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Unleashing your Creativity: Creating Innovative Interventions for Pediatric Patients

Presenter: Daniella N. Gonzalez, CCLS, MS
Joe DiMaggio Children's Hospital
Hollywood, Florida
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Objectives

I. Participants will be able to review the role that child life specialists serve in pediatric health care and the use of therapeutic play.

A. Review the American Academy of Pediatrics Policy Statement on child life services.

B. Review the Child Life Council's Practice Statement on the use of therapeutic play

Objectives

II. Participants will be able to apply Lev Vygotsky's Zone of Proximal Development and Fleming and Mills VARK Learning Styles to their current practice

A. Review Lev Vygotsky's Zone of Proximal Development and Scaffolding

B. Review of Fleming and Mills VARK learning styles research

C. Apply these theories into the child life assessment process and in turn creating interventions for patients.

Objectives

III. At the conclusion of this presentation participants will be able to review two types of Therapeutic Play Techniques: Medical Play and Expressive emotional activities.

A. Evaluate intervention case studies provided by the current author.

Quick Think 

What is Creativity to you?

* please don't go on to the next page*

"Creativity is defined as the tendency to generate or recognize ideas, alternatives, or possibilities that may be useful in solving problems, communicating with others, and entertaining ourselves and others."

(Franken, 1993 , p 396 as cited in Leader, 2023)

Academy of Pediatrics Policy Statement on child life Services

- Overview of statement
- Importance of Child Life services and Key recommendations

Academy of Pediatrics Policy Statement on child life services

- The Academy of Pediatrics research found the importance of Child Life Services in the hospital setting and the use of therapeutic intervention
- Non-pharmacological pain management- swaddling, oral sucrose, vibratory stimulations, relaxation and guided imagery, and deep breathing techniques decreased pain and behavioral reactions to invasive medical procedures.
- Distraction- use of virtual reality and digital devices; patients reported less pain and distress in inpatient, emergency rooms, and clinical settings.
- Use of age appropriate distraction items - bubbles, pop-up and sound books, light up toys, and other visual or auditory tools has helped pediatric patients. Caregivers have also been shown to have lower fear and distress during an invasive procedure.

(Percelay , 2021)

Academy of Pediatrics Policy Statement on child life services

- "Therapeutic play during health care experiences is essential and a major component of a child life program and the child life professional's role. Play is crucial to a child's social, emotional, and cognitive development and is even more critical during adversity or stress points in a child's life." **(Percelay et al., 2021, p 3)**

- Children benefit greatly from the normalization of interventions. Helping children of all ages that are anxious and struggling to cope with their hospitalizations, illness, or grief.

(Percelay et al., 2021)

Academy of Pediatrics Policy Statement on child life services

- Play in the health care setting is adapted to address unique needs on the basis of the patients developmental level, self-directed interests, medical condition and physical abilities, psychosocial vulnerabilities, and setting the patient is in (i.e., bedside, playroom, clinic).

- Play as a therapeutic modality including medical play has been found to reduce children's emotional distress and increase their coping with medical procedure.

(Percelay et al, 2021)

Academy of Pediatrics Policy Statement on child life services : Recommendations

1. To provide the comprehensive medical care that children and families require, child life collaboration with the full interdisciplinary team is crucial.

2. The delivery of health care services for children and families can use child life services as a quality indicator because they are a component of a patient- and family-centered models of care.

3. In pediatric inpatient units, emergency department, chronic care facilities, and other diagnostic and treatment areas, child life services should be provided.

-Smaller hospitals would need ongoing consultations between child life and the health care team. Education to staff on developmentally and appropriate patient family centered care is also needed.

(Percelay et al, 2021)

Academy of Pediatrics Policy Statement on child life services : Recommendations

4. The needs of inpatient and outpatient areas are taken into account while hiring child life personnel. Due to increase numbers of children with disabilities or complex medical conditions, child life services need to advance to meet the demands.

5. Our services optimize pediatric health and should be included in the hospital budget. Increase to less reliability on contingency or philanthropic funding.

6. Advocacy of child life services at the legislative level. Advocation from pediatricians and other stake holders at state/federal levels.

(Percelay et al, 2021)

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Child Life Council Practice Statement on Therapeutic Play

Child Life Council Practice Statement on Therapeutic Play

- Use of Therapeutic Interventions to address the emotional and psychological needs of children while being hospitalized.
- These interventions are designed to promote healing, resiliency, and overall well-being for our patients.

Therapeutic Play vs Play Therapy

- Therapeutic play and play therapy are used interchangeably.
- Therapeutic play aims to continue the normal development of the child while enabling the child to respond to difficult situations (i.e. medical experiences). Less structed play.
- Play Therapy addresses the psychological issues on how a child interacts with their world.

(Koller, 2008)

Why do we use Therapeutic Play?

- Enhance children's development
- Promote relaxation and divert attention
- Facilitate socialization between patients
- Enhance child/family relationships
- The expression of feelings
- Increase sense of safety, control, and security .

(Thompson 2018,p 244)

Child Life Council Practice Statement on Therapeutic Play

- Therapeutic play consists of at least one of the following types of activities

(Koller et al., 2008)

Child Life Council Practice Statement on Therapeutic Play

- Therapeutic play can take many different forms because it consists of activities that are based on the child's developmental needs as well as the environment.
- Interactive Puppet shows, expressive or creative arts, puppet or doll play, or other medical focused play
- Teaching of coping skills like deep breathing or guided imagery
- Therapeutic play can be non-directive or directive in their approach.

