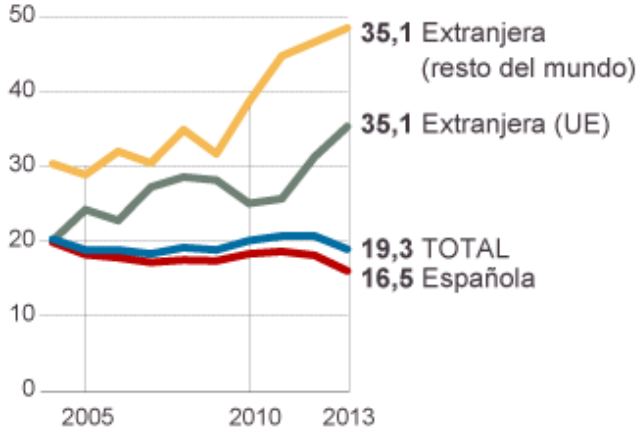
El INE cambió la metodología de cálculo en el año 2013. Por ello, los datos de 2004 a 2012 se han elaborado con el criterio anterior y los de 2013 corresponden al nuevo criterio.

INDICADOR DE POBREZA Y EXCLUSIÓN

Base 2013

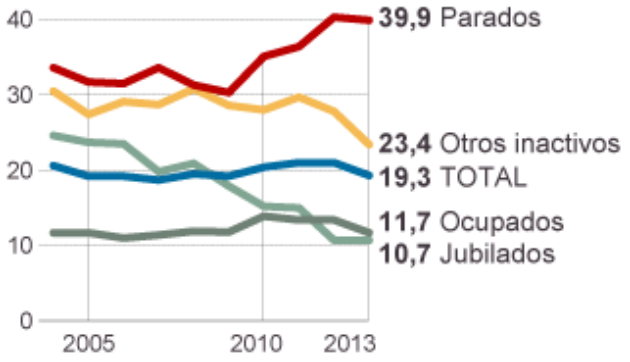


POBREZA POR NACIONALIDAD



POBREZA Y ACTIVIDAD

Tasa de pobreza y relación con la actividad



INDICADORES DE PRIVACIÓN SEVERA

% de personas que viven en hogares que no pueden afrontar los siguientes gastos

	2008	2010	2012	2013
No pueden afrontar cuatro o más gastos de los siguientes	**3,6**	**3,6**	**5,8**	**6,2**
Retraso en el pago de gastos de la vivienda principal en los últimos 12 meses (1)	7,1	7,1	9,9	11,0
Mantenimiento de la vivienda con temperatura adecuada	5,9	5,9	9,1	8,0
No puede permitirse ir de vacaciones al menos una semana año	36,2	36,2	46,6	48,0
Una comida de carne, pollo o pescado al menos cada dos días	2,2	2,2	2,6	3,5
Capacidad parea afrontar gastos imprevistos	29,9	29,9	42,1	42,1
Disponer de automóvil	5,9	5,9	5,7	6,2
No puede permitirse disponer de un ordenador personal	8,9	8,9	6,6	6,7

1. Hipoteca, alquiler, recibos de suministros, gastos de comunidad, etcétera.

Fuente: EAPN-ESPAÑA con datos de INE.

EL PAÍS

Part 2. Cultural Dimension of Health
Anthropology of Health and Medicine

1. Health, disease, and medicine in socio-cultural systems
2. Medical system: definition and types
3. Disease, myth and natural sciences
4. Complementary medicines and folk medicine
5. The scientific method and modern medicine
6. Natural sciences, social sciences, human sciences. Limits of scientific knowledge
7. Production of scientific knowledge and social system
8. Technoscience, knowledge production and social practices.
9. The role of the doctor and scientist in society
10. The experimental method and the life sciences: analytical method

1. Health, Disease and Medicine in Socio-cultural Systems

What does “system” mean?

Society as a social & cultural System

Health, disease and medicine as part of a social-cultural system

MEDICAL SYSTEM

A) Religious, supernatural conceptions of nature, health/disease

myth, beliefs, sacredness → ritual & empiric practice

B) Naturalistic conceptions → natural philosophy

scientific methods

technology

2. Medical Systems: Definition and Types

- **Supernaturalistic medical systems**

  based on religious beliefs and empirical practices

  - origins: prehistorical, indigenous, popular (folk medicine)
  - archaic: Egyptian, Mesopotamian, pre-Columbian societies, etc.

- **Naturalistic medical systems**
  - classical: Indian, Chinese, Hellenic
  - modern: Western medicine

- **Complementary medicines**

  Naturism, Homeopathy, Acupuncture, Osteopathy, etc.

3. Disease, Myth and Natural Sciences
Prehistoric and Indigenous Medical Systems

Handouts: Witchcraft & Disease

Spiritual/supernatural conceptions of disease

A) Variable consideration of the patient

B) Interpretation of health and disease

- Central meaning of myth
- spiritual/supernatural dimension
- cause: curses, possessions, loss of soul, introduction of a foreign body, bad influence

C) Clinical act: supernatural diagnosis, fortune-telling

D) Treatment and prevention: magic and religious rituals, empirical remedies (plants, diet, phytotherapy, massages)

E) Medicine man, wizard, shaman, priest: health & spiritual perfection

3. Disease, Myth and Natural Sciences

Folk Nedicine

Consultorio Medico Popular

- Sedimentation (survival and persistence) of ancient ideas, concepts, values, attitudes and practices among the population

- Strata:
  - Deep: religious beliefs + analogical thinking + ancient empirical practices and local traditions
  - Superficial: elements from historical medical traditions (hippocratism, galenism, etc.)

- Main features:
  - Healers, wizards, exorcists as healthcare “professionals”
  - Spiritual diseases: “evil eye”
  - Popular practices: “trencar l’enfit”
  - Herbalists
  - Domestic medicine

3. Disease, Myth and Natural Sciences

Classical Naturalistic Medicine

Historical background

China (3rd millennium BC); India (1st millennium BC); Hellenic (Greece & Rome, 1st millennium BC)

Main features of a naturalistic approach to Nature and Disease

- Unity of world and individuals → unity in Nature
- Natural harmony based on polarity/duality

  Dialectic equilibrium of contrary forces
- Notion of the element (elemental unit)
  - Analytical mentality
  - Natural philosophies
- Circularity of time (eternal return, transmigration, reincarnation)


Caledonia
Hibernia
BRITANNIA
Germania Inferior
Germania Magna
Sarmatia
Oceanus Atlanticus
Belgica
Lugdunensis
GALLIA
Germania Superior
Rhaetia
Aquitania
Alpina
Noricum
Pannonia
Tyras
BOSPORUN
Gallaecia
Nabonensis
Dalmatia
Illyricum
Moesia Superior
Moesia Inferior
Pontus Euxinus
Lusitania
Tarraconensis
Corsica
ITALIA
Thacia
Bithynia
Pontus
Armenia
Sardinia
Macedonia
Baetica
Epiru
Cappadocia
Galacia
ASIA
Assyria
PARTHIAN
Sicilia
Achaea
Africa Proconsularis
Lycia
Cilicia
Mauretania Tingitana
Mauretania Caesariensis
Numidia
Creta
Cyprus
SYRIA
Mesopotamia
Mare Internum
JUDEA
Cyrenaica
Arabia Petraea
Arabia Magna
Aegyptus

3. Disease, Myth and Natural Sciences

Hellenic Medicine

Origins: *Magna Graecia* in contact with other cultures

Stages and dimensions:

- Natural philosophies (pre-Socratic) (6th-5th C. BC)
- Hippocratic medicine (6th-3rd C. BC)
- Plato and Aristotle natural philosophy (5th C. BC)
- Alexandria medicine (3rd C. BC)
- Galen of Pergamum (2nd C. AD.)

→ Medieval Galenism (4th C. to 15th C.)

3. Disease, Myth and Natural Sciences

Hellenic Medicine

Corpus Hippocraticum, texts from medical schools in different *polis*: Kos, Knidos, Kroton, Syracuse, Rhodes, etc. Compiled at the Alexandria Library (3rd C. BC)

- Environmentalist naturalism
- *Vis curatrix naturae*
- Human nature: elements, humors
- Dietetics and regim of life
- Clinical observation and prognosis
- Disease order
  - *cursus morbi*
  - acute/chronic
  - epidemics/endemics

4. Complementary Medicines

Naturism

Homeopathy

Asian Medicines

- Chinese/Acupuncture
- Ayurvedic, Tibetan...

Folk medicine

Plurality of Medical systems

5. Scientific Method and Modern Medicine

Science = knowledge about natural things

Technology = practical aplication of scientific knowledge

Technoscience

Interpretation *versus* explanation

Objectivity as an unattainable goal

Objectivity and subjectivity as part of knowledge

- Science as a form of inter-subjectivity

5. Scientific Method and Modern Medicine

Observation: observational sciences: astronomy, anatomy, botany, etc.

Experimentation: control over the factors participating in phenomena and processes.

Hypothetical-deductive method: induction and deduction

Features: obtained from material reality

Hypothesis: provisional explanations

A priori Hypothesis **Verified Hypothesis**

Verification: experimental proof

Falsifiability: possibility of being refuted

Prediction: limits and conditions

Laws: mathematical representations of natural phenomena

Theories: general explanations (relativity, evolution, the cell, etc.)

Paradigms: great foundations of science at any time

5. Scientific Method and Modern Medicine

Natural facts concerning inanimate matter

Biological facts

Psychological facts

Social facts

- Diferences in the nature of facts
- Diferences in the complexity of facts
- Diferences in the scientific methodology
- Diferences in the possibility of intervention
- Diferences in the possibility of prediction

Natural sciences, biological sciences, social sciences, human sciences

6. Natural Sciences, Social Sciences, Human Sciences
The Limits of Scientific Knowledge

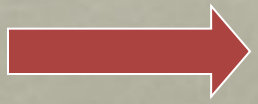
- How? versus Why?
- Causality and Aim
  - Limits between science, philosophy and religion
- Moral and ethical limits
  - Moral limits: respect for human dignity: animal and human experiments, doping, cloning, etc.
  - Risk limits: weapons of mass destruction, environmental destruction, impairment of living conditions, etc.
- Definitive answers *versus* provisional explanations

7. Production of Scientific Knowledge and Social System

- The role of authority and tradition in the classical sciences
  - Versus: validity of knowledge and obsolescence
- Scientific method as authority: the role of research in modern science
- Social system and technoscientific system
  - Science as part of the social and cultural order
- Science and technology: knowledge, products and social practices
  - Conceptualization

8. Technoscience, Knowledge Production and Social Practices

- Knowledge production in modern science
  - Universities
  - Scientific academies
  - Scientific expeditions



  - Laboratories
  - Experts
  - Publications, Conferences

- Science and technology faced with the market and globalization
  - New public and private institutions
  - Research+Development+Innovation as a factor in social development
  - Kowledge society of Knowledge
  - Science, technology and social practices

9. The Role of the Scientist & Doctor in Society

- Social/Professional Prestige (Status)
- Production of knowledge (Research)
- Prevention, cure and rehabilitation of patients
- Health education of the population
- Answer to social problems, environment, economy related to health and disease
- Expert instruction and popularization of knowledge
- Contribution to wealth (tangible, non tangible)

10. The Experimental Method and the Life Sciences: Analytical Method

- **Intuition, chance and experiments "to see"**
- **Provisional hypothesis** → experimental verification
  → falsification
- **Verified hypothesis**
- **Biological determinism**: "milieu intérieur" (internal environment) = stability of internal conditions (Cl. Bernard)
- **Analytical experiment:**
  - analysis of potential factors involved in producing a phenomenon
  - Experimental design
- **Functional correlation** → the concept of organic integration

10. The Experimental Method and the Life Sciences : Laboratory Animals

Concept of "laboratory animal": any living being, regardless of phylogenetic or taxonomic category, whether vertebrate or invertebrate, used in animal experimentation for scientific purposes:

- Biological research
- Quality of products and applications to medicine and veterinary science
- Pharmaceutical products
- Diagnosis and treatment of diseases
- Research in physiology, biochemistry, toxicology, immunology
- Studies on contamination and environmental impact
- Education, medico-legal and forensic research

Part 3. Contemporary Medicine

1. Mapping contemporary medicine
2. Scientific knowledge of health and disease
3. Therapeutics, prevention and health promotion
4. Origins of the universities and medical professions
5. Social and scientific factors in medical specialties
6. The doctor-patient relationship in a democratic context
7. Hospital medicine and health technologies
8. Biotechnology and health: market, human rights, ethical controversies

1. Mapping Contemporary Medicine
Health Sciences

- **Morphological sciences**
  - Anatomy
  - Histology
  - Embryology
- **Physiological sciences**
  - Human Physiology
  - Physiological Chemistry
  - Biochemistry
  - Cell Biology
  - Molecular Biology
- **Medical Psychology**

1. Mapping Contemporary Medicine
Disease, Prevention and Therapy

- **Scientific knowledge of disease**
  - Pathology
- **Prevention and promotion of health**
  - Individual and social hygiene
  - Social medicine and healthcare systems
  - International organizations
  - Therapeutics → Technologies: surgery
  - Physics — analytical
  - Chemistry — psycho-therapy
  - radiology & nuclear

Medical specialization

2. Health Sciences
Morphological Sciences

- **Dimensions of morphological sciences**
  - Descriptive: descriptive and topographical anatomy
  - Ordenative: comparative anatomy
  - Explanatory: phylogenetic anatomy

- **Elemental Unit of Living Matter**
  - Classical doctrines: Atom, element, humor, fiber, tissue
  - Cell Theory → Cell Biology, Molecular Biology

- **Doctrines on Embryo Development**
  - Epigenesis versus preformationism
  - Cell differentiation and embryonic sheets

2. Health Sciences
Physiological Sciences (I)

- Human physiology
- Animal Physiology
- Special Physiology
  - Analytical
  - Correlational

Comparative physiology

General/Cell Physiology

- 20th century

Cell Biology Biophysics Biochemistry Molecular biology

2. Health Sciences
Physiological Sciences (II)

- **Organic functions**:
  - Exchange of matter
  - Exchange of energy

  → no vital forces
- **Physiological Chemistry**
  - Analysis of organic products
- **Biochemistry**
  - General processes, metabolism, biological cycles
- **Molecular Biology**
  - Systems of biological information, integration and exchange: sub-cell structures (proteins, nucleotides and nucleic acids),

    field closely related to biochemistry, genetics, etc.

2. Science of Disease
Pathology: General Concepts

- **Disease**: loss of well-being (in all dimensions)
- **Morbid species/nosological entity**: a specific form of disease characterized by lesions, dysfunctions, causes/s, a mechanism of production (pathogenesis) and a course
- **Syndrome:** set of symptoms and characteristic phenomena of a particular pathological condition, setting aside certain factors (cause, pathogenesis)
- **Pathography**: an individual case
- **Nosography:** description of a morbid species
- **Nosotaxy:** system of classification of morbid sopecies
- **Nosology or pathology**: science/general knowledge of diseases

2. Science of Disease
Pathology: Levels

Dimensions of a morbid species/nosological entity (T. Sydenham)

- Anatomical: →
  - Lesions — anatomo-pathological signs
- Physiological: →
  - Dysfunctions — physio-pathological signs
- Etiological:
  - External causes (infectious), internal (heredity), and others
  - Psychological (Psycho-genetic)
  - Social (Socio-genetic)

3. Therapeutics, Prevention and Health Promotion

- **Remedies**

traditional **modern**

(vegetable, mineral, natural, diet) Chemical
Physical

- **Techniques**

Surgical
Psychological

3. Therapeutics, Prevention and Health Promotion (II)

- **Therapeutic indication**

  Set of patient conditions serving to determine the suitability of a specific pattern of treatment

- **Concepts**
  - ***Materia medica* or pharmacognosy** = knowledge of natural remedies
    → Ethnopharmacology
  - **Experimental Pharmacology**: analysis and isolation of active ingredients and their active mechanism
  - **Chemotherapy**: experimental synthesis of non-natural active compounds

3. Therapeutics, Prevention and Health Promotion

Handout: Health technologies: diagnostic imaging

- **Physical remedies**
  - Traditionally: natural environment: heat, sun, light, spa water, climate, etc.
  - Resources from physics: X-ray, ionizing radiation, nuclear medicine, short wave therapy, ultrasound, electricity, etc.
- **Surgical revolution**
  - Three obstacles: pain, haemorrhage and infection
  - Pain: chemical anesthetics
    - Air anesthetics: ether, chloroform
    - Hemostatics and blood transfusion: blood groups, Rh factor, etc.
    - Antisepsis (J. Lister) and asepsis (Semmelweiss)

  new surgery (body cavities, transplantation and restoration)
  - Microsurgery, tissue & organ transplants

    Regenerative medicine (stem cells, embryonic tissues. etc.)

