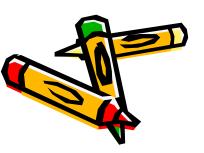




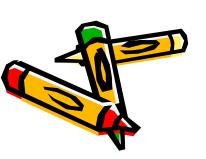
COURSE OBJECTIVES

- It is expected that at the end of this course students will be able to do the following;
 - Define paediatric nursing
 - Describe the principles of paediatric nursing
 - Recall normal growth and development of child
 - Describe the effects of illness and hospitalization in a child
 - Describe childhood illness/conditions:
 - Manage childhood illnesses using IMCI guidelines



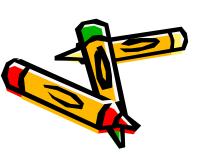
PAEDIATRIC NURSING

- Paediatric nursing is defined as the art and science that deals with management of childhood related disorders/diseases.
- Paediatric nursing is concerned with the health of infants, children and adolescents, their growth and development and their opportunity to achieve full potential as adults.



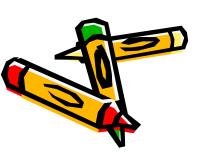
Components of pediatric nursing

- The nursing care of children from birth through adolescence includes;
 - health promotion,
 - disease prevention,
 - illness management, and
 - health restoration



Age group

- Child health is based on promotion of health/healthful living of a well child
- Internationally, the upper age limit of a child is 21 years. In Kenya, it is 12 years.
- A neonate is a newborn from birth to 28 days of age

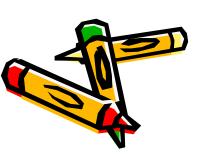






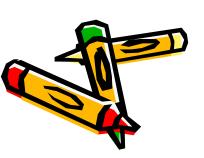
Nursing process in pediatric nursing

• The care of children and their families requires the application of the nursing process in accordance with accepted standards of practice, professional performance, and ethics.



Quality pediatric care

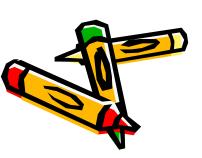
- Quality pediatric care is:
 - Developmentally appropriate,
 - Family centered,
 - Culturally sensitive, and
 - Evidence-based.





Additional hallmarks of quality care

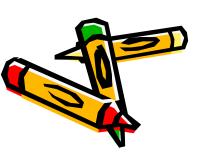
- ✓ Compassion,
- ✓ advocacy,
- ✓ care coordination,
- ✓ continuity of care, and
- ✓ a holistic approach
- These themes provide the context for standards that direct the practice of pediatric nurses.





ROLE OF THE PEDIATRIC NURSE

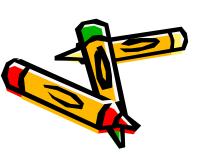
- Therapeutic relationship role
- Family care role
- Advocacy role
- Disease prevention/Health promotion role
- Supportive / counseling role
- Restorative role





1. Therapeutic relationship Role

This by relating to children and their families and able to distinguish their feelings and needs.



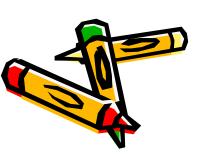
2. Family advocacy/caring

Nurse work with family members, identify their goals and needs and plan interventions that meet the defined problems.



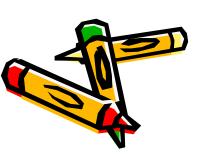
3. As an advocate

The nurse assists children and their families in making informed choices and acting in the child best interest.



4.Disease prevention/Health promotion

• Disease prevention/Health - Nurses involved with caring for children must practice preventive health. Example is safety.



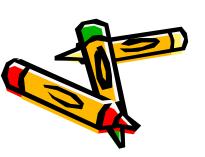
4. Support/counselling

Attention to emotional needs requires support and sometimes counselling.



5. Restorative role

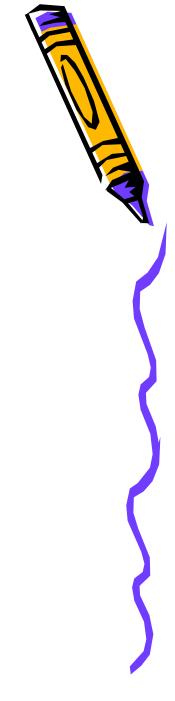
• This involves meeting the physical and emotional needs of children including feeding, bathing, toileting, dressing, security and socialization



OTHER ROLES

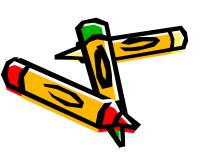
- Health education
- Psychologic support and counselling
- Coordination and collaboration
- Researcher
- Health care planning





MODELS OF CARE IN PEDIATRIC NURSING

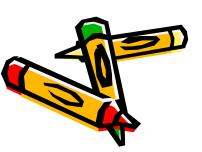
- 1. Family-centered care
- 2. Relationship-based care
- These are two models of care used in the delivery of nursing care to children.
- In both models, the importance of the family to the child is emphasized.
- In both, the unit of care is the child and the caregiver(s).





FAMILY-CENTERED CARE MODEL

- Core concepts of family-centered care include the following:
 - Dignity and respect for the child and family
 - Information sharing with the family
 - Participation in care by the family
 - Collaboration with the family to plan and provide care



Relationship-based care

- Core concepts of relationship-based care include the following:
 - The child and family remain the focal point in the plan of care.
 - The nurse makes an effort to develop a relationship with the child's family members and provides one-to-one time for conversations with the child and family on each shift.

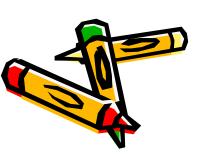
Relationship-based care

- Care is individualized to meet the specific needs of the child, based on issues that arise in the one-to one conversations with the child and family.
- All staff members strive to respect, understand, and address the child's and family's concerns.



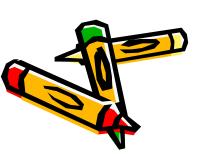
Relationship-based care

- -Children and families are actively engaged in all aspects of care, including decision making.
 - Open communication must occur between child, family, and staff.
 - The child's well-being and dignity must be safeguarded in all aspects of communication and care.



