

Knowledge and practices of a group of adolescents toward some aspects of their health and development

معارف وممارسات مجموعة من المراهقين بعض الجوانب في الصحة والتطوير

Namir Ghanim Al-Tawil. M.B.Ch.B., F.I.C.M.S/CM

Jwan Mohammad Sabir². M.B.Ch.B., F.I.C.M.S/FM

Kameran Hassan Ismail³. M.B.Ch.B., M.Sc., Ph.D./College of Medicine, Hawler Medical University/Community Medicine department

الخلاصة:

الخلفية: تعتبر المعرفة مهمة للمراهقين لتنمية نمط صحي للحياة، الوقاية من الأمراض، والمشاركة الفعالة في المجتمع.
الهدف: الدراسة تهدف الى تقييم معارف وممارسات عينة من المراهقين في أربيل-العراق حول بعض الامور التي تخص صحتهم.
الطريقة: اجريت دراسة مقطعية في مدينة أربيل للفترة من 2008/10/15 الى 2008/12/15. تم تصميم إستمارة جمع المعلومات من قبل الباحثين، وتم توزيع الاستمارات على الطلبة لغرض ملئها. تم أخذ الموافقة الشفهية لجميع الطلبة قبل البدء بالدراسة.
النتائج: اشتملت الدراسة على 441 مراهق (257 ذكر و 184 انثى). نسبة الذكور الى الاناث كانت 1.4 : 1. معدل العمر (+ الانحراف المعياري) كان 15.7 ± 2.3 سنة (من 11 الى 19 سنة). إعتقد أكثر من نصف العينة (58.8%) أنهم بصحة جيدة، 23.6% يعتقدون أن التدخين مضر بالصحة، أكثر من النصف (52.83%) كانوا يأكلون طعام صحي، 52% يمارسون الرياضة، و 39.46% كانوا يأخذون الفيتامينات للعناية بصحتهم.
الاستنتاج: لازالت معلومات وممارسات المراهقين ضعيفة وتحتاج الى المزيد من التوعية والمتابعة لتقديم وتطبيق المعلومات حول الصحة.

ABSTRACT:

Background: Information is important for adolescent to develop healthy lifestyles, protect themselves from disease, and participate meaningfully in society,

This study was carried out to assess the knowledge and practices of a group of adolescents toward some aspects of their health in Erbil-Iraq.

Methods: A cross sectional study was carried out in Erbil city, from October 15th to December 15th, 2008. The questionnaire was designed by authors and administered to students during class time. Verbal informed consent was obtained from all participants.

Results: The study sample was composed of 441 adolescents (257 males, and 184 females). The male: female ratio was 1.4: 1. The mean age (\pm SD) was 15.7 ± 2.3 years (ranging from 11-19 years). More than half (58.5%) think that they are in a good health, 23.6% believe that smoking affect their health negatively, More than half (52.83%) eat healthy food, around 52% practice exercise, and 39.46% take vitamins to take care of their health.

Conclusion: The knowledge and practice of our adolescent toward their health and practice still deficient and need more advanced follow up to increase information regarding this branch.

Key words: Adolescent, health, Erbil

INTRODUCTION:

Adolescents are young people between 10-19 years of age. Adolescents need information to help them be and remain healthy. Information is important for them to develop healthy lifestyles, protect themselves from disease, and participate meaningfully in society¹ Adolescence is a critical period for individuals with some illness, as this developmental stage includes the individualization process². Accompanying notable threats to adolescent health, often linked to adolescent

exploratory or risk behaviors, including those related to violence, accidents and injuries; substance abuse; mental or emotional disorders; nutritional alterations; sexually transmitted infections; and unintended pregnancy^{2,3}. Resilience and certain “protective factors” serve to enhance the health of adolescents⁽⁴⁾. The knowledge and practice of adolescents toward health aspects is affected by a number of factors including ethnicity, lack of insurance coverage, inconvenient clinic hours, inadequate transportation, attitudes and behaviors of health professionals, and lack of assurance of confidentiality⁽⁵⁻⁷⁾. The social development of adolescents is best considered in the contexts in which it occurs; that is, relating to peers, family, school, work, and community dating typically begins in middle adolescence, usually between the ages of 14 and 16 years. Even very young adolescents are now “cyber dating” over the Internet, chatting about mutual interests without having to risk face-to-face or even telephone encounters.⁸ Adults have legitimate reasons to be concerned about adolescents’ risk-taking behaviors like cigarette smoking, alcohol, drug use, Weapon Carrying (*e.g., a gun, knife, or club*), Fighting, and Sexual Violence⁽⁹⁾. The major problem areas of most concern for high-risk adolescents are alcohol and drug abuse; pregnancy and sexually transmitted diseases; school failure and dropping out; and crime, delinquency, and violence. The adolescent status is poor in relation to the education, lack of employment due to overpopulation, poor sex knowledge, social evils prevailing like child marriage, increasing risk of infection, raises chances of unwanted pregnancies and unsafe abortion, health risk like AIDS and other problems to which adolescents are prone to¹⁰. So in order to establish a baseline data of knowledge and practices about health status of a group of adolescents in Erbil city, Iraq where, up to the researchers’ knowledge, there is no published article about the subject. Therefore, this study was carried out to assess the knowledge and practices of a group of adolescents toward some aspects of their health.