(Koller et al., 2008)

Effects of Therapeutic Activities

- Children are encouraged to ask questions to clarify misconceptions and express feelings related to their fears and concerns
- Child life specialists can share information about what a child can expect in a medical experience and/or what sensations may occur.
- Reduction of anxiety and fears
- Children may exhibit greater cooperation during stressful situations.
- Reductions of physiological responses such was palm sweating, pulse rate, and breathing rate.

(Koller et al., 2008)

Quick Think 

Rank your use of Therapeutic Activity Modalities (Most to Least Used)?

1

2

3

What therapeutic activity do you want to develop more into your practice?

Lev Vygotsky's Zone of Proximal Development and Scaffolding

Lev Vygotsky Zone of Proximal Devlopment (ZPD)

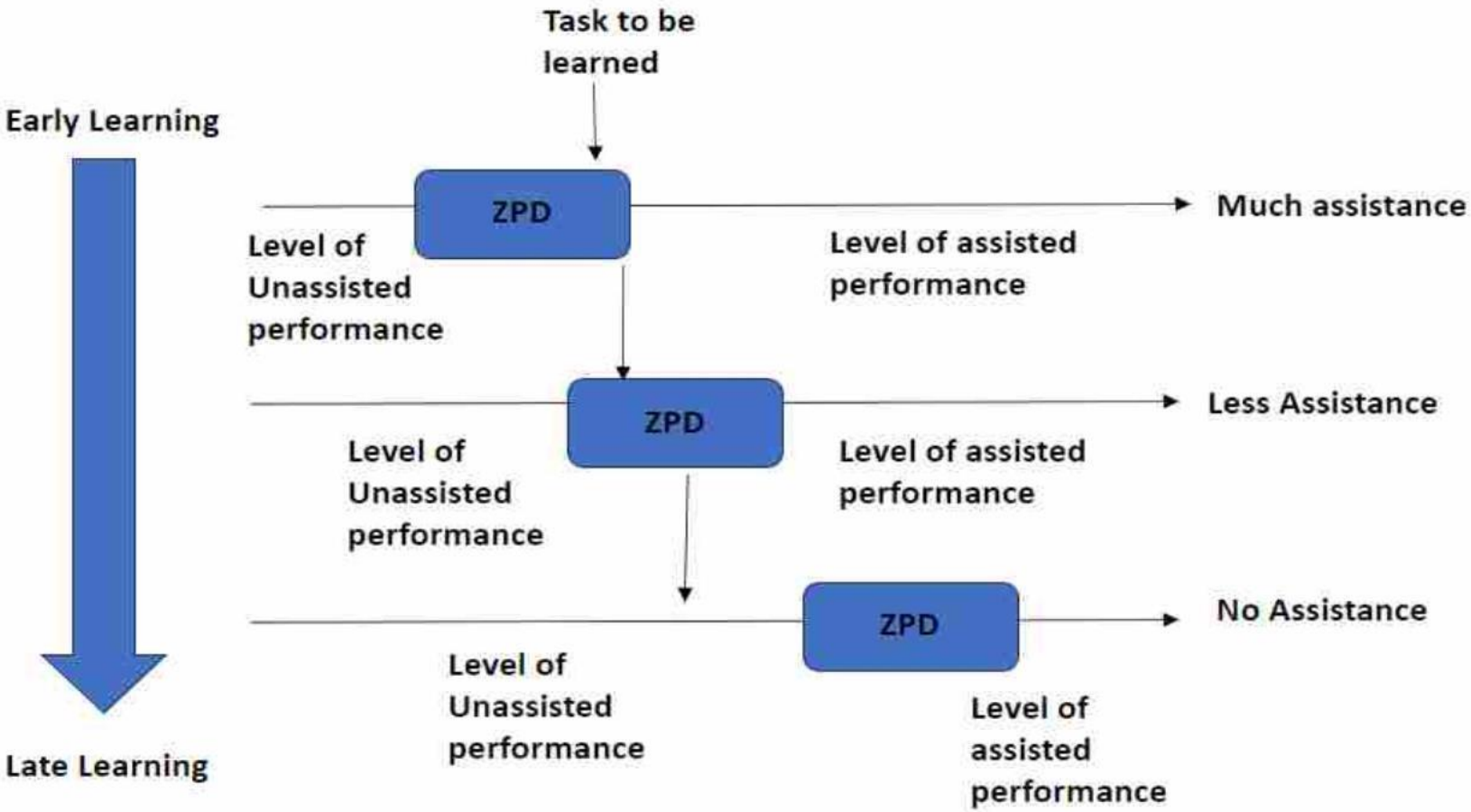
- Definition and explanation of ZPD
- Importance of ZPD in child development and learning
- Application of ZPD to Child Life Intervention

Lev Vygotsky Zone of Proximal Devlopment (ZPD)

- Vygotsky's theory on child's development of learning. Earlier in age children develop lower mental functions: simple perceptions, associative learning, and involuntary attention. In contrast to later in life through social interactions with peers and adults they will develop higher mental functions: language, counting, problem solving skills, voluntary attentions, and memory schema.
- Vygotsky believed that the ZPD will change and grow with the individual. The ZPD will move indicating the mastery of tasks. Lower zone mastery of tasks versus upper zone were learning can be acquired with assistance. When learning with a more competent peer or an adult the child learns in culturally appropriate ways.

