

# PROMOTION OF INFECTION PREVENTION: INTERVENTIONS FOR IMPROVING HEALTH LITERACY

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# What are we interested in?

- I am working in a crowded department of medicine in Israel, with occupancy rates  $> 100\%$ .
- Only  $\frac{1}{4}$  of patients in single rooms. The rest in 3-bed rooms, with a small space between beds.
- Would interventions aimed at patients improve infection control? (i.e. reduce hospital acquired infections, especially with MDR bacteria and *C. difficile*).
- Would interventions aimed at their visitors achieve it?
- At the public at general?

## What are we interested in? (2)

- A portion of our patients are sent to long term care facilities, some for rehabilitation.
- Similar (or worse) infrastructure.
- Isolation of patients not always an option.

## ECDC TECHNICAL REPORT: A rapid evidence review of interventions for improving health literacy (D'Eath M et al; on the ECDC website)

Health literacy comprises:

- Basic/functional literacy —basic skills in reading and writing for everyday situations;
- Communicative/interactive literacy — more advanced cognitive and literacy skills which can be used to ...extract information and derive meaning from different forms of communication, and to apply new information to changing circumstances;
- Critical literacy — more advanced cognitive skills which ... can be applied to critically analyse information and use this information to exert greater control over life events and situations.

Nutbeam D. Health literacy as a public health goal: a challenge for contemporary health and education and communication strategies into the 21st century. *Health Promotion International* 2000;15(3):259-67.

# Types of interventions:

- Accessible written health information.
  - Leaflets with explanations for patients and visitors?
- Alternative format interventions: technologies such as computers, videos, etc.
  - Applications for the smartphone or PCs? (Games?)
  - Use of the TV system and screen?
- Mass media campaigns.
  - Public?
  - In strategic places in the hospital?

## ECDC TECHNICAL REPORT: A rapid evidence review of interventions for improving health literacy (D'Eath M et al; on the ECDC website)

- A review of reviews
- Time frame: 2000 –2011
- 5 relevant reviews identified
- None of them included interventions targeting hospital acquired infections.
- 3 studies focused on a communicable disease (HIV): medication adherence as the outcome.
- Almost all outcomes were about improved knowledge.
- Majority of the trials were performed in North America
- Inconclusive findings

# Other studies?

- A few about HIV, mainly about adherence to treatment: equivocal results.
- A few about health literacy and attitudes toward antibiotic treatment and vaccines.

## Antimicrobial stewardship: changing risk-related behaviours in the general population. NICE guideline [NG63]; Published date: January 2017

### More appropriate antibiotic treatment:

- Help recognise self-limiting infection or infections in which antibiotics are not needed.
- Resources to advise people not to:
  - Use or take prescription-only antimicrobials without prescription and advice.
  - Keep leftover antimicrobials for use another time.
  - Share, or give, prescription-only antimicrobials to anyone other than the person they were prescribed or supplied for.
  - Use or take antimicrobials prescribed for animals.
  - Use or take prescription-only antimicrobials or give them to others if they have been obtained from anywhere other than their healthcare professional or pharmacist (for example, prescription-only antimicrobials bought online without a prescription).



Limiting the spread of infection (in the community). NICE guideline [NG63]; Published date: January 2017

- Ensure information and advice directed at the general public aims to prevent and reduce the spread of infections. Resources such as posters, leaflets and digital resources should be made available through multiple routes.
- Ensure information is available in a variety of formats to meet people's literacy and language needs and the needs of people with sensory disabilities.
- Consider distributing information and advice through facilities and services operated by local authorities, such as leisure centres and libraries.
- When deciding where to distribute information, prioritise settings in which people are more vulnerable to infection or where there is a high risk of transmitting infection to others.

Healthcare-associated infections: prevention and control in primary and community care  
Clinical guideline [CG139]. Published date: March 2012 Last updated: February 2017

- No mention of including patients or visitors in the efforts.

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# Types of interventions:

- Communication:
  - Advice during rounds?
- Accessible written health information.
  - Leaflets with explanations for patients and visitors?
- Alternative format interventions: technologies such as computers, videos, etc.
  - Applications for the smartphone or PCs? (Games?)
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# Content?

- Information: what are infection control and antimicrobial stewardship.
- No antibiotics when antibiotics are not needed. Narrow spectrum antibiotics whenever possible.
- Hand hygiene
- Watch and comment (politely) on staff hand hygiene.
- Ask (politely): do I need the IV line? Do I need the urinary catheter?
- Keep out of the private space of other patients.
- Don't clutter the patient's space (no flowers, visitor's personal belongings, etc).
- Anything else?

# Practice and research

- Implement the simplest interventions, the ones with face value.
- RCTs? Maybe other designs: wedge-shape introduction?
- Accompany by a correct before – after design.
- Very complex interactions – external validity?

# To sum up

- No evidence
- High face validity
- Try in practice and accompany by research



Thank you