Presentation 3

How Contaminated is your Mobile Telephone? A Presentation on a Systematic Review of Healthcare Workers' Mobile Phones as a Vector for Cross-Contamination of Infection in Clinical Environments

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Background

The mobile phone is a now valuable tool in healthcare, allowing rapid access to information and facilitating communication between healthcare workers (HCWs). Due to being in regular contact with the face and hands, there are concerns that HCWs' mobile phones are reservoirs for pathogenic microorganisms. These may cause healthcare associated infections (HCAIs) if transferred to vulnerable patients by contaminated hands of HCWs. The burden of HCAIs on healthcare systems is considerable.

Methods

A systematic literature review was performed between April and July 2020. Six databases were searched, papers were screened and filtered, and relevant data was extracted from eligible studies. Studies were critically appraised using checklists for either Cross-sectional Studies or Randomised Controlled Trials. A narrative synthesis of evidence was performed on results from studies.

Results

Seventeen studies (published 2012-2020) were included, conducted in hospitals in countries with a high human development index (defined by the UN). The mean percentage of mobile phones contaminated with pathogens across studies was 52.7%. Viral contamination was less prevalent than bacterial contamination. Large percentages of HCWs regularly used mobile phones at work and never disinfected them. Some studies tested a mobile phone cleaning protocol and bacterial pathogens were reduced or eradicated completely.

Key messages

To prevent cross-contamination between mobile phones, hands and patients, NHS trusts should provide guidance to staff and clinical students regarding mobile phone cleaning. Mobile phones should be disinfected regularly to prevent contamination with pathogens.