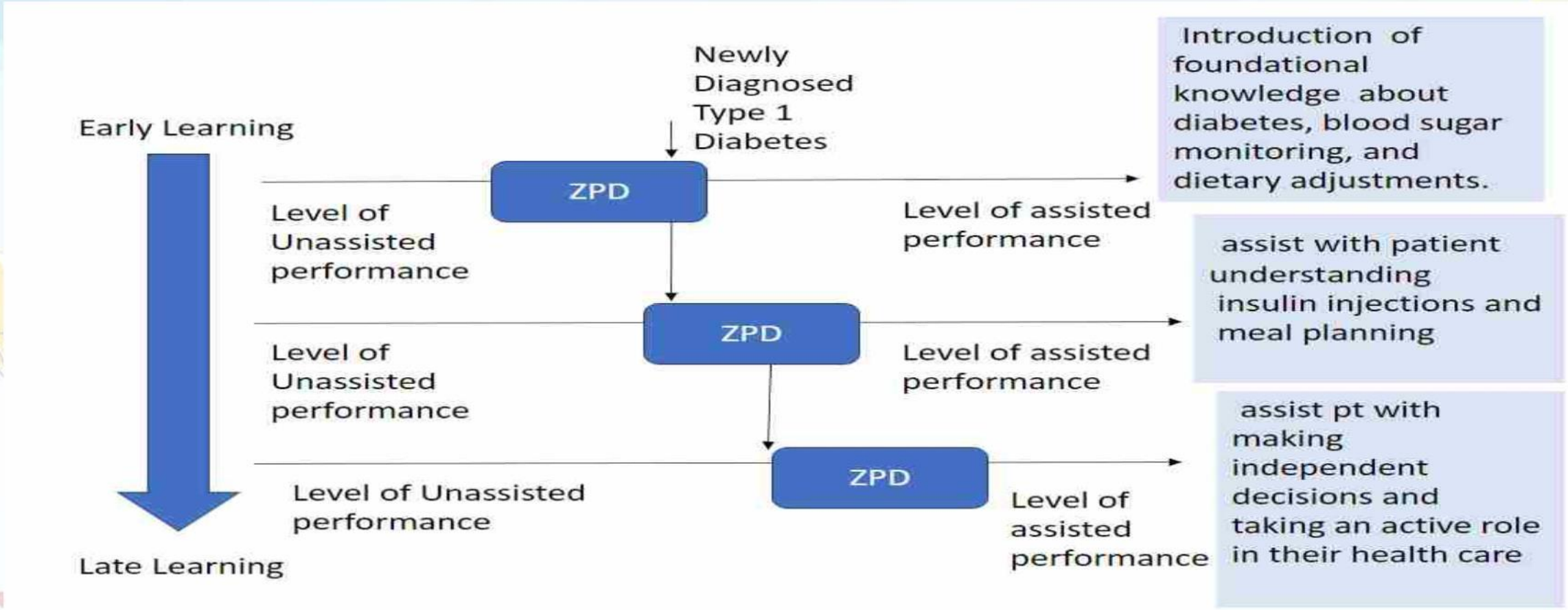
(Doolittle, 1995)

Lev Vygotsky Zone of Proximal Devlopment ZPD



Recreated flow diagram (Dolittle, 1995, p 6)

Applying ZPD to Assessment Process



Continually reassess patients' knowledge, emotional wellbeing, and progress of understanding . Modify interventions as needed and continue to develop patient's competence and independence .

Scaffolding and Learning Development

A scaffold is a temporary structure placed next to a building or modification of another structure. Once construction is complete, the scaffold is removed.

The adult provides assistance to the learner in the joint solving of a learning task then gradually overtime the support will be withdrawn. The goal is to support the learner to the extent necessary

(Margolis, 2020)

Scaffolding and Learning Development

Table 2

Analysis of scaffolding strategies (Van de Pol et al, 2010)

Scaffolding goals					
Support for metacognitive performance of students	Support for cognitive activity of students		Support for student affect		
A. Directions of support	B. Cognitive structuring	C. Reduction in degrees of freedom	D. Recruitment	E. Contingency Management / Frustration Control	
Means					
Feeding back	Giving hints	Instructing	Explaining	Modelling	Questioning

(Van de Pol et al 2010, as cited in Margolis, 2020)

Scaffolding and Learning Development

1. Recruitment- gaining and maintaining the child's interest in a task (Building rapport)
2. Reduction in degrees of Freedom- decrease the complexity of the task. Start at a level that the child can act independently.
3. Maintenace of direction- keeping the goal of solving the problem/task
4. Marking critical features- intended versus achieved results for the child's actions.
5. Control of the child's frustration- guiding the child and assisting with the child's motivation
6. Demonstration/model- attempts to solve the problem and to highlight the independent actions of the child. (praising the child)

(Margolis, 2020)

Fleming & Mills VARK Learning Styles

VARK Model

The development of the VARK model by Felming and Mills(1992) research conducted from observations and interviews with students based on their preferred learning modalities. Through this research the questionaries was developed.

How can we use this in practice and help to tailor our interventions and support children in learning and coping with a procedure or a new diagnosis

(VARK, 2014)

VARK Model

- Visual
- Auditory
- Reading/Writing
- Kinesthetic

(VARK, 2014)

VARK Model-Visual

Maps, diagrams, charts, graphs, flow charts. Symbols and all the symbolic arrows, circles, and hierarchies, Includes designs, white space, patterns, and shapes

Does NOT include still pictures or photographs of reality, movies, videos, or PowerPoint.

(VARK, 2014)

VARK Model-Aural/Auditory

Preference for information that is heard or spoken. Includes talking out loud as well as talking to oneself.

- Lectures, group discussions, radio, email, using mobile phones, speaking and talking things through.
- Email is included due to non-formal language and the use of colloquial terms/slang.

(VARK, 2014)

VARK Model-Reading/Writing

Information presented as words is preferred for reading and writing.

- manuals, reports, essays, and assignments
- People that choose this mode of communication are frequently dependent on PowerPoint, the Internet, lists, etc.

(VARK, 2014)

VARK Model-Kinesthetic

Preference of being hands on and having real/simulated experiences. "reality or concrete nature of the example. If it can be grasped, held, tasted, or felt it will probably be included."

