Lecture 11 • Mark Klimek • 78:29

Labor and Delivery (Continued from previous lecture)

Fetal Monitoring Patterns

There are 7 fetal monitoring patterns to learn … The ones that start with the letter **"L"** are bad heart tracings. Use the mnemonic **"LION"** as the nursing intervention

Normal fetal heart rate = 120 to 160 beats per minutes

1. **Low Fetal HR (heart rate)—HR <110**
   - This is BAD
   - You do **"LION"**
     - **L**eft side (place mother on the left side)
     - **I**V
     - **O**xygen
     - **N**otify HCP
   - Stop Pitocin (pit) if it was running
     - Implement before "LION"

2. **High Fetal HR—HR >160**
   - Document acceleration of fetal HR
   - Take the mother's temp
   - Not a high priority … Baby is WNL

3. Low Baseline Variability
- This is BAD
- Fetal HR stays the same—it doesn't change
- You do **"LION"**
  - **L**eft side
  - **I**V
  - **O**xygen
  - **N**otify HCP
- Stop pit if it is running (first)

4. High Baseline Variability
- Fetal heart rate is always changing—This is GOOD
- Document finding

Note
In utero, low variability of V/S is a bad sign but highly variable V/S is a good sign

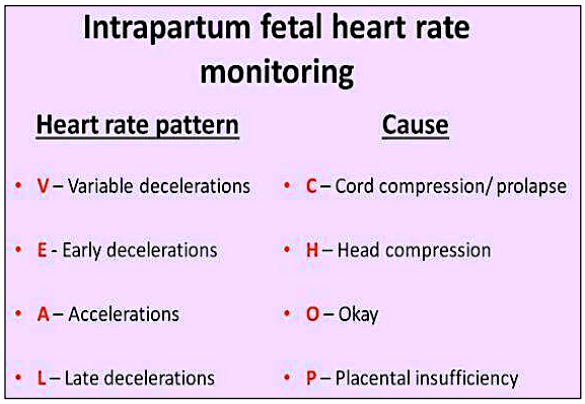


Figure 9. Remember "VEAL CHOP" for the causes of 4 HR patterns.

5. Early Deceleration

- This is normal … No big deal
- Document finding

6. **Variable (VERY) Decelerations**

- This is very BAD
- This indicates **prolapsed cord**
- What is the nursing intervention?
  - PUSH and POSITION

7. Late Decelerations

- This is BAD
- You do **"LION"**
  - **L**eft side
  - **I**V
  - **O**xygen
  - **N**otify HCP
- Stop pit if it is running

Recap

- Look at the first letter of a fetal heart rate tracing, it is a bad heart tracing if it starts with an **"L"**
  - Therefore, do "LION" which also starts with the letter "L"
- Variable deceleration is very bad
  - PUSH and POSITION)
- **Ace of spades** means that this answer works every time
  - Check the FHR

Second stage of L&D (labor and delivery)

- Delivery of the fetus … This is about order.
  1. Deliver head … The mother needs to stop pushing
  2. Suction the mouth then the nose … ABC order
  3. Check for nuchal (around the neck) cord
  4. Deliver the shoulders, next, the body
  5. Make sure baby has ID band on before it leaves the delivery area

Third stage of L&D

- Delivery of the placenta
- What do you check for with the delivery of the placenta?
  - Make sure the placenta is complete and intact
  - Check for 3-vessel cord—2 arteries and 1 vein, AVA

Fourth Stage of L&D

- Recovery
- There are **4 things** you do in the **4th stage**, **4 times an hour** (every 15 minutes)

1. Vital signs: Assessing for shock … Blood pressure goes down, HR goes up … Pt looks pale, cold, and clammy
2. Fundus: If it is boggy, massage it … If displaced, catheterize it
3. Check perineal pads … If there is **excessive bleeding**, the pad will **saturate in 15 minutes or less**
4. Roll pt over and check for bleeding underneath her

