

Health education for adolescents Guidelines for parents, teachers, health workers and the media



**World Health
Organization**

Regional Office for the Eastern Mediterranean

Health education for adolescents

Guidelines for parents, teachers, health workers and the media

Dr Abdul Rahim Omran

Dr Ghada Al-Hafez



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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Introduction

This is a book that should have appeared long ago.

No one can argue the fact that adolescents constitute an important section of society in our countries in terms of number, of belonging to various social groups and of being the parents of the future generations. So, if they are provided with proper health information now, they will surely be in the best position to put such information into practical application. Furthermore, they will be the ideal advocates of accurate health messages from the present and in the days to come.

In view of this, it is quite curious to note that the individuals of such an important social segment should suffer negligence and disregard, and that no one seems to be interested in introducing them to basic issues which will enable them to preserve their physical and mental health, ensuring that they become instrumental members of society.

Realizing the urgent need for providing adolescents with such useful information, and in an attempt to make up for failing, as yet, to meet the said need, the World Health Organization, represented by its Eastern Mediterranean Regional Office, together with the Islamic Education, Science and Culture Organization and The Islamic Organization for Medical Sciences organized a meeting that was held in Istanbul, thanks to the gracious hospitality of Dr Ihsan Dogramji, member of the board of trustees of the Islamic Organization for Medical Sciences. Top physicians, educators and religious scholars attended the meeting.

The participants discussed a preliminary text, prepared by Dr Abdul Rahim Omran and Dr Ghada Al Hafez that included chapters dealing with personal, mental, environmental, reproductive and sexual health and nutrition. The text tackled the said topics using

simplified language, and in a style free of embarrassment or complexity. The text included, as well, a chapter dedicated to some questions that haunt the minds of adolescents. These questions are stated and answered clearly and straightforwardly, so as to be in accord with the culture, norms and values prevailing in the Region. The participants approved most of the content of the text, revised the remaining parts and added what they felt was needed, so that it became a concise but comprehensive document. It supplies readers with a lot of what they should know while complying with the latest scientific findings, providing the information in a simplified form that corresponds to prevailing norms and values.

Religious scholars deserve full credit for expanding the area allocated for the discussion of some delicate issues, specifically those related to the reproductive system, and for answering the questions related to health aspects of sexual behaviour. Their point of view was that the Quran, read by all Muslims, young and old, instructs on many of these issues within their serious legal framework, such as major ritual impurity (janabah), menstruation, continence (keeping from indecent deeds), betrothal, marriage, sexual relations between married couples and similar situations that can be classified within a religious (legal) framework, versus those situations and practices that violate religious teachings. The Prophet ﷺ himself, in his sunna, had dealt with many such issues whether in the form of sayings, acts or statements, therefore, embarrassment should not restrain tackling those issues within the framework of this book, as long as the same level of seriousness, objectivity and purity were maintained. Such an undertaking, rather, should be considered a duty as it enlightens the young on matters that are of great significance to them, and demonstrates bare facts, hence sparing the youth the effort of hunting for information on those facts from sources that are unqualified to guide them correctly.

The participants agreed to issue the book in three separate volumes that are identical in most of their contents. However, the volume addressed to adolescent girls contains additional information that is of specific importance for girls, the second volume contains

similar information that concerns adolescent boys and the third, addressed to parents, teachers, media and personnel working in various health fields combines the contents of the two previous parts in addition to some extra information that helps users to answer more inquiries.

We hope the book will fulfil its objective, which is to enlighten our youth on how to protect their health and to promote their well-being, as well as to guide them into the right path towards realizing their welfare, avoiding, at the same time, any harm, damage or deviation from righteousness and well-being.

Dr Abdul Aziz bin
Othman Al-Tuwaijari
Director General, ISESCO

Dr Abdul Rahman
Al Awadi
Chairman of Islamic
Organization for Medical
Sciences

Dr Hussein A Gezairy
Regional Director
WHO Eastern Mediterranean
Region

Reviewers

The guidelines included in this booklet were discussed and revised in a seminar held in Istanbul, Turkey, 2–4 September 1998, with the active participation of the following dignitaries:

Dr Ibrahim Badran	Dr Abdullah Ahmad Abdullah
Dr Ihsan Dogramji	Counsellor Abdullah Al-Issa
Dr Ahmad Al-Hattab	Dr Abdullah Naseef
Dr Ahmad Rajai' Al-Jundi	Dr Ali Al-Saif
Dr Ahmad Al-Kadhi	Dr Ghada Al-Hafez
Dr Hassan Hathut	Dr Kadriah Yurdakuk
Dr Hussain Abdul Razzak Gezairy	Dr Malek Al-Badri
Al-Hakeem Muhammad Said	Hujjat Al-Islam Mustafa Muhakek
Mr Hammud Al-Kash'an	Damad
Dr Khaled Al-Mathkur	Dr Mohammad Al-Khatib
Dr Sallah Al-Utaiki	Dr Muhammad Said Ramadan Al-Buti
Dr Abdul Rahman Al-Awadhi	Sheikh Muhammad Al-Mukhtar Al-
Dr Abdul Raheem Umran	Salami
Dr Abdul Aziz Al-Tuwaijiri	Dr Muhammad Al-Hawari
Dr Mohamad Haytham Al-Khayat	

Part 1

Basic information on adolescents

1.1 Present status of adolescents and youth in the Eastern Mediterranean Region

1.1.1 Demography of adolescents in the Eastern Mediterranean Region

The countries of the Eastern Mediterranean Region have predominantly younger age rates with over 60% under the age of 25 years and over 50% under the age of 20 years. The young age structure is evident in the Region's population pyramid (Figure 1), which shows a very wide base and narrow top for each of 1975, 1990 and 2000.

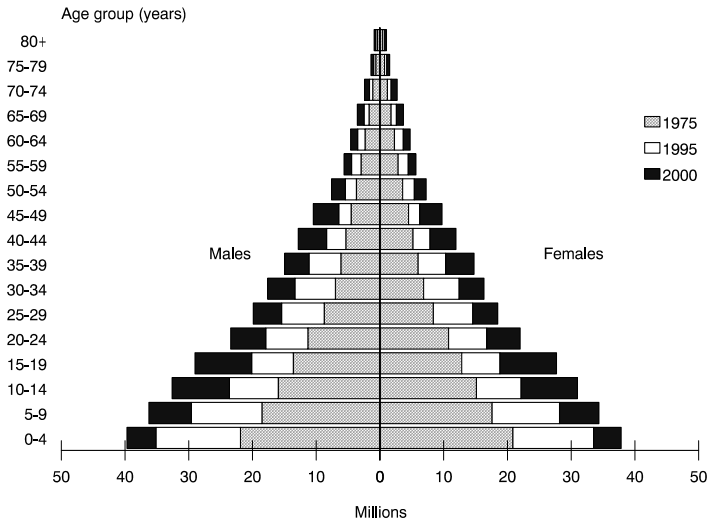


Figure 1. Population pyramid, Eastern Mediterranean Region

Table 1. Age distribution of the population under the age of 25 in the Eastern Mediterranean Region (1975, 1990 and 2000)

Age group (years)	1975		1990		2000	
	Number (millions)	Total population (%)	Number (millions)	Total population (%)	Number (millions)	Total population (%)
0-10	78 868	32.4	126 438	31.6	148 138	28.8
10-19	57 519	23.3	84 716	21.7	120 327	23.4
15-24	48 483	19.6	73 645	18.9	102 137	19.8
10-25	79 595	32.2	119 410	29.3	177 046	34.4
0-25	158 463	63.1	245 848	62.2	313 884	61.0
0-20	136 388	56.2	211 154	53.3	268 485	52.2

Source: WHO/EMRO database 1995

In 1975, there were 57.5 million adolescents (i.e. total number of the population aged between 10 and 19 years old) in the Eastern Mediterranean Region (Table 1). This figure soared to 84.7 million in 1990 and is expected to be 120.3 million by 2000. The combined size of both the adolescent and youth population (i.e. population between 10 and 25 years old) which was 79.6 million in 1975, rose to 119.4 million in 1990 and is expected to be 177 million by 2000 [1]. It is therefore surprising that almost one-third of the population could have been marginalized or simply ignored not only by social organizations but also by their own parents.

1.1.2 Health vulnerability of adolescents

Adolescents and young people are vulnerable to a range of health risks that may affect them immediately, such as infectious diseases, malnutrition, accidents or sexually transmitted diseases, or in the future, such as cardiovascular diseases and cancers. These risks may originate as a result of their lifestyle and health status during adolescence. Still another risk is to the offspring of adolescents when teenage pregnancy takes place.

1.1.3. Health problems facing adolescents

a. Problems peculiar to adolescence

- mental health problems related to psychosocial development;

- adolescent sexual growth problems;
- teenage pregnancy.
- b. Problems most common to youth**
- reproductive health problems, including maternal mortality and morbidity;
- sexually transmitted diseases (STD) including HIV/AIDS (human immunodeficiency virus/acquired immunodeficiency syndrome);
- accidents and injuries;
- drug addiction, smoking, alcoholism and drugs;
- dental health problems;
- nutritional problems;
- certain communicable diseases such as tuberculosis, intestinal helminthiasis, schistosomiasis and rheumatic fever originating in childhood from streptococcal infection.
- c. Lifestyle that may affect future health**
- inappropriate lifestyle based on excessive and unbalanced dietary consumption;
- lack of physical activity and smoking.
- These factors interact with each other, leading to obesity, cardiovascular disorders and diabetes.
- d. Conditions that may affect adolescents' offspring**
- low birth weight, high prenatal mortality;
- low intelligence;
- vertical transmission of HIV.

1.2 Historical evolution of adolescent health as a speciality in medicine

Adolescence has, until very recently, been a neglected segment of human life. Adolescents are too old to be covered by paediatrics and too young to fit automatically into the field of adult medicine. Even in maternal and child health programmes they neither belong to the maternal nor the child component unless teenage pregnancy occurs.

Interest in adolescent health has been slowly but surely rising during the second half of the twentieth century, especially after the Second World War. In the 1950s and 1960s, Tanner and his group published their fundamental work on the growth of adolescents [1]. Clinicians started to establish special clinics or centres for adolescence. The first such programme of “adolescent medicine” was established in Boston, Massachusetts, by Rosell Gallagher [2]. The establishment of other clinics in the United States of America (USA) and Latin America led to the formation, in 1968, of the Society for Adolescent Medicine (SAM), which publishes a specialist journal, “The Journal of Adolescent Health Care” [3]. A sister association in the United Kingdom, the Association for Professionals in Services for Adolescents publishes the “Journal of Adolescence”. Furthermore a special section on adolescent health has been established in the American Academy of Paediatrics [3].

These clinical efforts led the American Medical Association (AMA) to conclude in 1977 that the field of adolescent medicine fulfilled all the requirements for designation as a specialty in medicine [3]. Several textbooks on adolescent medicine have been published over the past three decades.

A more comprehensive concept of adolescent health, including both prevention and health care measures, has been promoted by the World Health Organization. In 1965, WHO convened a technical expert committee to discuss the health problems of adolescents [4]; a second technical expert committee was convened in 1977 to discuss the health needs of adolescents [5]. Then in 1990, the Adolescent Health Programme (ADH) was established at WHO headquarters in Geneva. Some nongovernmental organizations have become interested in adolescent health. The recently established Global Commission on Women’s Health has evinced considerable interest in the health of adolescent girls.

The Regional Office for the Eastern Mediterranean (EMRO) has expressed increasing interest in adolescent health and has been advocating the establishment of adolescent health programmes as a component of national health care systems. Two intercountry

consultations in 1993 and 1995 identified facets of adolescent health about which reliable information from countries of the Eastern Mediterranean Region is almost nonexistent. They recommended steps to bridge this gap. Measures for responding to the special needs of adolescents through maternal and child health programmes and school health services were also recommended [6, 7].

For over fifteen years Islam, the predominant religion in this Region, has devoted great attention to growing children and has promoted their treatment with compassion and empathy. Islam signals to parents and others that as early as the age of 10 a child is entering another phase in his or her life, a phase that needs more responsible parenting. According to a saying of the Prophet Muhammad ﷺ, children are enjoined to start praying at the age of seven years and are obliged to do so at the age of 10 years, i.e. age of discretion [*sin al-tamyeez*]¹. Parents are requested to provide separate sleeping arrangements for their children as a means of encouraging individuality and the development of a unique personality. It is also geared to guard against any improper modes of sexual behaviour. As well, adolescents and the young are ordered to stay chaste until marriage², and to get married as soon as they are fit, physically, socially and financially³. They are also instructed to stay away from bad company, which may tempt them away from their cultural norms.

¹ The full text is: "Order your children to pray at the age of seven, and smack them to do it at the age of ten, and separate between them in sleeping compartments." [Narrated by Amru bin Shuaib in the Mosnad of Ahmad.]

² Let those who cannot afford to marry live in continence until God shall enrich them from His own bounty [24:33].

³ "Young people! Whoever can afford the wherewithal of marriage let him be married." [Narrated by Abdullah bin Massoud in Ibn Maja.]

Part 2

The religious framework and faith dimension of the health of adolescents

2.1 *Optimum concept of good health in Islam as compared with the health definition by WHO [8]*

The main objective of this book is the protection of the health of adolescents. By health we mean that which WHO stated in the preamble to its constitution “Health is a state of complete physical, mental, social and spiritual well-being, and not merely the absence of disease or infirmity.”

Muslims, who constitute the majority of the population in this Region, should proudly recall that Islam has been centuries ahead of the rest of the world in presenting a comprehensive definition of good health and normalcy. During the era of Islamic civilization, Muslim physicians introduced definitions of health that conveyed positive concepts nearly unknown to the rest of the world prior to the twentieth century.

According to Islam, the original state of things is good health, normalcy and well-being. In the Quran we read: *He who created (all things) and then rendered them proper* [87:2]. We also read: *He who created you and fashioned you in due proportion* [82:7] and: *(I swear) By the soul and Him who gave it proportion and order* [91:7].

Islam places good health second only to certitude or faith. The Prophet ﷺ says: “Ask God to grace you with well-being; for none is graced with a blessing—save certitude—better than well-being”⁴. Which means that certitude, or true faith, is at the highest level of the perfection hierarchy, and that good health and well-being immediately follow. The Prophet ﷺ says: “It is good for a pious

⁴ Narrated by Ibn Maja, quoted from Abu Bakr

person to be wealthy⁵. But good health for him or her is even far better". In other words, there are two dimensions for normalcy: the fiducial, or spiritual, and the dimension of well-being.

It is gratifying that WHO has realized the importance of the spiritual dimension in health and modified its definition of health to become "Health is a state of complete physical, mental, social and spiritual well-being, and not merely the absence of disease or infirmity".

2.2 *Muslim physicians*

A thousand years ago, Muslim physicians identified a comprehensive definition of health. In his book "The Perfect Medical Practice", physician Ali Ibn Al Abbas stated that health is "A state of the human body wherein actions within the natural course are fulfilled".

Seven hundred years ago, physician Ibn Al Nafis in his "Outline of Medicine" said that "health is a physical condition wherein actions are sound per se, while illness is a contrary condition".

2.3 *Five concepts of health in Islam*

One can infer five concepts of health in Islam, namely:

1. health equilibrium or moderation;
2. health credit or reserve;
3. health promotion;
4. principle of therapy or seeking medication;
5. principle of "no harm is to be caused to oneself or to others".

2.3.1 *Moderation*

Islamic medical books referred to a concept that Muslim physicians had introduced, namely, moderation or health equilibrium. A thousand years ago, Ali Ibn Al Abbas said: "health is a state of moderation in the body". Avicenna, a physician and a

⁵ Narrated by Ibn Maja, quoted from Mou'az Ibn Abdullah Ibn Khobaib, quoted from his father who quoted from his uncle

philosopher living at the same time, explained that: “human moderation has a range to which excessiveness and negligence are two opposite limits”.

Muslim physicians refer such moderation to God’s words: *He raised the heaven and set the balance of all things that you might not transgress its bounds. You must observe the just balance strictly, and fall not short thereof* [55:7–9]. They also built on the Prophet’s ﷺ saying: “An excessively rough traveller neither covers any distance nor preserves the life of his burden-carrying animal”.⁶

2.3.2 Health credit or reserve

Islam deals, as well, with “health credit or health reserve”. It refers to what is known nowadays as preventive medicine, and to health preservation. This notion has its basis in a quotation by Al Bukhari from Abdullah Ibn Omar: “treasure up your health to help you face illness”. The quotation is derived from a hadith: “Take advance of five things before being hit by five things: your life before your death, your leisure before your overwork, your wealth before your want, your youth before your old age and your health before your illness”.⁷

Health reserve enjoys favourable status in Islam, which advocates maintaining and protecting health, as well as guarding it against overburden and destruction. The Prophet ﷺ, in the before-mentioned hadith quoted by Abdullah Ibn Amr, said: “Your body has a right on you”, therefore, the body should be nourished, protected, cleaned and guarded against illness. It should be treated in case of illness and should be spared overburdening”.

Health reserve comprises:

1. nutritive reserve;
2. immunity reserve (protecting the body against illness);
3. psychological reserve and peace of mind that enable the individual to confront psychological distress and hardships of life;

⁶ Narrated by Ahmad, quoted from Anas, and by Al Baihaki, quoted from Jaber

⁷ Narrated by Abou Na’im in “Al hiliah”, quoted from Amr Ibn Maymoun

4. cultural reserve that urges the individual to adopt a healthy lifestyle, which enables him or her to promote health and prevent illness;
5. physical fitness that helps the individual to perform work efficiently and without exhaustion.

2.3.3 Health promotion

Health promotion comprises all the means utilized for strengthening and developing health reserve in order to keep the scales weighted on the side of good health. Those whose health scale outweighs illness will enjoy good health and well-being, while those whose health is outweighed will become a prey to disease and ailment.

Avicenna calls those means or factors “instruments by which the conditions of the human body are either altered or maintained”. Among these instruments he lists atmospheres, intakes, dwellings, physical and psychological actions and inactions, such as sleep and wakefulness, as well as the impact of activity, gender, profession and habits.

To the above factors, Ibn Abbas adds sports, massage, bathing and sexual intercourse. He says that they are part of the means by which normal bodily conditions are preserved for the purpose of sustaining physical health.

2.3.4 Principle of therapy or seeking medication

Islam urges seeking medication. This includes making use of the inventions of medical technology in the fields of prevention and treatment. The Prophet ﷺ approved the principle of therapy. He said: “Seek medication”.⁸ He also said: “Yes, slaves of God, seek medication”.⁹ The Prophet ﷺ urged Muslim physicians to search for medicines by way of research and experimentation, he said: “God has not sent down an ailment without sending its cure, known by some,

⁸ Narrated by Abou Dawood, quoted from Ossama Ibn Shoraik

⁹ Narrated by Al Tirmithi

unknown to others".¹⁰ This demonstrates the necessity of scientific research for the purpose of identifying curative elements or factors. Islam prohibits amulets, incantations and resorting to unknown powers and mysterious means (i.e. sorcery) for treating the sick. The Prophet ﷺ said: "He who wears an amulet (for the sake of protection or cure), may God render his aims unfulfilled. And he who wears a cowl, may God deprive him of peace of mind".¹¹

2.3.5 Principle of "no harm to be caused to oneself or to others"

This Islamic general rule is the text of a *hadith* narrated by Aldaraqotni, quoted from Abou Sa'id Al Khodari. The significance of the rule is the prohibition of inflicting harm upon oneself or upon anything else, such as human beings or the environment.

1. Prohibiting self-inflicted harm

This can be seen clearly in the words of God Almighty: *And do not with your own hands cast yourselves into destruction* [2:195]. He also says: *Do not kill yourselves* [4:29]. It is also clear in a *hadith* by the Prophet ﷺ: "A believer should not humiliate himself". When the Prophet's ﷺ companions asked how one could humiliate oneself he answered: "When he exposes himself to an unbearable ordeal".¹²

Self-inflicted harm may result from malnutrition (due to over nutrition, i.e. excessiveness), or under nutrition (i.e. negligence), exposing oneself to infection, illegitimate sexual relations (premarital or extramarital) causing, among other things sexually transmitted diseases, engaging in drugs or alcohol, neglecting prevention and treatment, or teenage pregnancy.

2. Prohibiting infliction of harm on family members

This includes harming the spouse, impiety towards parents, neglecting children and failing to bring them up in accordance with the righteous Islamic teachings, neglecting adolescents and letting them go through adolescence with no guidance or affection. Islam prohibits the old practice of burying newborn girls alive. It also

¹⁰ Narrated by Ahmad, quoted from Jaber

¹¹ Narrated by Abu Dawood and Al Nassai

¹² Narrated by Ibn Maja and Ahmad, quoted from Hothaifa

prohibits gender discrimination and failure to provide necessary protection for adolescents, or failure to provide them with medication when they fall sick. God says: *Lost are those who in their ignorance have wantonly slain their own children* [6:140]. The Prophet ﷺ said: "For a man to sin, it is enough to abandon his dependents, whom he nurtures".¹³

3. Prohibiting harm to the environment and all people

This concerns actions such as contaminating water sources or pathways with human or industrial wastes. The Prophet ﷺ said: "He who harms Muslims in their pathways, deserves their curse".¹⁴

Islam prohibits transmitting infection to others. The Prophet ﷺ said: "You should not infect others, and you should not forebode".¹⁵ He also said: "No contact should be imposed by a sick person upon a healthy person".¹⁶ Islam also prohibits harming neighbours with smoke, waste, noise or any other form of harm. The Prophet ﷺ said: "By Almighty God, he is not a believer". His companions wondered: "Prophet ﷺ of God, who is he, might he be condemned to failure and loss?" He said: "He whose neighbour is never safe from his nuisance".¹⁷ Harming others includes cigarette commercials, especially those addressed to adolescents. It is also seriously harmful to spread and promote sexual permissiveness among adolescents through writing, photographs, songs or video and cinema films.

¹³ Narrated by Abou Dawood, quoted from Abdullah Ibn Amr

¹⁴ Narrated by Al Tabarani in "Al Kabir", well supported

¹⁵ Narrated by Al Bukhari, quoted from Ibn Amr and Anas Ibn Malek

¹⁶ Agreed-on, quoted from Abu Huraira

¹⁷ Agreed-on, quoted from Abu Huraira

Part 3

Basic components of health education of adolescents

Adolescent health should be viewed as a package of several components that are complementary within a framework of cultural and religious norms prevailing in the Eastern Mediterranean Region. These are depicted in Figure 2 and will be discussed below.

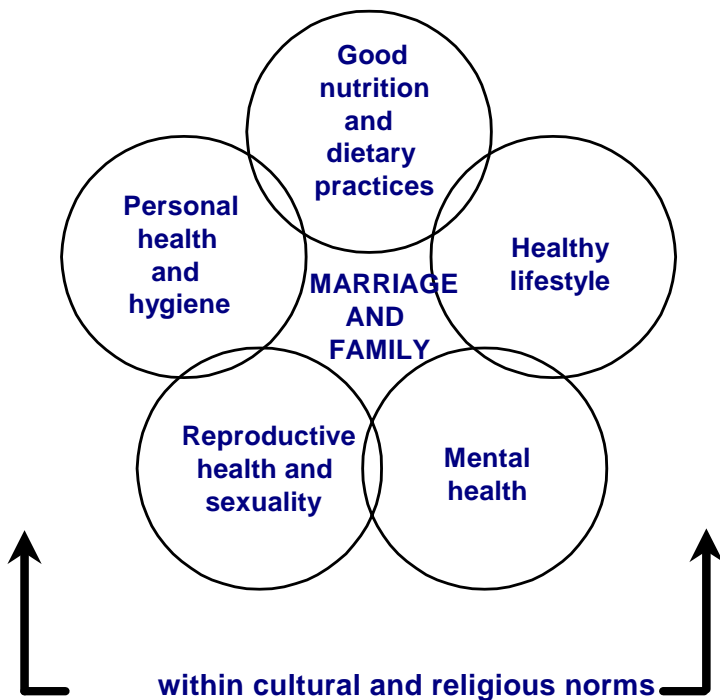


Figure 2. Components of adolescent health programmes in the Eastern Mediterranean Region

3.1 Nutrition and dietary habits during adolescence

3.1.1 Introduction

Adolescence is a period of rapid physical growth, with a corresponding increase in nutritional requirements to support the increase in body mass and to build up stores of nutrients. The daily intake of nutritional requirements increases according to the following factors:

- a. age: at the beginning of puberty, with the increase of height and at the last stage of adolescence;
- b. gender: adolescent girls require 10% more nutrients, iron and iodine in particular, than boys;
- c. pregnancy: during the second half in particular, as well as during the first six months of breastfeeding. It is advised that the first pregnancy after marriage be postponed at least until the girl is over 18 years old, because it might not be possible to meet additional requirements, especially among middle income and poor families;
- d. activities and sports: heavy physical sports in particular, such as swimming, running and ball games;
- e. in a Region where a deficiency in micronutrients, such as iron, iodine and vitamin A prevails, adolescents require foods fortified with nutrients, like iodized salt, iron-fortified bread and various vitamin A sources;
- f. infection with parasitic diseases, until they are cured.

