



UNIVERSITY OF
GOTHENBURG

PHILOSOPHY, LINGUISTICS
& THEORY OF SCIENCE
FLOV.GU.SE

CENTRE FOR ETHICS, LAW
AND MENTAL HEALTH
CELAM.GU.SE

CENTRE FOR ANTIBIOTIC
RESISTANCE RESEARCH
CARE.GU.SE

GOTHENBURG
RESPONSIBILITY PROJECT
GRP.GU.SE

FORTE:

Forskningsrådet för
hälsa, arbetsliv och välfärd



Vetenskapsrådet

HOW DRUG RESISTANCE CHALLENGES MEDICAL ETHICS

Ethikforum "public health ethics", Ludwig-Maximilians Universität München, February 6, 2018

CHRISTIAN MUNTHE, PROFESSOR OF PRACTICAL PHILOSOPHY. CONTACT: CHRISTIAN.MUNTHE@GU.SE



UNIVERSITY OF
GOTHENBURG

PHILOSOPHY, LINGUISTICS
& THEORY OF SCIENCE
FLOV.GU.SE

CENTRE FOR ETHICS, LAW
AND MENTAL HEALTH
CELAM.GU.SE

CENTRE FOR ANTIBIOTIC
RESISTANCE RESEARCH
CARE.GU.SE

GOTHENBURG
RESPONSIBILITY PROJECT
GRP.GU.SE

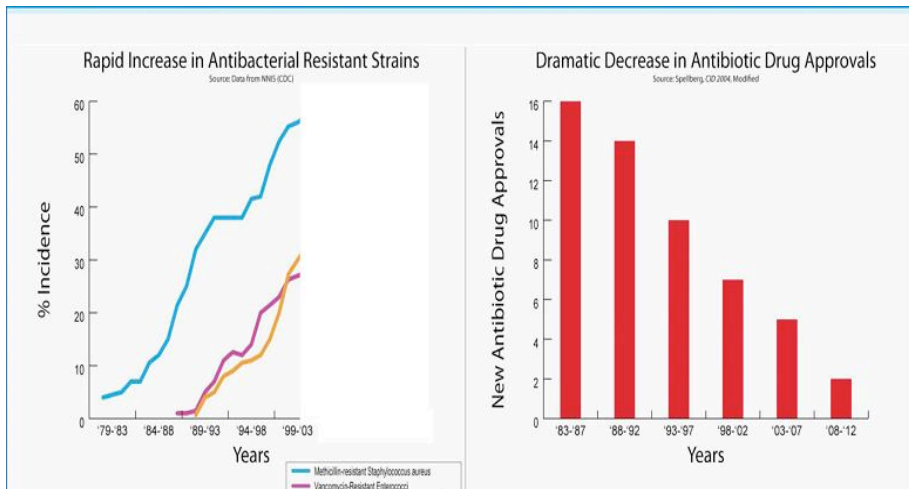
FORTE:

Forskningsrådet för
hälsa, arbetsliv och välfärd



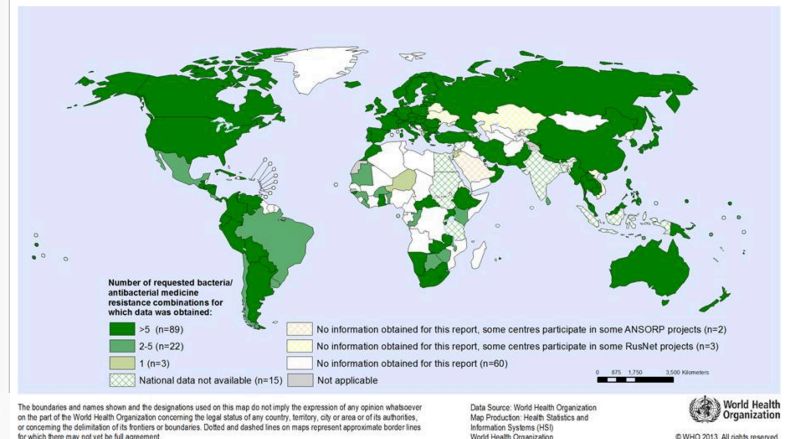
Vetenskapsrådet

Drug resistance increases rapidly, while infection drug access and innovation is stalling



Source: Antibiotic Resistance Fact Sheet of the Infectious Disease Society <http://www.idsociety.org/>

Available National Data* on Resistance for Nine Selected Bacteria/Antibacterial Drug Combinations, 2013



*National data means data obtained from official sources, but not that data necessarily are representative for the population or country as a whole

2017: bacteria resistant to "last resort" antibiotics confirmed.