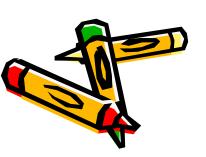
TRENDS IN PEDIATRIC NURSING PRACTICE

- Increased numbers of children requiring mental health services
- Increased numbers of children becoming ill as a result of antibiotic-resistant organisms
- Increased usage of blood conservation techniques for hospitalized children



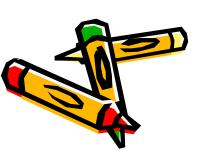
TRENDS IN PEDIATRIC NURSING PRACTICE

- Increased admissions due to:
 - Environmental risk factors, such as dangerous living environments, unstable households, and risky behaviors
 - Deficient knowledge base of caregivers, such as not following or understanding the treatment regimen
 - Lack of primary care access



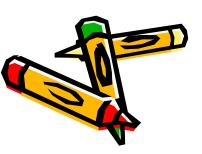
TRENDS IN PEDIATRIC NURSING PRACTICE

• Increased emphasis on provision of safety education (e.g., Internet safety, dealing with bullying)



OTHER TRENDS

- Earlier onset of puberty and its ramifications for adolescent sexual health
- Shift in the focus of medical/nursing care from disease treatment to health promotion and disease prevention
- Provision of health education in the school system



OTHER TRENDS

- Increased incorporation of families in the overall care of children
- Increased numbers of children requiring home-care provision
- Increased prevalence of autism spectrum disorders and childhood depression, requiring more education and research in these areas



NEW DISEASES IN PAEDS

- Increased childhood incidence of the following conditions:
 - Obesity
 - Hypertension
 - Diabetes
 - Asthma
 - Autism



GROWTH AND DEVELOPMENT

- Objectives
- Define the following terms
 - Growth
 - Development
 - Maturation
 - learnig
- State the stages of development and their respective ages
- Explain the principles of growth and development
- Discuss four theories of growth and development
 - Sigmund freud-psychosexual development
 - Erick Erikson-psychosocial development
 - Piaget- cognitive development
 - Kohlberg- moral development





Growth and development.

- **Growth**: -increase in structure the physical changes in the anatomy of the child.
 - implies a change in quantity
 - Increase in number and size of cells thus increasing the size and weight of the whole or any of the parts
 - It is qualitative in nature

• <u>Development</u>: — increase in function

- Changes occur in the physiological aspect of the child and they accompany growth
- Development also involves the changing from a lower to a more advanced stage of complexity
- Development is achieved through growth, maturation and learning
- $^-$ It is qualitative in nature



- <u>Maturation</u>: is the process of the unfolding of the genetic dinherited tendencies within the child
 - Some children are "late" matures while others are "rapid" matures
 - All children mature at their own rate
 - It is described as an increase in competence and adaptability
 - There is a "qualitative" change
- Learning: is a "change of behavior"
 - It is the result of experience, experimentation, and training
 - The ability to learn is dependent upon the inborn capacity for mental development
- NOTE: Maturation and Learning are interrelated. No learning can take place unless the child is mature enough to understand and the behavior is changed. The learning process can be hindered if the child is not given the opportunity learning by experience and from others when the time is optimum.

Stages of development and their respective age ranges

- Childhood develoment is devided into stages as follows;
- Prenatal; conception to birth
- Infancy: birth to 12 18 months
 - neonatal; birth to 27 28 days
 - infancy: 1 12 months of age
- Early childhood: 1 6 years
 - toddler 1 3 years
 - Preschool: 3 6 years
- School Age: 6 12 years
- *Adolescent: 13 − 18 years*



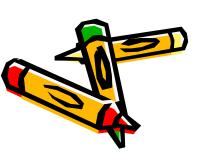


Developmental Phases

	Age
Prenatal period	Conception to birth
Neonatal	Birth to 28days
Infancy period	1 month to approximately 12 months
Toddler	1 year to 3 years
Early childhood period	1year to 6 years
Preschool	3 years to 6 years.
Middle childhood	6 to 11 years
Late childhood	11 to 19 years

Principles of G & D

- 1. The cephalo-caudal principle- gradual change in head size relative to body size during human growth.
- 2. Proxi-distal principle-The spinal cord develops before the outer parts
- 3. Development depends on maturation and learning
- 4. Development proceeds from the simple (concrete) to the more complex
- 5. Growth and development is a continuous process
- 6. Growth and development proceed from the general to specific
- 7. There are individual rates of growth and development

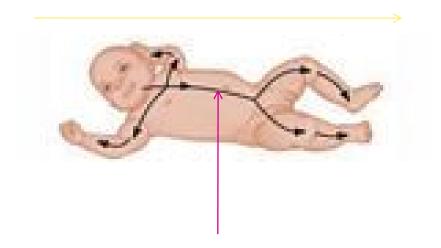


Basic principles of growth and development.

- Growth and development occur in an orderly sequence.
 - The sequence of development is the same for all children but the rate is different
 - Children creep before they stand and stand before they walk
 - talk before they read and read before they write
 - Each stage of development is an outgrowth of the previous stage
- Growth and development continue from conception to maturity.
- Differences in growth and development rates.
 - All children are on their own schedules and are unique to themselves
- Variation of Growth Rates for Different Body Structures
 - Not all body parts mature at the same rate
 - The brain is completely grown by age 7 but is not matured until years later
 - Growth and Development is a Total Process
 - The growth and development of a child is a PHYSICAL, MENTAL SOCIAL and EMOTIONAL process
 - The development of a "whole being"

Patterns of Growth and Development

Cephalocaudal Pattern (head to toe)



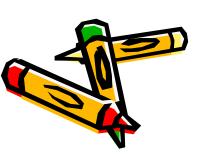
Proximodistal Pattern (from center outward)





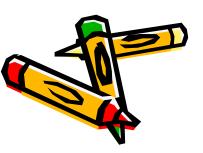
Periods of greatest growth

- A rapid pace during the foetal period-supply with the essentials through its mother's placenta.
- A rapid pace from birth to 2 years-provided the child's health is maintained and the essential requirements are given.



