

## Relationship between social determinants of health and health disparities

### Educational Objectives

- Describe the four domains of the “social context review of systems”
- Define an approach for exploring a “differential diagnosis” for Non- adherence
- Describe the relationship between health literacy, health outcomes, and medication errors

### Case 1 Description

*Mary is a 2-year-old Caucasian girl who comes to the community-based primary care clinic with her mother (Ms. Jones) for her well child care visit. She is seen by her pediatrician, Dr. Robinson. During the routine developmental screening, Dr. Robinson queries the mother about the number of words that Mary can say and about her ability to put two words together. Ms. Jones reports that Mary only speaks two words other than “mommy” and “daddy.” Mary’s physical exam is normal and she has no other abnormalities. Her gross and fine motor skills are normal. Records show that Mary also passed her universal newborn hearing screening test. Dr. Robinson explains to Ms. Jones that Mary has delayed speech development. She suggests that Mary be referred to the Early Intervention Program for evaluation of the speech problem and for coordination of speech therapy. She also recommends that Mary’s hearing be retested. Dr. Robinson calls Early Intervention while the mother is in the office and tells Ms. Jones that Early Intervention will call her at home to set up an appointment. Before leaving the clinic, the front desk makes an appointment for a hearing evaluation at a specialty office elsewhere in the city and gives the mother a slip with this information. Ms. Jones is also given a follow-up appointment with Dr. Robinson in 1 month. Mom seems very concerned, says “thank you,” and appears to understand.*

### Reflections

*What additional information might have been helpful to Dr. Robinson in developing a plan of action for Mary and her family?*

**Case 1 Continued**

*One month later, Ms. Jones and Mary return to the office for their follow-up visit. Dr. Robinson asks if Mary’s hearing has been tested, and Ms. Jones says she did not go to the hearing appointment. When asked why, she said that she was working and was unable to take time off to go to the appointment. When questioned whether the Early Intervention Program had called, Ms. Jones said that no one had contacted her. At this visit, Ms. Jones seems most concerned about Mary’s fever, runny nose, and ear pain. Dr. Robinson’s physical exam reveals that Mary has an ear infection, and she prescribes an antibiotic suspension. Dr. Robinson instructs Ms. Jones to give Mary 1 teaspoon of the antibiotic, 2 times per day for 10 days. Ms. Jones nods and seems to understand. Dr. Robinson informs Ms. Jones that the hearing test needs to be rescheduled and that she will re-refer Mary to Early Intervention. Ms. Jones is instructed to return to the clinic in 1 month for follow-up and she agrees. After the visit, Dr. Robinson wonders why Ms. Jones did not follow-up and calls Early Intervention to investigate. They explain that they tried to reach Ms. Jones several times, but were unsuccessful by phone. They sent two follow-up letters instructing her to schedule an appointment, but she never did. Dr. Robinson requests that these letters be faxed to the office for verification.*

**Reflections**

*At this second visit, what are potential reasons that Ms. Jones did not call EI to schedule an appointment for her child to have a hearing test?*

*Would there be a role to address caregiver’s motivation, activation and understanding of the issue at hand*

**Case 1 continued**

*Ms. Jones returns to the clinic with Mary 1 month later as scheduled. Ms. Jones explains that Mary’s cold and ear pain have resolved. However, when Dr. Robinson asks if Mary took the antibiotic for all 10 days, Ms. Jones responds: “Yes. But it was hard to give the medicine in the ear, because the drops kept rolling out.” When Ms. Jones is asked about the Early Intervention appointment, she says, “They never called.”*

**Reflections**

*What does Ms. Jones confusion about giving oral medication in the ear indicate?*

### **Case 1 Continued**

*One month later, when Ms. Jones and Mary return for their third visit, Dr. Robinson asks about the referrals. Mary's mother again denies being contacted by Early Intervention. Dr. Robinson asks her if she thinks her daughter's speech delay is important and if she is concerned. After Ms. Jones states that she is very concerned, Dr. Robinson asks screening questions to elicit evidence of maternal depression or domestic violence, responses to which are both negative. Dr. Robinson hands the mother the letter she received from Early Intervention via fax. When Dr. Robinson asks the mother to read the letter, Ms. Jones says she doesn't have her glasses. Dr. Robinson then looks at the chart registration form completed by Ms. Jones on her initial visit to the clinic. She notes that the form is incomplete and contains many spelling errors; this causes her to suspect that Ms. Jones may be illiterate. She then asks Ms. Jones, "Do you feel comfortable reading this letter?" Ms. Jones replies, "No."*

*On further exploration, Ms. Jones reveals that she works from 7 a.m. to 7 p.m. and has no voicemail, so she never received the phone messages from Early Intervention. Dr. Robinson suspects that, in addition to her inability to read, Ms. Jones may not be able to read the bus and subway maps necessary to go to the audiologist's office. Armed with this information, she assigns an office staff member to reschedule Mary's Early Intervention and audiology appointments and to teach Ms. Jones how to get there by public transportation*

### **Reflections**

*Why did it take 3 months and 3 visits to learn that Ms. Jones cannot read?*

*How can patients who have low literacy be identified?*

*How could this case have been handled better to improve understanding and address patients with inadequate literacy?*