Growth & Development

Toddler

Lecture "7"

dr. Shaban
Toddler age

The period from 1 year to less than 3 years age

Age 1: Starting to walk
Age 2: Starting to talk
Age 3: Starting Fantasy

- Physical Growth begins slow, while developmental tasks is rapid.
- **Health Concerns and Risks**: need for close supervision; curiosity; poisonings; auto safety
Assessment of a toddler

Speaks in two word sentence

20 deciduous teeth at 2.5 year
HR: 90 bpm

Pouchy abdomen from weak muscle

Chest Cx. Become bigger than head Cx.

Noticeable lordosis

Baby fat begins to disappear

Wide-based gait

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Physiological Developments

**Length:**
- Formula: “length (cm) after the first year: = age (y) x 5+80.”
- Arms and legs grow faster than trunk. At 2 years age midpoint of the body is umbilicus, at adulthood midpoint is the pubis.

**Weight:**
- Birth weight quadrupled by end of 2\textsuperscript{nd} year of life.
- The subcutaneous fat starts to disappear at the end of the second year.
- Formula: “Weight (2-7 years) = age (y) x 2+8.”
Physiological Developments

Head Cx.:
- Equals chest circumference at 1 year of age.
- By 2 years, chest circumference has grown greater than that of the head.
- Ant. Fontanel closure by 18 months

Body contour:
- Toddlers tend to have a prominent abdomen, because although they are walking well, their abdominal muscles are not yet strong enough to support abdominal contents as well as they will later.

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• Toddlers have a forward curve of the spine at the sacral area (lordosis). As they walk longer, this will correct itself naturally.

• Toddlers walk with a wide distance between their feet. This distance seems to increase the lordotic curve, but it support their walking.

• Developing balance, coordination, stability, and an improved ability to manipulate objects
Body systems continue to mature during this time:

- **Respirations slow** slightly but continue to be mainly abdominal.

- The **heart rate slows** to 90 bpm; blood pressure increases to about 100/60 mm Hg.

- Stomach secretions **become more acid**; therefore, **gastrointestinal infections** become **less common**.

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• Stomach capacity increases to the point a child can eat three meals a day.
• Control of the urinary and anal sphincters becomes possible with complete myelination of the spinal cord.
• IgG and IgM antibody production becomes mature at 2 years of age.

• The passive immunity obtained during intrauterine life is no longer operative.

• Teeth: 16 teeth during the second year.

• All 20 deciduous teeth are generally present by 2.5 to 3 years of age
<table>
<thead>
<tr>
<th>Age (Months)</th>
<th>Fine Motor</th>
<th>Gross Motor</th>
<th>Language</th>
<th>Play</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td><strong>Holds a spoon</strong> well but may still turn it upside down on the way to mouth</td>
<td><strong>Walks</strong> alone well; can creep upstairs</td>
<td>4–6 words</td>
<td>Enjoys being read to;</td>
</tr>
<tr>
<td>18</td>
<td>No longer rotates a spoon to bring it to mouth. Typically places both feet on one step before advancing.</td>
<td>Can <strong>run</strong> and jump in place. Can walk up and Down stairs holding on to a person's hand. <strong>Change direction</strong> (Forward, backward, around)</td>
<td>7–20 words, uses jargoning; Names body part</td>
<td>Imitates household chores, dusting, etc.; begins parallel play (playing beside not with another child)</td>
</tr>
<tr>
<td>24</td>
<td>Can <strong>open doors</strong> by turning doorknobs, works simple puzzles, <strong>puts on clothes</strong></td>
<td>Walks up stairs alone. Still using both feet on the same step at the same time</td>
<td><strong>50 words, 2-word sentences</strong>, <strong>monologue</strong> (noun, pronoun and verb), such as “Daddy go,” “me come”</td>
<td><strong>Parallel play</strong> evident, destructive, exploratory</td>
</tr>
<tr>
<td>30</td>
<td>Makes simple lines or strokes for crosses with a pencil; throw ball &amp; use child’s scissors</td>
<td><strong>Can jump</strong> down from chairs, developing balance (doing activities while walking)</td>
<td>Verbal language increasing steadily. Knows full name; can Name one color and holds up Fingers to show age</td>
<td>Spends time playing house, imitating parents' actions; play is “roughhousing” or active</td>
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Toilet Training

• Toilet training is one of the biggest tasks a toddler must achieve.

• It should begin and be completed according to a child's ability to accomplish it, not according to a set schedule.

• Before children can begin to be toilet trained, they must have reached two important developmental levels, one physiologic and the other cognitive:
  1. They must have control of rectal and urethral sphincters, usually achieved at the time they walk well.
  2. They must have a cognitive understanding of what it means to hold urine and stools until they can release them at a certain place and time.

• Ready to master toilet training (Bowel control by 2-3 yrs, bladder control by 2.5-3.5 yrs).

