



The Role of Cleaning Procedure, Infection Control, and Sterilization of Values and Handles in Preventing the Transmission of Infection in Dental Clinic

Samirah Ahmad Dwiri*, Gamr Mohammed Mognea, Eman Mofareh Aseri, Bayan Yahya
Qahtani, Amir Elagib

Department of Dental, Sharurah Armed Forces Hospital, Saudi Arabia

ABSTRACT

The dental clinic is a setting where illnesses are spread. Considering that mouth secretions have been the source of the majority of human microbial infections, the occupational risk for disease transmission becomes apparent. Organizations like the Centers for Disease Control and Prevention actively advocate using appropriate techniques to control infection since they are successful in preventing microbial pollution and cross-contamination. Due to a lack of knowledge about infection control or a shortage of personnel with the necessary training, the majority of hospitals do not have an infection control program. This research will conduct a descriptive methodology by reviewing previous studies that related to the same field and variables. In conclusion, dental practitioners have a reasonable attitude toward cross-infection and a good understanding of sterilizing techniques, but their knowledge of blood-borne illnesses is inadequate.

Key words: Dental Clinic, Diseases, Infection Control, Sterilization, Cleaning Procedures, Tools, Handles.

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Corresponding author: Samirah Ahmad Dwiri

E-mail✉: sameradwiri@gmail.com

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INTRODUCTION

In their clinical settings, dentists and other dental team members come into contact with a variety of potentially pathogenic microbes. Cross-infection occurs when infectious pathogens are transferred from one person to another or from inanimate things in a dental setting. Infections can spread between patients and healthcare professionals in dental settings. Blood exposure can spread blood-borne viruses such as HIV, hepatitis B, and hepatitis C, which pose a risk to workers. Dental personnel are vulnerable to respiratory illnesses such as COVID-19, TB, and influenza that spread through aerosols and droplets [1]. Bacteria that are normally found in saliva, including staphylococci and streptococci, can also spread through direct

touch or infected objects. Hepatitis A and herpes simplex are two viruses that can spread through direct contact and poor hygiene. To prevent the spread of germs in dental offices and safeguard employee and patients, strict adherence to advised infection control procedures is essential. These procedures include adequate hand hygiene, the use of personal protective equipment, surface disinfection, instrument sterilization, and isolation measures. Dental procedures or airborne transmission, direct contact with mucous membranes, broken skin or contaminated equipment, use of contaminated dental solutions, water, or instruments on multiple patients, and percutaneous injuries from contaminated sharp objects are just a few of the ways that dentistry carries the risk of disease transmission. To stop germs from spreading in dental settings and safeguard patients and workers, strict adherence to prescribed infection control practices specific to each route is essential [2]. Although compliance rates are not ideal, recommended procedures include hand hygiene such as washing hands before and after each patient. The employment

of gowns, masks, gloves, and eyewear, among other Personal Protective Equipment (PPE), creates a barrier against infectious materials. High-level disinfection gets rid of the majority of infections on semi-critical goods, whereas sterilization destroys all microorganisms on vital dental devices [3]. Sharps injuries are common in dentistry and can be decreased by using safe injection techniques, disposing of sharps properly, and not recapping needles. Environmental contamination is decreased by employing barriers and disinfecting clinical touch surfaces. Risks from water used in operations are reduced by maintaining the water quality of the dental unit through filtration, chemical treatment, or sterilization. In order to prevent infection and safeguard patients and staff, it is imperative that dental professionals follow established protocols that are specific to each possible pathogen transmission pathway. Using universal precautions with every patient (treating every patient and instrument as potentially infective), correcting any break in the aseptic technique, lowering the danger of contamination by reducing the extent of pathogens, and protecting patients and staff against occupational infection are the main objectives of infection control in dental clinics [4].

