



**Prepared for integrating of Adolescent Health and Development Domains into pre-service nursing curriculum at The Hong Kong Polytechnic University, World Health Organization Collaborative Centre for Community Health Services. Supported by WHO, Western Pacific Regional Office**

## **Module 4**

### **Adolescent Health Assessment and Anticipatory Guidance**

#### **I. Introduction**

Growth and development occur in an individual as she or he transitions from childhood to adulthood. Adolescence is generally understood as the period of transition from childhood to adulthood. It is distinguished by significant physical changes culminating in sexual maturity. It begins in the second decade of human life and is accompanied by marked biophysical changes towards sexual maturity and attainment of psychological independence.

#### **II. Learning Objectives**

Upon completion of this module, learners will be able to

1. Review the relevant interviewing skills.
2. Identify the tools for interviewing adolescents in your country.
3. Demonstrate proficiency from history taking to direct physical examination, especially in adolescents.
4. Explain how to prepare adolescents before physical examination.
5. Conduct a physical examination (especially using Tanner assessment) for adolescents.
6. Identify common abnormal findings and provide anticipatory guidance.

Sources:

1. World Health Organization. (2009). World Health Organization: Adolescent Job Aid. World Health Organization.
2. World Health Organization. Orientation Program on Adolescent Health for Health-care Providers. Facilitator Guide - New Modules. World Health Organization.
3. World Health Organization. Orientation Program on Adolescent Health for Health-care Providers. Handout - New Modules. World Health Organization.

### **III. Contents**

Upon completion of this module, learners will be able to:

- [Review the relevant interviewing skills.](#)
- [Identify the tools for interviewing adolescents in your country.](#)
- [Demonstrate proficiency from history taking to direct physical examination, especially in adolescents.](#)
- [Explain how to prepare adolescents for physical examination.](#)
- [Conduct a physical examination \(especially using Tanner assessment\) for adolescents.](#)
- [Identify common abnormal findings and provide anticipatory guidance.](#)

## **Objective 1: Review the relevant interviewing skills**

### **Activities**

Activity 4.1: Role play: A 16-year-old girl who is having unprotected sex. She is sure that she cannot become pregnant because her menses are irregular.

Role plays should be no more than 15-20 min.

Identify group members as the counsellor, adolescent and observers using the feedback sheet. Rotate different roles among group members.

### **Interviewing skills**

Guidelines for interviewing adolescents:

1. Do not treat adolescents like children
2. Be honest and show respect
3. Display genuine interest and concern
4. Avoid criticism and judgment
5. Be casual and give friendly responses
6. Ensure privacy and confidentiality
7. Interview should be held in a quiet and comfortable environment
8. Initiate with small talk relevant to the interviewee's interests, e.g. asking about his/her academic progress, home life, relationships and favourite pastimes
9. Explain every step and give the rationale
10. Use open-ended questions
11. Encourage the adolescent to talk freely in order to gather more information.
12. Questions should be asked one by one and the counsellor should refrain from pushing the client too hard.

Adopt from the WHO (2009). *WHO Adolescent Job Aid*. WHO (pp. 3-11)

## 2. Establishing rapport with your adolescent clients/patients

### *What you should be aware of:*

1. Some adolescents may come to you of their own accord, alone or with friends or relatives. Other adolescents may be brought to see you by a parent or another adult. Depending on the circumstances, the adolescent could be friendly or unfriendly with you. Also, depending on the nature of the problem or concern, the adolescent could be anxious or afraid.



2. Adolescents may be reluctant to disclose information on sensitive matters if their parents or guardians, or even spouses are also present.

### *What you should do:*

1. Greet the adolescent in a cordial manner.
2. Explain to the adolescent that:
  - you are there to help them, and that you will do your best to understand and respond to their needs and problems;
  - you would like them to communicate with you freely and without hesitation;

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### 3. Taking a history of the presenting problem or concern

#### *What you should be aware of:*

1. Many adolescent health issues are sensitive in nature.
2. When asked by health workers about sensitive matters such as sexual activity or substance use, adolescents may be reluctant to disclose information because of fears that health workers may scold or mock them.

