

Dr En@que Castro-Sánchez

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Cecturer in Adult Nursing & Research Lead (Centre for Health Services Research), City, University of London

Infection Prevention and Control Clinical Till

Beclaration of interests

- Views are mine and not necessarily of my employers or affiliated organisations:

 City, University of London,

 NHS England/Improvement,

 Imperial College London (hon) good

 National Institute for Health Research,

 World Health Organization

 Primary Care Internation

 University

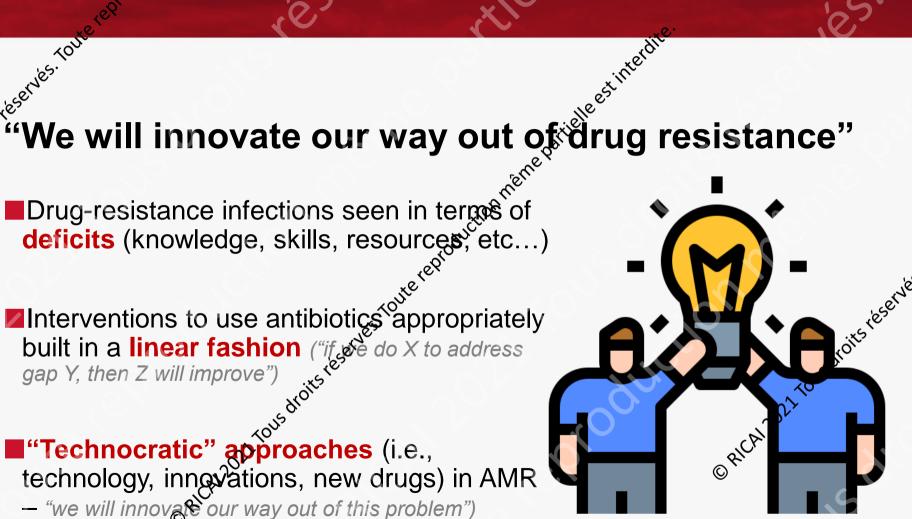
 University

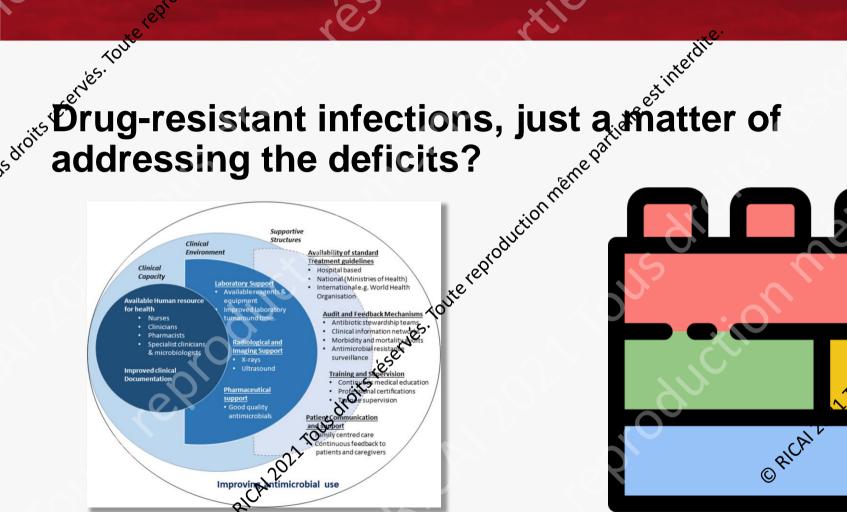
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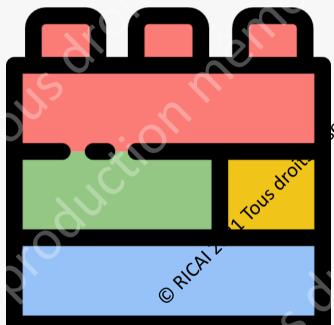
 - ■Universitat Oberta de Catalunya
 - Funded by Wellcome Trust, NIHR, AHRC, ESRC, GCRF, BRC, Florence Nightingale Foundation

Interventions to use antibiotics appropriately built in a linear fashion ("if we do X to address gap Y, then Z will improve")