- Demonstrations, simulations, and videos of “real” things, as well as case studies, practice, and applications.

(VARK, 2014)

VARK –Mixtures/Multimodality (MM)

- ***VARK Type One:*** individuals that can switch from mode to mode depending on what they are working on. They tend to have two, three, or 4 equal learning preferences.
- ***VARK Type Two:***Indvidual's with this learning preference prefer to utilize all of their preferred modes before they finish learning specific content. They may take longer to gather information from each mode, but tend to have a deeper understanding of the content. They also like to gather all information before making a decision.

(VARK, 2014)

VARK –Mixtures/Multimodality (MM)

- ***VARK Transition***for individuals that fall between VARK Type 1 or VARK Type 2

(VARK, 2014)

Quick Think 

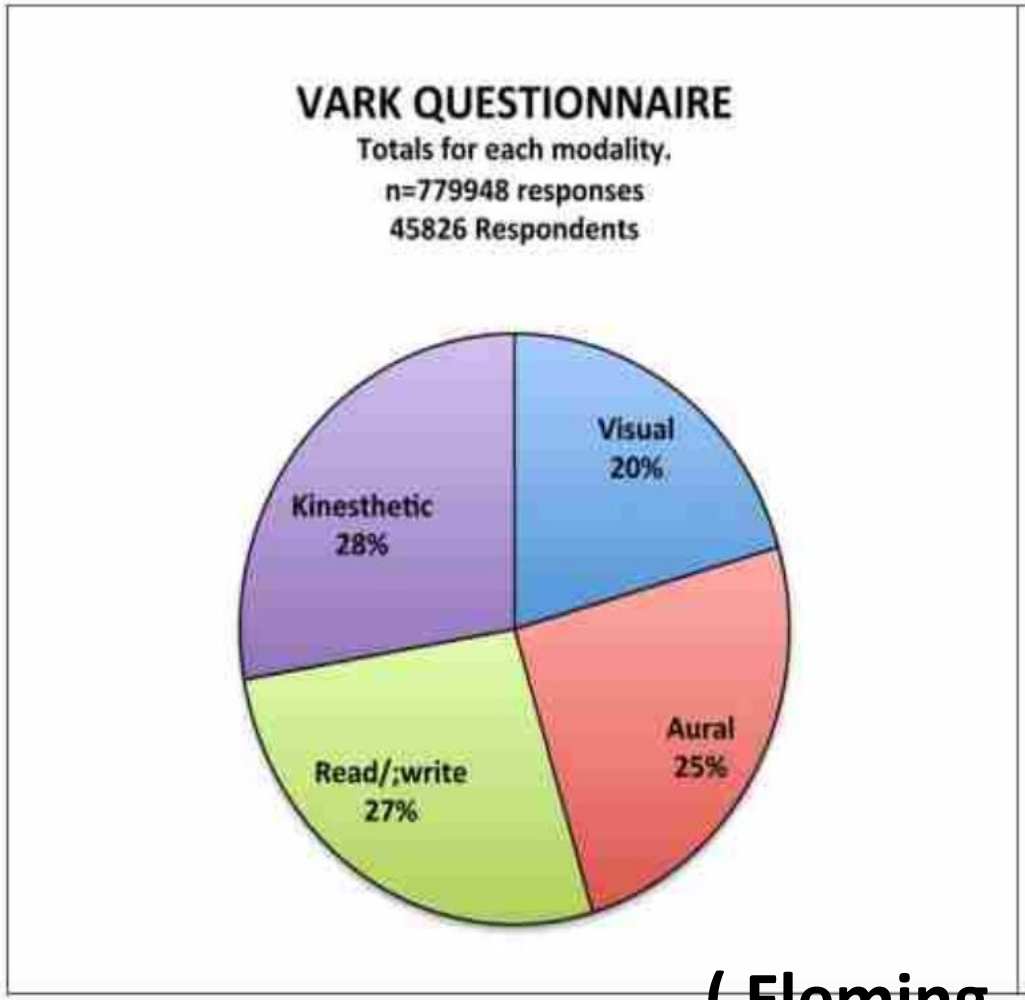
What is your learning style?