#### *What you should do:*

1. *Start with non-threatening issues:* Start the clinical interview with issues that are the least sensitive and threatening. The *Adolescent job aid* algorithms contain many direct questions that health workers need to ask to determine classification and subsequent management. However, if you were to ask an adolescent, "Are you sexually active?" without first establishing rapport, the likelihood of obtaining any answer, let alone a true answer will be low. It is usually best to start with some introductory questions (e.g. about the adolescent's home situation) before proceeding to more sensitive topics such as sexual and reproductive health. Then when one is ready to commence questioning about sexual and reproductive health, it is best again to start with the most non-threatening questions before proceeding to the more sensitive ones.
2. *Use the third person (indirect questions) where possible:* It is often best to ask first about activities of their peers and friends rather than directly about their own activities. For example, rather than ask an adolescent directly, "Do you smoke cigarettes?" you could ask, "Do any of your friends smoke?" If the adolescent replies, "Yes", you could then ask, "Have you ever joined them?" This can lead to other questions such as, "How often do you smoke?" etc.

3. *Reduce the stigma around the issue by normalising the issue:* An adolescent who has an unwanted pregnancy or a sexually transmitted infection may feel embarrassed or even ashamed. You can reduce the stigma around the issue by saying to the adolescent that, "I have treated a number of young people with the same problem you have".

***What you should be aware of:***

Even with adequate training, many health workers are uncomfortable discussing sensitive matters with anyone, whether adults or adolescents.

***What you should do:***

1. The first step in dealing with this is being aware of the issue, and then trying to overcome it. It may be useful to reflect that your discussions with the adolescents, although uncomfortable, will help you identify their needs and address their problems. It may also be useful to discuss your thoughts and feelings with a colleague.



2. Learn as you go along. In the beginning, you may use the questions listed in the *Adolescent job aid* as they are written. With time you may choose to modify them, using words and phrases that you are more comfortable with and a more relaxed conversational style. You will also find that you will get faster with practice, and will learn which issues to spend time on, and which other issues you can address quickly.

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#### **4. Going beyond the presenting problem or concern**

***What you should be aware of:***

1. When adolescents seek help from a health worker, they tend to volunteer information about the health problem that seems most important to them (i.e. the presenting complaint). They may have other health problems and concerns but may not say anything about them unless directly asked to do so. In such a situation, the health worker is likely to deal with the presenting complaint only (e.g. fever and cough) and go no further thereby missing other existing problems.

2. Further, adolescents may not volunteer information about a health problem or concern because they may be embarrassed or scared to do so, or because they may not be comfortable either with the health worker or the situation they are in.

***What you should do:***

You could consider using the HEADS assessment which could assist you to:

- detect health and development problems that the adolescent has not presented with;
- detect whether the adolescent engages in behaviours that could put one at risk of negative health outcome (such as injecting drugs or having unprotected sex);
- detect important factors in their environment that increase the likelihood of their engaging in these behaviours.

In this way, you would get a full picture of the adolescent as an individual and not just a case of this or that condition. It would also identify the behaviours and the factors in the adolescent's environment to address – yourself and in conjunction with other health and social service providers.

The HEADS assessment is structured so that you can start the discussion with the most non-threatening issues. It starts by examining the home and the educational/employment setting. It then goes on to eating, and then to activities. Only then does it deal with more sensitive issues such as drugs, sexuality, safety and suicide/depression.

See the listing of “Information that can be obtained from a HEADS assessment” towards the end of this part of the *Adolescent job aid*.

**HEADS** is an acronym for

- Home
- Education/Employment
- Eating
- Activity
- Drugs
- Sexuality
- Safety
- Suicide/Depression

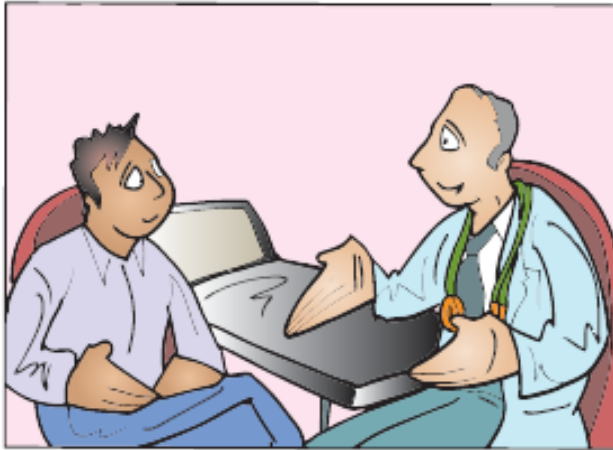
If time does not permit you to do a full HEADS assessment, you will need to prioritize which sections of the HEADS assessment to do. You may choose to prioritize the sections which are most related to:

- Presenting complaint:  
If an adolescent presents with an injury after a fall while drinking alcohol, you may prioritize the “Drugs” section of the HEADS assessment.  
and/or
- Important health issues in your local area:  
If you are working in an area of high HIV prevalence you may prioritize the “Sexuality” section of the HEADS assessment.

