

Hand Washing Heroes

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Background

Children are taught to share at a young age. Innocently, some things are unconsciously being shared that could be dangerous. The predominate spreading of germs and other bacteria is mainly transferred from one child's mouth or nose to other children's hands.² The non-complex task of proper hand hygiene plays a significant role in diminishing the spreading of dangerous germs and other bacteria.



Introduction

The spreading of germs is an extremely important topic, especially when talking about young children. Our clinical group visited a head start to talk to children about the spreading of germs and most importantly how to wash their hands properly. When our group arrived to the school we split up into small groups and went into as many classrooms as we could to teach the children how to properly wash their hands. After we explained to them the importance of hand-washing and how to properly wash hands, we then sent them to the bathroom so they could show us they knew how to do it. After they washed their hands we showed them all germs they missed with a glow light. This experience will definitely help them wash their hands for the given time and to really understand why washing their hands is extremely important.

Problem

Being in close contact and close confines 5 days a week, the children are sharing their germs without even knowing it. Whether it's being done by sneezing (airborne) or by touching objects and each other (contact), the children end up sharing more than just their toys and other classroom devices. They are unknowingly passing germs around and could potentially infect their classmates with something that may make them sick. In order to address this issue, we decided that by teaching these children the proper way to wash their hands, we could help to prevent the spread of some of the germs in their classroom and keep them from missing school because of preventable illnesses.

Methods

- We went to the Central Head Start in Beckley to teach the children how to properly wash their hands.
- Separated students into groups.
- While in our designated rooms, we asked the kids if they knew what germs were and where they came from.
- This resulted in a lot of answers, many of which were right.
- After the children demonstrated their knowledge, we applied glow germ on their hands and let them play for a while.
- We then shined a black light all over their hands showing how easy it was to spread the "germs."
- The kids were very amazed by this. We then took them to the sink and showed them proper hand hygiene.
- For being a super hygiene hero, we gave the kids a superhero sticker of their choice.



Results

Instructing the kids on how to properly wash their hands went exceptionally well. Each child was able to demonstrate proper hand washing techniques as follows¹:

- **Wet hands with water**
- **Apply soap**
- **Scrub hands while singing the ABC's two times**
- **Rinse hands under running water from wrists to fingers**
- **Dry hands with a paper towel**
- **Turn sink off with a paper towel**

All children were given superhero stickers as a reward for their super work. The children were very excited that they defeated the germs and became hand washing heroes!

Conclusion

- Hand hygiene can prevent the spread of illnesses such as, mono, influenza, and the common cold³.
- Hand hygiene is something easy that children can do to actively participate in the prevention of illnesses.
- Getting the children excited, with something like superheroes, will promote them to be more knowledgeable about germs and how they are spread.

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Handwashing Keeps You Safe



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Problem Statement

Handwashing is the single most effective way to prevent the spread of germs⁴.

Introduction

Mt. Hope Christian Academy students were taught about the importance of having proper hand hygiene and how to wash their hands correctly. The students were shown proper hand hygiene because most children of this age are not aware how fast and easily germs can spread. During the first meeting with the principal we chose a date and time to do this activity with the students the second meeting the principal signed a contract giving permission to perform the activity. The third and final meeting consisted of completion of the activity. The activity was completed by having the kids use hand sanitizer first, and properly letting it dry. Then the students put on Germ Glow. Additionally, how to effectively wash hands was demonstrated. This activity was chosen because proper hand washing is baseline knowledge that is needed throughout the human life.



Methods

- Split the students in half according to grade level.
- Then split so that each section of students could have better interaction and understanding.
- Began by having the students use hand sanitizer.
- Students were instructed of proper use of hand sanitizer and the act of properly letting it dry.
- Students were informed of the appropriate time that one can use hand sanitizer rather than soap and water.
- The students put on Germ Glow, while proper hand washing with soap and water were demonstrated.
- Following the demonstration students washed their hands while being observed.
- After washing their hands a black light was used to show the students all of the “germs” they left behind. This showed them the importance of effective hand washing and how important hand washing is to prevent the spread of germs.

