

Developmental Approach to Procedural Preparation

Piaget's (1926) developmental stages were used by LeRoy et al (2003) as a description of the development of cognitive abilities during childhood. It is helpful to categorise into developmental stages as a means of using an appropriate approach for the child.

Birth to 2 Years Procedure Preparation (sensorimotor stages)

Procedural preparation at this developmental stage focuses on the parents/caretakers, due to the limitations in children's conceptual abilities. LeRoy et al, (2003) recommend a minimisation of pain and other physiological stressors – e.g., fasting prior to surgery—and minimisation of separation from parents is of paramount importance. A transitional object, like a soft toy, can be very effective in soothing the infant during times of separation from parents. Occupational Therapist's (OT's) can encourage the child to take their toy everywhere and even do some pre-procedural preparation using their toy. OTs can empower parents in their occupational role of "parent" by encouraging reflection of and utilisation of effective calming and settling strategies. Strategies may include but are not limited to swaddling, feeding, stroking, use of sounds, suckling.

Parents can be encouraged to bring a small bag of toys to medical outpatient appointments, to utilise periods such as waiting times to promote play for their child. This may also serve to distract their child from upcoming procedures, be mentally stimulated and relaxed.

2 to 7 Years Procedure Preparation (preoperational stage)

At this stage of cognitive development, children use concrete thinking and think in absolutes e.g., good or bad. Attention spans, concept of time and self regulated coping strategies are limited. This corresponds to Piaget's 'preoperational stage' when children need to symbolise thoughts through language, drawing and play. Play is therefore a very important means of communication at this age, whilst expressive language skills continue to develop. LeRoy et al (2003) outlines providing 'hands-on' play experiences, using simple language, delivered the day before the procedure as being an effective means of assisting children in this stage. Some children may benefit from earlier exposure to pre-procedure preparation and loads of practice – this is best determined through discussion with family.

Picture books, both structured and free play sessions using dolls and doctor play kits are excellent tools to promote the child's understanding before the procedure as well as after to process the experience. The use of simple drawings to explain diagnosis can be particularly helpful.

When using dolls, offer simple explanations and descriptions while allowing the child to see and handle some of the medical equipment that will be used (Abbott, 1990). This gives the child a way to express anxiety, process information, and become familiar with equipment that will be used during their hospitalisation.

Distraction techniques can also be very effective in helping young children manage anxiety and can be used throughout the hospital experience (e.g., play – blowing bubbles, videos, computer games, entertaining conversation; singing child's favourite song aloud with child). These are most effective if commenced prior to a procedure and utilise more than one sense at a time.

7 to 11 Years Procedure Preparation (concrete operational stage)

LeRoy et al (2003) recommend that school-age children respond optimally when the information is presented approximately 1 week before their procedure however parents and caregivers may have explicit knowledge of the best timeframes within which to provide information to their child. Piaget described this age-group, as going through the 'concrete operations stage', where thoughts are concrete (i.e., children can take things very literally). To prevent misunderstanding and unnecessary stress, terminology and language must be chosen carefully. It is important to reinforce coping behaviours while encouraging expressions of feelings, and giving permission for the child to feel angry and sad.

The following are some reassurances that can be very helpful when giving medical education in general:

- There's nothing you did, didn't do or could have done to cause the diagnosis (eg. about cancer, asthma, CF)
- Your treatment and your diagnosis are not a punishment.
- Nobody can "catch" the *diagnosis* from you (i.e., obviously as long as it's not contagious)
- You, your family and your friends may feel lots of different emotions including sadness or anger – this is okay
All feelings are OK so long as you don't hurt yourself, others or property when letting them out.
- Your body may change as a result of the treatment; but you are still you
- You might have to take medicine even when you don't feel sick
- Your medicine may make you feel sick for a little while but you will feel stronger and better soon
- Your parents may need to leave the room for some of your treatments but don't worry because they'll come right back and there will be others who can care for you for that little while
- Remember that people love you and are thinking of you

References

Abbott, K. (1990) Therapeutic use of play in the psychological preparation of preschool children undergoing cardiac surgery. *Issues Comprehensive Paediatric Nursing*. 13, 265-277.

LeRoy, S., Elixson, M., O'Brien, P., Tong, E., Turpin, S., and Uzark, K. (2003) Recommendations for Preparing Children and Adolescents for Invasive Cardiac Procedures: A statement from the American Heart Association Pediatric Nursing Subcommittee of the Council on Cardiovascular Nursing in Collaboration with the Council on Cardiovascular Diseases of the Young, *Circulation*, 108 (20), 2550 - 2564.