## 6. Communicating the classification, explaining its implications, and discussing the treatment options

### *What you should be aware of:*

1. Informing your adolescent patients about the classification and explaining its implications for their health can help them become active partners in protecting and safeguarding their health.
2. Informing them about the different treatment options and helping them choose the one that matches their preferences and circumstances will increase the likelihood that they will adhere to the treatment.



### *What you should do:*

1. When you have made a classification, you will need to communicate it and explain its implications to the adolescent.

#### Before doing so:

- check whether they want to have the parent or other accompanying person present.

#### While communicating:

- demonstrate your respect and empathy to the adolescent through your speech and your body language (e.g. if the adolescent is with a parent or another accompanying person, address them);

- use language and concepts that they are likely to understand;

- periodically assess their understanding (e.g. by asking them to say in their own words what they understand about an issue).

2. Provide information on the implications of each treatment option and help the adolescent choose the one best suited to his/her needs.

#### While doing this:

- present all the relevant information;
- respond to questions as fully and honestly as you can;
- help them choose;
- respect their choice even if it is not the one you would have wanted them to make.

3. When providing medication, explain why they need to take it, and when and how they need to do so. If prescribing medication, make sure that they will be able to find the money to buy it.



### Information that can be obtained from a HEADS Assessment

<b>Home</b>	<p>Where they live</p> <p>With whom they live</p> <p>Whether there have been recent changes in their home situation</p> <p>How they perceive their home situation</p>
<b>Education/ Employment</b>	<p>Whether they study/work</p> <p>How they perceive how they are doing</p> <p>How they perceive their relation with their teachers and fellow students/employers and colleagues</p> <p>Whether there have been any recent changes in their situation</p> <p>What they do during their breaks</p>
<b>Eating</b>	<p>How many meals they have on a normal day</p> <p>What they eat at each meal</p> <p>What they think and feel about their bodies</p>
<b>Activity</b>	<p>What activities they are involved in outside study/work</p> <p>What they do in their free time – during week days and on holidays</p> <p>Whether they spend some time with family members and friends</p>
<b>Drugs</b>	<p>Whether they use tobacco, alcohol, or other substances</p> <p>Whether they inject any substances</p> <p>If they use any substances, how much do they use; when, where and with whom do they use them</p>
<b>Sexuality</b>	<p>Their knowledge about sexual and reproductive health</p> <p>Their knowledge about their menstrual periods</p> <p>Any questions and concerns that they have about their menstrual periods</p> <p>Their thoughts and feelings about sexuality</p> <p>Whether they are sexually active; if so, the nature and context of their sexual activity</p> <p>Whether they are taking steps to avoid sexual and reproductive health problems</p> <p>Whether they have in fact encountered such problems (unwanted pregnancy, infection, sexual coercion)</p> <p>If so, whether they have received any treatment for this</p> <p>Their sexual orientation</p>
<b>Safety</b>	<p>Whether they feel safe at home, in the community, in their place of study or work; on the road (as drivers and as pedestrians) etc.</p> <p>If they feel unsafe, what makes them feel so</p>
<b>Suicide/ Depression</b>	<p>Whether their sleep is adequate</p> <p>Whether they feel unduly tired</p> <p>Whether they eat well</p> <p>How they feel emotionally</p> <p>Whether they have had any mental health problems (especially depression)</p> <p>If so, whether they have received any treatment for this</p> <p>Whether they have had suicidal thoughts</p> <p>Whether they have attempted suicide</p>

### **Ten steps for communicating with adolescents**

1. Listen to the adolescent's basic message.
2. Respond to the most important part of the adolescent's statement that coincides with the basic apparent or underlying verbal and nonverbal messages.
3. Reflect the adolescent's feelings at a greater level of intensity than originally expressed by him.
4. Reflect both the implicit and explicit feelings of the adolescent and help him differentiate between thoughts and feelings.
5. Respond to the adolescent's nonverbal behaviours.
6. When the adolescent changes topics, respond to the primary cognitive or affective theme of the topics by verbal tracking.
7. Always allow the adolescent to modify or reject your perceptions.
8. Use your own feelings as the basis for checking out, confronting, leading, and so on.
9. If you are unable to rephrase your questions as statements, ask only open-ended questions that clarify issues for the adolescent or that elicit feelings.
10. If the adolescent doesn't pause to give you a chance to respond, and you feel lost or confused, break in with a statement such as 'I feel confused...' in order to focus on major themes. But do not feel you have to respond to every single adolescent statement.

