Non-pharmaceutical interventions for COVID control: *Filling the void in the absence of RCTs*

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IANPHI webinar
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Context

Wales - a Devolved Nation of the UK

- Population 3.1m
- Welsh Government established in 1999
- Health is a devolved function
- Budget for health and social services: £9.6bn in 21/22
- NHS Wales comprises
  - 7 Health Boards
  - Public Health Wales
  - Velindre NHS Trust
  - Welsh Ambulance Service NHS Trust

COVID Control: NPIs
Wales confirms first positive case of coronavirus (COVID-19)

The Chief Medical Officer, Dr Frank Atherton, has confirmed that a patient in Wales has tested positive for Coronavirus (COVID-19).

Dr Atherton said:

I can confirm that one patient in Wales has tested positive for coronavirus (COVID-19).

All appropriate measures to provide care for the individual and to reduce the risk of transmission to others are being taken.

I can also confirm that the patient had travelled back to Wales from Northern Italy, where the virus was contracted.

I’d like to take this opportunity to assure the public that Wales and the whole of the UK is well prepared for these types of incidents. Working with our partners in Wales and the UK, we have implemented our planned response, with robust infection control measures in place to protect the health of the public.

To protect patient confidentiality, no further details regarding the individual will be released.

28 Feb 2020

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Coronavirus pandemic

and yesterday we did identify the first case here in Wales.
COVID-19 Response
Policy and Strategic Response

- Establish Test, Trace and Protect system
- Implement testing and genomic sequencing
- Establish and implement NPIs according to a risk-assessed Alert Level
- Implement Vaccination Programme
- Introduce COVID-Passes
COVID-19 Response
Range of NPIs

• Social distancing
  o Local/National lockdown
  o Public gatherings
  o Household bubbles
  o Self-isolation
  o Shielding
  o Closure of non-essential businesses
  o School closure

• Face coverings
• Personal hygiene

• Testing
• Contact tracing
• Self-isolation
• Ventilation and filtration in high-risk premises
• Use of COVID-pass to reduce risk of social interactions
• Welfare benefits
COVID-19 Response
Making sense of the evidence-base

• Technical Advisory Group established by Welsh Government to assimilate scientific opinion to inform the response
• Investment in a Wales COVID-19 Evidence Centre (Cardiff University)
• Public Health Wales
Technical Advisory Group (TAG) Purpose

• To ensure that scientific and technical information and advice, is developed and interpreted to:
  • Provide timely access to the most up-to-date scientific and technical information related to the outbreak.
  • Support the commission and interpret data models, research outputs and measurements specific to Wales’s needs
  • Support a collegiate approach to science and technology advice and research
  • Provide advice and data to inform Welsh Government, NHS, Social Care and wider public sector policy and planning.
  • Communicate and share understanding of the virus with the public sector and the general public
Technical Advisory Group
Informing policy

• Informed Welsh Government decisions on the ‘21-day review’ process in the COVID Control Plan for Wales
COVID-19 Evidence Centre

Ambitions

• ‘good questions, answered quickly’

• Help ensure that health and wider needs are met

• Collaborate with other organisations to prioritise questions that are answerable from the research evidence

• Input to TAG

Cardiff University professor appointed as Director of new Wales COVID-19 Evidence Centre

20 January 2021
COVID-19 Evidence Centre

Work plan

• Reviewing research evidence to ensure access to the most up-to-date and relevant information to decide the best ways to provide services in health and social care

• Funded projects:
  o PVCOVID - Public Reviews During the Coronavirus Pandemic: £54K Surveys and Focus Groups
  o Common respiratory tract infection-related health behaviours: £79K Comparative review
  o Brain and brainstem basis for Long-COVID: £21K Clinical
  o Experiences of learners and their families from homes where Welsh is not spoken during the COVID-19 pandemic: £66K Qualitative
Public Health Wales

Statutory functions

• Statutory organisation in NHS Wales
• National PH Institute for Wales
• Statutory role to undertake and commission research for health protection (and population screening)
• Statutory role to collaborate with other ‘Cat 1’ responders in major incidents

• to provide to or in relation to the health service in Wales and manage a range of public health, health protection, healthcare improvement, health advisory, child protection and microbiological laboratory services and services relating to the surveillance, prevention and control of communicable diseases
• to develop and maintain arrangements for making information about matters related to the protection and improvement of health in Wales available to the public in Wales; to undertake and commission research into such matters and to contribute to the provision and development of training in such matters;
• to undertake the systematic collection, analysis and dissemination of information about the health of the people of Wales in particular including cancer incidence, mortality and survival; and prevalence of congenital anomalies; and
• to provide, manage, monitor, evaluate and conduct research into screening of health conditions and screening of health related matters.
Public Health Wales
Research activity during response

- Population survey of attitudes and behaviours – information for action
- Evidence synthesis to inform expert advice to the Chief Medical Officer
- Observational and epidemiological studies
Discussion
Role of RCTs in future pandemics

- Hierarchy of evidence: Is RCT the gold standard in the context of a pandemic?
- Responsibility for the conduct of RCTs in Wales
- Role of PHW in contributing or advocating for more RCTs
Commitment to RCTs in planning for future pandemics
  - Agree frameworks and collaborations
  - Centre for Pandemic Preparedness may have a role

What NPIs are most amenable to RCTs, recognising that most are complex interventions?

Acknowledge that what makes ‘sense’ may not make ‘science’