# Improving access to essential medicines: lessons learnt



**Dr Ornella Lincetto, MCA Department, WHO** Rome, 5 April 2018

# **WHO** Vision

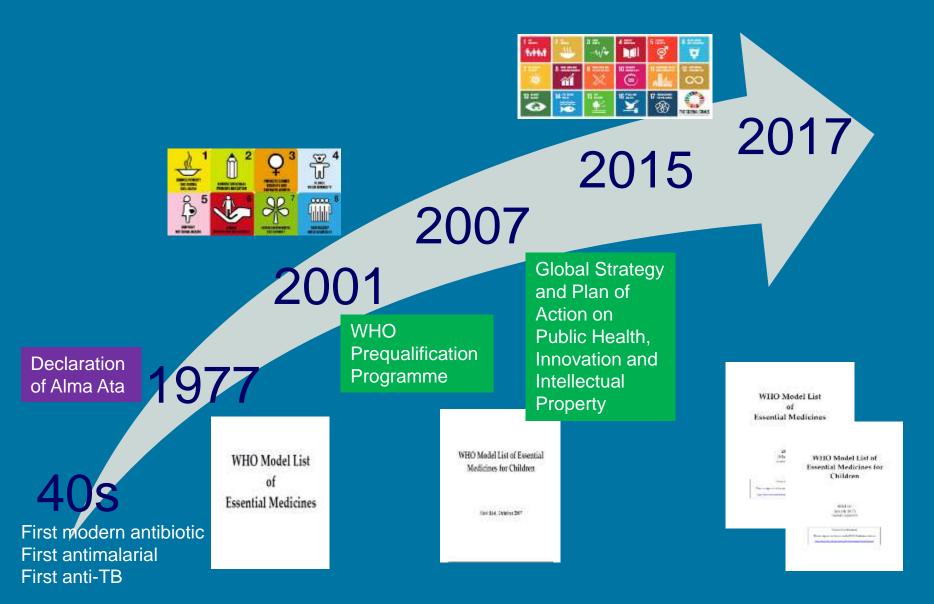


A world where every child, man and woman has access to the quality essential medicines, vaccines and other health products they need to lead a healthy and productive life



# The evolution of WHO programs to improve access to essential medicines

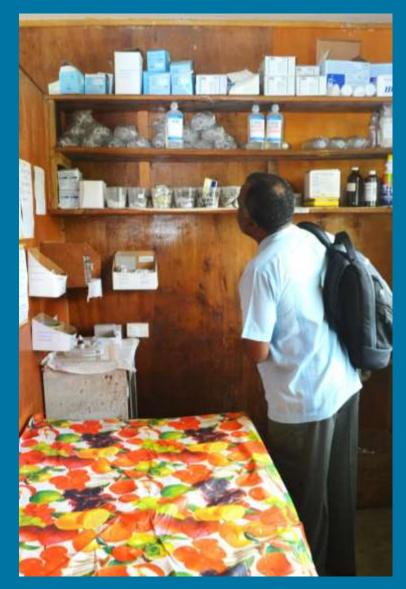




# The problem

- 2 billion people with no access to essential medicines
- Substantial economic impact of pharmaceuticals
- Specificities related to different pathologies
- Variability of price
- Irrational use of drugs and poor drug quality





# **Availability of essential medicines**

World Health Organization

Median availability of selected generic medicines in public and private health facilities, 2007-2013



**Source:** Surveys using WHO/HAI standard methodology conducted between 2001 and 2012 (available at: http://www.haiweb.org/medicineprices/). Countries are classified into income groups using World Bank list of economies (July 2012).

# Model Essential Medicines Lists: Prioritising medicines for health systems

- The Model List a guide for developing national essential medicines lists
- Concept of essential medicines to promote health equity
- The 20th WHO EML and 6th WHO EMLc, March 2017



World Health

WHO Model List of Essential Medicine

> 20th List (March 2017)

WHO Model List of Essential Medicines for Children

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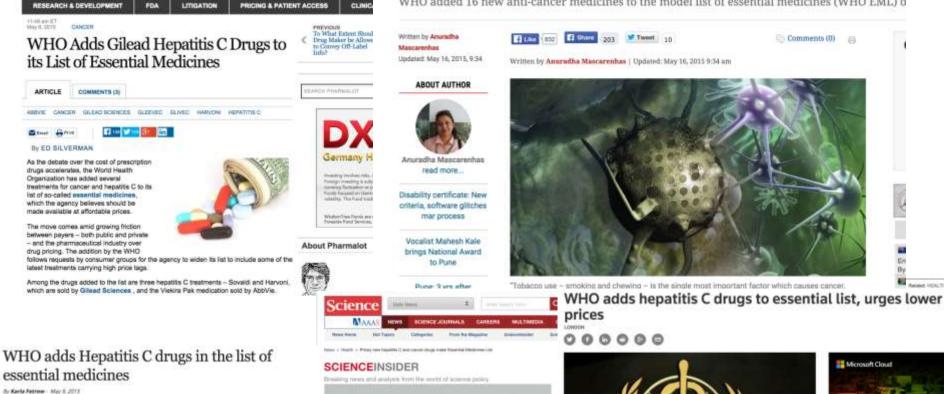
#### The Indian EXPRESS