### **Open-ended questions**

- Skill in interviewing is a basic requirement for obtaining the client's history; therefore, appropriate interviewing skills can assist in establishing a rapport.
- When interviewing an adolescent, the most important thing is to respect him/her. Do not treat an adolescent like a child. Be honest and display genuine interest and concern, avoiding criticism and judgment. The interview process should be casual and friendly
- Generally, adolescents will not disclose any personal information unless they are assured of privacy and confidentiality. Healthcare workers should ensure that the interview process cannot be overheard and that no information will be passed on to other people without their consent.
- Healthcare workers can begin with a less confrontational approach; for instance, we can initiate the interview with small talk related to the adolescent's interests, such as asking about his/her academic progress, home life, relationships, favourite pastimes and school life.
- The interview should be held in a quiet and comfortable environment. Explain every step and give the rationale. Use of open-ended questions can encourage the adolescent to talk freely and gather more information. Questions should be asked one by one to avoid pushing the client too hard.

### **Twelve characteristics and essential features of good communication skills**

- 1. Empathy**
  - Being able to communicate with the client with one's own self-awareness and understanding, providing him with an experiential basis for change
- 2. Respect**
  - Communicating with warmth and caring
- 3. Genuineness**
  - Being honest with oneself and the adolescent clients
- 4. Concreteness**
  - Responding accurately, clearly, specifically, and immediately to clients
- 5. Self-awareness**
  - Continuously developing an awareness of their own values and feelings in order to grow, be open to change, and model congruent behaviour and high-risk activity
  - Self-awareness leads to greater authenticity
- 6. Showing interest**
  - Showing interest in and involvement with the welfare of others and the influence of culture on all people
- 7. Knowledge and skills**
  - In order to be professionally effective, practitioners need to be able to integrate psychological theory and practice into their personal meaning. They must integrate multicultural competencies into their knowledge and skills.
- 8. Understanding**
  - Being able to understand the world view of each client
- 9. Ethical behaviour**
  - Demonstrating commitment to behaviours that are reflections of one's own moral standards, of society's codes, and of the norms of the helping profession
- 10. Warmth**
  - Showing concern for the adolescent through nonverbal expression
- 11. Immediacy**
  - Speaking in the present instead of the past or future tenses
- 12. Confrontation**
  - Discussing differences, mixed messages, incongruities, and discrepancies between the client's verbal and nonverbal behaviours

## **Objective 2: Identify the tools for interviewing adolescents in your country**

### **Adolescent Interviewing tools:**

- Five boxes
- HEEADSSS (Refer to WHO Adolescent Job Aid p.6)
- SAFE TIME
- self-administered questionnaires

### **Getting into “HEEADSSS” (Refer to WHO Adolescent Job Aid p.6)**

**H** - Home

**E** - Education/employment

**E** - Eating

**A** - Activities

**D** - Drugs

**S** - Sexuality

**S** - Safety

**S** - Suicide/depression screen

- Adolescence is a time of growth and development, not illness.
- When illness occurs, it is often related to increased risk-taking behaviours that are part of the normal adolescent process of exploration.
- Unfortunately, exploration can be dangerous and lead to mortality and morbidity in adolescents.
- “HEADSS” (Cohen, 1991) is a valuable screening framework for exploring psychosocial functioning with adolescents.
- In general, adolescence is a period of extremely good physiological health and well being. No matter what complaint an adolescent may present with, either general? Care or a specific minor physical problem, underlying psychosocial issues are usually much more important.
- Health care professionals use HEADSS (Cohen, 1991) to screen for the potential psychosocial problems of adolescents before they mature into serious disorders. HEADSS allows us to organise and remember the important elements of adolescents’ psychosocial history; it also provides a natural pattern of progression in history taking.

### **Example of HEADSS (Cohen, 1991) psychosocial screening questions**

#### **H – Home**

Where do you live and who lives with you?

How do you get along with each member of your household?

Who could you go to if you needed help with a problem?

#### **E - Education/employment**

What do you like about school (or work)?

What are you good and not good at?

How do you get along with your teachers and other students (or work colleagues)?

#### **A – Activities**

What sort of things do you do in your spare time out of school?

Do you belong to any clubs, groups, etc?