Table 2 shows the nutritional requirements for both male and female adolescents compared with the requirements of other age groups while Table 3 indicates the nutritional requirements proportionate to the kind of activity sustained.

Table 2. Recommended amounts of nutrients (nutritional requirements)

Age (Years)		Males			Females		
		10-12	13-15	16-19	10-12	13-15	16-19
Body weight	(kg)	36.9	51.3	62.9	38.5	49.9	54.4
Energy	(Kcal)	2600	2900	3070	2350	2490	2310
Protein	(g)	30	37	38	29	31	30
Vitamin A	(µg)	575	725	750	575	725	750
Vitamin D	(µg)	2.5	2.5	5.5	2.5	2.5	2.5
Thiamine B1	(mg)	1.0	1.2	1.2	0.9	1.0	0.9
Ripov.	(mg)	1.6	1.7	1.8	1.4	1.5	1.4
Niacin	(mg)	71.2	91.1	2.3	51.5	61.4	51.2
Folic acid	(µg)	100	200	200	100	200	200
Vitamin B12	(µg)	2.0	2.0	2.0	2.0	2.0	2.0
Vitamin C	(mg)	20	30	30	20	30	30
Calcium	(g)	0.6-0.7	0.6-0.7	0.5-0.6	0.6-0.7	0.6-0.7	0.5-0.6
Iron	(mg)	5-10	9-18	5-9	5-10	12-24	14-28

Source: *Nutritional requirements guide*, World Health Organization Regional Office for the Eastern Mediterranean, Alexandria, 1977. [Arabic]

Table 3. Activity and energy consumption

Activity	Energy consumed per calorie	Per hour
Rest	1.0	60
Standing	1.4	84
Walking (6 km per hour)	3.6	216
Descending steps	5.2	312
Driving	2.8	168
Horse riding	3.0	180
Cycling	4.5	270
Swimming	5.0	300
Gardening	5.6	366
Squash	10.2	612
Carpentry	6.8	408

Source: National Centre for Diabetes, Endocrinology and Hereditary Diseases, Jordan 1997.

3.1.2 Nutritional problems of adolescents

The nutritional problems of adolescents in the Region include:

- a. undernutrition, which results from the consumption of an inadequate quantity of food (i.e. less than the daily requirement) over an extended time. This prevails in poor

- families, in addition to being hit by chronic infection, such as tuberculosis and parasites;
- b. specific deficiency, resulting from a relative or absolute lack of a nutrient, such as iron deficiency anaemia, which is prevalent in the Region. In many countries more than one third of adolescent boys suffer from nutritional anaemia. Deficiency of vitamin A and iodine are also common in many countries of the Region. Such substances, that are required in small amounts for physical health, are called micronutrients; lack of that small amount leads to diseases;
 - c. overnutrition or malnutrition of affluence, is a result of the consumption of unbalanced and excessive quantities of food, especially starches, sugar and fat, over an extended time. The most common manifestation of over nutrition is obesity, which is prevalent among adolescent girls, particularly in the affluent countries of the Region (obesity will be discussed in detail later);
 - d. dental cavities are another health problem related to the excessive intake of sweets, chocolate, ice-cream, cakes and soft drinks, specially when consumed between meals. This is common in affluent countries, especially in cities. A contributing factor is the regular consumption of bottled desalinated water with low fluoride rates;
 - e. problems related to sports, such as running, bicycle racing, swimming, football, basketball and other games, as well as track sports and horse riding, where daily nutritional requirements increase according to violence, frequency, age and gender;
 - f. problems specifically related to violent sports, (such as menstruation irregularity or amenorrhoea, and rupture of the hymen in girls);
 - g. problems related to using drugs, such as steroids, that increase muscle volume and improve sporting performance. These drugs have harmful effects, especially when taken frequently. International law stipulates the performance of laboratory tests

in order to detect such drugs in the blood and urine of athletes before competitions; if found in an athlete's system that athlete is expelled from the tournament;

- h. the problem of widespread 'junk' food, such as hamburgers, cheeseburgers, hotdogs, chicken or fish, in addition to soft drinks, chocolate and sweets; has started to be clearly noticed in the Region, especially in affluent countries. As regards these snacks, there are two disadvantages. Many adolescents eat them in addition to main meals, thus exceeding the energy requirements of the body and often leading to obesity. They are usually served with fried potatoes, fried onion rings, sugar-loaded soft drinks or ice cream, a practice which also leads to obesity.

3.1.3 Improving the nutrition of adolescents

The general rule is stated in God's words: *Eat of the wholesome things with which we have provided you and do not transgress* [20:81], and: *Eat and drink but avoid excess* [7:31].

Adolescent nutrition in the Region can be improved through several measures including:

1. recognition of the increased nutritional requirements of adolescents;
2. nutritional education for the promotion of healthy dietary habits;
3. an adequate diet at specific times;
4. control excessive indulgence in food, especially those foods high in sugar and fat;
5. minimizing the intake of sweets and snacks between main meals, especially junk food snacks;
6. regular physical exercise to burn excess calories and to strengthen muscles;
7. always eating breakfast;
8. use of sugar replacement if prone to obesity;
9. ensuring that poultry and poultry products, as well as other meats, are well-cooked, ensuring the cleanliness of cutlery and

- surfaces used in cutting meat (for protection against salmonella), and not eating food sold by street vendors. Food should be hygienically kept, vegetables and fruits should be washed with soap and water before use and unpasteurized milk should be brought to boiling point;
10. adherence to the principle of moderation in food intake, and the inculcation of sound dietary practices should start during adolescence;
 11. never forgetting the well-known Arabic saying: “we are people who do not eat unless hungry; and we cease eating before feeling full”;
 12. adopting a balanced diet that contains appropriate amounts of food from different categories, such as energy-giving, body-building and protecting food. In general terms, the daily diet should contain cereals, beans, milk, meat, vegetables, fruits and fibres;
 13. control of parasitic infestation, that might be transmitted through food, drinks and other things;
 14. control of environmental deficiencies (e.g. iodine, fluoride and iron);
 15. access to clean water and sanitation, as well as food safety; these are considered essential requirements for health promotion. The dangers of contaminated water, common in poor environments, should be stressed in health education;
 16. safe and hygienic handling of food and control of food handlers;
 17. safeguarding food against contamination, as the Prophet ﷺ said: “Secure stoppers of water skins, cover food and drinks”.¹⁸

¹⁸ Narrated by Al-Bukhari , quoted from Jaber

3.1.4 The food guide pyramid

This pyramid (Figure 3) was suggested as a guide by the United States Department of Agriculture. It is a guide for the recommended daily servings of food. It reflects the balance of food to be consumed so that the bulk of a healthy diet should come from three types of foods, all low in fat. These are:

1. wheat, beans, cereals, rice and pasta;
2. vegetables;
3. fruits.

The rest of the items, constituting only about 25% of the diet, come from protein, such as dairy foods, meats, nuts and eggs, which are all high in fats and oils. Sweets should be used in very small amounts since they contribute mainly calories and not much else. The pyramid recommends the servings required from each group, taking age into consideration.

As regards their specific impact on the human body, foods can be classified into four groups.



Figure 3. The food guide pyramid

The first group is foods that provide us with caloric energy for moving and working (energy foods). These include cereals, beans, bread, starches, foods rich in fat, sugar, pasta and honey. On cereals, God Almighty says: *And from it produced grain for their sustenance [36:33]*. On honey He says: *From its belly comes forth a fluid of many hues, a medicinal drink for men [16:69]*.

The second group is foods that are used for building or renewing cells (building foods). These contain proteins. The richest kinds are those foods containing whole animal proteins, which contain the required amino acids. These include: meat, poultry, fish, eggs, milk and dairy products such as cheese. On these foods, God Almighty says: *He created the beasts which provide you with warm clothing, food and other benefits [16:5]*. He also says: *It is He who has subjected to you the ocean, so that you may eat of its fresh fish [16:14]* and: *We give you to drink of that which is in their bellies, between the bowels and the bloodstream, pure milk, a pleasant beverage for those who drink it [16:66]*.

Proteins can also be found in fruits, vegetables and nuts. The vegetal proteins are not considered whole proteins, but they may be upgraded by mixing blends from various vegetal sources in order to form an integrated mixture as regards amino acids; for example, cereal proteins are lacking in lysine acid, bean proteins are lacking in methionine acid, therefore, mixing cereals, such as bread, with beans (broad beans) forms an integral mixture.

The third group is the protective foods which supply the body with vitamins and with the required elements which come mostly from fresh vegetables and fruits. God Almighty said: *And thereby He brings up corn and olives, dates and grapes and other fruits [16:11]*.

(Micronutrients have already been mentioned.)

The fourth element is pure water that should be guarded against contamination. Water, originally is pure. God Almighty said: *And sends down pure water from the sky [25:48]*. Nobody should contaminate water, still water in particular. The Prophet ﷺ said: "Do not urinate in still water"¹⁹. He also said: "Beware of three things that

¹⁹ Narrated by Ibn Maja, quoted from Abu Huraira

bring forth curses: defecation in water sources, on the roads and in the shadow".²⁰

Fibres are the final element and although fibres are not nutrients they are a necessary part of the diet. They are indigestible vegetal foodstuff characterized by the ability to absorb water and inflate, thus increasing volume of food bulk and promoting a feeling of fullness. Fibres help in intestinal movement and in the discharge of wastes. They are included in all special diets; they impede the absorption of cholesterol that exists in food, and they minimize the risk of colon cancer. Fibre sources are whole cereals (e.g. brown bread), beans, vegetables, tuber foods and fruits.

3.1.5 Some nutritional problems

Obesity

Obesity is a major nutritional problem for adolescents. It simply means that the energy intake exceeds the amount of energy consumed, and the residual difference accumulates in the body to cause fat.

Overconsumption of food is the main reason for obesity, especially foods rich in sugar, starch and fat, like nuts, sweets, chocolate and soft drinks. Snacks and junk foods eaten with or in between meals, and popcorn, pizza and nuts consumed whilst watching television, also cause obesity. The energy consumed in sports, walking, manual work or physical exercise is always much less than the calorie intake.

Causes of obesity are:

1. Over consumption of food due to the following factors:
 - a. unhealthy dietary habits acquired in childhood, either because of the environment in which the individual grew up or because of adverse media influence;
 - b. excessive intake of foods rich in carbohydrates (starch and sugar, especially refined sugar) and little meat and fat, possibly due to a low family income or unhealthy dietary habits;
 - c. mothers' insistence on overfeeding their babies, mistakenly thinking that weight increase is tantamount to good health;

²⁰ Narrated by Abu Dawood, quoted from Mou'ath Ibn Jabal

- d. psychological pressures and anxieties that lead to over consumption of food as a means of escaping problems;
- e. hereditary and genetic factors that play a part in some cases where the family is prone to obesity, often exacerbated by wrong choices of food and ways of preparing it.
2. Lethargic patterns of life, with long hours spent watching television or having siestas, and very little time given to physical exercise or sports.
3. Goitre is a factor in some cases.
4. Malfunctions in the central nervous system in a very few cases.

When is weight increase considered obesity?

When the proportional relation of weight to height is 20% more than average, measured by highly accurate medical figures and calculations.

The risks are that apart from the unattractive appearance and the usual hurtful remarks about fat boys and girls, obesity could lead to serious diseases like:

- diabetes;
- cardiovascular diseases, including arteriosclerosis;
- renal diseases;
- diseases of the digestive system;
- joint diseases (arthritis).

Recent studies in industrialized countries show that obesity could also lead to higher mortality rates. United States medical insurance companies for instance have recently conducted a survey on a sample group of males between the age of 15 and 35, with the same height but variable weight. The findings show that if the ratio of weight to height is 5%–15% above average, the mortality rate is 10% more in obese people (see Table 4). If this ratio increases to between 45%–55% above average, the mortality rate is doubled.

Table 4. The ratio of mortality in relation to obesity (males 15-34 years at the start of the survey)

Ratio of weight increase above average (percentage)	Ratio of mortality among average-weight people (percentage)
105-115	110
115-125	127
125-135	134
135-145	141
145-155	211
155-165	227

Source: Cecil Textbook of Medicine, WB Saunders Co., 1997

Ways of treating obesity:

1. The best way to treat obesity is to lose weight by eating low-calorie meals and by using alternatives to sugar (Table 5 shows the calorific food value of some foodstuffs). A specialist should be consulted to decide the kind of meals and level of calorie intake needed. Strict adherence to the recommended levels must be observed.
2. Regular exercise and sports are necessary to burn up calories.
3. Medications for losing weight are available but not all are useful or safe; a specialist should be consulted.
4. Some people resort to plastic surgery (pumping out fats from specific parts of the body and using surgery to remove flabbiness) but this has repercussions sometimes.
5. Some obese patients need to consult a psychotherapist or psychologist.

Prevention of obesity:

1. inform adolescents of the dangers of obesity and obesity-related diseases;
2. moderate food intake during meals, avoid excess and indulgence, abstain from junk food snacks in between main meals and from addiction to chocolate, sweets, soft drinks and nuts when watching television or at any time;
3. recall, in addition to the aforesaid, the faith dimension in the regulation of diets and in the moderation of food intake; this includes fasting from time to time. God Almighty said: *Eat and drink, but avoid excess* [7:31]. The Prophet ﷺ said: “No receptacle,

man shall fill, is worse than his belly. A mere few morsels, enough to help him keep himself going, will do".²¹

Table 5. Calorific value of foods per 100 g

Fruits (raw)	Calories	Vegetables (raw)	Calories
Apple	56	Artichoke (inflorescence)	41
Apricot	52	Broccoli (flowers and stalk)	33
Banana	92	Cabbage (leaves)	26
Cherry	62	Cabbage, red (leaves)	44
Date, dry varieties	291	Carrot (root)	43
Fig	79	Cucumber (fruit, unpeeled)	20
Fig (dried)	290	Garlic (bulb)	132
Grapes	57	Kidney bean (immature seed)	151
Grape fruit	50	Lettuce (leaves)	24
Guava	70	Okra (fruit)	46
Lemon	28	Onion (immature bulb)	47
Lemon, (sweet)	26	Spinach (leaves and stems)	33
Mango (mature, peeled)	66	Tomato (fruit)	19
Olives (black)	191	Tea, leaves, dried	293
Orange, mandarin	48	Dry grain legumes and	Calories
Orange, sour	39	legume products	
Orange, sweet	45	Broadbean (stewed/medamis)	98
Peach	51	Chickpea (mature seed, boiled)	189
Pear	51	Lentil (mature seed, raw)	351
Pineapple	39	Pea (mature seed, raw)	340
Strawberry	34		
Sugars and sweets	Calories	Starches	Calories
Honey (without comb)	312	Bread Arabic white	284
Sugar, refined	386	Bread baladi brown	244
Syrup, date	313	Bread maize	203
Syrup, grape	258	Pasta macaroni	379
Nuts and seeds	Calories	Pasta vermicelli (Iranian)	367
Almonds (nuts)	617	Rice brown raw	363
Cashew (nuts)	542	Rice flour	377
Okra (seed)	411	Rice polished, steamed	122
Pine (seed)	574	Potato tuber boiled	110
Pistachio (nuts)	534	Potato tuber fried	341
Tehineh (sesame butter)	641	Oils and Fats	Calories
		Butter	693

²¹ Narrated by Al Termithi and Ibn Maja, quoted from Al Mikdam Ibn Ma' di Kareb

Table 5. Calorific value of foods per 100 g (cont.)

Milk and dairy products	Calories	Meat and poultry (raw)	Calories
Cheese, arab	310	Basterma, lean	261
Cheese, arish	77	Beef (carcass, medium fat)	322
Cheese, white or Bulgarian	321	Beef (meat, lean)	124
Cow milk, condensed	313	Chicken (dark, without skin)	137
sweetened		Chicken (light, without skin)	128
Cow milk, dried, whole	507	Lamb and mutton (meat, lean)	137
Cow milk, fluid, skimmed	39	Sausages (dried)	546
Cow milk, fluid, whole	195	Chicken egg (white)	53
		Chicken egg (whole)	160
		Chicken (yolk)	351

Source: Food and Agriculture Organization of the United Nations, Food composition table for use in the Near East, <http://www.fao.org/docrep/003/x6879e/X6879E03.htm#ch3>, accessed 20/10/05

Iron deficiency anaemia

Anaemia is the most widespread nutritional deficiency in the world, affecting no less than two billion people. In the Eastern Mediterranean Region, it is caused primarily by iron deficiency manifest in acute symptoms, especially among adolescent girls. At menarche, teenage girls need 10% more iron than boys of the same age because of blood loss in menses. Poor families often fail to provide the extra iron intake needed for those adolescent girls who will also have a heavy workload in the home. In addition, there is the possibility of sex discrimination in interfamilial food distribution in some families with girls having a smaller share than boys. If pregnancy occurs prematurely, before 18 years of age, nutritional requirements will significantly increase. Still another factor depleting nutritional resources in the body is parasitic infestation which is common in the Region. If not satisfied at the required level the general health of the girl will suffer, her resistance to infection will be poor and signs of malnutrition or deficiency of specific nutrients will appear. Anaemia also increases pregnancy and childbirth problems and is one reason for underweight newborn babies of teenage mothers.

Prevention of iron deficiency anaemia:

- upgrade the quality of nutrients and resort to iron fortified foods, e.g. bread;

- treat parasitic infections, e.g. ancylostomiasis and malaria;
- use iron compounds for susceptible groups, e.g. women during menses, pregnancy and breast feeding.

Treatment of iron deficiency anaemia is through the prescription of iron-based medications as recommended by doctors in individual cases.

Iodine deficiency

Iodine is a basic life element for humans. Iodine deficiency leads to goitre, abortion and mental retardation. (Deficiency means a severe lack that might have a pathological effect.) Iodine is a micronutrient that the body needs in small quantities, nevertheless, these quantities should be provided to ward off diseases. The need for iodine increases during adolescence.

There are certain regions where iodine deficiency is common, such as mountainous regions and areas where floods occur. There is usually slight to medium iodine deficiency in most countries in the Eastern Mediterranean Region. Iodine deficiency can be prevented by adding iodine to food salt, using iodized oil or taking iodine pills during pregnancy and breast feeding, especially in regions known for iodine deficiency. Goitre can be treated medically or surgically by removing a part of the hypertrophied gland.

Anorexia nervosa

This is a chronic neurotic disorder common in adolescence and youth, especially among girls. The behavioural symptom is the patient's desperate attempts to lose weight, and the psychological symptom is mainly a severe dissatisfaction with the body, which the patient always considers fat or above the ideal weight of fit and slim bodies of celebrities. Amenorrhoea is the main biological symptom and can last for months, due either to psychological reasons or severe malnutrition.

Interest in anorexia nervosa began when the disease started to affect celebrities, movie stars, and members of the aristocracy, princesses included.

Causes of the disease:

1. the changing image of the ideal body, particularly for girls. The old, slightly plump image of the beautiful woman in the 1950s has given way nowadays to the fit and slim, almost thin or skinny, body;
2. disproportional media focus on slim women and celebrities in films, videos, fashion houses, beauty contests, colourful advertisements and glossy magazines;
3. the influence of friends of the same age group in shaping the teenager's image of the ideally beautiful body;
4. intractable psychological problems;
5. anorexia nervosa specifically targets teenage girls shortly after puberty.

Symptoms:

1. phobic fear of the increase in weight, which could well be a psychological impression on the part of the patient;
2. numerous attempts to lose weight aiming at reaching the ideal figure or shape (as might be imagined by the adolescent. In many cases such attempts fail; and even if some attempts succeed the girl remains unconvinced and continues to attempt further weight loss. In many instances the image acceptable to her does not conform to correct health standards and nutritional requirements;
3. some girls try to induce vomiting of foods consumed in large quantities; others use laxatives or extremely violent exercise. These could be symptomatic of bulimia;
4. the sick girl often tries to conceal symptoms of the disease, which eventually appear clearly;
5. an increasing loss of layers of fat from under the skin leads to the obvious protrusion of bones;
6. amenorrhoea or menses irregularities are common.

Repercussions of anorexia nervosa:

- hormonal complications;
- heart diseases;
- digestive system diseases;

- poor immunity against contagious diseases, if the girl is exposed to such diseases;
- mental troubles and a feeling of worthlessness and depression;
- probable relapse after treatment and cure;
- a standing probability of committing suicide.

Treatment of anorexia nervosa:

1. nutritional control and replacement of lost nutrients;
2. treatment of medical repercussions;
3. psychological treatment by psychotherapist or psychologist to rectify the patient's ideal image of beauty and beautiful bodies;
4. closer integration within the family and with the circle of friends and relatives.

3.2 *Personal health of adolescents*

3.2.1 *Introduction*

Adolescents should be encouraged to develop a good regimen of personal health and hygiene to prevent diseases, build up health reserves and help maintain a fit and decent appearance. Such a regimen should include the cleanliness of all bodily membranes, dental and gum care, cleanliness of dress and surroundings, getting sufficient hours of sleep, recreation and exercise, routine medical care and immunization. These are the body's rights, which must be respected by all people so as to protect health and maintain strength. The Prophet ﷺ said: "Your body has a right on you".²² He also said: "A strong believer is better than a weak one".²³

3.2.2 *Personal cleanliness*

This is the best means to protect health, and in Islam it is given emphasis because the Prophet ﷺ said: "half the faith is cleanliness".²⁴

Personal cleanliness includes washing the body, at least once or twice a week; and washing hands, arms, feet, mouth, face, ears and

²² Narrated by Muslim, quoted from Abdullah Ibn Amr

²³ Narrated by Muslim, quoted from Abu Huraira

²⁴ Narrated by Abu Malek Al-Asha'ri in Muslim

hair everyday, as a Muslim regularly does in his ablutions before prayers. Hands must also be washed before meals, after visiting or touching anyone ill as well as following urination and defecation. As it is a *sunna* of the Prophet ﷺ, the urinary organs must be washed too. Aisha, wife of the Prophet ﷺ, said to Muslim wives: “Enjoin your husbands to do it, for I am too shy to tell them myself; the Prophet ﷺ used to do so”. In addition, each person should cut his nails, clean and brush his hair, cover his mouth and nose when sneezing or coughing, never spit except in a handkerchief or tissue and never throw rubbish in public places.

3.2.3 Dental care

Teeth should be regularly cleaned with toothpaste and a toothbrush or with *siwak* in the morning, at bedtime and after every meal. This is the routine practice in industrialized countries and it is also a *sunna*. The Prophet ﷺ ordered the faithful saying, “Clean your teeth of residual food and use al-siwak”.²⁵ and “Siwak cleanses the mouth and pleases God”.²⁶ In other word this is an act which will be rewarded by God.

3.2.4 Cleanliness of dress

Clothes are considered one of God’s blessings in Islam and they should be kept clean, tidy and as decent looking as possible. In the Quran God says: *Purify your garments and keep away from [all kinds of] uncleanness* [74:4]. Likewise underwear must be washed with soap and water and must be changed regularly.

3.2.5 Healthy home

As the home is the place for physical rest and inner psychological peace, it should be kept clean and tidy. It should also be as spacious as the family income allows, providing separate sleeping arrangements for adolescent boys and girls. The Prophet ﷺ ordered Muslims to do so when, concerning adolescent boys and girls

²⁵ Narrated by Abdullah bin Basheer Al-Mazini in Al-Tirmithi

²⁶ Narrated by Aisha in Al-Tirmithi

at the age of 10, he said: "Provide separate sleeping compartments for them".²⁷ General hygienic rules must be observed: household refuse must be kept in plastic bags or something similar until refuse collectors collect it; lavatories must be cleaned with detergents; food must be refrigerated or stored in hygienic places; and insects and flies must be eradicated.

3.2.6 Recreation

It is necessary to give the body and soul their share of rest and recuperation; "Hour for hour, Hanzalah", the Prophet ﷺ once said to one of his diligent followers, thereby evenly dividing the time of work and rest.²⁸ This is the only way to reinvigorate the body and allow it to continue work. The recreation and recuperation needed, however, must be within the parameters legitimized by God in His *sharia*.