Statistics

According to the CDC studies have shown that hand washing can prevent 1 in 3 diarrhea related illnesses and 1 in 5 respiratory infections, such as a cold or the flu⁴.

Results

The results the service learning project of teaching children about proper hand hygiene proved to be successful. After teaching the children in an interactive way, they were able to demonstrate the proper way to wash their hands with soap and water and how to properly apply hand sanitizer. Along with being able to show what they had learned from the presentation, they were also able to answer questions and tell the importance of practicing good hand hygiene.

Conclusion

The students of Mount Hope Christian Academy, grades K-5, learned the proper handwashing techniques with soap and water. Additionally, they learned the proper technique needed when using an alcohol based rub. Proper technique was demonstrated to the students, and then the students showed the hand washing techniques they learned. Within this project, the students learned how to keep their hands clean and keep the spread of germs to a minimum, both of which are lifelong skills. The project was successful due to the students being able to self-perform hand washing.



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Hand Hygiene

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Abstract

We chose to teach hand washing to the students because it is a very easy and simple task, yet a very important part of every day hygiene. Young students tend to sneeze, cough, wipe their nose, all of which can potentially spread germs everywhere. We believe teaching skills such as ways to scrub your hands and how to time their scrubbing would benefit them now and in the future.

Introduction

Hand hygiene is something we should all do every day. Teaching this to students while they are young will help to prevent the spread of germs. At the beginning of our presentation, we started out by asking the students questions about where do germs come from. After asking questions, we began teaching the steps to proper hand hygiene. We gave them each a drop of germ glow and then took them to the restroom to wash their hands. Once they returned, the students could look at their hands under “Jeremy the Germ” and see if they washed all the germs off. At the end, we reviewed hand hygiene and gave out candy.

Preparation

We discussed as a group what would be presented and what materials were chosen to help deliver the teaching. Discussion with faculty at the school allowed us to obtain specific content that would be important to focus on. We decided to use an interactive technique to elicit the interest of the children and have visuals to showcase the importance of hand hygiene.

National Standards¹

- A single gram of human feces can contain one trillion germs.
- Contamination of these germs can be obtained through sneezing and coughing onto hands and then proceeding to touch other surfaces.
- The absence of hand washing can make it easy for germs to pass from one person to another.
- The top two killing diseases present in children of 5 years of age are diarrheal diseases and pneumonia.
- Handwashing could help 1 in 3 children with diarrheal diseases, and 1 in 5 children with respiratory diseases.
- Education of handwashing could increase class attendance since it has the opportunity to prevent illness.

Methods

To help make this more interesting for the students, we used a few different techniques.

- Provided a poster with steps on how to wash their hands with pictures beside each step to help them understand it easier.
- Allowed the kids to practice washing their hands after glow germ was applied.
- Encouraged the kids to look inside “Jeremy the Germ” to see how well they washed their hands.

We believe these methods helped the students understand how to wash their hands at a level they could comprehend, and that this helped our overall results.



Results

We let the kids come see the germs on their hands before proceeding to take them to physically demonstrate hand washing. After properly demonstrating, the kids were very amazed at how many germs were still visible on their hands under the blacklight. They proceeded to tell us where exactly they need to focus more on, such as the fingernails and between the fingers. The kids followed up with answers showing their new and useful knowledge on how they are suppose to properly wash their hands. They also explained to us vital times at which they need to perform this, such as after using the bathroom and before eating.

Conclusion

After our lesson of Proper Hand Hygiene at Cranberry-Prosperity Elementary School, we all feel as though we left them with life long skills that the students and the staff will always have. These skills are vital to prevent the spread of bacteria and viruses. We also feel as though this habit of performing proper hand hygiene will aide them through flu-season when the spread of germs are at their peak. The experience was both educational and fun for all of those involved and we were happy to serve our community in such a positive way.