What sort of things do you like to do with friends?

#### **D – Drugs**

Many young people at your age are starting to experiment with cigarettes or alcohol. Have you tried these or other drugs like opiates, ecstasy, and injecting drugs?

How much are you taking and how often?

#### **S – Sexuality**

Some young people are getting involved in sexual relationships. Have you had a sexual experience with a guy or girl or both?

#### **S - Suicide/depression screen**

What sort of things do you do if you are feeling sad / angry / hurt?

Some people who feel really down often feel like hurting or even killing themselves. Have you ever felt this way?

Have you ever tried to hurt yourself?

**Objective 3: Demonstrate proficiency from history taking to direct physical examination, especially in adolescents**

The objectives of performing a health history are to identify pertinent information, determine the chief complaint, analyse the present illness, and review the past health history, including family and sexual history.

**Why is it important to obtain a comprehensive health history of adolescents?**

- A comprehensive health history is a precursor before performing any health assessment. Health history includes subjective and objective data. Subjective data are the information exposed by the adolescent; objective data are the information from the physical examination and laboratory studies. A combination of both types of data provides health workers with a clear picture of the health status of an adolescent.
- The process of collecting health information builds rapport and trust between health workers and adolescents. It also allows healthcare workers to begin health promotion and disease prevention.
- Healthcare workers require a broad range of background knowledge of physiological, psychosocial and cognitive development before performing a health assessment of adolescents because adolescence is a period of transition between childhood and adulthood. Within this transition period, adolescents undergo profound changes in biological, intellectual, psychological and economic aspects.
- The increase in adolescents' independence gives them the ability to tackle some problems; however, sometimes they may fall back on childhood response patterns because of their continuing lack of cognitive ability.
- Some adolescents can successfully manage the developmental transition, while others may adapt to this stage with difficulty. Therefore, adolescents are more likely to develop problematic behaviours and be exposed to various health risks. As health workers, we cannot focus only on their physical condition but must also be sensitive to their behaviour and development.
- Guidelines for interviewing adolescents:
  1. Do not treat adolescents like children
  2. Be honest and show respect
  3. Display genuine interest and concern
  4. Avoid criticism and judgment
  5. Be casual and give friendly responses
  6. Assure privacy and confidentiality

## **Components of a comprehensive adolescent health history**

### **Health history from parents**

Medical history: Parents are usually most familiar with the adolescent's perinatal period, early developmental milestones, serious or chronic illnesses, hospitalisations, accidents and immunisations.

Family history: This provides a genetic and familial medical history, and may also give a clue as to the residential "health environment" of the adolescent.

Psychosocial history: parents can provide information on the adolescent's personality, strengths, weaknesses and school life.

### **Health history from adolescent**

Medical history

Chief complaint

Psychological history: assessing the adolescent's establishment of independence, sexual development and future role in society

Health habits and health risks: activities, feelings or experiences that involve health risks

Family functioning

Social and school situation: socio-economic, cultural and spiritual factors



#### **Objective 4: Explain how to prepare adolescents for physical examination**

##### **Preparation for physical examination (Hockenberry et al., 2007)**

- The examination can be conducted in a room with adjustable lighting
- All procedures should be explained clearly
- A well-lit room is needed for the visual acuity test
- A darkened room is better for pupillary reflexes assessment and ophthalmoscopic examination

##### **Specific approaches to physical examination (Hockenberry et al., 2007)**

- Allow to undress in private
- Give gown
- Expose only area to be examined
- Respect need for privacy
- Explain findings during examination: “Your muscles are firm and strong”.
- Matter-of-factly comment about sexual development: “Your breasts are developing as they should be”
- Emphasise normalcy of development
- Examine genitalia as any other body part; may leave until end

##### **Sequence of the examination (Hockenberry et al., 2007)**

The physical examination for an adolescent follows a head-to-toe direction to provide a general guideline for assessing each body area in order not to omit segments of the examination. The typical organisation of a physical examination will be discussed later. The examination of adolescents uses developmental and chronological age as the main criteria for assessing each body system, which accomplishes several goals:

- It minimises the stress and anxiety associated with assessment of various body parts
- It fosters a trusting nurse-adolescent-parent relationship
- It allows for maximum preparation of the adolescent
- It establishes the essential security of the parent-adolescent relationship
- It maximises the accuracy and reliability of assessment findings