4. Origins of Universities and Medical Professions
Medical pluralism

Professional plurality since the Middle Ages:

Royal and Chamber Doctors and Surgeons

Physicus, physician, doctor

Barber

Sacamuelas/Queixaler (dentist)

Algebraist

Veterinarian

Apothecary

Midwife

4. Origins of Universities and Medical Professions in Valencia

1433: Colegio del gremio de cirujanos

1462: Escuela de Cirugía

1478: License for disecting human bodies

1499-1500: Estudi General de València (University)

Parish Hospitals

16th century: General Hospitals

Valencia: 1512

5. Social and Scientific Factors Involved in Medical Specialties

Specialization is not simply the consequence of progress in scientific knowledge

Conditioning factors of medical specialization
Internal factors

- Growth of scientific fields and change in scientific paradigms
- Technological development
- Division of human body into separate areas
- Demographic division of disease

External factors: social and economic

- Competition and monopolization of market fields
- Urbanization and the higiene movement
- Social and health problems: identification and policies (epidemiological, social diseases)
- National health services and contemporary hospitals (new technologies, new specialties)

5. Dimensions of Medical Specialization

- Social control of medical practice
- Spaces of professional organisation:

  colleges, associations, scientific communities, etc.
- Specialized publications
- Scientific meetings and conferences
- Specialized instruction programs (university & hospital)
- Establishment of specific departments, institutes and hospital services.

5. Origins of Medical Specialties (19th Century)

Clinical Specialties & Surgical Specialties

- Surgery
- Gynecology
- Pediatrics
- Psychiatry
- Dermatology, Venereology, Syphilography
- Stomatology
- Otorhinolaringology
- Ophthalmology

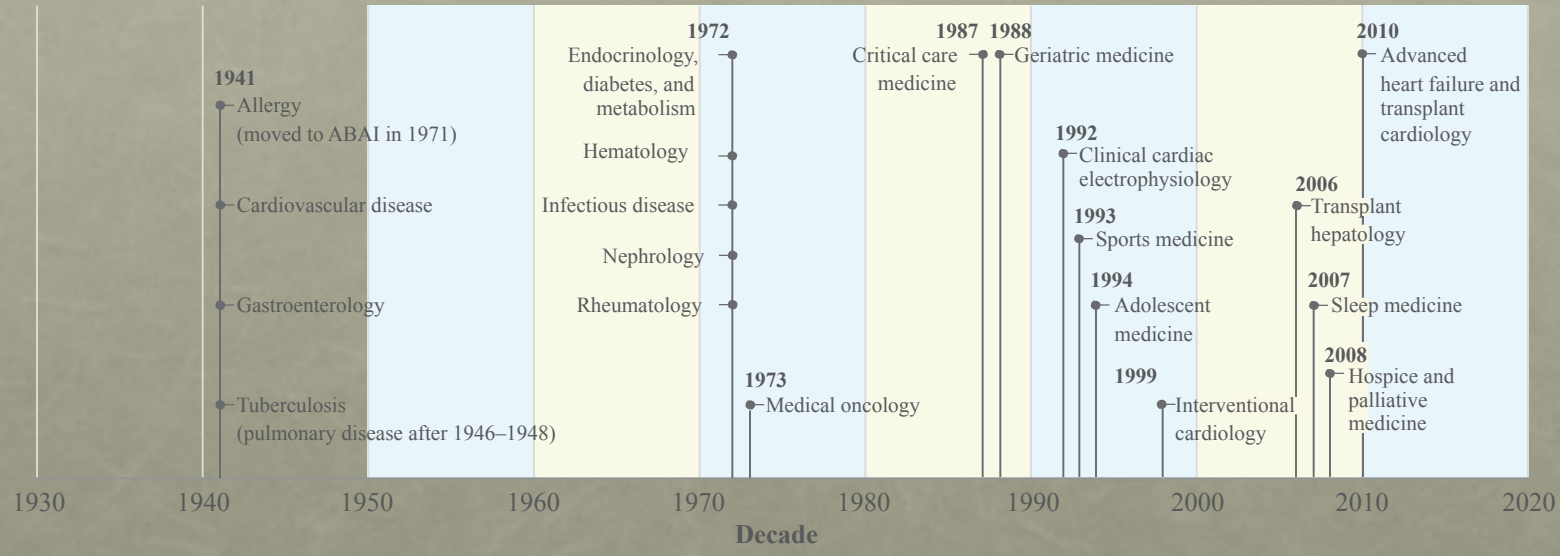
- Foundation of the College of Physicians & compulsory membership
- Fight against professional encroachment in medicine

5. Medical Specialties in the 20th Century)

After 1945: birth of the WHO and of national healthcare systems.

- Hospitals: important in the process of specializaton, latest technology, facilities.

-Technology plays an important role in development of new sub-specialties particularly since the last decade of the 20th century.



6. Hospital Medicine and Health Technologies

Laboratory experimental medicine and health industries

- X-rays (1896), Electrocardiography (1903)
- Antibiotics, analgesics, antipyretics, vitamins

→ Interwar Period (1914-1945)

Boom of Pharmaceutical Industry
+
New Health Technologies and Industry

→ 2nd half 20th century

- 1956: ecoscopy, ecography
- 1959: ophthalmic laser
- 1970s: microelectronics + particle physics :
  scanner, endoscopy, pacemaker, CAT scan, NMRI, PET, etc.

6. Hospital Medicine and Health Technologies
Origins of the Pharmaceutical Industry

- Private drugstore and municipal laboratories (19th C. and first half of 20th C.)
- Small family laboratories, municipal & national laboratories (early 20th C.)
- Large multinational pharmaceutical industries (2nd half, 20th c.)

Scientific background: experimental research (physiology, pharmacology, toxicology)
alkaloids (morphine, codeine, etc.)
sera and vaccines

- Colouring industry: 1856 selective colouring of coal in living tissues

possible diana effect on microbes, cancer cells → origins of chemotherapy

1883: antipyrine, pyramidon

1899: aspirin

Salvarsan (syphilis), prontosil (sulfapyridine), etc.

First antibiotics (1940s): penicillin, streptomycin

Psychopharmacology, vitamins, etc.

6. Hospital Medicine and Health Technologies
Nutrition and Vitamins

Interwar Period (1918-1945) → social and economic crisis (war, unemployment)

→ Deficiency diseases & famine

Research on nutrition

- food principles (nutrients)
- definition of food deficiency diseases: pellagra, scurvy, neuropathy, malnutrition

1912: F.G. Hopkins – metabolic importance of vitamins

1920s: research on beriberi – deficiency in vitamin B1

nutrition research: states, laboratories, League of Nations

1920s: Scurvy: Szent-Györgyi, vitamin C

Background to settle: minimum diet, optimum diet, rationing diet (war)

1940: Vitamin K, etc.

Importance of diet: codex alimentarius

6. Hospital Medicine and Health Technologies
Hormones and Antibiotics

- **Claude Bernard**: concept of **internal secretion**

  End of 19th-early 20th C.: adrenaline, thyroxine, insulin, estrogens, progesterone, testosterone...

Main interest: organic regulation, behavior, sexuality, criminality, etc.

(shock, adaptation syndrome, etc.)

- Discovery: **bactericide effect of penicillium & streptomices secretion**

  "Antibiotic era" starts in the 1940s: penicillin, streptomycin, aureomycin, tetracycline, etc. Drives the growth of the pharmaceutical industry

Large Multinational Corporations

- Further developments: **psychopharmacology** (tranquilizers, neuroleptics), antihypertensives, steroid hormones, etc.

6. Hospital Medicine and Health Technologies

Organ Transplantation and Artificial Maintenance of Life

- **Functional and structural substitution of organs:**

from mid-20th C.:

Hormone replacement therapy (birth control, diabetes)

iron lung

pacemaker

Last 25 years of 20th C.

renal dialysis and artificial ventilation

- Organ transplantation:

1983: cyclosporine (immunosuppressants)

inhibition of the rejection mechanism

6. Hospital Medicine and Health Technologies
Reproductive Technologies

1970s: Contraceptive pill

in vitro fertilization of human ovum

1982: First use in Spain **Regulations**

1988: Law for sssisted reproductive technology (Ley de Reproducción Asistida)

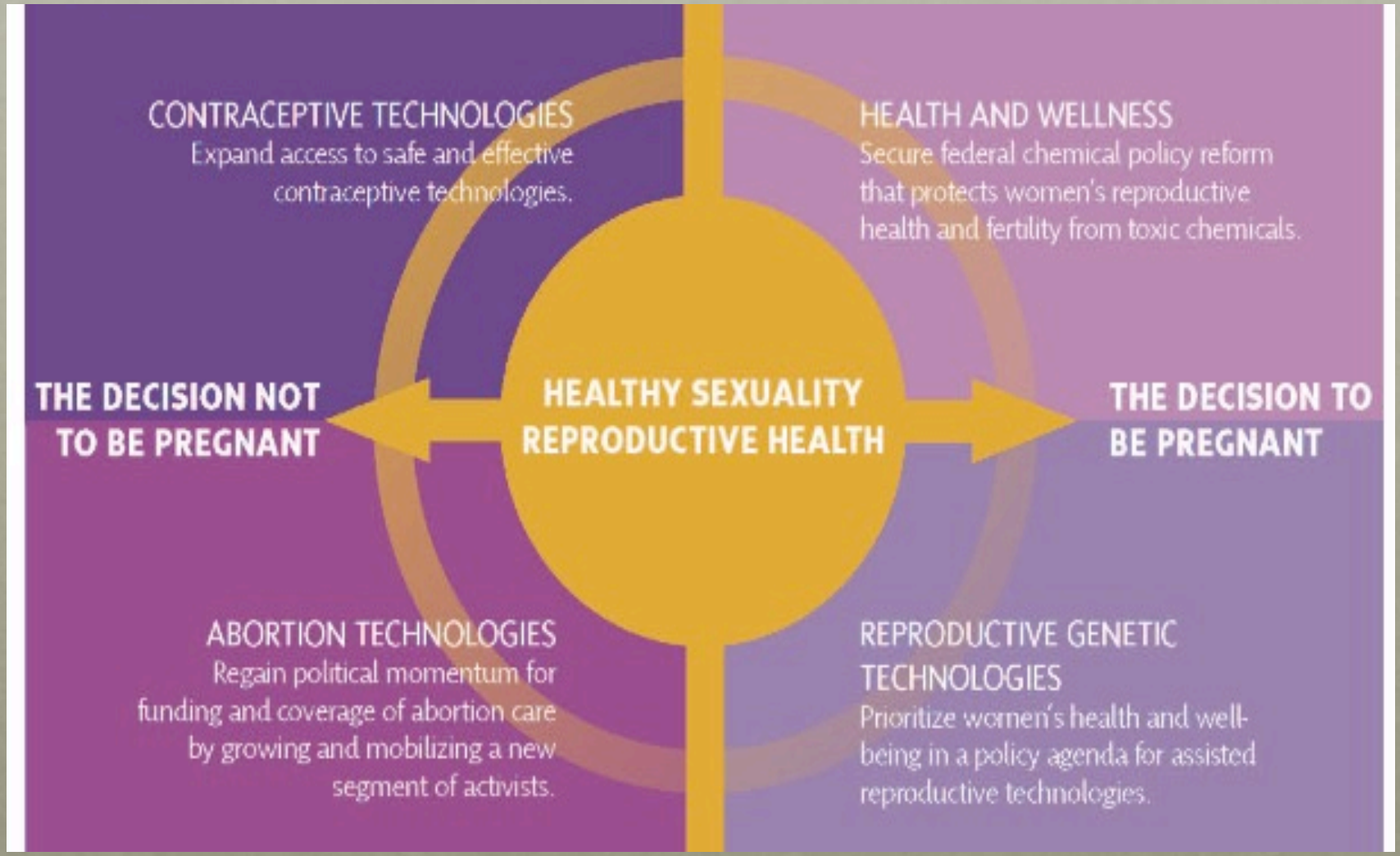
Comisión Nacional de Reproducción Asistida

1998: Cloning of animals: Dolly the sheep (Scotland)

2004: Stem cell cultivation: Regenerative therapy by means of pluripotent cells

Regenerative medicine (recovery from tissue damage)

6. Hospital Medicine and Health Technologies
Reproductive Health



7. Biotechnology and Health
Genetics, Molecular Biology, Pharmaceutical Research

- **Molecular diagnosis**
- **Genotyping:** typification of genetic human variation

  Genes associated with increased risk of suffering certain diseases: cancer, rheumatoid arthritis, bipolar disorder, cardiovascular diseases, Crohn's disease, diabetes, etc.
- **Supersequencing:** individual genomes, genetic ID
- **Chips and arrays**
- **RNA interference**
- **Recombining proteins and antibodies**

7. Biotechnology and Health: Future Challenges

- Biobanks for DNA, tissues, tumors, etc. National banks (public or private, data control, confidentiality)
- High performance technology platforms: integrating molecular and clinical features
- Funding for large-scale projects in pharmacogenetics, international consortia and networks, etc.
- Trans-national research: hospitals and mixed groups including laboratory and clinical researchers
- Transfer of technology: patents, multinational corporations

7. Biotechnology and Health
The Market, Human Rights, Values and Controversies

- **Threats and challenges around three main issues:**
  - **Negative effects on the doctor-patient relationship**
    - Global consideration of human beings
    - Patients as citizens endowed with civil rights
  - **Ethical principles associated with the manipulation of human life**
    - Creation of artificial life, abortion, euthanasia, etc.
    - Limits and regulations via laws based on social-cultural values
  - **Privatization of knowledge and the human body:**
    - Exclusion = threat for universal right to health
    - Patents, royalties, market principles of productivity
    - Exclusion of non-profit problems

UNIVERSITY, HEALTH, SOCIETY

ACADEMIC IDENTIFICATION	
University Degree	Medicine
Name of the course	University, Health, Society
ECTS Credits	4.5
Type	Compulsory
Calendar	Second Semester
Professor	Prof. J.L. Barona

Introduction

University, Health and Society offers a perspective on health and disease within their social context. The program discusses contemporary healthcare professions and systems, using the socio-historical method. It uses a critical approach to medical sciences and healthcare practices, taking into consideration the important role of the production and circulation of knowledge, methods, technologies, associated values and social practices. It helps the student to analyze social, cultural and environmental factors influencing health and disease, as well as to understand healthcare systems and medical professions by considering their historical development. While discussing the influence of globalization, politics and technologies on health, the student is faced with the present and future challenges and opportunities of health and medicine.

Theoretical and practical programme

LECTURE PROGRAM

1. Health, Disease and Society (Sociological Approach to Health and Medicine)
Health, human rights and citizenship. Discussing the concepts of health, normality and disease. Dimensions of health and disease. Social diseases and epidemiology patterns. Health transition, demographic transition, risk transition, nutrition transition. Public health and health policies. Globalization and health. Determinant factors and political strategies. Healthcare systems: past, present & future. International organizations and health. Health and social inequalities

2. Cultural Dimension of Health (Anthropology of Health and Medicine)
Health, disease, medicine in socio-cultural systems. Medical system: definition and types.
Disease, myth and natural sciences. Complementary medicines and folk medicine. The scientific method and modern medicine. Natural sciences, social sciences, human sciences. Limits of scientific knowledge. Production of scientific knowledge and social system. Technoscience, knowledge production

and social practices. The role of the doctor and scientist in society. The experimental method and the life sciences: analytical method

3. Contemporary medicine

1. Mapping contemporary medicine. Scientific knowledge of health and disease**.** Therapeutics, prevention and health promotion**.** Origins of the universities and medical professions**.** Social and scientific factors in medical specialties**.** The doctor-patient relationship in a democratic context**.** Hospital medicine and health technologies**.** Biotechnology and health: market, human rights, ethical controversies

RESEARCH PAPERS

Research papers consist of an essay about a specific topic which is conceived, planned and developed by a study group (4 students).
Students form their own study groups, which can be supervised and receive tutorial support.
Steps:

1. Formation of the study groups and choice of the research topic.
2. Oral presentation and discussion of the outline.
3. Oral presentation and discussion of the research paper.
4. Online presentation of the written essay.

