



Sameeksha* – Infection Prevention and Control (IPC)

Key highlights

- WHO report on WASH, waste and electricity services in health care facilities
- More evidence needed on nudges as a suitable and effective intervention to improve hand hygiene compliance
- IPC assessments to ensure safe infant feeding in healthcare facilities: experience from 3 countries
- Textiles as fomites in the healthcare system
- Summaries of APSIC IPC guidelines for catheter-associated urinary tract infections and dental infections

Publications from scientific journals

Water, sanitation, hygiene, waste and electricity services in health care facilities: progress on the fundamentals

- Summarizes global and country progress on implementing national actions on WASH in health care facilities.
- Provide insights on improving and sustaining WASH in healthcare facilities based on country experiences of successful approaches and challenges.

WHO | Global report | 13 June 2023 | [Online link](#)

Progress on household drinking-water, sanitation and hygiene 2000-2022: Special focus on gender

- This report on household drinking water, sanitation and hygiene provides in-depth analysis of gender inequalities in WASH services.
- Presents new sex-disaggregated data on the burden of water collection, as well as perceptions of safety outside the household after dark among men and women without private sanitation facilities.

UNICEF-WHO | Report | 6 July 2023 | [Online link](#)

Nudges as a suitable and effective intervention to improve hand hygiene compliance among healthcare workers in patient care settings: a narrative review

- Aims to assess the advantages, disadvantages and effectiveness of nudges as an intervention to improve hand hygiene compliance by health workers during patient care.
- Although performance feedback was found to be effective, the author recommends further studies avoiding bias, use of automated auditing systems for hand hygiene as well as address constraints for hand hygiene before studying the impact of interventions.

International Journal of Infection Control | Review article | 15 June 2023 | [Online link](#)

Safe infant feeding in healthcare facilities: assessment of infection prevention and control conditions and behaviors in India, Malawi, and Tanzania

- Observational cohort study intended to assess WASH environments in healthcare facilities for newborn infants in LMICs and identify potential opportunities for pathogen introduction during infant feeding.
- All facilities had good WASH facilities but multiple unsafe practices of newborn feeding were observed, including suboptimal behaviour related to cleaning, drying, and storing feeding implements and feed preparation.

PLOS Global Public Health | Scientific article | 8 June 2023 | [Online link](#)

Textiles as fomites in the healthcare system

- Reviews evidence on healthcare textiles (white coats, bed linen, curtains, towels, etc.) as potential nosocomial pathogen reservoirs and outlines current approaches to reduce microbial load on fabrics.
- Calls for further research on textile hygiene practices, interactions of fabrics and microbes, and developing appropriate guidelines and trainings for health workers.

Applied Microbiology and Biotechnology | Review article | 18 May 2023 | [Online link](#)

Timing of cefuroxime surgical antimicrobial prophylaxis and its association with surgical site infections

- Cohort study assessed the relationship between timing of administration of cefuroxime surgical antimicrobial prophylaxis (SAP) and surgical site infections (SSIs) based on surveillance data.
- Findings suggest that optimal time for giving cefuroxime was within 60 minutes prior to incision for surgical prophylaxis, and ideally within 10–25 minutes.

JAMA Network Open | Scientific article | 8 June 2023 | [Online link](#)

Diversity and persistence of MRSA and VRE in skilled nursing facilities: environmental screening, whole-genome sequencing and development of a dispersion index

- It documents cases of MRSA persistence despite terminal cleaning and horizontal spread of VRE between rooms.
- Calls for improved cleaning practices, stringent contact precautions and tailored screening programmes for health facilities based on local conditions.

The Journal of Hospital Infection | Scientific article | 7 May 2023 | [Online link](#)

Do knowledge, attitudes, and barrier perception affect the prevention and control of healthcare-associated infections? A structural equation modelling approach

- Study based on a structured questionnaire-based survey that explored knowledge, attitudes, practices and barrier perceptions amongst Chinese health workers in a large tertiary hospital.
- Demonstrated that knowledge indirectly impacts IPC practices through attitudes, underscoring the need to address the 'know-do' gap for better IPC practices.
- The authors recommend designing of deficiency-based training programs, ensuring sustained IPC habits, and strengthening management support to optimize IPC practices.