Research Problem and Questions

The risk of coming into contact with any infectious substance, including bodily fluids like blood, is higher for dental care providers. This risk can arise directly via needle stick injuries or splashes, or indirectly from contaminated devices or equipment. Dental assistants and dentists no longer debate the need for infection control because it has grown to be such an integral component of dental practice. Dental staff members are regularly exposed to potentially infectious pathogens due to their line of work, which poses a risk to their health. In order to reduce the transmission of illnesses, vaccination, appropriate PPE use, and sterilization and disinfection guidelines should be strictly adhered to [5]. Dentists are always at risk for percutaneous injuries because they work with multiple sharp devices on a regular basis. The dentist is exposed to the patient's blood and potentially infectious pathogens through a percutaneous injury. Dental professionals should be aware of the Human Immunodeficiency Virus (HIV), Hepatitis B (HBV), and Hepatitis C Viruses

(HCV) as bloodborne diseases. However, the presence of the virus in the community and working conditions determine the occupational risk of bloodborne viruses. In their regular work, dentists are always vulnerable to unintentional injury from sharp objects. A sharp injury is an unintentional stab wound that penetrates the skin caused by a needle (needlestick injury) or by a sharp item that snags on bodily secretions or blood. The operator is directly exposed to the patient's blood in this kind of injury, which may be infected with blood-borne diseases. Due to the lack of researches that discuss the current dependents and independent variables, the research aims to investigate the role of cleaning procedures, infection control, and sterilization of values and handles in preventing the transmission of infection in dental clinic by reviewing the main question; "What is the role of cleaning procedures, infection control, and sterilization of values and handles in preventing the transmission of infection in dental clinic?" .

The main question is divided into the following sub questions:

1. What is the role of cleaning procedures in preventing the transmission of infection in dental clinic?
2. What is the role of infection control in preventing the transmission of infection in dental clinic?
3. What is the role of sterilization of values and handles in preventing the transmission of infection in dental clinic?

Objectives

The current research aims to "investigate the role of cleaning procedures, infection control, and sterilization of values and handles in preventing the transmission of infection in dental clinic"

This main objective is subdivided into the following sub-objectives:

1. Investigate the role of cleaning procedures in preventing the transmission of infection in dental clinic.
2. Investigate the role of infection control in preventing the transmission of infection in dental clinic.
3. Investigate the role of sterilization of values and handles in preventing the transmission of infection in dental clinic.

Significance

The importance of this study stems from the role of (cleaning procedures, infection control, and sterilization of values and handles) in preventing the transmission of infection in dental clinics. Therefore, conducting such a study on this topic is expected to have a great positive impact and importance, which can be summarized as follows:

1. This study will be a useful source of information about cleaning procedure, infection control, and sterilization in dental clinics and their role in preventing the transmission of infection.
2. Referring to previous studies centered on the research topic will be crucial. It can be referred to determine the procedures that help dentists prevent infection through germs and blood.
3. On the other hand, this research's results may help prepare awareness sessions about preventing the transmission of infection in dental clinics.
4. Given the scarcity of previous studies related to the current field of research, this research will represent a good reference for future studies as long as it will provide subsequent researchers and scholars interested in the field of transmission of infection in dental clinics with valuable literature, important recommendations and suggestions for their proposed studies.

Methodology

The researcher will adopt the qualitative approach by referring to previous studies theoretically to obtain information that covers the variables of the current research.

LITERATURE REVIEW

The Role of Cleaning Procedures in Preventing the Transmission of Infection in Dental Clinics

Environmental surfaces, or surfaces or equipment that do not come into direct contact with patients, can get contaminated when providing patient treatment in dental settings. Some surfaces, particularly those that are touched regularly (such as drawer knobs, light handles, and unit switches), can act as reservoirs for microbiological contamination even when there is no clear link between them and the spread of infection to patients or dental professionals. Dental workers' hands are the main way that bacteria from contaminated

environmental surfaces are transferred to patients [6]. The simplicity of cleaning and disinfection should be taken into account while choosing equipment. Surfaces that could become contaminated with blood or bodily fluids need to be thoroughly cleaned and disinfection using the right and suggested treatments. Microbiological surveillance should include water testing from the dentist chair. Researches have shown that 20–26 different microorganisms, including bacteria, fungus, and protozoa, can colonize dental unit waterlines, which are narrow-bore plastic tubing that transports water to the high-speed handpiece, air/water syringe, and ultrasonic scaler [7]. In order to lower the microbial burden, the CDC advised flushing dental waterlines at the start of clinic hours; nevertheless, this is insufficient to remove biofilms. Self-contained water systems with chemical treatment, in-line micro-filters, and a mix of these 27 treatments can be used to enhance the quality of the water. It is recommended that dental devices (such as air/water syringes, handpieces, and ultrasonic scalers) that are attached to the dental water system be set to release air and water for a minimum of 15 to 30 seconds following each patient. Before sterilizing, mechanical cleaning of the equipment is favored over hand cleaning. This is due to the fact that mechanical cleaning is more effective and reduces the possibility of blood exposure and percutaneous injury. Thermal disinfectors, sometimes referred to as instrument washers or ultrasonic cleaners, can be used for mechanical cleaning [8]. Thus, manual cleaning is not recommended. If it is done, however, it needs to be done in a sink that has been specifically set aside and filled with lukewarm water and a special instrument cleaning detergent. It is not possible to use hot water because it encourages the coagulation of proteins, and it becomes more difficult to remove debris from the instruments because cold water solidifies lipids. The instruments need to be kept low and submerged in water in the sink while being cleaned with a long-handled brush. Following cleaning, the instruments need to be examined with a magnifying glass and under the proper lighting before being rinsed with warm or hot water (hot water speeds up the drying process) [9]. Dentists must wash their hands with the proper soap, water, and disposable towel combination at the start of the workday, after eating, after using the