PRACTICAL ACTIVITIES

1. The language of medicine & health sciences: medical terminology and communication
2. Primary health care: a general overview
3. Healthcare systems: a comparative approach
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World Health Organization, Ebola Virus Disease, www.who.int/csr/disease/**ebola**/en
World Health Organization website: http://www.who.int/en/

EVALUATION CRITERIA

The final grade will be based on the following:

1) A written exam consisting of five short questions regarding the content of the lecture program: 60%
2) Practical activities: 20%
3) Research paper: outline, oral presentation and written essay: 20%

RESEARCH PAPER

LIST OF PROPOSED TOPICS FOR THE RESEARCH PAPER
Students are invited to work together in groups of 4 students choosing one of the following topics:

1. Health and the Environment.
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19. Obesity, Lifestyle and Diet.
20. Violence, a social disease
21. Drugs consumption.
22. Alcohol Consumption.
23. The risks of Smoking.
24. Pharmaceuticals: consumption and abuse.
25. Sport and healthy living.
26. Homeopathic medicine.
27. Doping and High Performance.
28. Health Technologies in Modern Hospitals.
29. Private and Public Health Care.
30. Healers in Indigenous Cultures.
31. Gods of Health in Ancient Cultures.
32. Folk-medicine practices in Valencia (domestic medicine, quackery, religious medicine…).
33. Health indicators of the Valencia society.
34. Infant Mortality: the role of midwives in poor countries
35. The Public Image of the Medical Doctor.
36. Health and the Crisis of the Welfare State.
37. Health and Medicine in the Graphic Press
38. Access to Pharmaceuticals: Patents, Intellectual Property and Right to Health.
39. The Problem of Poverty-related & Neglected Diseases.
40. Geopolitics of Health.

Date of the OUTLINE PRESENTATION: 20th & 21th February, 2018
Date of the FINAL ORAL RESEARCH PAPER PRESENTATION: 17th & 18th April, 2018

During the first week of the term, groups of 4 students will be constituted. According to a random procedure, each group will choose one of the topics listed above. Topics will be assigned following the criterion of date of proposal.

DEADLINE FOR GROUPS & TOPICS' PROPOSALS: 9th of February, 2018

During the OUTLINE PRESENTATION each group will submit a proposal containing the aims and structure of the paper.

Each group will consume no more than 10 minutes for the presentation.

Draft proposals will include:

1. Title and name of the members of the group.
2. A short introduction showing the extent and importance of the topic.
3. A definition of the topic, enumerating the aspects or dimensions that will be discussed.
4. A description of the methodology, sources and bibliography.

FINAL PRESENTATION AND DISCUSSION OF THE RESEARCH PAPER MADE BY GROUPS OF 4 STUDENTS

Date of the final presentation seminar: 17th & 18th April
Deadline for the paper uploading: 30th April

ONLY ONE member of each group will upload the slides presentation and the written essay

The essay should contain the following elements:

1. Title and name of the members of the group.
2. A short explanation of the methodology of work applied by the group
3. A description of the content.
4. Final conclusions.
5. Bibliography.

Maximum extension for the written paper: 4000 words (bibliography included).

VNIVERSITAT DE VALÈNCIA

VNIVERSITAT DE VALÈNCIA Facultat de Medicina i Odontologia

DEPARTAMENT D'HISTÒRIA DE LA CIÈNCIA I DOCUMENTACIÓ

UNIVERSITY, HEALTH, AND SOCIETY

SYLLABUS

GROUP A

ACADEMIC TERM 2018

Professor Josep L. Barona
Department of History of Science & Documentation
Email: barona@uv.es

TABLE OF CONTENTS

PRESENTATION

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5. Social research in health sciences: a case study
6. Migration, traffic and disease: a case study

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The final grade will be based on the following:

1) A written exam consisting of five short questions regarding the content of the lecture program: 60%
2) Practical activities: 20%
3) Research paper: outline, oral presentation and written essay: 20%

Assessment criteria:

Written examination, research papers and practical essays will be assessed on the following grounds:
a) Argument structure: logical division of topics, coherent style and organized, clear arguments.
b) Analysis: analysis of the various opinions in the bibliography.
c) Referencing: use of the literature, reference to the materials dealt with in class, use of relevant details and correct citation of literature. Use must be made of printed materials, not just internet resources.
d) Comparative synthesis: a good analysis of the similarities and differences.
e) Own opinion: the arguments used to back up one's opinion.

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Recommended Reading

You are advised to read beyond the material selected for this course. Although you will only be examined on the material taught during the course and selected for it, experience has shown that students who have read beyond the selected material gain a better understanding of this subject. Recommended books include:

Barona Vilar, J.L. *Introducción a la medicina*. València, Universitat de València, 1990.
Barona Vilar, J.L. *Salud, tecnología y saber médico*. Madrid, Ed. Fundación Ramón Areces, 2004.
National Health System, Spain 2010. Madrid, Ministerio de Sanidad y Política Social, 2010.
World Health Report 2010. (2010) Geneva. World Health Organization.
World Health Statistics, 2012. (2012) Geneva. World Health Organization.

Materials for research papers and practical activities

The **"Practical Activities**" folder **(AULA VIRTUAL)** contains specific documents for all the proposed activities. Short handouts (newspaper articles) and long handouts have been uploaded in separate folders.
Students should download each document, complete all the tasks contained in the documents and upload them in due time to the **TASKS** folder.
For practical activities students are requested to comply with their specific group timetable and respect the deadlines for the submission of the activities. Exceptions will be only made in exceptional circumstances.

RESEARCH PAPER

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25. Sport and Healthy Living.
26. Homeopathic Medicine.
27. Doping and High Performance.
28. Health Technologies in Modern Hospitals.
29. Private and Public Health Care.
30. Healers in Indigenous Cultures.
31. Gods of Health in Ancient Cultures.
32. Folk-Medicine Practices in Valencia (domestic medicine, quackery, religious medicine, etc.).
33. Health Indicators of Valencia society.
34. Infant Mortality: the Role of Midwives in Poor Countries
35. The Public Image of the Medical Doctor.
36. Health and the Crisis of the Welfare State.
37. Health and Medicine in the Humor Cartoons
38. Access to Pharmaceuticals: Patents, Intellectual Property and Right to Health.
39. The Problem of Poverty-Related & Neglected Diseases.
40. Geopolitics of Health.

Date of the OUTLINE PRESENTATION: 20th & 21st February, 2018
Date of the FINAL ORAL RESEARCH PAPER PRESENTATION: 17th & 18th April, 2018

During the first week of the term, groups of 4 students will be formed. Following a random procedure, each group will choose one of the topics listed above. Topics will be assigned following the criterion of date of proposal.

DEADLINE FOR GROUPS & TOPICS' PROPOSALS: 9th February, 2018

During the OUTLINE PRESENTATION each group will submit a proposal containing the aims and structure of the paper.

Each group's presentation will take no more than 10 minutes.

Draft proposals will include:

1. Title and name of the members of the group.
2. A short introduction showing the extent and importance of the topic.
3. A definition of the topic, enumerating the issues that will be discussed.
4. A description of the methodology, sources and bibliography.

FINAL PRESENTATION AND DISCUSSION OF THE RESEARCH PAPER MADE BY GROUPS OF 4 STUDENTS

Date of the final presentation seminar: 17th & 18th April
Deadline for the uploading of the paper: 30th April

ONLY ONE member of each group will upload the presentation slides and the written essay.

The essay should contain the following elements:

1. Title and name of the members of the group.
2. A short explanation of the methodology applied by the group
3. A description of the content.
4. Final conclusions.
5. Bibliography.

Maximum length of the written paper: 4000 words (bibliography included).

LIST OF PRACTICAL ACTIVITIES
All the relevant documents for the practical activities are available in the "Practical Activities" folder (Aula Virtual)

PRACTICAL ACTIVITY 1
The Language of Medicine and Health Sciences. Medical Terminology and Communication.
Date of the seminar: 6th & 7th February
Deadline: 12th February

PRACTICAL ACTIVITY 2
Primary Health Care: A General Overview
Date of the seminar: 13th & 14th February
Deadline: 19th February

PRACTICAL ACTIVITY 3
Healthcare Systems: A Comparative Approach
Date of the seminar: 27th & 28th February
Deadline: 12th March

PRACTICAL ACTIVITY 4
NGO (Non-Governmental Organizations) & Health: The Ebola 2014-2015 Pandemic Outbreak
Date of the seminar: 6th & 7th March
Deadline: 12th March

PRACTICAL ACTIVITY 5
Health Industries: Patents, Pharmaceuticals and the Right to Health
Date of the seminar: 13th & 21st March
Deadline: 26th March

PRACTICAL ACTIVITY 6
Health and Social Inequalities: CIEs, Immigrants and Exclusion
Date of the seminar 27th March & 11th April
Deadline: 16th April

HANDOUTS FOR THE PRACTICAL ACTIVITIES

Handouts have been uploaded and are available in the "Resources" folder (Aula Virtual)

Short Handouts:

AIDS
Alma Ata
Biotechnology & Health
Challenges of the Millennium (United Nations)
Co-payment
Cuts in Public Health Care
Daily Problems & Mental Disorders
El Roto: Health in the Humor Cartoon
Enfermedad, negocio para la industria
Genetic Selection
Health & Environment
Health: a Geopolitical Challenge
Health & Exclusion
Healthcare Cuts
Healthcare Policies & Reforms
Health Inequalities
Health Technologies: Diagnostic imaging
Health Technology: Reproduction
Health Technology
INTERMON OXFAM Inequalities
Low cost hospitals
Measuring Welfare
Private Health Care
Privatization in Spain
Public Health Care
Resigning from Life
Virtual Patient
WHO Meat & Cancer
Witchcraft & Disease

Long Handouts

Governing for the elites (general) Intermon Oxfam January 2014
Governing for the elites (Spain) Intermon Oxfam January 2014
Guías alimentarias para la población española (2016)
Hepatitis. Technical report WHO (2014)
Intermon OXFAM 2016
El Roto: Health, Disease and Care in the Humor Cartoon
"Biotecnología y Salud" (2007)

INE “Living Conditions” (2012)
Medical Terminology
Medicamentos esenciales
Missing Midwives
MSF 1 Year Ebola Report
Pla de Salut Comunitat Valenciana 2016-2020
Poverty related & neglected diseases
Primary Health Care
Providential & Welfare State
Right to Health United Nations
Spanish National Health System
Treinta años del sistema sanitario español (2011)
World Health Report 2008
World Heath Statistics 2012

Valencia, February 2018

J.L. Barona
Catedrático de Historia de la Ciencia
Universitat de València

Practical activity 1
AN INTRODUCTION TO THE LANGUAGE OF THE HEALTH SCIENCES

Josep L. Barona

Professor of the History of Science

Language and reality

- Epistemological question
- Positivism
- Relativism
- Lucretius: “The most consistent proof of the gods’ existence is that men talk about them”
- No name = no existence (pariahs)

Specialized languages

- **Slang (*jerga*): a** type of language consisting of words and phrases that are regarded as very informal, more common in speech than writing, typically restricted to a particular context or group of people (prisoners, seamen, etc.)
- **Scientific and technical terminology:** scientific, professional, social groups, etc.

Words & Terms

- **Word (*vocablo*)** relates to normal language
- **Term/terminological unit:**
  - very precise meaning (semantic content); no polysemy, synonymy, or variations
  - one term = one single meaning

Medical terminology is recorded by:

glossaries, technical and specialist dictionaries, classifications, thesauri, indexing programs from the scientific literature, commissions for the regulation and control of neologisms, directories and databases.

All this paves the way for standardization strategies for specialized scientific languages

Lexicography, terminology, documentation, taxonomy, etc.

Medical terminology constitutes a wide and complex language of its own, encompassing several thousand terms.

It serves as vehicle of communication of medical knowledge, technology and practices, in a variety of media, settings and vehicles:

a) The doctor-patient relationship.

b) Handbooks, treatises, and monographs summarizing knowledge in any scientific field.

c) Scientific outreach through the mass media, written materials (books, leaflets), exhibitions, science museums, documentaries and other printed and audiovisual products, etc.

c) Conferences, symposia, workshops, scientific meetings, etc.

d) Specialized information and research journals

- Historical origin:
  - Greek/Latin: Hippocratic-Galenic Medicine
  - Middle Ages: Islamic tradition
  - Early Modern: colonial expansion
  - 19th century: birth of experimental medicine
  - 20th & 21st century: new knowledge, new specialties, new terms (neologisms)

Structure of Terms:

- **Roots**
- **Prefixes**
- **Suffixes**

Signifier and Signified (F. de Saussure)

•Semantic changes

Semantic trees

Semantic relations: polysemy, synonyms, antonyms, paronyms, etc.

Semantic changes (diachronic change): variability = changes in meaning

- **widening**
- **narrowing**
- **change of meaning**

Student's Name:

PRACTICAL ACTIVITY 1

THE LANGUAGE OF MEDICINE & HEALTH SCIENCES

Medical terminology and communication

Date of the seminar: 11th February & 12th February
Deadline: 20th February

Medical terminology constitutes a wide and complex language of its own, encompassing several thousand terms. Communication of medical knowledge, technology and practices take place through a series of media, spaces and vehicles:

a) The doctor-patient relationship.
b) Handbooks, treatises, monographs summarizing knowledge in any scientific field.
c) Scientific outreach through the mass media, written materials (books, leaflets), exhibitions, science museums, documentaries and other printed and audiovisual products, etc.
c) Conferences, symposia, workshops, scientific meetings, etc.
d) Specialized information and research journals

Analysis of medical terms

1. Write the terms corresponding to the following definitions, using the enclosed list of *morphemes* (roots, prefix, suffix):

- Red blood cell:
- Presence of urine in the blood:
- Stomach inflammation:
- White blood cell:
- An excess of glucose in the blood:

Morpheme	Meaning
-cyte	cell
erythr(o)-	red
gastr-	stomach
gluc-	glucide
hem-, hemat-	blood
hyper-	excess
-ia	alteration
-itis	inflammation
leuco-	white
ur-	urine

2. The following terms refer to different types of treatment. Try to find out their meaning taking as a point of departure their roots:

-Cryotherapy:
-Radiotherapy:

-Hydrotherapy:
-Pharmacotherapy:

3. Mark the right answer:

- Cutting a nerve is a:
    a) Neurorrhaphy.
    b) Neuralgia.
    c) Neurectomy.
    d) Neurolysis.
- Fear of animals is:
    a) Hydrophobia.
    b) Photophobia.
    c) Claustrophobia.
    d) Zoophobia.
- Inflammation of the cornea is:
    a) Stomatitis.
    b) Iritis.
    c) Keratitis.
    d) Phlebitis.
- Under the diaphragm is:
    a) Percutaneous.
    b) Infragastric.
    c) Subphrenic.
    d) Suprarenal.
- Which term refers to spherical bacteria joined together in a chain:
    a) Diplococcus.
    b) Streptococcus.
    c) Staphylococcus.
    d) Gonococcus.

4. Match these suffix forms with their meaning:

-cele.	-Herniation.
-rrhea.	-Hemorrhage.
-rrhage.	-Flow.
-rrhaphy.	-Rupture.
-rrhexis.	-Suture.

