



Sameeksha* – Infection Prevention and Control (IPC)

Key highlights

- Global Strategy on Infection Prevention and Control
- Multi-country study shows healthcare workers have robust knowledge of healthcare associated infections
- WHO Operational Handbook on IPC for Tuberculosis
- Compendium of strategies for reducing healthcare associated infections
- Online resources for infection prevention and control in haemodialysis settings

Publications from scientific journals

Evaluating the knowledge, attitudes, and practices of healthcare workers regarding high-risk nosocomial infections: a global cross-sectional study

- Findings show that healthcare workers (HCWs) displayed robust knowledge of healthcare-associated infections (HAIs), which increases with experience.
- Organizational support factors, such as the presence of an infection control team, supply of disinfectants and visible information (leaflets and posters) about HAIs play a significant role in shaping behaviour of HCWs towards infection control compliance.

Health Science Reports | Scientific article | 11 September 2023 | [Online link](#)

The PURPOSE cause of death study in stillbirths and neonatal deaths in India and Pakistan: a review

- Prospective, observational study finds HAIs are an important cause of neonatal deaths in intensive care units (NICU) due to *Acinetobacter baumannii*, followed by *Klebsiella pneumoniae*, *Escherichia coli*, *Shigella* and *Haemophilus influenzae*.

BJOG | Scientific article | 17 August 2023 | [Online link](#)

Assessing the impact of training on healthcare providers' adherence to infection control measures in hemodialysis services

- Single group, pre-post interventional study assesses impact of IPC educational interventions in improving IPC practices among nurses.
- Findings highlight significant association of mean IPC practice scores with various demographic variables.

Cureus | Scientific article | 5 August 2023 | [Online link](#)

Review on infection control strategies to minimize outbreaks of the emerging pathogen *Elizabethkingia anophelis*

- Describes a case of *E. anophelis* – a multi-drug resistant emerging opportunistic gram-negative bacterium with a high mortality rate – followed by a review of strategies to minimize transmission in healthcare settings.
- Recommended prevention strategies include avoiding wet points (such as water tap, aerator, etc.) in patient rooms, adequate hygiene and disinfection practices, and optimized diagnostics for screening, identification and molecular typing.

Antimicrobial Resistance & Infection Control | Review article | 8 September 2023 | [Online link](#)

Economic evaluations of whole-genome sequencing for pathogen identification in public health surveillance and health-care-associated infections: a systematic review

- Review concludes current economic evidence base is insufficient to support broad adoption of whole-genome sequencing in public health & infection control settings.
- Recommends a consistent economic evaluation framework including costs, effectiveness and cost-effectiveness for comparative analyses.

The Lancet Microbe | Systematic review | 5 September 2023 | [Online link](#)

Mapping of infection prevention and control education and training in some countries of the World Health Organization's Eastern Mediterranean Region: current situation and future needs

- Online survey maps IPC education and training (WHO's IPC Core Component 3) across WHO's Eastern Mediterranean Region at national and healthcare facility levels – and highlights disparities in IPC education and training across different countries in the region.
- HCW's training on IPC relies heavily on healthcare facilities rather than on a national training program.

Antimicrobial Resistance & Infection Control | Scientific article | 4 September 2023 | [Online link](#)

Environmental approaches to controlling *Clostridioides difficile* infection in healthcare settings

- Reviews latest epidemiological evidence on *C. difficile* and best practices for reducing spore contamination.
- Proposes implementation of new antibiotic and testing stewardship programs; the development of new potent sporicides for patient-zone disinfection cleaning.

Antimicrobial Resistance & Infection Control | Review article | 7 September 2023 | [Online link](#)

Hospital cleaning: past, present, and future

- Narrative review highlighting historical and current status of hospital cleaning with a focus on clinical area surfaces.
- Calls for evidence-based surface standards, along with training, regular monitoring and education to ensure implementation of IPC practices.

Antimicrobial Resistance & Infection Control | Review article | 22 August 2023 | [Online link](#)

How biofilm changes our understanding of cleaning and disinfection

- Provides an overview of biofilms and the challenges associated with control of biofilms to avoid HAIs.
- Highlights the key considerations for IPC professionals about risks posed by biofilms in adopting appropriate IPC strategies.

Antimicrobial Resistance & Infection Control | Review article | 7 September 2023 | [Online link](#)

Effectiveness of an artificial intelligence-based training and monitoring system in prevention of nosocomial infections: a pilot study of hospital-based data

- Describes a novel artificial intelligence-based training and monitoring system used to control and prevent HAIs by improving the skills of donning/removing personal protective equipment.
- Highlights AI-based technology in controlling HAIs in both routine clinical practice and training.

Drugs, Discoveries & Therapeutics | Brief report | 7 September 2023 | [Online link](#)

Excess mortality and long-term disability from healthcare-associated carbapenem-resistant *Acinetobacter baumannii* infections: a nationwide population-based matched cohort study

- Retrospective matched cohort study assesses association of carbapenem-resistance leading to negative patient outcomes.
- Associates carbapenem resistance with excess deaths, long-term ventilator dependence and high treatment costs.

PLoS One | Scientific article | 11 September 2023 | [Online link](#)

Guidelines

Global strategy on infection prevention and control

- Outlines the guiding principles of global strategy on IPC on HCW's protection and patient safety.
- Includes evidence-based approaches to measure and achieve improved outcomes in IPC and reduce risks of HAIs.

WHO | Technical document | 12 September 2023 | [Online link](#)

WHO operational handbook on tuberculosis: module 1 (prevention): infection prevention and control

- Advises how to implement the WHO-recommended IPC measures for tuberculosis.
- Targeted at policy-makers, program managers, clinicians, frontline HCWs and occupational health experts.

WHO | Handbook | 31 August 2023 | [Online link](#)

Report of the Meeting of the WHO Global Advisory Committee on Vaccine Safety, 15-16 May 2023

- Outlines recommendations and safety updates on vaccines for polio, COVID-19, dengue and malaria.

WHO | Meeting report | 5 September 2023 | [Online link](#)

Training / IEC resources

Society for Healthcare Epidemiology of America Compendium updates 2022

- Outlines practical, evidence-based strategies for reducing HAIs.
- Updated version of the 2014 compendium on HAIs.

Current Opinion in Infectious Diseases | Compendium | August 2023 | [Online link](#)

Infection prevention in dialysis settings

- IPC for haemodialysis settings that covers infection risks, recommendations, tools and resources.
- Targets dialysis technicians, nurses and other dialysis health care providers.

CDC | Online education | 3 August 2023 | [Online link](#)

Quotable quote

*Infection prevention and control is one of the cornerstones of quality of care;
the embodiment of the Hippocratic entreaty to "first do no harm"*

– Dr Tedros Adhanom Ghebreyesus, DG-WHO

**Sameeksha* is a Hindi word, meaning review. This compilation of recent IPC resources includes a brief summary of relevant publications from scientific journals, guidelines, and training/IEC resources. The intended target audience for this includes clinical and public health professionals interested in IPC at both public and private sector in India. Kindly note: inclusion of publications/resources in this review does not imply an endorsement by WHO.