3.2.7 Physical exercise and sports

Regular exercise preserves health, prevents diseases and fills spare time with useful and inexpensive recreational activities. As mentioned above, it is the best way to prevent heart (especially coronary) diseases, obesity, arthritis, and to maintain or lose weight. With aging, physical exercise becomes even more necessary to keep the body fit and in shape. There are specific exercises for specific muscles and specific physical disorders and these must be practiced under close supervision of physiotherapists. The kinds of sports recommended vary according to age, gender, pregnancy and general state of health

3.2.8 Immunization

Both acquiring and promoting immunity is of two kinds. The first is vaccination, in which the body is given a dose of vaccine containing controlled (dead or weakened) variants of the virus or germ causing the disease, or a very small amount of their toxin

²⁷ Narrated by Amr bin Shaib in Ahmad

²⁸ Narrated by Hanzallah bin Rabee' in Muslim

(poison). These do not cause the disease but trigger antibodies to the virus, germ or poison, which fight infection when it occurs. The acquired immunity lasts for varying lengths of time, depending on the kind of disease. Available vaccines for diseases at present include: tuberculosis, infantile paralysis, diphtheria, whooping cough, tetanus and measles which are the six initial vaccines usually given to children in all vaccination programmes in the world. There are also vaccines against hepatitis B, meningitis, influenza, pneumonia, mumps, rabies, German measles and yellow fever.

Adolescents need to be inoculated with all six vaccines if they were not vaccinated with them in childhood. When necessary, the tetanus vaccine is given to protect against wound infections in sports; hepatitis B, meningitis, influenza (every year) and yellow fever (if travelling to infected areas in Africa and Latin America); rabies if bitten by a dog or other potentially rabid animal. Pneumonia vaccine however is given to adults only once.

The second type of immunization is serum, which differs from vaccine in that it contains ready-made antibodies. They are bred in living bodies (human beings, horses, etc.) to directly attack the virus, germ or toxin of a disease.

The immunity acquired in this case is short-lived and limited, though potent when exposure to the disease occurs, as in antidotes to diphtheria, tetanus, snakebites, scorpion and even bee stings (especially people on journeys or in scout and youth camps).

In addition to immunization by vaccine and serum, there are useful medications for the protection against diseases during trips to infected areas, like chloroquine tablets for malaria (as well as pesticides to kill mosquitoes) and antibiotics like penicillin for rheumatic fever. A doctor should be consulted.

3.2.9 Routine medical care

Routine medical checkups can detect some intractable diseases. Schoolchildren (elementary and secondary) and university students should thus be kept under strict health control in their respective academic institutions. Blood, phlegm, urine and stool laboratory tests

should be conducted regularly as recommended by specialists. Girls should be taught to check for abnormalities in their breasts and boys in their testicles.

3.3 The mental health of adolescents

If the physical health of adolescents is subsumed in the general health system, mental health concerns rarely come to the attention of parents and school health programmes. Yet it is logical to expect and screen for mental health problems that accompany the drastic and rapid physical, biological, sexual and psychosocial changes that occur in adolescence.

3.3.1 Clinical mental conditions

The mental health of adolescents is of considerable importance since it greatly influences behaviour patterns in adulthood. However, this fact has not attracted the attention of those responsible for adolescent health. Some clinical conditions common to adolescents are: attention deficit disorder; personality disorder; oppositional disorder; conduct disorder; disorders of affect: moodiness, anxiety, depression; cognitive disorders: confusion; somatic disorder (tics); hypochondria; epilepsy; sleep disorder; anorexia nervosa; bulimia; schizophrenia; suicide ideation. Also included is drug addiction.

3.3.2 Depression

The term "depression" often crops up in daily conversation to label a bout of sadness, moodiness or disappointment. However, this is not depression, which is a specific, clinically recognized condition diagnosed by psychologists or psychotherapists. Depression is a serious disorder that can lead to feelings of unhappiness, misery and personal worthlessness, coupled with a loss of interest in activities previously enjoyed, and can even lead to suicide. Indeed depression is fast becoming a leading cause of morbidity and mortality among adolescents and young people in industrialized societies, affecting more females than males in the ratio of 2 to 1. Still, although attempts

of suicide are more common among girls, successful suicides occur more frequently among boys.

Symptoms that must be noted to diagnose depression

In 1994 the American Psychiatric Association insisted that at least five symptoms should be noted for the clinical diagnosis of depression. The symptoms should persist for one week or more so as to affect a marked change in the psychological and behavioural state of the patient. These are:

1. sustained depressive mood, lasting most of the day and occurring every day for a week or more. In children and adolescents this symptom could take the form of agitation and hyperactivity;
2. permanent loss of interest in activities previously enjoyed;
3. marked changes (loss or increase) of weight (roughly 5% of the total weight over a period of one month), without significant changes of dietary and nutritional habits and without the intention of putting on or losing weight;
4. sleep disorder (loss or increase of sleeping hours) almost every day;
5. agitated hyperactivity or inhibition almost every day;
6. feelings of fatigue or loss of energy almost every day;
7. feelings of personal worthlessness and guilt;
8. permanent attention deficit disorder and loss of the ability to concentrate or think straight or take decisions;
9. recurrent feeling of approaching death or suicide ideation.

Important note. Some of these symptoms may result from drug abuse.

Treatment of depression:

1. psychiatric and/or psychoanalytical treatment;
2. antidepressants are available in huge numbers, but these medications must be prescribed by a specialist and must never be taken according to the advice of friends or unqualified people. Antidepressants have severe side-effects and can be addictive. Electric shock treatment is also available;
3. spiritual and faith healing treatment of psychological disorders.

Many psychological disorders may be treated by having enough faith, patience, belief and trust in God, and by self-resignation to, and acceptance of, destiny and fate. In the Quran Almighty God says: *No misfortune befalls except by God's will. He guides the hearts of those who believe in Him* [64:11]. He also says: *Every misfortune that befalls the earth, or your own person, is ordained before We bring it into being. That is easy enough for God; so that you may not grieve for the good things you miss* [57:22–23]; and: *Conduct yourself with becoming patience* [70:5]. The Prophet ﷺ reiterated the same message, advocating patience until God sends His relief: “Know that whatever misfortunes had befallen you could never have missed you; and whatever misfortunes had missed you could never have befallen you. Know, too, that patience goes hand in hand with final triumph, relief with crisis, and ease and comfort at hard times”;²⁹ and “Whoever perseveres God gives him patience”.³⁰

Part of the treatment is to associate and constantly converse with religious people, to carefully choose the company of righteous friends. Praying to God and reciting the Quran are vital, for, *Surely in the remembrance of God all hearts are comforted* [13:28]. Close integration with the family, relatives and friends is also recommended.

Strengthening faith is often a good means to prevent suicide among adolescents if they heed God's dictates when he said: *Do not kill yourselves; God is merciful to you* [4:29], and *Do not with your own hands cast yourselves into destruction* [2:195].

An important point to remember is that mental illness is mostly treatable, if properly diagnosed. Further, mental illness does not mean insanity, a diagnosis reserved for specific, severe and largely incurable diseases.

3.3.3 Adolescents' concerns about puberty

Adolescents can become much concerned, sometimes to the point of depression, when changes happen to their bodies that are not

²⁹ Narrated by Ibn Abbass in Al-Tirmithi

³⁰ An approved hadith narrated by Abi Said Al-Khudri

properly explained to them. (Some examples are given in parts 3.5.2 and 3.5.3)

In all these cases, appropriate counselling will overcome the harmful effects of such mental concern.

3.3.4 Gender discrimination or inequitable treatment of children

Gender preference is a common trait in many developing countries. Discrimination against female children overtly or covertly is common in some countries of this Region. The Quran condemns the feeling of shame and great disappointment that a parent may express when he or she learns that a new child is a female. This feeling may later take the form of actual discrimination against girls with respect to treatment, societal position and even food distribution in the family. The adolescent girl becomes acutely aware of this constant discrimination which gives rise to bitter feelings that exist within the female child, the adolescent girl and the young woman. On examination, such discrimination is tribally based not based on religion, and Islam categorically condemns such unfair practices.

3.3.5. Positive factors regarding mental health in the Eastern Mediterranean Region

There are some innate beliefs in the countries of this Region that may give protection, at least partly, from mental health disorders. Some of these are:

- complete belief in destiny and fate; an acceptance that *Nothing will befall us except what God has ordained* [9:51], and a complete resignation to God's dictates without question or objection; all of which may neutralize some of the stress and act as a soothing factor;
- control of interpersonal conflicts that may lead to mental pressures;
- low prevalence of alcohol and drug abuse.

3.4 Environmental health

3.4.1 The environment

The environment is the sum total of mans' surroundings and his multiple relations to them. Inevitably man influences and is influenced by various environmental factors in his search for health promotion and disease prevention, and the most important environmental factors are:

- a. physical factors, which include water, air, residence and workplace. In each of these locations, for instance, man is exposed to natural, industrial and medical radiation (in diagnosis and treatment);
- b. chemical factors, which include food, refuse dumps, industrial waste, fertilizers and pesticides used in agriculture, all of which eventually reach and pollute water sources. There are also air pollutants, like car fumes, industrial smoke and smog, cigarette smoke, natural gases and pollutants from chemical industries, like detergents and pharmaceuticals;
- c. biological factors, which include plants, animals, viruses, parasites, infection carriers like flies, mosquitoes and other insects. In addition, there are animal sources of infection (like rabies, transmitted by rabid animals); poisoning caused by snakebites; and parasitic infections (from pigs and pork, etc.). The soil itself is a source of infection, like hookworms which cause ancylostomiasis or fleas which cause tetanus when an open wound gets infected;
- d. social factors, i.e. the conditions of the society a man inhabits, including individual and societal interactions, traditions, the media and cultural history of that society;
- e. cultural factors, which include religion, conventions and social values inculcated by families, schools and the community. One traumatic experience for adolescent children of diplomats or of people studying abroad is the dislocation and disorientation they suffer when parents move from one culture to another, complete with a different religion, different systems of beliefs, values,

marriage rituals, social relations, etc. Islamic minorities in other societies and cultures suffer similar traumatic disorientation, especially adolescent boys and girls who need special education and guidance from parents, family, the local Islamic community and Islamic centres;

- f. environmental disasters, like storms, floods, typhoons, wars, famines, desertification of green lands, forced immigration, daily accidents on roads, at home or in the workplace.

3.4.2 The significance of the environment for doctors of the Arab and Islamic civilization

A thousand years ago, the Muslim doctor Ibn Sina was well aware of the vital role the environment played in promoting health and preventing diseases. He talked about the “helping factors” or what he called “the factors that change or maintain the various states of the human body”. Among them he listed the following:

“...Tempers and factors related to them; food and drink and factors related to them; discharge, retention, countries and places of residence and factors related to them; physical and mental motion and quietude, such as sleep and wakefulness; age transition and disparity and variation in gender, crafts and habits...”

Ali bin Al-Abass, a contemporary of Ibn Sina, added “sports, massage, bathing, and sexual intercourse”. He said of these factors,

“... When used as they should be used and as required by the body in terms of quantity, time and order, then this would keep the natural matters intact and thus maintain the health of the body...”

In addition to the environmental factors, there are other factors referred to in modern terminology as “habits”, i.e. different lifestyles and patterns followed in eating, drinking, sleeping and waking, exercise and lethargy, depression and isolation, sexual behaviour and physiotherapy, all of which develop subject to age and gender.

3.4.3 Diseases and the environment

Adolescents need to know the environmental risks they might be exposed to, in this and other regions of the world, especially different kinds of diseases.

Infectious diseases

They are transmitted to a healthy person by one of the following means:

- a. phlegm from the mouth or nose of an infected person when sneezing, coughing or spitting. Infections of the respiratory system like tuberculosis, pneumonia, influenza, whooping cough, diphtheria, measles and meningitis, which are the ones usually spread in this way;
- b. touching the body, equipment or emissions of an infected person, as in eye and skin infections, or infections of the respiratory system. Bare feet touching infected soil also causes ancylostomiasis;
- c. infected food or drink, as in diarrhoea, hepatitis, food poisoning or gastrointestinal worms.
- d. swimming, bathing or paddling in water (e.g., canals, stagnant water, etc.) infested with bilharzia parasites in their infectious phases;
- e. by insects like flies (diarrhoea, cholera, typhoid), mosquitoes (malaria, yellow fever, etc., depending on the kind of mosquito), fleas (plague) and lice (typhus, fevers), etc;
- f. sexually transmitted diseases like syphilis, gonorrhoea, AIDS, etc;
- g. blood infections by polluted syringes, especially in drug abuse, which could transmit AIDS, hepatitis B and C, etc;
- h. by infected animal carcasses, milk or their products (tapeworms, Brucellae, etc.), or by the bites of rabid dogs (rabies).

Infectious diseases can be prevented by the following means:

1. general cleanliness, healthy nutrition and acquiring hygienic habits;
2. access to sanitary water, drainage systems and lavatories;
3. health control of food and food handlers;

4. washing fruits and vegetables with soap and water or other suitable means;
5. eradicating insects;
6. regular vaccination against disease;
7. avoiding sexually transmitted diseases by chastity and abstention until marriage;
8. avoiding drug abuse and addiction;
9. early diagnosis and instant treatment by specialists.

Accidents

Accidents (on roads, at home or in the workplace) are among the main causes of adolescent mortality, incapacity and retardation. They can be avoided by following safety instructions.

3.4.4 The spiritual dimension of environmental health

Islam explicitly enjoins that the environment be protected, and strictly prohibits acts that damage or apathetically exploit the environmental structure. While promoting agriculture and land tillage, Islam forbids abuse of the natural balance, especially those practices which lead to the destruction of plant and animal life. It also prohibits waste and gaseous pollution by man. A few examples from the Quran and *sunna* might suffice to illuminate this. In the Quran, Almighty God says: *Do not foul the land* [2:60], and *Do not strive for evil in the land, for God does not love the evil-doers* [28:77]. He also says: *No sooner than they [infidels] leave you than they hasten to do evil in the land, destroying crops and cattle [And] God does not love evil* [2:205].

The Prophet ﷺ Muhammad banned the uprooting of healthy trees and demarcated areas where cutting trees or killing animals was strictly prohibited. In Medina, for instance, he gave strict orders that “not a single tree in Medina should be cut down”.³¹ He also said of Medina that none of its game (wild animals, birds etc) should be scared off: “not even a tree branch should be broken except for a man to feed his camel”.³²

³¹ Narrated by Sa'd Ibn Abi Wakkas in Abu Dawood

³² Narrated by Abu Dawood

Islam forbids environmental pollution through defecation, etc. at places that could become sources of infection to others. The Prophet ﷺ said: “Avoid the three damning things: defecation in the sources, in the middle of the road or in the shade”.³³ He also said: “Let no one urinate in stagnant water”³⁴ and “Removing harm off the road is a benefaction (charitable deed).”³⁵

3.5 Reproductive health including that of adolescents

Reproductive health, as defined by the World Health Organization, is a state of complete, physical, mental and social well-being, and not merely the absence of disease or infirmity, in connection with the reproductive system and its functions and processes. It entails providing all means and factors necessary for men and women to have healthy and safe reproductive lives.

Sexuality is a term that refers in common use to all sexual aspects of human life.

3.5.1 Phases of development in adolescence

The physical and psychological changes that are experienced during adolescence do not necessarily take place at the same time for all adolescents. Nevertheless, the period of adolescence can conveniently be divided into three phases with varying degrees of overlap: early adolescence, aged 10–14 years, middle adolescence, aged 15–17 years and late adolescence, aged 18–19 years. The three main phases are depicted for easy reference in Table 6 according to the type of change that occurs at different phases.

The three kinds of change seen are physical growth, biological and sexual maturation and psychosocial change (see Box 1 for fourteenth century references to human development).

Physical growth reaches a high rate during early and mid-adolescence (being exceeded only by growth in childhood); this includes what is known as the pubertal spurt. Incremental increases

³³ Narrated by Muaz bin Jabal in Abu Dawood

³⁴ Narrated by Abu Hurairah in Ibn Majjah

³⁵ Narrated by Abu Thar in Abu Dawood

in height and weight and muscle growth, especially among boys, occur. The shoulders of boys become broader. In girls, the shoulders do not grow as broad as boys' shoulders while the pelvis widens gradually. Girls' physical growth is virtually complete by the age of 18, including the linear growth of long bones. Peak bone mass, however, is not completely acquired for a few more years, usually by the time they are 20 years old.

It is of interest to find a 14th century reference to phases of human development with specific names in the Arabic language. These were provided by the great 14th century theologian Ibn Qayyem al-Jawzia (famous as Ibn al-Qayyem—died 1350 AD). They are found in his book on religious rules for the growing child.

The phases of development according to Ibn Al-Qayyem are:

- suckling infant
- weaned infant
- toddler
- growing child (age 7-10)
- reached puberty
- youth (age 20-40)
- mature (middle age 40-60)
- aging (age 60+)
- elderly/advanced age
- advanced aging and weakness

These phases of Ibn al-Qayyem reflect these Quranic words on successive stages of creation and development:

Allah is He who created you out of weakness, then formed after weakness strength, then after strength came weakness and greying. [30: 54]

Box 1. An intriguing cultural note on phases of human development

Table 6. Growth and maturation during the three phases of adolescence

Early adolescence (10–14 years)	Middle adolescence (15–17 years)	Late adolescence (18–19 years)
Physical growth		
<p>Rate of growth accelerates to a pubertal spurt. Increase in height and weight. Muscles build up and shoulders broaden, (more in boys than girls). Girls may start growing one year earlier than boys.</p>	<p>Growth rate decelerates but adolescent reaches 90 or more of% of adult stature. Muscles continue to build in boys while characteristic fat deposition in girls moulds them into the shape of a woman. Pelvis in girls widens. Marriage at this age is premature, and pregnancy is classified globally as high risk.</p>	<p>Growth is virtually complete. Linear growth especially of the long bones is not complete until the age of 18 in girls. Peak bone mass is not achieved until two or more years later.</p>
Biological or sexual change		
<p>Secondary sexual characteristics appear. Hair grows in armpit and in pubic area around genitalia. Early growth of female breasts. Wet dreams (boys) and sexual dreams (girls). Menarche occurs at mean age of 13 in the Region (range: 9–18).</p>	<p>Hair on face (boys). Change in voice (boys). Feeling pleasure when genitalia are stroked or manipulated; discovery of masturbation (both sexes). Curiosity about how babies are made and born. Acne may become a problem.</p>	<p>Sexual maturation complete. This is a suitable age for marriage.</p>
Psychosocial change		
<p>Peer group affiliation. Morphological changes are associated with psychological changes, day-dreaming and apprehension of the unknown. Child may compare his/her genitalia with those of older siblings or peers and may become depressed or inquisitive.</p>	<p>Peer group defines behavioural code. Increasing curiosity about members of other sex. Thinking becomes more abstract. More romantic day-dreaming and preoccupation. May be introduced to smoking, risk-taking, violence, drug use and risk of sexually transmitted diseases/HIV, accidents, and suicidal behaviour.</p>	<p>Influence of peers recedes to individual friendships. Future orientation Intellectual identity established. Child–parent relationship changes into adult–adult relation.</p>

Biological or sexual maturation starts during early adolescence under the influence of hormones. An obvious change is the appearance of secondary sexual characteristics, such as hair growth in the armpits and in the pubic area. The size of the sex organs, and breasts in girls, also starts to increase in early adolescence. Wet dreams for boys and sexual dreams for girls usher the onset of puberty. Menarche in girls starts between the ages of 9 and 16 (mostly 13 in the Eastern Mediterranean Region). It may be delayed in cases of gross under nutrition. Boys begin to grow hair on their faces, and their voices deepen. Children and adolescents feel pleasure when their genitalia are stroked or manipulated and in early adolescence boys and girls become more curious about how babies are made and how they are born. All these changes are under the control of sexual and other hormones, which may produce the nagging complexion problem of adolescents known as “acne”.

In late adolescence, sexual maturation is complete. This is an acceptable age for early marriage at 18 or 19 years. By that age, a person should be physically, biologically and sexually mature and be ready for marriage and its responsibilities. This is called early marriage because it occurs soon after maturation, but it is the ideal age for marriage as it satisfies the sexual needs of husband and wife and avoids the risks of sexually transmitted diseases in premarital sexual relations. It would be wise, however, to postpone the first child until after the age of 20. Therefore contraceptive knowledge should be provided to those engaged to get married.

Far reaching psychosocial changes accompany the physical and biological sexual changes and unless properly handled may result in future ill-effects. Peer group affiliation is usually sought, and by mid adolescence, the peer group usually defines the behavioural code. During this tender stage adolescents may be introduced to smoking; risk-taking, accidents and violence; rejection of authority; drug and alcohol use; and premarital sexual relations (with the concomitant risk of sexually transmitted diseases).

Future orientation and intellectual identity are usually established during late adolescence. The child–parent relationship

changes into an adult–adult relationship, while the influence of peers, as a group, may partly or totally recede, giving way to individual friendships. Sexual problems may also arise for those seeking marriage; the issue of virginity and its proof in girls, homosexuality and sexual relations outside marriage, are the traditional preoccupations.

3.5.2 What happens inside boys' bodies

When a boy reaches puberty, he may wake up one morning and find his pyjamas and sheet wet with sticky milky or yellowish stuff. This is semen that came out from the male organ in a sexual (or wet) dream during the night. If not previously told about it by his father he wonders what is going on in his body. (The genital system of the male is given in Figure 4.)

The testicles are the producers of sperm. They are two oval-shaped glands that hang inside the scrotum and away from the body. The testicles produce the male sex hormone, which is called testosterone. At puberty, the testicles begin to produce sperms. Each of which carries the genetic characteristics of the male in whom they are produced. This process continues throughout life as long as the person is healthy. Each sperm is a tiny cell with a head and a tail, and

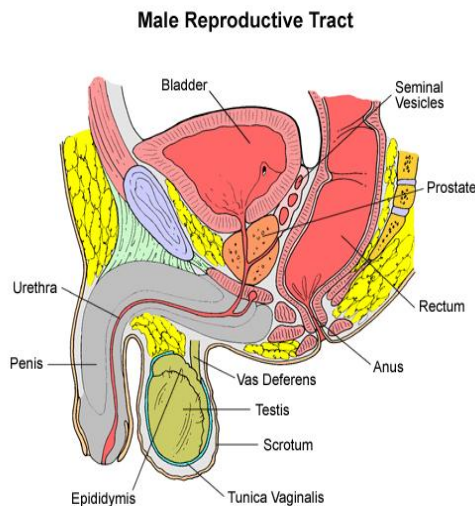


Figure 4. The male genital reproductive system

is the male contribution to the process of reproduction by penetrating the female's egg (called ovum; eggs are ova) and starting a pregnancy. The process of joining the sperm with an ovum is called fertilization, which occurs after the journey of sperms and eggs to the fallopian tubes of the female. Thus, the sperm travels from the testicles through the vas deferens, which is a long tube that starts in the testicle (one on each side) and goes around the urinary bladder to the prostate gland. The prostate is a gland situated at the base of the urinary bladder. It adds milky fluid to the sperms. In addition to carrying them the fluid contains nutrients for the sperms. The fluid containing the sperms is now called semen (some additional fluids are added by other small glands). The semen passes from the vas deferens to the urethra (coming from the bladder). The urethra carries the semen outside the body through the male organ, which is surrounded by an intricate network of blood vessels and spongy tissue.

When a male is sexually excited (during a sexual act, through thoughts or during a sexual dream) extra blood fills the spongy tissue in the penis and causes it to become larger and hard, standing out from the body. This is called erection. When the peak of excitement is reached, muscle contractions force the semen out in spurts. This is called ejaculation.

Note that the urethra is a part of the urinary system (it carries urine from the bladder through the penis to outside the body). This is called urination. The urethra is also a part of the genital system in the male since it conveys semen from the vas and prostate to the outside. During intercourse, the prostate undergoes some contractions which block the passage of urine from the bladder to the urethra, thus the semen passing through does not mix with urine. Only sperms are ejaculated during excitement. Meanwhile they are stored in the tubular reservoir between the testicles and the vas. This is called the epididymis.

From this it is clear that once the boy reaches puberty and starts to ejaculate semen, he becomes capable of impregnating a female. A tiny drop of semen reaching the vagina of a female can result in

pregnancy, if the female has started to ovulate and menstruate (9–18 years). During a regular ejaculation, about a teaspoonful of semen is produced. This contains millions of sperms. Only one sperm is needed for fertilizing an egg and starting a pregnancy.