Please select two of these and write a term for each suffix and its meaning:

5. Write the meaning of the underlined <u>morphemes</u> which form part of the following terms:

-Dipl<u>opia</u>:
-Gastro<u>cele</u>:
-<u>Phleb</u>itis:
-<u>Laparo</u>tomy:
-Poly<u>dipsi</u>a:

6. Among the materials available in Aula Virtual for seminar 1, you can find a pdf version of the article:

P Temming and MEM Jenney

The neurodevelopmental sequelae of childhood leukaemia and its treatment.
***Arch Dis Child* 2010 95: 936-940**

6.1. Extract from the text an eponym and an acronym:

-Eponym:
-Acronym:

6.2. Extract from the text a polysemic term and write the different meanings:

-Term:
-Meanings:

7. **Extract two terms from the text and give a synonym of one of them and an antonym of the other**:

-Term: -Synonym:
-Term: -Antonym:

8. Extract three terms from the text and indicate generic-specific relations with other terms in the text:

9. Analyze two terms of Greek or Latin origin in the text:

1st TERM:
-Root(s):
-Prefix(es):
-Suffix(es):
-Meaning:

- Another term containing the same root:
- Another term containing the same prefix:
- Another term containing the same suffix:

2nd TERM:
-Root(s):
-Prefix(es):
-Suffix(es):
-Meaning:

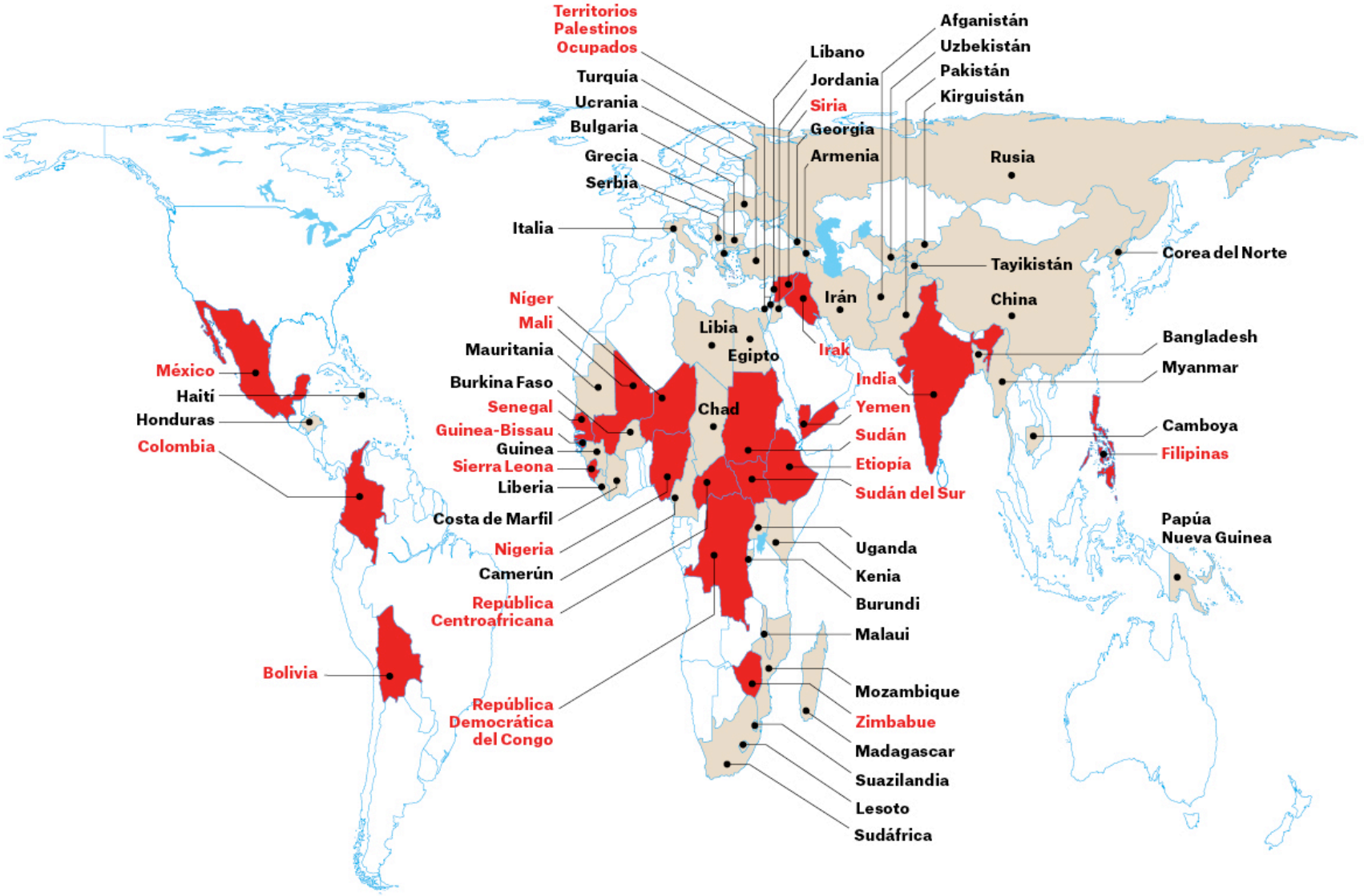
- Another term containing the same root:
- Another term containing the same prefix:
- Another term containing the same suffix:

CHALLENGES OF HUMANITARIAN ACTION

MEDICOS SIN FRONTERAS

MSF stands for Médecins Sans Frontières, an international medical and humanitarian organization that helps people in dangerous situations and victims of catastrophes of natural or human origin and armed conflicts, without discrimination with regard to race, religion or political ideology.

MSF International Projects 2014



En rojo, proyectos gestionados por MSF España.

Fuentes: *Memoria internacional MSF 2014, Memoria MSF España 2014*.

CHALLENGES OF HUMANITARIAN ACTION

context

MEDICOS SIN FRONTERAS

Elwa Camp, Liberia, Epidemia de Ébola, Octubre 2014

Elwa Camp, Liberia, Epidemia de Ébola, Octubre 2014

Audiencia en la India por la oposición a la patente del sofosbuvir de Gilead para la hepatitis C

LOS MEDICAMENTOS NO DEBERÍAN SER UN LUJO

Al peso, este medicamento
para la hepatitis C
es 67 veces más caro que el oro

MEDICOS SIN FRONTERAS

EL ANUNCIO DE LA FARMACÉUTICA

LA REALIDAD

MULTI-DRUG RESISTANT TUBERCULOSIS, Donetsk, Ucrania, Enero 2015

VACCINATION CAMPAIGN, GUINEA, JANUARY 2014

CHALLENGES OF HUMANITARIAN ACTION

CHANGES

MEDICOS SIN FRONTERAS


MEDECINS
SANS FRONTIERES

DISPLACED PEOPLE HEADING FOR THE TRANSIT CAMP IN RWABUSORO, RWANDA. 100,000 PEOPLE PASSED THROUGH HERE IN 10 DAYS, RWANDA, JULY 1994

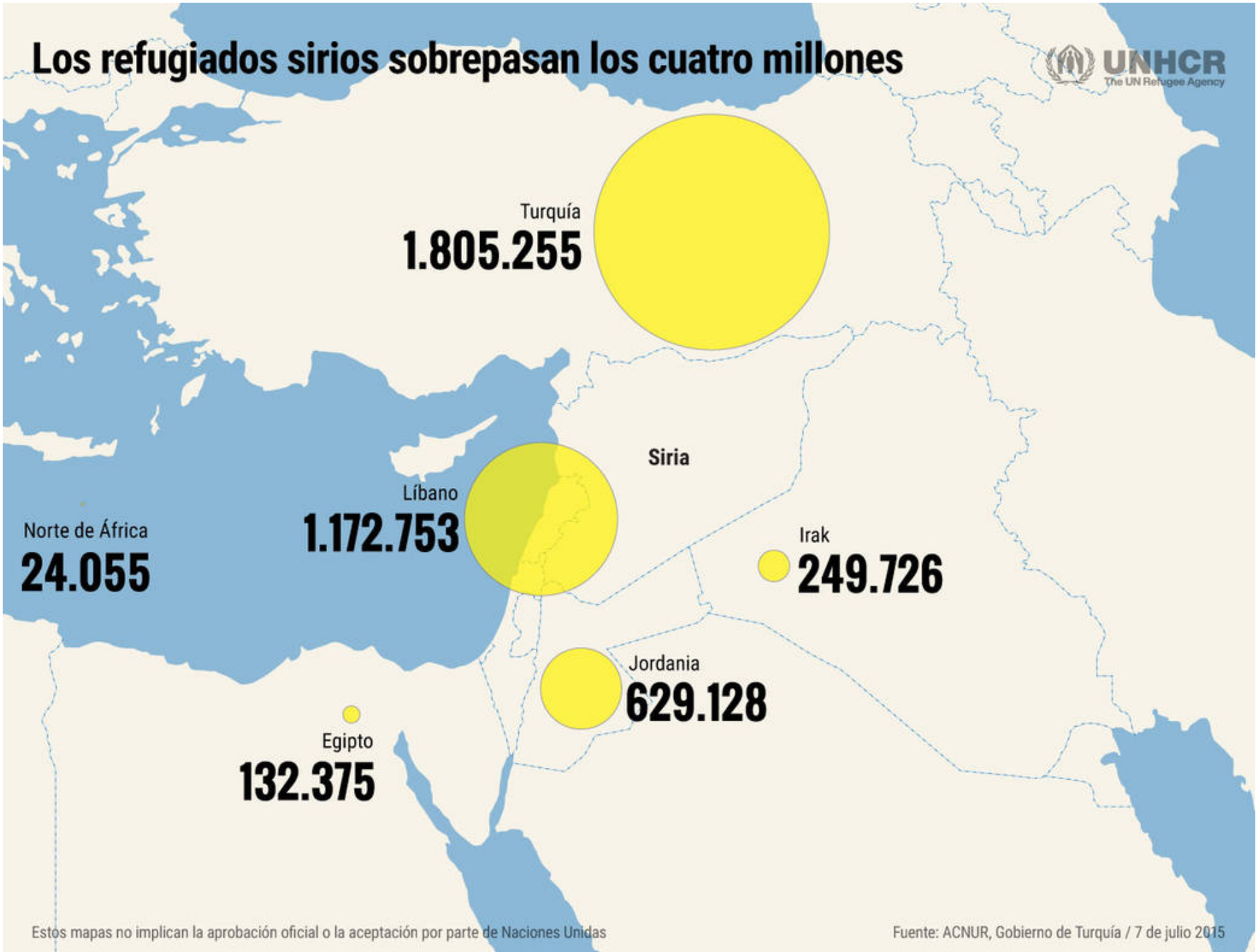
Chechenia 1995

CHALLENGES OF HUMANITARIAN ACTION

PRESENT SITUATION

MEDICOS SIN FRONTERAS

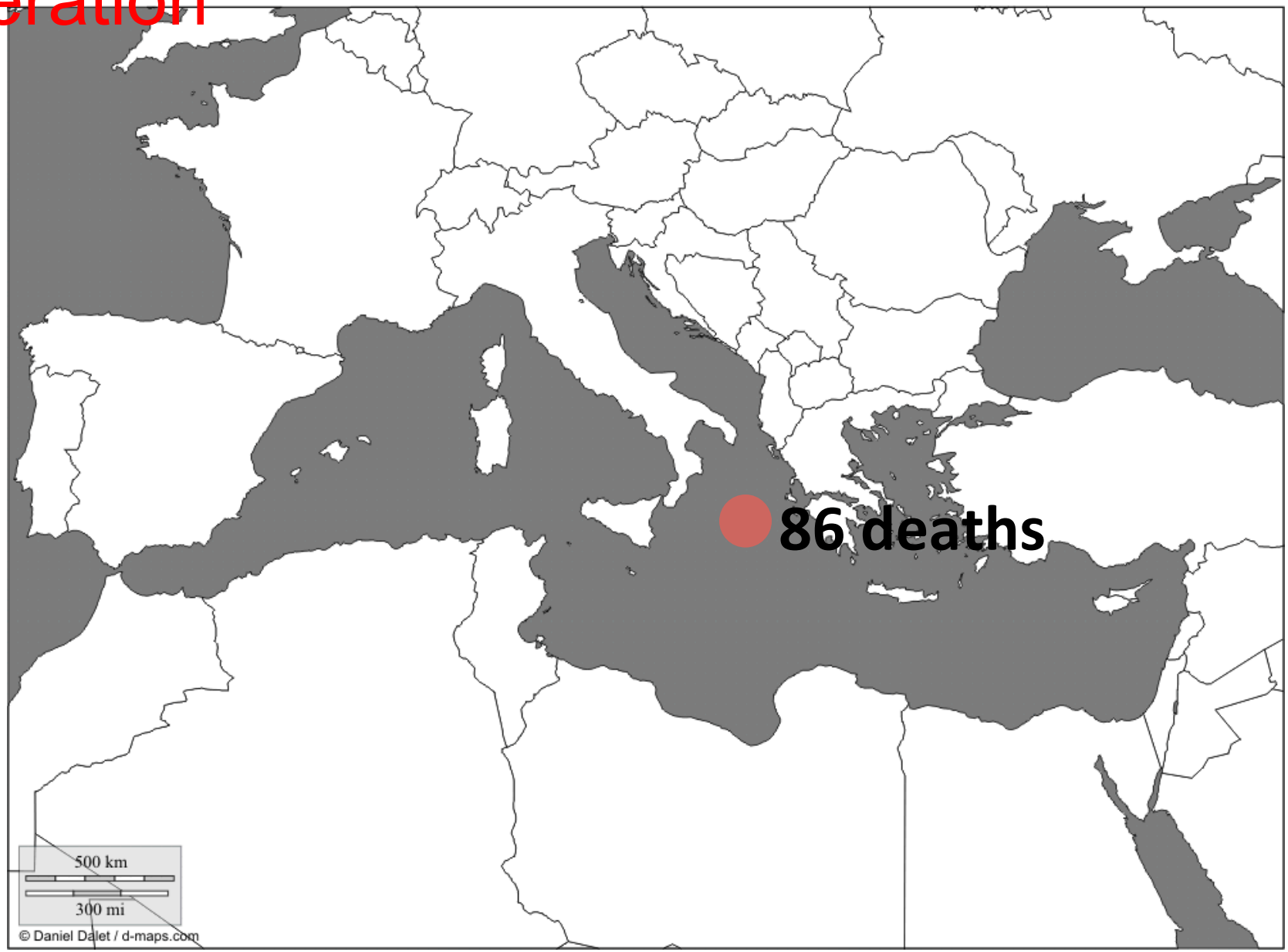
Los refugiados sirios sobrepasan los cuatro millones



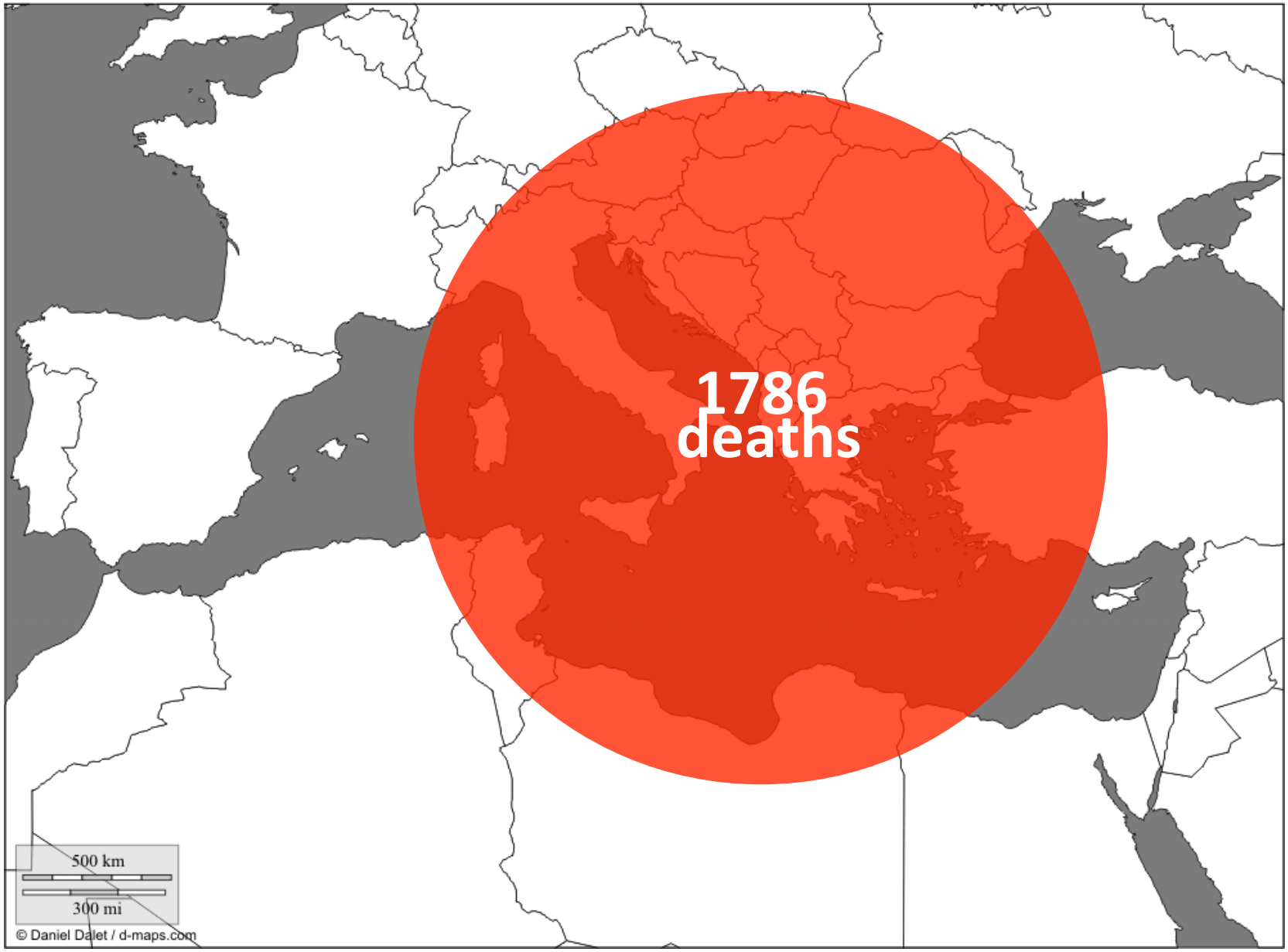
Estos mapas no implican la aprobación oficial o la aceptación por parte de Naciones Unidas

