

## Podcast: The Use of Sharps

Hello everyone, welcome to today's podcast of the Difaem Health community. We are still in the IPC series and today, we have an important topic to discuss in our podcast: the correct use of sharps in medical contexts. My name is XXX, I am your host and with me today is XXX, who has quite some experience with the use and disposal of sharps.

Hi everyone, I am happy to be here today and I think it is exciting to take a closer look at this critical aspect in medical practice. As a medical professional I have been through quite some accidents with sharps myself, so I know just how important the proper handling is for infection prevention and control.

Well, I hope that this podcast can help to reduce the number of accidents with sharps. However, let us start at the beginning. You talk about "sharps" and in a medical context, what are we talking about exactly?

"Sharps" are medical devices or instruments with sharp points or edges that can puncture or cut the skin. Everybody thinks of needles, but there are more, for example lancets, scalpel blades, razor blades, pricks and even broken glass from vials or containers. Most of these things are essential tools for various medical procedures but pose a significant risk if not handled correctly.

Okay, you talk about the risk of improper handling of sharps poses. I can imagine, if you prick yourself with a needle that has already been used, it can be quite dangerous.

Yes, that is exactly why we should work hard to avoid or at least reduce accidents with sharps to a minimum. Needlestick injuries are quite an issue: whenever a healthcare worker or individual comes into accidental contact with a used needle or another sharp medical device it can lead to the transmission of bloodborne pathogens such as HIV, Hepatitis B, and Hepatitis C, putting the person at risk of serious and potentially life-threatening infections. In addition, we have data, that worldwide about 100.000 health care workers got an infection with Hepatitis B or C or even HIV due to accidents with sharps at their workplace. Most of them live in sub-Saharan Africa; because there many patients who suffer from these diseases the risk is higher if you prick yourself or get pricked, that the body fluids you get in touch with contains the viruses.

However, improperly handled sharps pose not only a risk to health care workers. Generally, contaminated sharps can introduce pathogens into the body during medical procedures, increasing the risk of post-procedure infections. In addition, there is the risk of cross-contamination: if sharps are not handled and disposed of correctly, there is a risk of cross-contamination in healthcare settings. Contaminated sharps can inadvertently spread

infections from one patient to another or contaminate surfaces and medical equipment, leading to further transmission.

Okay, I see, sharps really pose a relevant risk to the health care workers and the patients. I see two major points for action here: the first is to prevent accidents with sharps and the second is how to handle accidents that happened with sharps. Are there still ways to break the chain of infection after an accident with sharps occurred?

You are right; these are the two main points to focus on when talking about sharps and IPC. Maybe the first point should still be broken down into two sections. Safe use and safe disposal of sharps first and then the question what to do when “it” happened, which is another big issue.

However, let us start with the safe use first. As we learned in the podcast about reprocessing: single use items like needles and syringes or blades that are not meant for re-sterilisation should strictly be used only once and then be disposed of. Single use with sharps does really mean: single use only!

Yes, we want to emphasize this again: do not reprocess sharp items that are not meant for reprocessing! They pose an enormous risk for the health of the patient and to your health as well. Protect yourself and your patients!

It is to say that most sharp accidents occur, either when you are in a hurry or elsewhere with your thoughts. Therefore, focus on the task before you! Prepare what you need, wear appropriate PPE if necessary – gloves will be the most common item here - and then work step by step without haste.

Therefore, if using a sharp, make sure you have the correct item for the task on hand. If you use a sharp for a task it is not meant for, there is a higher risk of an accident because the items might break, snap back or get stuck. Check if the packing is intact, make sure there is no damage or hole in it – this applies especially for the blades that you use in theatre – hold the packing against light, to see if there are miniscule pricks. If there are, discard the item. It is no longer considered sterile. Once you are sure that everything is in good order, you continue. If you use an item, that has been resterilized because it is meant for multiple use, check if the markers indicate proper sterilization and whether it is in good condition. If you see rusty blades or needles, needles with dents or bends, discard them.

Okay, there are already quite a lot of things to consider even before I actually use the sharp; prepare the articles I might need, check, if I have the correct item for the task before me, prepare everything and finally check the condition of the item in question to make sure, if it is in good working order and sterile. In addition, it is important to do all this step by step and without haste.

Yes, right! When using sharps, maintain a stable and controlled handgrip, especially during injections or vein punctures. This helps prevent accidental needlestick injuries. And keep in mind: it is always better to request help if a patient is agitated or if there are other problems that might disrupt the procedure.

If you use the same item several times during a procedure - like blades or needles in surgery - place them immediately after use clearly visible to everyone, to a clearly defined place, for example on the theatre tray, so that no one can touch it accidentally. If you realize that another worker is coming close to it, you might even say “attention, sharp”. I said to put them down immediately after use. It is not a good idea to run around with needles in your hands, pointing and throwing with scalpels, or throwing used lancets like basketballs in the direction of the sharps container! I see the big question marks in your eyes, but believe me; I have seen all of this happening.

Of course, this is dangerous and I am shocked that there are really people out there who do that. I just hope that if you have ever done anything like that – you will never do it again after this podcast!

Okay, thank you very much. I think what you told us was very important. As the use of sharps comes with quite some risk, we need to be aware, that we have to use them carefully and show responsibility for what we are doing.

To finish, let me also wrap up all the other points of today. Sharps pose a relevant risk for the health of the patients and the health care workers as well, because they can puncture or damage the skin barrier and therefore bring infectious material directly into the body. Therefore, safe and responsible handling is crucial. Whoever works with sharps should be prepared for the task ahead, check the equipment, be focused and not in a hurry. If help is needed, it should be requested at any time. When conducting the task, it should be done in a straightforward way. Sharps should be placed in previously defined locations when used intermittently. It is the responsibility of the user to warn other people of the danger at hand and also to ensure the proper disposal of the sharps. My sharp – my responsibility!

Yes, that is right. How to ensure a proper disposal of sharps will be a new chapter and I am already looking forward to talking about it in our next podcast.

Me too, until then, stay safe, stay blessed, and handle all the sharps with appropriate care!

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