**Objective 5: Conduct a periodic physical examination for adolescents (especially using Tanner assessment)**

**1. Screening:**

- Height and weight
- Blood pressure
- Pap smear (female only)
- Chlamydia screen (female>20yr)
- Rubella serology of vaccination history (female>12)

**2. Counselling:**

- Injury prevention
- Lap/shoulder belts
- Bicycle/motorcycle/ATV helmet
- Use of substances
- Avoiding tobacco use
- Avoiding alcohol/drug use
- Sexual behaviour
- STD prevention
- Unintended pregnancy
- Diet and exercise
- Balanced diet, limiting fat and cholesterol; maintaining caloric balance
- Adequate calcium intake (female)
- Regular physical activity
- Dental health
- Regular visit to dental care provider

**3. Immunisation:**

- Tetanus-diphtheria booster
- Hepatitis
- MMR
- Varicella
- Rubella

## Assessment of sexual maturity

### Past health history

- Urinary tract infections, kidney disease
- Sexually transmitted diseases
- For females
  - Abdominal pain
  - Past surgery on uterus, ovaries, vagina
  - Menstrual history: date of menarche, last menstrual period, cycle, dysmenorrhoea
  - Obstetric history for late adolescence
  - Vaginal discharge: character, amount and duration
- For males
  - Reproductive or hernia surgery
  - Trauma to genitourinary system
  - Exposure to mumps after puberty
  - Penile discharge: if present, determine colour, amount, odour, associated symptoms, treatment, diagnoses
  - Penile lesions: appearance
  - Scrotal and groin masses, swelling, tenderness, pain, treatment
  - Enlargement or hernias in the inguinal area

### Chief complaint

In brief, this is the answer to the question:

- What problem or symptoms brought you here?
- How long has this problem been present?
- When did these symptoms begin?

The adolescent's age, sex, marital status, previous hospital admissions, and occupation should be noted for the record. Other significant complaints often surface while you are taking the history. These seemingly secondary issues may have even greater significance than the original concern, because the driving force for the chief complaint may be found in them.

### Sexual maturity

- The secondary sex characteristics [More](#) that develop depend on which hormone is produced in the greatest amount, since both male and female hormones are produced by each person.
- The androgens produce the male configuration and the oestrogens produce the female configuration of the body.
- As with general growth, the development of secondary sexual characteristics occurs in a predictable sequence.

- This sequence can be divided into a series of five phases – the Tanner ratings
  - Females
    - develop sex characteristics before puberty and may take 2-8 years for completion
    - breast development, often the earliest sign of puberty, occurs between 8-18 years
    - pubic hair develops between 11-14 years
    - ovulation usually begins 12-24 months after menarche
  - Males
    - change in body shape, growth of body hair and muscle development may continue until 19-20 or even until the late twenties
    - growth of face and chest hair usually occurs around age 16
    - the voice begins to deepen at 13-14

### **Examination**

- For females
  - assure privacy and confidentiality
  - assess the adolescent's growth velocity and menstrual history
  - when the girl's sexual activity includes intercourse, or at age 18 years in virgins, periodic pap smears are also started
  - perform inspection of skin, hair distribution, labia major and minor, then palpation of vagina and speculum examination if required
  - during the bimanual examination, note that the adnexa are not palpable
- For males
  - assure privacy and confidentiality
  - the adolescent has a wide variation in normal development of the genitals. Use the Tanner chart to assess pubic hair growth, darkening of scrotal colour, the size of the testes and scrotum, and penis length and width
  - perform examination with inspection and palpation of penis and scrotum; palpate for hernia and inguinal lymph nodes

### Sexual maturation in girls

Tanner stage	Pubic hair	Breasts	Other changes
Stage I (pre-pubertal)	None; preadolescent	Only a small elevated nipple	
Stage II	Sparse, lightly pigmented, straight along medial border of labia	Breast buds palpated; areolar diameter increased	
Stage III	Darker, beginning to curl, increased amount	Breast and areola enlarged; no contour separation	Axillary hair develops; acne vulgaris develops
Stage IV	Coarse, curly, abundant amount but less than adult	Areola and papilla form secondary mound	
Stage V	Adult female triangle; spread to medial surface of thighs	Mature; nipple projects areolar part of general breast contour	