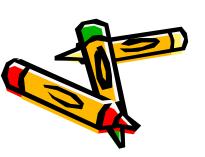
Periods of greatest growth

- A slower pace from 2 years to puberty and the process is prolonged.
- The child's height gradually increases under the influence of hormones.
- This also plays a part in the psychosocial development of the child.
- When the child reaches puberty, the sex hormones facilitate the individual's physical, psychological and emotional development.



Periods of greatest growth

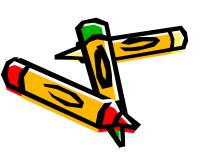
- A rapid pace from puberty to approximately 15 years
- A sharp decline from 16 years to approximately 24 years when full adult size is reached



Factors that Influence Growth and Development

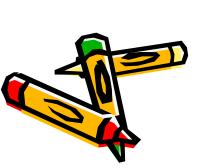
- Genetics
- Environment
- Culture
- Nutrition

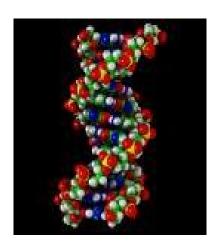
- Health status
- Family
- Parental attitudes
- Child-rearing philosophies

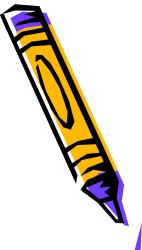


Genetic influences on growth and development

- pattern, rate, rhythm and extent:
 - governed by genes interplaying with environment
 - intrauterine life extremely important in growth and healthy development of the child





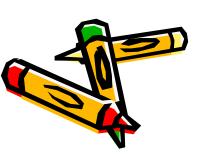


Environmental influences

- family composition
- family position in society
- family socioeconomic status
- knowledge of the family
- availability of healthy diets
- housing
 - diseases present in family and child

Cultural influences

- Must be considered when assessing growth and development
- Customs vs. work demands from different cultures



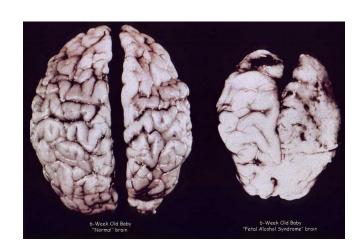
Nutritional influences

- Begins during the prenatal period
- LBW/preterm can result from poor prenatal nutrition
- Socio-economics may impact growth

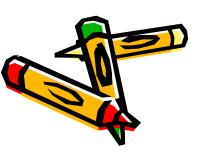


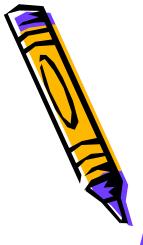


thalidomide



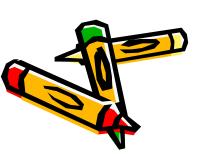
Fetal alcohol syndrome





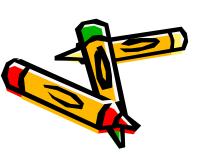
Health status of the child

- Certain diseases may affect g & d
- Endocrine and cardiac status included here



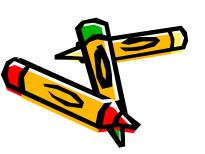
Family / Parental Attitudes / Child-rearing Philosophy

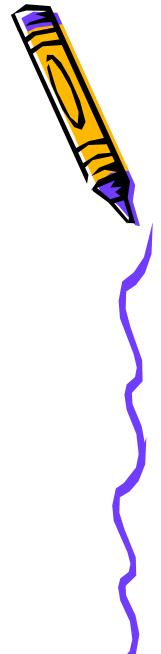
- Critical in growth and development, esp. emotional growth
- Intellectual growth must be included here as well
- Chronic illness can be combated with a loving environment and close family relationships



Methods to Evaluate Growth

- charts: compare to norms
- compare to self over time
- X-rays
- teeth
- height, weight, head circumference
- size of head and legs: length of bones

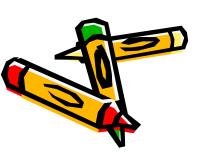






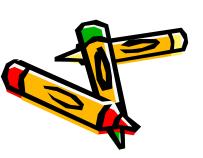
What is a Theory

- Organized and logical set of statements about a subject, frameworks to clarify, to make sense of.
- Human Development Theory: Models intended to account for how and why people become who they are, tries to explain and predict human behavior.



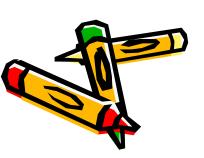
Why study theory?

- Provides a framework
- Offers logic for observations and explanations
- How and why people act
- Important for nurses to combine theory, practice, and research
- Nurses assess responses to illness and treatments

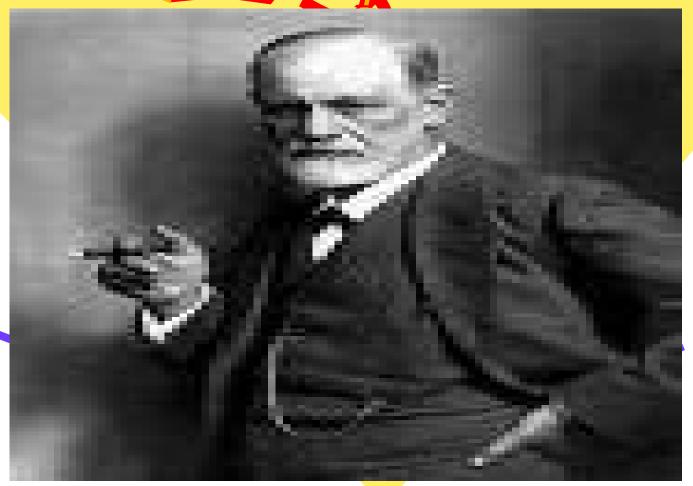


Theorists Associated with Development

- Jean Piaget: Periods of cognitive development
- Erik Erikson: Stages of psychosocial development
- Lawrence Kohlberg: Stages of moral development
- Sigmud Freud: Stages of psychosexual development