Fuente: ACNUR, Gobierno de Turquía / 7 de julio 2015

January - April 2014 MARE NOSTRUM operation



January - April 2015 TRYTON operation



MOIRA RECEPTION CENTRE, GREECE OCTOBER 2015

MOIRA RECEPTION CENTRE, GREECE OCTOBER 2015

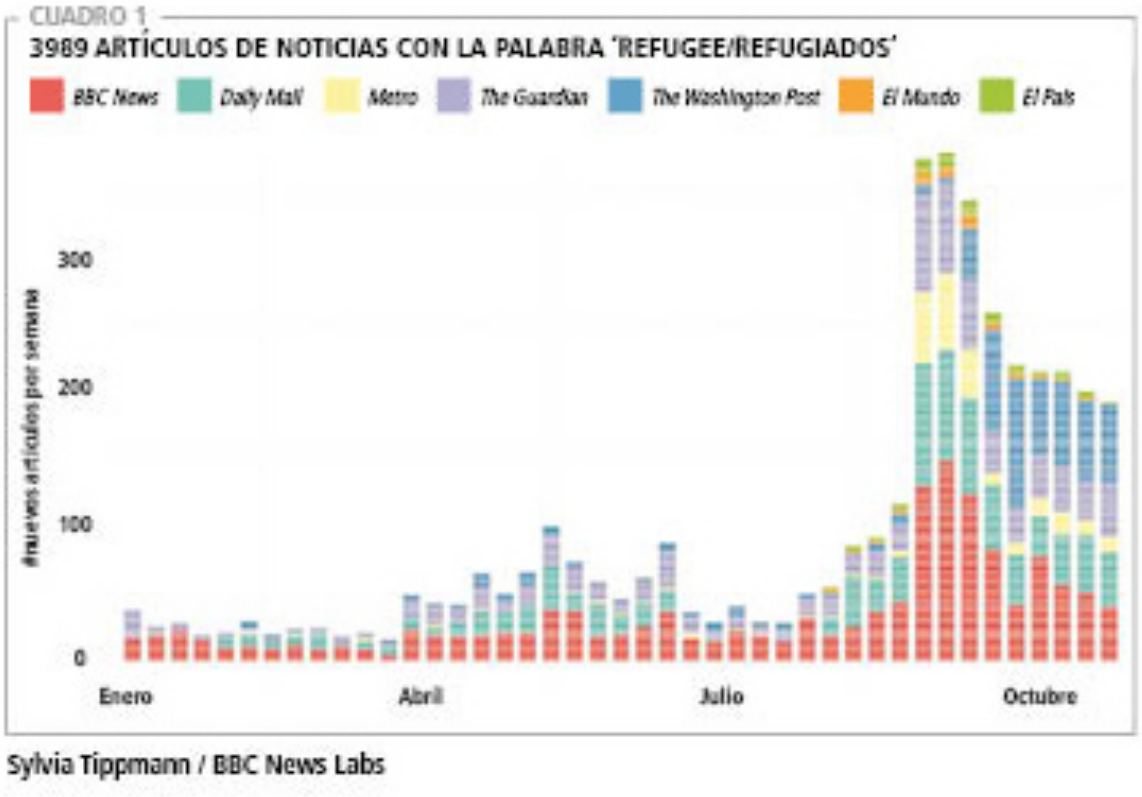
MOBILE SURGERY AT BAPSKA, SERBIA SEPTEMBER 2015

REFUGEE CAMP AT GRANDE-SYNTHE, FRANCE JANUARY 2016

CARRERA DE OBSTÁCULOS HACIA EUROPA

2015: CATASTRÓFICO FRACASO DE EUROPA A LA HORA DE RESPONDER A LAS NECESIDADES DE LOS REFUGIADOS Y LOS MIGRANTES

The number of articles containing the word refugee in the media



Source: Cuadernos de periodistas, “Cobertura de la crisis de los refugiados: Otro periodismo para las nuevas olas migratorias”, Asociación de la prensa de Madrid

Carta abierta a los líderes de los estados miembros de la Unión Europea

Copias enviadas a los gobiernos de Suiza, Noruega, Antigua República Yugoslava de Macedonia (ARYM), Serbia y al presidente de la Comisión Europea.

MSF Prensa @MSF_Prensa · 16 sept.

Ayer @lindishurum @MSF fue invitada a hablar sobre #Refugiados en el @Europarl_ES. ¿Dónde estaban los eurodiputados?

8 3

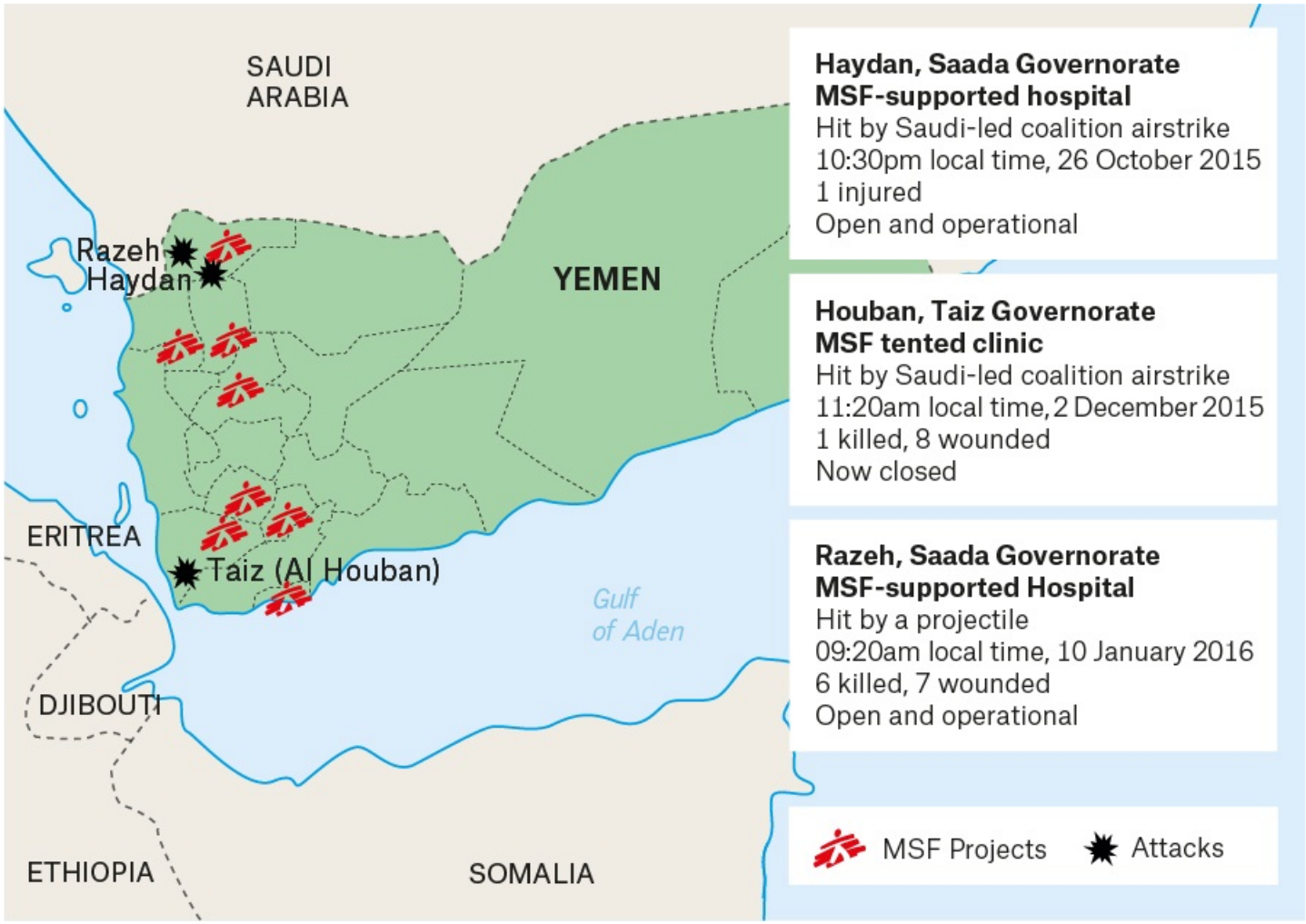
Kunduz, Afganistán, mayo 2015

Kunduz, Afganistán, octubre 2015

MSF Hospital in Shiara, Yemen, Enero 2016

MSF STRUCTURES HIT IN ATTACKS IN YEMEN

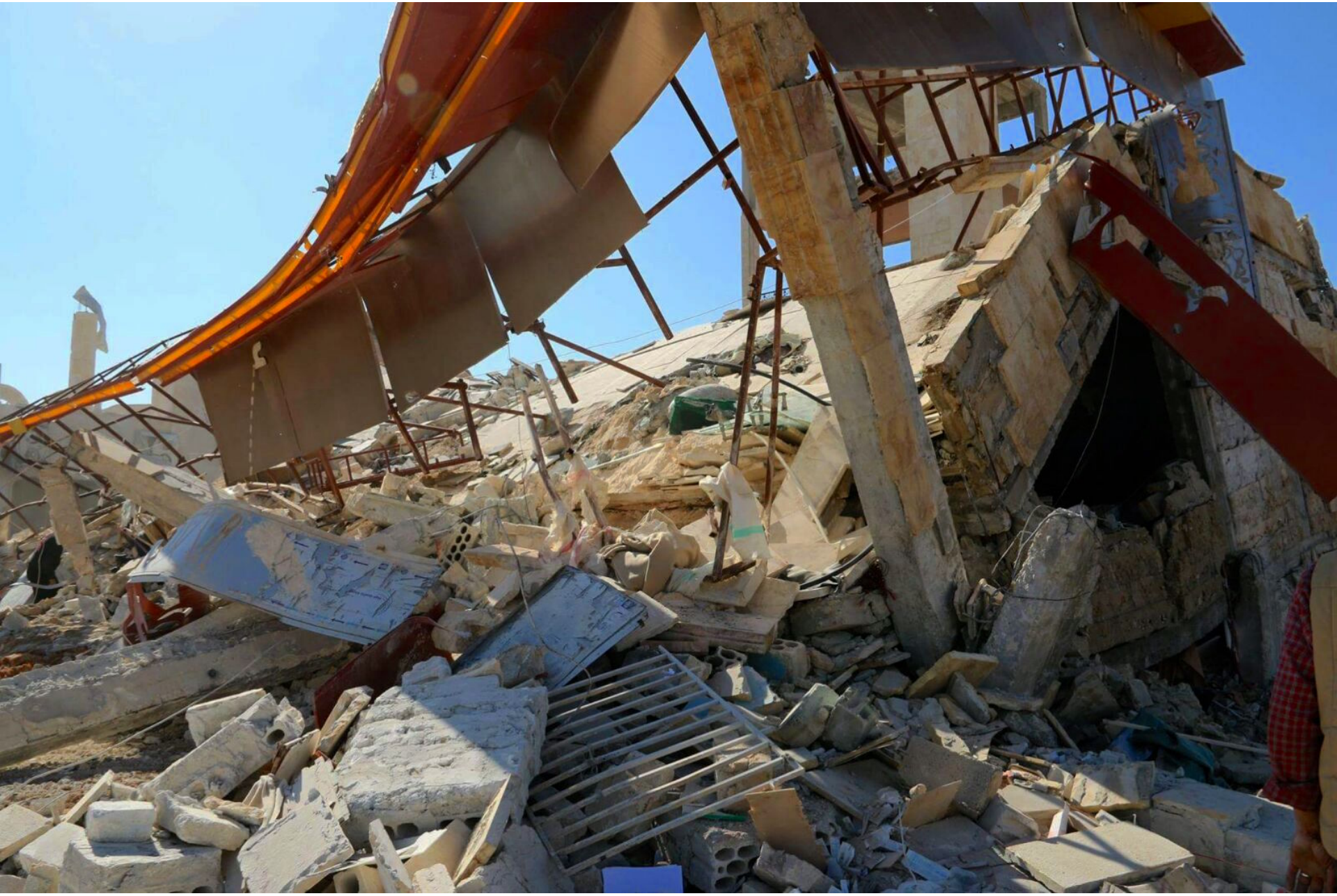
October 2015
to January 2016



MEDICOS SIN FRONTERAS

MSF Hospital in Idlib, Syria, February 2016

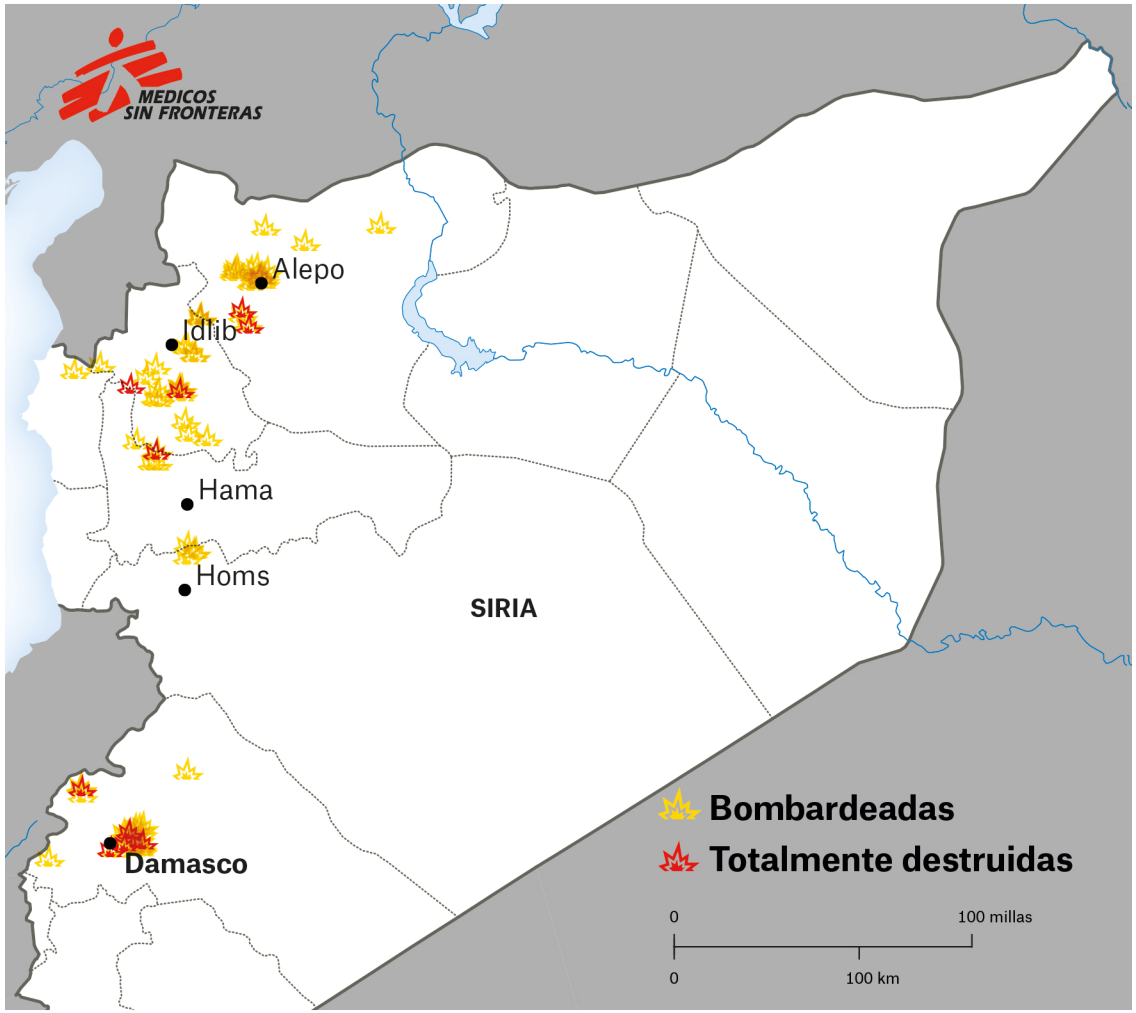
MSF Hospital in Idlib, Syria, febrero 2016



