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MONOGRAPH
THE IMPORTANCE OF BIOSECURITY IN DENTISTRY

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GRATITUDE

I thank my parents who have raised me with responsibility and above all, with love. And especially to my mother who guided me in this work by her great knowledge as a dentist. I thank God for giving me life so that I can take advantage with experience. And of course i thank the school for all the knowledge i had earned and help to realize what i want to be in the near future.

SUMMARY

The title of this monograph is “The Importance of Biosecurity in Dentistry” and the purpose is to achieve knowledge and awareness about this topic at the medical office. This research will explain the basics of biosecurity such as its definition and certain principles that will be vital for readers to achieve a better understanding about this topic .

Moreover, this monograph will inform about the different rules that includes the presence of biosecurity in the office. The first chapter introduce the reader to understand more the topic and can apprehend the following chapters of the monograph.

The second chapter will talk about the different type of personal protections like masks and glove and the chemical used for cleaning materials. the information in this chapter will clear out any thoughts that the reader have about certain tools that are present on any dentist office. In the third chapter , will explain about sterilization. An essential procedure uses to prevent the spread of diseases like HIV or Hepatitis B. Not only about the definition of sterilization but the different methods to sterilize materials for future uses. The principal conclusion is to let people be careful when visiting a dentist office and to be aware of certain characteristics about biosecurity.

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INTRODUCTION

The following monograph is a investigation about “The Importance of Biosecurity in Dentistry”. The purpose of this research is to instruct all people, whether patient or professional, to consider the importance of biosecurity guidelines to protect themselves and at the same time to protect others from transmitting tragic diseases such as HIV or diseases that can be easily spread through physical contact.

Besides that, this monograph will inform on details about biosafety within dentistry, where appropriate and primary biosafety standards will be reported and the importance to avoid the transfer of cross infections between the professional and the patient. This objective will be present into several topics that incorporate biosafety, such analyzing the methods of sterilization of instruments and mastering the technique of hand hygiene, in order to demonstrate an idea to people about how careful they have to be with their health. This document is useful for people who are looking forward to study dentistry and stressing why it is necessary to use biosafety.

This topic have been taken for investigacion by several professional around the world , each one putting more important on certain details about biosecurity or with a more descriptive research about it. Biosecurity have existed from a long time to stop spreading diseases and by the time it got developed. This confirms that this topic have been considered for investigation by several people like Camargo Gonzales and other odontologists on their study

“Uso de implementos y medidas de bioseguridad en las clínicas odontológicas de Bucaramanga de la universidad Santo Tomás en el segundo semestre del año 2015” where a lot of topics about biosecurity are explained in a more focused way.

The implementation of biosecurity was borned in 1987 worldwide with the purpose of reducing the risk that puts in danger the health or even the life of the person, family and community. Since then, this have been implemented at different areas like home, school and specially health centers. Nevertheless there are few that are not considering this topic.

The way in which this monograph will be verified will be through interviews with dental professionals from the Guayaquil city in the period 2018-2019. These results will confirm how important is biosecurity for any dentist in the city. The reason why the interview must be held in this location is because there are a large number of dentist on the city .

The monograph will consist of four chapter, each one having between four and five subtopics. It will inform about what does biosecurity mean, the different equipments and chemicals for personal protection and about the process of sterilization and certain methods, which it consists on different phases where sterilization do differents actions.

CHAPTER I

ANALYSIS THE RULES OF BIOSECURITY

1.1. Definition of biosecurity.

According to the analysis of Malagon G.(1995,p.10)“The term “Biosecurity” have been used to define and congregate the norms of behavior and preventive management, of the health personnel, against microorganism potentially infectious, with the purpose to prevent and decrease the probability of having infections.”

It can be defined Biosecurity as an absolute prevention against any infectious threats and the best way to take care of patient’s health so they can feel comfortable with the service and the working process of the professionals. It helps to guarantee that there won't be any problem about the preventive management of the Odontologist’s office.

Funes.E(2005,p.10) in chapter 2 of Biosecurity affirms that :

The concept of Biosecurity can be defined from the perspective of the bioethics as a set of attitudes of preventive type that is supported by the scientific knowledge, motivation and the set of assumed values from

the responsibility. A base of support consist in the next sentences “The Biosecurity as a obligation and a right”.