■"Technocratic" approaches (i.e., technology, innovations, new drugs) in AMR — "we will innovate our way out of this problem")



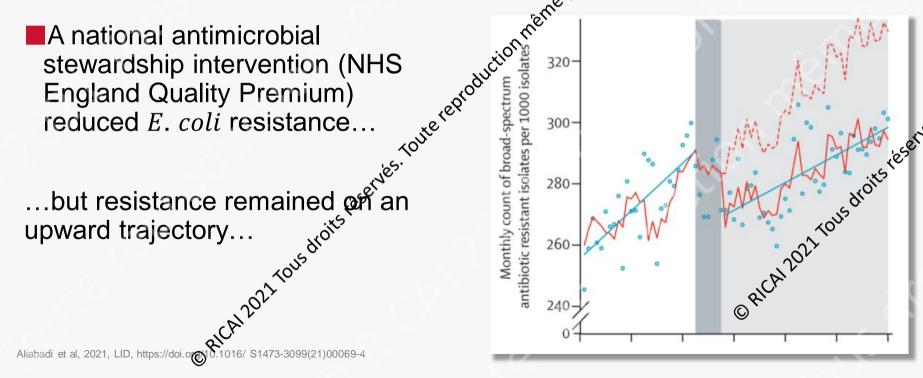




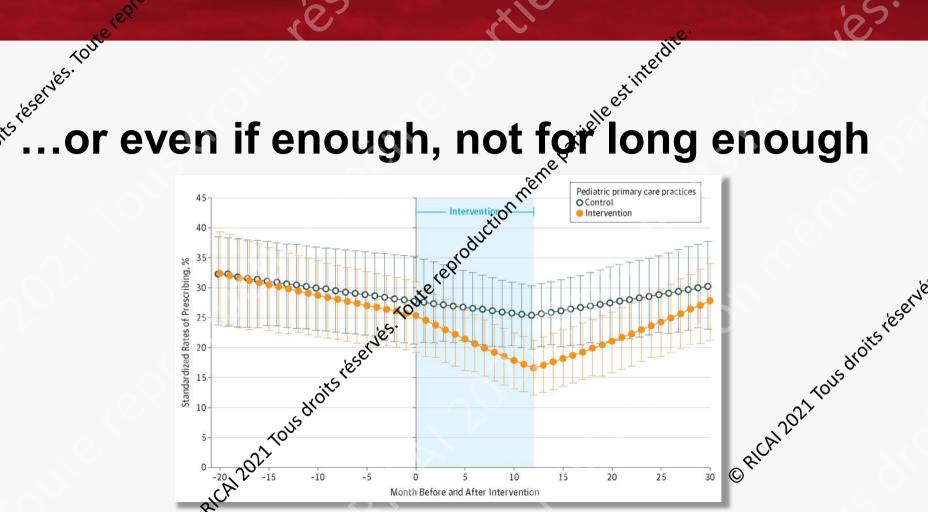
Maina M et al, 2021, BMJ Global Heath;6

Stroits But addressing one deficit may intended the enough...

A national antimicrobial



, Judits réservés. Toute redic



Education seems to make prescribers more knowledgeable but not more confident



Undergrad med students report gaps in skills, confidence, optimal behaviours

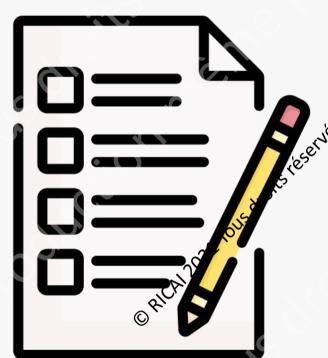
Trainee doctors report gaps in skills, confidence, optimal behaviours

ORICAL 201

Guidelines may exist. But following them may be a different matter...