Comments (0)

Home - Lifestyle - Health - 'Cancer treatment ain't just for the rich'

## 'Cancer treatment ain't just for the rich'

WHO added 16 new anti-cancer medicines to the model list of essential medicines (WHO EML) o



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NEVER Do This

WHO - The world health organization added an updated list of essential medicines that should be included in new treatment options. For the first time, it added hepatitis C drug in this list.



#### Pricey new hepatitis C and cancer drugs make Essential Medicines List

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Second aspendixe new drugs that heat hepatitie C and some common cancers appear on the latest Essential Medicania List (EML) published by the World Health Organization (WHO). An expert committee every 2 years askeds readicines for the kit based on scientific evidence that the drugs work and are asle and cost effective. The year's tot, released it May,



The Work: Health Dispersionless (WHC) says is percent at the entrance of the leastsporters in Density, January JS, 2010

The World Health Organization has added new curative treatments for hepatitis C to its. essential medicines list, but the U.N. agency sald prices needed to fall to make them accessible to patients in poorer countries.

The treatment of hispatite C, which affects about 150 million people globally and kills around half a million each year, has been transformed by the entirel of new drugs, such as Gliesd's Sovaid.

These products can cure hepalitis C but are out of reach at Western prices to patients in



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ENDING ON REUTERS





# EML 2017 – major changes/updates



- Antibiotic comprehensive review
  - 3 tiered categorisation: ACCESS, WATCH and RESERVE
  - 23 syndromes reviewed: first and second choice
- Cancer: 8 medicines, 2 approvals
- HIV: dolutegravir, PreP
- HepC: sofosbuvir + velpatasivir (pangenotypic)
- Contraception: ulipristal and MPA

# **EML AWaRe categorization**



#### ACCESS GROUP (29 antibiotics)

First and second choice antibiotics for the empiric treatment of most common/relevant infectious syndromes (21 syndromes).

First choices are usually narrow spectrum agents with positive benefit-to-risk ratios, and low resistance potential, whereas second choices are generally broader spectrum antibiotics with higher resistance potential, or less favorable benefit-to-risk ratios.

#### WATCH GROUP (7 antibiotic classes)

Antibiotics with higher resistance potential whose use as first and second choice treatment should be limited to a small number of syndromes or patient groups.

These medicines should be prioritized as key targets of stewardship programs and monitoring.

### **RESERVE GROUP** (8 antibiotics or classes)

Antibiotics to be used mainly as 'last resort' treatment options that could be protected and prioritized as key targets of high-intensity stewardship programs.

#### ACCESS GROUP

Amikacin	Cefalexin	Clarithromycin*	Nitrofurantoin
Amoxicillin	Cefazolin	Clindamycin	Phenoxymethylpeni cillin
Amoxicillin + clavulanic acid	Cefixime*	Cloxacillin	Piperacillin + tazobactam*
Ampicillin	Cefotaxime*	Doxycycline	Procaine benzyl penicillin
Azithromycin*	Ceftriaxone*	Gentamicin	Spectinomycin
Benzathine benzylpenicillin	Chloramphenicol	Meropenem*	Sulfamethoxazole + trimethoprim
Benzylpenicillin	Ciprofloxacin*	Metronidazole	Vancomycin*

### WATCH GROUP

Quinolones and fluoroquinolones (e.g. ciprofloxacin, levofloxacin, moxifloxacin, norfloxacin

3rd-generation cephalosporins (with or without beta-lactamase inhibitor, e.g. cefixime, ceftriaxone, cefotaxime, ceftazidime)

Macrolides (e.g. azithromycin, clarithromycin, erythromycin)

Glycopeptides (e.g. teicoplanin, vancomycin)

Anti-pseudomonal penicillins with beta-lactamase inhibitor (e.g. piperacillin + tazobactam)

Carbapenems (e.g. meropenem, imipenem + cilastatin) and Penems (e.g. faropenem)

#### **RESERVE GROUP**

#### Aztreonam 4th generation cephalosporins (e.g.

cefepime) Fosfomycin (IV) Polymyxins (e.g. polymyxin B, colistin) Daptomycin Sth generation cephalosporins (e.g. ceftaroline) Oxazolidinones (e.g. linezolid) Tigecyline

