

Module B4: common medical problems during adolescence

Entry Scenario

The entry scenario addresses a variety of issues and problems associated with the module topic. It may be used at the beginning of the course to stimulate the students to identify their own needs and interests. The results may be utilized by the individual to assess own learning process, or be integrated with class objectives.

Billy, a fourteen-year-old teenager, is brought to the consultation by his mother who thinks that he should have a check-up and a blood test. Billy has pimples that do not bother him, but which his mother thinks are unsightly. Moreover, she is concerned that Billy's recent drop in school performance may be due to fatigue or anemia, given that he is often unable to get up in the morning. Billy is an athletic boy who has not faced any special medical problems until recently. He has gained about 10 centimeters over the last year and the mother also speculates that her son has growing pains and fatigue due to the rapid growth in stature. Billy does not seem to be worried about all these problems, saying that he enjoys his sports activities and going out with a group of friends during the weekend. He does, however, admit to being very tired, and asks for some kind of medication/vitamins.

General goals for learners: By completing the module the participant will be able to:

- I. Describe the adolescent-specific aspects of skin diseases, and demonstrate skill in screening, diagnosis and treatment
- II. Describe the adolescent-specific aspects of common orthopedic conditions, and demonstrate skill in their screening, diagnosis and treatment
- III. Describe the adolescent-specific aspects of functional disorders and somatic complaints, and demonstrate skill in screening, diagnosis and treatment of these conditions
- IV. Describe the adolescent-specific aspects of sleep disorders, and demonstrate skill in their screening, diagnosis and treatment
- V. Describe the adolescent-specific aspects of fatigue and chronic fatigue syndrome, and demonstrate skill in screening, diagnosis and treatment

Teachers are strongly encouraged to make use of an educational site developed by Prof. Laurence Neinstein in Los Angeles (www.usc.edu/adolhealth). This site was developed for use by health care professionals involved in either the teaching of adolescent health or clinical care of adolescents and young adults. The material was developed to stand alone or to supplement material in the EuTEACH curriculum of adolescent health. It includes in each section text background, cases, questions and answers, web links and references. Each part may be utilized independently of the others. With its numerous charts, slides, and examples, this site is an excellent supplement to other teaching modalities.

Goal I: Describe the adolescent-specific aspects of skin diseases, and demonstrate skill in screening, diagnosis and treatment

	Training objectives Key topics to be covered		Training tools	Activities, Questions, and Issues
KNOW	A. Update knowledge of various clinical presentations of skin diseases, including acne, during adolescence		Reading, Internet use Mini-lecture	If needed, mini-lecture with slides. Indicate how to distinguish acne from other diseases. Presentation may include contributing causes, comorbidities, myths and misconceptions.
Att.	B. Understand the impact of skin disease on an adolescent's feeling of wellbeing - Impact of condition on self-image - Concerns and fears (e.g. of scarring) - Effect on social interaction		Group discussion Patient input	Participants discuss impacts on wellbeing, drawing on own personal history with skin disease as well as on clinical experiences. Consult adolescents if possible.
SKILL	C. Elicit and explore the adolescent's perception of and experience with a			<u>Case study</u> A fifteen year-old boy with severe facial acne has already seen two doctors and tried several creams without much result. He has lost all patience with his

<p>& Att.</p>	<p>disease such as acne. Respond supportively to the emotional dimension of the problem.</p> <p>- D. Demonstrate skill in :</p> <ul style="list-style-type: none"> - Motivation to treatment adherence - Avoidance of useless approaches - Education of adolescent in effective treatments - Appropriate psychosocial support if needed 		<p>Role play Real or simulated patients (Objectives C and D)</p> <p>Group work</p>	<p>condition and asks for a quick cure. Role-play a consultation, with all participants helping to formulate statements and questions that help the practitioner explore the patient's self-image. "Patient" identifies which statements from "practitioner" feel genuinely reassuring and helpful. Practice solving the problem with input from the "patient". How can a physician be flexible in negotiating the options? List factors that can improve compliance.</p>
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Goal II: Describe the adolescent-specific aspects of common orthopedic conditions, and demonstrate skill in their screening, diagnosis and treatment

