Difäm Health Community (DHC)

Podcast: Cleaning

Hello everyone, welcome to today's podcast of the Difaem Health community. I am XXX and I am here with my colleague xxx. We are still in the IPC series and today we will be talking about an extremely important topic that unfortunately many health professionals do not like very much. However, it is one of the absolute baselines of IPC. So today, we will get our hands dirty because it is all about cleaning…

Wait, even if you are a janitor or part of the cleaning staff, you should not really get your hands dirty, this is why we already talked about PPE in previous podcasts. During the process of cleaning and decontamination, disinfection and sterilization hands and body of the health worker who performs the task should be well protected.

Yes, you are right. If you missed the podcasts on PPE, check it on our website: https://www.difaem-community.de. Now let´s start with today's topic: just a moment ago, you mentioned cleaning, decontamination, disinfection, sterilization; many different words that all mean something similar don't they?

Well, yes and no. All the terms like cleaning, decontamination, disinfection and sterilization refer to the process of removing impurities but they discuss different aspects of it. All the words are used and even the WHO is sometimes not stringent in their wording. Therefore, for today, let´s only talk about environmental cleaning, when we refer to the healthcare setting. The other aspects will be discussed in the podcasts to come.

Environmental cleaning is the first step in the process and involves the removal of visible dirt, dust, and debris from surfaces. When we are talking about surfaces, these include furniture and other fixed items inside and outside of patients' rooms and bathrooms, such as tables, chairs, walls, light switches and computer peripherals, electronic equipment, sinks, toilets as well as the surfaces of non-critical medical equipment, such as blood pressure cuffs, stethoscopes, wheelchairs and incubators. As you can see, we are talking about quite a lot of items already, but add to that the electronic devices like touch screens and controls, smartphones, monitors and many other articles.

Oh dear, I never thought about cleaning being such an excessive necessity in a hospital setting, which involves so many items. Honestly, I was only thinking about floors and toilets – just what I frequently clean at home. What first ? How often ? In which way? There are so many questions that come to my mind when I imagine all the areas that require environmental cleaning.

I know. The job of the cleaners is one of the most important to make a health care facility secure; very often quite overlooked but nevertheless very, very important. I hope that in your facility janitors and cleaners receive the respect they deserve for their very important task. As you already said, cleaning involves a lot of different aspects. This is why it is a good idea to have a cleaning plan and a schedule of what to clean, at what time and how often, paying special attention to high touch surfaces and areas of potential contamination.

So-called high-touch surfaces, such as bed rails, doorknobs, light switches and medical equipment are all areas that are in frequent contact with patients and health care workers. Therefore, they are more

prone to contamination and should receive special attention during cleaning. In order to minimize the spread of pathogens these surfaces should be cleaned and disinfected frequently.

Okay – a cleaning plan and a schedule are important for monitoring purposes. It is helpful if the janitors sign it when they have fulfilled the task. That brings us to the next question: How should the work actually be done?

For environmental cleaning itself, you can use various methods such as sweeping, vacuuming, wiping, or mopping, depending on the type of surface that you want to clean. The combination of some form of mechanical action like brushing or scrubbing with soap or a neutral detergent removes or at least reduces dirt, debris and other organic matter such as blood, secretions and excretions, but it does not kill microorganisms.

In general when cleaning, you should progress from the least soiled (cleanest) to the most soiled (dirtiest) areas and articles, and from the higher to the lower levels so that debris can fall to the floor and be cleaned up at the end. Use fresh cloths at the start of each cleaning session. For example in the daily routine cleaning of a general inpatient ward you use different cloths for the male ward and the female ward; otherwise you might transfer germs from one ward to the other. Discard all cloths that can no longer absorb solutions or are soiled. Soiled cloths should be reprocessed properly after each use.

Detergent or disinfectant solutions become contaminated during cleaning and so become progressively less effective if the organic load is too high; therefore, the continued reuse of the same solution may transfer microorganisms to each subsequent surface. Thus, detergent and/or disinfectant solutions must be discarded after each use.

