1. Which of these symptoms reflects the DSM-5 criteria for Autism Spectrum Disorder?
   a. Expressive language delay
   b. Problems with eye contact
   c. Gross motor clumsiness
   d. Cognitive impairments

   Answer: b

   One of the DSM-5 diagnostic criteria for ASD is persistent deficit in social communication and social interactions across multiple contexts. One criterion for determining this is deficits in non-verbal communication in social interaction demonstrated by impairment in social use of eye contact; difficulties coordinating eye contact.

2. A 16-year-old otherwise healthy male presents with a 2-year history of worsening acne vulgaris on the face. Which of the following regimens is most appropriate given his clinical presentation?
   a. Tretinoin cream + clindamycin lotion
   b. Benzoyl peroxide wash + Spironolactone by mouth
   c. Tretinoin cream + benzoyl peroxide wash + clindamycin lotion
   d. Tretinoin cream + benzoyl peroxide wash + clindamycin lotion + doxycycline by mouth
   e. Clascoterone lotion + cephalexin by mouth

   Answer: d
3. The American Academy of Pediatrics recommends that pediatric providers conduct developmental surveillance?

a. At each health supervision visit with the incorporation of standardized developmental screening tests
b. By utilizing standardized developmental screening tests only if parental concerns arise

c. On the condition that implementing developmental screening tests can be easily incorporated in an EMR
d. When developmental screening tests take less than 2 minutes to administer

Answer: a

Developmental Surveillance is an important way for clinicians to identify children at risk for developmental delay and should occur during every health supervision visit. During these visits, clinicians should address developmental progress, concerns, and promotion. The American Academy of Pediatrics (AAP) recommends that pediatric providers conduct developmental surveillance at every health supervision visit, with the incorporation of standardized developmental screening tests. Developmental surveillance resources can be integrated into office procedures.

4. When social media use rises to addiction, what is the most effective treatment?

a. Cognitive-behavioral therapy
b. Sports intervention
c. Internet-based interventions
d. Using combination of interventions

Answer: d

Addiction can be thought of as the uncontrolled use of the internet that interferes with the child/teen's world life. CBT is one of the first empirically validated treatment interventions adapted to target problematic internet use. Group therapy can also be an effective treatment. Sports play a positive role for teens with an internet addiction. Internet based interventions such as online therapy, education/information, apps that monitor progress, etc. have also been empirically validated interventions for addiction treatment.

5. The most common cause of knee pain in young adolescents (10-14yrs) participating in sports is:

a. ACL tear
b. meniscus tear
c. apophysitis
d. tendonitis

Answer: c

The most common reason for knee pain in children is due to **overuse**. The anatomy of a child’s knee joint is extremely sensitive to small problems in alignment, training, and overuse. Apophysitis, which means inflammation of the growth plate, develops in children due to chronic traction of a tendon at its insertion onto the growth plate. It is most common during rapid growth in conjunction with a high amount or increase in activity level. Common sites of apophysitis include the heel (Severs Disease), foot (Iselin’s Disease), knee (Sinding Larson Johansson and Osgood-Schlatter Disease), elbow (Medial Epicondyle Apophysitis, also known as Little League Elbow), and shoulder (Proximal humeral apophysitis, also known as Little League Shoulder).
6. What are the only two FDA approved antidepressant treatments for childhood depression?

   a. Prozac and Lexapro  
   b. Zoloft and Lexapro  
   c. Prozac and Effexor  
   d. Remeron and Trazodone  

**Answer:** a

In 2003, after reviewing the research on drug safety, the U.S. Food and Drug Administration, approved Prozac, the antidepressant made by Eli Lilly, for treating children and adolescents with depression. Lexapro (escitalopram) was approved to treat adolescents (ages 12 years and older) with depression in 2002.

7. Which variable is most representative of a pathogen’s ability to spread in a community?

   a. Incubation Period  
   b. Effective reproduction number (Re)  
   c. Mean inhibitory concentration (MIC)  
   d. Viral Load  

**Answer:** b

What is $R_e$?

**Effective reproduction number**

- Does not assume complete population susceptibility
- Incorporates innate immunity and vaccination
- $R_e = R_0 \times x$, where $x$ is the fraction of susceptible population
- If $R_e < 1$, the disease can be eliminated (herd immunity)