

Physical Exam, during Physical Examination PowerPoints

Objectives:

- Students develop skill to confidently measure vital signs and know how to distinguish normal and abnormal.
- They appreciate that there is a spectrum of normal appearance and size
- They learn to look intelligently, to visually compare right and left.
- They learn to feel intelligently, to ascertain size and texture.
- They learn the difference between normal and abnormal heart, lung, and bowel sounds.

Material:

Watch with second hand; thermometers; stethoscope, blood pressure cuff; non-LED flashlight; otoscope; spoon/tongue blade; stethoscope. Optionally have volunteer children and pregnant women. Village Medical Manual, Volume 1, Chapter 1.

Preparation:

The day before the PowerPoint and lab start,

- Check the students' equipment. In particular, be sure that there are at least a few mercury or alcohol thermometers. Digital thermometers additionally but they are not sufficient.
- Be sure the flashlights are not LED. LED flashlights damage eyes.
- Be sure that the stethoscopes are good ones, not children's toys. If there is a toy-quality stethoscope among them, point it out and invite the students to listen with it and then with a good one to compare the quality.
- Show the students how to put the stethoscope in their ears, the ear pieces pointing toward their noses rather than toward the backs of their heads.

Student steps: These are given in the PowerPoint lectures. After the lectures make sure that each student qualifies on the following points:

- He can determine vital signs accurately on a classmate or volunteer.
- He can point out the parts of the mouth including the uvula, the tonsils.
- He can demonstrate the examination of the eyes, pupil response, eye movements, and checking inside the lower lids
- He can demonstrate the examination of the chest, heart size, describe rales (recognize them if you can find a volunteer with heart failure), and demonstrate the difference between central and surface lung sounds.
- He listens for bowel sounds before pressing on the abdomen; shows how to examine for liver and spleen size i.e. a right and left colon.
- He can demonstrate the examination of the limbs, comparing right and left.

Guidelines:

- Students tend to interpret variations of normal as being abnormal. These include skin and mouth discolorations, muscle and clothing sounds through the stethoscopes, and normal bowel as an abdominal mass.
- They tend to push on the abdomen when putting their stethoscopes on the patient, thus abolishing the bowel sounds they are endeavoring to hear.
- They absentmindedly put their stethoscopes in their ears backward and then wonder why they can't hear.