

# Utilizing Pediatric Patients as a Teaching Tool

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## Background:

- Second year students typically do not have access to real pediatric patients to learn how to perform a physical exam
- First exposure to pediatric patients is usually during 3rd year clerkship rotations
- Students typically do not know how to interact with pediatric patients or how to gain cooperation during a physical exam

## Lab Preparation:

- Second year students are provided with the pediatric exam PowerPoint presentation one week prior to the actual lecture.
- Students are expected to review the presentation and read the pediatric chapter in *Bates'* prior to class in preparation for in-class discussions regarding the pediatric physical examination
- Students are encouraged to watch the *Bates'* videos to observe the interaction with pediatric patients

## Lab Setup:

### *The Patients:*

- 16 children ranging in age of 3 months to 10 years, all children/friends/relatives of attendings/office staff
  - 5 children between 3 months and 3 years old
  - 5 children between 4 and 6 years old
  - 6 children between 7 and 10 years old
- The children are divided up into three sections of the lab based on their age.
- Each child has a placard with their name and age

### *The Students:*

- Students are divided into three lab groups of 56 students
- Each lab group participates in lab for a one hour session
- No white lab coats in lab
- Recommend the students come prepared to interact with children:
  - Playful clothing
  - Little toys or distractors
  - Diagnostic kits
- All second year students rotate to each section and examine at least one child from each age range

## Pediatric Exam Checklist:

- Each student has a checklist and must document physical exam findings for each child examined
- The completed checklist counts as a quiz grade for class

## Lab Introduction:

- Physicians discuss with the students how to make a pediatric patients (and their parents) comfortable and cooperative
  - Be familiar with the current children's television shows and movies
  - Find out what the child is interested in and discuss this during the exam
  - Use little games during the exam to get the child to follow the choreography of the exam with the doctor
- Physicians demonstrate choreography of a newborn exam on a 3 month old patient
  - Different reflexes on a newborn patient
  - Dubowitz score
  - Ortolani and Barlow hip tests

## Obstacles Encountered by Students:

- Child running around and does not sit still
- Child in midst of temper tantrum
- Child crying through cardiac and pulmonary exams
- Child too young to be able to fully cooperate with examination
- Child refusing to be examined
- Child refusing to let go of the parent

## Benefits for the Students:

- Students are able to practice exams on real life pediatric patients in a protected environment
- Physician and nurse parents are able to have further discussions with students on how to manage pediatric patients and provide additional pearls for the pediatric exam
- Students learn how to creatively gain pediatric patient cooperation
- Welcome respite from board studying in a fun and educationally conducive environment

## Bonus for the Parents

- Physicians and nurses are able to spend time with their children
- The children gain a better understanding of their parents' work
- The children are able to see how the medical equipment works and are excited about being able to "help" teach the medical students
- The children are given a certificate and "prize," and are encouraged to return the next year

## References:

1. Bickly, Lynn S. *Bates' Guide to Physical Examination and History Taking*. 11th Edition: Lippincott. 2013: Chapter 18.
2. J Craze and T Hope. "Teaching medical students to examine children". Arch Dis Child. 2006 Dec; 91(12): 966-968.
3. Neelkamal Soares Terry Stratton and John Wilson. "Medical students' comfort with children". The Clinical Teacher. Volume 12, Issue 3, pages 176-180, June 2015

Name \_\_\_\_\_ Date \_\_\_\_\_ Section \_\_\_\_\_

Pediatric Examination Lab

| Exam Findings | Infant-Toddler<br>0-2 years | Preschool-Early Elementary<br>2-9 years | Middle-Late Elementary<br>9-10 years |
|---------------|-----------------------------|---|--------------------------------------|
| HEENT         |                             |   |                                      |
| Cardiac       |                             |   |                                      |
| Lungs         |                             |   |                                      |
| Abdomen       |                             |   |                                      |
| Extremities   |                             |   |                                      |
| Cooperation   |                             |   |                                      |
| Communication |                             |   |                                      |

List three exam findings that are consistent between the different age groups:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

List three exam findings that vary between the different age groups:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



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