OBJECTIVES : This study aimed to assess the knowledge and practice of a group of adolescents toward some aspects of their health in Erbil.

METHODOLOGY:

A cross sectional study was carried out in Erbil city, from October 15th, to December 15th, 2008. This study included 441 students from four primary schools and five secondary schools located in Erbil city. within the age group (10-19 years). One class (cluster) was included from each school.

The official permission for carrying out this study was obtained from the general directorate of education of Erbil city. The questionnaire was designed by authors and administered to students during class time. Verbal informed consent was obtained from all participants. The data was collected by distributing questionnaire (Kurdish language) to the students in schools in order to fill and return back to the authors. Statistical package for social sciences (SPSS, version 15.0) was used for data entry and analysis. P value ≤ 0.05 was considered statistically significant.

RESULTS:

The study sample was composed of 441 adolescents (257 males, and 184 females). The male: female ratio was 1.4: 1. The mean age (\pm SD) was 15.7 ± 2.3 years (ranging from 11-19 years). Figure 1 shows that more than half (58.5%) think that they are in a good health, and 27% think that they are in a very

good health. Only 5% think that they are in a bad health.

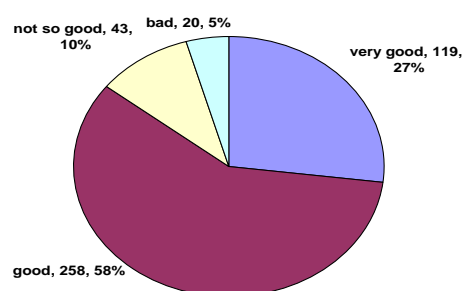


Figure1. Distribution of sample by their opinion about their health status.

(Figure 1) shows that 30% of the sample doesn't have health problems, while 17.1% were complaining from headache, 11.2% complaining from chronic fatigue, and another 11% were complaining from ear or eyes problems.

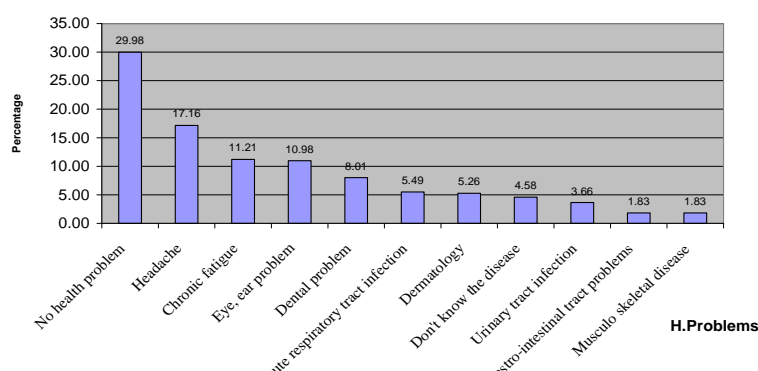


Figure 2. Distribution of sample by health problems during last six months.

Table 1: Functional impairments sustained by adolescents

Impairments	No. (%) n=441
No problem	232 (53.7)
Vision problems	60 (13.9)
Understanding and learning as quickly as peers	49 (11.3)
Don't know	37 (8.6)
Problem of understanding what other people say	20 (4.6)
Problems of self expression in words	18 (4.2)
Hearing problems	8 (1.9)
Movement problem	8 (1.9)
Total	432 (100.0)

Table 1 shows that more than half (53.7%) of participants had no functional impairments, while 13.9% had vision problems, and 11.3% had problems in quick understanding and learning as quickly as their peers.