The concept in any ways teach students and even professionals to change how to view the space of work and see it more like a war zone than an ordinary office for dental practice. And of course, to be prepared in these ambient of work, it is important to have knowledge and responsibility about how to manage your labor and the ambient of work.

Another point that we can see in Biosecurity and according to Delfin and Cols (1999,p.10): “what is a set of measures and procurement that conforms a law whose main objective is protect life, in two of the kingdoms, animal and vegetable and to which is the environment is added”. In other words, biosecurity must be respected by any means necessary, because odontology has more influence in having contact with the patients and that is the reason that a high risk of infections exist.

It is also considered “as a doctrine of behavior, that is aimed at the achievement of attitudes and conducts with the objective of minimize the risk of whom that practice in the provision of health , which is based on three fundamental principles: Universality, Use of Barriers and Solid waste Disposal” (Capone,2000,p.10).

In conclusion, it is very important to have an idea about what does biosecurity means, because it is a very important factor that is considered to apply in different situation

where the patient can be very exposed to an infinite list of infections that leads them to acquire a disease.

1.2. Principles of biosecurity.

This section is divided in three important principles that support the concept of biosecurity so it can be considered mostly on odontology. This principles are useful for new students of odontology so they can have a view of how the service must be done.

The first principle as mentioned by Rodriguez J. (2001, pp.10-11) is “Universality: are the measures that must be involved on all patients of all services. All the personnel must fulfill the standards precautions habitually to prevent the exposition that could lead the origins of diseases and accidents”.

It clearly said that could happen diseases on all patients, there is no exception and that’s why it must be included on every process that is made on anyone. If this norms are not followed correctly, it would be like giving free access for the infections and causing nothing good to the patients.

Rodriguez J. (2001, p.11) also mentioned the next principle “Use of barriers: understand the concept about avoiding the direct exposition to blood or others organic fluids that

are potentially pollutant, through the application of suitable materials that intervene to the contact of the same”.

The last principles is about the measures of elimination of contaminated material. “Comprehend the set of gadgets and suitable procedure, in a way that the material used on the patients, are disposable and eliminated without risk”(Rodriguez J., 2001,p.10). The definition of this principle is like a cycle, every time a material is used on one patient, then it cannot be used the same material on other patient, must new material.

Having knowledge about this principles can complement students for their practices at university and new professionals that can show a more reliable work, because if biosecurity is not well presented in this type of health service, it cannot construct trust in patient and have problem to offer service to anyone.

1.3. Biological risks

The biological risks can be presented in many situations with any kind of patient or case. Nevertheless, these risks are not odd at all, these risks are very common and cannot be exposed for a long time and need immediate actions to control it.

In addition, the first point according to the research, we found that “the biological risk is derived from the exhibition of biological agents. It is important to note that this exhibitions can be manifested directly or indirectly”(Ministerio de Salud Pública, sf).

The direct way, mentioned by the Ministerio de Salud Publica (s.f, p.14) “is originated when the staff manipulates and has contact with biological agents through the established techniques and procedures”. In conclusion, any type o contact with contaminating agents can cause the exposure of biological risks.

Furthermore, the indirect way is presented “as a result of an interaction, that liberate in the ambient certain amount of biological agents, either if it was started by any procedure, an certain accident or in the evaluation of contaminated waste treated with no care”(Ministerio de Salud Pública, s.f.,p.14).

To sum up all this section, the following said that “the principal risk of the personnel that work with biological agents are related with the accidental exposure of mucous membranes, percutaneous or by ingestion of infected material” (Ministerio de Salud Pública, s.f, p.15).

1.4 Rules of biosecurity.

The work area should always be with the best cleaning conditions, if a fridge is required for equipment or medicines that need low temperatures, it should always be clean and not stored food. The temperature, lighting, and ventilation of the work areas should be comfortable.

All patients should be treated as if they were infected and have the necessary precautions and protection for everyone. You should wash your hands carefully before and after any treatment or consultation. The mandatory protective gear is latex gloves, hat, mask, apron, goggles and waterproof apron.

Care must be taken before removing gloves to wash them with soap before discarding them, use a pair of gloves for each patient, do not touch with gloved hands any part of their body or other objects other than the patient's treatment, that the mask and glasses are properly well placed to avoid splashing. Forbidden to wander with work clothes outside the healthcare area.