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Nursing Implications in Freudian stages of development

• Help children achieve bowel and bladder control without undue emphases on its importance. If at all possible, continue bowel and bladder training while child is hospitalized.
Psychological Development

- Anal stage
- Gender identity

Cognitive development

  0-2 yrs  Sensorimotor
  2-7 yrs  Egocentric (imitation, imagination, short memory & attention span).
Language Development

• Toddlerhood is a critical time for language development, because children need a practice time.
• A child who is 2 years old should talk two-word & noun-verb simple sentences.
• A word that is used frequently by toddlers is “No” which reflect their autonomy development.

• Toddlers use it to when
  - they are refusing a task.
  - they do not understand it.
  - they practice a sound that they have noticed has patent effects on those around them.
• Language develops most quickly if parents:
  - Respect what toddlers have to say.
  - Make conversation with toddler.
  - Answering their questions (simple and brief).
  - Naming objects as they play with their child.
  - When they give their toddler something, they must name it.
  - Children should not be made to name an object before they can have it (because their vocabulary is so limited). They should say the word in right way.
• *** The toddler learn language from imitating what they hear.
• *** pronouns are difficult to use, up to 3.5-4 years to recognize.
Social Development
Autonomy vs. Shame and Doubt

• Children are discovering their own independence.
• Those given the opportunity to experience independence will gain a sense of autonomy.
• Children that are overly restrained or punished harshly will develop shame and doubt.

Nursing implications in Eriksonian stages of development
- Provide opportunities for decision making, such as offering choices of clothes to wear or toys to play with.
- Praise for ability to make decisions rather than judging correctness of any one decision.
Social Development

- Develops trusting relationships with other family members & with adults outside the family
- 15-month-old children are excited about interacting with people.
- By 18 months, toddlers imitate the things they see a parent doing.

Sex-Role Development

- **Gender identity**: Knowledge of being a boy or girl by age 3
- **Gender-role awareness**: Knowing appropriate behavior for each gender
- **Gender stereotypes**: Beliefs about presumed characteristics of each gender
Play behavior

• All during the toddler period, children play beside the children, not with them. This side-by-side play (called parallel play).
• Caution parents that if two toddlers are going to play side by side, they must provide duplicate toys or an argument over one toy is likely to occur.
• 1 to 2 yrs unable to play well with others, may be aggressive.
• The toddlers enjoy toys that require action (dolls that can be squeezed, pulled).
• By the age two years the child imitate adult actions in their play.
Emotional Developmental

- Child becomes sensitive to the feelings of others and may be characterized as affectionate
- Depending on the parents, infants can form secure or insecure attachments
  - **Secure attachment** – occurs when parents are consistently warm, responsive, and sensitive to their infant’s needs
  - **Insecure attachment** – may develop when an infant’s parents are neglectful, inconsistent, or insensitive to the infant’s moods or behaviors
Parenting Styles:

- 4 main parenting styles were determined by
- 1. Authoritarian
- 2. Authoritative
- 3. Permissive
- 4. Rejecting-Neglecting, Uninvolved
Authoritarian Parenting: Too hard

- **Tightly control**: Impose rules and expect obedience.
- **Classic Phrases**:
  - 1. Don’t interrupt me!
  - 2. Don’t leave your room a mess!
  - 3. Don’t stay out late
  - 4. Why? Because I said so!
- **children’s behavior**
  - Can produce children who have poor communication skills, who are moody, withdrawn, and distrustful.

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Authoritative Parenting:

- Parents provide firm structure, but are not overly controlling; listen to their children’s opinions and explain their decisions.

  - **Example**: Johnny, I can understand you are upset that you have to go to bed now. That is not a reason to throw your toy at daddy though. Because you misbehaved, your consequence will be __________ and it IS time to go to bed.

- Children tend to become self-reliant and socially responsible.
Permissive Parenting: Too soft

- Parents have too little control and neglectful
- Submit to their children’s desires.
- They make few demands and use little punishment.

- Children tend to become overly dependent and lack self-control

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Outcomes with Parenting Styles

- **Authoritative parenting**, more than the other two styles, seems to be associated with:
  - high self-reliance.
  - high social competence.
  - high self-esteem.
  - low aggression.
Deeds to avoid punishment

• When toddlers are old enough it is all right to punish them or to start discipline.
• **Discipline** means setting rules or road signs so children know what is expected of them. Parents should begin to instill some sense of discipline early in life because part of it involves setting safety limits and protecting others:
  • for example, the child must stay away from the fireplace or heater; she must not go into the street; she must not hit other children.
• **Punishment** is a consequence that results from a breakdown in discipline, from the child's disregard of the rules that were learned.
• correct behavior is praised rather than wrong behavior punished.
Discipline

• “Timeout” is a technique of helping children learn that actions have consequences. To use “timeout” effectively, parents first need to be certain their child understands the rule they are trying to enforce: for instance, “If you hit your brother, you'll have timeout.”
Behavioral Characteristics

• Negativism

• Temper tantrums

• Ritualistic Behavior

• Separation anxiety and regression.
Negativism

- As part of establishing their identities as separate individuals, toddlers typically go through a period of extreme negativism.

- They do not want to do anything a parent wants them to do.

- Their reply to every request is a very definite “No.”

- Parent need some help to realize this is not only a normal phenomenon of Toddlerhood but also a positive stage in development.