Freud's Psychosexual Stages of Agrelopment





Freud's Psychosexual Stages

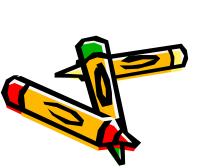
Oral Stage: Birth to 18 Months

Anal Stage: 18 months to three years

Phallic stage: 3 years to 7-8 years

Latency Stage: 7-8 years to puberty

Genital Stage- Pubertu to Adulthood

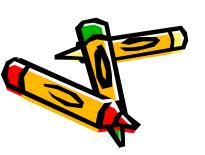






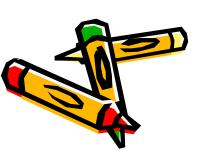
Piaget's Theory of Cognitive Development

- Jean Piaget (1896–1980) Swiss psychologist who became leading theorist in 1930s
- Piaget believed that "children are active thinkers, constantly trying to construct more advanced understandings of the world"
- Cognitive development is a stage process



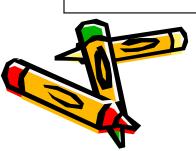
Piaget's Approach

- Primary method was to ask children to solve problems and to question them about the reasoning behind their solutions
- Discovered that children think in radically different ways than adults
- Proposed that development occurs as a series of 'stages' differing in how the world is understood



Piaget

Preoperational Stage (2–7 years)	 Emergence of symbolic thought Egocentrism Lack of the concept of conservation Animism 		
Concrete Operational (7–12 years)	 Increasingly logical thought Classification and categorization Less egocentric Conservation No abstract or hypothetical reason 		
Formal Operational Stage (age 12 – adulthood)	 Hypothetico-deductive reasoning Emerges gradually Continues to develop into adulthood 		



Intellectual Development (Piaget)

Concrete Operational (7 to 11)

- Logical & coherent thought
- Can distinguish fact from fantasy

Formal Operations (11 to 15 to adulthood)

Acquisition of abstract reasoning leading to

Analytical thinking

Problem solving

Planning for the future

Create a Mnemonic for Piaget's Four Stages

Examples:

Sometimes Piaget Can Frustrate!



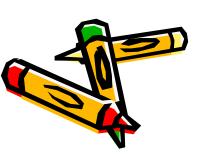
Rules for Toddlers

- If I like it, it's mine.
- If it's in my hand, it's mine.
- If I can take it from you, it's mine.
- If I had it a little while ago, it's mine.
- If it's mine, it must never appear to be yours in any way.



Rules for Toddlers, continued

- If I'm doing or building something, all the pieces are mine.
- If it looks like mine, it's mine.
- If I saw it first, it's mine.
- If you are playing with something, and you put it down, it automatically becomes mine.
- If it's broken,





Promote Psychosocial Development (Erikson)

Trust vs. Mistrust: (birth to 1 year)

- Establishes a sense of trust when basic needs are
- Nurses should provide consistent, loving care

Autonomy vs. Shame & Doubt: (1-3 yrs)

- Increasingly independent in many
- spheres of life
- Nurses should allow for self care & imitation

Initiative vs. Guilt: (3-6 yrs)

- Learns to initiate play activities.
- Nurses should encourage to explore environment with senses, promote imagination
- Industry vs. Inferiority: (6-12 yrs)
- Learns self worth as a workers & producers

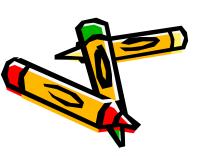
Allow children to compete and cooperate

Psychosocial Development (Erikson)



Identity vs. Role Confusion: (12-18 yrs)

- Forms identity and establishment of autonomy from parents
- Peers, society big influence
- Encourage peer visitation, texting, phone calls



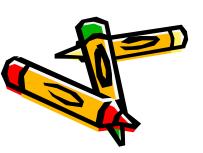
Erikson's Theory

Stage	Age	Psychosexual	Psychosocial Virtue		Danger
Infancy	to age 2	Oral/ Sensory	Trust vs. Mistrust Hope		Withdrawal
Early	2-3	Muscular/ Anal	Autonomy vs. Shame Will		Compulsion/
Play Age	3-5	Locomotor/	Initiative vs. Guilt	Purpose	Inhibition
School Age	6-12	Latency	Industry vs. Inferiority	Competence	Inertia
Adolescence	12-18	Puberty	Identity vs. Identity Confusion	Fidelity	Role Repudiation
Young	19-35		Intimacy vs. Isolation	Love	Exclusivity
Adulthood	35-65		Generativity vs.Stagnati on	Care	Rejectivity
Old Age	after 65		Integrity vs. Despair	Wisdom	Disdain



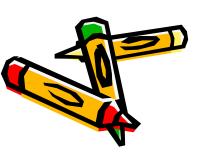
Kohlberg's Theory of Moral Development

- Assessed moral reasoning by posing hypothetical moral dilemmas and examining the reasoning behind people's answers
- Proposed six stages, each taking into account a broader portion of the social world



Levels of Moral Reasoning

- Preconventional—moral reasoning is based on external rewards and punishments
- Conventional—laws and rules are upheld simply because they are laws and rules
- Postconventional—reasoning based on personal moral standards



Kohlberg's Levels of Moral Development

Preconventional

Moral reasoning is controlled by external rewards and punishments.

• Conventional

Internal standards are imposed by others.

• Postconventional

Morality is internal, not based on external standards.