restroom, or whenever their hands get solid from coming into contact with bodily fluids like blood or saliva or from handling contaminated tools or equipment. While it is ideal to have a separate sink for hand hygiene, sinks that have been used for instrument decontamination or expectoration by patients need to be cleaned, disinfection, and marked before being used for hand washing. In a dental office, laundry may comprise gowns, lab coats, uniforms, scrubs, contaminated textiles, and fabrics that frequently have a high concentration of bacteria from bodily fluids and chemicals, such as blood. Commercial laundries that are located off-site or on-site offer laundry services to dental offices. Using the proper personal protective equipment on a regular basis together with overall good hygiene practices will help reduce the spread of infectious diseases when handling linen. Use these rules when on-site washing services are available [10]. Dentists are responsible for making sure that all tools, medical equipment, and chemical items are utilized within the license parameters and are licensed under the Government Medical Devices Regulations. Dental suction units are deemed medical equipment under the medical equipment regulations, and as such, require a license from the Health Medical Devices Bureau dental instruments and gadgets that are reusable yet cannot be cleaned again. It is mandatory for instrument manufacturers to specify at least one sterilizing technique in their usage instructions. Standard dynamic air removal cycles include both Steam Flush Pressure Pulse (SFPP) and pre-vacuum cycles. However, many manufacturers' instructions for use suggest processing with a regular pre-vacuum cycle, and end users might not be sure if the SFPP cycle can be used instead. Written manufacturer instructions for cleaning, decontamination, disinfection, wrapping, and sterilization must be attached to all reusable dental tools and devices. The choice of materials and procedures for reprocessing ultimately rests with the dentist. Only someone who has proven to be competent in the field of instrument reprocessing to the dentist may be given this job. As well, before being disinfection or sterilized, reusable dental equipment and devices need to be free of all debris, including bioburden and dental materials. Sorting and disassembly (if necessary), washing, rinsing, drying, reassembly, and inspection are all necessary steps in the cleaning process. Every workday,

all waterlines must be completely flushed with water for at least two minutes in order to purge them. Waterlines need to be cleared for at least 20 seconds following patient care. Every day and weekly maintenance schedules for the MIFU of dental units and equipment are required when using closed water systems or other specialized water delivery systems. To lessen the chance of infectious material backflow, suction lines between patients must be aspirated with water or disinfection solution (that is compatible with the evacuation system according to MIFU).

The Role of Infection Control in Preventing the Transmission of Infection in Dental Clinics

Safe patient care includes the prevention and management of infections. Practitioners need to design, review, continuously update, and monitor their infection prevention and control strategies and protocols due to concerns about the potential spread of blood-borne infections and the effect of newly emerging, highly contagious respiratory and other disorders. Asserted that the goal of Infection Prevention and Control (IPC), a pragmatic, evidence-based approach, is to shield patients and healthcare professional from preventable infections. These procedures are intended to circumvent the several pathways through which an infectious agent can spread disease to a vulnerable host. Pathogenic microbes can be found in the air, water, on inanimate surfaces and equipment, as well as within and outside the human body in hospital settings. Visitors, patients, and medical staff can all act as both the susceptible host and the agent that spreads the infection. Infections that patients may contract while receiving medical care in a healthcare facility are known as healthcare-associated infections, or HAIs. Hospitals, dentistry offices, and other healthcare facilities are the places where these infections happen. HAIs can proliferate in numerous ways. For instance, some patients contract an infection via tainted or misused equipment, while others contract an infection from a healthcare provider's filthy hands. According to previous studies, all individuals working in dental care settings, whether paid or unpaid, who may come into contact with infectious materials such as bodily fluids, tainted medical supplies or equipment, contaminated environmental surfaces, contaminated water or air, or contaminated medical supplies are