Diagnosis	2011		2019		P-value
	According to guidelines		According to guidelines		(
	N	%	According to guidelines N 16 23 27 29 58 385 droits teserves	%	'sb _l
Acute pharyngitis	16	32.0	16	26.2	% .504
Acute sinusitis	14	28.0	23	31.7	0.281
Acute middle ear infection	10	20.0	27 e.We	44.3	0.007
Acute bronchitis	13	26.0	29 (650	47.5	0.134
Pneumonia	42	84.0	58 WOILS	95.1	0.052
Acute cystitis	15	30.0	3350	63.9	<0.001
Acute pyelonephritis	18	36/0	29	47.5	0.221
Total	128	34.6	221	51.8	<0.001

Radošević Quadranti et al, 2021, Farety Practice, 38(3):259-264



Decision-support & diagnostics? Often undecided... Strategies must align with

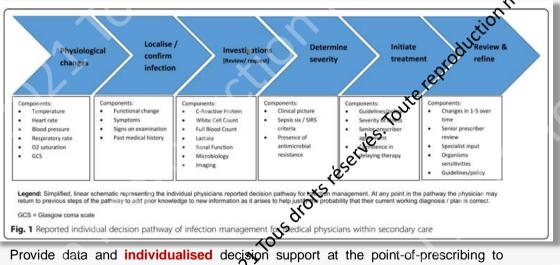


The state of the second experience of the seco clinical roles and experience-

- Ambiguities— when to use Ampact

 Text— pro-

Drug-resistant infections, imagined as a linear problem?



Provide data and individualised decision support at the point-of-prescribing to promote better decisions at each step of the physicians' decision-making pathway



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roits reserves. Toute red A hidden, messy, complex and unspoken world

ter education for rn managing scrations of suspected infections of suspected infections of suspected infections.

Better documentation in the stress of t Need better education for patients on managing their expectations of Senior Surgeons given feedback on infection surgical prophylaxis Targeting therapy from admission can help suspected infection Engage with nurses & illneee Need this for SSI surveillance MSW can support? atomes in ICU. This needs with the financial constraints posed later due to pharmacists I ook at work flow in theatres e communicated to wider Identify 'concrete outcomes' prolonged therapy Implementation of better for interventions infection control practice Engage with MSW in AMS Formal IPC training for all Pharmacists to follow up members of the team No indication documented Nurse & pharmacist missing from AMS Difficulties in 'shifting' patients Missed opportunities in Data only fed back to seniors taking culture and sensitivity by email Documentation trail often missing for The decisions in ICU led by before initiating antibiotics at not properly documented Heavyworkload in theatre Carer presence - IPC risk transferred patients ICU consultants - surgeons Source control key & admission. Once funds run out patients transferred to The expectation of Poor history and leads to breaks in surgical not engaged with infections of difficult to implement government hospital patients for therapy can procedure with multiple Culture & sensitivity surveillance their patients? Therapy adjusted based on financial means of drive practice oversubscribed natients leading to early discharge Lack of documentation- patient details, transfer notes, indication of antibiotics etc. Outpatient Other Hospital Operating theatre Intensive Care Unit Surgical Wards Other Hospital Outpatient Carers/patient Anaesthetists ICU Consultants Carers/patients Carers/patients Dispensers Surgeons Surgeons Surgeons Surgeons Surgeons Nurses? Nurses Operating room nurses Nurses **Pharmacists** MSW There is a perception that documentation is 'extra work' Reluctance to be discharged – families to to be seen to do the right thing Often the carer is the best There are reported The role of ICU consultants -Hierarchies prevail, seniors source of information of the inconsistencies in ownership of question of ownership of lead decision making care patient has received the surgical prophylaxis infection care in ICU impacts de-escalation administration between MSW is a link person in patient Patient and staff preference anaesthetists and surgeons care - role in counselling for IV route for antibiotics Pharmacists role limited to ICU Communication largely indocumented Surgeons outcome driven MSW - medical social worker

droits reserves. Toute red

A hidden, messy, contriblex and unspoken world Structures Antibiotic use emergent the economic and political

Antibiotic use emergent of economic and political priorities—such as productivity—reflected in quick fixes to physical and social dructures

and the second s

Networks

Antibotic use written into the flows of materials, information, algorithms and imperatives that make up global health and development

"The guideline therefore recommends that prescribers take time to discuss with patients the likely nature of their condition, the benefits and harms of mediate antimicral." immediate antimicrobial prescribing, alternative options such as watchful waiting and/or delayed preseribing and why prescribing an antimic robial may not be the best option for them"



But what is it that you expect citizens to do?