Expanded global surveillance confirms the trend: **Global antimicrobial resistance surveillance system (GLASS) report (WHO, 2018)**

The drug resistance *challenge*

- **Modern welfare societies and health systems rests on a backbone of stable public health**, where control of infections is a central aspect, and **antibiotics is central for this control**
- **Many modern medical procedures assume the use of antibiotics:** surgery, neonatal care, cancer care, transplantation ...
- **Pathogens naturally develop resistance** to drugs the more they are used → **antibiotics become ineffective**
- **Welfare societies, health systems and modern medicine threatened to be undermined** by the same practice that upholds them





UNIVERSITY OF
GOTHENBURG

PHILOSOPHY, LINGUISTICS
& THEORY OF SCIENCE
FLOV.GU.SE

CENTRE FOR ETHICS, LAW
AND MENTAL HEALTH
CELAM.GU.SE

CENTRE FOR ANTIBIOTIC
RESISTANCE RESEARCH
CARE.GU.SE

GOTHENBURG
RESPONSIBILITY PROJECT
GRP.GU.SE

FORTE:

Forskningsrådet för
hälsa, arbetsliv och välfärd



What can be done about it?

1. **Speeding up innovation:** more new drug formulas are needed and more quicker.
 2. **Controlling consumption:** "antibiotic stewardship", control, restrict and streamline/rationalize use.
 3. **Controlling resistant infections:** carrier & infection screening and surveillance + restrictive measures.
 4. **Fighting environmental drug emission:** make production lines and conditions transparent, include environmental requirements, e.g., in procurement processes.
- Many potential internal goal conflicts (eg. between 1 & 2, between 1 and 4, and between 2 & 3). Today's focus is on how medical ethics may conflict w. these goals.



"What if we don't change at all ...
and something magical just happens?"

Very relevant area,
but not
immediately
enacted within
healthcare



UNIVERSITY OF
GOTHENBURG

PHILOSOPHY, LINGUISTICS
& THEORY OF SCIENCE
FLOV.GU.SE

CENTRE FOR ETHICS, LAW
AND MENTAL HEALTH
CELAM.GU.SE

CENTRE FOR ANTIBIOTIC
RESISTANCE RESEARCH
CARE.GU.SE

GOTHENBURG
RESPONSIBILITY PROJECT
GRP.GU.SE

FORTE:

Forskningsrådet för
hälsa, arbetsliv och välfärd



Traditional (professional) medical ethics

- **Patient focus:** help individual people according to (medical) need, and respect them as persons
- **Professional responsibility:** treatments need to be well motivated from a risk-benefit-uncertainty and research perspective
- **Clinical research ethics:** protect and respect patients and participants in clinical research
- **Professional integrity:** in conflicts between individual patient needs and competing interests (scientific, societal, monetary, etc.), a doctor should prioritize the former. → **the importance of patient trust**



WORLD
MEDICAL
ASSOCIATION

WHAT WE DO

POLICY

PUBLICATIONS

NEWS & PRESS

WHO WE ARE

What We Do / Medical Ethics / Declaration of Geneva

DECLARATION OF GENEVA

The "Modern Hippocratic Oath"



WORLD
MEDICAL
ASSOCIATION

WHAT WE DO

POLICY

PUBLICATIONS

NEWS & PRESS

WHO WE ARE

What We Do / Medical Ethics / Declaration of Helsinki

DECLARATION OF HELSINKI

Medical Research Involving Human Subjects



UNIVERSITY OF
GOTHENBURG

PHILOSOPHY, LINGUISTICS
& THEORY OF SCIENCE
FLOV.GU.SE

CENTRE FOR ETHICS, LAW
AND MENTAL HEALTH
CELAM.GU.SE

CENTRE FOR ANTIBIOTIC
RESISTANCE RESEARCH
CARE.GU.SE

GOTHENBURG
RESPONSIBILITY PROJECT
GRP.GU.SE

FORTE:

Forskningsrådet för
hälsa, arbetsliv och välfärd



Speeding up innovation

- Creating incentives for researchers and drug companies
- Smoothing the pathways from idea to product
- **"Cutting red tape": relaxing regulatory requirements, e.g., regarding effect, safety, etc.**
- The tape is there for a reason ...
- Cutting it means **accepting less effective, more hazardous and less well researched experimental treatments to be introduced to patients.**
- But if the resistance challenge proceeds unchecked, there will in the future be **much less** effective treatments, and other treatments will be **even more hazardous.**
- Should *present* identified patients be exposed to increased risk of harm for the sake of *future* as yet unidentified, maybe not even existing, patients?



?



UNIVERSITY OF
GOTHENBURG

PHILOSOPHY, LINGUISTICS
& THEORY OF SCIENCE
FLOV.GU.SE

CENTRE FOR ETHICS, LAW
AND MENTAL HEALTH
CELAM.GU.SE

CENTRE FOR ANTIBIOTIC
RESISTANCE RESEARCH
CARE.GU.SE

GOTHENBURG
RESPONSIBILITY PROJECT
GRP.GU.SE

FORTE!

