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Published In/Presented At

McNamara, J., Wilcox, A., Carr, M., & Palmentera, A. (2016, August 19). *Clostridium Difficile (C. Diff) and Personal Protective Equipment.* Poster presented at LVHN Vizient/AACN Nurse Residency Program Graduation, Lehigh Valley Health Network, Allentown, PA.

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Clostridium Difficile (C. Diff) and Personal Protective Equipment

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BACKGROUND

- C diff is increasing in the medical surgical field
- There is a lack of proper personal protective equipment during the donning and doffing of C diff contaminated rooms
- Licensed and unlicensed personnel need to be re-educated and reinforced on the importance of proper PPE

PICO QUESTION

- P: Licensed and unlicensed staff on a medical-surgical unit
- I: Education of staff and the proper and appropriate donning and doffing practices of PPE in regards to C diff rooms (contact precautions)
- C: Education based on current practice of applying and removing PPE (pre-observation, pre survey, post- observation, post survey) Will educate staff on 4KS with TLC module and bullet points on paper, and 4K with one to one teaching
- O: Improved compliance and knowledge donning and doffing practices on observation and pre and post survey

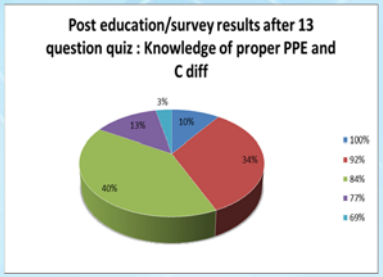
EVIDENCE

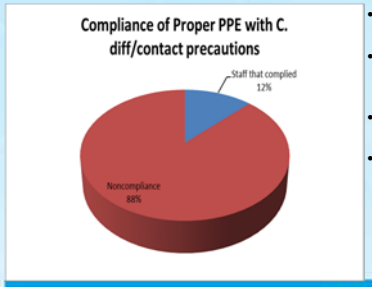
- PPE utilization can reduce C. diff rates (Goldstein, et al, 2008)
- Staff/patient education regarding PPE can raise awareness improving compliance within the workplace resulting in lower transmission of C. diff (Goldstein, et al, 2008)
- Together with gloves, a gown can be worn to limit the spread of C. diff via clothes (Grossman & Magear, 2010))
- Employees uncertainty in the execution of donning and doffing could be a factor in improper PPE procedures (Verbeek, et al, 2010)
- Education and reinforcement is a critical aspect to an employers policies and procedures (Atack, 2008)
- In order for PPE to become more efficient, employees must be receptive to education (Atack, 2008)

METHODS

- Staff was pre-observed by discretely observing each encounter with C diff contaminated rooms and rule out C diff rooms
- Pre-survey was done observing staff entering an exiting patients room
- Evaluation of proper donning and doffing was evaluated utilizing a checklist
- If one area of PPE was not utilized properly, improper usage of PPE was noted on checklist
- Education was provided with a TLC module as well as bullet points provided on paper on 4KS and verbal teaching was utilized on 4K with the exact same information
- Staff completed a quiz that was handed out on paper on one floor and did a verbal quiz on the other entailing the same information about C diff and proper donning and doffing
- Pre and post surveys were compared to determine whether the education was beneficial and/or increased compliance and knowledge of proper donning and doffing of PPE.

RESULTS





OUTCOMES

- Between the months of April and May, six rooms containing or possibly containing C. diff were observed discretely on 4KS and five on 4K
- Multiple encounters with staff licensed and unlicensed were found not properly utilizing PPE
- 30 quizzes were collected post survey taken by Techs, Aps and Nurses
- Majority of the staff are well aware of proper PPE and precautions regarding C. diff
- Education did **NOT** alter results regarding proper donning/contact precautions when entering a C. diff room
- One out of seven employees properly donned while entering a room during pre observation and post observation

CONCLUSIONS

- Employees both licensed and unlicensed are clearly aware of the proper PPE when coming in contact with a patient who possibly has C diff.
- It is not a knowledge deficit, the issue at hand is compliance regarding proper PPE
- Staffs noncompliance could be at the issue to why C diff is increasing at rapid rates
- Re-education, reinforcement and possible disciplinary actions may be needed to have employees comply with proper donning of PPE

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