### Sexual maturation in boys

Tanner stage	Pubic hair	Penis	Testes	Other changes
Stage I (pre-pubertal)	None; preadolescent	None; preadolescent	None; preadolescent	
Stage II	Scant, long, lightly pigmented	Usually does not enlarge	Enlargement of scrotum and testes; texture alteration; scrotal sac reddens	Gynecomastia may occur; voice breaks and muscle mass increases
Stage III	Darker; starting to curl slightly	Enlarges and becomes longer	Further growth of testes and scrotum	
Stage IV	Resembles adult, but less quantity; course, curly	Becomes longer; glands and breadth increase in size	Continued growth of testes and scrotum; scrotum becomes darker	Axillary hair develops; voice changes; acne vulgaris develops
Stage V	Adult distribution; spread to medial surface of thighs	Adult in size and shape	Adult in size and shape	Facial hair present on sides; mature male physique gynecomastia

## **Objective 6: Identify common abnormal findings and provide anticipatory guidance**

### **Common abnormal findings (Malaysia Ministry of Health, 1997)**

#### **I. Nutrition and eating disorders**

- Ia: Anorexia nervosa
- Ib: Bulimia nervosa
- Ic: Obesity

#### **II. Skin problems in adolescence**

- IIa: Acne vulgaris
- IIb: Seborrhoeic dermatitis

#### **III. Psychosomatic disorders and somatic complaints**

- IIIa: Headache
- IIIb: Back pain
- IIIc: Abdominal pain

#### **Ia. Anorexia nervosa**

Anorexia nervosa is characterised by serious weight loss (Steinberg, 1987) caused by food avoidance and sometimes exacerbated by rigorous exercise regimes, purging and omitting.

Characteristics:

- serious weight loss
- strong desire for a thinner body
- weight phobia
- morbid fear of becoming fat
- medical problems
- amenorrhea

Counselling points:

1. Adolescents who practise unsupervised food restriction will bring ill health to themselves, which can give rise to serious medical problems.
2. Underweight adolescents need to seek medical advice so that further medical problems will not arise.

#### **Ib. Bulimia nervosa**

Bulimia often follows anorexia nervosa (Russell, 1985); food avoidance is replaced by over eating, and there is evidence to suggest that the incidence of bulimia may be increasing during adolescence.

Characteristics:

- binge eating (eating large quantities of food rapidly)
- episodes of purging (self-induced vomiting; diarrhoea with use of laxatives, diuretics, or enemas; compulsive exercise)
- periods of strict dieting

Counselling points are similar to those for anorexia nervosa.

### **Ic. Obesity**

Obesity is a condition where there is excessive adipose tissue relative to the non-fat body mass. It reflects an imbalance in energy intake and energy usage.

Characteristics: there is a 20% excess over the ideal body weight.

Counselling points:

1. Adolescents who overeat without physical exercise or activities will have weight problems.
2. Obesity can lead to other medical complications such as hypertension, coronary heart disease, thrombophlebitis, diabetes mellitus, hyperlipidemia, respiratory disease, gall bladder disease and intestinal disturbance
3. Proper food restriction and regular exercise will help in weight reduction. The key message is “Get lots of exercise. Build your body into one you’ll be proud of and get rid of fat and tension at the same time.”
4. Healthy food means a variety of fresh and wholesome food from all food groups, as illustrated in the food pyramid, without excessive fat, cholesterol, sugar or salt content. In addition, healthy foods are high in fibre.

### **IIa. Acne vulgaris**

Acne vulgaris (pimples) is a chronic inflammatory disease of the pilo-sebaceous unit. Sebaceous glands are larger and more active on the face, neck and front and back of the chest.

Factors:

- Sebum level is generally higher in patients with more severe acne
- Impaction and distension (due to local blockage) of follicles by tightly packed horny cells, lipids and microbes will result in an inflammatory response when there is disruption of follicular epithelium with formation of papules, pustules and nodulocystic lesions
- Propionibacterium acnes act on sebum to release free fatty acids, which cause further inflammation
- Genetic
- Excess androgens in males and females
- Bacterial infection
- Diet
- High humidity and hot weather
- Emotional stress

Characteristics:

- development of comedones (blackheads and whiteheads)
- erythematous papules and pustules on the face, chest (front and back), shoulder and upper arms

Counselling points:

1. It is only natural that girls and boys will experience some skin problems during adolescence, and it is not the end of the world.
2. Good skin hygiene will improve acne, and clients should avoid picking acne to prevent scars.

### **IIb. Seborrhoeic dermatitis**

This is a chronic superficial dermatitis. It affects mainly the sebaceous areas of the body (scalp, midportion of face, sternal and interscapular regions). The lesions appear as yellowish dry scales. Lesions may be pruritic.

