

Dry, Cracked, and Bleeding; A Research Project Exploring the Negative Side Effects Associated with Frequent Use of Alcohol-Based Hand Sanitizer

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Background

- The CDC estimates that registered nurses (RN's) wash their hands with an alcohol-based hand sanitizer a minimum of 100 times per 12-hour shift.
- Frequent use of alcohol-based hand sanitizers by RN's is a risk factor for developing dry, cracked, irritated hands.
- RN's with dry, cracked and irritated hands results in decreased hand hygiene compliance due to discomfort.
- Impaired skin integrity compromises the skin's ability to act a barrier against bacteria and pathogens leading to infection of self, staff, and patients.
- Incorporating the regular use of oil-based lotions to hand hygiene practices improves skin integrity and increases hand hygiene compliance rates.

Practice Change

Educate RN's about the addition of oil containing lotion, location of lotion on units, to improve overall condition of skin, and improving hand hygiene compliance.

Methods

- Administered anonymous paper pre-surveys to RN's
- Presented educational content to RN's in staff huddle, posted flier on unit
- Anonymous post-surveys were administered to RN's directly after education.

Measures and Results



Pre-survey (n=10)

- 100 % of nurses admitted to having dry cracked hands secondary to over use of alcohol based hand sanitizer.
- 40% admitted to not always being compliant with hand hygiene due to dry/cracked hands.
- 45% of nurses reported that they felt that their hand hygiene compliance would improve were lotion to be available near the hand sanitizer.
- 90% of nurses on Grant 6E were unaware that there was lotion available in the alcoves near the sinks.

Post-survey

- 75% of nurses were able to identify where lotion was available on the unit
- 75% of nurses saw improvement in their hand conditions after adding lotion to their hand hygiene
- 60% of nurses felt their hand hygiene compliance had improved with the addition of lotion

Summary/Discussion

- The results of this project were limited by the small number of nurses who returned the survey.
- While lotion is available in several alcoves, our results may have been positively impacted if lotion were to be located in the hall beside the hand sanitizer.
- Feedback from nurses:
 - Most nurses were initially unaware that lotion has been available on the unit for some time. This shows the gap we have regarding hand hygiene.
- Other considerations:
 - The use of lotions is monitored by infection control. Use of home lotion is discouraged as sanitary conditions cannot be guaranteed
 - Current foam hand sanitizers provided are meant to be gentler on skin than the traditional liquid alcohol based hand sanitizer. The foam also contains minimal lotion in the ingredients.

Conclusion

Hand hygiene compliance is impacted by the drying effects of alcohol-based hand sanitizer on the hands of nurses. The use of hospital approved lotions which are provided on the unit can help to keep RN's safe from risks associated with dry and cracked hands while also improving rates of compliance.

References

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