Recap

- 4 things to do every 15 minutes in the 4th stage of labor
  - V/S → Fundus → Peri pads → Roll

Post partum Assessment

- Assess every 4 to 8 hours
- Assess for **"BUBBLE HEAD"**
- Make sure you focus on the 3 designated steps stated as **important** from BUBBLE HEAD

"BUBBLE HEAD" stands for

- **B**reasts
- *Uterine fundus should be **firm** … **Important***
  - Massage if fundus is boggy and midline
  - Catheterize pt if fundus is boggy and not midline

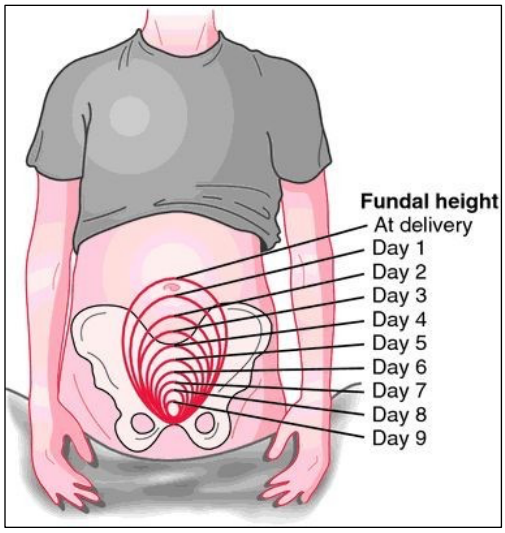


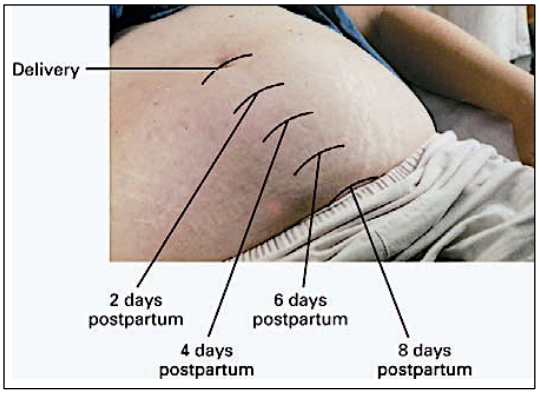
Figure 10. Fundal height postpartum.

Question

What should the postpartum uterine tone, height, and location normally be?

- The **tone** of the fundus should be **firm**, not boggy
- The **height** of the fundus after delivery should be at the **umbilicus (or navel)**
  - Fundus involutes about 2 cm every day PP (postpartum)
- The location of the uterus should be midline
  - If not midline, the bladder is distended

- **B**ladder
- **B**owel
- ***L**ochia is **vaginal drainage** postpartum (Know the order) … **Important***
  - Rubra—red
  - Serosa (if your cheeks are rosy)—pink
  - Alba (albino)—white
  - Moderate amount: 4 to 6 inches on pad in an hour
  - Excessive: saturate a pad in 15 minutes
- **E**pisiotomy
- **H**emoglobin/hematocrit



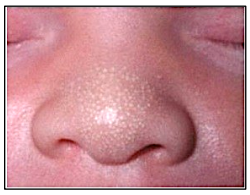
- ***E**xtremities—Looking for **thrombophlebitis** … **Important***
  - What is the best way to determine if a pt has thrombophlebitis?
    The best way is to measure **B**ilateral calf circumference **(Best answer)**
    Homan sign is not the best answer
- **A**ffect—emotional
- **D**iscomforts

Recap
The 3 big things about postpartum on the exam are
- Fundus
- Lochia
- Thrombophlebitis

