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Preventing Germs Spreading in Preschool Children

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Preventing Germs Spreading in Preschool Children

Erika Hernandez

A Capstone project for the Bachelor of Arts in Human Development and Family Studies

Introduction

Young children in childcare centers are exposed to germs everyday and are more vulnerable to diseases being in a group care setting. Children from migrant families with little formal education might be more vulnerable because parents may have little knowledge about the importance of hygiene for their children, or they may not have time to reinforce healthy habits due to long working hours. To help address the lack of healthy habits among preschool children aged 3 to 5 years, I am providing a three-day lesson about how germs are spread and the importance of washing hands to prevent diseases at the Little Angel's Migrant Head start in King City, California.

Need Statement

Young children are exposed to germs everyday and more vulnerable to diseases in child care centers. "There is a high rate of infectious illness in such public child care centers, ranging from the common cold to more severe ailments like stomach viruses and respiratory infectious diseases" (Lapinske et al., 2014, p. 219). Lack of practice of healthy hygiene and poor knowledge on implementing correct techniques in handwashing are the most common predictors of infectious illnesses in children (Mazlan et al., 2017). Since children are in contact with adults and other children in child care centers, there are more chances for them to be exposed to germs. For this reason, teaching children proper hygiene and healthy habits could be crucial in preventing disease spreading.

The best and effective way to prevent diseases is proper handwashing (Person et. al, 2013). Encouraging children to wash their hands with soap and water after using the toilet, before eating, and after playing outside can be helpful to prevent diseases in preschool and

childcare centers since hand washing removes dirt and microorganisms that can cause diseases (Mazlan et al., 2017). State regulations have specific hand washing and cleaning policies for preschool and childcare centers to avoid the spread of diseases; however, teachers and childcare providers do not always follow these policies (Lapinske et al., 2014). Teachers and childcare personnel should develop strategies to include hand washing in their curriculum, so they can make it a routine not only at school but at home as well.

Many children wash their hands, but they do not use soap or spend the proper time scrubbing them as it is recommended. In one study, preschool children were observed washing their hands without soap. Researchers also timed and observed that children were only washing their hands for five seconds (Aihara, et al. 2014). According to the Center for Disease Control and Prevention (2019), hands should be rubbed together with soap for at least 20 seconds to prevent germs spreading. In addition, many times children do not dry their hands properly. They often just wash their hands and wipe them on their clothes instead of using a towel. If children wash their hands, but do not dry them, there are more chances to transmit microbial contaminants to anything they touch (Person et. al, 2013). For this reason, it is important for teachers and childcare providers to make sure children follow the stepwise process to wash their hands that includes hand drying.

Implementing proper hand washing can help prevent and control the spread of disease. Research has shown that proper hand hygiene has been found to reduce diarrheal disease by 31% and respiratory disease by 21% (Person et. al, 2013). If teachers, childcare providers, and parents teach young children proper hygiene habits early, disease spreading can be prevented. Teaching hygiene and healthy habits during the preschool years is the most favorable time before

unhealthy habits are established. Moreover, in order for a child care to earn accreditation from the National Association for the Education of Young Children (NAEYC), guidelines for proper handwashing must be followed (NAEYC, 2012). For this reason, teachers and other adults need to teach children proper handwashing. Children tend to imitate what other people around them do, so if a child sees a teacher or a peer that does not wash his/her hands, it is most likely that this child imitates what he/she sees.

Overall, my project will bring awareness to children about germs and handwashing. I will discuss the different ways germs are spread, when it is necessary to wash hands, and proper ways to wash hands to kill germs to a class of preschoolers at Migrant Head Start in King City, California.

Theory Application

Developmentally, children at preschool age learn by observing and modeling behaviors from people around them. This type of learning corresponds to Albert Bandura's Social Learning Theory. This theory states that individuals learn from interactions with others. By observing the behavior of others, individuals tend to imitate such behavior (Bandura, 1977). In the case of handwashing, it is possible children imitate their peers, teachers, and other adults at home, so if teachers and adults around them set the example by washing their hands every time is needed, children will imitate this behavior, and will make it a daily routine. When a child imitates teachers and peers, learning goals may be achieved, so in this particular case, preschool children may imitate their model's procedure to wash hands to learn the new skill (Over & Carpenter, 2012).

Oftentimes, teachers and peers serve as models for children to learn a new behavior. When teachers encourage hygiene to children by modeling first, there is a chance that these children imitate the teacher's actions. Children tend to imitate a behavior from these models especially when there is a vicarious positive reinforcement. For example, when children see that their peers are being rewarded by doing something, there is a tendency to imitate the behavior for which their peers are being recognized. In my project, I will praise children who follow all the steps for handwashing, so other children can imitate them. If children receive positive feedback by teachers or in this case by me, when they wash their hands properly, it is more likely that these children keep that behavior since “responses that produce rewarding outcomes are retained and strengthened” (Bandura, 1977, p. 20). While doing my project, I will model handwashing first, and I will also use direct positive reinforcement when children properly follow the steps to wash their hands. This way, other children who need more practice may imitate their peers and achieve the proper handwashing process.