Moral Development

Kohlberg's Stages

Level I-Preconventional

Stage 1: Obedience and punishment orientation

Stage 2: Naively egoistic orientation

Level II—Conventional

Stage 3: Good-boy orientation

Stage 4: Authority-and-social-order maintaining orientation

Level III—Postconventional

Stage 5: Contractual-legalistic orientation

Stage 6: Conscience or principle orientation

Gilligan's Stages

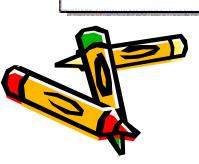
1 Individual Survival

1A From Selfishness to Responsibility

2 Self-sacrifice and Social conformity

2A From Goodness to Truth

3 Morality of Nonviolence



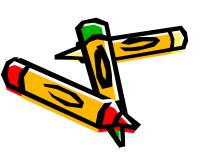


Lawrence Kohlberg Moral Development Theory

- Level 1- Preconventional
- Stage 1- Punish and Obey
- Stage 2- Instrumental Relativist
- Level 2- Conventional
- Stage 3- Good boy/Nice girl
- Stage 4- Society Maintenance
- Level 3- Post-Conventional
- Stage 5-Social Contract
 - 🖚 age 6- Universal Ethics

Stages of Moral Development Lawrence Kohlberg

Level	Stage	Ages	Social Orientation
Pre-Conventional	1	2-4	Obedience and Punishment
	2	4-7	Individualism, Instrumentalism
Conventional	3	7-10	Good Boy/Girl
	4	10-12	Law and Order
Post-Conventional	5	Teens	Social Contract
	6	Adult	Principled Conscience



Let's Practice!

Situation 1

Ashley borrowed her father's car. She and her friend Kayla were very late coming home that evening. They were further delayed at a stop light on a quiet street. After what seemed to be an unnecessary long wait, Kayla reminded Ashley that they were late. Ashley continued to wait, insisting that if everyone ignored stop lights when it was personally convenient to do so, no street would be safe.

• At what stage do you think Ashley's decision was? Why?



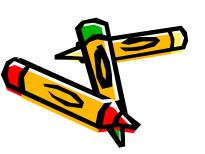
Jordan was not prepared for a difficult chem. Exam, so he wrote some important formulas on a slip of paper which he put in his pocket before the test. Just before the test began, the teacher informed the class that any student caught cheating would automatically fail the test. Even though Jordan needed the information he wrote, he didn't use it because the teacher stood too close to his desk during the entire exam.

• At what stage? Why?



Early in the school year, DeShawn who started at varsity basketball, asked Caitlin for a date. Caitlin was not attracted to DeShawn and politely declined. A few weeks later Caitlin tried out for cheerleading and made it. Several of the other cheerleaders were dating boys on the team. When DeShawn asked Caitlin to go with him to a party that the team was having after an important game, she accepted.

• At what stage? Why?



Kyle asked his older sister, Gabby, if he could borrow her car so that he and his friend could go to the beach. Gabby reminded her brother that she never wanted him to drive her car. She suggested, however, that if it was all right with him, they could all go together. Soon after they got to the beach, Kyle's friend got ill. Kyle asked Gabby if she could drive his friend home. Gabby refused, saying that she had just come all that way and she was not going to turn around and go right back. Kyle tried unsuccessfully to find a way to get his friend home. Finally, while Gabby was swimming, he wrote her a note telling her he would be back soon as possible, took her car keys, and drove his friend back home.

What stage? Why?

As Jason's father was leaving for work in the morning, he asked Jason to clean out the garage sometime during the day. Jason responded, saying he already had plans to play tennis that day. Around noon, Jason and two friends made plans that required Jason to borrow his father's car that evening. Jason decided to skip playing tennis and clean the garage.

That stage? Why?

Kohlberg's Theory of Moral Development Theory into Practice

Sam starts to get out of his seat to sharpen his pencil without permission. He stops because he realizes that if he does, others might also do so and this could result in disorder in the classroom. Because of this, he understands that it is his duty to follow the rules.

Q: At which of Kohlberg's stages of moral development is Sam functioning?

Kohlberg's Theory of Moral Development Theory into Practice

Sam starts to get out of his seat to sharpen his pencil without permission. He stops because he realizes that if he does, he will be punished.

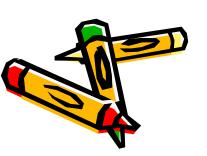
Q: At which of Kohlberg's stages of moral development is Sam functioning? Explain.



Kohlberg's Theory of Moral Development Theorint of Practice

Sam starts to get out of his seat to sharpen his pencil without permission. He stops because he realizes that if he does, it will displease his teacher.

Q: At which of Kohlberg's stages of moral development is Sam functioning? Explain.



Intellectual Development (Piaget)

Sensorimotor (birth to 2)

- learns from movement and sensory input.
- learns cause & effect

Preoperational (2 to 7)

- Increasing curiosity and explorative behavior.
- Thinking is concrete
- Egocentrism





Developmental Milestones

Age in months	Milestones	
2	Attention to objects	
3	No head lag when pulled up to sitting position	
5	Reaches out for object	
6	Asymmetric tonic neck reflex disappeared, sits steadily	
10	Bears weight on leg when standing, chews lumpy foods.	
18	Walks independently, has stopped casting or mouthing objects	
20	Says single words with meaning	
28	Puts two or three words together to make phrases	
36	Talks in sentences	

Developmental Milestones

	Age
Not smiling at mother	8 Weeks
Poor head control	6 Months
Unable to sit unsupported	9 Months
Not crawling	12 Months
Unable to stand with help	12 Months
Not babbling	12 Months
Unable to stand unaided	15 Months
Not walking independently	18 Months
Unable to understand simple commands	2 Years
Not using two to three words.	2.5 Years

DEVELOPMENTAL CHARACTERISTICS

- 1. Physical maturation: overall Gross and fine motor growth, mobility and erectness
- 2. Cognitive development: learning, awareness, perception and memory-use of senses
- 5.Psychosocial development: relational through play and interaction with people and the environment
- 6. Mental development: communication and language, social behavior, self care, intelligence and learning



Normal developmental milestones

6 weeks:

Movt and posture

- Head lag not quite complete
- Primitive responses persist

Vision and manipulation

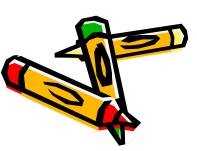
- looks at a toy held in midline
- follows a moving person

Hearing and speech

• vocalizes with gurgles

Social behavior

smiles briefly when talked to by mother





Movt and posture:

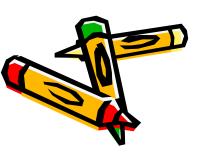
- Holds head up in sitting position
- Rolls from prone to supine
- Primitive responses are gone

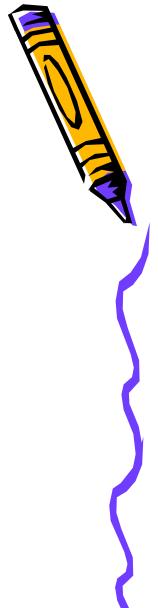
Vision and manipulation

- Watches hands
- Pull at their clothes
- Tries to grasp objects

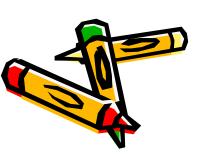
Hearing and speech

- Turns head to sound laughs
- Social behaviour: recognizes mother, becomes excited by toys





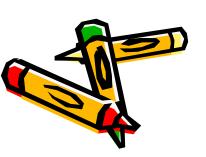
- Movt and posture: sits unsupported, rolls from supine to prone, bounces with pleasure,
- Vision and manipulation: transfers objects from hand to hand, bangs toy on table, watches small moving objects
- Hearing and speech: says da,ba,ka,
- Social behavior: tries to feed himself, puts objects in their mouth



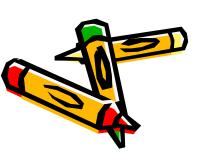
- movt and posture; crawls, gets to sitting position without help, can pull up to standing, lifts one foot when standing,
- Vision and manipulation:reaches for objects with index finger, has
 developed finger-thumb grasp, will place objects on examiner's hands but
 not release them,
- Hearing and speech; says one word with meaning
- Social behavior; say bye-bye, deliberately drops objects, puts objects in and out of boxes



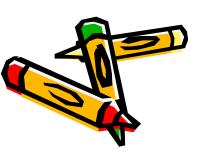
- Movt and posture; walks unsupported, may shffle on buttocks and hands
- Vision and manipulation:can hold two cubes in one hand, makes marks with pen,
- Hearing and speech:says two or three words with meaning
- Social behavior:understands simple questions



- Movt and posture; stands without support, climbs stairs, walks with broad based gait
- Vision and manipulation:builds a tower of two cubes, takes off shoes
- Hearing and speech; around 12 words
- Social behavior:asks for things by pointing, can use a book

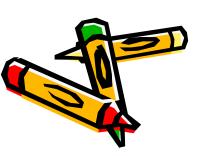


- Movt and posture; runsand jumps, can climb onto a chair and sit down
- Vision and manipulation; tower of three cubes, turns pages of a book, scribbles
- Hearing and speech; is beginning to join two words together
- Social behavior:recognizes cars and animals in a book, points to nose, ear on request, carries out simple orders,



Newborn Flexion

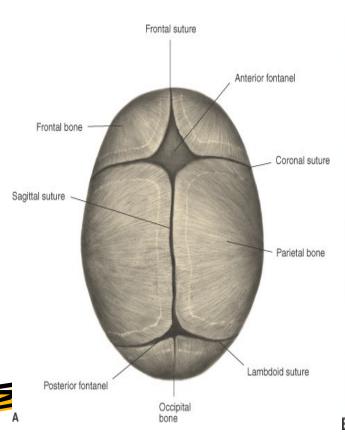








Fontanels







Newborn Head Control

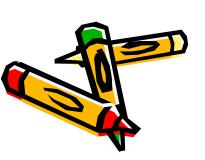


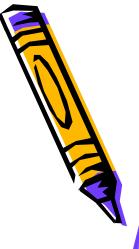




Moro Reflex

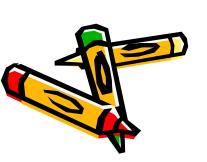


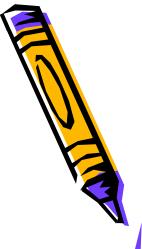




Dance/step/walking reflex



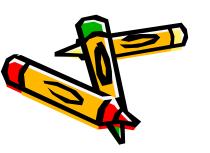




Care of hospitalized child

"Atraumatic Care"

Use of interventions that eliminate or minimize psychological and physical distress that is experienced by children and their families in the health care system

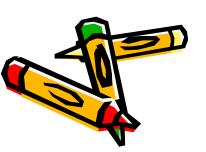


Promotion of normal development

- Infants: oral-motor development
- <u>Toddlers</u>: encourage mobility & exploration, language development
- Preschoolers: assistance with self-care
- School-aged: socialization, provision of games & tasks for mastery
- Adolescents: increased independence in managing own care

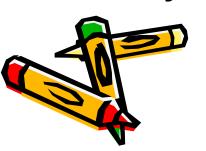
Stressors of Hospitalization

- 1.Separation Anxiety
- 2.Loss of Control
- 3. Bodily Injury & Pain



1. Separation Anxiety (Universal fear of toddler)

- Protest: loud, demanding cries, rejects comfort measures
- <u>Despair</u>: lies on abdomen, flat facial expression, weight loss, insomnia, loss of developmental skills
- Denial or Detachment: silent expressionless child, deterioration of developmental milestones, may have trouble forming close relationships



Nursing Diagnosis

Anxiety r/t separation from parents during hospitalization.

<u>Goal</u>: child will exhibit minimal evidence of separation anxiety during hospitalization.

Outcome criteria: observe child's positive interactions with staff members & adherence to hospital routine, appropriate for age & e of development.

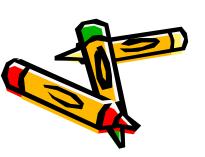
Nursing Interventions

- Limit admissions
- Limit hospital stay
- Reduce pain
- Adequately prepare child for procedures
- Open visiting (include siblings)
- Primary nursing
- Use of play
- Hospital bed = "safe area"
- Increase control



2. Loss of Control

- Children loose control over their:
 - Routine
 - Body
 - Basic decisions
 - Loss of school, boredom
 - Ability to socialize





Interventions

- Infants: Provide consistent care
- Toddlers: maintain consistent routine
- Toddlers often have security objects such as a stuffed animal that help them feel safe and secure
- Preschoolers: need adequate preparation to unfamiliar experiences, fear bodily injury
- School-aged: provide schoolwork, social
- **Adolescents**: same as schoolage, privacy



Interventions: Play!