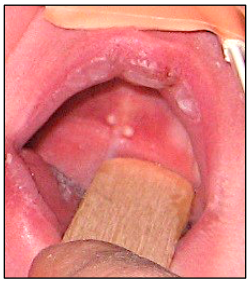
Variations in the newborn

All of the following skin conditions are normal
- **Milia—**White, pinhead-size, distended sebaceous glands on the nose, cheek, chin, and occasionally on the trunk. Usually disappear after a few week of bathing
- **Epstein pearls—**Palatal cysts of the newborn, which are small white or yellow cystic vesicles
- **Mongolian spot—**Bluish discoloration in the sacral region of newborn usually seen in African Americans … Carefully document its presence as such action may prevent child abuse charges against parents or caregiver
- **Erythema toxicum neoratorum—**Described as flee-bitten lesion … pink rash with firm, yellow-white papules or pustule on the face, chest, abdomen, back and buttocks of some newborns. Usually appears 24 to 48 hours after birth and disappear in a few days
- **Hemangioma—**An abnormal accumulation of blood vessels in the skin of the newborn. It is one of the most common birthmarks associated with childhood and affect 10% of all children

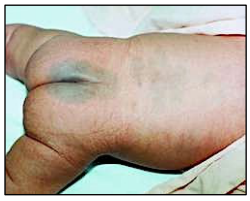
Milia



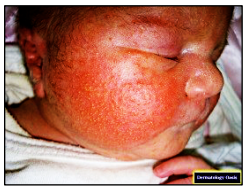
Epstein pearls



Mongolian spot



Erythema toxicum neonatorum

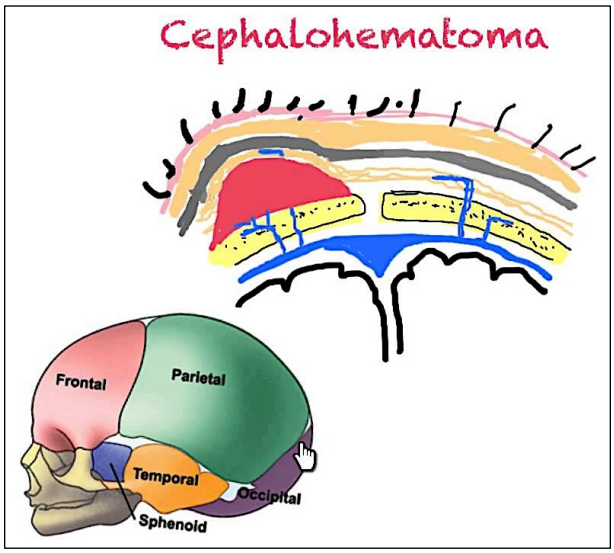


Hemangioma

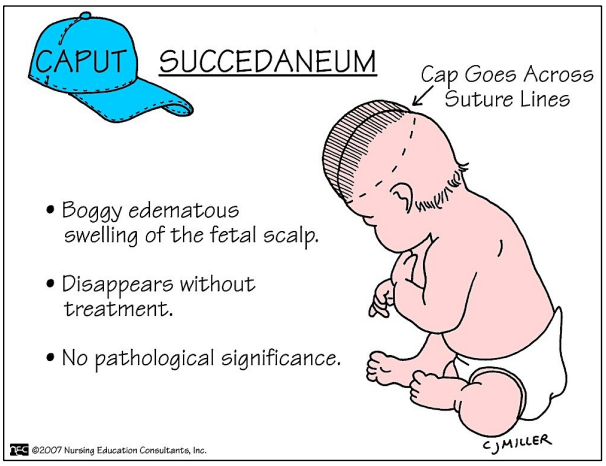
Cephalohematoma vs. Caput succedaneum … Make sure you know these 2
- **Cephalohematoma**—A collection of blood between the periosteum of a skull bone and the bone itself
  - Occurs in one or both sides of the head
  - Occasionally forms over the occipital bone
  - Develops within the first 24 to 48 hours after birth

- **Caput succedaneum**—An edema of the scalp of the neonate during birth from mechanical trauma of the initial portion of scalp pushing through a narrowed cervix
  - The edema crosses the suture lines
  - May involve wide areas of the head or it may just be a size of a large egg
  - **C**aput **S**uccedaneum **(CS)**—**C**rosses **S**uture line, and **C**aput **S**ymmetrical