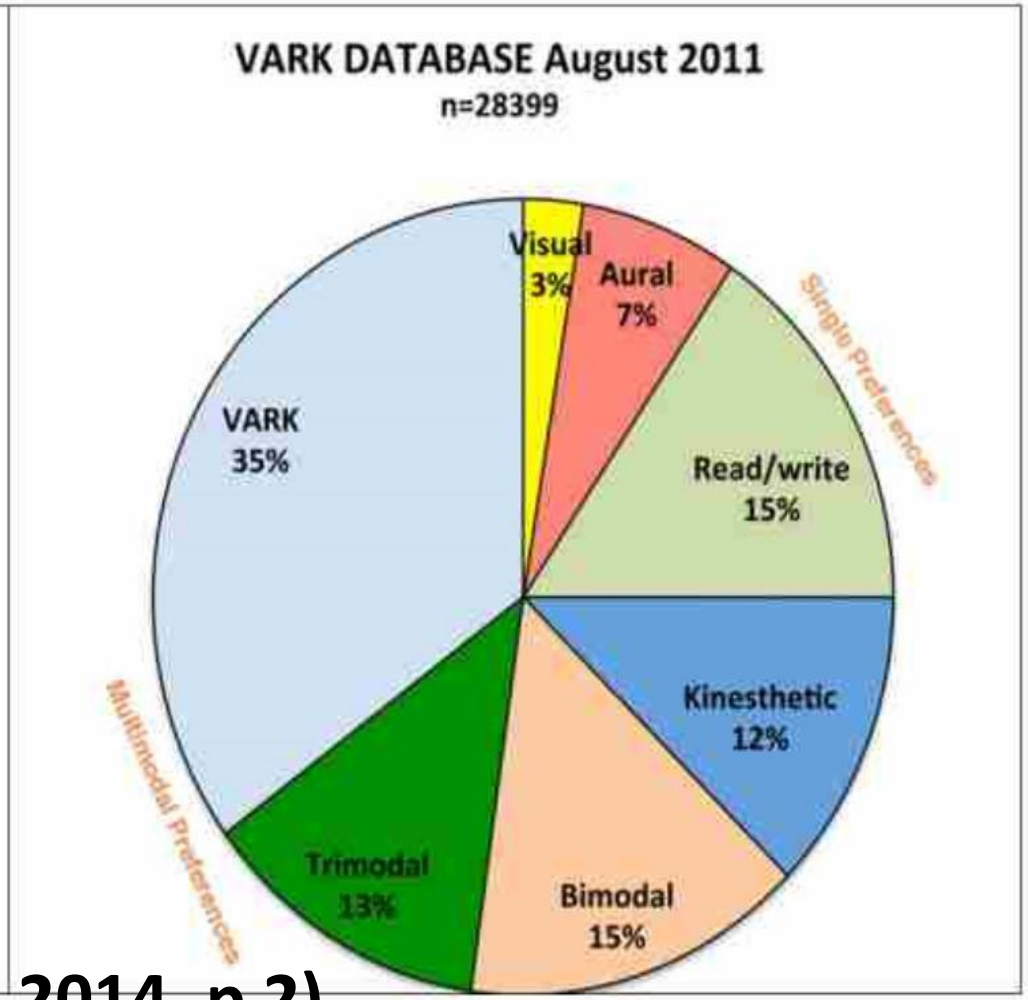
- **Visual**
- **Aural/Auditory**
- **Reading/Writing**
- **Kinesthetic**
- **MultiModal**

VARK Transition

Has your learning style changed over time? Is it still the same for you from when you were younger?

Statistics





(Fleming, 2014, p 2)

VARK Model Application

Auditory- listen to podcasts or videos about diabetes

Visual- creation of a Blood Sugar Log or Insulin Injection Schedule

Reading/Writing- Patient can read information about patients their age with diabetes. Can calculate their carbs

Kinesthetic- medical play and practicing injections with unfilled syringe or toy syringe

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How to Unleash your Creativity

How to Unleash your Creativity: Inspiration

- Seek Inspiration from various resources like books, art, nature, STEM related activities
- Use Websites: Pinterest, Instagram, Facebook Groups, Forums and Google searches

How to Unleash your Creativity: Collaborate and Brain Storm

- Talk to fellow coworkers
- Connect virtually with other child life specialists within your specialty
- Collaborate with integrative therapies (Art Therapy, Dance/Movement Therapy, Music Therapy, Yoga, etc.
- Spark new ideas and solutions

How to Unleash your Creativity: Utilize Visual Tools

- Use tools like Canva or PowerPoint to create diagrams, visuals, infographics, or incentive sticker charts, etc.
- These platforms are user friendly and also have templates and design functions that can help you to compile your information in visually appealing ways, even if you do not have formal design skills.

How to Unleash your Creativity: Experiment and Take Risks

- Step out of your comfort zone to try new techniques or approaches
- Experimentation allows for personal growth and the discovery of innovative strategies.

Case Studies

All names and ages have been changed for patients privacy.

Lego Feelings
* This intervention was adapted from LEGO Build Big Feelings, 2022

"Z"