- ©Provides diversion, brings about relaxation.
- [©]Helps child feel more secure in strange environment.
- [©]Helps lessen stress of separation.
- [©]Means for release of tension & fears.
- [©]Means for accomplishing therapeutic goals.
- ©Allows making choices & being in control.

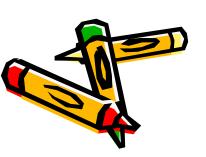


3. Bodily Injury

• Procedures are uncomfortable

• Disease processes are painful

• Postoperative pain can be very severe





Assess for Pain

<u>Infants</u>: watch facial expression, FLACC

Toddlers: grimace, clench teeth, restless

Preschoolers: can locate pain, use face scale, fear bodily injury & mutilation, literal

School-aged: fear disability & death, pain is punishment, "magical quality" of germs, can use faces scale

Adolescents: use same pain scale as adults



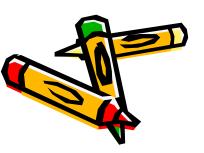
Pediatric Pain Assessment

Pain is whatever the child experiencing it says it is".



Children are under-medicated because of these <u>MYTHS:</u>

- ✓ infants don't feel pain
- ✓ children tolerate pain better than adults
- ✓ children cannot tell you where it hurts
- ✓ children always tell the truth about pain
- ✓ children become accustomed to painful procedures
- parents do not want to be involved in child's pain control
- √ narcotics are more dangerous for children



Interventions

- Nurses have an ethical obligation to relieve a child's suffering
- In addition adequate pain relief leads to
 - earlier mobilization
 - shortened hospital stays
 - reduced costs.





Assess the child using QUESTT:

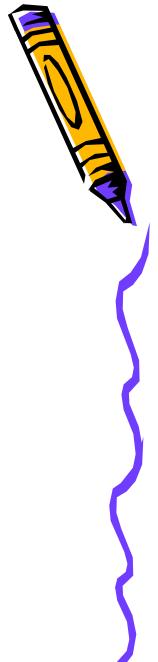
- **Question** the child.
- >Use pain rating scales.
- Evaluate behavior & physiologic changes.
- > Secure the parents' involvement
- > Take into consideration: cause of pain.
- Take action & evaluate results.

Interventions

• Medicate for Pain

- Non Pharmacological Therapy
 - Cutaneous Stimulation
 - Distraction
 - Guided Imagery
 - Hot or Cold application

Relaxation



Hospitalization for all pediatric patients

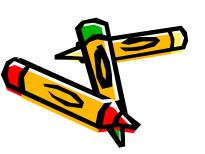
GOALS:

- Child will be prepared.
- Child will experience little or no separation.
- Child will maintain sense of control.
- Child will exhibit decreased fear of bodily injury.

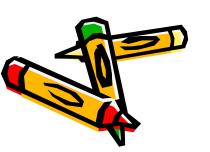
ETAT

At the end of the unit you will be able to:

- ☐ Triage all sick children when they arrive at a health facility, into the following categories:
 - ✓ those with emergency signs
 - ✓ those with priority signs
 - ✓ those who are non-urgent cases.
- Assess a child's airway and breathing and give emergency treatments.
- Assess the child's status of circulation and level of consciousness.
- \square Manage shock, coma, and convulsions in a child.
- Assess and manage severe dehydration in a child with diarrhoea.
- ☐ Plan and implement ETAT in your own working area in your hospital.



- Many deaths in hospital occur within 24 hours of admission.
- Some of these deaths can be prevented if very sick children are quickly identified on their arrival and treatment is started without delay.
- In many hospitals around the world, children are not checked before a senior health worker examines them; as a result, some seriously ill patients have to wait a very long time before they are seen and treated.
- Children are known to have died of a treatable condition when waiting in the queue for their turn.
- The idea of triage is to prevent this from happening.

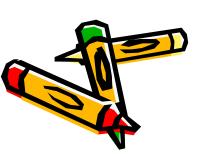


Triaging of Sick Children

- Is the process of sorting of patients into priority group? according to their needs and the resources available.
- It involves rapidly examining all sick children when they first arrive in hospital in order to place them in one of the following categories:
 - i. Those with **EMERGENCY SIGNS** who require immediate emergency treatment.
 - ii. Those with **PRIORITY SIGNS** should be given priority in the queue.
 - i. Those who have no emergency or priority signs and therefore are NON-URGENT cases can wait their turn in the queue

The triaging process

- Triaging should not take much time. For a child who does not have emergency signs, it takes on average 20 seconds.
- The health worker should learn to assess several signs at the same time.
- FOR EXAMPLE
- A child who is smiling or crying does not have severe respiratory distress, shock or coma. The health worker looks at the child, observes the chest for breathing and priority signs such as severe malnutrition and listens to abnormal sounds such as stridor or grunting.

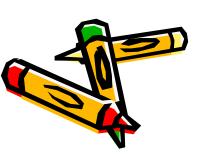


METHODS OF TRIAGING

- Several methods are available to facilitate the triaging process.
- One example is a stamp being used in Malawi consisting of the "ABCD" signs in which the health worker circles the correct step and initiates emergency treatment "E" or puts them in priority groups "P" or "Q" for children who can wait in the queue.
- Colours can also be used for differentiating the three groups, giving a red sticker to emergency cases, a yellow for priority and green for the queue.

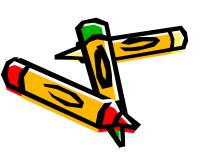


- Who should be triaged?
- When and where should triaging take place?
- Who should triage?



