Using Prompts to Improve Toilet Training for Children with Physical Disabilities

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Toilet training is complex for every child. It requires maturity in motor and cognitive areas as well as emotional readiness. It combines the organization and understanding of bodily sensations with communication, motor planning, and timely task performance. As a result, parents are often anxious about toilet training. Fortunately, the scope of toileting methods is broad, and the advice voluminous, so they eventually discover a method that works for their child.

The story is different—and often bleak—for parents of children with special needs and disabilities. Toilet training in this population is atypical, unpredictable, and time-consuming; no single method is tried and true.[2-4] Even so, regardless of the toilet training method used, certain strategies can help improve results, including the oft-overlooked strategy of using prompts. **The effective use of prompts to shape behaviors and function during the toileting process can lead to better toilet training outcomes in children with physical disabilities.**

Making Time for the Toileting Discussion

Toilet training for the child with disabilities is as much a developmental milestone as it is for any child.[3] Unfortunately, this is not universally recognized nor given due attention in the medical profession.[5] At routine medical appointments, other parents may be discussing toileting issues with their child's physician;[1] for children with disabilities, the conversation typically focuses on medical conditions,[5] particularly motor and cognitive delays. Often these appointments leave no time for parents to voice concerns and ask questions about toileting progress, effective management of the bowel and bladder, and recommendations for adaptive equipment.[5]

Yet the importance of these concerns—and the need to address them—cannot be overstated. Effective toileting not only maintains a healthy bowel and bladder,[3] but significantly impacts a child's quality of life.[3,13]

Because the child with disabilities faces so many challenges when approaching toilet training, clinicians must allot time to address this milestone and become knowledgeable, not only about the medical aspects of bowel and bladder management, but also about the available toileting methods and adaptive toileting equipment.[6] In the same way, parents need to be educated and encouraged during the process. Studies show that parental stress is high when a child in the family has toileting concerns,[7] and ignoring these concerns can increase the stress.[5] Parents must also understand that since their child has special needs, their toileting method will be special and may take longer than they expect.[8] Special modifications and adaptations should be embraced rather than avoided.[2,9]

Regardless of their physical condition or mental status, the majority of children with disabilities eventually will become toilet trained or achieve some degree of continence.[3,5,6,8-11] The training involves persistence, patience, and time in the face of barriers to toileting.

Assessing Toileting Readiness

Typically, a child will begin toilet training around the age of two and achieve the skill by four.[2,5,12] Their readiness to toilet is reflective of their age-appropriate development at the emotional, cognitive, and physical levels. In contrast, children with disabilities do not exhibit toilet readiness in a specific age range because their development in the cognitive, emotional, and physical areas is often significantly delayed.[3,13,14] Pushing a child prematurely into toileting can be frustrating for both parent and child.[4,6] Instead, parents need to watch their child and look for the signs that may indicate the child is developmentally ready and interested in toileting. These may include:

- Child notices when diaper or clothing is wet or soiled.
- Child shows interest in others' toileting behaviors.
- Child demonstrates the ability to sit (with or without support).
- Child indicates the need to go to the bathroom through expressions, postures, signs, or words.
- Child has bowel movements that are solid and well-formed.

Other signs of readiness—such as complete bladder emptying, staying dry for more than an hour, or the ability to ambulate—are certainly desirable but not necessary for toilet training to begin. Indeed, children who may never be able to ambulate can still participate in the toileting routine and learn continence.[15] Complete voiding and the holding of urine can be learned during toilet training.[9]

Bladder awareness, although not a sign of readiness, must also be achieved in order for toileting to start.[9] This is especially true for the child with disabilities in the autism spectrum, whose varied sensory input may make it difficult to discriminate or notice a full bladder. (Guidelines to help children gain this awareness are available.)[9]

Parents and caregivers should be ready too. Potty training a child with special needs takes time, commitment, and consistency. Some toilet training methods recommend that parents allot a few hours every day to helping their child achieve the goal.[8,9] Parental readiness also involves addressing their child's medical, communication, and adaptive equipment needs.[5] If these are not addressed prior to toilet training, they can easily become barriers.[5]