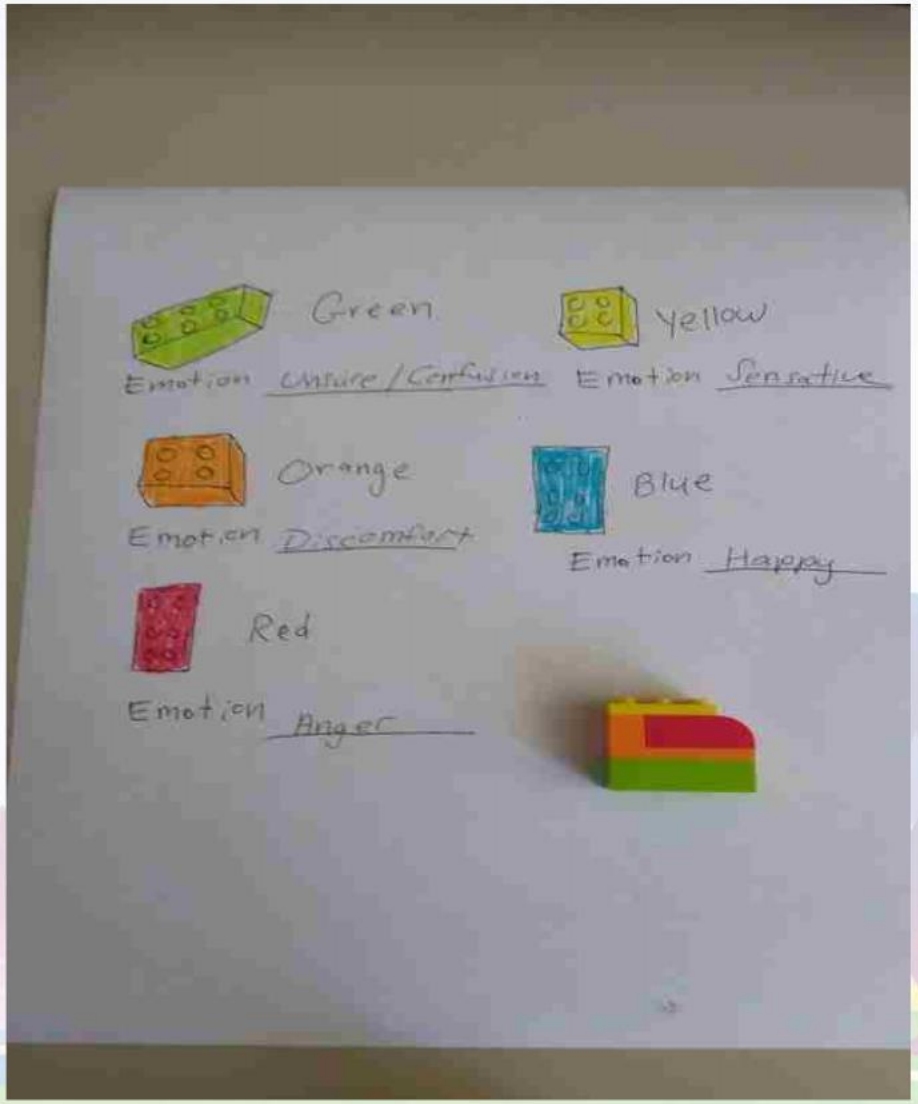
Age 9 years old

Diagnosis- Type 1 Diabetes

Intervention- identify their feelings to having a chronic illness

"Z" selected what colors would represent their emotions

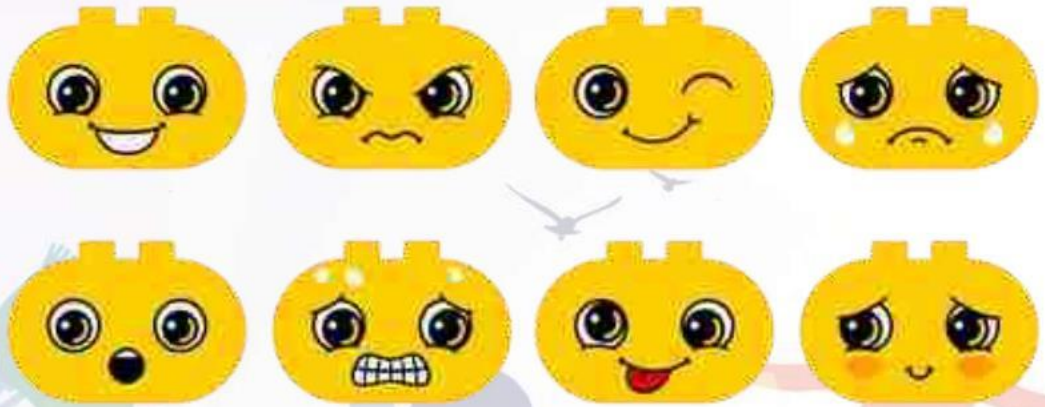
"Z" abstractly built Lego piece and discussed their feelings on their new diagnosis



- **Green- Unsure/Confusion-having to adapt to a new diet and not knowing what they can/cannot eat. Not knowing what would happen if they go to a friend's birthday**
- **Yellow- Sensitive- doesn't want to show emotions in front of mother or cry**
- **Orange-Discomfort- 1st day getting used to amounts of insulin injections and finger sticks to check blood sugar**
- **Blue – Happy- Z coping well and having a good hospital experience minor having a new diagnosis**
- **Red- Anger - pt able to cope well with finger sticks/injections. Not understand why sibling doesn't cope well.**
  Upset because they are now more alike to their brother and they want to be their own person.

LEGO Feelings

(LEGO Build Big Feelings, 2022)



(LEGO Explore the Face bricks, 2023)

Target Practice with Iv Flush

"J"