Cephalohematoma



Caput succedaneum

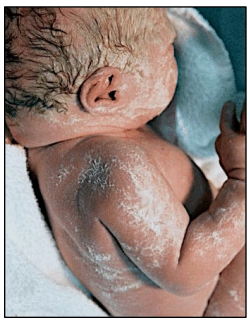


Caput **S**uccedaneum **(CS)**—**C**rosses **S**uture line, and **C**aput **S**ymmetrical

Hyperbilirubinemia in the Newborn

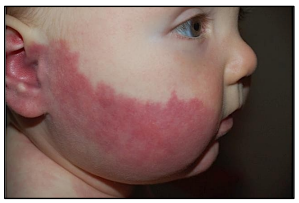
- Physiologic jaundice is **normal** and appears after 24 hours after birth … Disappears in about one week
- Pathologic jaundice is seen in the 1st 24 hours after birth

Vernix caseosa



Fatty, whitish secretion of the fetal sebaceous gland to protect the skin from amniotic fluid exposure

Acrocyanosis



Blue discoloration of the hands and feet in the newborns during the first few days after birth

- Normal finding and not indicative of poor oxygenation, respiratory distress, or cold stress

Nevi (Telangiectatic nevi)

Nevi or telangiectatic nevi, a.k.a. “stork bites,” are pink and easily blanched skin lesion that appear on upper eyelid, nose, upper lip, lower occipital area, and nape of the neck

- No clinical significance
- Disappears by 2 years of age

Port wine stain
Port-wine stain or nevus flammeus is seen at birth and is composed of a plexus of newly formed capillaries in the papillary layer of the corium

- Commonly found on the face and neck
- Red to purple, varies in size, shape and location
- Does not blanch on pressure

OB Medications—6

- Terbutaline (Brethine)
- Mag sulfate
- Pitocin
- Methergine
- Bexamethasone
- Surfactant

1. **Tocolytics (Stop contractions, stop labor)**
   - Tocolytics are given to women in premature labor that must be stopped
   - Terbutaline (Brethine)
     - S/E: maternal *tachycardia* (don't give with cardiac disease)
   - Mag sulfate
     - Treatment with Mag sulfate will induce hypermagnesemia, which will cause everything to go down
     - HR will go down, BP go down, **Reflexes go down, RR go down**, LOC go down

Question
So, what is the nursing intervention for hypermagnesemia due to mag sulfate treatment?

- Monitor respiration
  - If RR <12, decrease dose of Mag sulfate
- Assess for reflexes
  - Normal reflex is 2+
  - If reflexes are 0 or 1+ … Decrease dose of mag sulfate
  - If reflexes are 3+ or 4+ … Increase dose of mag sulfate

2. **Oxytocics (Stimulate and strengthen labor)**
   - Pitocin (Oxytocin)
     - S/Es: Uterine hyperstimulation (defined as longer than 90 seconds, closer than 2 minutes) The nursing intervention is to **lower the dose of pitocin** in case of uterine hyperstimulation
   - Methergine
     - Causes HTN—if it contracts blood vessels it makes sense that this increases BP

3. **Fetal/Neonatal Lung Meds**
   - Betamethasone (steroid)
     - Given to **mother IM**

- Can repeat as long baby is in **utero**
- S/E: increase glucose (steroid)

- Surfactant (Survanta)
  - Given to **baby** via **transtracheal** route
  - Given **After birth**

Medication Helps and Hints

1. What is **Humalin 70/30?**

- **Mix of insulin N and R … 70% = N … 30% = R**
  - So, if 100 units of 70/30 is given to a pt … the pt gets 70 units of N and 30 units of R
  - Or, for 50 units—35 units of N and 15 units of R
  - To remember the bigger number, think of a fraction … The numerator N is on top; therefore, Insulin N is the bigger number

Question
Can you mix insulin in same syringe and how?