Forskningsrådet för
hälsa, arbetsliv och välfärd



Vetenskapsrådet

Controlling antibiotic consumption

- More restrictive prescription practice
- Install mandatory prescription where there is none
- Block online access to drugs
- Unnecessary use of antibiotics (which is far too common) is harmful for the patient: exposes her to increased risk of resistant infection
- Uncontrolled drug consumption is a public health hazard
- **But:** patient interest may be dictated by other considerations than biomedical ones, e.g. keeping one's job
- **And:** Restricting the most precious antibiotics will necessarily mean accepting higher risk of patient harm
- **Is it acceptable for doctors to withhold a treatment that is in a patient's best interest for the sake of contributing to the preservation of access to this treatment for other patients in the future?**



Figure 1. When Kids Get Sick: Concerns Among Parents With Kids in Child Care





UNIVERSITY OF
GOTHENBURG

PHILOSOPHY, LINGUISTICS
& THEORY OF SCIENCE
FLOV.GU.SE

CENTRE FOR ETHICS, LAW
AND MENTAL HEALTH
CELAM.GU.SE

CENTRE FOR ANTIBIOTIC
RESISTANCE RESEARCH
CARE.GU.SE

GOTHENBURG
RESPONSIBILITY PROJECT
GRP.GU.SE

FORTE:

Forskningsrådet för
hälsa, arbetsliv och välfärd



Vetenskapsrådet

Controlling drug resistant infections

- Screening (all?) patients for carriership of resistant *cultures* (most of which never lead to infection)
- Screening (all?) patients for resistant *infections*
- **Restrictive interventions** when some risk level X is detected
- E.g. restricting access to hospital, isolation, quarantine, lifestyle restrictions, mandatory health reporting, etc.
- Brings well-known risks of screening: needless fear, false security, stigmatization, discrimination, social exclusion, needless incarceration, brutality, etc.
- **Is it defensible to expose a large number of patients to these procedures and risks when they have no benefit from it, and pose no acute public health threat (like in an epidemic)?**
- **Risk of backlash: undermining the trust in doctors and healthcare**



General concerns

- Can a professional medical ethics that would block measures necessary to preserve the effectiveness of health care be defended?
- How and to what extent can professional medical ethics be accommodated to accept the implications of drug resistance management interventions?
- The conflict between individual and public health has always been present, but the drug resistance challenge moves it **inside** the very institution of healthcare and practice of medicine.
- Nevertheless: the role of professional medical ethics to preserve patient trust must be considered also from a public health standpoint.



Tacit conclusions (work in progress)

- Professional medical ethics should acknowledge an additional **principle of sustainability** (cf. Angus Dawson's talk):
- What is done to help one patient must not be part of a practice that would undermine future access to the resources that facilitates the helping of patients in the first place (such as effective drugs).
- Reason 1: Universalize the professional medical ethical ethos across generations: future patients must not be robbed of the possibility to be helped (at least) as well as present patients
- Reason 2: Avoiding "levelling down" / "money pump" logic: practising a sound ethics should never systematically undermine our future ability of doing good
- **But:** Managing the sustainability of medical practice should not be a main responsibility of individual health professionals.
- **However:** Individual health professionals should accept institutional sustainability reform also in cases when individual patients may not be optimally benefitted



UNIVERSITY OF
GOTHENBURG

PHILOSOPHY, LINGUISTICS
& THEORY OF SCIENCE
FLOV.GU.SE

CENTRE FOR ETHICS, LAW
AND MENTAL HEALTH
CELAM.GU.SE

CENTRE FOR ANTIBIOTIC
RESISTANCE RESEARCH
CARE.GU.SE

GOTHENBURG
RESPONSIBILITY PROJECT
GRP.GU.SE

FORTE:

Forskningsrådet för
hälsa, arbetsliv och välfärd



Vetenskapsrådet

Thank You!

Visit CARE: <http://care.gu.se>

Watch videos on ethics and drug resistance: <https://care.gu.se/all-ethics-and-value-symposium-talks>

More info about the global fight against drug resistance:
<http://www.who.int/antimicrobial-resistance/en/>

Latest report on the global surveillance of drug resistance:
<http://www.who.int/glass/resources/publications/early-implementation-report/en/>

Readings:

Littmann, J., Viens, A.M. (2015). The Ethical Significance of Antimicrobial Resistance. *Public Health Ethics* 8(3): 209–224

Jamrozik E., Selgelid M.J. (eds) (2018). *Ethics and Drug-Resistant Infections: Collective Responsibility for Global Public Health*. Cham, Switzerland: Springer, in press.

More info about me:

https://www.gu.se/english/about_the_university/staff/?userId=xmuntc