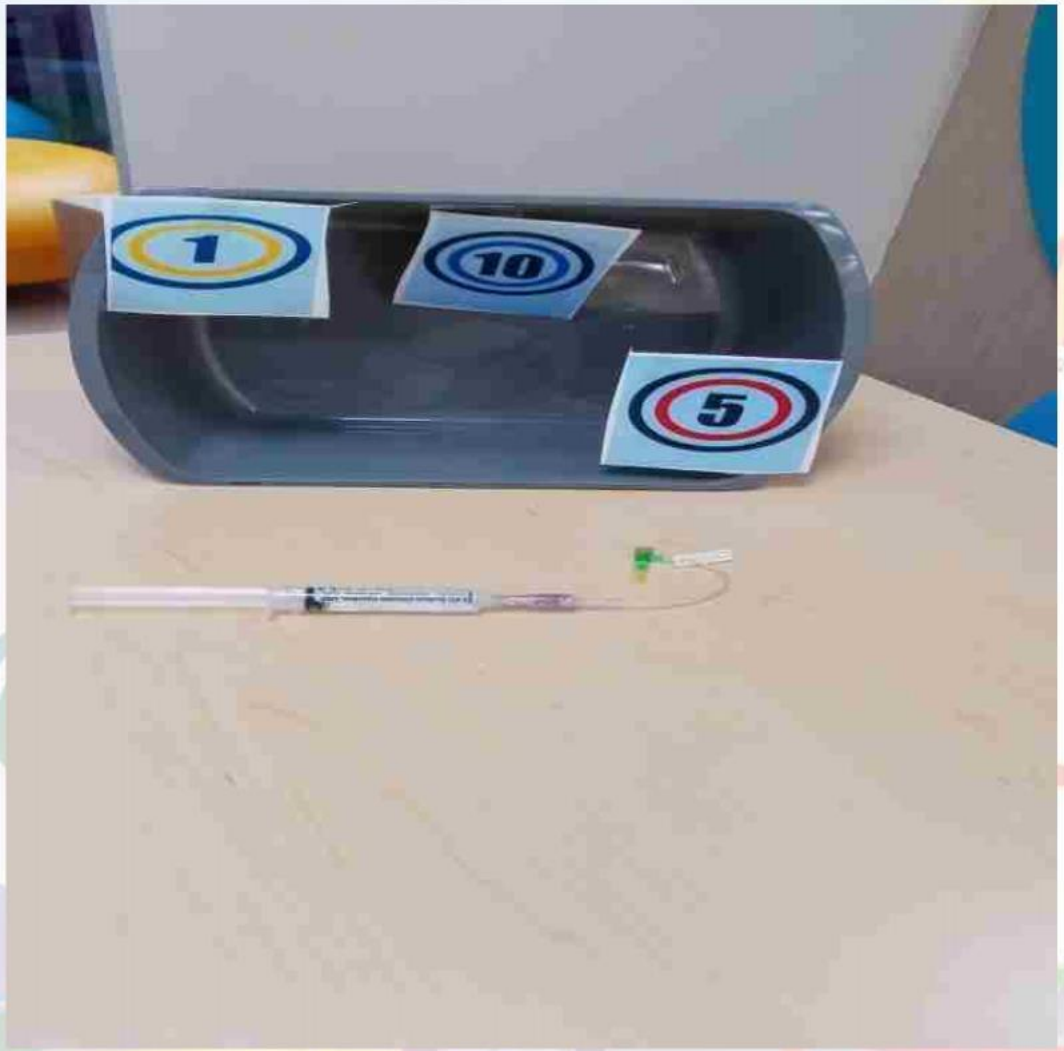
Age 6 years Old

Diagnosis: Nephrotic Syndrome , fear of IV flushes

<u>Intervention:</u> Medical Play

CCLS attached IV catheter to flush. Pt played target practice.

Results: J decreased fear of IV flushes and become more compliant when medical staff needed to flush their line and provide medicine through the IV



Color Your Feelings

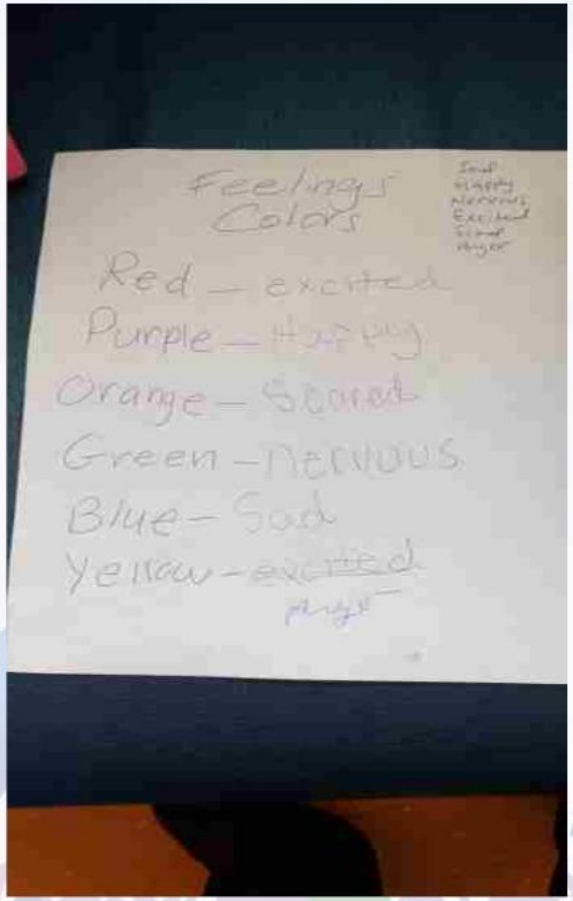
"F"

Age 11 years Old

Diagnosis: Hematoma in intestines due to scooter accident

Intervention: Art/Express feelings. Talk about how colors overlap similar to how feelings can have different meanings or emotions/experiences attached to them.

Results: F was able to express their feelings about their extended admission (1 month) and how they felt about not being able eat/drink food due to their injury. Blank spaces were filled with words of encouragement F selected the next session



Medical Play & Diabetes

"B"

Age 3 years Old

Diagnosis: Type 1 Diabetes

Intervention: Medical Play

Mock Paper Diabetes Blood Sugar Monitor and paper "test strip"

"B" would pick food that doll could eat. "B" would practice having the dolls insulin checked and place paper inside "test strip". "B" would pick where the doll would get poked (arm, leg, stomach) with toy syringe

Results: B continued playing with family and decreased fear of insulin injections and finger sticks over their 6 day admission.

Slime Time

"S"

Age 8 years Old

<u>Diagnosis:</u> Pots Puffy Tumor

Intervention: Post procedure education of incision/drainage of abscess

"S" created their own DIY slime together with CCLS

Ziplock bag with picture of girl taped to back.

Slime was placed inside bag and patient had to move away the piece of slime from the girl's forehead similar to their own the incision/drainage of abscess

Rip it Up- Expression of Anger, Frustration, and Fear

"T"

