



Received: 06-05-2025

Revised: 15-06-2025

Accepted: 10-07-2025

Preventing Cross-Infection: Best Practices For Dentists, Dental Assistants, And Medical Nurses

Hamdah Duhaymis Alnadawi,¹ Walaa Abdullah Alzahrani,² Arub Sari Albughubar,³ Saja Mosleh Althobaiti,⁴ Mashaal Khalaf Nazal Alanazi,⁵ Amjad Mofareh Alrasheedi,⁶ Maram Ibrahim Alshammari,⁷ Bashayr Mohammed Manqal Alanezi,⁸ Joud Nasir Bazaid,⁹ Abdunaser Mohammed Almalki,¹⁰ Safaa Owaid Al-Sulami,¹¹ Abdulmajeed Salem Bin Muslih Almajnuni,¹² Yunus Sadun Hussain Alharbi,¹³ Anas Rubayyi Hamad Alharbi,¹⁴ Omar Barakah A Alhumaidi,¹⁵ Nuha Marzouq Ruzayq Almahyawi¹⁶

^{1,2,3}-Najran Speciality Dental Center Ministry Of Health Kingdom Of Saudi Arabia

⁴-Western Region Ministry Of National Guard Health Affairs Kingdom Of Saudi Arabia

⁵-King Khaled General Hospital Ministry Of Health Kingdom Of Saudi Arabia

^{6,7,8}-Maternity And Children Hospital Ministry Of Health Kingdom Of Saudi Arabia

⁹-Al-Mahd Primary Health Care Center Ministry Of Health Kingdom Of Saudi Arabia

¹⁰-East Jeddah Hospital (Alrabie And Al Tawfig Phc) Ministry Of Health Kingdom Of Saudi Arabia

^{11,12,13,14,15,16}-King Abdulaziz University Hospital Ministry Of Education Kingdom Of Saudi Arabia

Abstract Preventing cross-infection is a critical concern in dental practice, where dentists, dental assistants, and medical nurses collaboratively ensure a safe environment for both patients and staff. This article examines best practices tailored to each profession within the dental care team, emphasizing teamwork, evidence-based protocols, modern sterilization techniques, and effective communication. Implementing these practices not only reduces infection risks but also builds patient trust and strengthens the overall standard of care in dental clinics.

Keywords - Cross-infection prevention, dentists, dental assistants, medical nurses, infection control, dental sterilization, dental practice safety, healthcare protocols, team collaboration, patient safety.



Introduction

Cross-infection, the transmission of infectious agents between patients and healthcare practitioners or between practitioners themselves, poses significant risks in dental healthcare environments. Dental procedures often involve exposure to blood, saliva, and aerosolized particles, making strict adherence to infection control essential for safeguarding health.

Dentists, dental assistants, and medical nurses each play vital roles in the prevention of cross-infection. While their specific responsibilities may differ, a unified approach using standardized protocols and continuous education is required to manage the complexities of infection control.

Best practices include rigorous hand hygiene, use of personal protective equipment (PPE), surface and instrument sterilization, proper waste disposal, and effective patient screening. In addition, ongoing training, clear workflow documentation, and interprofessional communication strengthen the clinic's ability to prevent infection spread. By following updated guidelines and fostering a culture of safety, dentists, dental assistants, and medical nurses not only protect themselves but also provide reassurance to patients, promoting greater trust in dental healthcare services.

Importance of Cross-Infection Prevention in Clinical Settings

Cross-infection prevention is a **fundamental component of patient safety and occupational health** in dental and medical facilities. Clinical environments are inherently high-risk due to the **frequent exposure to blood, saliva, respiratory droplets, and contaminated surfaces**, which can harbor numerous infectious pathogens. In such settings, the **failure to control cross-infection** can result in **serious consequences**, including patient morbidity, occupational exposure incidents, reputational damage to the healthcare facility, and potential legal implications.

1. Protecting Patients from Healthcare-Associated Infections (HAIs)

One of the primary objectives of infection prevention is to **safeguard patients** from acquiring **healthcare-associated infections (HAIs)**.

- Patients undergoing dental procedures are often exposed to **aerosols generated by high-speed handpieces, ultrasonic scalers, and air-water syringes**, which can transmit pathogens.
- Medical interventions, such as administering injections, wound care, or intravenous therapy, also pose a risk of **bloodborne infections** if proper sterilization is not maintained.