3.5.3. What happens inside girls' bodies

When a girl reaches puberty, she may wake up one morning and find her underwear wet with blood. This is menstrual blood that has come out from the girl's womb under the influence of sexual hormones. If not previously told about it by her mother she wonders what is going on in her body. The genital system of the female is given in Figure 5.

The following are the parts of the female reproductive system:

- ovaries: two glands, one on each side of the uterus. Ovaries produce ova from puberty to menopause. Ovaries also produce the sex hormones;
- fallopian tubes: horn-like tubes, one on each side of the uterus. They pick up the ovum after being produced by the ovary and keep it for a while for fertilization by a sperm. In other words, fertilization occurs in the tube when a sperm travels up the vagina, up the uterus and into a fallopian tube. The fertilized ovum passes thereafter to the uterus where it is embedded in its inner lining;

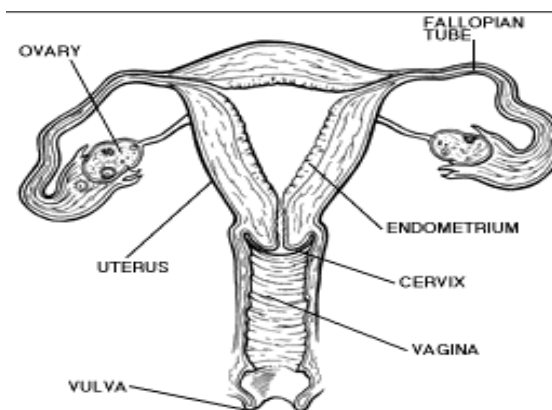


Figure 5 The female genital system

- uterus or womb: a muscular organ that grows larger with the embryo during pregnancy. Its lining grows, monthly, under the control of the ovaries' hormones preparing for nesting the fertilized ovum. If pregnancy does not occur, the lining strips off with its vessels and leaves the uterus in the form of blood, that is called menstrual blood;
- cervix: the opening of the uterus to the vagina;
- vagina: the canal that leads from the uterus to the vulva;
- hymen: a delicate sheath at the end of the vagina. It has one or more openings to allow menstrual blood to pass. It is torn with the penetration of any object therein, especially on the first intercourse or defloration;
- vulva: the exterior female sex organ. It consists of four skin folds called: labium majus and labium minus, a small cancellous erectile body called clitoris hidden by a skin cover called clitoris foreskin. The walls of the vulva contain a group of small glands;
- breasts: enlarge during puberty and adolescence to the size of an adult woman. One may be larger or more sagging than the other.

The menstrual cycle (also called menses)

Triggered by the female hormones, menstruation continues monthly from puberty to menopause except during times of pregnancy and between 3–6 months after delivery. The cycle is simplified and provided in a diagram for easy comprehension.

The successive stages of menstruation are given in Figure 6.

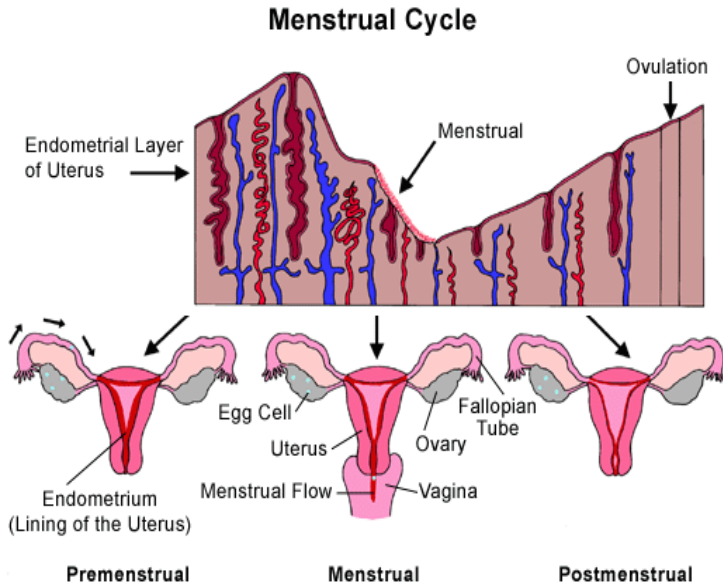


Figure 6. The stages of menstruation

3.5.4 Age at menarche and marriage

Formerly, girls in the Eastern Mediterranean Region used to get married as soon as they began to menstruate, which was at the age of 17 or 18 years. Now that the age of menarche has fallen by four or five years (the average age at menarche in the Region is 13 years) it is unrealistic to make this the age for marriage. Girls at this age are not yet physically, socially or psychologically mature enough to get married and bear children. (That is why it is called premature marriage, and it is different from early marriage.)

Studies in the Region found that a high proportion of adolescent girls are married by the age of 20. In many countries, however, the age of marriage has been rising, in part because more women are being educated for longer, and they postpone marriage until after their studies, and also because young people cannot afford to get married. This postponement of marriage raises another problem—the sexual behaviour of young people between puberty and eventual marriage.

Another custom in the Region is that the first pregnancy should come as soon after marriage as possible, to prove the wife's fecundity and the husband's virility. With premature marriages, teenage pregnancy occurs and carries great risks to the health of the mother and child [18].

3.5.5 Acne

Acne is one of the most nagging complexion problems for adolescent males and females. It is indeed a general and almost universal problem, for hardly anyone goes through that phase of life without being affected by it, for long or short periods of time, and with varying severity of symptoms. Although acne disappears towards the end of adolescence, the most worrying thing, especially among girls, is the acne scars left behind, which might mutilate the facial skin and severely damage its beauty.

Acne can affect the face, neck, chest, shoulders and upper part of the back. It is usually caused by androgynous hormones, which produces a thick, fatty, sweat-like substance, blocking skin tissue. The resultant pimple is white at the pustule itself and surrounded by red inflamed skin. Lack of cleanliness, heavy use of makeup and over consumption of chocolate, nuts and foods rich in fat and sugar, and the wrong practice of squeezing the pimple by hand, all exacerbate symptoms. Anxiety and psychological disorders, and in some cases heredity, are contributory factors. Still, the main cause of acne is closely related to this phase in human life, and the symptoms will eventually disappear at the end of adolescence, though in severe cases (and they are rare) the scars left on the face do damage the beauty of the boy or girl.

The treatment for acne is as follows:

1. cleanliness here is a must; the face should be gently washed several times a day with lukewarm water and soap, then rinsed with cold water and dried well;
2. special kinds of soap, ointments and preparations are useful for drying the boils, but they should be used according to a

- physician's prescription, because not all products advertised and promoted on the market are safe;
3. local use of benzyl peroxide and vitamin A is also useful. Some cases might even need the use of antibiotics such as tetracycline;
 4. meals should be organized: fatty and spicy foods, chocolate, nuts and some kinds of seafood should be avoided.

3.6 The institution of marriage and the prevention of aberrant sexual behaviour

3.6.1 Marriage as a model for life and chastity

All religions and subcultures within the Eastern Mediterranean Region consider the family as the basic social unit and marriage as the only way for family formation. Marriage, in religion, provides tranquillity for each of the spouses and provides them with protection from immoral sexual behaviour. Marriage is considered the only acceptable way to satisfy the sexual needs of young people, to prevent out-of-wedlock pregnancy and to protect them from sexually transmitted diseases such as HIV/AIDS.

Indeed marriage is the only means to achieve the "state of complete, physical, mental and social well-being, and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes", as the World Health Organization defines it. Marriage achieves social and societal well-being by consolidating the foundations of the family and family life as the only social unit. It achieves mental and psychological well-being by bringing about inner peace, tranquillity and mercy in line with God's pronouncement: And of His signs is that He created for you mates [spouses] of yourselves that you might find tranquillity in them. And He ordained between you love and mercy [30:21]. It achieves physical well-being by satisfying the physiological sexual desires God enshrined in husband and wife. Islam does not consider this legitimate sexual relationship hateful or abhorrent or something counter to the primeval and perfect original state; on the contrary,

Islam considers sexual intercourse between husband and wife a form of worship rewarded by God. The Prophet ﷺ says: "And in the copulation of every one of you there is favour and blessing!" They said: "Prophet ﷺ of God! Would we be satisfying our desires and rewarded at one and the same time?" He said: "Imagine that you fulfilled this desire in an illegitimate way; would you not be penalized? So is the case that if you fulfilled it in the right and righteous way you would be rewarded".³⁶

Marriage, moreover, is the accepted practice of some former prophets. In the Quran God tells the Prophet Muhammad ﷺ: *We have sent forth other apostles before you and given them wives and children* [13:38].

Prophet Muhammad ﷺ also ordained and encouraged marriage: "Marriage is my recommended practice and whoever turns away from it does not belong to me".³⁷ He also said: "and I marry women, and he who disapproves of my practice (*sunna*) does not belong to me."³⁸

The institution of marriage and family is crucial for the perpetuation of our culture, and the protection of family genealogy, chastity and honour, as well as the protection of future generations from contamination and break-up. Marriage also provides a home for the proper upbringing of children with love and care. Studies in industrialized countries have shown that a stable and happy marriage is the best environment in which to bring up children, and that, on the whole, children from broken homes fare worse than children from well-functioning families. Mental problems and juvenile delinquency are associated with poor upbringing in childhood.

For marriage to be successful, the two partners should be prepared biologically, socially, financially and psychologically; this is called *ba'a* (the wherewithal for marriage) in Islamic terminology. The Prophet ﷺ says: "O young people let those who possess the means

³⁶ Narrated by Abi Thar in Muslim

³⁷ Narrated by Ibn Majah following Aisha

³⁸ Narrated by Anas in Muslim

(sexual and financial) get married, which is the way to lower your gaze and protect your chastity. But those who cannot (do not have the means), let them take to fasting, for fasting is a good restraint of the sexual desire".³⁹ Until marriage takes place young people should be patient and should preserve themselves for their beloved partners. The Quran says: *And let those who find not the financial means for marriage keep themselves chaste until Allah enriches them of His Bounty [24:33]*.

Chastity is achieved by avoiding temptation and thoughts about sex, by patience and fasting, by reciting the Quran and reading useful books, by filling spare time and mixing with the right company and righteous friends.

It is worth mentioning that Islam⁴⁰ not only considers marriage an individual responsibility but also a social duty and a social responsibility. God addressed the Islamic community saying: *Take in marriage those among you who are single [24:32]*, and Islam considers celibacy a road to corruption, as grave as refusing to allow one's dependents to get married. The Prophet ﷺ warned Muslims: "If someone comes to you proposing marriage, and you are happy with his piety and honesty, accept to marry him! If you don't, the land will be overwhelmed by sedition and great corruption".⁴¹

3.6.2 Sex outside marriage

Sex outside marriage is defined by Islam as a grave sin. It has adverse social effects leading to family and genealogical breakup, and is considered to violate the social rights of husbands and guardians. It is also the main source of sexually transmitted diseases, out-of-

³⁹ An approved hadith, narrated by Abdullah Ibn Massoud

⁴⁰ Marriage is the norm in Judaism and Christianity. In the Old Testament, marriage was considered the way for Adam: Then the Lord God said, "It is not good that the man [Adam] should be alone; I will make him a helper fit for him." [Genesis 2:18]

In Christianity, the church condones sexual relations only within marriage, the only acceptable alternative being abstinence. St Paul said in his first letter to the Corinthians: To the unmarried and the widows I say that it is well for them to remain single as I do. But if they cannot exercise self-control, they should marry. For it is better to marry them than to be aflame with passion. [1 Corinthians 7:8-9.]

⁴¹ Narrated by Abu Hurairah in Ibn Maja

wedlock pregnancies (a major concern for teenagers) and illegitimate children (a major concern for teenagers, families and society at large). That is why Islam strictly prohibits adultery. In the Quran, God categorically instructs Muslims: *You shall not commit adultery, for it is foul and indecent* [17:32]. He also says *You shall not commit foul sins, whether openly or in secret* [6:151].

Adultery is equally categorically prohibited in other religions.

It is clear that all religions enforce control over sexual activity. They only permit it within the framework of marriage. They recommend both males and females to abstain from any sexual practices before getting married.

3.6.3 Homosexuality

Homosexuality refers to sexual relations between man and man or between woman and woman. According to religions, homosexuality runs foul of the innate nature, which God created in man and which allows only for heterosexuality (sexual relations between man and woman) within the institution of marriage. Homosexuality is widespread, and accepted in some societies, where it is claimed to be inherent or hereditary and not a chosen lifestyle. Indeed homosexuals no longer feel ashamed to admit it, and many mothers and fathers accept the sexual behaviour of their sons and daughters as a matter of fact. Homosexuals even call for their "right" to legally marry their partners (man and man or woman and woman), and some churches in some countries give their blessings to such marriages. Furthermore, in some countries, homosexuality frequently features in films, arts, poetry and literature in general, and there are civil societies and organizations fighting hard for "gay rights".

The disease AIDS first came to prominence among male homosexuals and then spread to the heterosexual population. This seems a vindication of the Prophet's ﷺ pronouncement: "Never has the indecent act spread among a people who condoned it without the onslaught of the plague and the sorrows unknown to their perishing ancestors."⁴²

⁴² Narrated by Abdullah bin Omar in Ibn Maja

Indeed, one cannot fail to wonder about the innocent victims of AIDS: the fetus or newborn baby catching HIV during pregnancy or at birth; the chaste wife infected by her promiscuous husband; the patient infected in blood transfusions, surgery or transplants. What sin have they committed?

The answer, as far as one can tell, and only God is omniscient, finds its resonance in a Quranic passage: *Guard yourselves against temptation. The wrong doers among you are not the only ones who will be tempted (and thus suffer). Know (too) that God's punishment is stern* [8:25].

AIDS is a social disease. All society is therefore responsible for preventing it, including individuals exposed to, or afflicted with, AIDS. Prevention therefore calls for measures taken by the individual, like personal chastity until marriage and abstention from extramarital affairs. It also calls for social measures, including the protection of family structures and inculcation of social values; adherence to religious norms and enshrining faith at the heart of social life; fighting prostitution, drug addiction and alcohol abuse; rational control of the media and censorship of promiscuous media practices, both within and outside the community; treatment of sexually transmitted diseases and contributing factors for infection; promoting health education for all members and all institutions in society and encouraging further cooperation between doctors, sociologists and theologians. Perhaps this is the way for society to protect itself and help prevent temptation reaching the guilty and innocent alike.

Islam categorically condemns homosexuality, and in the Quran Almighty God threatened Lot's people by saying: *You lust after men instead of women. Truly, you are a degenerate people* [7:81]. The Prophet ﷺ says: "The worst that I fear for my nation is what Lot's folk have done".⁴³

Likewise, all other religions condemn homosexuality.⁴⁴

⁴³ Narrated by Jaber bin Abdullah in Ibn Majjah

⁴⁴ Timothus 1:9-10 and 1:18-32

3.6.4 Family planning for married adolescent girls

As soon as teenagers are formally committed to enter into a marriage contract, they should receive adequate instruction about contraceptive methods. The parents consent, should, of course, be sought. The purpose of contraception is to delay the first pregnancy until the age of 18 to 20 or beyond and to space subsequent pregnancies. (Section 5.3 covers the subject of contraception in detail.)

Part 4

Questions and events that worry adolescents

4.1 Questions from boys

4.1.1 Biological questions

1. Adolescent boys may wonder why the testicles are held in a special bag (scrotum) outside the body.

Sperms are extremely delicate cells, which are highly vulnerable to any change in temperature. They are produced inside the testicles at 36° Celsius, which is one degree lower than the normal body temperature. Hence, the scrotum maintains this lower temperature as it is situated outside the body. It also functions as a thermal regulator drawing the testicles near to the body in cold weather and holding them away in hot weather.

2. Adolescent boys may ask whether there are a constant number of sperm cells, which are produced at each age, and whether accumulated sperms would drain away completely after each ejaculation.

The production of sperms cells by the testicles does not stop at a fixed age, and there is no fixed number of sperms such cells to be produced at each age. However, infection with sexually transmitted diseases (STDs) or other diseases, such as tuberculocele and epididymis tuberculosis, might affect their production. Carcinoma scroti and other testicular communicable diseases might also affect such production.

It can be noted that several millions of sperms are ejected at each ejaculation, and that the testicles replace the lost sperms within a very short time. However, replacement becomes slower in old age.

None ejection of sperms should not be a worrying matter as extra sperms are let out through wet dreams.

3. An adolescent boy might get worried because one of his testicles is more pendulous or larger than the other.

This situation is quite normal and does not indicate any defect.

4. An adolescent boy might express concern because his penis is small and he fears that he might not be able to satisfy his wife in the future.

Boys differ in the size of their male genital organs as they differ in the size of any other body parts. The size of the erect penis is always enough for complete copulation after marriage.

5. Adolescent boys express concern that as the urethra carries both the urine and the semen there is a possibility that they mix together during copulation.

This cannot happen because the prostate takes care of this function. The prostate tissue usually contracts during times of sexual arousal and prevents access of urine to the urethra at the time of ejaculation.

6. An adolescent boy may be worried because his penis bends at erection.

This case is known as Peyronie disease whereby a small part of the penis becomes fibrous (the absence of one of the erectile muscles). During erection this part does not expand and the penis would bend to either side. This condition can be treated by surgery.

7. One adolescent boy said that he had heard a lot about the bitter enemy of virility (maleness), i.e. impotence (inability to maintain erection), and he asked about the reason leading to such a situation.

Impotence does horrify men. It occurs sometimes without any known reason and continues throughout the whole life. Sometimes, it occurs as a result of certain pathological situations, which have to be treated, or it can be ascribed to particular diseases or, sometimes, to old age. In a few cases it might occur as a result of psychological suggestion by people who claim that they can bring it about on the wedding night (a sort of claimed magic). This, however, is a temporary effect, which will disappear as soon as the affected person recovers his self-

confidence. Villagers usually think that a similar counter action should be taken in this case (through psychological suggestion as well). The most common type of impotence is without known reasons. Many attempts have been made to use mechanical means for maintaining penis erection, and very recently, in 1998, new drugs (injections or tablets such as Viagra), for bringing about erection were placed on the market, although these are still in at the experimental stage, and it is yet to be ensured that they have no side effects. Probably over the coming few years, safe medicines might be available at affordable prices for the treatment of impotence.

8. A married young man heard of drugs that increase sexual potency or desire, and asked about the validity of such a claim.

There are certain chemicals, which are known as “eroticizing stimulants”, claimed to increase sexual potency. However, this is a subject of medical research, and a physician should be consulted to decide whether there is a need for such a stimulant, and what kind of herb or chemical should be used.

A similar query was made about drugs that prolong the duration of sexual pleasure.

4.1.2 Questions about virginity and pregnancy

9. A young man narrated a story of a man who divorced his wife on their wedding night because what is known as “the blood of honour” did not come out of the hymen membrane. The young man asked if this behaviour was justifiable.

The behaviour was not justifiable, as there are cases where no such blood comes out despite the fact that the wife bride has always maintained chastity:

- some girls are born without a hymen membrane; therefore, no blood comes out at the first intercourse on wedding day;
- some hymen membranes are of an elastic nature, and they expand instead of rupture at the first wedding intercourse, hence, no blood comes out;
- certain hymen membranes have too wide orifices to cause blood coming out at the first wedding intercourse;

- sometimes, the rupture of the hymen membrane at first intercourse brings about but a few drops of blood, insufficient to stain the cloth used for this purpose.

Therefore, the husbands should consider carefully before behaving stupidly.

10. A would-be-married young man, who came from the countryside where the tradition is that, on the wedding day, a woman (perhaps a birth attendant) should rupture the hymen membrane, or even the husband himself should rupture it with his own fingers, asked whether this act is imperative for him.

No, such an act is not necessary. It is even a backward, inhuman and uncivilized act. A wedding night is the first occasion at which the wedding couple are totally alone together, therefore, it should not be made a night of terror. The hymen membrane must not be ruptured by another woman or by the husband's fingers. Doing this might well cause a rupture of the vagina wall accompanied by massive haemorrhage. Nicety, patience and tenderness at copulation form a good start to a permanent matrimonial relationship.

11. The question was asked whether a girl can get pregnant while the virginity membrane remains intact.

This is possible because any droplet of semen that reaches the vagina can lead to pregnancy. However we should never forget that religion does not permit practising any kind of sexual activity outside the framework of marriage.

12. An adolescent asked if a girl can get pregnant without copulation.

This is possible because any droplet of semen that reaches the vagina can lead to pregnancy. However, we should never forget that our religion does not permit practising any kind of sexual activity outside the framework of marriage.

4.1.3 Questions about sexually transmitted diseases

13. Can an adolescent boy be infected with an sexually transmitted disease (STD) because of having a sexual relationship with a girl who looks clean and healthy?

Sexually transmitted diseases might be latent (asymptomatic), especially in females. They can infect males, as well and they can cause serious complications to females, even if they are asymptomatic. The ideal protection against sexually transmitted diseases is maintaining chastity until the time of marriage. A droplet of semen reaching the vagina of the girl might not only cause pregnancy, but could also infect the girl with sexually transmitted diseases.

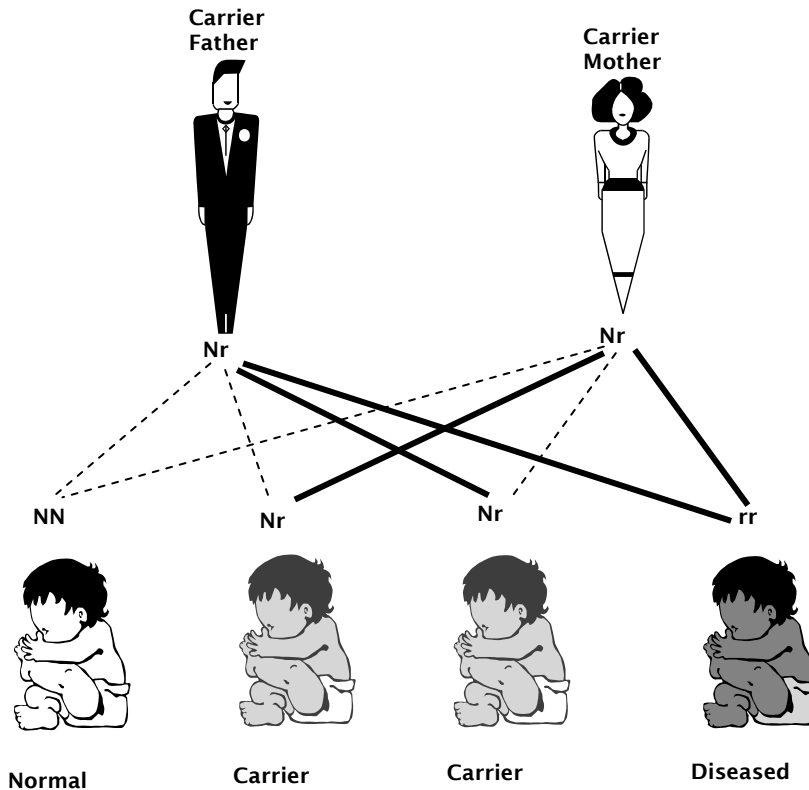
14. An adolescent boy argues that the progress being realized in medicine so far can cure all sexually transmitted diseases.

This is a totally wrong and destructive conviction. First, there are, at least, three well-known, serious sexually transmitted diseases which cannot be cured so far, AIDS, herpes and viral Hepatitis B. Furthermore, sexually transmitted diseases can cause grave harm before they are detected and treated. Thirdly, the treatment of a disease like AIDS takes a very long time, and requires the administration of highly expensive drugs throughout the remaining portion of the patient's life without any guarantee that they will bring about complete recovery. Furthermore, it is quite true that "a dirham of prevention is much better than a quintal of cure" –if there is a cure!

4.1.4 Questions about marriage between relatives

15. A young man got engaged to a direct cousin (the daughter of his father's full brother). However, it is known that the whole family suffers from sickle cell anaemia He is afraid that their future children might be vulnerable to this family disease.

Homogamy is quite common in the Eastern Mediterranean Region. The girl is right in being afraid of begetting children who would be vulnerable to sickle cell anaemia. Medical research has revealed that certain hereditary diseases and situations are common in marriages between relatives, especially when such marriages are repeated among kin and cousins from grandfathers/mothers to grand children. All such diseases occur as a result of marriages between couples carrying recessive pathological genes. However, if such genes exist in one parent only, the children will not get the disease but they will be



N = normal

r = recessive abnormal gene

From the family tree it is apparent that each offspring has:

- a 25 % chance of being normal (NN);
- a 25 % chance of being affected (rr)
- a 50 % chance of being carrier of the recessive abnormal gene (Nr), like the parents
- Should the carrier son or daughter marry a carrier spouse the same risk of transmitting the disease to the next generation occurs.
- Close to 1000 conditions are inherited recessively and are usually more severe than the conditions transmitted dominantly. Examples include the following:
 - Cystic fibrosis.
 - Phenylketonuria (PKU) a deficiency of an essential liver enzyme.
 - Sickle cell anaemia.
 - Thalassaemia, a blood disease

Genetic defects occurring within consanguineous marriages are of the recessive variety.