Age 9 years Old

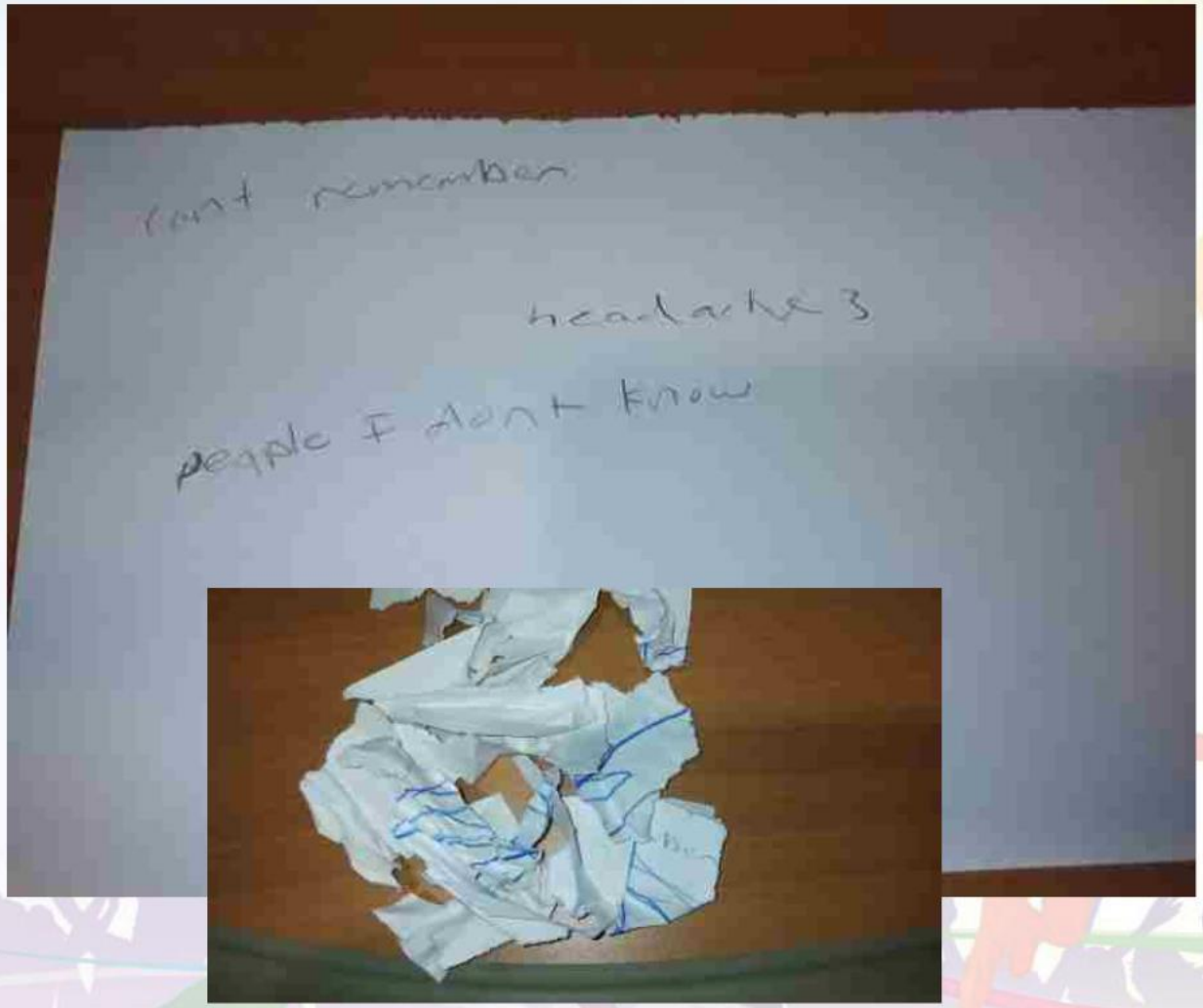
<u>Diagnosis:</u> Meningitis and continued Headaches and Seizures

Patient wrote down their fears and anxiety on paper

- **Memory Loss**
- **Increase Headaches**
- **Not remembering medical staff coming into their room**

Had pt rip up paper to release their anger, frustration, and fear.

Over T's admission T was able to express their feelings with their mother and started journaling.



EEG

"L"

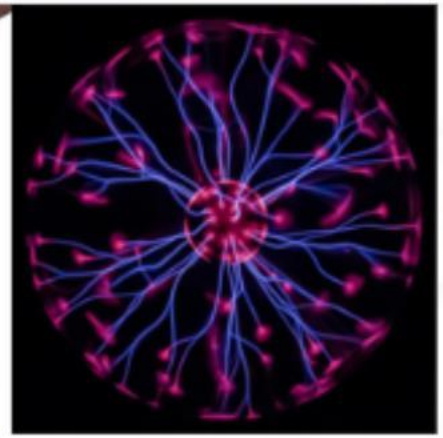
Age 6 years Old

<u>Diagnosis:</u> onset Epilepsy

<u>Medical Play-</u> L placed stickers on paper of girl in similar locations electrodes would be placed for Video EEG

Post VEEG taught L and family what epilepsy is through using plasma ball. When L touched the ball that would represent the brain sending a signal to the part of the body. When the plasma ball tendrils were running all over the ball that would be similar to a seizure.

Neuron sending message to nueron to part of body "Leg & Foot Kick Ball"



Seizure

Constipation Sensory Bag

"N"

Age 6.5 years Old

Diagnosis: Constipation

Intervention: Sensory Bag for L to understand how their body works, constipation, and how medicine will help them pass their stool.

Ziplock bag with picture of the digestive system on back.

N would move small beads (small stool) and black large playdoh (hard stool) through the intestines like a maze. N was given shampoo to act as MiraLAX to help move the stool throughout the body easier.

Results: N understood how medicine was helping their stool move out of their body and N became more compliant with medicine and diet changes.

Conclusion

- Tailor children's interventions to their learning potential (ZPD)
- Recognize that children have diverse learning styles and adapt therapeutic activities
- Stay updated on evidence based practices for maximum impact
- Adapt, experiment, collaborate to unleash your creativity

<u>Future Considerations:</u>

- How to apply to outpatient settings
- How to apply to patients that have developmental disabilities

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Thank you for attending this presentation. Any Questions?

Contact information: Daniellgonzalez@mhs.net.

Please remember to go on cvent and fill out the session survey!