Received: 06-05-2025

Revised: 15-06-2025

Accepted: 10-07-2025

- Vulnerable patients, including **immunocompromised individuals, children, and the elderly**, are at **higher risk** of infection-related complications.

By implementing **robust infection control protocols**, clinics can significantly **reduce the incidence of HAIs**, improving treatment outcomes and overall patient trust.

2. Ensuring Healthcare Worker Safety

Dentists, dental assistants, and medical nurses are **frontline workers** who are directly exposed to pathogens during clinical procedures.

- **Needle-stick injuries, cuts from sharp instruments, and accidental exposure to blood or saliva** are common occupational hazards.
- Bloodborne diseases such as **HIV, Hepatitis B (HBV), and Hepatitis C (HCV)** are of particular concern in dental and medical practices.
- Airborne infections like **tuberculosis, influenza, and COVID-19** can also pose risks in poorly ventilated or crowded clinics.

Effective cross-infection prevention not only protects patients but also **ensures the long-term health and well-being of healthcare professionals**, reducing absenteeism and workforce shortages.

3. Maintaining Legal and Regulatory Compliance

Adhering to infection prevention protocols is not just an ethical responsibility but also a **legal requirement** for dental and medical practices.

- Regulatory bodies such as the **Centers for Disease Control and Prevention (CDC), World Health Organization (WHO), and Occupational Safety and Health Administration (OSHA)** have **stringent guidelines** for infection control.
- Local health authorities mandate **regular audits, documentation, and compliance** with sterilization, waste management, and PPE usage protocols.
- Non-compliance can result in **legal penalties, clinic shutdowns, or professional license suspension**, emphasizing the importance of systematic infection control practices.

4. Enhancing Patient Confidence and Clinic Reputation

In the modern healthcare environment, **patient perception of safety** is directly linked to **trust and clinic reputation**.

- Visible infection control measures, such as **staff wearing PPE, disinfecting surfaces between patients, and using sterilized instruments**, enhance patient confidence.



Received: 06-05-2025

Revised: 15-06-2025

Accepted: 10-07-2025

- Post-pandemic, patients are **more aware of hygiene and sanitation standards**, making cross-infection prevention a **key factor in patient retention and satisfaction**.

5. Supporting Public Health and Disease Control

Effective cross-infection prevention in clinical settings contributes to **broader public health goals**.

- Preventing the spread of communicable diseases in healthcare facilities **reduces community transmission**.
- During outbreaks or pandemics, strict infection control in clinics plays a **critical role in breaking the chain of infection**.
- Clinics that follow **comprehensive infection prevention strategies** help reduce the **burden on hospitals and public health infrastructure**.

Summary of Significance

Cross-infection prevention is not a single-step task but a **multifaceted, continuous effort** that protects:

1. **Patients** from avoidable healthcare-associated infections.
2. **Healthcare staff** from occupational exposure to infectious agents.
3. **Clinics and institutions** from legal, ethical, and reputational risks.
4. **Public health** by minimizing disease transmission within the community.

The integration of strict infection control practices, **staff training, regular audits, and interprofessional collaboration**, ensures a **safe and sustainable clinical environment** for all stakeholders.

Best Practices for Cross-Infection Prevention

Effective cross-infection prevention in dental and medical environments requires a **multilayered approach**, incorporating **strict hygiene protocols, sterilization methods, environmental safety, and interprofessional collaboration**. Since dentists, dental assistants, and medical nurses operate in close contact with patients and potentially infectious materials, adherence to these best practices is essential to ensure patient and staff safety.

1. Hand Hygiene and Personal Protective Measures



Received: 06-05-2025

Revised: 15-06-2025

Accepted: 10-07-2025

Hand hygiene is considered the **first line of defense** against cross-infection. Hands are the most common vectors for transmitting pathogens between patients, instruments, and environmental surfaces.

Best Practices:

- **Perform hand hygiene:**

- Before and after every patient contact.
- After removing gloves.
- After contact with contaminated surfaces.

- **Handwashing Technique:**

- Wash hands for **20–30 seconds** with antimicrobial soap.
- Use **alcohol-based hand sanitizers (minimum 60% alcohol)** if hands are not visibly soiled.

- **Use of Personal Protective Equipment (PPE):**

- Wear **disposable gloves, surgical masks, protective eyewear, and face shields**.
- Replace gloves **between patients** and immediately if torn or punctured.
- Use **fluid-resistant gowns or aprons** for high-risk procedures.