Figure 7 Consanguineous marriages and genetic diseases

carry those harmful genes. Figure 7 indicates the increasing possibility of begetting infected children among couples carrying the recessive pathological genes.

Meanwhile, we should emphasize that Islam does not prohibit marriage between cousins. God Almighty says in the Holy Quran: Prophet ﷺ, *We have made lawful to you the wives to whom you have granted dowries and the slave girls whom God has given you as booty; the daughters of your paternal and maternal uncles and of your paternal and maternal aunts* [33:50]. The Prophet ﷺ himself approved the marriage of his daughter Fatima to his cousin Ali. This, however, took place within a family that had no harmful genes. Hence, we conclude that if there is a hereditary disease in the family, or if the family has a sickly or weak child, then the family should be advised to ban marriage among its members. Such advice falls under the general Islamic rule: “No harm is to be done to oneself or to others”. When Caliph Omar Ibn Al-Khattab noticed that members of Bani Al-Sa’eb tribe were begetting sickly and weak children because of intermarriage, he ordered that such marriages should be stopped and that they should seek marriage to members of other tribes, in order to protect their offspring. He said: “seek foreign spouses rather than exposing yourself to having sickly offspring”.

4.1.5 Questions about male preference

16. A young man was married for eight years during which his wife gave him a female child, which caused him a great deal of disappointment. Then they had a male child, which changed his attitude completely. The father became very proud of the boy; he showed much more interest in and care of his son than he did to his daughter. He did so, because he thought that that was the tradition and he had to follow.

These traditions are wrongful and have no legal ground. The holy Quran severely condemns those who prefer male children to female children. The prophet ﷺ rebuked one of his companions who kissed his son and seated him in his lap, and when his daughter came

dismissed her and turned away his face from her. The Prophet ﷺ said angrily: "You must treat them equally".

17. A man of 28 was married for eight years with three daughters. He blames his wife for not being able to give him a male child.

Preferring to have male children is a common tendency among most cultures. In most cases, the wife is the one blamed for begetting female children. Scientifically speaking, this is absolutely wrong, as the husband and not the wife is responsible for the sex of the child. The husband's sperms are not all of one kind; if a female sperm fertilizes the ovum then the baby will be a girl. The husband might continue to have female children, even if he remarries.

4.1.6 Questions about family planning

18. A married adolescent wants his wife to delay her first pregnancy until she is 20 years old or over; and he thinks that the traditional methods in this respect are as useful as the modern ones, while they cost nothing and cause no such complications that pills and other modern methods are said to cause.

Traditional methods were better than nothing when there were no other medically developed modern ones. Those traditional methods included ejecting semen outside the vulva, seeking the safe period and using a piece of cloth as a uterus para-cervical block. Such methods, however, are not proven to be totally secure and their failure rate is quite high. Meanwhile, modern methods are numerous and their contraceptive effect is much stronger, i.e. their failure percentage is low.

19. A married adolescent male thinks that early conception would save him pressures by his mother and his mother-in-law.

This would mean early pregnancy for the adolescent wife, which is very dangerous. This danger gets greater the younger the wife is below the age of 20, and is worst at the age of 16. Despite the fact that the adolescent girl becomes capable of conception as soon as she reaches puberty, her body is not be capable of maintaining a safe pregnancy and giving birth to a child before the age of 18–20. The danger threatens both the mother, who might die because of

pregnancy or delivery, and the child who might die during delivery or during its first year of life. However, there is no harm in marriage between 16 and 18, but pregnancy should be postponed until after the age of eighteen. Therefore, the family should not exercise pressure upon their married children for childbearing before the proper age, preferably about 20.

20. A young husband thinks that family planning is the exclusive responsibility of the wife, because she is the one who gives birth to the children.

This idea is unjustifiable and wrong. Family planning is a common responsibility shared by the husband and the wife, as they should decide together the proper time for childbearing, and agree on proper methods for contraception. Although many of those methods are related to the wife, some of them are the responsibility of the husband, such as condoms, coitus interruptus and seeking the safe period for intercourse. A pill is now being developed for the husband to take, and is expected to be added to the list of contraceptives.

21. A young couple are planning to get married. They wish to cooperate in pregnancy planning in order to minimize the risks of childbearing. They have heard of mothers who died because of reasons related to pregnancy, delivery or puerperium (postpartum period), known as maternal death. They have also heard that bad reproductive patterns (too early pregnancies, too late pregnancies, too close pregnancies or too frequent pregnancies) lead to begetting unhealthy children, most of which may not survive their first year (infant mortality).

Such bad patterns lead to the decrease of the intelligence quotient among children. This has been confirmed by an international study undertaken in several countries in the area including Egypt, Muslim areas of India, Islamic Republic of Iran, Lebanon, Pakistan, Syrian Arab Republic, and Turkey.

The following are the main requirements for achieving reproductive health and establishing a healthy family:

1. There should be medical examinations before marriage for the exclusion of any unapparent physical or hereditary disorder. In most cases, such disorders are either treatable or correctable.
2. They should obtain necessary counselling on family planning as soon as the marriage is contracted. Such counselling can be sought from a specialized physician or at a family planning clinic.
3. They should delay the first pregnancy until the age of 18, or even better, the age of 20 (see: adolescent girls' pregnancy).
4. They should obtain pre-pregnancy care and counselling once the couple decide to have a baby, as this helps to rectify any impairment and secure advice needed about psychological and physical preparations necessary for the pre-planned pregnancy;
5. Once pregnancy is confirmed, they should obtain and secure the following:
 - a. antenatal care (during pregnancy) and the father might need psychological counselling;
 - b. perinatal care by a trained midwife or a physician;
 - c. postnatal "mother care";
 - d. postnatal "neonatal care".
6. If it is imperative to avoid smoking and drug abuse by everybody, it is even far more imperative during pregnancy. It is also essential to investigate any flu-like disease so that the fetus can be protected against certain congenital defects. Mothers should be immunized against tetanus in order to pass necessary antibodies on to the fetus for protection.
7. Breast-feeding is the most favourable method of infant feeding throughout the first six months at least. The Holy Quran recommends breast-feeding for "two whole years if the parents wish the sucking (breastfeeding) to be completed" [2:233]. The infant can be given supplemental food at 3–6 months of age.
8. Pregnancy spacing at intervals of about three years each is necessary. A spacing interval, however, should not be less than 30 months. God says: "Man...is born and weaned in thirty months" [46:15].

9. Periodic testing of vaginal smears is quite necessary for a married woman in search of any pathological symptoms, especially cervix-uteri (neck of uterus) cancer.
10. A married woman should be taught how to carry out self examination of the breasts for early detection of possible lumps and/or cysts.

She should stand against a mirror looking carefully at both breasts and notice any abnormal signs, such as the exit of any discharge from the nipples, shrinkage (retraction) of the nipples or breast rhitidosis (skin wrinkle).

She puts her hands behind her head pressing forward, then puts her hands on her hips and slightly bows towards the mirror, pushing her shoulders and elbows forward. Meanwhile, she pays attention to any new changes in the shape of either breast. If she does notice such changes, she should carefully palpate and compare both breasts.

She raises her left hand up, and examines the left breast using the fingers of her right hand. She starts from the outside edge inward, pressing with her fingers in small circles until she reaches the inner edge of the breast. She should not forget to examine the areola area, as well as the area between the breast and the arm. She should take notice of any abnormal subdermal lumps and then press the nipple gently taking notice of any abnormal secretions. The same procedures should be repeated for examining the right breast.

The woman lies on her back on a tough hard, even surface, placing her left arm beside her head, and with a pillow under her left shoulder. She then examines the left breast in a circular movement, as indicated before, searching for abnormal subdermal lumps. The same should be repeated for the right breast.
11. When a married woman is 40, or even before, she should stop getting pregnant, to avoid possible risks, and to prevent illnesses that might befall children born to elderly wives, especially mental retardation.

12. Every woman between 40 and 50 should have a mammogram. This is more imperative in families with a history of breast cancer. Such mammography should be repeated periodically above the age of 50.
13. Husbands should carry out self-examination of the testicles. This is done by rotating each testicle with the fingers to detect any possible lumps of the size of a pea or a chickpea.

4.1.7 Questions about infertility

22. A young man who is over 25 with 5 years of infertile marriage blames his wife for not having children.

This is a case of possible infertility, which affects about 10% of spouses. To deal with such a frustrating situation, there are five principles that should be taken into consideration.

1. The wife is responsible for about 40% of infertility cases, a further 40% is the responsibility of the husband and the remaining 20% is either the common responsibility of both, or due to unknown reasons.
2. All cases of infertility should be carefully investigated, and both the husband and the wife should be subject to clinical and laboratory examinations, in order to find out the reason and treat it. This is far better than placing responsibility on either side.
3. Many infertility reasons for infertility are treatable.
4. In the light of the current advances in medical and genetic technologies, there are certain methods to help bringing about fertility, such as:
 - a. medicinal treatment;
 - b. artificial insemination;
 - c. test-tube babies.

In the latter two methods, only sperms taken from the husband and ova taken from the wife should be used.

Religion prohibits making use of donors, sperm banks, or frozen sperms of the husband, after his death or after divorce.

Religion also prohibits surrogate motherhood.

A great amount of psychological and family counselling is needed to address the problem of infertility. However, some husbands and wives accept the problem as their fate while some others do not.

4.1.8 Questions about family diseases

23. An adolescent boy read somewhere that cancer of the scrotum (testicular bag) is more common among young males than among older males.

This is true as the rate of scrotum cancer is double the rate among youth than among those who are 35 and older. Nevertheless, it is a very rare disease. A monthly self-examination is useful in early detection of the disease. One has only to look carefully at the scrotum and roll it with the fingers. If there is a pea-like elevation the doctor must be consulted immediately.

24. An adolescent boy is worried because his father died from lung cancer and he read that lung cancer is more common among males than among females.

The latter statement is true, as lung cancer is a key reason for death among males in most countries because the smoking rate among males is higher than among females. However, occurrence of the disease among females in the United States has significantly increased in recent years. It has become equal to or exceeded the rate of breast cancer. This is because women there smoke as heavily as men.

However, hereditary occurrence of lung cancer is not proven. Practically speaking, if the adolescent is not a smoker, he should be quite safe as long far as lung cancer is concerned. It is very rare that lung cancer occurs in a person who does not smoke.

25. A boy from a family known for common male baldness expresses deep concern that he might suffer baldness as well.

This case is known as male-pattern baldness, which occurs only in males. This type has a hereditary trend. However, it should not be a source of embarrassment at any rate, as most of the world's prominent intellectual men are bald. The same rule applies to early greying,

which does not mean early senility. Old age can affect hair pigment cells without affecting the rest of the human body.

26. The father of an adolescent boy died because of coronary heart disease. The boy was told that he would have the same disease as his father had.

Genetic factors have a significant role in the occurrence of coronary heart disease occurrence, which means that there is an increased risk of probable inheriting of the same disease by other members of the family. However, this does not mean that the son will inevitably have such a disease. There are a number of risk factors, which can be avoided to limit the possibility of suffering the same disease.

This can be achieved by observing the following:

1. a proper lifestyle, including reduced fats and lean meat intake, having more fish at main meals, avoiding smoking and above all, regular physical exercises;
2. treating high blood pressure;
3. treating diabetes;
4. avoiding or controlling stress;
5. carrying out medical examinations on a regular periodic basis, especially after the age of 40, including electrocardiography;
6. early treatment of coronary heart disease, as soon as it is diagnosed.

At present, there are several medical treatment systems in this area, as well as surgical interventions in advanced cases.

4.1.9 Questions about rebelling against parents

27. As a result of peer effect, an adolescent boy thinks that he should not obey authorities, including the authority of his parents who constrain him with their orders and interdictions. In fact, he and his peers are deceived by the western pattern of sexual freedom as “romantically” presented in cinema, television, pornographic magazines and other media. Under the circumstances, he and his peers are dissatisfied with the restrictions imposed upon them.

In the Eastern Mediterranean Region, family traditions and values represent the essence of our society and culture. We should be

proud indeed of our culture and our heritage, as they are our most precious assets. Our youth are the guardian angels of our cultural future. Parental disobedience is quite strange to our culture and traditions; we should never allow it to build up. Meanwhile, parents should discuss various matters with their young and adolescent children; make them have confidence in them; encourage them to express themselves forthrightly; prepare them well during puberty for the next stage of physical, psychological and sexual development; unreservedly discuss with them their sexual characteristics and lifestyles; protect them against exciting and erroneous information acquired from their peers or from the street in general and assure them of the real worth of their social values. If the parents are short of knowledge, they may ask knowledgeable instructors and scholars. It is hoped that these publications of the Regional Office for the Eastern Mediterranean are of substantial benefit in this respect.

4.2 Questions from adolescent girls

4.2.1 Biological questions

1. An adolescent girl after puberty notices fine hairs around the nipple, and is afraid of becoming a male.

Fine hair around the nipple is normal

2. A girl notices that one of her breasts is larger in size or lower in position than the other.

This is normal

3. A girl notices that her breasts are smaller than some other girls and thinks she is not going to grow up.

Some girls have small breasts and some have large breasts. This is as normal as some girls being short and some being tall.

4. A girl says she gets wet or sexual dreams and feels she is becoming a bad girl.

Wet or sexual dreams are normal and some girls have only a few while some girls have many.

5. A girl gets a discharge from the vagina, which is whitish or yellowish in small amounts. She is scared that something is wrong.

This is normal for girls and is a result of the vagina trying to cleanse itself. However, if the amount is heavy or if the colour is darker and is accompanied with bad odour, then this could be an infection and medical help should be sought, especially if there is pain on urination or pain in the vagina or in the lower abdomen. If it happens that the girl was exposed to sex with or against her will and develops the above symptoms with or without other symptoms like sores, then it could be a sexually transmitted disease (STD) and medical help is a must to avoid the possibly terrible consequences. (See Table 7 on sexually transmitted diseases)

4.2.2 Questions about menstruation

6. A girl learns about menstruation only when she gets her period. She is shocked, scared and confused at what is happening.

A basic duty of a mother is to inform her daughter about menstruation or menses. Girls should not be kept in ignorance about menstruation until they start menstruating. They should be informed that menstruation is normal for women and prepared and equipped with procedures of how to handle the blood flow and keep going to school.

7. A girl notices that her periods are often preceded by severe pain in the abdomen, cramps, bloating, discomfort, headache and sometimes vomiting. Pain in the breasts also occurs. She agonizes over her condition.

Some girls have these symptoms prior to a few or many of their periods. This is called premenstrual symptoms or syndrome (PMS). If they are too severe and are repeated often, medication should be used under the supervision of a doctor or school nurse.

8. A girl has heavier periods than she is used to, and is worried about whether this is normal or whether it means that something is wrong.

Some girls have heavier periods than other girls. Some also have occasional heavier periods than they are used to. In that case, and when this is accompanied with bad odour, there may be infection and medical help should be sought.

9. A girl is afraid to take baths during menstruation.

She should take baths during menstruation. Of course there is also the ritual bath after menses required by *sharia*.

10. A married girl thinks that she can not get pregnant from intercourse during menses.

She is wrong on two accounts. Firstly, it is prohibited by religion to have intercourse during menses, and secondly, she can get pregnant if the ovum is still viable and is fertilized by a sperm.

11. Girls who are fond of imitating girls from industrialized countries may be tempted to use tampons during menses to absorb the blood.

This is very dangerous. Tampons should be avoided specifically by virgin girls. The tampon is a roll of soft material inserted into the vagina during menses to absorb the blood, but it may tear the hymen.

4.2.3 *Questions about female circumcision*

12. A girl is horrified at an early age from what she hears about female circumcision producing pain and bleeding, but she is told that this is the *sunna* and tradition.

One of the most horrifying experiences young girls and female adolescents have to undergo in some African countries of this Region is genital mutilation. This means the removal of parts of the external genitalia of the female, including all or parts of the clitoris which contains sensitive nerve endings. The degree of mutilation depends on local practice and can result in psychological and physical trauma for girls, besides cutting down their sexual enjoyment after marriage. More drastic forms of mutilation, such as infibulation, have serious health and obstetric consequences. Female circumcision bears no proof of religious sanction and should be prohibited. It is a tribal, pre-Islamic practice seeking to change or mutilate God's own creation, prohibited by God Himself and by the Prophet ﷺ. [See *Islamic rulings on circumcision*. The Right Path to Health. Health Education through Religion Series No. 5. Alexandria, WHO Regional Office for the Eastern Mediterranean, 1996.] It is worth mentioning in this respect that this harmful practice does not exist in most Islamic countries but

is exclusive to some African countries in the Region and to some other African societies with Christian or heathen majorities.

4.2.4 Questions about adolescent pregnancy

13. A girl is persuaded or forced to have "external" sexual contact without penetration and thinks that this is safe.

Religion prohibits this act; in addition, it is very dangerous. The occurrence of menses means that the girl is physically prepared for pregnancy. She can get pregnant without penetration if a drop of semen seeps into her vagina during "external" sex; a drop of semen contains millions and millions of sperms. Only one sperm is needed for a pregnancy to take place by reaching and penetrating the ovum excreted by the ovaries every month. In addition, she can also be infected with sexually transmitted diseases during such sexual contact; therefore, Islam prohibits any premarital sexual practices.

14. A girl calculates the timing of ovulation and may be persuaded or forced into having sex during what is called the "safe" period.

In addition to being religiously prohibited this is medically wrong for three reasons:

- a girl should never have sex before marriage;
- the "safe" period is not accurate and the girl may still get pregnant;
- the girl can be infected with sexually transmitted diseases.

15. A girl who has not yet had her first period (but is close to having it) thinks that pregnancy cannot occur until her periods start and she has seen the blood.

This is not necessarily true. She can get pregnant just before the start of the first period, if sperms reach her vagina and an ovum has already been excreted. The same thing applies to a girl who thinks that pregnancy cannot occur the first time she has sexual intercourse or if she only has sexual intercourse once. In these cases not only can pregnancy occur, but also sexually transmitted diseases can be contracted as well. Anyhow, let us not forget that sex outside wedlock is religiously prohibited.

16. A girl thinks that as long as she is a virgin she cannot get pregnant unless there is penetration.

She can get pregnant as explained above (Item 13).

17. A girl thinks that pregnancy can only occur in the uterus and that as long as the uterus (and abdomen) does not enlarge there is no pregnancy.

Pregnancy occasionally occurs outside the uterus e.g. in the fallopian tube connecting the uterus and the ovary or somewhere else (called ectopic pregnancy). In that case, the uterus does not enlarge but there are symptoms of growing pressure on the tube, which may burst and cause an emergency risk to life. If discovered early, the emergency may be avoided. If both tubes are subjected to ectopic pregnancy, the woman becomes infertile. Fortunately, this is not a common type of pregnancy and occurs only occasionally. Noticeable uterus enlargement often takes place as late as the second trimester of pregnancy, especially in the first pregnancy.

4.2.5 Questions about virginity

18. A girl is at the menarche age (12–13 years) and has the symptoms of a period but blood does not appear. This is repeated at the same time a month later and so on. She feels pain in her lower abdomen when touched. She is scared that something is wrong. Her abdomen looks as if she is at the first stage of pregnancy.

This is very rare but can occur. Some girls are born with a hymen that has no orifice and prevents menstrual blood from flowing down month after month. Once something like that happens, medical help should be sought and a small slit in the hymen will let the accumulating blood flow down.

19. A girl is active in heavy sports and is afraid or is told that her hymen may get torn.

This is correct. The hymen is a delicate sheath at the opening of the vagina and is the sign of virginity. It can get torn with repeated heavy physical activities and sports. It can also get stretched. This should in no way be used as an excuse for the girl to become sexually active.

20. A girl who is about to get married is scared by the horror stories circulated in the Region about the wedding night, the defloration and the absence of honour blood.

The horror stories may be true with the continued resort to old traditional methods such as finger defloration, which may lacerate the vagina, or defloration by the *daya* (midwife) which increases haemorrhage. These practices should be categorically abandoned and the first night of a long life together should not be marred with pain and psychological horror. As to the honour blood, it should occur in the majority of cases with regular intercourse. If this pre-Islamic tradition is to be observed, a few drops of blood, rather than haemorrhage, will do. In rare occasions, the girl is born with a hymen that is stretchable or she may be born without a hymen at all. In these cases blood will not appear.

21. A girl is concerned that she and her husband will not be able to have sexual intercourse on their wedding night.

These and similar horror stories and malicious suggestions (sometimes involving the use of magical tactics) may result in a psychological and temporary impotence on the first night. The girl should be patient and the boy should be reassured that he is normal.

4.2.6 Questions about sexually transmitted diseases

22. A girl thinks that through the advances in medicine all sexually transmitted diseases can be cured.

This is wrong. Several of the major sexually transmitted diseases such as AIDS, herpes and hepatitis B are not yet curable. In addition, some sexually transmitted diseases can be treated, but they have complications before being treated. Syphilis and gonorrhoea might cause permanent infertility. Even curable diseases are not treated by some people due to ignorance or in order to avoid scandal.

23. A girl who is sexually active (against societal values) may think that she is safe from sexually transmitted diseases as long as she has no symptoms.

She is wrong. Girls can be infected with sexually transmitted diseases without her or her partner showing symptoms, and they can develop

serious complications from sexually transmitted diseases. They can also transmit the diseases to a sexual partner. This is the most dangerous unmarked source of sexually transmitted diseases. Abstinence until marriage is the best protection from sexually transmitted diseases.

4.2.7 Questions about family planning

24. A married girl under the age of 20 thinks that the earlier she has a child the better.

Teenage pregnancy is very risky; the lower the age below 20 years the higher the risk. The highest risk occurs for girls under 16–18. The reason is that, while the ability to get pregnant occurs with the start of puberty, the ability of the body to sustain a healthy pregnancy and the birth of a healthy child is delayed until the age 18–20. The dangers are for both the mother (who may die because of the pregnancy or labour) and the child (who may die at birth or during the first year). Marriage can occur at 16–18 years, but pregnancy should be postponed until after 18 years.

25. A married girl thinks that if she douches well after sex, she cannot get pregnant.

That is risky. Douching does not completely wash out all the sperms. Since sperms are present in the vagina in millions, it is easy that several may remain after douching. Only one sperm is needed for pregnancy.

26. A married girl who wants to postpone her pregnancy thinks that the traditional methods are as good as the modern methods while they are without expense and without the complications rumoured about the pill and other modern methods.

The traditional methods were better than no method when there were no medically developed modern methods. Traditional methods include withdrawal (i.e. ejaculation outside the vulva), “safe” period, breastfeeding, use of a cloth to close the orifice of the uterus and use of local medications in the vagina. These traditional methods are not certain to prevent pregnancy. They fail most of the time or are accompanied with inconvenience. There are many modern and more

effective methods of preventing pregnancy, i.e. with only a small percentage of failure.

27. A 17 year old girl is engaged to be married. She and her husband want to plan their family properly and in such a way as to minimize reproductive risks. They have heard about mothers who die because of causes related to pregnancy, labour or puerperium (maternal mortality). They have also heard that poor reproductive patterns (early or late pregnancies, close pregnancies or too many pregnancies) result in sickly children, many of whom may not survive the first year of life (infant mortality). Such poor patterns result in children with low intelligence quotient (I.Q).

The following are the main requirements for achieving reproductive health and establishing a healthy family.

1. Medical examination before marriage for the exclusion of any unapparent physical or hereditary disorder. In most cases, such disorders are either treatable or correctable.
2. Obtaining necessary counselling on family planning as soon as marriage is contracted. Such counselling can be sought from a specialized physician or at a family planning clinic.
3. Delaying the first pregnancy until the age of 18, or even better, the age of 20. (See: Pregnancy during adolescence).
4. Obtaining pre-pregnancy care and counselling once the couple decide to have a baby, as this would help to rectify any impairment and secure needed advice about psychological and physical preparations necessary for the pre-planned pregnancy.
5. Once pregnancy is confirmed, they should obtain and secure the following:
 - Antenatal care (during pregnancy). [The father might need psychological counselling];
 - Perinatal care by a trained midwife or a physician;
 - Postnatal "mother care";
 - Postnatal "neonatal care".
6. If it is imperative to avoid smoking and drug abuse by everybody, it is even far more imperative during pregnancy. It is also essential to investigate any flu-like disease so that the fetus

can be protected against certain congenital defects. Mothers should be immunized against tetanus in order to pass necessary antibodies on to the fetus for protection.