Awareness (n= 7/11)
Education (n= 7/11)
Behaviour (n=5/11)
Training (n= 2/14) 3 droits leserves. Toure

3 droits réservés. Toute

- Fix for care in fractured health systems

 Fix for productives Fix for productivity at local and global scales, for humans, animals and crops
- ■Fix for hygiene in sealings of minimised resources
- Fix for inequality driven by political, economic

Applying social science to AMR Micro level

Victorial Health Quick fix for care, productivity, hygiene and inequality: reframing the entrenched problem of antibiotic overuse

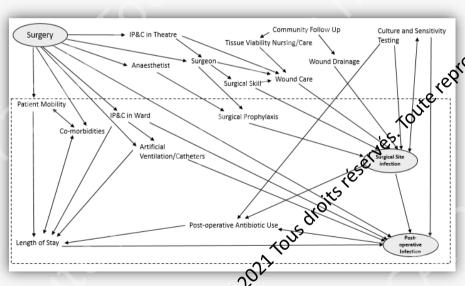
Laurie Denyer Wills, *Clare Chandler

T care in fracture.

Den**y中心性所定** BMJ Global Healtr 3019;4:e001590. doi:10.1136/ bmjgh-2019-001590

Shroits Applying social science to AMR: Meso level

"Artibiotic prescribing' as



Behaviour"- not linear, but complex, dynamic social process, influenced by many determinants

"Unwritten rules" influence antibiotes prescribing behaviours
 Clinical autonomy and the rarchies

within clinical peer specialties overrule policies and guidelines

Charani et al. Clin Microbiol Infect. 2017

Applying social science to AMR: Meso level

MAJOR ARTICLE

'Archibiotic prescribing' as

Behavior Change Strategies to Influence Antimicrobial Prescribing in Acute Care: A Systematic Review

Rachel Edwards, 1 Nick Sevdalis, 2 Banos Alexandrou. 3 Eleanor

Understanding the Determinants of Antimicrobial Prescribing Within Hospitals: The Role of "Prescribing Etiquette"

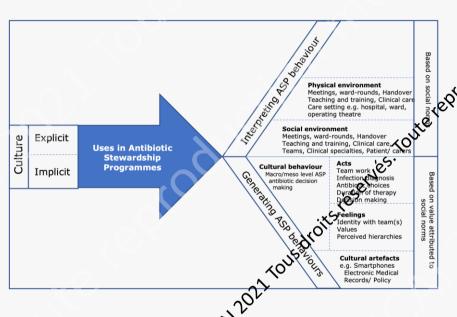
E. Charani, E. Castro-Sanchez, N. Sevdalis, 23 Y. Kyratsis, L. Drumright, N. Shah, and A. Holmes

Course to the complex of the complex

■'Unwritten rules' influence antibiotic prescribing behaviours

Clinical autonomy and toerarchies within clinical peer specialties overrule policies and guidelines

Charani et al, 2013, Clin Infect Dis 5



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C'Behaviour''- not linear, but complex,
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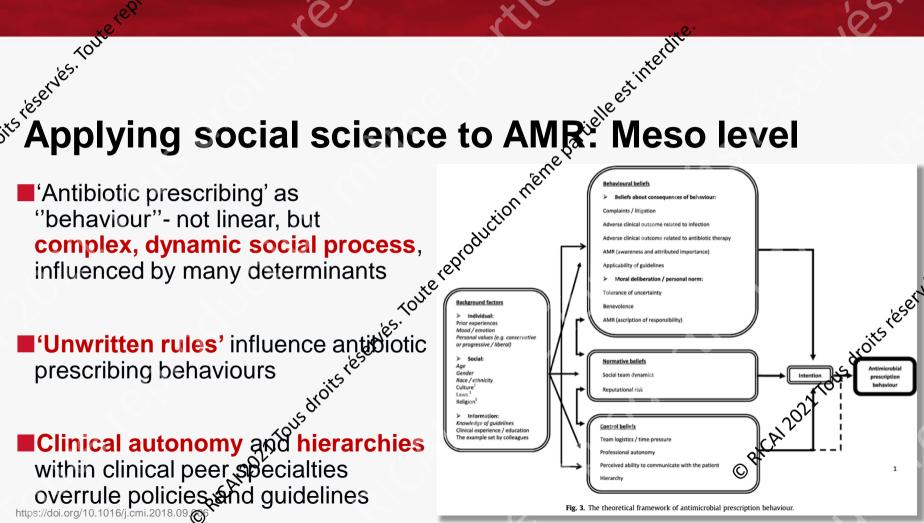
- ■'Unwritten rules' influence antibiotics' prescribing behaviours
- within clinical peer specialties overrule policies and guidelines