References

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Southern WV Youth Explore Career Options in Nursing

Kelly Morton MSN, RN, Hillary Parcell MSN, RN, Crystal Sheaves PhD, RN, APRN, FNP-BC

Abstract

- Early adolescence is a time of discovery when youth consider future career opportunities and develop career identities.²
- A Junior Nursing Academy can help students explore nursing as a career option.
- Nursing Academies help students gain information on various types of nursing fields and practical skills, such as, CPR-Certification.
- The national nursing shortage is expected to peak in 2020.¹
- Engagement in Junior Nurse Academy meets a critical need for addressing the national nursing shortage by sparking career interest in the nursing profession.



WVU School of Nursing, Beckley Division faculty and students await AirEvac's departure during trauma simulation.

Mission

*"The Mission of the West Virginia Junior Nursing Academy shall be to: inspire middle school students to pursue a professional nursing career."*¹

Goals

- Offer the first Southern WV Junior Nursing Academy Summer 2018.
- Co-Sponsored by WVU, WVU Tech, Bluefield State College, WV Center for Nursing, Raleigh General Hospital, Beckley Appalachian Regional Hospital, and AirEvac.
- Spark interest/excitement about nursing as a career option.
- Advise students on appropriate course work in high-school to prepare for a nursing degree in college.



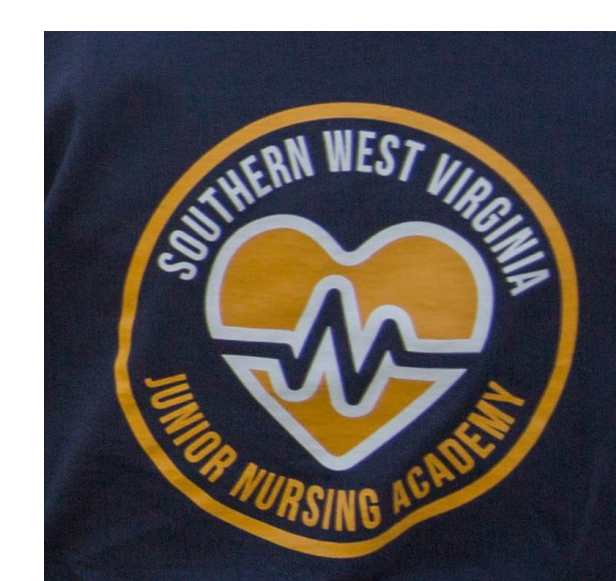
WVU School of Nursing, Beckley Division faculty and student welcome the Southern West Virginia Junior Nursing Academy students.

Methods

A three day curriculum was developed in order to showcase a small portion of the nursing profession to 18 up coming eight grade students. Students attended classes on WVU Beckley campus, Bluefield State College, Raleigh General Hospital and Beckley Appalachian Regional Hospital. In the classroom, the students were educated about proper hand hygiene, personal protective equipment, proper stethoscope technique, and basic anatomy. In the clinical field, all students received a CPR certification and participated in simulations including emergency, child birth, and OR. Each student was also assigned a mentor that was able to answer questions regarding the nurse career, what life is like in nursing school and in the nursing field. Students in the academy also partook in a pinning ceremony at Erma Byrd Higher Education Center where their families attended.



Junior Nurse Academy students, WVU School of Nursing Faculty- Beckley Division faculty and students with AirEvac crew and helicopter following trauma simulation.