7. Breastfeeding is the most favourable method of infant feeding throughout the first six months at least. The Quran recommends breastfeeding for two whole years. The infant can be given supplemental food at 3–6 months of age.
8. Pregnancy spacing at intervals of about three years each is necessary. A spacing interval, however, should not be less than 30 months. God says: *His bearing and weaning shall be thirty months* [46:15].
9. Periodic testing of vaginal smears is quite necessary for a married woman in search of any pathological symptoms, especially the cervix-uteri (neck of uterus) cancer. She should learn self-examination of the breasts for early detection of lumps and cysts.
10. At 40 or sometimes earlier, she should stop childbearing to avoid risks to herself and ill health for children; particularly mental retardation.
11. Between 40 and 50, every woman should have a baseline mammogram. This is more crucial if there is a family history of cancer of the breast. After 50, mammography should be done periodically.
12. The husband should have monthly testicular self examination by rolling each testicle between fingers to detect any lump or pea-like elevation.

4.2.8 Questions about infertility

28. A girl is worried about her sister who has been married for seven years without having children. Her husband is accusing her of being barren and unfit to beget children. He may take another wife to get a child.

This is a case of possible infertility, which affects about 10% of spouses. To deal with such a frustrating situation, there are five principles that are to be taken into consideration.

1. The wife is responsible for about 40% of infertility cases, the husband for 40% and the remaining 20% is either the common responsibility of both, or due to unknown reasons.
2. All cases of infertility should be carefully investigated, and both the husband and the wife should be subject to clinical and laboratory examination, in order to find out the reason and treat it. This is far better than placing responsibility on either side.
3. Many reasons for infertility are treatable.
4. In the light of the current advances in medical and genetic technologies, there are certain methods to help bring about fertility, such as chemical treatment, artificial insemination, test-tube babies and genetic engineering, subject to conditions outlined in *sharia*. In the latter two methods, only sperms taken from the husband and ova taken from the wife should be used. Religion prohibits making use of donors, sperm banks, or frozen sperms of the husband, after his death or after divorce. Religion also prohibits a woman from carrying inside her body the embryo of another woman (surrogate motherhood).
5. A great amount of psychological and family counselling is needed to address the problem of infertility. However, some husbands and wives accept the problem as their fate (by God), while others do not.

4.2.9 Questions about marriage between relatives

29. A girl is named to marry her cousin. The family is known to have a serious problem of sickle cell anaemia. She is afraid that her children are at risk of developing that family disease.

Marriages of this sort are called consanguineous or blood-related marriages, and are common in the Eastern Mediterranean Region. The girl's fear of having children at high risk of getting sickle cell anaemia is justified. Modern medicine has found that conditions for certain genetic diseases prevail in consanguineous marriages, especially if this is repeated by grandparents, parents and grandchildren marrying their cousins. All these diseases result from the marriage of two carriers of the abnormal genes. The genes are

called recessive because if only one parent carries them and the other is normal, no disease results among their children, although some of the children may become carriers of the harmful genes. With inbreeding (or marriages between cousins) in these families, the probability increases of a marriage between two carriers leading to affected children. This is demonstrated graphically in Figure 7.

It is to be emphasized, however, that marriage between cousins is not prohibited in Islam, God Almighty said: *Prophet ﷺ, we have made lawful to you the wives to whom you have granted dowries and the slave girls whom Allah has given you as booty, the daughters of your paternal and maternal uncles and the daughters of your paternal and maternal aunts* [33:50]. After all, the Prophet ﷺ allowed his daughter Fatima to marry his cousin Ali; but this was in a healthy family free from abnormal genes. However, if genetic diseases occur in the family or if puny or weak children are borne, the family is well advised to disallow intermarriages within the family. This medical advice can come under the general rule of “do not harm yourself or others”. It is also reported that Caliph Omar noted that the tribe of Al-Sa’ib produced puny or weak children through inbreeding in the tribe. He reprimanded them and asked them to marry members of tribes other than their own to protect their children.

4.2.10 Questions about giving birth to girls only

30. A girl is worried about her sister who has been married for 10 years and who has given birth to four girls, and no sons. Her husband’s family, especially the mother-in-law, is trying to persuade the husband to take another wife in order to have a son.

A preference for sons is a part of almost all cultures. The wife is always blamed for bearing only girls but this is scientifically wrong. The husband, rather than the wife, is responsible for the sex of his children. Sperms from the husband are not all males or females. There are male sperms and female sperms. If the ovum is fertilized by a male sperm, the result is a son. If, on the other hand, a female sperm fertilizes the ovum, the result is a daughter. Taking another wife by the husband may still result in female children.

4.2.11 Questions about family diseases

31. A girl finds out that one of her aunts has been diagnosed with breast cancer. She has heard that a family history of breast cancer increases her risk of developing it as well.

It cannot be denied that family history of breast cancer increases the risk for other females in the family. However, this is not a common disease and there are precautions to be taken by relatives of a patient, especially close relatives. These include:

- avoid obesity and fatty diets;
- avoid or quit smoking;
- learn how to and practise self-breast examination once every month;
- get a basal mammogram at the age 40 or shortly after;
- get a mammogram every 1–2 years after the age of 50;
- once the disease is suspected, careful medical attention is required. If the lesion in the breast is small, it should be removed with the surrounding tissues (lumpectomy) to be followed by radiation or chemotherapy; precautions also include the surgical removal of the lymph gland in the axilla on the same side. Removal of the whole breast (called mastectomy) is done for larger lesions, followed by radiation or chemotherapy.

Part 5

The five major health concerns of adolescents

5.1 Sexually transmitted diseases (STDs)

5.1.1 The sexual behaviour of adolescents and STD/HIV

The lifestyles adopted by adolescents and youth will largely decide the risk of sexually transmitted disease and HIV infection. It should be understood that these age groups are vulnerable to such infections. For example, ages from 20 to 24 usually have the highest incidence of HIV infection followed by those from 15 to 19 years of age.

There are three profiles of adolescent sexual behaviour in the Eastern Mediterranean Region:

- the first comes from a conservative culture in which adolescents, with family direction, conform to the religious norm of keeping chaste until marriage;
- the second group imitates the decadent behaviour of some American and European adolescents. They have boyfriends and girlfriends, they drink and use drugs and may have premarital sex. This is a small yet increasing group and is exposed to STD and HIV from illegal sexual contacts;
- the third group has a mixed profile; they are not as restrictive as the first group and are not as permissive as the second. They are less likely to be exposed to STD than the second group, but they are at risk nevertheless. Unfortunately, this group is also increasing in number.

It is of utmost importance that girls and boys should learn in some detail the kind of sexually transmitted diseases that can affect adolescents along with their symptoms, complications and curability. Box 2 gives a list of general signs that adolescents should look for

whereas Table 7 describes sexually transmitted diseases in more detail to allow easy reference. Given first are ten sobering facts about STDs for young people.

5.1.2 Ten dreadful facts about STDs

1. STDs are among the curses of humanity. They bring shame and social stigma to persons involved.
2. STDs can affect anyone, male or female, young or old, rich or poor.
3. STDs can result from one sexual contact.
4. STDs can be contracted from apparently clean, educated, well-to-do persons who are infected.
5. Some people infected with STDs may not show symptoms.
6. A person can have more than one STD at the same time.
7. Innocent victims include unsuspecting wives of an infected husband, an unborn fetus infected by the blood of an infected mother, or during birth (gonococcus may cause blindness).
8. So far, no cure exists for AIDS, herpes or hepatitis B.
9. If a girl or boy suspects having been exposed to STDs through mistake or force (rape) she or he must seek immediate and urgent medical and psychological care.
10. If an STD is diagnosed in a spouse, both spouses should be treated, otherwise re-infection will occur.

5.1.3 Recognition of sexually transmitted diseases

<p>Girls</p> <p>Unusual discharge from vagina Blood in between periods Odour Pain in pelvic area between naval and genital area (abnormal cramping) Burning or itching around vagina Pain deep in vagina</p> <p>In both girls and boys</p> <p>Redness, rash, sores, bumps, blisters, warts in or near sexual organs Burning on urination or defecation Itching around genital organs Swelling in the area around sexual organs Flu-like feeling with fever, chills and ache days after intercourse Night sweats Wasting Excessive fatigue Rare pneumonia Unusual skin pigmentation</p> <p>What to do</p> <p>Consult nurse or physician who may require special laboratory tests. The best protection is to abstain from sexual practices before marriage.</p>	<p>Boys</p> <p>Unusual odour from genital area Unusual discharge from male organ Pain and itching in the genital area</p>
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Box 2. Signs of sexually transmitted diseases

Table 7. Sexually transmitted diseases in adolescents

Disease	Look for	What happens if not treated
Gonorrhoea (gonococcus)	2-21 days after intercourse with infected person: <ul style="list-style-type: none"> • discharge from penis or vagina • burning sensation on urination • frequency of urination • cramps in lower abdomen (females) • most women and some men have no symptoms but will develop the complications and infect others • Positive smear + history of exposure 	<ul style="list-style-type: none"> • Infection of reproductive organs leading to sterility in both infected men and women • Mother can infect new-born child • Arthritis • Can cause heart disease • Can cause blindness if gonococcus reaches the eyes • Curable with antibiotics

Table 7. Sexually transmitted diseases in adolescents (cont.)

Disease	Look for	What happens if not treated
Syphilis (spirochete)	<p>*Primary: 3–12 weeks after sex with infected person:</p> <ul style="list-style-type: none"> • painless sores on mouth, on sex organs, on breasts and fingers which last 1–5 weeks then disappear <p>*Secondary: 1–6 months after sores disappear:</p> <ul style="list-style-type: none"> • rash anywhere on the body • temporary flu-like feelings • organ disease which can affect any organ in the body: heart, brain, nervous system, eye etc. • Positive Blood Test + History of exposure 	<ul style="list-style-type: none"> • Mother can infect newborn • Serious complications: <ul style="list-style-type: none"> • heart disease • brain damage • blindness • bone disease • diseases of liver • death • Can infect others through sexual relations or blood transfusion • Curable with antibiotics
Hepatitis B (virus)	<p>1–9 months after sex with infected person:</p> <ul style="list-style-type: none"> • flu-like feeling for prolonged period • fatigue otherwise unexplained • jaundice (yellow skin and eye) • dark urine but light clay stool • Many have no symptoms but can infect and develop complications • Several laboratory tests + history of exposure to sex or infected needles 	<ul style="list-style-type: none"> • Mother can infect newborn • Liver disease • Infection persists for a long time in some patients and may disappear in others • No cure but can be prevented by vaccine
Herpes (virus)	<p>1–30 days after sex with infected person:</p> <ul style="list-style-type: none"> • flu-like feeling or no symptoms • small painful blisters on the sexual organs with itching and burning before blisters appear • blisters last 1–3 weeks • blisters may go away but can come back 	<ul style="list-style-type: none"> • Mother can infect child during birth • No cure

Table 7. Sexually transmitted diseases in adolescents (cont.)

Disease	Look for	What happens if not treated
HIV/AIDS HIV=virus AIDS=disease	<ul style="list-style-type: none"> • Infection through sex with HIV positive person or infected needles or blood products (blood transfusion); mother to child • Several months to several years after exposure: <ul style="list-style-type: none"> • night sweats • unexplained weight loss • obstinate chronic diarrhoea • white spots or thrush in mouth • swollen- painful glands • yeast infection in women • cancerous lesions in skin (Kaposi's sarcoma) • pneumonia, tuberculosis • brain symptoms and dementia • Can be present for many years without symptom • HIV Blood testing + history of exposure 	<ul style="list-style-type: none"> • Very serious results of infection as already mentioned • Almost always fatal • Multiple drugs may be used with HIV positive infection to postpone symptoms (prevention) • Multiple drugs to slow down the disease process (treatment) • Treatment of symptoms as they arise • Treatment of diarrhoea, pneumonia • Patients are ineffective throughout • No cure and no vaccine so far
Chlamydia infection (intracellular organisms)	<p>7-21 days after sex with infected person:</p> <ul style="list-style-type: none"> • discharge from the vagina and watery yellow discharge from penis • bleeding from the vagina between periods • pain on urination • pain in lower abdomen in females (when infection reaches pelvis) • occasionally fever and nausea; • sometimes is silent (no symptoms) but can infect others and can develop complications • Laboratory test + history of exposure 	<ul style="list-style-type: none"> • More serious pelvic infection • can cause infertility in men and women • Can be treated but may recur
Trichomoniasis vaginitis (flagellar)	<ul style="list-style-type: none"> • Itching burning or pain in vagina • discharge from vagina • bad odour or discharge • uncomfortable feelings • trichomonias in man can affect penis, prostate gland or urethra 	<ul style="list-style-type: none"> • Can be treated

Table 7. Sexually transmitted diseases in adolescents (cont.)

Disease	Look for	What happens if not treated
Genital warts (virus)	<ul style="list-style-type: none"> • Appear 1–8 months after exposure as small warts on the sexual organs • itching or burning around genital organs • warts can recur • disfiguring warts • A diagnosis laboratory + history of exposure 	<ul style="list-style-type: none"> • Can be treated

5.1.4 *Acquired immunodeficiency syndrome (AIDS)*

AIDS is a deadly disease, which appeared only in the second half of the twentieth century. The earliest cases were discovered in the USA in 1981, though isolated cases were recorded thirty years before that.

The word AIDS itself is an acronym for acquired immunodeficiency syndrome. Syndrome is the group of symptoms that always appear together; immune deficiency is the absolute breakdown of the immunity system so much so that the human body is completely incapacitated to fight infection; acquired is not inherited but obtained through contracting the virus which causes AIDS. This is called HIV, human immunodeficiency virus, and the term HIV/AIDS is a compound term referring to the infection with the virus and the fully blown symptoms of the disease.

AIDS affects both males and females (though at first it was common among male homosexuals then spread to heterosexuals through sexual relations), rich and poor, the educated and illiterate. It is a global disease transcending geographical and national borders. Until recently, Islam was a substantial barrier against the spread of AIDS but, regrettably, imitation of certain lifestyles present in industrialized countries has made some Muslims more exposed to HIV/AIDS. Still, even now, Islamic countries have the lowest ratio of HIV infection in the world.

The special relevance of AIDS to adolescents and youth

During adolescence and youth, boys and girls are receptive to different trends depending on the influence exercised by various

factors, whether social, economic, cultural, technological, religious, even fundamentalist or extremist. This transitional phase in human life makes youth and adolescents more adventurous and risk-taking so they are more susceptible to behavioural diseases such as AIDS and other STDs.

The problem is that the young are the pillar supporting the future development of their countries, and when they contract such deadly diseases as AIDS, the loss is not only personal but also national and societal.

Although it is known that AIDS affects all age groups, it specifically targets the young. Two-thirds of all AIDS cases occur before the age of 25 (i.e. between 15 and 25) and this is a particularly productive age group in society.

How adolescents and young people get exposed to infection

1. Sexual intercourse between boys and girls is the principal means of contracting AIDS. Prostitutes are a very dangerous source of HIV/AIDS, but the infection is transmitted to all sexually active partners (male and female homosexuals included) of all social classes.
2. Sexual intercourse between homosexuals is a sure way to contract AIDS. The tiny virus, seen only by an electronic microscope, can reach blood vessels through the tiny ruptures in the lining of the rectum and sexual organs. No one can tell whether a partner is infected with AIDS or not, because the patient infects and is infected without showing symptoms of the disease.
3. Infection can occur through blood transfusions, surgery or transplants.
4. Sharing infected needles and syringes, especially by drug addicts who use them frequently without proper sterilization, is a means of infection. Sharp personal equipment like razors or toothbrushes is also a factor.
5. Infection can be sustained inadvertently by medical staff such as dentists, surgeons, nurses or laboratory technicians either by

an infected needle or by wounding themselves with infected scalpels or similar equipment.

6. Infected mothers pass the virus on to their babies through the placenta.
7. A previous STD as well as various sexual partners increases the probability of contracting AIDS.
However, AIDS cannot be transmitted through:
 1. food, drink, speech, coughing or sneezing;
 2. sharing bathrooms, lavatories, swimming pools, etc;
 3. touching or shaking hands;
 4. living within the family or with parents, brothers, sisters, etc. or by sitting next to an infected person at school or in public places;
 5. flies and mosquitoes.

Incubation period

The time needed for symptoms to show up after infection, varies between a few months and years (up to ten years or more). In this period the patient seems normal and healthy though he or she would prove positive in blood tests for AIDS.

Symptoms of the disease

First stage:

In some cases, the patient suffers an initial severe flu-like attack, with fever, sweating, headache, inflammation of the pharynx and joint pains. In some other cases, nothing at all happens during this phase.

Second stage:

This is the latency stage which could last for a few years. As antibodies to AIDS are being created, the patient proves HIV positive in blood tests, practically a life sentence. Still no symptoms appear in this phase, though the patient is a carrier and can pass on the HIV/AIDS infection.

Third stage:

The patient's immune system deteriorates and fails to protect the body against ordinary infections, which do not usually cause serious diseases. Only when the immune system is depleted do these

“opportunistic diseases” surface, including pneumonia, bronchitis, chronic diarrhoea, brain infection and severe loss of weight for no apparent reason. Neck, armpit and groin lymphatic glands get inflamed with severe pains, followed by skin cancer with different shapes and colours of skin spots. Tuberculosis could appear at this stage, followed by gradual amnesia, systematic deterioration of eyesight until complete blindness, general fatigue and depression, then death. Patients become complete burdens to themselves, to relatives, friends, and to the healthcare system and the whole of society.

Is there AIDS in the Eastern Mediterranean Region?

By prohibiting premarital and out-of-wedlock sexual relations, it was believed that Islam would keep AIDS away from Islamic countries. But each society and each religion has its deviants. Islam did actually delay the onslaught of the AIDS epidemic in the Region for six years after it first appeared in America, but, through foreign visitors and infected returnees from industrialized countries, the epidemic started in 1987.

By the end of 2004, the number of patients with HIV/AIDS in the Region had reached 710 500. By world standards this is a low prevalence, compared to other regions. Still, the infection endangers everyone who engages in risky behaviour.

Prevention of AIDS

1. No efficient vaccine has so far been developed for AIDS. Nor are there medications that can cure or prevent it.
2. The best way to protect adolescents and youth is complete abstinence from any premarital and out-of-wedlock sexual practices. This is exactly what Islam, Christianity and Judaism advocate, and it is what every family should also embrace if truly concerned for its sons and daughters.
3. Adolescent boys and girls need serious sexual and religious education, as the present authors are attempting, with the approval and cooperation of parents, teachers and health professionals.

4. The intensive campaigns by the media and the entertainment industry to promote and encourage sex outside the institution of marriage should be ended.
5. Early marriage accompanied by family planning, along with the commitment to married life and its values help prevent AIDS. Pre and extramarital affairs must simply stop.
6. For the prevention of both AIDS and drug addiction, which must also be abandoned, sharing of needles and syringes should be stopped.

Let us remember:

First, that there are 14 000 new infections with HIV every day, globally, and one should try not to be one of them.

Second, that it is easy to avoid infection by abstinent and moral behaviour. We should also remember that when infection does occur it is simply incurable: AIDS is a death sentence in most cases.

Third, that aberration and promiscuity open the door wide for AIDS and other STDs.

Fourth, that drug abuse will eventually lead to injecting drugs and thus to AIDS, through shared needles and syringes, apart from the behavioural risks of under the influence of drugs.

Fifth, that chastity, early marriage, family planning, and the prohibition of premarital and out-of-wedlock sexual relations are the best means of prevention of AIDS.

Finally, that many people link between the AIDS epidemic and the spreading and condoning of promiscuous, shameless, illegal sexual behaviour, referring to the Prophet's ﷺ saying that: "Never has adultery spread in a community that practises it overtly, without being followed by an outbreak of plague and sorrows never known to their forefathers before".⁴⁵

⁴⁵ Narrated by Abdullah Bin Omar in Ibn Maja

5.2 *Pregnancy during adolescence*

5.2.1 *The problem*

The majority of teenage pregnancies in the Eastern Mediterranean Region happen within marriage; however, a few happen, unfortunately, out-of-wedlock.

Pregnancy before the age of 20, and particularly before 18, is considered globally to be “high-risk pregnancy” since it carries higher risks of morbidity compared to pregnancy after that age. This is due to pregnancy-related diseases such as: pre-eclampsia, urinary tract infection, delay in intrauterine growth; dystocia of presentation and position, fetal-pelvic disproportion, premature rupture of membranes, prolapse of the umbilical cord, fetal distress, profuse haemorrhage, vesical vaginal fistula, high maternal mortality, high prenatal mortality of the offspring and low birth weight of the surviving child.

These complications are a result of incomplete growth of the adolescent, poor antenatal care and lack of access to blood transfusion and emergency obstetric care in rural areas and poor yet rapidly growing urban areas.

Pregnancy out of wedlock increases these risks as well as causing the psychological stress of the mother-to-be; the stigma of pregnancy out of wedlock may deter the woman from seeking such antenatal care as is available. Such shame may also cause a new, unmarried mother to abandon her newborn on the steps of a mosque or church, or even to commit infanticide.

WHO estimates that the risk of dying due to pregnancy related causes is almost five times higher for females between the age of 10 and 14 and three times higher for ages 15 to 19 than females aged 20 to 24 (Table 8).

Table 8. Maternal mortality by age per 100 000 live births

Country	15-19	20-24	Ratio
Algeria	205	78	2.63
Bangladesh	860	479	1.79
Egypt	268	155	1.73
Ethiopia	1270	436	2.91
Indonesia	1100	575	1.91
Nigeria	526	223	2.36

Source: WHO, Geneva, 1996

5.2.2 Major risks of pregnancy during adolescence

Adolescence pregnancy is considered a high risk for both the mother and the baby.

There are many effects of adolescent pregnancy:

For married adolescents:

- pregnancy related hypertension
- anaemia and malnutrition
- cephalic pelvic disproportion
- vesicle vaginal and rectal vaginal fistulae
- prolonged labour
- obstructed delivery
- retardation of fetal growth or intrauterine growth
- premature birth
- low birth weight
- perinatal mortality

For unmarried adolescents:

The same problems may occur plus:

- high risk of abortion with attempts to hide it (not declared until later by which time the pregnancy is advanced and of greater risk)
- quitting school (termination of education)
- honour-related measures against the girl
- psychological training

For children born to adolescent mothers:

- premature low birth weight
- not reaching their first birthday
- malnourished, suckling

- infant mortality rate (IMR) is 33% higher for children of adolescents compared to those of 20 years or over
- Low IQ
- poor nutritional status, poor school performance, risk of being abandoned and becoming street children or being caught in a cycle of poverty and delinquency in addition to poor health

For families started by adolescents:

- quitting school because of being pregnant
- more likely to have more children over a lifetime, dependence on parents
- less stable because they are usually arranged marriages without due consent of females

For teenage fathers:

- quitting school to make a living
- low paying jobs

The most dangerous consequences of pregnancy before the age of 16:

- cephalo-pelvic disproportion
- vassal vaginal fistula
- rectal vaginal fistula

Pregnancy repercussions:

- in children below the age of 16 the pelvis size and maturation during pregnancy is still of childhood size
- retardation of fetal growth
- premature with low birth weight
- perinatal mortality

Complications of abortion during adolescence:

- haemorrhage
- anaemia
- septicaemia
- toxoemia
- pelvic infection
- secondary sterility or infertility
- cervical and vaginal laceration
- perforation of uterus or bowel

5.2.3 *The reasons adolescent girls become pregnant before marriage*

- They lack information about reproduction and the ability of a girl after puberty to become pregnant.
- They do not know that one sexual experience is enough for pregnancy to occur.
- They are emotionally high and forget all about pregnancy.
- They believe that unintended pregnancy will not happen to them. It happens only to grown ups or to “bad” girls.
- They do not use any contraceptives thinking that pregnancy is improbable.
- They are deceived into submission by a promise of marriage.
- They are unable to get contraceptives.
- They are under the influence of drugs or alcohol.
- Their peer group pressurizes them into having sexual relations.
- Their peer group dismisses the value of virginity.