EMERGENCYSIGNS

- i. Those with **EMERGENCY SIGNS** who require immediate emergency treatment.
 - If you find any emergency signs, do the following immediately:
 - " Start to give appropriate emergency treatment.
 - " Call a senior health worker and other health workers to help.
 - » Carry out emergency laboratory investigations.



ii. Those with **PRIORITY SIGNS**

• They should be given priority in the queue, so that they carrapidly be assessed and treated without delay.

iii. Those who have no emergency or priority signs and therefore are **NON-URGENT** cases.

• These children can wait their turn in the queue for assessment and treatment.



Re-view

Categories after triage	Action required
EMERGENCY CASES	Need immediate emergency treatment
PRIORITY CASES	Need assessment and rapid attention
NON-URGENT CASES	Can wait their turn in the queue



Emergency Signs

- Triage of patients involves looking for signs of serious illness or injury.
- Children with these signs require very urgent life support procedures.
- Relate to the 'ABCD'
 - **A**irway
 - **B**reathing
 - Circulation/Consciousness/Convulsion/Coma
 - **D**ehydration
- During care of children with such signs
 - Always assess for any danger in the environment to self and to patient
 - Call for help
 - Weigh if possible

If there is history of trauma, ensure cervical spine is protected

Airway

- Check for airway obstruction
- Management
 - Look, listen, feel.
 - If obstructed by foreign bodies, secretions or head position perform head manouvers (Neutral position for neonates, Jaw thrust or head-tilt chin-lift for older children) to open the airway, suck all secretions.
 - An airway (oropharyngeal tube) can be inserted if available
 - If foreign body remove it, or perform backslaps or Heimlich manouver to expel them
 - Re-assess after every intervention



Breathing

- Check for
 - Central cyanosis
 - Severe respiratory distress
 - Weak or absent breathing
- Management
 - Look, listen, feel for breathing
 - If not breathing, give 5 rescue breaths; each breath should last 2-3 seconds. Check rise in chest with each breath given
 - Re-assess
 - Support breathing with oxygen via right-sized and well fitting face mask (or if indicated and with mechanical ventilator)

Circulation

- Check for:
 - Capillary refill of more than 3 seconds
 - Weak, rapid thready pulse
 - Absent or Slow heart rate of less than 60beats/min
- Management
 - If pulse is slow (<60bpm for infants and neonates), weak or absent and breathing is absent perform cardiopulmonary resuscitation (CPR) 15 chest compressions: 2 breaths
 - Reassess at regular intervals
 - If no change after CPR
 - Give I.V Adrenaline 0.1ml/Kg body weight of 1:10 000 adrenaline concentration
 - Continue CPR for 3 mins. Reassess
 - Repeat adrenaline a 2nd dose if necessary



- If pulse is > 60bpm, continue breathing support with oxyg
- look for sign of dehydration or poor circulation and give emergency I.V fluid (1st Bolus of 20mls/Kg body weight of Ringer's lactate or Normal saline)
- Consider treating for hypoglycemia, continue full examination to consider cause of illness

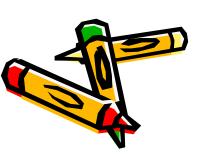
When to Stop CPR

- If no gasping or breathing after 20 minutes of CPR or gasping but no breathing after 30 minutes
- Decision to stop resuscitation depends on local resources



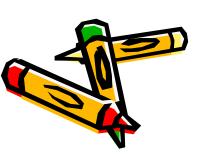
Convulsions

- Management
 - I.V diazepam 0.3mg/Kg body weight or rectal 0.5mg/Kg body weight
 - Reassess
 - Repeat diazepam if still convulsing
 - Reassess
 - If still convulsing, give I.M phenobarbital 20mg/Kg body weight(Neonates) or 15mg/Kg body weight for infants and young children



Consciousness/Coma

- Assess for level of consciousness using AVPU scale
 - *A* **A**lert
 - V responds to Voice
 - P responds to Pain
 - U Unconscious/Unresponsive This is a child in coma
- A child who is not alert but responds to voice is lethargic



- Dehydration results due to diarrhoea
 - Check if the child:
 - Is lethargic or unconscious
 - Has sunken eyes
 - Skin pinch goes back very slowly
 - Management is by IV fluid therapy as described at 'Circulation'
- When ABCD has been completed and there are no emergency signs, continue to assess the **PRIORITY** SIGNS.





PRIORITY SIGNS

- Priority signs should alert you to a child who needs prompt, but not emergency assessment.
- Children with these should be front of the queue.
- Clinical review as soon as possible, Weigh, Baseline observations
- Use the acronym 3TPR MOB
 - Tiny Sick infant aged < 2 months
 - If the child appears very young, ask the mother his age
 - Temperature very high > 39.50C
 - A child that feels very hot may have high fever. Children with high fever on touch need prompt treatment
 - 🛺 a major trauma or other major surgical condition
 - Includes even the invisibles: acute abdomen, fractures and head injuries

- $-\mathbf{P}$ ain child in severe pain
 - may be due to severe conditions such as acute abdomen, meningitis, etc.
- Poisoning mother reports poisoning
 - A child with a history of swallowing drugs or other dangerous substances needs to be assessed immediately, as he can deteriorate rapidly and might need specific treatments depending on the substance taken
- **P**allor severe palmar pallor
 - Is a sign of severe anaemia which might need urgent transfusion



- **R**estless / Irritable / Floppy
 - Lethargic child i.e. Child who is at V in the AVPU scale
- Respiratory distress
 - e.g. lower chest wall indrawing (not severe), or difficulty in breathing
 - NB: Severe respiratory distress is an emergency sign
- Referral has an urgent referral letter
 - Read the note carefully and determine if the child has an urgent problem.
- Malnutrition Visible severe wasting; a sign of marasmus
 - To assess for this sign, look rapidly at the arms and legs as well as the child's chest.
- Oedema of both feet
 - is an important diagnostic feature of kwashiorkor, another form of severe malnutrition
- Burns severe burns

Burns are extremely painful and children who seem quite well can deteriorate rapidly