Considered Dental Health Care Personnel (DHCP). Dentists, dental hygienists, dental assistants, trainees, students, dental laboratory technicians, contractors, and volunteers are all included in this. DHCP also covers individuals from the administrative, secretarial, housekeeping, and maintenance fields who may come into contact with infectious agents but do not directly provide patient care. In the dental context, infectious pathogens can spread through skin or mucosal contact, injection, ingestion, or inhalation. The goal of infection prevention and control strategies is to stop or reduce the spread of pathogenic agents from patients to dental healthcare professionals. Additionally, infection control prevents infections from spreading outside of dental practices. Every patient needs to have standard precautions in place, and when patients are at danger of spreading infectious diseases primarily airborne infections transmission-based precautions need to be used. In dental clinics, germs can transmit either directly (from person to person) through fluids such as blood or saliva or indirectly (through contaminated instruments, equipment, or surfaces). Another way to get infected in a dental setting is by inhaling microorganisms suspended in the air, or airborne transmission. Direct contact with blood and bodily fluids at a dentist practice is a significant transmission route. Since saliva typically contains blood from gingival bleeding, all saliva needs to be handled as potentially infectious material. Although any disease might theoretically spread in a dental office, certain illnesses are more pertinent to dentists than others. Human Immunodeficiency Virus (HIV) and the hepatitis B and C viruses are examples of bloodborne diseases of concern. Percutaneous damage is the most frequent method of HBV transmission in dentistry, with an average 30% risk of HBV transmission. For a week at room temperature, dried blood can harbor the Hepatitis B virus. Dentists are thought to have a ten-fold higher risk than the general population of developing chronic Hepatitis B (HBV), while their chance of contracting HIV is negligible.

Percutaneous injuries have the highest risk of HIV transmission; nonetheless, the chance of transmission following a needlestick contact to blood tainted with HIV is approximately 0.3% per exposures. at comparison, there is

a 30% chance of HBV transmission at dentist office. The chance of transmission is 1.8% when exposed to blood that has the hepatitis C virus. Sterilization is done on devices to get rid of all living microbes, including bacterial spores. In dentistry, steam under pressure and dry heat sterilization are the most often used sterilization techniques. Nevertheless, there are alternative, less popular techniques, such as ethylene oxide and unsaturated chemical vapor pressure sterilization [11]. In dentistry, autoclaving or steaming under pressure is the most often used form of sterilization. It is quick and easy to use, and the effectiveness of the sterilization can be checked. For 20 minutes, autoclave sterilization involves high temperatures of 121 °C and 15 pounds of pressure. For three to four minutes, 134 °C is the next cycle. The disadvantages include the need to air-dry the instruments after the sterilization cycle and the fact that autoclave treatment tends to rust carbon steel instruments and burs. Additionally, equipment that cannot withstand high temperatures cannot be sterilized by autoclave sterilization. When working in a clinical setting, treating patients, transitioning from a clinical to a non-clinical area, processing dental equipment, and ended the workday by heading home, we must never lose sight of the significance of infection control. By doing this, the chance of disease transmission will be reduced, and patient and staff safety will be guaranteed. Asserted that the medical community is dedicated to protecting patients' health and safety in dental settings and to giving all dental staff members a safe workplace. This entails implementing and keeping up infection prevention procedures that reduce the possibility of occupational or healthcare-associated infections for oral health professionals and patients. Local health districts in the health sector must put the "Oral Health: Cleaning, Disinfection, and Sterilizing Standard Operating Procedures" into practice in order to accomplish this.

The Role of Sterilization of Values and Handles in Preventing the Transmission of Infection in Dental Clinics

The management of dental operations is becoming more and more dependent on the expertise and ability of dentists. The team's ability to handle urgent conditions and other elements relevant to the process at hand determine how