5.3 *Family planning for married adolescent girls*

5.3.1 *Questions by adolescent married couples*

1. Does pregnancy during adolescence put the girl at risk?

Yes. If pregnancy occurs before the age of 18, the girl has not yet completed her own growth. In other words, she herself is still a child physically (and probably psychologically and socially as well). A child should not bear a child.

2. Up to what age can the first child be postponed?

The best age for child bearing is 20–34. It may be brought forward to 18 or 19 but never earlier.

3. How can the first pregnancy be postponed?

This can be done through contraceptive methods which can also be used for spacing births and stopping pregnancy after the age of 40 or even earlier.

4. Is family planning permitted by religion?

Yes. The Prophet’s ﷺ companions used to use *al-azl* (coitus interruptus) to prevent pregnancies. By *qiyas* or analogous reasoning, modern methods, which were not available at the time of the Prophet ﷺ, are permissible. All the great Imams of Islam condone

contraception including: Abu Hanifa, Al-Shafei, Malik, Ibn Hanbal, and Imams of the Shiite Schools. Imam Al-Ghazaly allows contraception for health and economic reasons and even for preservation of the beauty of the wife (and now to allow her to complete her schooling is no less important).⁴⁶

5. What contraceptive methods are suitable for young couples?

There are a variety of methods available now to young couples. They can choose the method most suited for them, preferably with the advice of a parent, a teacher, a nurse, a doctor or a family planning clinic. Things to consider when choosing a method are:

- a. its effectiveness (i.e. what are the chances of not getting pregnant while using the method);
 - b. its safety (it has no side effects on health);
 - c. its feasibility (how easy it is to use);
 - d. how both the husband and wife feel about it;
 - e. how often the method is to be used;
 - f. the advantages of the method for the adolescent couple;
 - g. the disadvantages of the method for the adolescent couple.
- (Table 9 compares contraceptives)

5.3.2 Description of contraceptive methods

1. Natural methods

a. Withdrawal (*al-azl*)

This is the method used before modern methods became available. It is still used in parts of Europe and the Middle East. The husband withdraws his penis from the vagina before ejaculation.

This method is not very effective and may interrupt the pleasure of the wife. That is why it is called coitus interruptus (interrupted copulation). That is also why Islam has stipulated that a wife has to give her consent or permission before the use of this method.

b. Breastfeeding

During the first few months of breastfeeding, some contraceptive effect may occur. This is assuming that the mother will

⁴⁶ The Coptic Church allows contraception, but the Catholic Church disallows artificial methods and condones only natural methods like the safe period.

suckle the child at his or her request day and night. Such is not possible for young wives. In addition, its effectiveness is low.

The risk is that if pregnancy occurs during the early lactation period, it is classified as high risk pregnancy coming too soon after the birth of the suckled child. Such a pregnancy will also interfere with the proper feeding of the suckled child and the unborn fetus.

c. **Safe period**

That is the period during which it is supposed that ovulation does not occur. Though this method is a natural one, it is not recommended for the adolescent married couple who want to be assured that no conception will take place for a certain period of time.

2. Spermicides

These are chemicals that can kill the sperms. They come in the form of foam or foaming tablets (*hubub al-aman*), suppositories or film.

3. The condom

This is used by the husband to prevent pregnancy because the rubber bag fitted to the male organ receives the semen and prevents it from reaching the wife's vagina. Spermicides may be used with condoms as an additional precaution. (Condoms are promoted in industrialized societies to prevent AIDS and STDs.) Condoms will fail to provide the desired effect if not used from the very beginning to the very end of the sexual act.

4. The diaphragm (female condom)

This is a small rubber cup designed for the wife to fit around the cervix (opening of the womb or uterus). The size differs according to the individual female and has to be fitted by a physician; spermicides in the form of a cream are used with the diaphragm for better protection.

5. Intrauterine devices (IUD otherwise known as the loop or *al-lawlab*)

These are small, specially shaped devices that are inserted by a physician or nurse through the cervix to fit the shape of the uterus. They are made of plastic, formed like a T-shape or other shapes. Some IUDs also contain some copper to increase its effectiveness. It is

effective for 10 years. The method of action of the IUD is not known for sure.

6. The pill (orally used)

These pills contain synthesized hormones that can impede the ovary from producing an ovum (i.e. prevents ovulation). The monthly supply is 21 pills, one is taken daily for 21 days after the end of menstruation. A physical examination by a physician should be done before prescribing the pill in order to exclude women who are likely to suffer side-effects.

Equally important is that the woman should never smoke while using the contraceptive pill, otherwise side-effects will double or triple. New formulations of the pill are much safer than the old pills.

7. Injections

These are injections containing artificial hormones that are taken once every two months (one kind) or every three months (another kind). The scientific name is Depo Provera.

8. Norplant™ (subcutaneous capsules)

These are six tiny plastic capsules containing artificial hormones, inserted under the skin of the arm by a clinician. It is effective for about five years through slow release of the hormone in the blood stream to inhibit ovulation. If no longer needed, the capsules can be taken out.

Table 9. Comparison of contraceptives

Method	Effectiveness	Safety	Advantages	Disadvantages
Natural: Withdrawal Breastfeeding Safe period	Generally less effective than modern methods	Safe	Cheap and feasible no side effects No need for medical examination	Require special commitment to practice them Great individual variation
Spermicides	Probable effectiveness if used alone less than 80%	Safe	No need for medical examination No serious side-effect	May cause allergy or irritate vagina
Condom	If used carefully: over 90%; if used with spermicides 98%	Safe	Can buy from stores and pharmacies; Easy to use; Used in industrial countries to prevent AIDS and STD's	Must be used from beginning to end of sexual contact Should be properly stored; Should be used once and disposed of
Diaphragm	Effective if carefully fitted and used with spermicide cream 95%	Safe	Used only when needed Relatively cheap	Requires knowledge Requires privacy in applying (not with children in the same room) Can be messy Must be left in 6-8 hours after sex
Pill	Highly effective 97%-99%	Quite safe under age of 35 and non smokers	Does not interfere with sex Does not cause infection in pelvis (PID) No bleeding	Needs to be taken punctually without error Expensive Not good for women who smoke or over 35 Weight changes
IUD	Effective 98%-99%	Safe	Needs only one insertion for 10 years Does not interfere with sex Not subject to neglect or forgetfulness	May cause bleeding, cramps and backache Can cause pelvic inflammatory disease (PID)

Table 9. Comparison of contraceptives (cont.)

Method	Effectiveness	Safety	Advantages	Disadvantages
Injectables	Effective 99% +	Usually safe	Does not interfere with sex Effective for 3 months Safe to use during breastfeeding	Not to be used by women with liver disease May cause menstrual irregularities Causes weight change Need to be taken two or three months Delays the return of fertility for months after stopping injection
NORPLANT™	Effective 99% +	Quite safe unless there is liver disease, heart disease, blood clots or breast cancer	Effective for 5 years Can be removed any time Does not interfere with sex	Some women do not like it Expensive Needs surgical insertion May cause amenorrhoea (no menstruation)

5.4 Youth and smoking, drugs and alcohol abuse

5.4.1 Smoking and youth

Prior to the fifteenth century, smoking was not known. It was rare then to find lung cancer, throat cancer or cancer of the pharynx. Emphysema, except among iron and coal miners, was equally rare, as were cardiovascular (coronary diseases) and other smoking-related diseases.

However by the late fifteenth century people had begun to partake of tobacco and its use had spread through the leisured, aristocratic class, hence, down the social ladder to the middle and lower classes. Now the epidemic has reached such proportions that 3 million people die every year from smoking-related diseases, i.e. one death every 13 seconds.

Indeed so intensive was the media campaign to promote smoking that almost every celebrity and movie star used to smoke, in and outside films. In the propagandist World War 2 pictures, a cigarette was the best thing one could offer the dying soldier in a trench, perhaps to make him enjoy imminent death!

In the early stages, men were more exposed to tobacco-related diseases than women, with a higher ratio of lung cancer and heart disease among males. But women caught up fast with smoking and the ratio of lung cancer as the cause of mortality is higher in women today than in men. (Table 10 provides a list of diseases related to smoking.)

Table 10. Smoking-related diseases

Diseases of the respiratory system	<ol style="list-style-type: none">1. Throat cancer2. Lung cancer3. Emphysema4. Chronic bronchitis
Diseases of the digestive system	<ol style="list-style-type: none">1. Pharynx and tongue cancer2. Oesophagus cancer
Diseases of the lower limbs	<ol style="list-style-type: none">1. Hardening of the arteries2. Haemorrhages in these arteries leading to blockage and gangrene
Cardiovascular diseases	<ol style="list-style-type: none">1. Heart haemorrhages leading to heart attack or cardiac infarction2. Arteritis
Diseases of the nervous system	<ol style="list-style-type: none">1. Arteriosclerosis of brain2. Brain haemorrhages leading to hemiplegia and death3. Atrophia of brain cells if smoking continues for a long period
Effects of smoke on the pregnant woman	<ol style="list-style-type: none">1. Repeated abortions2. Prematurity3. Babies born with lower weight and higher rates of mortality4. Slower physical and mental development of babies born to mothers who smoke5. Smoking while using contraceptive pill increases the risk of strokes

5.4.2 *Smoking and its adverse effects on health*

Cigars, cigarettes and tobacco in general contain numerous ingredients, the most dangerous of which are:

- **nicotine:** such a deadly poison that one dose of 70 milligrams is sufficient to kill a healthy man of average weight. The same dose does not kill if taken over an extended period of time but acts as slow poison, with each cigarette containing 3–5 milligrams of nicotine, according to the brand. Nicotine helps concentrate fats in arteries which systematically narrow until blocked, causing serious heart and brain haemorrhage. Death or severe debility often follows;
- **tar:** an irritant to mucous membranes that line the mouth, throat, larynx and bronchi. It causes recurrent inflammations that over time could lead to throat and lung cancers and breathing difficulties with emphysema;
- **carbon monoxide:** another lethal poison that blends with the haemoglobin of the red cells in the blood and prevents the passing of oxygen from the lungs to all other parts of the body, especially the heart and brain whose tissues are most affected by a shortage of oxygen. Carbon monoxide is the same gas which comes out of car exhausts and which, in confined places, could lead to suffocation and death.

Note. Tobacco companies have recently added other chemical substances to promote addiction specifically among youths and adolescents.

5.4.3 *Modern smoking-related phenomena*

Anti-smoking campaigns

With the increasing awareness of the health hazards of smoking, anti-smoking campaigns in northern and western Europe and in North America were launched. Now smoking is strictly banned in various public places, hotels, restaurants, aeroplanes, schools, hospitals and health centres. The United States Surgeon General forced tobacco companies to print a health warning on every packet of cigarettes stating that smoking seriously damages health

and could lead to death and serious diseases. United States courts and Congress forced tobacco companies to pay enormous compensation to families of people who had died of smoke-related diseases (lung cancer), and forbade tobacco advertising on television.

Despite the anti-smoking campaigns in America, United States tobacco fields are still planted and new lucrative markets were found abroad. Tobacco companies from the United States of America and from Europe accordingly flooded markets in the developing countries with cheap cigarettes. Regrettably, there are no parallel laws in those countries banning smoking advertisements on television or in the media, and there are rarely health warnings on cigarettes exported outside America. Developing countries meanwhile gullibly spend huge sums of money on smoking, even depleting their reserves of hard currency to buy cigarettes from the United States and Europe.

Discovering the harmful effects of passive smoking

Recent studies in the United States and Europe have shown the serious effects of smoking on nonsmokers, commonly known as forced or passive smoking. Husbands, wives, children, and colleagues at work all suffer smoke-related diseases because of their proximity to smokers. The findings of these studies have further invigorated anti-smoking campaigns.

Targeting youth and adolescents

Investigating the practices of USA tobacco companies has shown that they specifically target adolescents and young people in their advertising campaigns. Not only has the tobacco industry conducted careful marketing policies and research to entice the young into smoking but they have also added specific substances, which promote addiction. Nicotine itself is addictive and as poisonous (causing actual death to injected laboratory rats) as tar and carbon dioxide.

5.4.4 Religious opinion on smoking

The Regional Office for the Eastern Mediterranean sought the opinion of some leading theologians and religious scholars regarding

Islam's attitude to smoking. The scholars sent their detailed answers. In 1988, the Regional Office for the Eastern Mediterranean published those answers under the title "Islamic Ruling on Smoking", as the first publication of the series Health Education Through Religion. Having reviewed the medical literature on smoking, the overwhelming majority went for strict prohibition of smoking. The scholars based their views on the following:

- confirmation of the serious health damage caused by smoking, which leads to self-destruction, and self-destruction in turn is strictly prohibited in Islam. Almighty God says in the Quran: *Do not kill yourselves, God is merciful to you* [4:29];
- confirmation of the serious health damage caused by cigarettes to others, who inhale the smoke of smokers and are thus exposed to similar risks. This is tantamount to inflicting harm on others, which is also prohibited in Islam, according to the general *sharia* rule: "Do not harm yourself or others";
- confirmation of the attributes of "spendthrift", "wasteful" and "excessive" on smokers who spend money needlessly. In Islamic *sharia* this is also forbidden. God says in the Quran: *Avoid excess. He (the Lord) does not love the intemperate* [7:31]. The Prophet ﷺ, too, discouraged wastefulness when he said: "On Judgement Day, the subject (or servant of God) will be asked, among other things, to account for his money: how did he earn it? And how did he spend it?"
- confirmation in the Islamic *sharia* because to healthy non-smokers, the smell of tobacco is well within the parameters of the "loathsome" and "foul", and Islamic sanctions against these are categorically clear. God said: *To those that shall follow the Apostle—the unlettered Prophet ﷺ—whom they shall find described in the Torah and the Gospel. He will enjoin righteousness upon them and forbid them to do evil. He will make good things lawful to them and prohibit all that is foul* [7:157].

5.4.5 Alcohol abuse and adolescents

The projected image of the adolescent in the media of industrialized countries (songs, films, videos, magazines, novels, poetry, literature, etc.) is alien to the Eastern Mediterranean Region and its values. The adolescent is depicted as an almost mature person, way beyond the age of childhood, entitled to personal independence and to revolting against authority and indulging himself in practices which suit his new role. This may include dancing, drinking, drug abuse and violence, all presented as a matter of course and the expected normal behaviour of all young people all over the world. This kind of projected sensation and practice has reached our Region not only through foreign films and media but also by the blind imitation of the industrialized countries and of Hollywood itself by the local media and through local film production. For, since the 1950s when societies in the Region were more conservative, local films have been flooded with dancing, drinking and drug abuse. Alcohol has been portrayed as an escape from stress, an entertainment or an attribute of the refined classes, which has gradually invaded the public imagination through novels and films. With the advent of television and satellite to conservative and not so conservative homes, it has become possible for the adolescent to see these practices in film after film, one soap-opera episode after another, one song and explicitly sexual scene after another. Such a trend has managed to draw the adolescent to foreign patterns of lifestyle and behaviour, progressively weakening resistance from adolescents. It is therefore the duty of responsible members of healthy societies to give a helping hand to adolescents, who represent the promising future of their nations.

One of the mean fallacies circulated by advocates and followers of this trend is that alcoholic drinks are not absolutely prohibited in the Quran, and that the prohibition is limited to the time of prayer when man should not be under the influence of alcohol. They maintain that alcohol has undeniable benefits, that cannabis and other drugs are also useful for soothing pain and easing distress and physicians use them for such purposes. That is why, they

maintain, neither in the Quran nor in the Prophet's ﷺ *sunna* is there a categorical prohibition of drugs and alcohol.

Alcohol prohibition is expressed in the Holy Quran by the term "forbiddance". Almighty God said: *They ask you about drinking and gambling. Say: there is a great harm in both, although they have some benefit; but their harm is far greater than their benefit* [2:219]. He also says: *[The Lord] has forbidden all indecent acts, whether overt or disguised, sin and wrongful oppression* [7:33]. Subsequently He categorically stated: *Believers, wine and games of chance, idols and dividing arrows, are abominations devised by Satan. Avoid them, so that you may prosper. Satan seeks to stir up enmity and hatred among you by means of wine and gambling, and keep you from remembrance of God, and from your prayers. Will you not abstain from them?* [5:90–92] Avoidance is the strongest Quranic term for prohibition and used for prohibiting idolatry, polytheism, falsehood, and the greatest sins.

The Prophet ﷺ himself demonstrated the meaning of "avoidance" as the highest degree of prohibition when he said: "God damned the alcoholic drink and whoever drinks it, sells it, buys it, brews it, carries it and the person to whom it is carried".⁴⁷ A great many of the Prophet's ﷺ sayings in his *sunna* categorically prohibit alcoholic drinks such as: "every drink that makes you drunk is prohibited",⁴⁸ and he said: "everything that makes one drunk is alcohol, and alcohol is prohibited"⁴⁹ and "Alcoholic drinks are made of juices, grapes, wheat, barley, corn... and I prohibit you to use every alcoholic drink".⁵⁰ The Prophet ﷺ also said: "do not drink alcoholic drinks, for it is the key to every evil"⁵¹ and "If plenty of one drink gets you drunk, a tiny bit of it is also prohibited."⁵²

⁴⁷ Narrated by Ibn Omar in Abu Dawood and Ibn Maja

⁴⁸ Narrated by Aisha in Muslim

⁴⁹ Narrated by Ibn Omar in Muslim

⁵⁰ Narrated Aman bin Basheer in Abu Dawood

⁵¹ Narrated by Abi Al-Darda' in Ibn Maja;

⁵² Narrated by Ibn Omar in Ibn Maja

5.4.6 Drugs and youth

Narcotics or drugs have never been as known and widespread as they are today. Yet, there are clear religious sanctions to prohibit them by juristic reasoning, judging them by the same standards applied to substances that “dope”, “drug” or “veil” the mind of man, that is incapacitate it or destroy it temporally or permanently. The Prophet ﷺ himself forbade every intoxicant and narcotic [Narrated by Um Salamah in Imam Ahmad.] He also said: “Every intoxicating substance is forbidden, every narcotic is forbidden, if a great deal of something intoxicates, the little bit of it is forbidden,⁵³ and whatever veils the mind is forbidden,” and “everything that causes drunkenness is alcohol.”⁵⁴

Omar Ibn Al-Khattab said in defining alcoholic drinks “whatever intoxicates the mind is alcohol.” All this applies to both alcohol and drugs in all shapes and forms and regardless of the way they are consumed, whether by drinking, sniffing or injecting. The texts prohibiting them are categorical and comprehensive.

Factors contributing to the spread of drugs

1. The economic factor: the legendary sums of money involved in drug trafficking entice people to take it up as a business or trade, despite the severe penalties imposed. With these sums of money intricate international networks have been built to promote and market drugs, specifically among the young, using prostitution and the white slave trade to seduce new, promiscuous deviants.
2. The bad example set by celebrities, artists, and movie and theatre stars, both local and international, all known for their drug addiction. Even the painful death of some of them with AIDS has not stopped the spread of the disease among this faction of the population. That is because they share needles (for drug abuse), have promiscuous sexual relations with infected males and females, or because homosexuality is rife among them.

⁵³ Narrated by Anas bin Huthaifa in Abu Naeem

⁵⁴ Narrated by Ibn Abbass in Abu Dawood

3. The increasing contacts with foreigners by travelling abroad or by receiving package tours or foreign labour.
4. Blind imitation of the youth of industrialized nations; pressures of peers and friends; love of adventure and experimentation with alternative ways of life among adolescents of both sexes.
5. Lack of religious orientation; the break-up of families; parental lack of interest in attending to their sons and daughters, especially during this critical phase of their lives. In the industrialized countries, such practices have undermined family values and sound behaviour among the younger generation.
6. Lack or total absence of concentrated societal efforts to protect adolescents against the spreading of drug abuse, although they are the most targeted vulnerable group in the community.

The adverse effects of drugs on young people

1. Drugs destroy people's faith and keep them away from prayers, from remembering God and from proper Islamic behaviour.
2. Drug abuse is a sure way to waste fortunes, as it is a very expensive practice. In turn this may lead adolescents into juvenile delinquency, including stealing, assault or even prostitution to obtain drugs.
3. There is also the possibility of an overdose, which can kill any adolescent boy or girl.
4. Dropping out of school and absence from work are common risks.
5. The danger of getting into trouble with the law or entering prison (for years sometimes) or, even worse, being sentenced to death in countries imposing the death penalty for drug traffickers. Some gullible adolescents are used as couriers, smuggling drugs and delivering shipments or encouraging their friends to use drugs.
6. The health effects of drug addiction, particularly on the central nervous system, are grave, both psychologically and physiologically.
7. Accidents may happen due to drug taking.

Table 11 shows the adverse effects to health caused by the ill-famed drug triad: hashish, heroine and morphine.

Table 11. Health damage caused by well-known drugs

Hashish	Heroin	Morphine
1. Amnesia and concentration deficit disorders	1. Hallucination and ideation (stoned out of his mind)	1. Damage to lung tissue and mucoid lining of the nose
2. Ideation and forgetfulness	2. Slow breathing and increasing demand for oxygen to purify the blood	2. Depression and ideation (stoned) as if living in a separate world
3. Lethargy, imbecility and depression	3. Hyperactivity at first followed by inertia	3. Moodiness and antisocial behaviour
4. Possible impotence in addicts and constant increase of dose to achieve the same effect	4. Sudden loss of consciousness at injection	4. Sacrificing everything to obtain the drug, including theft and prostitution
	5. Anti-social and unconventional behaviour, including stealing and prostitution to obtain money for the dose	5. Stomach aches and nausea
	6. Could lead to addiction and insanity	6. Skin irritation with foul smell
		7. Confusion, hypertension and hallucination, especially if the drug dose is not available

Prevention and treatment

Prevention is much better than treatment in cases of drug addiction. Prevention can be achieved by the following:

1. cleavage to the family and family cohesiveness, giving adolescents the attention they need in this critical phase of their lives. The family should also enjoin adolescents to perform their religious duties;
2. enshrining religious consciousness among the young and explaining attitudes towards drugs;
3. encouraging adolescents to abandon bad company and choose righteous friends and peers;
4. distancing adolescents from the drug culture;
5. early in life, adolescents exposed to the risks of drug addiction need psychological and medical care depending on the kind of drug or drugs used.

5.5 Youth and violence

5.5.1 Introduction and definition

Adolescents suffer from violence inflicted upon them in many ways and this affects their lives, their health and their future as violence victims. On the other hand adolescents can also exercise violence either against themselves or against others. In fact violence has increased in recent decades and has become a serious problem to public health, safety and social behaviour.

What is violence?

Violence is the intentional use of force (actual or by threat) against oneself, another person or persons and against groups of society at large. It can lead to injuries or even to death, and it can lead to psychological and physical damage or retardation.

Violence can be a permanent or a temporary behaviour, and can be physical, psychological or sexual. It can take place in the home, at work, school or in a public place. It can be individual or organized gang violence. The most dangerous form of violence is that practiced by gangs, paramilitary groups or occupation forces, or that taking place during political conflict, ethnic cleansing or wars.

5.5.2 Forms of violence against adolescents

1. Sexual violence and assaults by a family member.
2. Rape by strangers which could happen to those from respectable families as well as to the homeless and other children, including the retarded or drug addicted.
3. Mutilation of the female sexual organs (female circumcision), which is considered a physical and mental assault with dire future effects. Leading Muslim physicians have confirmed the violent damage sustained by young girls. It is worth noting that there are absolutely no religious sanctions for female circumcision in Islam. It is a violent act seeking to change God's creation, and is condemned by God and the Prophet ﷺ. In fact female circumcision is a tribal ritual inherited from the times of

the pharaohs and is limited to specific countries where non-Muslims and, regrettably, Muslims practice it.

4. Political violence against adolescents in occupied countries, refugee camps or among immigrants, which includes rape and sex crimes such as those sustained by Muslim women in Bosnia and Herzegovina during organized acts of racial cleansing.
5. Societal violence, which makes use of the economic needs of servants, nurses or babysitters. Rape and violent sex crimes are committed with the sure belief that want will prevent those women from reporting the case and exposing the perpetrator.
6. Violation of the rights of adolescents and children by using them in pornography, prostitution, the sex trade and drug trafficking.
7. Crimes of honour, in which unmarried pregnant girls often get killed, including victims of rape (though it is not their fault), or subjected to various forms of psychological and physical violence. Such crimes are almost one quarter of all the murder cases among females.

Sociological studies show that most women do not report rapes and assaults in fear of the consequences. This means that rape is much more widespread than is indicated by the number of reported cases. It should be borne in mind however that the adverse effects of rape are not restricted to shame or unwanted pregnancies but also to the risks of contracting AIDS from a carrier of the virus with no conscience.