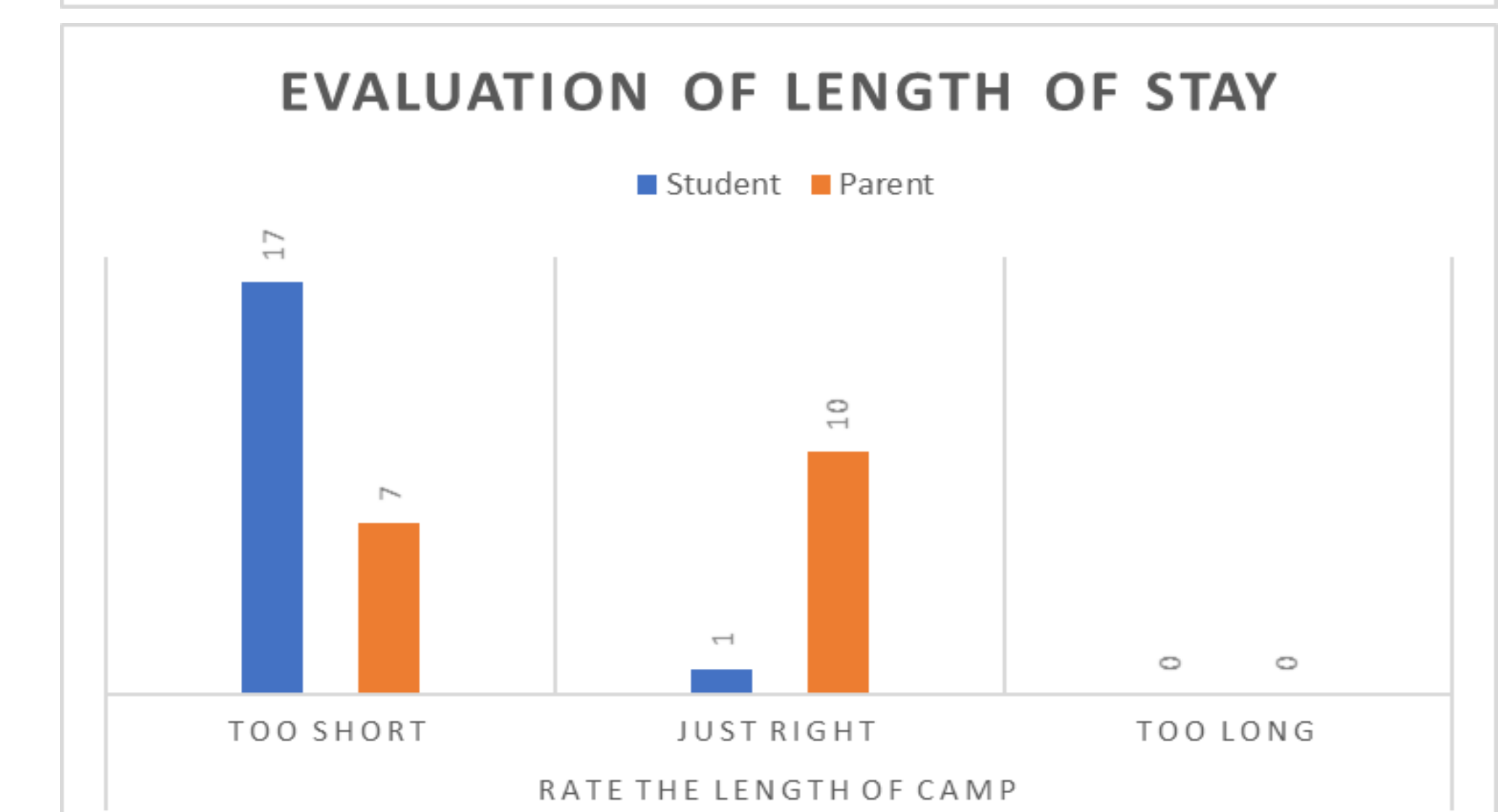
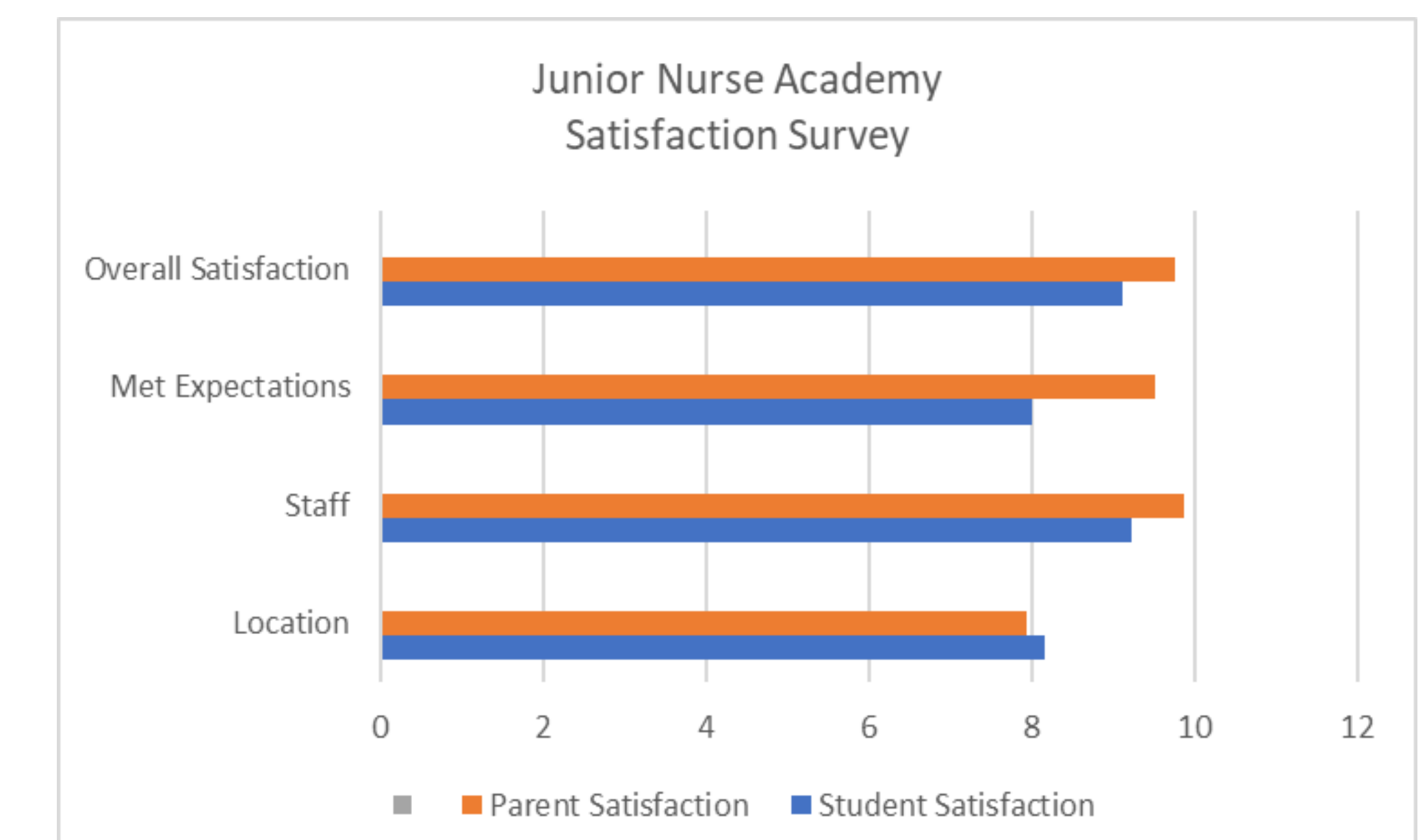
Left: Junior Nurse Academy Student donning personal protective equipment. WVU Beckley Division.