quickly an intervention is carried out. The ability to employ sterile and well-stocked instruments in a fair amount of time is precious in these conditions since it is crucial to uphold both the proper daily dental practice methodology and the instrument's sanitation and disinfection protocols. It is crucial to handle instruments correctly and have the most effective instruments and sterilizers in order to have a large amount of sterile material on hand and ready to use. Any living thing, pathogenic or nonpathogenic, in a vegetative state or as spores on the surface of the material to be sterilized is destroyed during the sterilization process. Sterile refers to an object or product that is devoid of live germs. A repeatable, standardized, verifiable, and documentable procedure must be used for sterilization [12]. Instruments that are thermosensitive and cannot tolerate autoclaving cycles are decontaminated by chemical sterilization. The chosen method for the remaining cases should be autoclave sterilization. Throughout the years, dry heat, chemical steam, and saturated steam have been the most often used physical heat sterilization techniques in dental offices. The last two techniques are thought to be unstable and have a narrow application. The device used to sterilize dental instruments is called an autoclave. A pump draws out the air from the sterilization chamber at the beginning of the first stage of the sterilization cycle. This stage is crucial because the chamber's air serves as an insulating barrier, preventing the steam from uniformly penetrating and diffusing throughout the equipment. The newest generation of autoclaves is differentiated from the prior generation by a fractional vacuum phase. Steam is added once the air inside the chamber has been evacuated; this process involves multiple steps to replace air with steam. When the evacuation and steam replacement phase is complete, the internal pressure in the chamber is greater than the ambient pressure, raising the water's boiling point and producing a hotter vapor as a result. The materials inside the autoclave are exposed to steam for the prescribed amount of time once the boiling temperature is attained to completely destroy all vegetative forms and live spores. Following this time, the material is vacuum-dried and the steam is released [13]. Dental instruments, devices, and equipment used in patient care should be classified as critical, semi-critical, or noncritical based on the possible risk of infection connected

to its intended usage. Every sterilization cycle must have the biological indicators (Bacillus stereo thermophiles spore strips) evaluated; if not, at least once a week. Sterilization cycles must be monitored physically and chemically. Dentistry is concerned with the diverse types of oral flora, which are abundant in different aerobic and anaerobic microorganisms. In addition to being asymptomatic, patients receiving care in the dentist office may also be carriers of other illnesses. During clinical procedures, the instruments used in the medical and dental fields become contaminated with bodily fluids such as blood. Cleaning, disinfecting, and sterilizing these instruments using various techniques can lower the risk of infection between patients and dentists. According to its definition, sterilization is the process of killing all kinds of microbiological flora, including bacterial spores. Moreover, it is a procedure that rids a written work, a surface, or a medium of all germs, whether they be in the vegetative or spore stages of life. The handpieces and any other equipment that is removable from the dental unit ought to be sterilized. Chemical disinfectants must be used to clean the dental chair, lighting, and X-ray equipment. To prevent contamination during use, digital radiography sensors should be covered with a clear barrier. This should be done after cleaning, heat sterilization, or high degrees of disinfection between patients. Devices classified as semi-critical include handpieces. Heat sterilization is necessary in between patients; it is the preferred method of heat sterilization for handpieces because chemical germicides may not easily penetrate their internal components. To get rid of organic garbage, ultrasonic scalers should be bathed in 70% isopropyl alcohol. Surfaces including door knobs, chairs, desks, elevators, and restrooms can be cleaned with disinfectants such 0.1-0.5% sodium hypochlorite, 62-71% ethanol, or 2% glutaraldehyde. Protective barriers need to be placed over clinical touch surfaces, and these need to be replaced after every patient. Prior to sterilization, instruments can also be disinfected by submerging them in sodium hypochlorite. According to previous studies, dental tools that can withstand heat have a range of sterilizing techniques at their disposal. These include the use of dry heat, unsaturated chemical vapor, and steam struggles (a steam autoclave). In general, it is best to adhere to the manufacturer's recommendations regarding

the sterilization time, temperature, and other operational factors. It's also important to adhere to the directions for using the appropriate converging, containers, and chemical or biological markers. For all equipment that will endure high temperature, heat sterilizing techniques (steam autoclave, dry heat, and unsaturated chemical vapor) are recommended for a number of reasons. Use liquid chemical sterilant and disinfectants only in cases when an object will be harmed by heat. In dental clinics, heat-sensitive and semi-critical instruments and gadgets are occasionally sterilized by submerging them in liquid chemical germicides. However, total immersion for around 12 hours may be necessary for goods disinfected in this way. Additionally, after being sterilized in this way, the goods must be carried to their intended use aseptically, handled with sterile gloves, dried with sterile towels, and rinsed with sterile water to remove any harmful or irritating residues before being used right away. It is advised to disinfect or discard instruments that frequently pierce oral soft tissue, such as the mucosa or skin, as well as bones, after each usage. These goods, which include surgical instruments, periodontal knives, and scaling devices, are referred to as important items because they pose the greatest danger of spreading infection.