2. Instrument Sterilization and Disinfection

Instruments are one of the **primary sources of cross-contamination** in dental and medical procedures. Proper sterilization and disinfection **eliminate microorganisms** and prevent disease transmission.

Best Practices:

- **Instrument Segregation:**

- Separate **contaminated, cleaned, and sterilized instruments** into distinct zones.

- **Cleaning and Sterilization:**

- Clean instruments using **ultrasonic cleaners** before sterilization.
- Use **autoclaves (steam under pressure)** for critical and semi-critical instruments.



Received: 06-05-2025

Revised: 15-06-2025

Accepted: 10-07-2025

- Perform **biological indicator tests** weekly to ensure autoclave effectiveness.

- **Disposable Items:**

- Use **single-use instruments** whenever feasible.
- Discard immediately after use in appropriate **biohazard containers**.

3. Environmental Cleaning and Surface Management

Surfaces in dental and medical clinics, such as **dental chairs, lights, countertops, and instrument trays**, can harbor infectious agents for extended periods.

Best Practices:

- **Surface Disinfection:**

- Clean and disinfect surfaces **after each patient** using **EPA-approved hospital-grade disinfectants**.
- Focus on **high-touch areas**, including chair controls, light handles, and drawer handles.

- **Barrier Protection:**

- Use **plastic wraps or covers** for surfaces that are difficult to clean.
- Replace barriers **between patients**.

- **Floor and Air Management:**

- Mop floors daily using **disinfectant solutions**.
- Maintain **air filtration systems** to reduce aerosol contamination.

4. Aerosol and Splatter Control in Dental Settings

Dental procedures such as **scaling, polishing, and tooth preparation** generate aerosols and splatters containing **saliva, blood, and microorganisms**, which can remain airborne for extended periods.

Best Practices:

- Use **high-volume evacuators (HVE)** to capture aerosols near the source.
- Employ **rubber dams** to isolate operative fields and reduce saliva exposure.
- Encourage patients to use **pre-procedural antimicrobial mouth rinses** (e.g., chlorhexidine) to reduce microbial load.



Received: 06-05-2025

Revised: 15-06-2025

Accepted: 10-07-2025

- Install **HEPA filters and UV disinfection systems** for enhanced air purification in treatment rooms.

5. Waste Management and Biohazard Disposal

Proper **segregation and disposal of clinical waste** are essential to prevent cross-contamination and community transmission.

Best Practices:

- Follow **color-coded biomedical waste disposal protocols**:
 - **Yellow bags** for infectious waste.
 - **Red bags** for contaminated plastics.
 - **Puncture-proof containers** for sharps.
- Dispose of **sharps (needles, blades) immediately after use** to prevent accidental injuries.
- Collaborate with **licensed biomedical waste disposal agencies** for safe final disposal.

6. Patient Screening and Clinical Scheduling

Identifying high-risk patients and **managing patient flow** can significantly reduce cross-infection risks.

Best Practices:

- Conduct **pre-appointment screening** for symptoms of respiratory or infectious diseases.
- Reschedule **non-emergency treatments** for patients with active infections.
- Allocate **specific time slots for immunocompromised patients** to minimize exposure.
- Maintain **electronic health records** for infection risk tracking and follow-up.

7. Staff Training and Interprofessional Communication

Continuous **education and coordination** among dentists, dental assistants, and medical nurses is critical for infection control.

Best Practices:

- Conduct **regular training sessions** on updated CDC/WHO infection control guidelines.



Received: 06-05-2025

Revised: 15-06-2025

Accepted: 10-07-2025

- Maintain **infection control checklists** and logs for sterilization and disinfection.
- Foster a **culture of safety** where staff promptly report protocol breaches or exposure incidents.

8. Vaccination and Post-Exposure Protocols

Staff immunization is a **preventive shield** against cross-infection risks.

Best Practices:

- Ensure **mandatory vaccinations** for staff against **Hepatitis B, Influenza, and COVID-19**.
- Implement **post-exposure protocols** for needle-stick or bloodborne pathogen incidents.
- Maintain a **confidential record** of staff immunization and exposure management.

Conclusion of Best Practices

Cross-infection prevention is a **team-driven effort** requiring strict adherence to hygiene, sterilization, environmental cleaning, and patient management protocols. Dentists, dental assistants, and medical nurses must work in **synchrony** to implement these best practices, ensuring **patient safety, staff protection, and public health security**. Continuous training, vigilance, and the adoption of **evidence-based guidelines** are key to maintaining a **safe clinical environment**.