MSF Hospital in Idlib, Syria, febrero 2016

Syria, February 2016

SIRIA 2015 | BOMBARDEOS A ESTRUCTURAS MÉDICAS APOYADAS POR MSF



Personal médico apoyado por MSF

58 heridos **23** muertos

Estructuras médicas apoyadas por MSF

94 ataques en **63** estructuras

Campaign

STILL ALIVE

Some trips leave bad memories.
Thousands of people are embarking
on the journey of their lives.
Pain also moves

MEDICOS SIN FRONTERAS

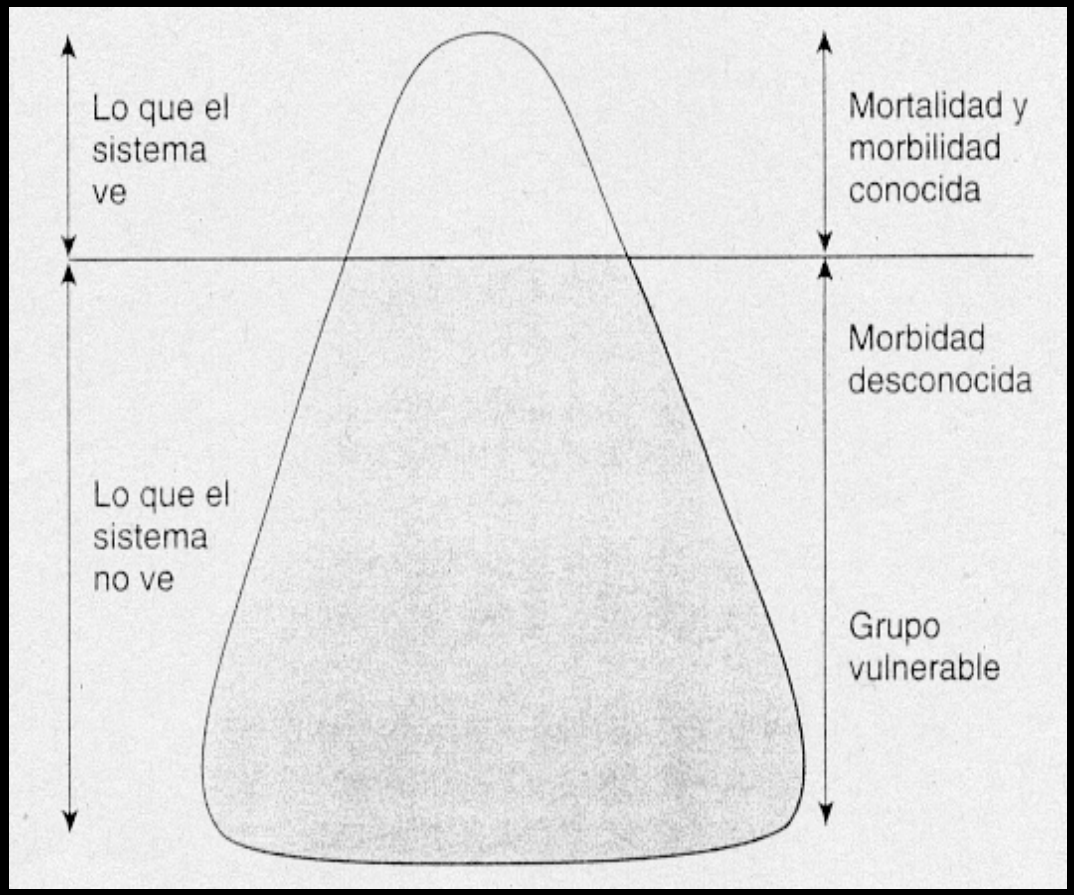

#SEGUIRCONVIDA
CÓMO
SOBREVIVEN
LOS CIVILES
A LA GUERRA

PRACTICAL ACTIVITY 2

PRIMARY HEALTH CARE: a general overview.

Information sources

- http://www.who.int/topics/primary_health_care/en/
- UNICEF: Challenges remain at Global Health Conference (2008) http://www.youtube.com/watch?v=tK5vyiHcl90
- The Declaration of Alma-Ata (1978) http://www.youtube.com/watch?v=LA_DSip5Y2I
- "Primary health provision in Spain". From: Saltman, R.B. (ed.) Primary care in the driver's seat? Open UP, 2006, p. 134
- National Health System, Spain 2010.



Source: Martínez Navarro, F. (ed.) *Salud pública*. Madrid, Interamericana, 1997, p. 34

1946 WHO (OMS)

- The **World Health Organisation (WHO)** was founded in July 1946 as a consequence of the Charter of the United Nations (UN), which recognized health as an international problem.
- WHO is the institution delegated by the UN to determine health policies for the prevention and treatment of disease and to promote health all over the world.
- In 1948, the UN proclaimed the right to health for everyone, in article 25 of the *Universal Declaration of Human Rights*

ARTICLE 25

- This article is the result of a consensus among countries to guarantee health care
- It has formed the basis of all international policies, laws and plans for health since 1948

Derechos humanos y salud

Artículo 25

1. Toda persona tiene derecho a un nivel de vida adecuado que le asegure, así como a su familia, la salud y el bienestar, y en especial la alimentación, el vestido, la vivienda, la asistencia médica y los servicios sociales necesarios; tiene asimismo derecho a los seguros en caso de desempleo, enfermedad, invalidez, viudez, vejez y otros casos de pérdida de sus medios de subsistencia por circunstancias independientes de su voluntad.

Declaración Universal de Derechos Humanos
Adoptada y proclamada por la Asamblea General en su resolución 217 A (III), de 10 de diciembre de 1948, Naciones Unidas

Organización Panamericana de la Salud
Oficina Regional de la Organización Mundial de la Salud
60
30 ALMA-ATA
MINISTERIO DE ASUNTOS EXTERIORES Y DE COOPERACIÓN
aecid

1978 ALMA-ATA

- International Conference on Primary Health Care (PHC), sponsored by WHO, in Alma-Ata (Kazakhstan)
- The Declaration of Alma-Ata states health as "a fundamental human right" and "that the attainment of the highest possible level of health is a most important world-wide social goal whose realization requires the action of many other social and economic sectors in addition to the health sector."
- The Declaration consists of ten items and it defines what Primary Health Care is in the sixth of these.

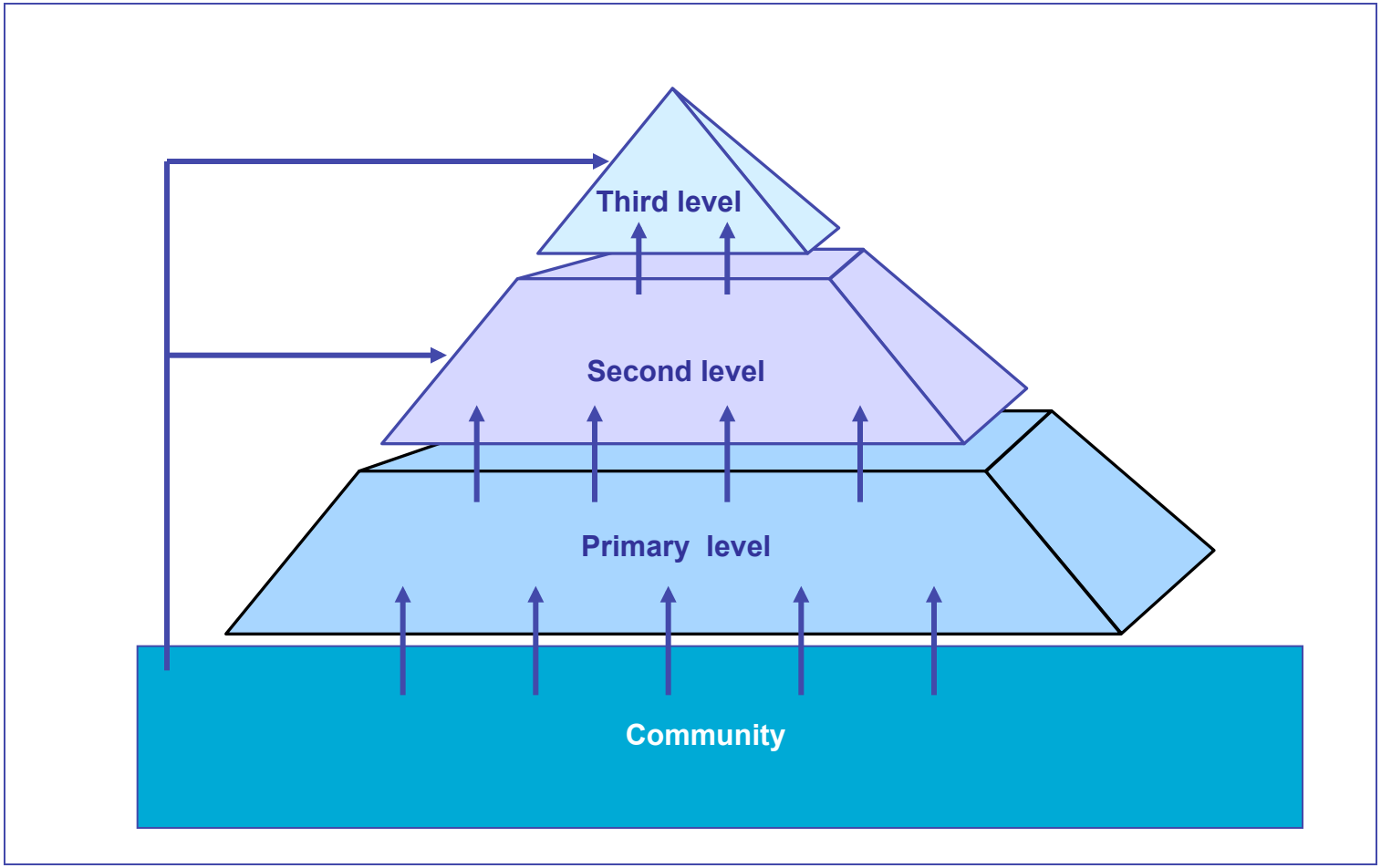
1978 ALMA-ATA: PRIMARY HEALTH CARE

- "**Primary health care** is essential health care based on practical, scientifically sound and socially acceptable methods and technology made **universally accessible to individuals** through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination."

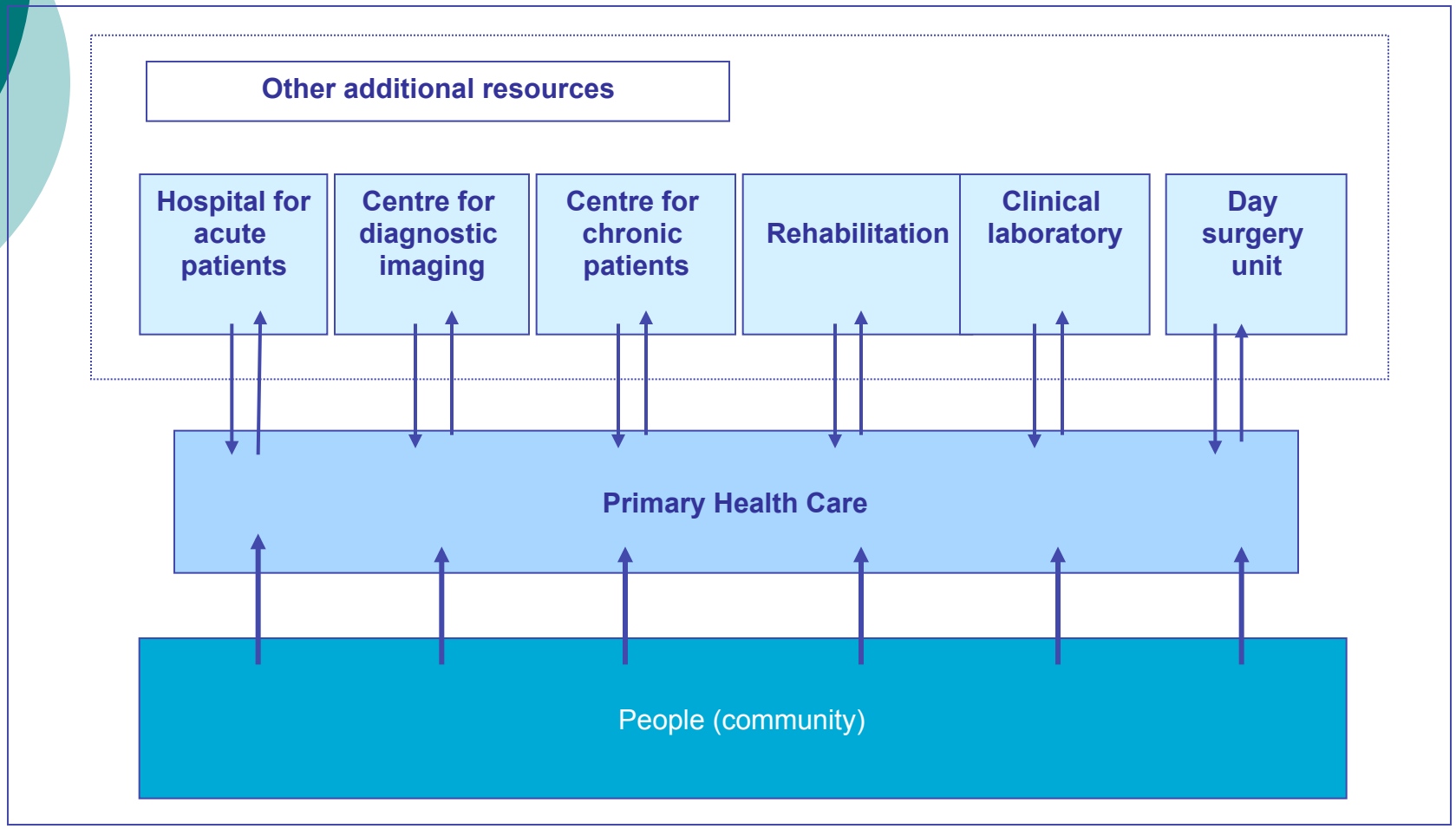
1978 ALMA-ATA: PRIMARY HEALTH CARE

- "**Primary health care** is an integral part both of the country's health system, of which **it is the central function and main focus**, and of the overall social and economic development of the community."
- "It is **the first level of contact of individuals, the family and community with the national health system** bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process."

Health care by levels



Primary health care



1978 ALMA-ATA: PRIMARY HEALTH CARE

Major world health problems identified were:

- Education for health
- Provision of food and proper nutrition
- Water supply and basic sanitation
- Child & maternal health care, including family planning
- Vaccination against major diseases
- Prevention and control against the major endemic diseases
- Treatment of the common illnesses and injuries
- Supply of essential drugs

ALMA-ATA (1978): PRIMARY HEALTH CARE

Criteria:

- Involvement of all sectors connected to national and community development such as agriculture, industry, education, etc.
- Community participation on planning, organization, functioning and control of PHC
- Priority to those most in need
- Inclusion of physicians, nurses, midwives, social workers, and even traditional practitioners, working together as health teams
- Universal health coverage: all people should be included among the beneficiaries, whether by citizenship or by residence ("Universal coverage means coverage for everybody, not for everything")

Salud España

- El derecho a la salud está presente en todos los pactos internacionales, destacando los Derechos Humanos de la Naciones Unidas.

- La Conferencia y Declaración de Alma-Ata (1978), la Estrategia de Salud para Todos (1981) y la Carta de Ottawa para la Promoción de la Salud (1986) son otros de los referentes internacionales en salud.