Infection and Drug Resistance | Scientific article | 6 May 2023 | [Online link](#)

Abundance, spatial distribution, and chemical characterization of face masks on the beaches of SE Kanyakumari, India

- Baseline study found large density of face masks on recreational and tourist beaches, highlighting the need for sufficient management facilities to optimize PPE disposal.
- Calls for better waste management systems, public education campaigns of marine plastic pollution and designing eco-friendly PPE and recycling of PPE.

Marine Pollution Bulletin | Scientific article | 19 May 2023 | [Online link](#)

Knowledge, attitude and practice of infection prevention and control precautions among laboratory staff: a mixed-methods systematic review

- This review finds a gap in knowledge, attitude and practices in relation to IPC guidelines among laboratory staff raising their risk for laboratory-acquired infections.
- Calls for specific training in IPC and safety in laboratories with a special focus on – IPC precautions, safety policies, safety equipment and materials, safety activities, initial biohazard handling, ongoing monitoring and potential exposure.

Antimicrobial Resistance & Infection Control | Systematic Review | 13 June 2023 | [Online link](#)

Risk factors for SARS-CoV-2 infection among health workers in India: a case control study

- Multi-centric study assessed risk factors and IPC training among HCWs in seven Indian states.
- Risk of infection for SARS-CoV-2 was low among HCWs who had received both theoretical and practical IPC training, while the risk of infection was high among HCWs who had received only practical IPC training.
- Recommends having a separate hospital infection control department for implementing regular IPC activities, as well as developing policies that address the occupational hazards faced by health workers.

Frontiers in Public Health | Scientific article | 31 May 2023 | [Online link](#)

Infection prevention and control for COVID-19 response in the Rohingya refugee camps in Bangladesh: an intra-action review

- An intra-action review of IPC response efforts to the COVID-19 pandemic in Cox's Bazar, Bangladesh was done to identify best practices, challenges, and recommendations for improvement.
- Recommends establishing well-planned IPC programmes that include leadership, resource mobilization monitoring and continuous training to promote consistent and adaptive IPC practices.

International Journal for Equity in Health | Scientific article | 6 June 2023 | [Online link](#)

Effects of COVID-19 pandemic on healthcare-associated infections, antibiotic resistance and consumption rates in intensive care units

- Retrospective study of the effects of the pandemic on healthcare-associated infections (HAIs) and antibiotic consumption rates among ICU patients in Turkey, found a significant increase in blood stream infections and central venous catheter bloodstream infections.
- Also, higher consumption of meropenem, teicoplanin and ceftriaxone were noted in all ICUs.

Le Infezione in Medicina | Scientific article | 1 June 2023 | [Online link](#)

Guidelines

APSIC guide for prevention of catheter associated urinary tract infections (CAUTIs)

- Summarises the Asia Pacific Society of Infection Control – [APSIC guidelines for preventing CAUTIs](#) (catheter associated urinary tract infections).
- Recommends all healthcare institutions to include surveillance of HAI and use of insertion/maintenance bundles as part of CAUTI prevention programs.

Antimicrobial Resistance & Infection Control | Guidelines | 30 May 2023 | [Online link](#)

APSIC dental infection prevention and control (IPC) guidelines

- Summarises the [APSIC dental IPC guidelines](#) – and highlights practical recommendations in a concise format.
- Provides a checklist for dental facilities to achieve excellence in IPC.

Antimicrobial Resistance & Infection Control | Guidelines | 30 May 2023 | [Online link](#)

Training / IEC resources

Train-the-Trainers in hand hygiene facilitate the implementation of the WHO hand hygiene multimodal improvement strategy in Japan: evidence for the role of local trainers, adaptation, and sustainability

- Evaluates the Train-the-Trainers (TTT) in hand hygiene programme in alignment with [WHO guide to the implementation of the WHO multimodal hand hygiene improvement strategy](#).
- Sustained improvements in hand hygiene were documented which was attributed to successful adaptation of TTT to the Japanese context and integrating local trainers.

Antimicrobial Resistance & Infection Control | Scientific article | 9 June 2023 | [Online link](#)

Quotable quote

Wise and humane management of the patient is the best safeguard against infection

– Florence Nightingale

* *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.