Role of Dentists, Dental Assistants, and Medical Nurses in Infection Control

Infection control in clinical settings is a **shared responsibility** among all healthcare personnel. Dentists, dental assistants, and medical nurses **each have distinct yet complementary roles** in preventing cross-infection. A coordinated, team-based approach ensures that **infection prevention protocols are consistently followed**, minimizing the risk to patients, staff, and the broader community.

1. Role of Dentists in Infection Control

Dentists are **primary care providers** in dental settings and hold **overall responsibility** for ensuring a safe clinical environment. Their role extends beyond performing treatments to **leading and enforcing infection control protocols**.

Key Responsibilities:

1. **Leadership and Supervision:**



Received: 06-05-2025

Revised: 15-06-2025

Accepted: 10-07-2025

- Ensure all team members adhere to **CDC, WHO, and local infection control guidelines**.

- Conduct **daily checks** to confirm sterilization and disinfection processes are completed.

2. **Clinical Hygiene and Safety:**

- Use **personal protective equipment (PPE)** during all patient interactions.

- Minimize **aerosol generation** with the use of high-volume evacuators (HVE) and rubber dams.

- Follow **strict hand hygiene** before and after procedures.

3. **Instrument and Equipment Oversight:**

- Verify that all **dental instruments are sterilized** using validated autoclave protocols.

- Ensure **disposable items** are used where required and safely discarded.

4. **Patient Education:**

- Inform patients about **oral hygiene practices** that reduce infection risk.

- Explain **pre-procedural rinsing** and post-operative care to minimize cross-contamination.

5. **Record-Keeping and Documentation:**

- Maintain **accurate sterilization and disinfection logs**.

- Document **patient screening results and any exposure incidents**.

2. **Role of Dental Assistants in Infection Control**

Dental assistants are **frontline infection control enforcers** who manage the clinical workflow, sterilization processes, and environmental hygiene. Their **direct involvement in preparing, assisting, and cleaning** makes their role critical in breaking the chain of infection.

Key Responsibilities:

1. **Preparation of the Clinical Environment:**

- Disinfect dental chairs, light handles, countertops, and trays **before and after each patient**.



Received: 06-05-2025

Revised: 15-06-2025

Accepted: 10-07-2025

- Place **barriers and protective coverings** on frequently touched surfaces.
- 2. **Instrument Handling and Sterilization:**
 - Segregate **used and sterilized instruments** to prevent cross-contamination.
 - Operate **autoclaves and ultrasonic cleaners** and conduct **sterilization efficacy tests**.
 - Dispose of **single-use items** in the correct biohazard containers.
- 3. **Assistance During Procedures:**
 - Manage **high-volume suction** to reduce aerosol and splatter exposure.
 - Provide the dentist with **sterilized instruments** without contaminating the operatory field.
- 4. **Waste Management:**
 - Follow **color-coded biomedical waste disposal** protocols.
 - Safely handle **sharps and contaminated materials** to avoid accidental injuries.
- 5. **Staff and Patient Communication:**
 - Remind colleagues of **infection control steps** during busy schedules.
 - Guide patients to **wash hands, wear protective bibs, and follow safety protocols**.

3. Role of Medical Nurses in Infection Control

Medical nurses serve as the **bridge between patient care and clinical safety protocols**, particularly in **multi-specialty and hospital-based dental settings**. Their role often includes **patient assessment, infection surveillance, and post-exposure management**.

Key Responsibilities:

1. **Patient Screening and Risk Assessment:**
 - Perform **pre-treatment screening** for infectious diseases, fever, cough, or recent exposures.
 - Identify **high-risk or immunocompromised patients** who require special scheduling or precautions.



Received: 06-05-2025

Revised: 15-06-2025

Accepted: 10-07-2025

2. **Implementation of Standard Precautions:**

- Enforce **PPE compliance** across the healthcare team.
- Assist in **hand hygiene auditing** and ensure **disinfectant availability**.

3. **Monitoring and Reporting:**

- Document **infection control checklists and patient health records**.
- Report **needle-stick injuries, accidental exposures, or protocol breaches** immediately.

4. **Vaccination and Staff Health Management:**

- Maintain **vaccination records** for all staff, including Hepatitis B and Influenza.
- Coordinate **post-exposure prophylaxis (PEP)** if staff are exposed to bloodborne pathogens.