If the practitioner has exudative lesions or a wound, it must be covered with tape. Keep the vaccination card up to date. In another case, pregnant women should both

professionals and patients should be very strict in complying with universal precautions and be in areas of lower risk.

Sharp pricking objects should be deposited in special containers located in each service area. Do not reuse contaminated material such as needles, syringes, scalpel blades and suction cannulas. Disinfect and clean surfaces, work equipment at the end of each procedure and at the end of the working day.

In case of accidents such as spillage or accidental contamination of blood or other body fluids on work surfaces, cover with absorbent paper, add 10% sodium hypochlorite and leave for 30 minutes. Then wash with soap and water. Personnel performing the cleaning should also use personal protection. However, in case of blood exposure on the skin, wash thoroughly with soap and water.

In the area of biological irrigation the sink must allow to open or close the water tap with the foot, knee, elbow or photosensitive cell. No unauthorized personnel should enter this area. Non-disposable contaminated clothing should be sent to the health center laundry.

The infectious material should be discarded in red bags, labeled with the biological risk symbol called "infectious waste". In case of accidental exposure with sharp puncture material you should report to the Infectious Waste Committee and / or worker safety. In no case is it possible to use cell phones in critical areas such as operating rooms and patient care areas, such as dental furniture because the cell phone is a highly polluting element.

CHAPTER II

PERSONAL PROTECTION

2.1 Visual Protection

First of all, the personal protection on the odontologist must be present all the time to follow the rules of biosecurity perfectly. This step is the first line of defense against infections or different infections related to the patient's health and these moments must be confronted with implemented protection that is recommended to use all the time while working. This preparation is very important to prevent the professional from getting sick, or in the other case, to prevent infections in the patient.

How can infections have access in the human being through the eyes? It is hard to discover this infection when the professional is working. Nevertheless, it is mentioned that: “to the use rotaries and ultrasounds instruments it present the production and projection of contaminated aerosol outside the oral cavity” (Cortesi V., 2008, p. 110).

It is a gas that it is not able to see clearly, that is the importance of using safety equipment such as the goggles. In the analysis of this point mentioned by Cortesi V.(2008, p. 110) it says:

The glasses, on which screens and visors can be placed, are therefore an essential device to protect the conjunctiva from infection by splashing infected material and chemical caustic agents. Remember that the conjunctiva of the eye is much vascularized and constitutes in itself an important access route for microorganisms.

For a better explanation of this quote, the conjunctiva is a transparent mucous membrane that covers the eyeball and can interact with certain infections while working in any patient and it is why it must be protected with this equipment. The conjunctiva of the eye due to its exposure to external agents is especially susceptible to traumas, infections and allergic reactions, and can become inflamed and lead to conjunctivitis.

It is absolutely important that the dentist wears goggles as well as the patients in every procedure no matter what, especially if the patient use contact lenses. Before every work done with the patient, the goggles, screens and visors must be immediately decontaminated and disinfected.

Another point is that it can happen that these devices can get damaged with so many uses and will lose their function, in that case it must be replaced with new devices. But with appropriate care it should not occur such a thing.

2.2 Bucconasal Protection

Just like infections can occur through eyes, so through the nose and mouth cavity. It is important that every cavity, except the ear, must be covered so it can prevent the microorganisms to enter and corrupt the human body. To sum up, the bucconasal equipment helps to protect against crossed contaminations in material areas.

This equipment must be used by the personnel exposed to certain risk factors such as in a biological way, gases and chemical products. There are two types of bucconasal protective equipment.

2.2.1 Respirator

The design of the respirators are used to reduce and prevent the exposure of an employee to airborne contaminants, and must be adjusted to the user's face so it could provide a wall between those infections and stay free of any biological danger. In addition, this equipment offers the best protection for employees that have to work with close contact with patients that presents symptoms like flu.

2.2.2 Surgical Masks

This equipment is the most common and essential for anyone who would like to work like a doctor, dentist or any medical career. Without this, any medical office will be a total warzone for infections. These masks are used as a physical barrier to protect workers' health against risks such as common blood splashes or corporal fluids. It is an obligation to use it all the time while working. Moreover, it can grow confidence on any patient that can see how someone work.

