Interdisciplinary research on antimicrobial resistance

driving the unknown route

Gloria Cristina Córdoba Currea MD-MPH, PH.D fellow

Department of General Practice University of Copenhagen

Interdisciplinary research & AMR workshop

2-3 March 2017



driving the unknown route













UC-CARE University of Copenhagen Research Centre for control of antibiotic resistance



http://uc-care.ku.dk/english/research/

UC-CARE University of Copenhagen Research Centre for control of antibiotic resistance

Transdisciplinary Researc	1	Multidisciplinary Research	Int	erdisciplinary Research
Collaboration in which exchanging information, altering discipline-specific approaches, sharing resources and integrating disciplines achieves a common scientific goal (Rosenfield 1992).		Researchers from a variety of disciplines work together at some point during a project, but have separate questions, separate conclusions, and disseminate in different journals.	the kno dis Allo info ano	earchers interact with goal of transferring wledge from one ipline to another. ws researchers to rm each other's work compare individual ings.

http://www.obesity-cancer.wustl.edu/en/About/What-Is-Transdisciplinary-Research

UC-CARE University of Copenhagen Research Centre for control of antibiotic resistance

Transdisciplinary Research	Multidisciplinary Resea	ch	Interdisciplinary Research
Collaboration in which exchanging information, altering discipline-specific approaches, sharing resources and integrating disciplines achieves a common scientific goal (Rosenfield 1992).	Researchers from a variety of disciplines we together at some point during a project, but ha separate questions, separate conclusions, a disseminate in different journals.	ve nd	Researchers interact with the goal of transferring knowledge from one discipline to another. Allows researchers to inform each other's work and compare individual findings.

http://www.obesity-cancer.wustl.edu/en/About/What-Is-Transdisciplinary-Research





General Practitioners



Veterinarians (companion animals)



Veterinarians (production animals)

Knowledge gaps





Cordoba et al. Pilot and Feasibility Studies (2015) 1:38 DOI 10.1186/s40814-015-0036-9



STUDY PROTOCOL

Open Access

Exploring the feasibility and synergistic value of the One Health approach in clinical research: protocol for a prospective observational study of diagnostic pathways in human and canine patients with suspected urinary tract infection

Gloria Cordoba 1* , Tina Møller Sørensen 2 , Anne Holm 1 , Charlotte Reinhard Bjørnvad 2 , Lars Bjerrum 1 and Lisbeth Rem Jessen 2

*Five common diagnostic tests that can be used in both humans and companion animals with suspected UTI. Nonetheless, some parameters and technical characteristics of the diagnostic tests are different.

*The interpretation of these tests can vary due to: a) differences in the prevalence of some microorganisms, b) urine collection technique, and c) cut-off point for significant bacteriuria on positive cultures.

*Challenges for common funding, thus development of the projects

*Challenges for common publication



*Similar use of diagnostic tools with the majority of patients having a urine culture performed as part of the diagnostic process

*Similar diagnostic error if the decision is only based in signs and symptoms

*Similar proportion of overtreatment ---- similar diagnostic uncertainty? Similar reaction to uncertainty??



General Practitioners' views on the acceptability of using quality indicators to reduce unnecessary prescription of antibiotics in patients with suspected Respiratory Tract Infections

Working group:

Gloria Córdoba, Ph.D fellow

Nieves Hernandez, Associate Professor

Sandi Oliveira, Associate Professor

Lidia Caballero, GP

Miguel Angel Suarez, GP

Monica Olinisky, GP

Marjukka Makela, Professor

Lars Bjerrum, Professor



UNIVERSITY OF COPENHAGEN



HOW



UNIVERSITY OF COPENHAGEN



CONCLUSION

- ✓ In general, there was a **positive** view towards the use of quality indicators as a tool to help GPs to reduce the unnecessary use of antibiotics.
- Applicability challenges arisen from health system barrier, GPs as a professional group, lack of diagnostic tools, the importance of the patient-doctor relationship and content validity of the indicator affects the acceptability for using the indicators.
- Inter-sectorial actions need to be taken in order to consider the use of quality indicators an effective tool to be implemented in General Practice within the South-American context.



Conclusion



Interdisciplinary research is challenging. Requires patient and willingness to understand the others mind set



....but it is worth trying to bring about innovative solutions to old problems



gloriac@sund.ku.dk