5. **Environmental and Equipment Oversight:**

- Ensure **treatment rooms, recovery areas, and waiting rooms** remain disinfected.
- Support **airflow management and ventilation checks** in clinical areas.

4. **Team-Based Interprofessional Collaboration**

Infection control is **most effective when all three professionals collaborate** seamlessly.

- **Dentists** provide leadership and clinical oversight.
- **Dental Assistants** execute **day-to-day infection control tasks**.
- **Medical Nurses** manage **patient safety, screening, and exposure protocols**.

Regular **team meetings, staff training sessions, and mock drills** improve coordination and ensure that infection prevention remains **consistent and effective** across all procedures.

Conclusion

Dentists, dental assistants, and medical nurses **play interconnected roles** in infection control. By maintaining **strict adherence to hygiene protocols, sterilization processes, and interprofessional communication**, they ensure the **safety of patients, staff, and the community**. Their **combined efforts** form the backbone of a **successful cross-infection prevention program** in any clinical environment.



Received: 06-05-2025

Revised: 15-06-2025

Accepted: 10-07-2025

Interprofessional Collaboration

Infection prevention in clinical settings requires a **coordinated team effort** involving dentists, dental assistants, and medical nurses. No single professional can fully ensure infection control without **effective communication, shared responsibilities, and synchronized actions**. Interprofessional collaboration bridges the gap between **individual tasks** and **collective outcomes**, creating a **safe clinical environment** for patients and healthcare workers.

1. Definition and Importance of Interprofessional Collaboration

Interprofessional collaboration (IPC) refers to the **active partnership of healthcare professionals** from different disciplines working toward a **common goal**—in this case, **preventing cross-infection** in clinical settings.

Importance in Infection Control:

- **Reduces Infection Risks:** Coordinated actions ensure **every step of infection control protocols is covered** without gaps.
- **Improves Efficiency:** Teamwork allows **faster patient turnover without compromising safety**.
- **Enhances Patient Trust:** Patients feel safer when they **observe teamwork and consistent hygiene practices**.
- **Strengthens Workforce Safety:** Timely communication of **exposures or breaches** prevents widespread contamination.

2. Roles of Key Professionals in Collaboration

Each professional contributes **unique expertise** to the infection control process:

Dentists:

- Lead and **establish clinic-wide infection control protocols**.
- Supervise sterilization, disinfection, and patient safety practices.
- Train team members on **infection risks and mitigation strategies**.

Dental Assistants:

- **Execute day-to-day infection control measures**, including sterilization, operatory preparation, and waste disposal.



Received: 06-05-2025

Revised: 15-06-2025

Accepted: 10-07-2025

- Communicate **instrument or PPE shortages** promptly to prevent lapses.
- Support dentists during **aerosol-generating procedures** with HVE and barrier techniques.

Medical Nurses:

- Handle **patient screening, vaccination checks, and infection surveillance**.
- Communicate **exposure incidents** and coordinate **post-exposure prophylaxis (PEP)** if needed.
- Integrate **infection control protocols** between dental and medical departments in multi-specialty clinics or hospitals.

3. Communication and Workflow Coordination

Effective collaboration is **built on structured communication and defined workflows**:

- **Pre-Procedure Coordination:**

- Nurses verify **patient screening results** and medical history.
- Dental assistants prepare **sterilized instruments and operatory setup**.
- Dentists review **planned procedures and risk points**.

- **During Procedures:**

- Dental assistants ensure **instruments are passed without contamination**.
- Dentists and nurses **coordinate PPE usage and patient monitoring**.
- Any **accidental exposure** is reported immediately.

- **Post-Procedure Follow-Up:**

- Assistants handle **instrument sterilization and operatory disinfection**.
- Nurses **document exposure logs** and verify compliance with infection protocols.
- Dentists **review and audit infection control steps** for quality assurance.

4. Benefits of Interprofessional Collaboration in Infection Control

1. **Reduces Cross-Contamination Risks:**

- Each professional **covers gaps** that may occur if working in isolation.