An important point mentioned by the Ministerio de Salud Pública (s.f , p.18): “ it also protects other people so that they are not infected by the person who is wearing the surgical mask”. For example it can happen that the very dentist is sick and continuously sneeze and unable to stop it so he or she must use the surgical mask for holding their illness in their organisms and don't spread it. In conclusion , mask are not only to protect from diseases , it is also a way to prevent infecting healthy patients , more like a manner of protecting themselves , it is more like a manner of protecting the patients. The surgical mask have various purposes which are the following:

For sick people, so it can prevent the spread of infectious respiratory secretions to other people. As explained before, to prevent contamination from the dentist. Moreover, for the patients so they can feel protected and free from getting infections.

Healthcare providers and employees must use surgical masks to protect against blood splashes or corporal fluids ,and it is of course a way “to prevent accidental contaminations of injuries on the patients by organism that are normally presented in mucus and in saliva”(Ministerio de Salud Pública,s.f,p.18).

2.3 Protection of the body and superior limbs and use of gloves

These are the least protective equipment but never less importance, in this section it represents the use of uniforms, the surgical hats or caps, the function of this equipment is to prevent touching the patient mouth with any part of our skin because there can be easily but small door for infections that can produce a great damage on patients and is also a way to protect against those.

The principal function is to protect the skin of the operator, so the uniforms and the robes must be made with resistant fabric so it can bear any tear that could happen when doing any procedure. If it happen the case that the uniform and robe are damaged or dirty, those must be replaced or sent to a medical lavender in a red plastic bag. Beside this case, there are disposable robes that, “if it is stained with blood from a splash, then it have to be replaced immediately by another one” (Cortesi V., 2008, p. 109). Having this disposable robes are very economic because it serves the function of being a skin protector while being an equipment is made with low price fabric but effective to defend against any danger.

In other case there is the surgical hat that must completely cover the operator's hair . there are also disposables hats serves the same function of normal hats. It is very important to protect the hair because it cannot step in on the operator's work.

Lastly, there are the gloves, which are an individual physical protection that prevent the contact with mentioned infectors like blood and corporal fluids. It is important to note that "this glove doesn't replace the hand washing procedure in any way, since the latex of the gloves are not fabricated to wash and for having several uses" (Gonzales,C.,2015,p.17). After all, it is not a substitute, because it can create microspores when exposed to any activity like using disinfectant, the practice of utilized liquids or even using soap.

There are different types of gloves used for different practices, the latex gloves are used while working with any patient which of course, it must be use a pair of gloves for each patient. , and other gloves made with different materials are for using ultrasound instruments.

2.4. Hand washing

This methods is extremely important to do every time before working and even when stretching hand with the patients, if this isn't applied, an amateur dentist without knowing this will transport a huge amount of crosses infections. An example of the concept ,an Healthcare operators can get infected if they have injuries on their skins. However, they can also transfer this infections to the patients.

The process of washing hand can be divided in 5 and 10 steps, both works very well, but obviously the larger one is the most complete and secure with success the expulsion of microorganisms. To sum up the process of how hand must be washed , it consist in washing every part of the both hands from the wrist to the finger's nails , doing constant brushes with soap on parts when a simple hand wash people normally do can't reach perfectly to clean. The larger process is the same thing only that you have to repeat the process twice and with more precaution advices such as not operating the sink with your hand but using your elbow. It is more discerning but it will assure that most of the microorganisms are removed from hands that are the principal tool to work in with more probabilities to get infected in a short period of time.

This process must be implemented before and after any labor done in the medical office. In addition it must be removed any jewelry before working diary, these jewelry are high contaminants so they must be removed.

2.5. Disinfectants and Antiseptics

Besides all the equipment the dentist must use on their daily work, they must wash equipments with certain chemicals agents that can be used over surfaces, these elements are known as disinfectants. On the other hand, the antiseptics are chemicals agents that are applied in the skins and mucous membranes.

There are a lot of disinfectants and antiseptics that are normally used on the medical office, but there are only few that are the most common such as the alcohol or hydrogen peroxide, which are chemicals used for all basic instruments cleaning. Nevertheless, there are also other chemical that is very important and must be kept in mind.

2.5.1. 2% Glutaraldehyde

As quoted by Cortesi V. (2008, p.114) “it is generally used for the treatment of material for sanitary use that cannot be submitted to sterilization by physical processes and that requires a high degree of decontamination”. To sum up this quote, this chemical is one of the most effective to destroy most of the microorganisms that are present in used equipments. This agent in fact, is efficient to eliminate infections and even spores.