In order to inform everyone properly, there are standardized operating procedures that can regulate e.g. the frequency of changing cloths and cleaning solutions. Fresh solution should be prepared on a daily basis or for each cleaning shift. Cleaning equipment such as buckets have to be well maintained. Equipment used for isolation areas or sterile areas should be colour-coded and separated from other equipment. The janitors should wash the buckets with detergent, and rinse, dry and store the, bottom-up to drain fully when not in use.

Oh, can you stop here! This was a lot of information. Let me just recapitulate: Always use a combination of mechanical action and proper detergent when cleaning. Go from clean areas to more dirty areas and from higher places to lower places. Change cloths and solutions regularly. It is best to have a standard, so that all cleaners and janitors do their job properly and in the same way. It is helpful as well for someone not so experienced in cleaning to do the job, following the instructions in the standardized procedures.

Yes, that is right. I would like to say a few words about equipment. The equipment you use should clearly be dedicated to cleaning alone and should be stored in a safe and dry place. Surface cleaning supplies include portable containers e.g. bottles, small buckets for storing environmental cleaning products or solutions and surface cleaning cloths. Floor cleaning supplies include mops, cloths squeegees and buckets. Although common, the following tools should not be used in a health care setting: brooms because they just distribute dirt and when handled carelessly distribute dirt back into the air – it is always recommended to apply wet mopping, also when taking off spills or shards. However, don´t forget the respective PPE. Sprays are not recommended, either. They are difficult to dose and to control, as they just waft with the ventilation and in the end, the detergent might not be where you need it. Here squeeze bottles and cloths are much better. Fumigation should never be used in areas where patients are present. Vacuum cleaning should be avoided in patient areas too, as there is always an uncontrollable distribution of air and potentially germs as well.

Good to know. From the questions I had in mind at the beginning, you answered the one about how to clean and what to use but the question of frequency remains. You mentioned the importance of a plan, but what is on this plan?

Good question. However, I can only give you a very general overview because this is very different depending on the setting, layout, patient frequency, ward structure and many other things. Generally speaking, if you look at the different areas of an out-patient-department, the high touch areas and the floor of the reception and waiting areas should be cleaned at least once in 24 hours, this includes the reception desk, the waiting chairs and benches, payment windows and other areas that are frequently touched by patients, family or staff. The high touch areas and floors of the consultation and examination rooms should be cleaned twice daily at least. High touch areas and the floor around the patient table should be cleaned after every patient in the procedural rooms such as dressing rooms or minor theatres. By the end of the day all surfaces in the procedural rooms– not just the high touch areas – the handwashing sinks, the sluice area and the complete floor must be cleaned and disinfected thoroughly. All the remaining low touch and low frequency areas should be cleaned at least on a weekly basis.

As far as inpatient departments are concerned, I am only talking about the wards. Here all high touch areas and the floors should be cleaned at least once in 24 hours and the remaining areas on a weekly basis and of course, whenever they are visibly soiled. Let me add, that any spilling of body fluids or any other contamination should always be removed immediately irrespective of the cleaning schedule.

I think for the high sterility areas like the theatre, maternity and intensive care, we will do a separate podcast, because there are many additional topics. So as far as that is concerned you have to wait a bit longer, but you will get some information.

Now that is a lot to keep in mind. I think, we will call it a day for now. What I learned today is what a complex job proper cleaning is and how much has to be considered and kept in mind if you want to do it properly. A big thank you for the cleaners and janitors, who obviously play such an important role in breaking the chain of infection and protecting us and our patients from health care associated infections. I know this was just the beginning of the cleaning, contamination and sterilization chapter, so I am looking forward to the coming podcasts, to learn even more about this important area of IPC. Until then, stay safe and stay blessed.

https://www.cdc.gov/hai/prevent/resource-limited/cleaning-procedures.html

https://www.who.int/publications/i/item/cleaning-and-disinfection-of-environmental-surfaces-inthe-context-of-covid-19

https://www.cdc.gov/hai/prevent/resource-limited/index.html