- Yes, insulin can be mixed in the same syringe
- How do you mix insulin?
  - (1) Pressurize vial and (2) Draw up insulin
    (1) To pressurize the vial … Inject air into N, the into R, Draw up R
    (2) To draw up insulin … Think of RN

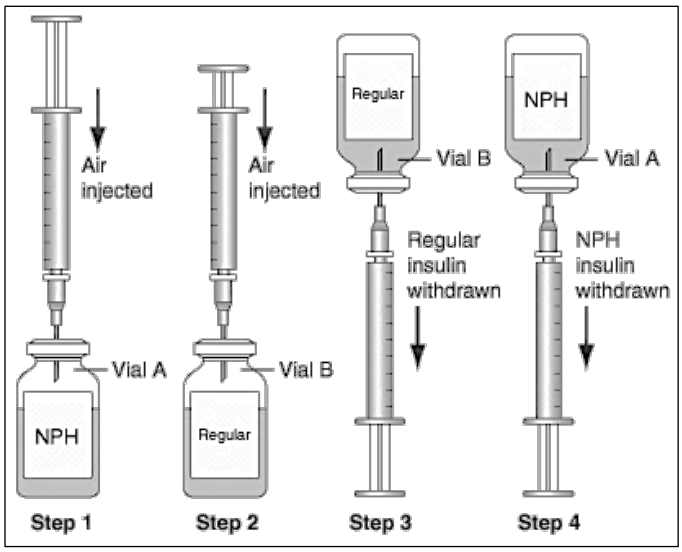


Figure 11. Pressurizing vials with air and drawing up insulin.

Needle for Insulin Injections

- Know what needle to use for insulin injection?
- Giving an IM injection
  - Pick answer in which both answers have a "1" in them
  - "I" in IM looks like the "#1"
  - Use a 21-gauge, 1-inch long needle
- Giving a SubQ injection
  - 5 looks like an "S" in "SubQ"
  - Pick the answer that has "5s" in it
  - Use a 25-gauge, 0.5 inch needle

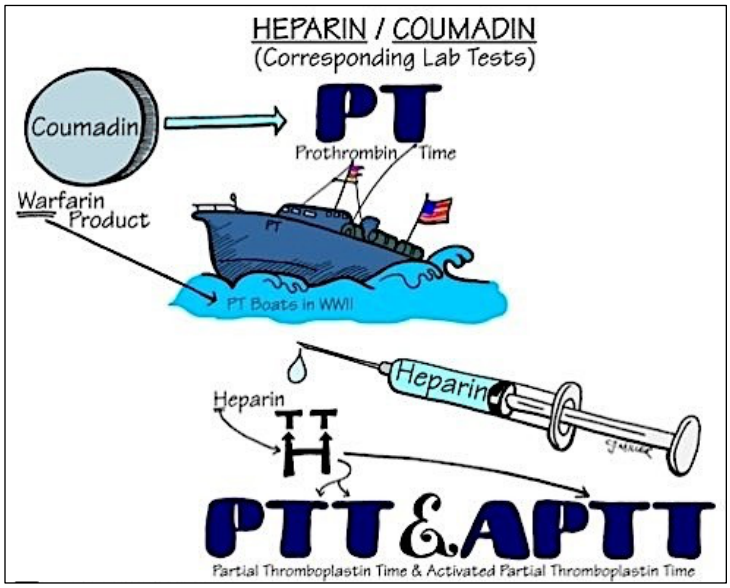
2. **Heparin**

- Given IV or SubQ
- Works immediately

- Cannot be given for more than 3 weeks (21 days)

After 21 days the body start making antibodies against heparin. Therefore, it is not given for more than 21 days

- Except for Lovenox (enoxaparin)
- Antidote: Protamine sulfate
- Labs: PTT
- Can be used during pregnancy—Class C medication



3. **Coumadin**
- Given only PO
- Takes few days to a week to work (likely 4 to 5 days)
- Pts can be on Coumadin for their entire life
- Antidote: Vitamin K
- Labs: PT/INR
- Can't be used during pregnancy—Class X medication