Moreover, it practically lacks from corrosive actions over metals, rubber and plastic materials. The disadvantage of this chemical is that it is very toxic both by skin contact and inhalation, and that is the reason why professionals must be cautious with this material.

CHAPTER III

STERILIZATION METHODS AND PROCESSES

3.1. Definition of Sterilization

Firstly, to understand about the different methods of sterilizations it is important to mention the definition of sterilization. , as explained by Cortesi V. (2008, p.120) sterilization is “a process by which every living organism, pathogen or not, and in their vegetal form or like spores are completely destroyed. It is more like killing any sign of live”.

The concept is absolute. There is no way something may be wrong in this process. It is the action of destroying any kind of microorganism, bacteria and certain infections. To make a successful sterilization it must reach chemical and physical parameters and microbiologic results to make sure that every microorganism is absolutely dead. If these elements are not achieved that means that the sterilization did not get successful and must be immediately considered to use a different method. Depending of the method, these process are highly effective .In this chapter we will discuss about of these methods.

3.2. Steam Sterilization

This method is commonly cheap, safe and widely used and its result is very efficient. It consists on using steam power to eliminate microorganism by denaturation. Which “consists on using an autoclave technology that provides high temperature in a short time” (Siguencia J., 2017, p.2).

In addition, the autoclave technology has a certain importance on every medical office , it is essential for any dentist to have this equipment so they can elaborate a successful sterilization. Peshin A. (2017,parr.5) mentions “the autoclave is a type of machine that used to eradicate biohazardous waste from the surface of tools or instruments”. This machine provides high temperatures when sterilizing, and as a result, microorganism won't survive.

The advantage of using this method is that is very practical and economic for professionals uses and it has three factors that will determine its success: heat, humidity and temperature .

3.3. Sterilization by dry heat

The function of this method is eliminate microorganism by coagulation and it process start with a heat diffusion, using a certain amount of heat power so it could present low levels of the temperature and that is a way to kill infections. This is a very good method and have suitable results.

This different type of sterilization benefits in the way that have an easy use on solids and liquids, or even reach places that are difficult to clean such as closed cavities on certain instruments. And also helps to clean instruments that have oil, dust and other infectants. Nevertheless, something bad about this method is that it deteriorate the material of the instrument and it is complicated to apply this method.

3.4. Process of Sterilization.

There are different ways to see the process of sterilization. Nevertheless, in this section it will be explained in a more summarized form that will only consist of five phases.

3.4.1. Phase 1

In this phase, after taking care of the patient, the infected instruments such as scalpel or needles are retired and after sorting waste from the instruments, those wastes are put on a red recipient called the guardian, it is technically a red garbage can for sharpening tools waste. Finally, the instruments are transported to the sterilization area.

3.4.2. Phase 2

This is the phase when the material is washed and decontaminated, using disinfectant such as the glutaraldehyde and enzymatic soap. The materials are submerged in a recipient filled with water and enzymatic soap and must wait for two hours in the recipient. Secondly, the material is transported to another recipient but instead of water and soap, it is filled with the glutaraldehyde and then let it wait for another two hours. After all the materials are cleaned with a brush and detergent. The person must wear gloves, an apron and surgical mask for this procedure. After cleaning, the materials are moved to the dry area, which are two small plastic boxes with absorbent paper in the bottom.

3.4.3. Phase 3

After the materials are dry, these are packed and labeled on individual plastic bags. In this part, the materials are prepared for a proper sterilization.

3.4.4. Phase 4

The packed materials are introduced on the autoclave technology with a 190 Celsius degree and let it wait for one hour. It is recommended to be careful when doing the sterilization and not to intervene in the procedure.

3.4.5. Phase 5

The materials, now sterilized, are stored on a specific place for future uses. However, this is not the end of the process , to make sure that the materials were completely sterilized, it must be verified that they have reached the assigned chemical and physical parameter and that the microbiologic results does not have any mistake or difference. If these conditions are present, the sterilization was a success.