5.5.3 Violence by adolescents

The world, particularly the industrialized countries of the world, is overwhelmed today by waves of adolescent violence practised against others. The adverse effects of this violence have become one of the leading causes of morbidity and mortality. In the Eastern Mediterranean Region, violent adolescent crimes increase proportionately to the increasingly blind imitation of lifestyles in industrialized countries. Among motives for this violence are:

1. the increasing levels of violence in American and European films, which depict violence as an art form and means of entertainment;
2. linking maleness with violence and aggression;
3. easy access to weapons in industrialized countries;
4. family breakups and the loss of family values resulting in little attention given by women from industrialized countries to their sons and daughters. The high ratio of divorce among married couples, and of separations among married couples testify to this social decline in family values, as does domestic violence;
5. drug and alcohol abuse;
6. the increasing number of violent young people who are themselves victims of violence.

5.5.4 The physical and psychological effects of violence

These are:

1. cuts and bruises, broken bones and dislocated joints;
2. internal bleeding and injuries;
3. unwanted pregnancies of rape victims;
4. sexually transmitted diseases contracted in rapes;
5. abortions and inflammations of the pelvis;
6. nervous symptoms like hypertension, anorexia nervosa and retardation;
7. serious psychological and mental symptoms like depression, lack of self confidence, attention deficit disorders, and sexual problems like impotence or sexual frenzy;
8. suicide and self-immolation;
9. detachment between the individual and society;
10. turning to drugs.

5.5.5 The faith dimension and the prevention of violence

The motives for violence are diverse, so the solution should be equally comprehensive, and perhaps nothing can be as comprehensive as faith. A lot of Quranic passages and sayings of the Prophet ﷺ prohibit all kinds of violence, as well as inflicting harm on

others. For instance Almighty God says in the Quran: *Do not foul the land with evil* [2:60], and *Those who torture believers (men and women) undeservedly shall bear the guilt of slander and a gross sin* [33:58]. The Prophet ﷺ also said: “Be gentle and avoid violence”⁵⁵ He said: “God is gentleness and gives more to gentleness what He does not give to violence or anything else”.⁵⁶ The Prophet ﷺ also said: “God tortures those who torture others in life”.⁵⁷ He said: “Do not do harm to yourself or to others”,⁵⁸ and “He who inflicts harm on others God will harm him, and he who is hard on people God will be hard on him”.⁵⁹

About caring for women and not exposing them to violence, God said: *And planted love and kindness in your heart* [30:21] and *Treat them (women) with kindness* [4:19]. The Prophet ﷺ also said: “I enjoin you to treat women well”,⁶⁰ and “Do not force women to do what they hate”,⁶¹ and “The best among you are the best to their women”.⁶²

About violence against children the Prophet ﷺ said: “He is not one of us who is not compassionate with our young people”.⁶³

Concerning rape Almighty God said: *You shall not commit foul sins, whether openly or in secret* [6:151] and *You shall not commit adultery, for it is foul and indecent* [17:32].

About suicide and self-inflicted harm, God said: *Do not kill yourselves* [4:29], and *Do not with your own hands cast yourselves into destruction* [2:195]. The Prophet ﷺ also said: “Do not harm yourself or others”.

5.5.6 Recommendations for the prevention of violence

1. Family ties should be strengthened and parents should spend enough time with their children.

⁵⁵ Narrated by Aisha in Al-Bukhari.

⁵⁶ Narrated by Aisha in Muslim

⁵⁷ Narrated by Hisham bin Hakim in Muslim

⁵⁸ Narrated by Amr bin Yahata in Al-Dar Qatani

⁵⁹ Narrated by Abi Saramah in Abu Dawood and Ibn Maja

⁶⁰ Approved by all

⁶¹ Narrated by Abu Hurairah in Abdul Razzek

⁶² Narrated by Abu Hurairah in Al-Termithi

⁶³ Approved by all

2. Home violence between spouses should be prevented and they should abstain from quarrelling in front of the children because this might provide the children with an erroneous role model.
3. The parents and the school should cooperate in organizing programmes and camps aiming at subduing the tendency towards violence among adolescents, and there should be coordination between the school, the family, the civil societies, and sport clubs for filling leisure time of adolescents.
4. Children should be encouraged to shun bad company and gangs, and to choose friends who hate violence.
5. The media plays a crucial part; therefore, it should be sponsored in order to ban films which encourage violence. When this is impossible, a parent should accompany the adolescents to such films in order to ward off the bad effect.
6. The problem of unemployment needs to be solved.
7. Victims of rape, violence and addiction should be rehabilitated.
8. A hotline that can be used by adolescents for inquiring about their problems anonymously should be available. This is particularly important in cases of home-violence, rape and fear of rape.

Part 6

Adolescents and biological and sexual information

6.1 *The requirements*

Correct, carefully measured, properly timed and emphatically provided biological and sexual information is crucial for adolescents. This is to help them learn about their bodies and the functions of their reproductive system. The education should be viewed within cultural and religious norms; any deviation from these values is abuse of the system. Adolescence is the critical decade when biological and sexual maturation takes place. Adolescents cannot comprehend or handle the rapid changes on their own. Information and guidance are prerequisite for a healthy adolescence. However, some parents believe that children and young adolescents should be left alone and be protected from exposure to any sex information that could open their eyes to things that should not be awakened. When questions about sexual issues are posed by children, parents get embarrassed and quickly change the subject or dismiss the child on the assumption that children should not hear these things. This may be true for very young children, but it can hardly apply to adolescents undergoing changes leading to puberty and sexual maturation, which are shocking and perplexing to many unprepared adolescents.

In a recent study in one of the Region's countries [22], adolescents aged 15 years and over, when interviewed, indicated that they wished they had proper information on their sexuality (physiology of puberty, sexual behaviour, sexually transmitted diseases and marriage). Of those interviewed, 15% of boys and 14% of girls were surprised by puberty (i.e. were not prepared beforehand); 36% of girls and 11% of boys were shocked and apprehensive by the changes that took place (i.e. they had not had enough preparation or support during what they considered a difficult time).

Parents should realize that there are many different sources of information about sexual issues that can influence their adolescents, many of which are not appropriate or even factually correct and might lead the adolescent to adopt risky behaviour.

6.2 *Imparting biological and sexual knowledge to adolescents*

The succession of different phases of sexual maturation and psychosocial development require that the information provided to the adolescent should be tailored to each stage of development. For that reason four stages will be considered here:

- pre-puberty from 10 to 12 years (early adolescence)
- puberty from 13 to 14 years (early adolescence)
- post-puberty from 15 to 17 years, middle adolescence
- late adolescence from 18 to 19 years, final adolescence

6.2.1 Pre-puberty stage: 10–12 years of age

This is the age of becoming responsible. The information required in this stage is simple. The children are informed that they have grown up enough to pray regularly like an adult. They are provided with separate sleeping arrangements. They are to request permission, at certain times of day, when entering a room where there are adults resting. They should be made, on different occasions, aware of the family and of its role in keeping relatives together and in helping one another. Parents should be loved and respected. Children should be loved, guided and provided for by their parents.

Children may casually be made aware that families are made by men and women who are married. They should be comforted about the early appearance of secondary sexual characteristics like pubic hair in both boys and girls and the development of breasts in girls.

6.2.2 Puberty stage: 13–14 years of age

Adolescents by this age should have been prepared for signs of puberty. The father or mother may be better suited to discuss wet dreams with boys. The mother or another female in the family is the

best to prepare a girl for menarche. Girls should be told that this is a part of natural growth, and that all adult females start their adulthood this way. Girls must be advised on personal hygiene during menstruation. During menstruation, no prayer, no fasting and no entering the mosque are the rule. A ritual bath at the end of the menstrual period re-establishes the state of ritual purity required before praying, fasting and entering the mosque. The same applies to the boys after wet dreams. Girls also have sexual dreams and should have the ritual bath accordingly.

Girls should be reassured if their periods are irregular, too heavy, too light or delayed. If menarche has not occurred by the age of 18, medical advice should be sought, especially if the girl is not overtly undernourished. Severe cramps and premenstrual syndrome (PMS) may also require medical attention.

Masturbation may be discovered by adolescents by accident or suggested by peers. There is no explicit textual prohibition in religion but the practice is not encouraged. Some parents may choose to talk about this practice with their children, others may not. Literature dealing with this question talks of a number of grave health consequences, yet, there is no evidence of any substance in such claims. Masturbation causes no harm whatsoever. It may even provide protection against sexual abuse.

At this early age, it may not become necessary to discuss sexual intercourse and how pregnancy occurs. The main thing a parent or teacher should emphasize is that with puberty, pregnancy becomes a possibility, and that the normal practice is to wait until marriage before becoming pregnant. There may be questions by adolescents about sperm and ova that need to be answered.

6.2.3 Post-puberty stage: 15–17 years of age

This is a most vulnerable age and needs extra attention. It is the age of a number of risks, such as premature marriage, teenage pregnancy and in some cases drug abuse and sexually transmitted diseases. All these ills should be tackled. Kind but firm dialogue with adolescents over these matters should continue.

Adolescents, at this age, should be aware of the anatomy of the male and female genital systems and how a woman becomes pregnant. It is important to emphasize that a drop of semen can produce pregnancy if sperms enter the vagina, even without intercourse. In fact a drop of semen contains millions of sperms of which only one is needed for fertilizing an egg.

Marriage should again be emphasized as the only way for sexual satisfaction. Adolescents should preserve their chastity until they get married. The virtues of virginity are too great to miss. The concept of virginity expressed in a “modern” way has been aptly stated in a recent communication:

“Instead of virginity being something we “lose” or have to “save” for someone, it could mean our physical, spiritual and emotional wholeness, our self-respect and our bodily integrity and our freedom to make a choice. When we make choices about sex, choosing virginity is but an expression of self-respect; and thus we would be in a position to put ourselves into a situation of self satisfaction and a cheerful mood.”

The danger of premature marriage at this age is that of early pregnancy, which is risky for both mother and fetus. High maternal mortality and severe maternal morbidity are calculated risks.

Another danger for adolescents in this age group is that they may consider themselves old enough to view X-rated movies, suggestive video songs or pornographic magazines or, under peer pressure, to experiment with sex. This is very disturbing because it may lead to the three ills of adolescence:

- unwanted pregnancy, possibly followed by abortion;
- sexually transmitted diseases;
- smoking, alcohol and drug abuse and violence.

Dialogue with adolescents in this age group may include advice to shun peers who might have a bad influence on them and avoid media with sexual content.

The more education an adolescent girl receives, the more she is empowered; it is a way of raising the age at marriage to 18 or older

and a means of sublimation. An educated mother is crucial for future generations.

6.2.4 Older adolescents: 18–19 years of age

The advice listed above applies here as well. Marriage at this age, however, is acceptable and even encouraged in the Eastern Mediterranean Region, as it plays an important role in securing mental and sexual health and protecting young people against AIDS and other sexually transmitted diseases.

Contraception should be emphasized for married adolescent girls during the first couple of years of marriage in order to postpone the first pregnancy and space the subsequent ones.

6.3 Sources of influence on adolescents

Throughout the growth years, adolescents are exposed to a variety of influences (See Figure 8). Some are internal (the process of biological sexual maturation and psychosocial development) and others are external. Familial sources include family structure and cohesion, parental characteristics, parent–child communication and the influence of siblings. Migration of the parent or parents, especially the absence of the father (which is not uncommon in the Eastern Mediterranean Region) may have a negative influence on growing adolescents. Family problems between the parents, the worst of which is divorce, will influence the psyche of adolescents. Information gleaned from the behaviour of maids and servants may lead adolescents astray.

The extrafamilial environment has a great influence on the adolescent especially if parents are silent on sexual issues. This environment includes the neighbourhood, the school, the peer group, and the community at large and, last but not least, the health system in and outside school.

The cultural and religious norms in the family and community have far-reaching effects on the upbringing of the adolescent. Central to all these is the institution of marriage, which can be entered into at the age of 18 or later.

The media shower adolescents with a variety of sex information, quite often leading to sexual misbehaviour with detrimental consequences.

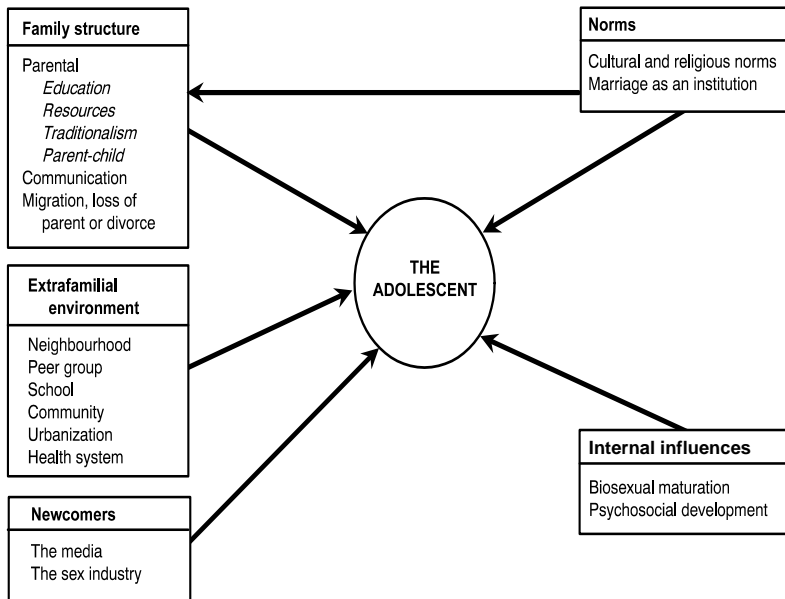


Figure 8. Sources of influence on adolescents during their development

6.4 *Sharing the responsibility for health and sexual education of adolescents*

6.4.1 Primary interest group

This group, which should shoulder the responsibility of health education of adolescents, especially about sexuality, includes parents and other family members, teachers, school health professionals and enlightened religious counsellors. Parents naturally should be the first to watch for the early signs and subsequent stages of physical growth and sexual maturation. They should start counselling their children, but they will need the cooperation of other members of the family, teachers, health personnel and religious counsellors. All those counselling adolescents need to be trained in the technique of counselling. [27]

6.4.2 Youth-friendly civil societies

It is recommended that some civil societies should be established to care for adolescents and youth in close cooperation with the primary interest group. Among these societies are the Scout societies (for boys and girls), which can organize adolescent orientation courses to complement the role of the primary interest group. [28]

6.4.3 Filling the time of adolescents and youth with useful activities

The following are suggestions that might enhance young people's opportunities for finding worthwhile work:

- enhancement of knowledge and skills of young people;
- continuation of girls' school enrolment and/or education even after early marriage;
- promotion of special talents of adolescents in sports, music, literature, art and other activities.

6.4.4 Recruiting the mass media for adolescent education

It is possible to use the mass media to educate adolescents and young people in all areas related to growth and maturation; provided this is done in an appropriate manner.

6.4.5 Guidelines for parents and teachers

There is a need for guidelines to help parents, teachers, health professionals and all others concerned with adolescents. It should include simple and direct answers to questions that young people ask.

Part 7

Conclusions and recommendations

Adolescence is the critical second decade of human life that links the period of childhood and early youth with adulthood. It is marked by profound and dynamic changes, yet it is virtually neglected by health care providers, by society and even by most parents, teachers and health professionals. Adolescents are neither covered by paediatric nor by adult medicine, although adolescence is a period of turmoil, with drastic physical, biological, sexual and psychosocial changes. The nutritional needs of adolescents increase; their lifestyle is formulated in such a way that it might influence their current or future morbidity. Their reproductive life may start prematurely while their intellectual abilities and cognitive and affective faculties are still being formed. Far-reaching mental health problems (for example, depression, antisocial behaviour and scholastic underachievement) may arise. In addition they are vulnerable to exposure to the risks of smoking, drug addiction, alcohol and violence. This is also a time of high risk of contracting sexually transmitted diseases, including AIDS. All these changes are too drastic to be comprehended and properly faced by the adolescent alone without adequate protective preparation.

Sexual maturation is by far the most challenging change, not only to the adolescent but also to parents, teachers, health professionals and society at large. Most parents somehow dismiss their responsibility of healthy dialogue with their children under the guise of being embarrassed, being ignorant or being too busy; they do not perceive the agony of growing up in their child. They may also surrender their responsibility to teachers, who in turn feel that the responsibility lies with the family and not the school. During this confusion other sources of information present themselves: peer groups, older siblings, street talk and the media.

Adolescent health should therefore become a legitimate and visible concern of different actors in the arena, including parents, teachers, health professionals, religious counsellors, the media and other community organizations. Adolescent health for one thing should become an integral part of public health, athletic clubs, youth organizations and non-government organizations.

We hasten to emphasize that all activities on adolescent health should be within the religious and cultural norms of the religion. In point of fact, a hidden agenda of these activities is to guard against letting adolescents fall out of the cultural and religious norms and against too blind an adoption of lifestyles or norms of industrialized countries.

7.1 Parents

Parents should remember that at one time they were children and must have longed for their parents to prepare them and explain to them what was happening during puberty and growth. Now that they are parents their children are passing through puberty and adolescence and they need guidance and compassion. Thus they should do the following.

1. Parents should develop a positive attitude towards guiding their children through their rapid physical and sexual growth. They should shoulder their responsibility of imparting biological physical and sexual knowledge to their children on timely occasions. They are likewise responsible for emphasizing cultural norms especially the institution of marriage and family. The virtue of staying chaste until marriage is culturally engraved and should be parent endorsed.
2. To help themselves in their undertaking, parents should read up on the subject using scientifically written books, guidelines and enlightened religious writings. They may also involve learned and influential members of the family as well as seeking religious advice.
3. Parent-teacher collaboration in educating adolescents will harmonize the instructions and reassert the messages. Parents

and teachers should use, as entry to the subject, biological knowledge about other species and how they procreate. This would shun the sensationalism attached to discussions of human sexuality.

4. Parents (and teachers) should attend seminars and workshops held on the subject of adolescent sexuality with the participation of experts in health, psychology, sociology and religion. If no such workshops exist, parents and teachers should prevail upon community leaders to have them conducted.
5. Parents should give correct answers to adolescent inquiries about reproductive and sexual questions or about references to sexuality in religious books, subject to their education and age. Parents should also know that enveloping sexual matters with a veil of secrecy in family debates and conversation has the reverse effect because there are other sources to fill the gap and provide adolescents with possibly misleading, sensational and incomplete information.
6. As adolescents reach puberty, they should be instructed in the religious rituals attached to wet dreams and menstruation. In addition, they should be gently reminded that they have developed the ability of procreation and that a drop of semen reaching a girl's vagina can cause pregnancy with or without intercourse.
7. Adolescents at puberty should be provided with separate sleeping arrangements in the form of private rooms, private beds or private mats and covers. This guarantees their individuality.
8. Adolescents should not be allowed to meet in privacy with servants, maids, nannies, chauffeurs and other family helpers without supervision. Equal protection is due concerning privacy with relatives, neighbours, teachers or peers of much older or much younger ages (to protect against homosexual temptations).

9. Mixing between boys and girls must be conducted in a family atmosphere and under the watchful eyes of parents or older brothers. Supervised activities may also be allowed in clubs, sports and other family gatherings. This would remove the sting of sexual awareness when boys and girls meet.
10. Parents should, without undue harshness, have some control on what their children watch on television or videos.
11. Parents of the same sex as the child (father to sons and mother to daughters) should discuss sexual relations when occasions or questions call for that. The subject of masturbation may arise in the discussion. Parents should neither totally denounce it nor limitlessly encourage it. Health risks of its excessive use should be emphasized. The practice is not prohibited by any religious text.
12. Parents should encourage their children to fast occasionally when they themselves do that voluntarily.

7.2 Teachers and health professionals

Teachers and school health professionals have the advantage of more knowledge compared to most parents. In consortium with parents, they should provide information on sexual development and expectations as part of biology or social studies. They should also report to parents, tendencies of their children to misbehave, become vulgar or stay away from classes for no accepted excuse.

7.3 Nongovernmental organizations

These have a great role in health education of adolescents: Scout organizations for boys and girls provide a healthy atmosphere for health education of adolescents. In addition they provide precious opportunities for them to become active in sports, camping and community help activities, all are avenues to sublimation. Women's organizations may also undertake special programmes for adolescent girls.

7.4 The media

It is because parents are totally silent on the sex instruction of their children, a situation that is compounded by the ambivalence of school curricula, that the mass media have a profound influence on the sexual behaviour of adolescents. Adolescents are being exposed to the intensive influence of items with sexual overtones through the cinema, video, television, radio and the press. To these is added a dangerous trend, making available to adolescents suggestive video songs and X-rated movies via cable and satellite television and through underground trade and out-of-control peer groups or gangs. Sex is not the only thing promoted in them; violence, smoking, alcohol, and hard drugs are equally forcefully pushed. It is where the real danger lies; and it needs to be confronted. It is of interest to note that even the authorities in industrialized countries have been getting worried about the increasing amount of sex and violence in the media. Studies have been undertaken to measure the effect of such exposure on adolescents. These studies in the United States of America showed that:

- adolescents spend more time watching television than studying;
- exposure to sex and crime in the media increases the acceptability of premarital sexual relations in adolescents;
- juvenile delinquency and antisocial behaviour are correlated with the amount of exposure to portrayals of such behaviour in the media.

The media should exercise self-control and avoid culturally offensive sexual references and presentations providing free time for the health education of adolescents. This should be the practice of local, national and Pan-Arab channels.

All the above parties are kindly reminded that health education of adolescents is an integrated package, and should at least encompass the following 10 cardinal priorities:

1. building up a healthy lifestyle for health promotion and disease prevention, including good dietary habits, excellent personal hygiene and physical exercise;

2. compassionate but truthful dialogue with adolescents about their physical, sexual and psychosocial changes they are exposed to;
3. emphasizing the institution of the family structure through marriage;
4. meeting the mental health requirements of a growing adolescent undergoing fundamental changes that may shape his or her future character and psyche. Prevention of sex discrimination is crucial for the mental health of adolescents;
5. contraceptive education, with the consent of parents, for older adolescents entering into a marriage contract;
6. postponing first pregnancy until the girl is biologically, emotionally and socially mature; birth-spacing and proper timing of pregnancies should be the rule.
7. prevention of smoking and drug and alcohol abuse;
8. prevention of accidents and violence by and against adolescents;
9. training of those responsible for adolescents, such as parents, teachers, school health providers, youth-to-youth leaders (e.g. Scouts), religious leaders, nongovernmental organizations and media specialists. Guidelines to facilitate their task should be prepared;
10. national activities for adolescent health should be strengthened, and integration of adolescent health care into the national health system should be implemented as soon as possible.

Finally, it is hoped that this booklet will provide knowledge and guidelines to the concerned parents, teachers, health professionals, and media and others in realizing their responsibilities in the health education of adolescents.

Further reading

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Adolescence is characterized by rapid change, when events and experiences have significant implications and consequences for later life. As they develop, adolescents adopt new roles of social responsibility, acquire skills and access opportunities necessary for functioning in adult life. The health and, even more importantly, the knowledge, attitudes and practices of adolescents are regarded as essential factors when predicting the process of epidemiological transition of a population. The current lifestyles of adolescents, such as eating habits and reproductive behaviour, are crucial for the health and disease patterns that will be observed in the future. Nevertheless, during these formative years, adolescents are subject to many influences dominating their internal and external environment. These include: parents, teachers, peer groups, health care providers, media, and religious and cultural norms in the community. Knowledge of the significant rapid physical, mental and social changes occurring during this critical stage of life helps adolescents to absorb and adapt to these changes and enables them to avoid becoming victims of many serious illnesses.

Motivated by the urgent need bridge the gap in the knowledge of adolescents, their parents and other concerned partners, the World Health Organization Regional Office for the Eastern Mediterranean, together with the Islamic Education, Science and Culture Organization and the Islamic Organization for Medical Sciences developed three manuals for health education of adolescents. The three manuals are addressed to priority target groups, namely: parents, teachers, health workers and media; adolescent girls; and adolescent boys. The manuals, originally published in Arabic, were widely and warmly welcomed by the participants of the intercountry workshop with partners for promoting adolescent health and development using information, education and communication, held by the Regional Office in Amman, Jordan, May 2002. The manuals were regarded as an important addition to the limited range of education materials available for promoting adolescent health and development within the sociocultural values prevailing in countries of the Eastern Mediterranean Region. The manuals were also considered as invaluable tools for advocacy with the political and religious leaders in Member States.

This publication is essential reading for everyone with interest in promoting adolescent health and development in the Eastern Mediterranean Region.