Characteristics:

- Scaly scalp. Scales may also involve eyebrows, eyelids, nasolabial creases, behind the ears and sternal areas. May be itchy. Scalp may be greasy or dry.
- White specks (scales) on the hair can be easily flicked off. Sometimes, the specks are first noticed when they fall on the shoulders.

### **IIIa. Headache (Hockenberry et al., 2007)**

Headaches are a common complaint of adolescence and are associated with different pathologies, including extracranial disease, intracranial disease, vascular abnormalities, psychogenic disorders, or a combination of the above.

Tension headaches are the most common form of headache in adolescents. Simple analgesics, including acetaminophen and ibuprofen, are usually the most effective pharmacological intervention. Biofeedback and relaxation techniques may be useful nonpharmacological interventions.

Migraine headache is an autosomal dominant disorder, occurring in both adults and children. The cause is unknown, but attacks may be precipitated by stress, hypoglycemia, sleep deprivation, environmental factors, sympathetic stimulation, the nervous system, fatigue, exercise, menses, conflict, anxiety, or certain foods such as chocolate. It is characterised by a chronic and recurrent headache, is often preceded by an aura, and is accompanied by nausea and vomiting. Symptoms may include pallor, malaise, irritability, and fatigue. Nausea and vomiting often follow a throbbing bilateral headache, although it may be unilateral.

### **IIb. Back pain (Seidel et al., 2003)**

Back pain can be abrupt or gradual onset.

Characteristics of the pain and sensation: Tearing, burning, or steady ache; tingling or numbness; location and distribution relating to buttocks, groin or legs.

Associated events: Trauma, occupational and non-occupational lifting of heavy weights, long distance driving, sports activities, change in posture or deformity.

### **IIIc. Abdominal pain (Hockenberry et al., 2007)**

There are two types of abdominal pain:

#### 1. Visceral

The pain arises from the viscera or internal organs, such as the intestines, and is usually dull, poorly localised, and difficult for the patient to describe.

#### 2. Somatic

The pain arises from the walls or linings of the abdominal cavity, such as the peritoneum, and is generally sharp, well-localised, and more easily described.



### **Providing anticipatory guidance**

- The ideal way to handle a situation is to deal with it before it becomes a problem. The best preventive measure is anticipatory guidance.
- Often parents need to give their children early guidance on normal growth and development, and anticipatory guidance builds confidence in their parenting skills.
- However, anticipatory guidance should extend beyond giving information to empowering families to use the information as a means of building competence in their parenting abilities.
- To achieve this level of anticipatory guidance (Desselle and Pearlmutter, 1997):
  - Base interventions on needs identified by the family, not by the professional.
  - View the family as competent or as having the ability to be competent.
  - Provide opportunities for the family to achieve competence.

#### **IV. Summary**

A comprehensive health history is a precursor to performing any health assessment. Health history includes subjective and objective data. Subjective data is the information given by the adolescent, while objective data is that obtained from the physical examination and laboratory studies. The combination of both types of data provides health care professionals with a clear picture of the health status of an adolescent and allows health care professionals to begin health promotion and disease prevention.

#### **V. References**

- Desselle and Pearlmutter (1997). Two Cultures: Deaf children. Self-Esteem, and Parents' communication Patterns. *Social Work in Education*, vol.19: p.23-30.
- Hockenberry, M., Wilson, D., Winkelstein, M., & Kline, N. (2007). *Wong's nursing care of infants and children*. (8th ed.). St. Louis: Mosby.
- Malaysia Ministry of Health (1997). *Adolescent Health Care: Adolescent health needs*. Malaysia: Family Health and Nutrition Division.
- Seidel, H.M., Ball, J.W., Dains J.E., & Benedict, G.W. (2003). *Mosby's Guide to Physical Examination* (5th ed.). St. Louis: Mosby.
- Sperry, L., Carlson, J., Lewis, J., & Englar-Carlson, M. (2005). *Health promotion and health counselling: Effective counselling and psychotherapeutic strategies* (2nd ed.). Boston: Pearson Education, Inc.
- World Health Organization. (2001). *The Second Decade. Improving Adolescent Health and Development*. World Health Organization.
- World Health Organization. (2009) *World Health Organization Adolescent Job Aid*. World Health Organization.
- World Health Organization. *Orientation Program on Adolescent Health for Health-care Providers. Facilitator Guide - New Modules*. World Health Organization.
- World Health Organization. *Orientation Program on Adolescent Health for Health-care Providers. Handout - New Modules*. World Health Organization.