- La Cuarta Conferencia Mundial sobre la Mujer (Beijing 1995) aprueba la Declaración y la Plataforma de Acción de Beijing. Ello supuso el reconocimiento de la necesidad de luchar por conseguir de forma efectiva la igualdad entre hombres y mujeres.

Salud España

- Pacto de Toledo, referente al *"análisis de los problemas estructurales del sistema de seguridad social y de las principales reformas que deberán acometerse (España 1995).*
- La Declaración del Milenio (2000) establece los Objetivos de Desarrollo del Milenio (ODM). Los tres objetivos relacionados directamente con la salud se han desarrollado, entre otros, en los Foros de Alto Nivel celebrados en Ginebra, Abuja y París.
- La Declaración de París (2005) reafirma las conclusiones de la Cumbre del Milenio y establece medidas para aumentar la eficacia de la ayuda al desarrollo.
- La Ley 23/1998 de Cooperación internacional para el Desarrollo y el Plan Director de la Cooperación Española 2005-2008 son referentes normativos de la Política Nacional de Cooperación al Desarrollo.

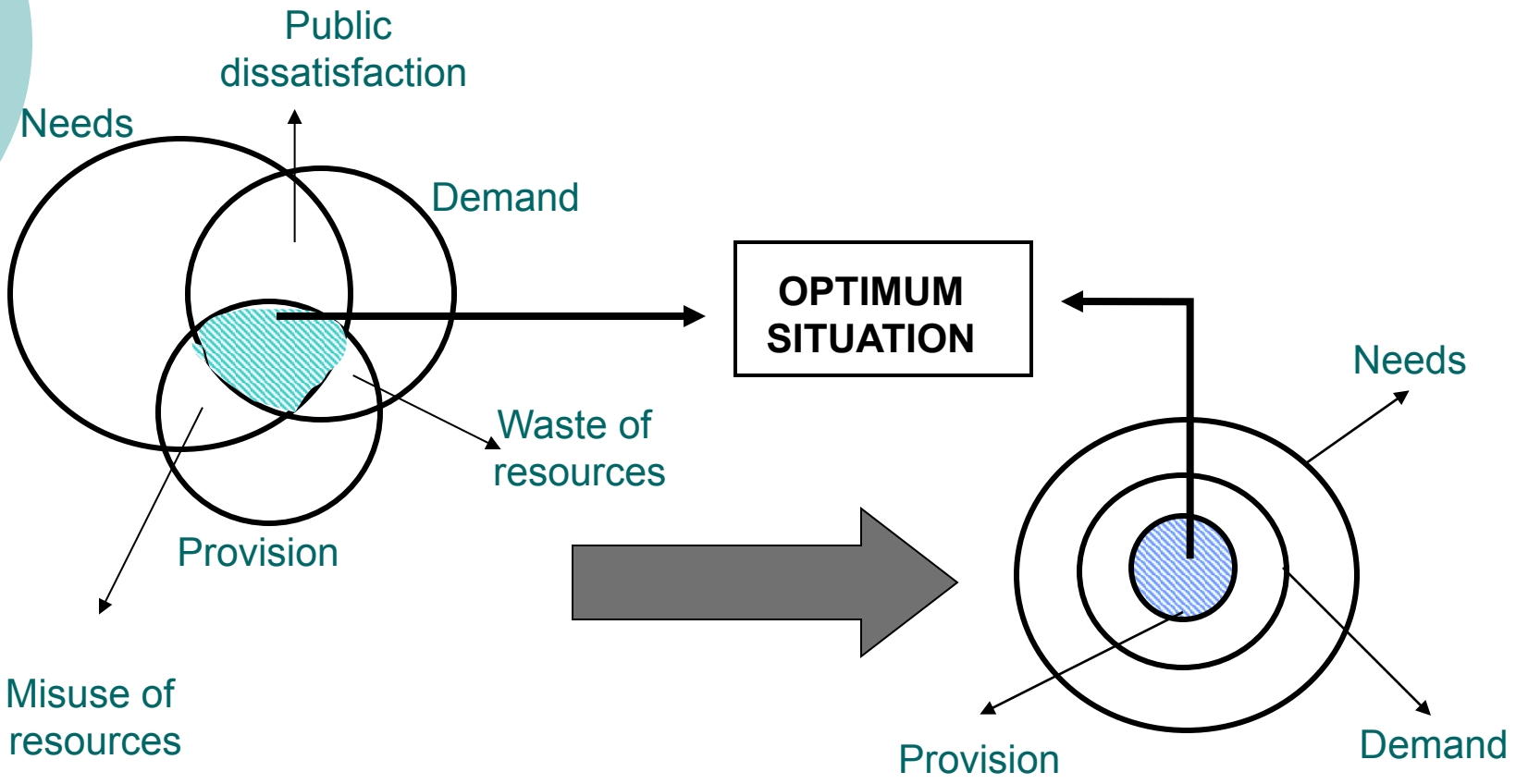
PRIMARY HEALTH CARE: TRAITS

- Comprehensive: care by means of health promotion, prevention, medical care and rehabilitation.
- Continuous: not limited to a specific need or an isolated moment (24 hours a day, 7 days a week, from birth to death)
- Autonomous and close to the community, geographically accessible
- Active: in the sense that PHC predicts, identifies and prevents health problems in the community
- Integrated into the health system, facilitating access to other health services

HEALTH SYSTEM: CONCEPT AND MAIN TRAITS

- The combination of organizations, institutions and resources for the improvement of individuals and community health with regard to quality and equality
- **Quality**: to reach the best possible level of health with respect to the actual and perceived needs of the population
- **Equality**: to respond to all people without discrimination between individuals while taking their differences into account
- **Efficiency**: to maximize resources and avoid waste

Planning for social efficiency



STUDENT'S NAME:

PRACTICAL ACTIVITY 3
HEALTH CARE SYSTEMS: A COMPARATIVE APPROACH

Source material: Michael Moore, "Sicko" (2007).

Date of the seminar: 3th and 4th March
Deadline: 12th March

Sicko

The words "health care" and "comedy" aren't usually found in the same sentence, but in Academy Award winning filmmaker Michael Moore's new movie 'SiCKO,' they go together hand in (rubber) glove.

While Moore's 'SiCKO' follows the trailblazing path of previous hit films, the Oscar-winning BOWLING FOR COLUMBINE and all-time box-office documentary champ FAHRENHEIT 9/11, it is also something very different for Michael Moore. 'SiCKO' is a straight-from-the-heart portrait of the crazy and sometimes cruel U.S. health care system, told from the vantage of everyday people faced with extraordinary and bizarre challenges in their quest for basic health coverage.

In the tradition of Mark Twain or Will Rogers, 'SiCKO' uses humor to tell these compelling stories, leading the audience to conclude that an alternative system is the only possible answer.

"Sicko" (2007) will be shown during the Seminar 3 session. Students are requested to analyse the content of the film and discuss the following questions:

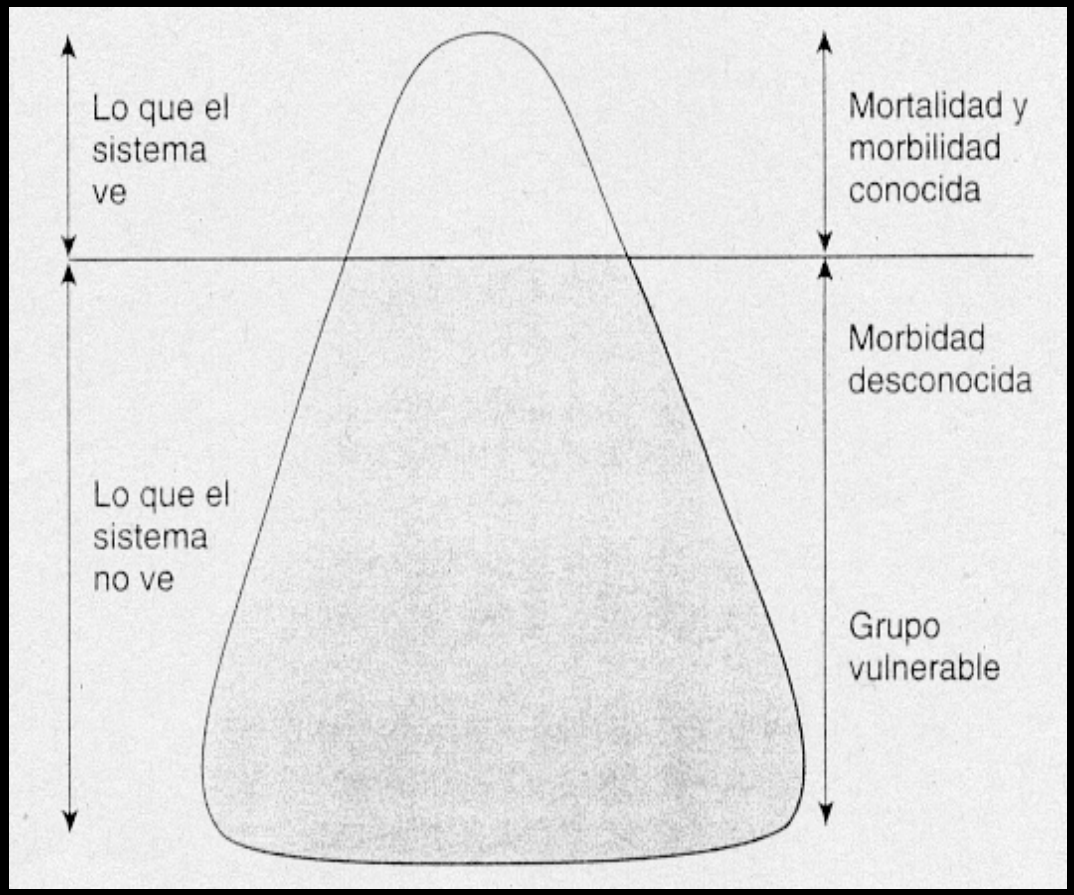
1. Write a summary of the content (no more than 10 lines)
2. Compare the three main health care systems showed in the film: USA, European welfare health care systems and Cuba. Explain their principal characteristics and main differences.
3. Analyse positive and negative aspects in each case.
4. Personal assessment of the film's argument.

PRACTICAL ACTIVITY 2

PRIMARY HEALTH CARE: a general overview.

Information sources

- http://www.who.int/topics/primary_health_care/en/
- UNICEF: Challenges remain at Global Health Conference (2008) http://www.youtube.com/watch?v=tK5vyiHcl90
- The Declaration of Alma-Ata (1978) http://www.youtube.com/watch?v=LA_DSip5Y2I
- "Primary health provision in Spain". From: Saltman, R.B. (ed.) Primary care in the driver's seat? Open UP, 2006, p. 134
- National Health System, Spain 2010.



Source: Martínez Navarro, F. (ed.) *Salud pública*. Madrid, Interamericana, 1997, p. 34

1946 WHO (OMS)

- The **World Health Organisation (WHO)** was founded in July 1946 as a consequence of the Charter of the United Nations (UN), which recognized health as an international problem.
- WHO is the institution delegated by the UN to determine health policies for the prevention and treatment of disease and to promote health all over the world.
- In 1948, the UN proclaimed the right to health for everyone, in article 25 of the *Universal Declaration of Human Rights*

ARTICLE 25

- This article is the result of a consensus among countries to guarantee health care
- It has formed the basis of all international policies, laws and plans for health since 1948

Derechos humanos y salud

Artículo 25

1. Toda persona tiene derecho a un nivel de vida adecuado que le asegure, así como a su familia, la salud y el bienestar, y en especial la alimentación, el vestido, la vivienda, la asistencia médica y los servicios sociales necesarios; tiene asimismo derecho a los seguros en caso de desempleo, enfermedad, invalidez, viudez, vejez y otros casos de pérdida de sus medios de subsistencia por circunstancias independientes de su voluntad.

Declaración Universal de Derechos Humanos
Adoptada y proclamada por la Asamblea General en su resolución 217 A (III), de 10 de diciembre de 1948, Naciones Unidas

Organización Panamericana de la Salud
Oficina Regional de la Organización Mundial de la Salud
60
30 ALMA-ATA
MINISTERIO DE ASUNTOS EXTERIORES Y DE COOPERACIÓN
aecid

1978 ALMA-ATA

- International Conference on Primary Health Care (PHC), sponsored by WHO, in Alma-Ata (Kazakhstan)
- The Declaration of Alma-Ata states health as "a fundamental human right" and "that the attainment of the highest possible level of health is a most important world-wide social goal whose realization requires the action of many other social and economic sectors in addition to the health sector."
- The Declaration consists of ten items and it defines what Primary Health Care is in the sixth of these.

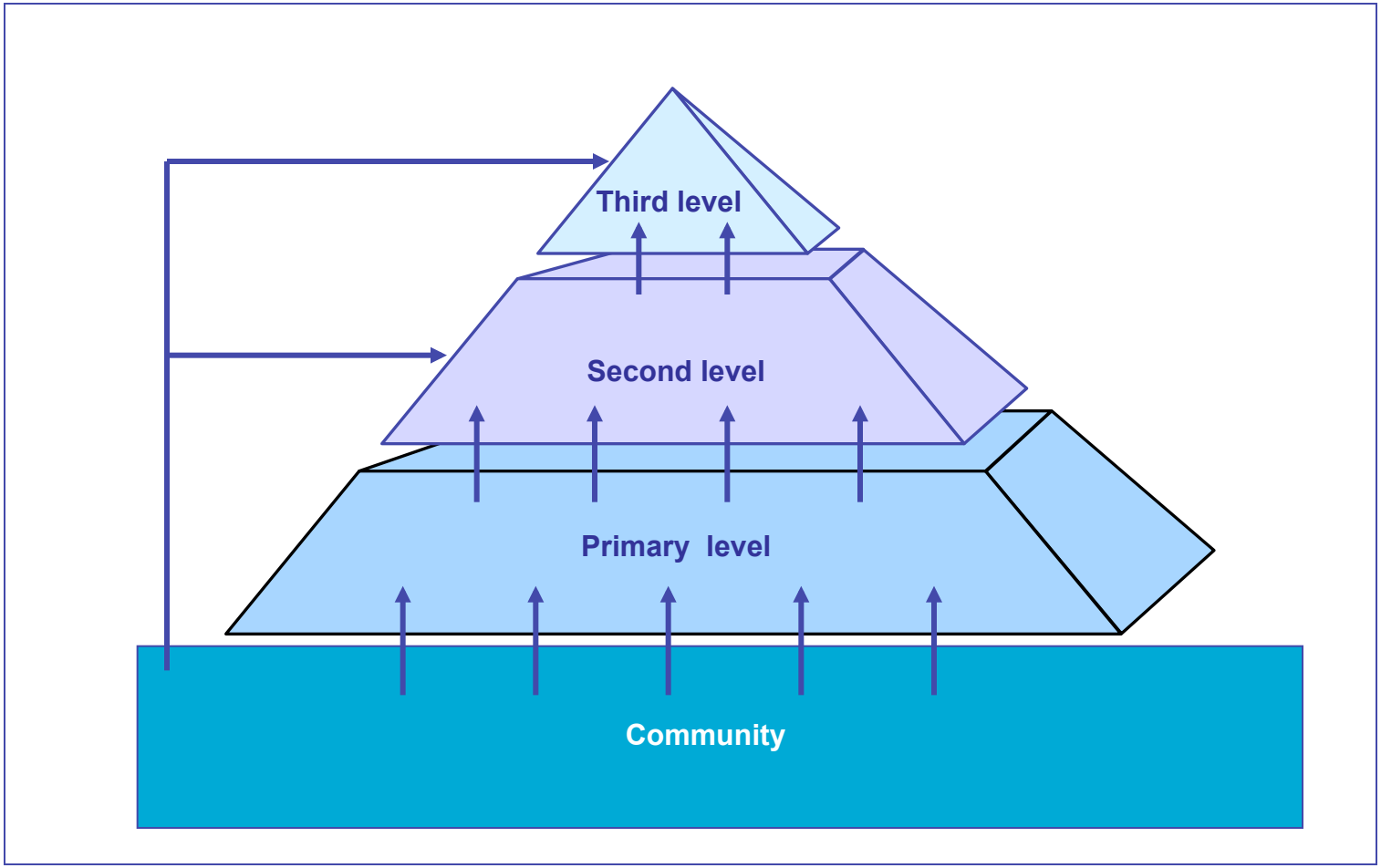
1978 ALMA-ATA: PRIMARY HEALTH CARE

- "**Primary health care** is essential health care based on practical, scientifically sound and socially acceptable methods and technology made **universally accessible to individuals** through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination."