<p>KNOW</p>	<p>A. List orthopedic conditions which frequently appear or deteriorate during adolescence</p> <ul style="list-style-type: none"> - Osgood-Schlatter disease & steochondritis - Scheuermann's disease - Scoliosis 		<p>Readings Mini lectures</p>	<p>Lecturer use X-rays if possible to illustrate clinical findings associated with these conditions.</p>
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<p>ATT</p>	<ul style="list-style-type: none"> - Kyphosis - Epiphysiolysis (slipped capital femoral epiphysis) - “Growing pains” <p>B. Explore the adolescent’s experience of the condition, including mobility and locomotor activity</p> <ul style="list-style-type: none"> - Impact on functional activity - Effect on self-image and life style choices - How the adolescent experiences his/her condition (impact on life) 		<p>Group work, video, Interviews with teenagers</p>	<p><u>Case study:</u> A 14 year-old successful soccer player presents with severe Osgood-Schlatter disease. The parents and the coach insist on continuing training.</p> <p>What would the adolescent’s side of the story be?</p>
<p>SKILL</p>	<p>C. Arrange appropriate medical treatment and follow up or referral if needed. With the patient and his family, identify and discuss patient’s goals and motivations and assist with personal life management</p>		<p>Group work Simulated patient Role play</p>	<p><u>Case study:</u> a 18 year-old female patient with severe scoliosis asks what the consequences are of her condition on her sexual life and her capacity to have children. She also complains of severe back pain that began 3 months ago. She has just started a new job as a director’s secretary, and has not any time to go to her therapy with a kinesiologist.</p> <p>How can a physician assess a patient’s motivation to do muscle-strengthening exercises or other self-help control of symptoms?</p> <p>Discuss comprehensive multidisciplinary approach to life management for a patient with severe orthopedic conditions that interfere with daily activity.</p>

Goal III: Describe the adolescent-specific aspects of functional disorders and somatic complaints, and demonstrate skill in screening, diagnosis and treatment of these conditions

<p>KNOW</p>	<p>A. Define the concept and scope of functional disorders in adolescence.</p> <p>B. Report on the frequency of somatic complaints in adolescence</p> <p>C. Understand the importance of comprehensive history taking, as well as a thorough clinical examination, to the diagnostic process in psychosomatic conditions</p>	<p>Readings Interactive lecture</p> <p>Group discussion</p>	<p>With participants contributing experiences from their own practices, lecturer leads discussion that shows which types of functional complaints are most common during adolescence, and illuminates the reasons why this type of complaint is common in this age group.</p> <p>Issues to incorporate include:</p> <ul style="list-style-type: none"> - What is the link with the adolescent’s psychological status or feelings of overall well-being? - Is there a link with the parents’ health status? - What may be the link with the teenager’s cultural background? <p>What are common physiological and organic causes of pain in adolescents? What are the criteria for excluding serious etiologies in favor of a functional explanation?</p> <p><u>Case study:</u> A 16 year-old girl complains for a month about having a stomachache. The pain, which is fluctuating in intensity, usually appears when the girl gets up in the morning and lasts until the end of the day, although it is not present during weekends or during holidays. The girl does not disclose any special problem. She and both the parents ask for a thorough check-up including CT scan and lab tests.</p> <p><u>Key questions:</u> What should be included in a “comprehensive” history taking when dealing with functional disorders?</p> <p>How, why and when do you include the parents in the consultation?</p> <p>How do you react as a physician / health professionals when faced with an</p>
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<p>ATT</p>	<p>D. Explore the adolescent’s representations of his/her condition, and discuss the impact and consequences of the symptoms on everyday life.</p>	<p>Interviews with teenagers Role play Simulated patient</p>	<p>adolescent who complains about severe pain (of a functional nature) but denies any link with psychological concerns?</p> <p><u>Case study:</u> Three months ago, a 14 year-old adolescent, member of a junior basketball team, began complaining about headaches after almost every game. He has been an excellent pupil and denies any personal or social problem. However, because of the headaches, the boy has missed many classes, and the school seeks a quick medical solution.</p>
<p>SKILL</p>	<p>E. Work with the patient and family to set up the frame for developmentally appropriate interventions (including medication, physiotherapy, behavioral support / psychotherapy, school/social support).</p>	<p>Group work Role play Simulated patient</p>	

Goal IV: Describe the adolescent-specific aspects of sleep disorders, and demonstrate skill in their screening, diagnosis and treatment