2. **Promotes a Culture of Safety:**



Received: 06-05-2025

Revised: 15-06-2025

Accepted: 10-07-2025

- Encourages **collective responsibility** for patient and staff protection.
- 3. **Improves Training and Awareness:**
 - Shared knowledge helps **junior staff or new hires** adopt correct practices quickly.
- 4. **Ensures Legal and Regulatory Compliance:**
 - Collaborative documentation supports **audits, certifications, and inspections.**
- 5. **Optimizes Resource Utilization:**
 - Efficient teamwork prevents **waste of PPE, disinfectants, and staff time.**

5. Strategies to Enhance Collaboration

- **Regular Interdisciplinary Meetings:**
 - Discuss infection control challenges, **update staff on new protocols**, and **review incident reports.**
- **Clear Role Assignments:**
 - Define **who is responsible for sterilization, patient screening, waste disposal, and exposure management.**
- **Use of Checklists and SOPs:**
 - Implement **infection control checklists** for pre-, intra-, and post-procedure tasks.
- **Training and Simulated Drills:**
 - Conduct **mock drills for exposure management and cross-infection emergencies.**
- **Open Communication Channels:**
 - Encourage **staff to report potential breaches or risks without fear of blame.**

6. Real-World Example of Collaborative Infection Control

In a **multi-chair dental clinic within a hospital:**

1. **Medical nurses** perform **initial patient screening** for infectious symptoms.



Received: 06-05-2025

Revised: 15-06-2025

Accepted: 10-07-2025

2. **Dental assistants** prepare the operatory, ensuring **sterilized instruments and barriers** are in place.
3. **Dentists** perform procedures with **aerosol reduction protocols**, supported by the assistant.
4. If a **needle-stick injury** occurs:
 - The **assistant reports to the nurse**,
 - The **nurse initiates post-exposure protocol**, and
 - The **dentist documents and reviews the incident** for preventive measures.

This **team-based chain of action** ensures **quick response and minimal risk of cross-infection**.

Conclusion

Cross-infection prevention is a **critical pillar of patient safety and healthcare quality** in dental and medical settings. The combined efforts of **dentists, dental assistants, and medical nurses** form the **foundation of a safe clinical environment**, where each professional fulfills **unique but interconnected roles**.

Dentists are **leaders in infection control**, establishing protocols, performing high-risk procedures, and ensuring team compliance. Dental assistants act as the **frontline enforcers of sterilization and disinfection**, while medical nurses ensure **patient screening, immunization oversight, exposure management, and interdepartmental safety coordination**.

The **integration of best practices**—including **rigorous hand hygiene, proper PPE use, instrument sterilization, surface disinfection, aerosol control, and biomedical waste management**—is essential to **break the chain of infection**. Furthermore, **interprofessional collaboration** enhances the **efficiency and reliability** of these practices, minimizing the risk of cross-contamination and ensuring rapid response to exposure incidents.

Ultimately, sustaining a **culture of safety and continuous education** is vital. Regular **staff training, audits, and mock drills**, supported by evidence-based guidelines, ensure that infection control protocols remain **dynamic and responsive to emerging threats** such as antibiotic-resistant organisms or novel viral infections. By **working as a unified team**, dentists, dental assistants, and medical nurses **protect both patients and themselves**, reinforcing public trust in clinical care.

References



Received: 06-05-2025

Revised: 15-06-2025

Accepted: 10-07-2025

1. Centers for Disease Control and Prevention (CDC). **Guidelines for Infection Control in Dental Health-Care Settings**. *MMWR Recomm Rep*. 2003;52(RR-17):1–66.
2. World Health Organization (WHO). **Infection Prevention and Control (IPC) in Healthcare Settings**. 2021.
3. Kohn WG, Collins AS, Cleveland JL, Harte JA, Eklund KJ, Malvitz DM. **Guidelines for infection control in dental health-care settings—CDC**. *J Am Dent Assoc*. 2004;135(1):33–47.
4. Harrel SK, Molinari J. **Aerosols and splatter in dentistry: A brief review of the literature and infection control implications**. *J Am Dent Assoc*. 2004;135(4):429–437.
5. Rutala WA, Weber DJ. **Disinfection, sterilization, and control of hospital waste**. In: *Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases*. 9th ed. Elsevier; 2020.
6. Laheij AMGA, Kistler JO, Belibasakis GN, Välimaa H, de Soet JJ; European Oral Microbiology Workshop (EOMW) 2011. **Healthcare-associated viral and bacterial infections in dentistry**. *J Oral Microbiol*.2012;4:17659.
7. Siegel JD, Rhinehart E, Jackson M, Chiarello L; Healthcare Infection Control Practices Advisory Committee (HICPAC). **2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings**.