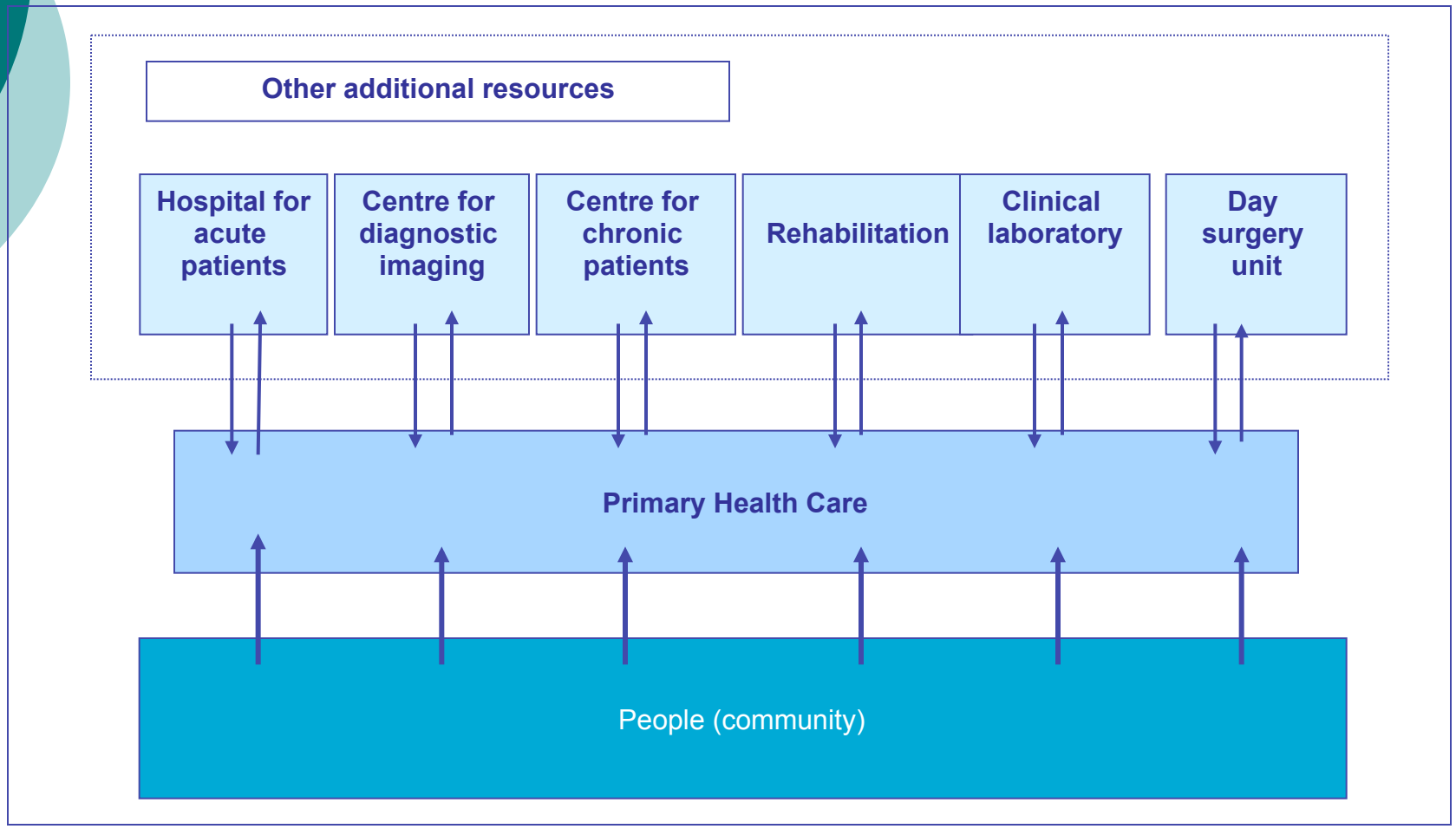
1978 ALMA-ATA: PRIMARY HEALTH CARE

- "**Primary health care** is an integral part both of the country's health system, of which **it is the central function and main focus**, and of the overall social and economic development of the community."
- "It is **the first level of contact of individuals, the family and community with the national health system** bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process."

Health care by levels



Primary health care



1978 ALMA-ATA: PRIMARY HEALTH CARE

Major world health problems identified were:

- Education for health
- Provision of food and proper nutrition
- Water supply and basic sanitation
- Child & maternal health care, including family planning
- Vaccination against major diseases
- Prevention and control against the major endemic diseases
- Treatment of the common illnesses and injuries
- Supply of essential drugs

ALMA-ATA (1978): PRIMARY HEALTH CARE

Criteria:

- Involvement of all sectors connected to national and community development such as agriculture, industry, education, etc.
- Community participation on planning, organization, functioning and control of PHC
- Priority to those most in need
- Inclusion of physicians, nurses, midwives, social workers, and even traditional practitioners, working together as health teams
- Universal health coverage: all people should be included among the beneficiaries, whether by citizenship or by residence ("Universal coverage means coverage for everybody, not for everything")

Salud España

- El derecho a la salud está presente en todos los pactos internacionales, destacando los Derechos Humanos de la Naciones Unidas.

- La Conferencia y Declaración de Alma-Ata (1978), la Estrategia de Salud para Todos (1981) y la Carta de Ottawa para la Promoción de la Salud (1986) son otros de los referentes internacionales en salud.

- La Cuarta Conferencia Mundial sobre la Mujer (Beijing 1995) aprueba la Declaración y la Plataforma de Acción de Beijing. Ello supuso el reconocimiento de la necesidad de luchar por conseguir de forma efectiva la igualdad entre hombres y mujeres.

Salud España

- Pacto de Toledo, referente al *"análisis de los problemas estructurales del sistema de seguridad social y de las principales reformas que deberán acometerse (España 1995).*
- La Declaración del Milenio (2000) establece los Objetivos de Desarrollo del Milenio (ODM). Los tres objetivos relacionados directamente con la salud se han desarrollado, entre otros, en los Foros de Alto Nivel celebrados en Ginebra, Abuja y París.
- La Declaración de París (2005) reafirma las conclusiones de la Cumbre del Milenio y establece medidas para aumentar la eficacia de la ayuda al desarrollo.
- La Ley 23/1998 de Cooperación internacional para el Desarrollo y el Plan Director de la Cooperación Española 2005-2008 son referentes normativos de la Política Nacional de Cooperación al Desarrollo.

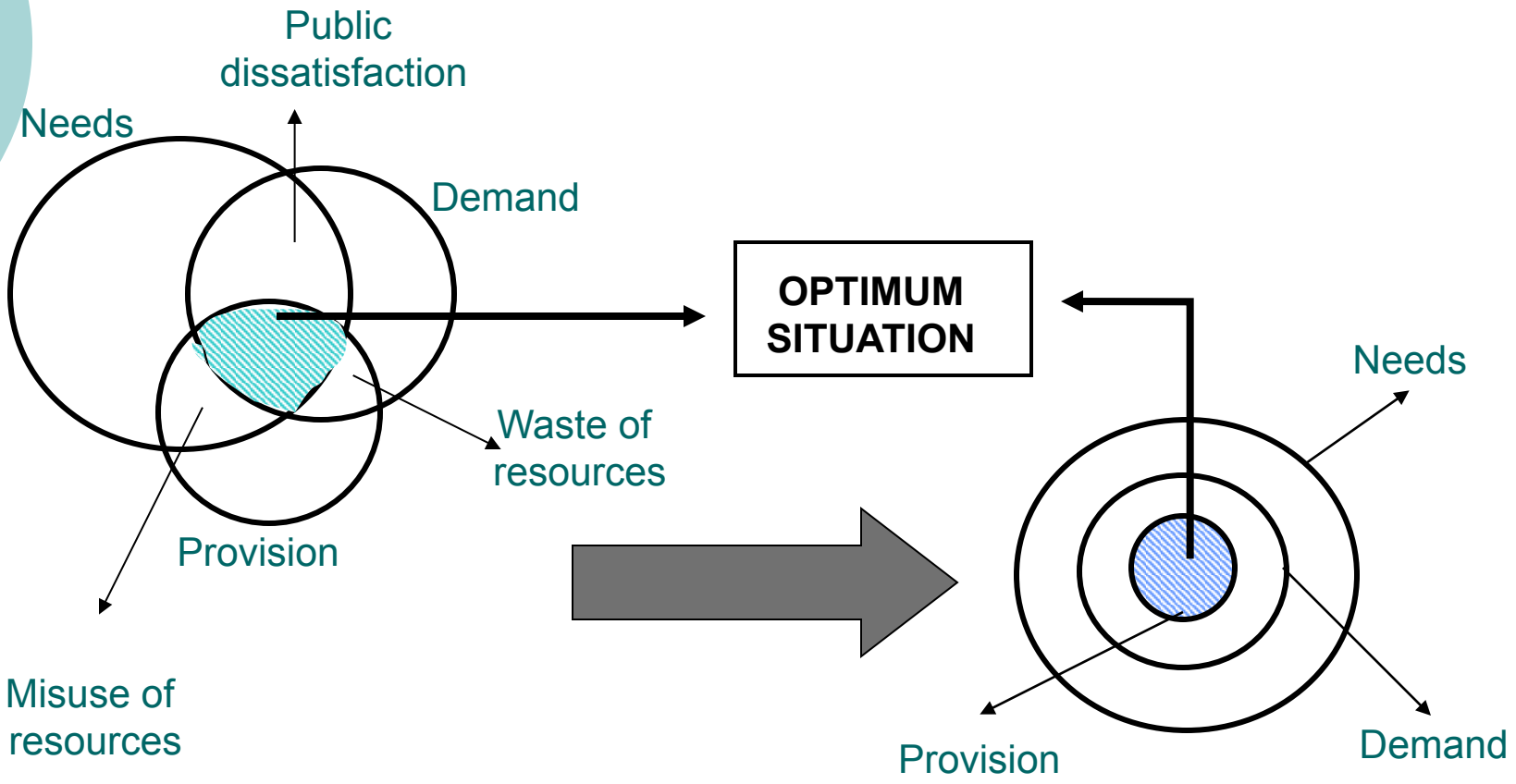
PRIMARY HEALTH CARE: TRAITS

- Comprehensive: care by means of health promotion, prevention, medical care and rehabilitation.
- Continuous: not limited to a specific need or an isolated moment (24 hours a day, 7 days a week, from birth to death)
- Autonomous and close to the community, geographically accessible
- Active: in the sense that PHC predicts, identifies and prevents health problems in the community
- Integrated into the health system, facilitating access to other health services

HEALTH SYSTEM: CONCEPT AND MAIN TRAITS

- The combination of organizations, institutions and resources for the improvement of individuals and community health with regard to quality and equality
- **Quality**: to reach the best possible level of health with respect to the actual and perceived needs of the population
- **Equality**: to respond to all people without discrimination between individuals while taking their differences into account
- **Efficiency**: to maximize resources and avoid waste

Planning for social efficiency



STUDENT'S NAME:

PRACTICAL ACTIVITY 4

NGOs (Non-Governmental Organizations) & Health: the Ebola 2014-2015 pandemic outbreak

Date of the seminar: 10th & 11th March
Deadline: 22nd March

Ebola has been a latent healthcare problem in Africa for decades, having emerged in 1976. Affecting very specific areas of the continent, Ebola has become a serious threat, provoking high rates of mortality. Nevertheless, the endemic situation affected only local areas of rural districts. No cases were reported in cities until the last outbreak reported in March 2014, which became the deadliest manifestation of the disease.
This new hazard acquired a much wider dimension than that seen previously.

1. Review general information about the origins of the disease, its clinical manifestations and epidemiological dimension. Consider the issue in the context of the contemporary globalization process and its influence on health and its impact on living conditions.

Recommended information sources:

- a) Read Handout: Joseph Stiglitz, "Ébola y desigualdad"

- b) http://www.who.int/csr/disease/ebola/en/

- c) Visit these websites:
http://www.bbc.com/news/world-africa-28755033
http://www.rtve.es/noticias/crisis-ebola/
http://www.who.int/csr/disease/ebola/en/

You can also find out more about the issue in the media and electronic newspapers.

The following links may be helpful:

a) Médecins sans Frontières:

http://ecampus.msf.org/moodlemsf/mod/page/view.php?id=22246

b) Website on Ebola Anthropology:

http://www.ebola-anthropology.net/

2. Taking into account the information sources and discussions held in the lecture and seminar room, write an essay (maximum length: 2000 words) containing the following items:

a) Origins and development of Ebola. Consider its epidemiological and geographical extension.
b) Discuss the local, national and international reaction.
c) Discuss the reaction of civil society. What is the role of governments and non-governmental organizations (NGOs)? Should WHO be more active in global health problems, by means of international health staff acting in the field?
d) What impact has Ebola had on affected countries in Western-Central Africa?
e) What impact has Ebola on Western/technologically developed countries?
f) Include any other issues or comments you consider relevant. Try to contribute original arguments.

STUDENT'S NAME:

PRACTICAL ACTIVITY 5

Health industries: patents, pharmaceuticals and the right to health

Date of the seminar: 13th & 21st March
Deadline: 26th March
Extension: 1200-1500 words

The documentary 'India, the pharmacy of the world' was produced by the NGO Farmamundi. The documentary uses the example of *Imatinib (Gleevec)*, a medication used to treat some types of cancer. It explains why India has become one of the main producers of generic medicines and its determination to support affordable medicines. The documentary pays attention to a legal and social process of the so-called 'Gleevec case', in which a patent application for this drug made by Novartis (one of the main pharmaceutical companies) was rejected.

The documentary is available online: Documentary: 'India, the pharmacy of the world' (2013): http://www.farmaceuticosmundi.org/farmamundi/index.php?opcion=noticias&noticia=913

A related article was published by *The Guardian* in January 2016: https://www.theguardian.com/society/2016/jan/26/big-pharmas-worst-nightmare

Some interesting documentaries are:

- "Sobremedicados" (Salvados, La Sexta, 07/04/2013): https://www.youtube.com/watch?v=TJoULVdTyzM
- "Adictos a los medicamentos" (El Punto de mira, Cuatro, T01, Capítulo 6): http://www.mitele.es/programas-tv/en-el-punto-de-mira/57cdb42ec815da3c1d8b4587/player

Your task will consist of writing an essay about this topic. In order to do so, you can take into account the documents mentioned above, but other sources can also be considered, as well as the points mentioned in the debate. Write a short summary, analyze the situation of generics and multinationals and write your own comments on the topic.

Here are some questions to give you some ideas:

- What do we understand by the words "trust" and "efficacy"?
- What is the role of the media? Bad advertisement of generics? Support for multinationals? You could try to find articles about the Novartis case that were published in different newspapers and study their point of view, their sources, etc. You could also look for other similar examples.

- Does legislation protect big companies?
- Why is it the case that people still don’t trust generics? What is the role of doctors?
- What would had happened if Novartis had won?

NAME OF THE STUDENT:

PRACTICAL ACTIVITY 6

HEALTH AND SOCIAL INEQUALITIES: CIEs, IMMIGRANTS AND EXCLUSION

Date of the seminar: 28st & 29th March
Deadline: 10th April

Maximum extension: 1000 words

You are going to watch the documentary: 'La Puerta Azul' (Valencia, 2015), which analyzes the real situation of CIEs (Centros de Internamiento de Extranjeros), focusing on the Valencian one, placed in Zapadores. This documentary includes the point of view of those who supported its creation and those who want these centers to be closed, besides from the testimony of the most damaged ones, the immigrants.

Information sources:

- You can find the documentary online:

https://www.youtube.com/watch?v=hgzcX81-EtQ

- Read the recent publication about CIEs:

http://elpais.com/agr/cies_la_reforma_pendiente/a/?rel=mas

- You can listen to an interview to the author:

http://www.rtve.es/alacarta/audios/sin-fronteras/sin-fronteras-puerta-azul-documental-destapa-realidad-centros-internamientos-inmigrantes/3086424/

After working out the sources you need to analyze the content of the documentary and analyze the following questions including some of the points also tackled in the sources:

1. **Write an abstract of the content of the documentary (no more than 10 lines)**
2. **Try to summarize the points in favour of CIEs and the negative consequences**
3. **Personal assessment about the argument**