Note: The only antipsychotic that can be given to pregnant women is Haldol

4. **Diuretics**
- K-wasting and K-sparing diuretics
- Any diuretic ending in "X," "Xes" out K
  - So, it wastes "K" like Lasix
  - PLUS Diuril
- If it does not end in "X," it is a sparer
- Examples

Brand	**Generic**
Aldactone	**Spinorolactone**
Adactazide	Spinorolacone-Hydrochlorothiazide
Modurectic	Amiloride-Hydrochlorothiazide
Lasix	Furosemide
Bumex	**Bumetanide**
Clotrix	Clotrimazole
Esidrex	**Hydrochlorothiazide**
Demadex	Torsemide
Diuril	Chlorothiazide

5. **Baclofen and Cyclobenzaprine**
- 2 **muscle relaxants** to know for the NCLEX

Brand	**Generic**
Lioresal	**Baclofen**
Flexeril	Cyclobenzaprine

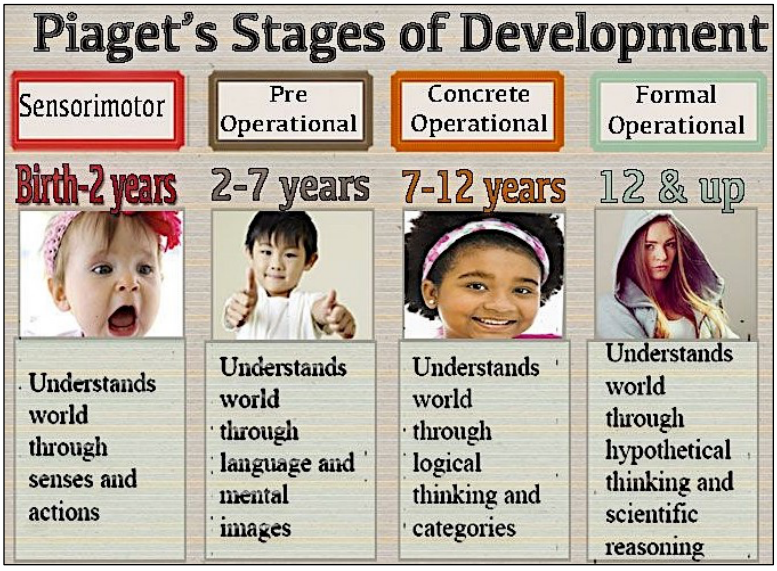
- The 2 things being tested on the board are
  - The 2 S/Es
    (1) Fatigue/Drowsiness

(2) Muscle weakness (paresis)
- The 3 things to teach
  (1) Don't drink
  (2) Don't drive
  (3) Don't operate heavy machinery

Note: The following phrase help you remember baclofen as a muscle relaxant … "When you are on baclofen, you are on your back *loafing*"

Pediatric Teaching

Piaget's Theory of Cognitive Development—4 Stages



- There is some overlap with Piaget's Theory of Cognitive Development and toy appropriateness based on age on page 50
- Make sure not to confused between the two

1. **Sensorimotor—0 to 2 years**
- They only think about what they are sensing right now
- You can teach only in the present (while you are doing it)
  - **Think Present Tense**
  - Just tell them
  - Children at this age don't understand play
  - Tell them as it is happening

Question
A 19-month-old infant is about to have a lumbar puncture (LP) for csf analysis and culture. How would the nurse teach the child?
- Tell the child how the LP is done while it is being done.
- There is no such thing as preop teaching for this age group
- Preop teaching are only for the parents—mom and dad—or guardian

2. **Preoperational (Preschooler)—3 to 6 years**
- **They are fantasy-oriented, imaginative, and illogical, there thinking obeys no rules**
- However, they understand the future and they understand the past

Question
A 3-year-old child is schedule for a lumbar puncture (LP) for csf analysis and culture. What is the nurse's best action to teach the child about the procedure?