- This change indicates their toddler has learned he or she is a separate individual with separate needs (idea of self).

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Temper Tantrums

• Temper tantrums occur as a natural consequence of toddlers' development.

• For example, temper tantrums occur most often when children are tired, just before naptime or bedtime, or during a long shopping trip or visit. The tantrums may be a response to an unrealistic request by a parent: asking a child to comb his hair before he is coordinated enough to do so, asking her to pick up her toys before she has a feeling of family responsibility, or asking him to share before he can understand what is wanted.

• Also, they may occur if parents are saying “no” too frequently with regard to such things as touching the coffee table, getting dirty.
Almost every toddler has a temper tantrum at one time or another. The child may kick, scream, stamp feet, shout, "No, no, no," lie on the floor, flail arms and legs, and bang the head against the floor.

Children may even hold their breath until they become cyanotic or have seizures and fall to the floor.

This is harmless breath holding; ignoring it will make it ineffective and the child will give it up.
## Differentiating Temper Tantrums and Seizures

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Temper Tantrums</th>
<th>Seizures</th>
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<tbody>
<tr>
<td>Provocation</td>
<td>Usually provoked—parent can state a reason for it (she asked toddler to come to dinner, but he wanted to finish an activity), Usually child very angry</td>
<td>Not provoked</td>
</tr>
<tr>
<td>Appearance of cyanosis</td>
<td>Child holds breath, becomes cyanotic, then slumps to floor</td>
<td>Child slumps to floor first, then becomes cyanotic</td>
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Ritualistic Behavior

• Although toddlers spend a great deal of time every day investigating new ways to do things and doing things they have never done before, they also enjoy ritualistic patterns.

• Ambivalence,

• Sibling rivalry: aggressive behavior towards new infant: peak between 1 to 2 years but may be prolonged indefinitely).
Separation Anxiety

• Fear of being separated from parents begins at about 6 months of age and persists throughout the preschool period.

• This universal fear of this age group is known as separation anxiety. For this reason, toddlers have difficulty accepting being separated from their primary caregiver.
Promoting Toddler Safety

- Toddlers tend to develop many upper respiratory and ear infections, so family is always recommended to have a schedule visits at 15-18-24 months of life.

- Accidents are the major cause of death in children of all ages.

- Accidental ingestions (poisoning) are the type of accident that occurs most frequently in toddlers (medication & cleaning products).

- Other accidents that occur frequently in toddlers include motor vehicle accidents, burns, falls, and playground injuries.
Needs and Concerns

• **Nutrition:** A toddler's appetite becomes lesser than the infant. They should consume 1,300 kcal daily, diets high in sugar should be avoided. **2-3 cups of milk/day; 100-125 ml/kg/day water**

• **Health Supervision:** Immunization, dental care (begin to do the brushing themselves under supervision; schedule a first visit to a dentist skill by 2.5 years of age for assessment of dentition.

• **Engage in housework.** **Dressing,** participation in food preparation

• **Sleep:** In the beginning of toddlerhood period, toddler have two naps a day and sleeps 12 hours each night, and end it with one nap a day and only 8 hours' sleep at night
Lead Screening

- All children between the ages of 6 months and 6 years should be tested periodically for the presence of too much lead in their body (lead poisoning).
- Elevated lead levels are caused by eating, chewing, or sucking on objects (such as windowsills, paint chips, or furniture) that are covered with lead-based paint. Or Colored print in newspapers; old water pipes.
- Lead is toxic to body tissue, ingestion of it can lead to serious damage to the brain and nervous system, kidneys, and red blood cells; learning and behavioral problems.
- Beginning symptoms of lead poisoning include irritability, headache, fatigue, and abdominal pain.
Activities to insure toddler safety:

• **13 to 18 months:** Educating child about dangers of throwing, hitting; Preventing access to electrical cords; Securing gates and doors

• **19 to 24 months:** Instructing child on street dangers; Storing all chemicals, cleaners, and personal care products out of child’s reach; Ensuring multiple barriers to pools and hot tubs.

• **25 to 36 months:** Instructing child on dangers of fires, and also how to get help when feeling scared or in danger; Selecting toys carefully; Storing matches and lighters out of child’s reach; Instructing child about stranger danger and good touch/bad touch.
Nursing Care to Assist the Child with Hospitalization

- Awareness of child’s anxiety with strangers. Encourage parent to room in and if have to leave, leave when awake and leave something of meaning with child for support.

- Play is effective tool for building rapport

- Bring infants security object -- favorite toy, blanket

- Set limits, give choices on simple decisions

- Teach parents child may regress

- Teach parents about hazards (crib, chair, toys, equipment) be sure to supervise when out of crib.

- Teach proper hygiene to prevent infections

- Nutritional counselling
Therapeutic Play Techniques

- **Toddler**
  - Play peek-a-boo or Hide-and-Seek
  - Read familiar stories
  - Play with dolls that have similar “illness” as them
  - Puzzles, building blocks, push-and-pull toys
  - Play with safe hospital equipment – stethoscopes, syringes without needles. – remove when finished playing