Table 2: Most negative factors that affect the health of adolescents now a day

Negative factors	No.	% (n=441)
Smoking	104	23.6
Home accidents	97	22
Air pollution	90	20.5
Car accident	71.0	16.1
None	65	14.7
Water pollution	54	12.2
Family violence	54	12.2
Unhealthy food	49	11.1
Alcohol	43.0	9.8
Don't know	29	6.6
Chemicals in food	27	6.1
Lack of medical insurance	26	5.9
Work accidents	24.0	5.5
Drugs	24.0	5.4
STDs	14	3.2
Violence in street	13	3

Table 2 shows that when asking the adolescents about the most negative factors that affect their health, 23.6% believe that smoking affect their health negatively, while 22% of them think that home accidents affect their health, and 20.5% think that air pollution affects their health negatively.

Table 3: Distribution of smokers by cause of smoking

Causes of smoking	No.	% (n = 18)
Peer pressure	4	22.22
One of parents smoke	3	16.67
Psychological or family problems	3	16.67
Imitating personalities	2	11.11
To prove one-self	2	11.11
For fun	2	11.11
To relax	2	11.11
Showing off	1	5.56
Parents neglect	1	5.56
Wide spread of cigarettes and argilah	1	5.56
Both parents smoke	1	5.56

Table 3 shows that the prevalence of smoking was 4.1 % (18 out of 436). The majority (14) of the smokers was males, and only four out of 18 were females. A considerable proportion of them (22.22%) think that the cause of smoking is due to peer pressure; in 16.6% the cause could be attributed to a smoker parent; and in another 16.67% the cause of smoking could be psychological or family problems.

Table 4: Practices carried out by the adolescents to take care of their health by gender.

Variables	Males (n = 257)		Females (n = 184)		Total (n= 441)	
	No.	%	No.	%	No.	%
Take vitamins	110	42.8	64	34.8	174	39.46
Take iron	19	7.4	10	5.4	29	6.58
Eat good food	131	51	102	55.4	233	52.83
Care of personal hygiene	70	27.2	81	44	151	34.24
Do physical exercise	146	56.8	82	44.8	228	51.7
Sleep sufficiently	74	28.8	82	44.8	156	35.37
Avoid smoking	42	16.3	18	9.8	60	13.61
Avoid drinking	41	16	22	12	63	14.29
Avoid drugs	27	10.5	32	17.4	59	13.38
Nothing	25	9.7	10	5.4	35	7.94
Don't know	10	3.9	10	5.4	20	4.54

Table 4 represent that the adolescents were asked about three things they do to take care of their health. More than half (52.83%) eat healthy food, around 52% practice exercise, and 39.46% take vitamins to take care of their health.

Table 5: Body weight evaluation as expressed by the adolescents

How do you evaluate your body weight	No.	%
Don't know	134	30.52
Stayed as it is	115	26.20
Decreased	71	16.17
Don't care	69	15.72
Increased	50	11.39
Total	439	100

Table 5 represent that When asking the adolescents about their perspective of their body weight, 30.5% didn't know whether their weight is normal or not.

Table 6: Distribution of sample by knowledge of puberty changes in boys and girls

Changes in boys	No.	% (n =441)	Changes in girls	No.	% (n=441)
Chang of voice	232	52.61	Others	166	37.64
Mustache and beard hair grow	207	46.94	Menstrual cycle	165	37.41
Appearance of acne	177	40.14	Appearance of pubic and auxiliary hair	129	29.25
Increase of weight	173	39.23	Appearance of acne	117	26.53
Appearance of pubic and auxiliary hair	129	29.25	Breast enlargement	91	20.63
Semen discharge	99	22.45	Increase weight and height	60	13.61
Others	6	1.36	Don't know	5	1.13

Table 6 represent that The rates of knowledge were not so high among the studied sample. Around one half or less knew these puberty changes.

DISCUSSION:

Adolescents are growing up in the world in which they will have to make more decisions for themselves than any previous generation. They experiment more, make choices and risks and learn by their own experiences rather than by those of others, many are able to face change and confidence and with the vision of better life in future which they can build with their own efforts. Adolescents are very important asset for prevention of HIV/AIDS and other major problems country is facing today. All this require adolescent education of family planning and sex education program which will help them to learn the right way to live. Young people want to seek guidance but they don't know where to get it, this results that many teenagers turn to their peers or media for related information, which often provide inaccurate information¹⁰.