- Teach 2 hours before …, the morning of …, or the day of the procedure how it will be performed
- They are in the "imaginative" stage … Don't give them a whole lot of time to *imagine* the worst
- Teach them what will be done … **Future Tense**
- They can learn by playing

3. **Concrete Operations—7 to 11 years**
- **"7/11 Grocery Stores are surrounded by concrete"—no trees, no flowers**
- Children in this age group are rule-oriented
  - **Live and Die by the Rules and Cannot Abstract**
  - There is one way to do things … Everything else is wrong
- Teach them a day or two ahead of time
- Teach them what you're going to do and how to do skills
- Use age-appropriate reading and demonstration (skill)

Question
An 8-year-old child is schedule for a lumbar puncture (LP) for csf analysis and culture. What is the nurse's best action to teach the child about the procedure?
- Use age-appropriate demonstration 1 or 2 days before the procedure

4. **Formal Operations—12 to 15 years**
- **They can abstract and think Cause and Effect**
- **As soon as children become twelve, teach them like an adult**
  - This is now a regular Med-Surge question
- When is the first age a child can manage his care?
  - 12 years old
  - Manage means making decisions which require the person to abstract

Question
Which of the following 4 children will be able to manage his own care?
a. A 7-year-old with Cystic Fibrosis
b. An 8-year-old with Diabetes Mellitus
c. A 10-year-old with a scraped knee
d. A 13-year-old with Chronic Renal Failure

Answer: (d)
- A 10-year-old with a scraped knee as one of the answer choices is a diversion to fool the exam taker. Answer to these questions is not about the severity of the condition but about the age-appropriateness to make decision
  - The 10-year-old will Wash, Dry, apply Neosporin and Bandaid the wound as thought … He will continue to do the same thing if the wound becomes is exudating pus and swollen the 4th day … A 12-year-old will likely stop and seek help
- A 13-year-old with chronic renal failure will get help if they are thought to auscultate for a bruit over a shunt and heard nothing on day 3
  - This is managing

- This means that knowing what you can do when you can, and seek help when you cannot

Note: Manage = 13-year-lod … Skill = 8-year-old

Seven Principles to Obey When Taking Psychiatric Tests

1. Make sure you know what phase of the nurse-patient relationship you are in
2. Don't give/accept gifts in psych
   - If a schizophrenic pt gives you flowers, to you the HCP it may be flowers; to him, it may be a marriage proposal
3. Don't give advice!
   - If the pt says, "What do you think I should do?" Reply by asking them the same question" "What do you think you should do?"
   - The pt won't be able to blame you in the future even if things work in his favor
   - Avoid giving advise in psych
4. Never give guarantees
   - For instance, "If you cry, you will feel better."
   - There are chances that crying may not help the pt
5. Immediacy
   - If you are between 2 answer choices and you don't know which one to pick, pick the one **that keep him talking**
   - Don't refer to someone
6. Concreteness
   - Psych pts take you literally. Therefore …
   - Never use slang
   - If a pt says "I feel rotten." Don't reply by saying, "You feel rotten?"
   - Don't ever say to an upset pt to "Chill out!"
   - Don't use figurative speech such as: "What goes around, comes around"
7. Empathy
   - Empathy is about the nurse accepting the patient's **feelings**
   - Don't ever pick an answer that says, "Don't you worry …" … "You shouldn't feel …" … "Anybody would feel …" … "I know how you feel …" …

4 Phases of nurse-client relationship

- **Pre-interaction phase**- professional goals
- **Orientation phase-** purpose, nature, time, trust
- **Working phase-** active problem solving
- **Termination phase**-achieved goals, ended relationship

4 steps to answering empathy questions

- **Empathy questions will always have a quote**
- Role play the feelings (Put yourself in their place) and say the words as you really meant them
- Ask yourself if I said these words, how would I be feeling right now?

- Choose the answer that reflects the pt's **feeling**, and ignore what the pt said