<p>KNOW</p>	<p>A. Describe normal and variations of normal sleep needs and patterns throughout pre-adolescence and adolescence and those factors which impact on sleep</p> <ul style="list-style-type: none"> - Evolution of needs and patterns - Cultural influences - Personal sleep habits - situational (housing, etc) 		<p>Interactive lecture</p> <p>Group discussion</p>	<p><u>Lecture</u>: note the difference among child, adolescent, and adult needs and patterns, and changes during adolescence.</p> <p>Participants discuss from own practice and personal experience: How do sleep patterns such as drastic changes over the weekend affect adolescent functioning?</p> <p>Participants list cultural factors such as meal times that could influence sleep patterns, and identify differences in the cultures represented at lecture.</p> <p>What are the personal and environmental factors related to bad sleep habits during adolescence?</p> <p>Issue: how would one define a “bad” sleeping habit?</p> <p>Why are sleep problems common during adolescence?</p>
<p>SKILL</p>	<p>B. Describe common sleep disorders and their consequences</p> <ul style="list-style-type: none"> - Insomniacs, hypersomniacs, parasomniacs - Delayed sleep phase, breathing disorders <p>C. Demonstrate history taking that includes an adequate exploration of sleep patterns and sleep disturbances.</p> <p>D. Present therapeutic approaches, including medications, for sleep disorders</p>		<p>Reading</p> <p>Handout list or mini-lecture</p> <p>Group work</p> <p>Role play</p> <p>Simulated patient (Obj. C and D)</p>	<p><u>Case study</u>: A 17 year-old girl complains about difficulties in getting to sleep during the last 2 months. She is missing school in the morning.</p> <ul style="list-style-type: none"> - What are the important questions that need to be asked when investigating sleep patterns or disturbances? - How do you evaluate individual needs in terms of hours of sleep?

	and discuss the pros and cons with the patient and parents.			<p>- What criteria should a practitioner use in selecting one, or several, options to offer to a teenager with chronic sleep disturbance?</p> <p>- Which kind of situation could require medication, and what type of medication?</p>
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Goal V: Describe the adolescent-specific aspects of fatigue and chronic fatigue syndrome, and demonstrate skill in their screening, diagnosis and treatment

KNOW	<p>A. Define and differentiate fatigue and chronic fatigue syndrome as experienced by adolescents.</p> <ul style="list-style-type: none"> - Working definitions - Diagnostic criteria/differential diagnosis - Adolescent-specific elements 	Interactive lecture	<p>Participants offer own definitions of fatigue, and describe at what point they take serious note of this complaint from an adolescent.</p> <p>How does one distinguish between a fatigue of somatic cause from one of psychogenic origin such as anxiety or depression?</p> <p>Discuss the relation of fatigue to physical growth, developmental tasks, and life style.</p>
	<p>B. List all factors potentially related to fatigue, including infectious diseases where fatigue is a prominent symptom</p>	Group discussion	<p>Discussion questions:</p> <p>What are the personal and environmental factors (such as sleep patterns, nutrition) related to fatigue during adolescence? What is the potential link between fatigue and sleep problems? How can infectious diseases or psychogenic correlates impact fatigue?</p>
ATT		Focus group	<p>How do participants react to their own fatigue and to their young patients' fatigue? What coping strategies do participants use when faced with their</p>

<p>SKILL</p>	<p>C. Explore the physician's as well as the adolescent's perception of fatigue and its impact on everyday life.</p> <p>D. Identify key elements of history taking linked with fatigue: onset, duration and severity, and impact on the adolescent's life.</p> <p>E. Provide the adolescent and the family with symptomatic treatment/relief, and adequate explanations. Link if necessary with school/professional network.</p>	<p>Small group work Role play Simulated patient</p> <p>(Objectives D and E)</p>	<p>own sleep and fatigue problems?</p> <p><u>Case study:</u> A 15 year-old girl comes to the office with mild fever. Her conjunctivae are slightly yellow and she is very tired. She is supposed to take her final examination within 10 days. The parents who are upset demand an immediate solution.</p> <p>What are the various therapeutic approaches that can be helpful when facing a teenager with chronic fatigue?</p> <p><u>Case study:</u> an 18 year-old boy complains about fatigue of several months duration. All lab and X-ray tests are normal. The boy does not want to see any psychologist/psychiatrist and remains convinced that he has a severe disease. He is missing a lot of school. His parents complain about the failure of the previous physicians to find the origin to the boy's condition.</p>
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Resources

- USC Keck School of Medicine , Common Medical Problems During Adolescence
http://www.usc.edu/student-affairs/Health_Center/adolhealth/content/b4misc.html

Lucile Packard Children's Hospital at Stanford; Adolescent health problems and injuries
<http://www.lpch.org/DiseaseHealthInfo/HealthLibrary/adolescent/ahphub.html>