Right: Dr. Sheaves demonstrates proper stethoscope and blood pressure technique to Junior Nurse Academy Students.



Junior Nurse Academy students attend Operating Room Simulation at Raleigh General Hospital.



Conclusion

- Experience of Junior Nurse Academy can encourage youth to become interested in nursing and health professions.
- Based on student feedback adjustments to curriculum will be made to include basic first aid education, more hands on care experiences with real patients, exposure to other areas of the nursing profession (e.g. community nursing, med-surg, pediatrics), and more activities to engage and excite our youth to attend college in the future.

Student Comments

- "I enjoyed everything that went on. My favorite thing overall was making new friends and getting to see how the nursing field is. I especially loved seeing the helicopter and flight nurses."
- "I really liked giving CPR and doing the AED, and the helicopter, and delivering the baby."
- "I liked watching and delivering the manikin baby."
- "I really liked the staff and students. I also liked all the activities we got to do."
- "My favorite part was going to RGH Surgery Center. I liked it because I got to see different parts of the nursing profession."
- "I loved the OB experience, the CPR, the ER, the helicopter, hands on activities, and meeting new people."
- "I really liked the ER and learning about trauma."
- "I had an amazing time!!!! Please have it again and make the camp longer!"

Parent Comments

- "I think this is a great thing for our youth. With the world we live in, our children need more programs like this. I think each child will walk away with more knowledge, and guidance toward the future."
- "We were pleased with the entire experience. My daughter talked every evening about how great it was, how much she learned, how great the staff were. It was a great collaboration among community."
- "It has been a very exciting 3 days, listening to what my daughter got to see, learn, and participate in, only thing I would recommend is maybe making the camp a week long."



Junior Nurse Academy Student receiving her certificate of graduation.

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Hand Hygiene with Shady Spring Elementary

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Background

- Demonstrate proper hand hygiene to 1st graders at Shady Spring Elementary.
- This age group was chosen because of the short attention span, and possible knowledge deficit of proper hand washing time.