Consideration of Diversity

I will be conducting my project at the Little Angel’s Migrant and Seasonal HeadStart. This program provides no-cost child care and preschool services to low-income families whose primary income is from agricultural production or harvesting (Child Programs, n.d.). For this reason, I expect my participants to be mostly low-income children. Since these families work long hours, parents may not have time to teach their children healthy habits, so I expect some children not to know how to wash their hands or not to know how to follow proper handwashing guidelines. In addition, in this HeadStart most of the children speak Spanish, and only a low percent of them speak English, so I will be conducting my project in English and Spanish so that

all children will be included in my project. However, it could be possible that a child can be excluded unintentionally. If there are new children, some may speak Mexican indigenous languages (e.g., Triki, Zapoteco, Mixteco, etc.), so it is possible that they do not understand neither English nor Spanish.

Learning Outcomes

I intend to provide a three-day lesson about how germs are spread to preschoolers at the Little Angel's Migrant Head Start in King City, California. The activities and lesson plans will be approximately 20 minutes long.

By the end of the project, children will be able to:

1. Identify one way germs are spread.
2. Describe one instance when hand washing is necessary
3. Demonstrate the steps to wash hands to kill germs.

Method

Day 1

On the first day of my project, I will first ask children to sit in a circle. Then, I will ask them if they know what germs are, and what they look like? This section will take approximately 4 to 5 minutes depending on how many children want to participate. Since it will be a big group of about 15 to 18 children, it is possible that answering the questions takes a little longer. Next, I will read the book called *Germs are not for Sharing/Los Germenos no son para Compartir* (Verdick, 2006). I will be using the bilingual version of this book since I will be working with children who speak English and Spanish. After the story, I will discuss the book with the children and talk about all the different ways the germs can be spread. I also will be prepared

with easel paper and markers to discuss and write the children's answers to the question: When should we wash our hands? I will write their responses with their names on the paper, so I can document my results.

Day 2

On this day, I first will ask the children who remember what we were talking about the day before. I expect their answer to be germs, so I will then ask who remembers how germs are spread, and when should we wash our hands? Answering these questions will take about 4 to 5 minutes for children to answer. After the discussion, I will explain the activity they will be doing with glitter. I will be using different color glitter to represent germs, and I will ask children to pretend glitter is germs. First, I will sit children in a big circle, so I can show them the procedure for the activity. Next, I will sprinkle some glitter on my hand, and I pretend I sneeze on it. Then, I will shake a child's hand, and say "look, she got my germs." I will also choose three children to sprinkle different color glitter. Different color glitter will serve for children to learn that they can get germs from different people. Then, I will have the children shake hands with other children who do not have glitter on their hands. Finally, I will choose one child to wipe his/her hands with a paper towel, another child to wash but not dry hands, and a last child to wash his/her hands with water, soap, and dry them with a paper towel. At the end of the activity, I will explain the importance of correct hand washing to get rid of germs.

Day 3

On the last day of my project, I will prepare a poster with the steps for good hand washing. First, I will ask once again who remembers the correct way to wash their hands, and what they need to wash them correctly? I want to give a turn to most of the children, so this will

take about 4 to 5 minutes. Next, I will show the poster to the children, and I will explain the steps to proper hand washing. After this, I will introduce a song called *This is the way we wash our hands/Asi es como nos lavamos las manos*, so they can sing it when they are washing their hands. Since the bathroom has only two sinks, I will pair the children to take turns on washing their hands. I will ask one of the teachers to help me to observe the children that are waiting for their turn while I document the steps children take to wash their hands. I will also hang the poster, so it can be visible for children to see the steps they need to follow.

Results

Not completed due to COVID-19

Discussion

Not completed due to COVID-19

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Capstone Festival Presentation

Preventing Germs Spreading in Preschool Children

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By- Erika Hernandez

Need Statement

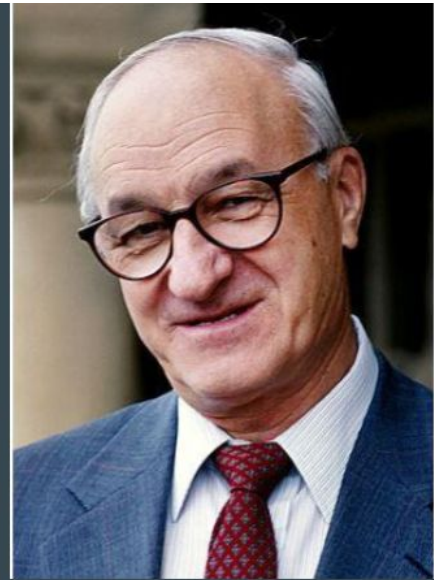


- Lack of practice of healthy hygiene
- Poor knowledge on implementing correct techniques in handwashing
- Child care centers have been implicated in the spread of disease
- National Association for the Education of Young Children (NAEYC)

Theory

Social Learning Theory

- Children learn by observing and modeling.
- Children imitate those they identify with.
- Children imitate a behavior when there is a positive vicarious reinforcement.



Albert Bandura

Method

What I did

- 3 day lesson plan
- Little Angel's Migrant and Seasonal Head Start in King City
- Children 3 to 5 years old



Day 1

- Read Book
- Discuss book with children



Day 2



Glitter activity

- Child one: wipe hands with a paper towel
- Child two: wash but not dry hands
- Child three: wash hands with water, soap, and dry them with a paper towel.

Day 3



Learning Outcomes

Participants will:

1. Identify one way germs are spread.
2. Describe one instance when hand washing is necessary.
3. Demonstrate the steps to wash hands to kill germs.



Results

Not completed due to COVID-19

Discussion

Not completed due to COVID-19

Thank You!
Questions?