Adolescence is a distinct developmental stage posing unique challenges. Although generally considered a time of health and well-being, traditional health indicators often overlook areas specific to adolescence. Despite encouraging improvements in recent years, this population continues to have high rates of morbidity and mortality owing to violence, injury, and mental health disorders. Also, potentially health-damaging behaviors, such as premature and unprotected sexual behavior and substance use, pose significant threats. Fortunately, adolescence is a time of great behavioral plasticity. Because the vast majority of adolescent health risks are the result of behavioral causes, much of this morbidity and mortality is preventable. The adolescent population is projected to greatly increase over the next two decades. However, older age groups are increasing more rapidly, reducing the proportion of adolescents in the overall population. The aging population will likely demand increased access to scarce resources. The public needs to be educated about the need to support programs for youth. If resources are properly allocated, and health professionals trained to deal with adolescents' unique needs, youth have the potential to benefit greatly from successful implementation of new knowledge, developing healthy, positive, life-long behaviors¹¹.

Results of the present study showed that 4.1% of the sample were smokers and majority of them were males, this proportion was less than the proportions of studies done in Saudi Arabia, United Arab Emirates and Yemen, which revealed that 21.3%, 19%, 19.6% of adolescents were smokers respectively⁽¹²⁻¹⁴⁾, and it is comparable to results of a study done in Oman¹⁵.

The most prevalent health problem in the last three months among students was headache (17%) and dental problems in about 8%. This disagrees with the result of a study done in Saudi Arabia which revealed that dental caries affected nearly half of the participants (students)¹².

Regarding some practices that were carried out by the adolescents to take care of their health, about 53% used to eat good food specially breakfast, 52% used to do physical exercise, 35% sleeping sufficiently, 34% take care of personal hygiene. These results were different from results of a study done in Saudi Arabia which revealed 48%, 75%, 54%, 44% respectively¹².

We recorded the difference in distribution of sample by knowledge of puberty changes in boys and girls, in general boys had more knowledge about the primary and secondary sexual characteristics that happened at this age group, and this may be due to effect of culture and believes in our community and may be due to lack of knowledge obtained by formal lectures presented in secondary schools regarding this branch of knowledge.

The main limitation of this study was shortage of references to compare with, as the majority of the studies in the western countries focus on sexual life of adolescents, drug

abuse, and crimes, and this is because these problems are highly prevalent there and more important (in their societies) than our study subject.

CONCLUSION:

The knowledge and practice of our adolescent toward their health and practice still deficient and need more advanced follow up to increase information regarding this branch.

REFERENCES:

1. WHO. Adolescent health features: Child and adolescent health and development. Child and adolescent mental health - diet and physical activity - Youth and tobacco. www.who.int/topics/adolescent_health/en.
2. Cote JE, Schwartz SJ. Comparing psychological and sociological approaches to identity: Identity status, identity capital, and the individualization process. *Journal of Adolescence*. 2002; 25:571–586.
3. Strasburger V, Brown R. *Adolescent Medicine: A practical guide*. New York, Lippincott-Raven; 1998.
4. Benson P, Scales P. *A Fragile Foundation: The State of developmental Assets Among American Youth*. Minneapolis, Minnesota, research institute; 1998.
5. Australian Health Ministers. *The Health of Young Australians*. Canberra, Australian Government Publishing Service; 1995.
6. Ryan S, Millstein S, Greene B. Utilization of ambulatory health services by urban adolescents. *J Adolesc Health* 1996; 18:192.
7. Society for Adolescent Medicine. Access to health care for adolescents: A position paper of the Society for Adolescent Medicine. *J Adolesc Health* 1992; 13:162.
8. Piaget J. *The psychology of intelligence*. New York: International Universities Press. 1950.
9. Santrock, JW. *Adolescence* (8th ed.). New York: McGraw-Hill; 2001
10. Sharma N, Mahajan P, Samkaria M. Attitude of adolescents towards family life education (FLE): A comparative study of Jammu and Palampur. *Anthropologist* 2004; 6(4): 265-8.
11. Irwin CE, Burg SJ, Cart CU. America's adolescents: where have we been, where are we going? *J Adolesc Health* 2002; 31 (6): 91-121.
12. A.H.Abou -Zeid, T.M.Hifnawy and M.Abdel Fattah. Health habits and behavior of adolescent schoolchildren, Taif, Saudi Arabia. *East Mediterr Health J* 2009; 15(6):1525-34.
13. Bener A, AL-Ketbi LM. Cigarette smoking habits among high school boys in a developing country. *J R Soc Health* 1999; (3): 166-9.
14. Bawazeer AA, Hattab AS, Morales E. First cigarette smoking experience among secondary school students in Aden, Republic of Yemen. *East Mediterr health J* 1999; 5(3): 440-9.
15. Jaffer YA, Afifi M, AL Ajimi F. Knowledge, attitudes and practices of secondary-school public in Oman: 1. Health compromising behaviors. *East Mediterr health J* 2006; 12 (1/2): 35-49. Top of Form.