Class 3 PHE Notes

Constitutional symptoms

1. Symptoms that do not fit into specific system, affects patients physical state
2. Fatigue
    a. Sense of weariness or loss of energy – I do not feel like getting up to, I do not have any energy
    b. Depression, anxiety, infection, hypothyroidism, diabetes mellitus, electrolyte imbalance, dehydration, heart failure, chronic lung, kidney and liver disease, anemia, malignancies, nutritional deficiencies
3. Weakness
    a. Loss of muscle power
    b. Neuropathy or myopathy
4. Fever
    a. Fever refers to abnormal elevation in body temperature
    b. Patient with fever starts feeling cold, develops goose bumps and shivers. What is happening in the patient? – T is increasing
    c. Patient with the fewer starts to feel warm and sweaty – T is falling (dropping)
    d. Chills
    e. Night seats
    f. Low grade fiver with night seats – tuberculosis
5. Weight changes
    a. Gain or loss
    b. Is it body tissue or body fluids
    c. Rapid change in the matter of few days is body fluid
    d. BMI
6. Pain - the most common presenting symptom in the office

General survey (from the moment you see the patient – observation)

1. General appearance
    a. Apparent status of health
    b. Level of consciousness
    c. Apparent discomfort or distress

d. Skin color, skin lesions
e. Dress, groomed, personal hygiene
f. Facial expression
g. Odors from skin or breath
h. Posture, gait, motor activity

2. Measuring patient heigh and weight
   a. BMI = weight (kg)/height (m2)
   b. What is the normal BMI: 18.5 – 24.9 (18-24)
   c. With which BMI patient is considered underweight: <18.5
   d. What is the BMI in overweight patient: 25.0-29.9
   e. Obesity
      - I: 30-34.9
      - II: 35-39.9
      - III (extreme): >40
   f. Can patient have a high BMI and be healthy – yes. What other test can be done to measure patient fat content – body fat percentage measurement. Measurement of circumference – waist, hips and neck
3. Which one these methods is better then body weight measurement in predicting obesity – BMI
4. Vital signs
   a. Heart rate (HR), respiration rate (RR), blood pressure (BP), temperature (T)
   b. HR – rate and rhythm. Radial pulse. What is the normal range: 60-100 bpm. >100 = tachy, <60 brady. If the pulse is regular 30s x2. If the pulse is irregular 1 min. If the pulse is fast or slow – 1 min.
      - Patient present to you with complaints of palpitations. For how long you would count the pulse: 15s, 30s, 45s, 60s
      - If you detected irregularities in heart rhythm you will also count the pulls by – listening with stethoscope over the heart area
      - If it is irregular what is the test which can detect which arrhythmia patient has – ECG (EKG)
   c. RR – rate and rhythm – 1 min, norm 12-20/min. >20 tachypnea, <12 bradypnea. RR is counted while you are palpating the radial pulse. What if you cannot see patient breathing (cannot see chest movement) – count the breathing by using stethoscope.

d. Temperature – measure the core body temperature. Normal core body T 37C (98.6F).
   - It fluctuates about 1C over the course of day
   - Lowest in the morning and highest in the afternoon
   - Fever (Pyrexia), Hyperpyrexia 41.1C (106F)
   - Hypothermia <35C (95 F)
   - Gold standard – blood temperature in the **pulmonary artery**
   - **Oral and rectal,** axillary, tympanic, temporal artery (forehead)
   - Oral temperature is lower than the core temperature. Oral T is also lower than rectal temperature 0.4-0.5 C(0.7-0.9F)
   - Axillary T: 5-10 minutes, considered less accurate than other methods.
   - Tympanic is also more variable than oral and rectal
   - Cause of increased: infections, trauma, crush injuries, malignancies, drugs, immune disorders

5. BP
   a. Standard blood pressure cuff bladder 12-23 cm and can be used for arm circumference of up to 28 cm
   b. Width of inflatable bladder of the blood pressure cuff should be about 40% of upper arms circumference
   c. Length of the inflatable bladder should be about 80% of upper arm circumference
   d. The select arm should be free of closing and free of any conditions like-edemas, enlarge axillary lymph nodes
   e. You have to determine that brachial artery is palpable (antecubital area).
   f. Antecubital area has to be at the level of the heart
   g. BP cuff should be 2.5 cm above antecubital area. Stethoscope should not be placed under the cuff.
   h. First reading of systolic blood pressure should be done by palpation of radial artery – pulse disappearance will indicate possible level of SBP. This is done to prevent overinflation and cause of pain and discomfort in the patient. Add 30 mmHg to that level when next time inflating the cuff and know determine SBP by auscultation. How long to wait between inflation: 15-30 sec

i. Factors that can alter BP reading
   - Factors that lower both S/D pressures – acute meal, acute alcohol, cuff is too large
   - Factors that would increase both S/D pressures – acute caffeine, cold exposure, acute smoking (nicotine) white coat effect, crossed legs, unsupported arm, acute activity, smaller cuff, talking during
   - Systolic up and diastolic down – stethoscope under the cuff , fast cuff deflation (>3mm Hg/sec)
   - If there is a gap. Patient BP 130/80 mmHg with the gap between 130 and 120. BP 200/90 with the gap between 170 and 150

Cognition, behavior and mental issues

1. Presence in primary setting
   a. 20% have mental disorder, from those 50-75% undetected and untreated
   b. Anxiety -20%
   c. Mood disorder -25%
   d. Depression – 10%
   e. Somatization d: 10-15%
   f. Alcohol and substance abuse: 15-20%
2. Serotonin, Norepinephrine, Dopamine, Acetylcholine
3. Concerning symptoms
   a. Anxiety
   b. Excessive worrying
   c. Memory problems
   d. Medically unexplained symptoms
   e. Panic
   f. Phobia
4. The mental status examination
   a. Appearance and behavior
   b. Speech and language
   c. Mood
   d. Thoughts and perception
   e. Cognition
5. Somatization disorders

    a. Malingering
6. Disorder of mood
    a. Major depression
    b. Manic episode
    c. Hypomanic
    d. Dysthymia
7. Anxiety disorder
    a. Panic
    b. Agoraphobia
    c. OCD
    d. PSD
    e. Specific phobia
8. Psychotic disorders
    a. Schizophrenia
    b. Schizoaffective disorder
    c. Brief psychosis