Barriers to Toileting for the Child with Disabilities

The severity of a disability or condition will determine if additional treatment and support is needed to help a child reach toileting readiness. Fortunately, the majority of problems can be resolved; often a visit to the child's primary care physician will help determine the source of the problem and how best to treat it.[5,9] It may be as simple as taking a medication to control behavior, or delaying toilet training until a child with cerebral palsy has developed more bladder awareness and control.[6]

Parents of children with disabilities must also learn to think creatively. Awareness of a disability's effect on each stage of toilet training—and the ability to compensate for that effect—is a skill in itself. For instance, a child with spina bifida may never develop bladder awareness but instead can learn to manage a catheter effectively and then habit-train to use the toilet for bowel movements.[3,5] Alternatively, frequent trips to the toilet can help children with poor bladder awareness meet their toileting needs.[9]

Medical Barriers

Frequently, children with special needs have undetected medical problems that may affect toileting readiness. Common issues include urinary tract and bowel infections, coeliac disease, diarrhea, and constipation. It is good to have the child checked medically before any training starts.[9] Upon diagnosis, such problems can be controlled by medication or diet changes.[3]

Other conditions—an abnormally wide bladder neck, or defective bowel and bladder sphincters—occasionally cre-

ate barriers to toileting as well.[9] In these cases, children cannot effectively close their sphincters to prevent wetting and soiling.[9] Without corrective surgery, a child will most likely remain incontinent.[9]

Physical Barriers

Physical disabilities may also present themselves as barriers to toileting readiness, especially if a child has poor muscle control and balance deficits.[2,3] These types of impairment make approaching and sitting on a regular toilet difficult, if not impossible. In a survey conducted by Emma Pivato, PhD, which explored parents' perceived physical barriers to toileting their child with special needs, over half the respondents cited a lack of adaptive toileting equipment as a problem.[16]

During toilet training, children sit longer on the toilet to achieve complete voiding and continence.[2] This can range anywhere from two to five minutes at a time (or more) for multiple sessions throughout the day.[9,17,18] Such duration makes stability, comfortable positioning, and adequate support on the toilet essential[3]—and finding the right adaptive equipment (including equipment for mobility and transfers) a must.

Barriers Caused by Lift and Transfer Issues

One specific physical issue—the inability to bear weight or walk independently—presents unique toileting challenges. In Emma Pivato's survey, nearly all respondents reported lifting issues as a major barrier to toilet training their child with special needs.[16] In some cases, toilet training was abandoned because the daily continual lifting was too strenuous.[16] Sometimes children in this situation are even dismissed as incapable of toilet training.

In the case of mobility limitations, a supportive gait trainer or adaptive walker can be used to facilitate mobility and weight bearing during the toileting process. Sometimes, however, all that is needed is a different approach—such as the MOVE® Hygiene and Toileting Program. This program instructs providers and parents in "upright toileting," where children remain in an upright position for clothing adjustments, removal and application of incontinence products, cleaning, and skin inspection before they engage in the sit-to-stand and stand-to-sit transitions typical of toileting. The focus is to improve independence in functional motor skills and to provide consistent, regular opportunities for toileting.

The key to success is the upright table for changing or transfers. Using the table, children can participate in the sit-to-stand transfer, then remain in a supported standing position by resting their trunk on the padded surface while clothing adjustments or diaper changes are completed in preparation for sitting on the toilet.[15] With this program, even individuals with the most significant involvement can be toilet trained and participate in their toileting transfers, vastly reducing any lifting on the part of the caregiver.[10,11,15]

The Role of Prompts in Toilet Training

Once the barriers have been addressed, bladder awareness has been achieved, and parents are ready to dedicate time and energy to the process, toilet training can begin. There are many approaches to toileting the child with special needs,[8,9] but one aspect common to all is the use of prompts to achieve a good outcome.[9,19,20] Prompts can be verbal, physical, or sensory in nature. They are fundamental to behavioral training and treatment programs because they can initiate a desired response when addressing skill deficiencies.[17,18,21] As toileting requires planning strategies and a sequence of motor skills, it can be overwhelming at first; prompts at various steps along the way will help guide the child through the task.

Breaking Down the Task

The first phase in using prompts involves breaking down the complete toileting task into smaller steps to determine where the cues are needed and which steps must be learned.[6,22] This "task analysis" allows caregivers to draw

up an individualized plan of action. Breaking down the task may look something like this:

1. Approach the toilet
2. Remove clothing
3. Sit on toilet
4. Void
5. Rise from the toilet
6. Replace clothing
7. Flush
8. Wash hands
9. Leave bathroom

Prompts should be placed wherever there is difficulty in performing a step.

