Dissemination of PICO Research

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**Results**

The results of the articles that were researched had varying results, mostly due to what they were considering. Some studies were comparing types of perioperative scrubs, and others were investigating the number of times a pre-op scrub was to be performed all to decrease the occurrences of surgical site infections (SSI). Alcohol-based surgical scrubs (ABSS) compared to ABSS with Chlorhexidine gluconate (CHG) added, the results showed that the CHG scrub immediate activity had a relatively low result on day one, but increased each day throughout the study, whereas the ABSS had a higher immediate activity but did not change throughout the study (Macinga, Edmonds, Campbell, & McCormack, 2014).

In another study, a comparison was done between CHG bath versus no bath. The results had significant reduction of SSI in the group who had the pre-op CHG bath (Graling, & Vasaly, 2013). This study also mentioned that the CHG bath reduced the postoperative organ space infections (Graling, & Vasaly, 2013).

Another article researched the evidence of CHG scrubs and povidone iodine (P-I) with and without alcohol. The rate of SSI in all cases decreased but the greater effectiveness was seen with the CHG with alcohol scrub (Al Maqbali, 2013).

The last article searched the evidence for how many times a surgical preoperative disinfecting shower needs to be performed before a surgery. It looked at one, two or three showers. It came up that there was no significant evidence of the numbers of showers needed to be preform preoperatively to decrease SSI, but did mention the superior effect of CHG had on the reduction of bacteria.

**Relation to PICO**

My PICO question is as follows; Does the use of preoperative body washing with a chlorhexidine scrub on adult patients, the night before and morning of surgery, help reduce the rate of post-op infections compared to no preoperative intervention used? These articles relate in giving evidence that first a preoperative bathing will help in reducing post-op SSI. The evidence shows that ABSS with CHG has the better disinfecting effect, for the longer time frame (Macinga, Edmonds, Campbell, & McCormack, 2014). The alcohol has the better immediate effects, but CHG has a longer lasting effect that outlast the life cycle of bacteria that could cause the SSI. In one of the study it compared the immediate and six hours later, on day 1, day 2 and day 5. Each day there was a slight increase of effectiveness with use of CHG (Macinga, Edmonds, Campbell, & McCormack, 2014). Keep in mind each article mentions there are some limitations. Alcohol base scrubs cannot be used on mucous membranes. And any allergies or sensitivities need to be considered

**Improving Clinical Practice**

**Policies** Clinical pathways need to beinitiated to include preoperative ABSS with CHG scrub. Need to take in consideration of allergies and sensitivities to chemical ingredients of the surgical scrub. That a preoperative scrub preformed for once a day for two or three days is needed. **Education**

First the need to make sure that all nursing personal is aware of policy. To have the desired outcome it is important that the healthcare workers have the knowledge behind them to guide their patients with clear directions about the way to carry out the preoperative scrubs. Education on how to perform the scrub. A 3-5 min scrub. Patients may wash hair but to do so prior to performing surgical scrub wash. Not to use soap, lotions, perfume/cologne after performing surgical scrub. Explain to patient not to use on or near mucous membranes. Staff need to be aware of patient’s allergies and sensitivities. Not to use on neonates, these may cause chemical burns on their underdeveloped skin (Al Maqbali, 2013).

**Impact of the EBP process**

**Clinical Practice.**

In the clinical practice this process will include having and providing the knowledge on how this practice will help improve outcome of SSI by decreasing the occurrences. The training of staff on proper methods, and times to have the preoperative scrubs done. This will take little time for the instruction, and the cost for staff training will be outweighed by the saving in the decreased numbers of SSI post-op. In practice, the healthcare worker has to take into account the patient’s allergies and skin conditions and tolerability, along with the user acceptability when instructing.

**Patient care delivery.**

Patient care delivery will only change in the instructions of pre-op instruction to include the showering two to three time prior to the patient’s surgery. If patient is wanting to wash hair in shower to do so prior to the surgical scrub. Not to use soaps, lotions, or perfume/cologne after these showers.

**Patient’s preferences and values.**

In considering best practice for the PICO question results, we also need to communicate with the patient. We need to find out about their accommodation and if they can follow the instructions. If they can comprehend verbal or written directions, and if a shower is directed to do, to make sure they have one. We need to consider all walks of life, and adjust to help.

References

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