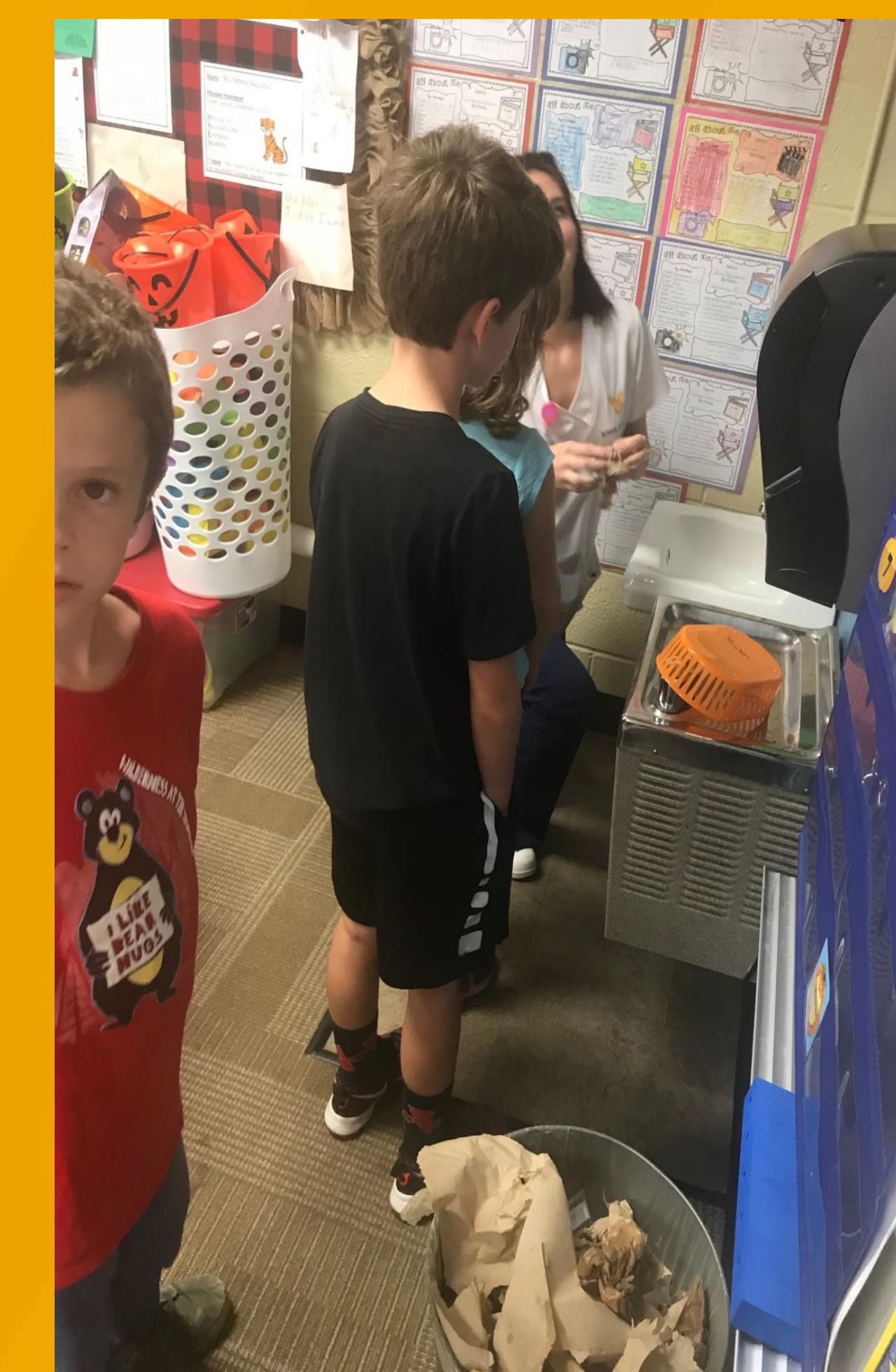
Introduction

- Proper handwashing of 20 seconds and decreasing the risk of illness was discussed with the students.
- Demonstration that handwashing should take about the same time it takes to say the alphabet or happy birthday twice was provided.



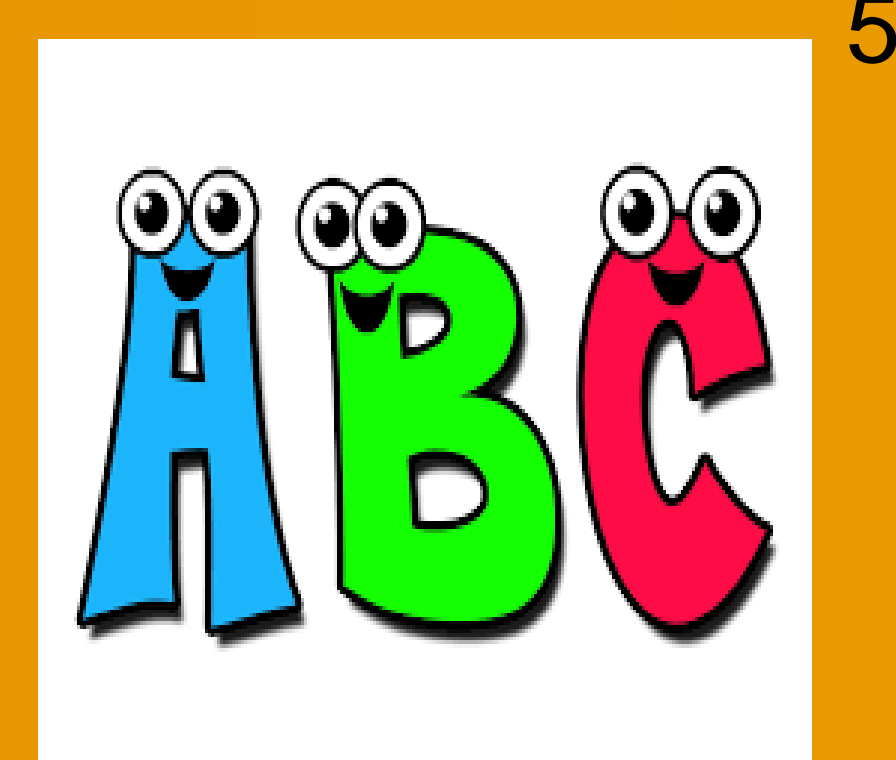
Methods

- Questioned students about hand hygiene and where germs come from
- Educated students about how germs are spread
- Instruction provided on GermGlo, including findings of improper handwashing
- Class divided into small groups and demonstrated handwashing
- Black light used to visualize areas of improper handwashing
- Areas around fingernails were frequently missed
- Education provided regarding proper nail washing technique



Results

- The students demonstrated proper handwashing technique.
- Unaware of proper length of handwashing.
- They did know that they should wash their hands before preparing food, eating, after using the bathroom, and blowing your nose.
- Areas around fingernails frequently showed improper handwashing
- Students learned to sing the ABC's during handwashing for proper timing.



Conclusion

Only having one sink per classroom created a time strain to complete the project. However, this allowed us one on one time with each student to better teach them about proper handwashing.



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