Previous Studies

A study entitled "Cross infection and sterilization methods: A survey among dental practitioners in Chennai" conducted aimed to evaluate the knowledge, attitude, and practice of sterilization and infection control procedures among dental practitioners in Chennai. In this descriptive study, 100 dental practitioners working in private clinics in Chennai were randomly chosen to evaluate the knowledge, attitude, and practice of sterilization and infection control procedures using a self-administered questionnaire. The study found that the attitude toward cross-infection is satisfactory nevertheless no adequate knowledge of blood-borne infections among the practitioners. "Sterilization in Dentistry: A Review of the Literature" is a study conducted aimed to investigate that the instrument sterilizers are increasingly efficient in achieving results, both in terms of time and size and ensuring that materials are sterile and ready to be stocked in a reasonable time. A literature search for articles

related to revision work was performed using electronic databases such as PubMed, Scopus, and Google Scholar. The study concluded that without a doubt, sterilization of instruments and products plays a fundamental role, but the efficiency of the sterilization and sterilization procedures cannot be separated from managing the personnel in charge by giving them specific tasks. A study entitled "Infection Control and Prevention in Dentistry" sought to investigate that in a dental setting, the patient's saliva mixed with blood, pus, plaque, and crevicular fluid is often aerosolized and spattered, thus exposing the dental professional to potentially infectious agents. The study depended on reviewing previous studies that related to the variables. The study found that infection makes it mandatory for dental professionals to follow universal precautions and treat every patient as potentially infectious. A study entitled "INFECTION CONTROL MEASURES IN DENTAL PRACTICE" conducted sought to provide an extensive review of evidence-based infection control guidelines recommended by authoritative bodies. The study depended on reviewing previous studies that related to the variables. The study found that despite clear guidelines, compliance with recommended practices remains suboptimal, underscoring the need for robust training, monitoring, audits, leadership support, and a culture of safety. A study "ORAL HEALTH: CLEANING, DISINFECTING AND STERILIZING", goal of this standard operating procedure document is to identify processes that aim to provide a safe clinical environment that protects the health and wellbeing of all patients who access public dental services and all dental staff. The study found that the use of a dental dam is an effective measure for confining and limiting contamination.

CONCLUSION AND RECOMMENDATIONS

The dental clinic is a setting where illnesses are spread. Considering that mouth secretions have been the source of the majority of human microbial infections, the occupational risk for disease transmission becomes apparent. Furthermore, most people who carry infectious diseases are difficult to identify. Because of this, numerous surveys were conducted toward the end of 1980 in a number of nations, including North America and Europe, to look into the

methods used to control infection and the degree to which universal measures were followed during dental procedures. Organizations like the Centers for Disease Control and Prevention actively advocate using appropriate techniques to control infection since they are successful in preventing microbial pollution and cross-contamination. By applying these precautions to every patient, universal precautions acknowledge that every patient must be regarded as infectious. Due to a lack of knowledge about infection control or a shortage of personnel with the necessary training, the majority of hospitals do not have an infection control program.

In conclusion, dental practitioners have a reasonable attitude toward cross-infection and a good understanding of sterilizing techniques, but their knowledge of blood-borne illnesses is inadequate. Although the majority of practitioners use appropriate sterilization techniques, there is always room for improvement in the way that disinfectant solutions are handled and hand pieces are sterilized. All dental professionals are required to be knowledgeable about the various sterilization techniques used for certain tools and equipment.

The researcher recommends the following recommendations

1. In the dental office, protocols for reducing percutaneous injuries need to be established, communicated to new hires, and updated and monitored on a regular basis.
2. In the event of an accident, exposure protocols and risk assessments ought to be adhered to.
3. Dental healthcare professionals and their patients are susceptible to infections and the spread of diseases, so it is important to emphasize infection control procedures, ongoing education, and immunizations.
4. In order to avoid cross-contamination between patients, proper sterilization procedures should be followed.

5. The dental healthcare provider must take care to ensure that every tool is cleaned before sterilization, which is frequently done in a secure way to prevent cuts and injuries.

6. Dentists should also have a better understanding of the list of patient and staff protective measures.

7. It is necessary for all dentists to comply with prescribed infection control procedures with greater diligence.

8. Health officials ought to be made aware of the value of an infection control strategy.

9. Healthcare professionals need to possess the necessary attitudes, abilities, and knowledge for effective infection control procedures

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