Prompts may not always be in the right place the first time around, so it is important to evaluate and assess performance each time, making changes where necessary.[9] Knowing why certain steps are difficult may also be helpful in choosing appropriate prompts.

Behavioral Prompts

For children with cognitive issues, the focus is on communicating the need to go to the toilet, holding in the urine while completing the steps in sequence without distraction, voiding, and then following through with the final steps.[9] Sometimes all that is needed to prompt this desired behavior is a reward, praise, or encouragement.

Children with more behavioral involvement may need additional assistance. Verbal prompts to direct the sequence and skills, followed by gradual physical guidance, can be useful in this case. Physical guidance involves gently moving the child in the right direction or through the necessary actions.[9]

Verbal prompts and physical guidance should be used sparingly, so the child has the opportunity to work through the problem without relying too heavily on supervision.[9] When is a prompt warranted? The practice of "delayed prompting" can help here. In delayed prompting the prompt is not given immediately, providing space for the child to overcome the challenge. After a few seconds, if the child is unable to perform the task or becomes distracted in doing so, the prompt is given. Delayed prompting has been associated with longer retention of skills, especially in children with cognitive issues.[20]

Physical Prompts

For children with physical disabilities who cannot walk or bear weight independently, practicing mobility skills for toileting is important. Even children with normal cognitive status will need to routinely practice transferring, standing, and sitting to become more independent at toileting. Those with combined physical and mental disabilities can be assisted through the process on a regular daily schedule.[15]

Accommodating physical disabilities during toileting may require the addition of steps during task analysis.[9] For instance, a child who approaches the toilet in a wheelchair may need a step that addresses the sit-to-stand transfer before clothing removal. Prompting in this area takes the form of caregiver assistance and/or adaptive equipment[15] to physically support the child in functional postures and positions.

As another example, consider the act of sitting on the toilet. Because of poor muscle tone, balance issues, and contractures, children with physical disabilities are often incapable of independent sitting. If a child is not secure and comfortable while on the toilet, the muscles of the body cannot relax and voiding will not occur.[2,23] As a result, children with disabilities often require much more support than a regular toilet or commode can provide. Instead, they may need a commode with an adjustable backrest, laterals, abductor, or footboard (or all of these), as well as a transfer table, grab bar, gait trainer, or caregiver support. These are all considered prompts: they are not designed to take the place of a skill, but rather to help a child accomplish the task while learning new skills.[22] The eventual goal is to reduce these prompts to encourage independence.[22]

Prompt Reduction

For both behavioral and physical disabilities, prompts work best with both task repetition and "most-to-least prompting."

In terms of task repetition, it is widely recognized that practice is the most important variable for motor learning and skill acquisition.[9,22,24-26] To get sufficient practice, the child should be an active participant in every aspect of the toileting task, and many practice opportunities should be arranged. As practice improves performance and independence in a skill, prompts may become less necessary.

Most-to-least prompting, or "prompt reduction," occurs when a child starts to master a skill and no longer needs cues or supports to accomplish a step.[20,22] These prompts are then phased out. The goal is to gradually reduce prompts until the task is performed with total independence.[22] With an adaptive commode, for instance, a child's head and trunk control may improve over time through opportunities to practice daily skills; at a certain level of achievement, the headrest on the commode may be removed. The same applies to verbal cues and physical guidance.

Of course, not every child with a disability will become completely independent in toileting, but prompt reduction can still facilitate progress toward that goal. Prompt reduction generally leads to favorable results with fewer errors and better skill retention.[10,11,19,20,27,28] Even a slight improvement toward independence in this area can make a major impact on quality of life.

Conclusion

Independent toileting is a developmental milestone in the life of every child—but because it requires maturity in cognition, mobility skills, and emotions, it is not always easy or quick. For a child with physical disabilities the barriers are even higher, the challenges far greater: medical conditions, behavior, and delayed or absent mobility skills create additional complexity. It therefore becomes important to provide tailored guidance and assistance to help these children achieve independent toileting. Using prompts to channel behaviors and improve function is an inherent part of almost every toileting method. Although their significance is often overlooked, prompts, if used appropriately, can effectively improve toilet training outcomes in children with disabilities.

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