# **Proper use of essential medicines**



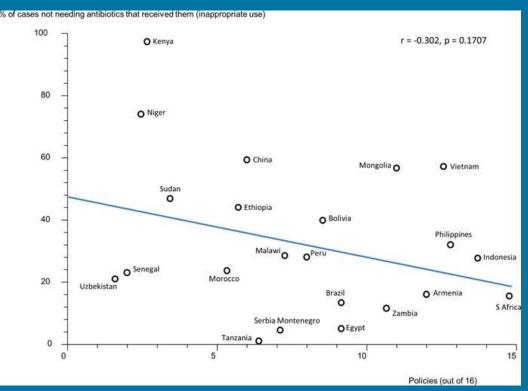
- Improves patient safety
- Limits unnecessary medical spending
- **Reduces antimicrobial resistance**
- WHO Model Formulary
- WHO Model Formulary for Children



# WHO Essential Medicines policy implementation reduces inappropriate antiobiotics use



Correlation between the number of implemented policies (out of 16) and the percentage of patients not needing antibiotics who received them. Correlation coefficient (r) = -0.302, p = 0.1707. Each data point (circle) represents a country.



Source: The impact of WHO Essential Medicines Policies on inappropriate Use of Antibiotics. K A Holloway et al. PLOS ONE | DOI:10.1371/journal.pone.0152020 March 22, 2016

# **WHO Prequalification of medicines**



- A service provided by WHO to assess quality, safety and efficacy
- 2001 Focus on medicines for HIV/AIDS, tuberculosis and malaria
- 2006 Reproductive health medicines and products
- 2012 WHO List of Prequalified Medicinal Products: 316 medicines for priority diseases
- Highly successfull to increase access to medicines and build capacity in countries



# Keeping substandard and falsified products out of the supply chain



- Products that enjoy lucrative commercial markets or are in short supply are particularly susceptible to falsification
- They cause harm
- WHO Global Surveillance and Monitoring System for Substandard and Falsified Medicines launched in Africa in 2013
- Global Medical Product Alert

# The power of partnership



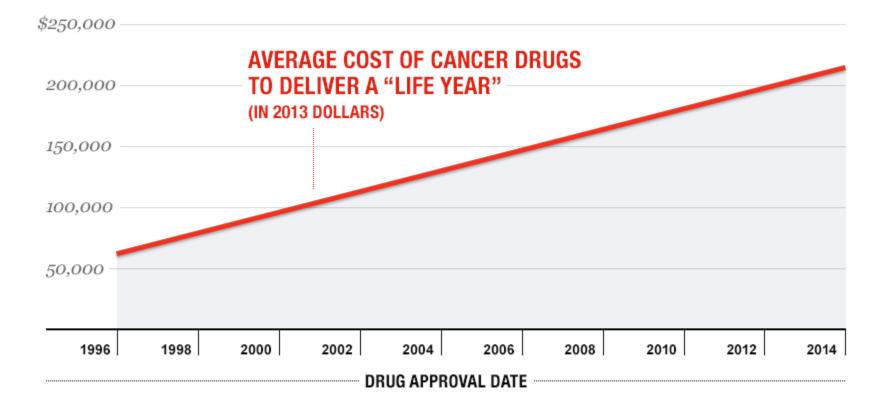
- To promote R&D for diseases that affect the poor
- Meningitis Vaccine Project, coordinated by WHO and PATH
- Coalition for Epidemic Preparedness Innovations
- Global Antibiotic Research and Development Partnership

# **Improving industry behaviours**



- Global Strategy and Plan of Action on Public Health, Innovation and Intellectual Property, 2008
- Access to Medicine Index, 2008
- Medicines Patent Pool, 2010





SOURCE: DAVID H. HOWARD, PETER B. BACH, ERNST R. BERNDT, AND RENA M. CONTI, "PRICING IN THE MARKET FOR ANTICANCER DRUGS," JOURNAL OF ECONOMIC PERSPECTIVES, 2015

Bach, Fortune Sept. 2015

# A model for fair pricing



- Prices so high they are unaffordable
- Prices so low they drive highquality manufactures out of the market, leading to drug shortages
- To reach UHC a model for fair pricing is needed to make essential medicines available in sustainable quantities at affordable prices



## Conclusions



- Access to essential medicines depends on complexities related to cost of medicines, specificities related to patologies and variability in price dynamics
- Policies aiming at UHC increase access to essential medicines and have the potential of eliminating deadly diseases
- WHO is committed to help Member States to achieve universal access to safe and quality assured medicines by promoting appropriate use of essential medicines, strengthening regulations, and building partnership for responsible industry and fair pricing



"No one should have to choose between death and financial hardship. No one should have to choose between buying medicine and buying food."

Tedros Adhanom Ghebreyesus