Charani et al, 2018, Clin Infect Dis

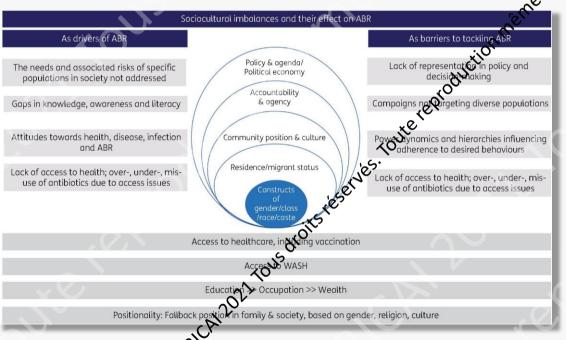
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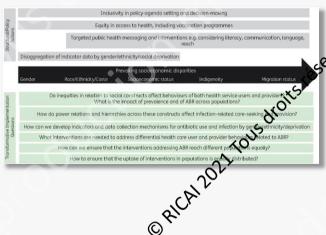
"Unwritten rules" influence antibiotic prescribing behaviours
 Clinical autonomy and hierarchies

within clinical peer specialties overrule policies and guidelines https://doi.org/10.1016/j.cmi.2018.09

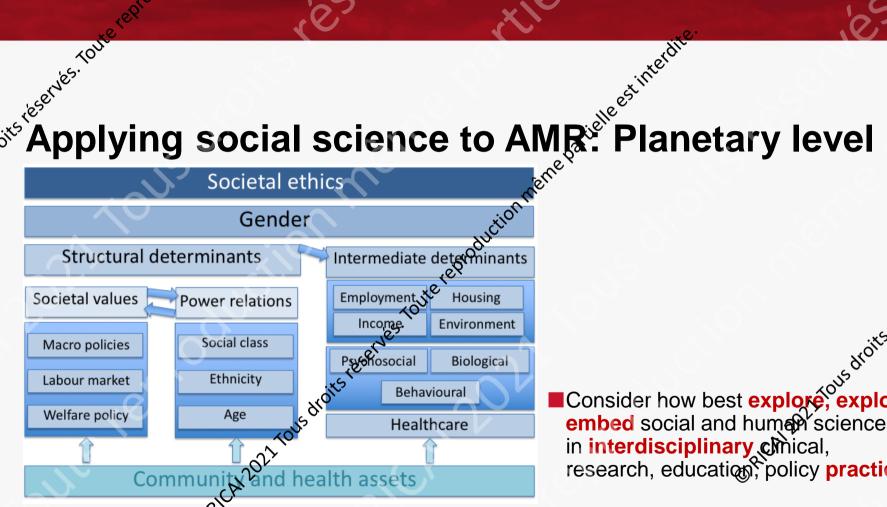


Stroits Applying social science to AMR Macro level





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■Consider how best explore, exploit, embed social and human science interdisciplinary clinical earch, education

Adapted from Padilla Bernáldez et al, Olic

The right social behavioural lenge for your clinical practice and researche



■ Political, economic, social, technological, environmental, legislative, industrial context to deliver tailored approaches

Cannot transplant interventions (high to gotte low income, hospital to care homes, one professional group to other...)

Foster engagement and ownership

LUNDI 13 & MARDI 14 DÉCEMBRE 2021

Place des Sciences Humaines et Sociales dans nos pratiques Lecture in Adult Nursing & Research Lead (Centre for Infection Prevention)

Dr Enrique Castro-Sánchez

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