CHAPTER IV

INTERVIEW

4.1. Interview applied

This interview confirm most of the information presented in this monographic work, like the importance of biosecurity, the different ways to confront infections, and some useful recommendation. The interviews are pointed to odontologist of the city of Guayaquil, they have the best answer to clear out some thoughts about this topic. Between the dentists there is Katia Guerrero, a well experienced odontologist who has a big support for the development of this monograph.

Question 1: What does the word “biosecurity” mean for you?

“Biosecurity are norms that are designed to reduce the risk of transmission of microorganisms” (Guerrero, K, 2018)

This question confirms, between all the interviewed , that they have in mind what is the definition and how it is important on dentistry. And this topic consist of certain

management that the professionals have in mind. In conclusion, most odontologist have a well orientation in what biosecurity means.

Question 2: What measures of Biosecurity do you eventually apply?

“Disinfection, sterilization, distribution of infectious waste, protection with gloves, masks and disposable supplies, hand washing.” (Guerrero, K., 2018)

This answer resume information from chapter two and three, the interviewed redacted certain topics like sterilization and personal protection with equipment. Most of the answers talks about equipments and methods of sterilization.

Question 3: Do you think this topic is irrelevant in your work, or does it really matter?

Why?

“It is very important because the biosafety measures taken are for the protection of the patient and all health workers.” (Cornejo,S.,2018)

The respondents confirms that biosecurity has a great importance on their work, it is considered a factor that most of the professionals cannot forget while working.

Question 4: Do you think users know the importance of biosafety standards? Why? What would you propose?

“Most health professionals do know about biosafety because the profession requires it, but it is not too much to continue educating and monitoring compliance with these measures.” (Cornejo,S.,2018)

Professionals are concerned that even if they know about this topic because it is required for their work, people should acquire some knowledge about the importance of biosecurity, because they can get in danger even if they are not in an obligation to achieve this like the professionals.

Question 5: What advice would you give people so they can be aware of this when they visit a doctor's office?

“Promotion of the management of biosafety protocols” (Guerrero,Y.,2018)

Most of the interviewed recommend to instruct people about biosecurity for students and even well experienced dentists so they can keep in mind that infections must be prevented. They want to secure the safety of the patient in all the possible ways.

4.2. Analysis of the applied survey

With the results of the interview, professionals inform that biosecurity is essential to know if someone wants to be a dentist, because besides that it is an interesting career , it really can cause the spread of infection in any moment while working.

A well experienced odontologist should know the essential methods that secures safety for the patients and for the professionals. The results confirms that most of the dentist know the required methods and equipments for their daily work. What is more, in the interview they describe different types of equipment like the gloves, surgical mask and others.

Nevertheless , professionals are worried that patients and even other dentists are not familiar with this topic , because the fact of not knowing the basics of biosecurity could put them in danger. For that, the best solution they could give is to socialize this topic with everyone so they can be aware of being infected, overall, they recommend to be very cautious when visiting a health center, and to have knowledge about this topic so they can prevent healthy problems.

CONCLUSIONS

At the end of this monographic work it is concluded that any type of infections may be found on any health center and for that professional must know the basics norms of biosecurity so they can know how to react to any type of infections spotted. For that ,it is important to know that biosecurity is the way how against microorganism to prevent the spreading of infections from one person to another. With this concept in mind, biosecurity must be implemented on every situation in dentistry.

In addition, professionals must be protected with all the required equipment like gloves, mask and the uniform. Without one of the different equipments the risk of being infected is higher. For this reason, equipments are essential when working with the patients.

Also, knowing the different methods of sterilization help to have more safe and clean instruments of work while having contact with patients. Have their efficient on certain situations. However, an autoclave machine must be present to proceed with any of the two methods like the steam and dry heat sterilization.

RECOMMENDATIONS

At the end of this work it is recommended that:

- Professionals and patients must always to be aware of certain issues like a dirty health center or having contact with a dentist who lacks of any kind of equipment. For the patients it is recommended to observe how the professional is working, in this way patients can prevent to receive a bad service from the wrong hands.
- Another recommendations is to evade contact with anyone in the health center, just like shaking hands or giving a hug. Even if this is a sign of appreciation or modals, with this actions you can inherit a huge amount of microorganisms in your body. Having too much contact is a risk to get sick or worse.
- Professionals must develop the habit of washing their hands before and after being in contact with the patient. Washing their hands can decrease greatly the chance of infecting someone or getting infected and sick. Also, this habit must be complemented with the required equipment.

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