# Healthy Lifestyle for Clients Attending to Primary Health Care Centers in Erbil City

نمط الحياة الصحية للزبائن المراجعين الى مراكز الرعاية الصحية الاولية في مدينة اربيل

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#### الخلاصة

خلفية البحث: نمط الحياة الصحي هي مسؤولية الفرد في اختبار و صنع الصحة و بشكل بارع من خلال التغنية الجيدة و الممارسة اليومية للتمارين الرياضية و النوم لفترة كافية و تجنب التدخين وتجنب شرب المشروبات الكحولية والمشاركة الاجتماعية مع افراد العائلة والاصحاب.

الهدف: الهدف من هذه الدراسة هي التعرف على نمط الحياة المراجعين الى مراكز الرعاية الصحية الاولية في مدينة اربيل.

المنهجية: دراسة عرضية اجريت في مدينة اربيل ضمن الفترة من 17 تموز 2014 ولغاية 11كانون الثاني 2015. عينة عشوائية شملت 248 زبون من عمر 15 سنه فأكثر حضروا الى مراكز الرعاية الصحية الاولية اما لمعالجة الحالات المرضية البسيطة او لتغطية برنامج التطعيم لاطفالهم شرط خلوهم من الامراض المزمنة. استمارة الاستبيان صممت من قبل الباحثين من خلال جمع البيانات عن طريق المقابلة الشخصية. استخدم اختبار مربع كاي (او اختبار فشر) لمقارنة النسب. قيمة الاحتمالي اقل او يساوي 0.05 اعتبر ذات دلالة معنوية من الناحية الاحصائية.

النتائج: اشارت الدراسة الى ان هنالك نسبة من الممارسات الغير صحية في عينة الدراسة مثل التدخين بنسبة 27% و عدم ممارسة الانشطة البدنية بنسبة 40,5% و مشاهدة التلفاز اكثر من سبعة ساعات بنسبة 70,2% و تناول الاطعمة الغنية بالدهون بنسبة 40,5% كما اشارة الدراسة الى ان 40,5% و مشاهدة التلفاز اكثر من سبعة ساعات بنسبة 40,5% و العمر والتدخين (40,000) والعمر والنوم المبكر (40,000) و العمر و عدد ساعات النوم (40,000) وهنالك اختلاف ذات دلالة معنوية احصائية بين جنس الزبائن و ممارسة الانشطة البدنية.

الاستنتاج: استنتجت الدراسة ان نسبة من الممارسات الغير صحية في عينة الدراسة مثل التدخين وعدم ممارسة الانشطة البدنية و تناول الدهون و مشاهدة التلفاز اكثر من سبعة ساعات و العمر والممارسات البدنية وكذلك الجنس و ممارسة الانشطة البدنية. العمر والممارسات البدنية وكذلك الجنس و ممارسة الانشطة البدنية.

**التوصيات**: اوصت الدراسة للسياسة الصحية في المحافظة لتشجيع نمط الحياة الصحي من خلال وسائل الاعلام و تاسيس المزيد من النوادي الرياضية لممار سة الانشطة الندنية.

المفردات الرئيسية: الانماط الحياتية، البالغون الاصحاء، مراكز الرعاية الصحية الاولية، مدينة اربيل.

### **Abstract**

**Background**: Healthy lifestyle is the responsibility of person to choice and making smart health through good nutrition, daily exercise, adequate sleep, avoid tobacco smoking and drinking alcohol and engage with family members and friends.

Aim of study: is to identify the lifestyle for clients attending to primary health care centers in Erbil

**Methods:** descriptive study conducted in Erbil City through the period of July 17, 2014- January to 11, 2015. A convenience method of sample was recruit 248 client age 15 and above without chronic diseases who were attended to primary health care centers during study period for purpose either treatment minor illness or vaccination coverage program for their children. Questionnaire designed by researchers and used to collect data by interview. Chi square test of association (or Fisher's test) was used to compare proportions. A p- value of  $\leq 0.05$  was considered as statistically significant.

**Results**: study found that the unhealthy behavior among study sample were: smoker 27.0%, did not practicing physical activities 64.9%, watch TV more than seven hours 70.2%, eat food high in fat 40.7% and there significantly association between age and smoker (P<0.0001), age and number of hours sleeping (P<0.0001), age and going to bed early (P<0.0001), and there was significantly association between r physical activities and gender (P=0.021).

**Conclusion:** there was proportion of unhealthy lifestyle among sample of study such as watch TV more than seven hours, did not practicing physical activities eating fatty foods, there was significantly association between age and smoking, age and practicing physical activities, and association between gender and practicing physical activities.

**Recommendation**: study recommended for health policy in governorate to encourage health lifestyle among people through mass media and open more sports club for physical activities.

Keywords: Lifestyle, Healthy Adults, Primary Health Care Centers, Erbil City.

## **INTRODUCTION:**

Lifestyle includes the behavior and activities that make up human daily life and it involve the work do by human, leisure activities the food eat, interaction with family, friends, neighbors, coworkers and strangers<sup>(1)</sup>.

The negative behaviors that includes tobacco use, unbalanced nutrition (too many calories and/or too much of one food group and not enough of the others) and a lack of physical activity are some of the key risk factors for the most common causes of death <sup>(2)</sup>.

People who smoke, don't exercise, eat poorly, and drink alcohol are three times more likely to die from cardiovascular disease and nearly four times more likely to die of cancer. According to study conducted in United Kingdom involved 4,886 randomly selected people aged 18 or older in 1984 to 1985. The unhealthy behavior (that involves smoking, eating fruits and vegetables less than three times a day, exercising less than two hours a week, and drinking alcohol more than 14 and 21 units for women and men respectively per week) was calculated by giving one point for each negative behavior. The participants were then tracked for the next two decades. Over the course of 20 years, 1,080 participants died, 431 from cardiovascular disease, 318 from cancer, and 331 from other causes. The researchers found that compared with participants who did not have any unhealthy behaviors, the risk of death from all causes as well as from each cause increased substantially with each additional unhealthy behavior (3).

The World Health Organization (WHO) reports indicated that total of 57 million deaths occurred in the world during 2008; 36 million (63%) were due to non communicable diseases (NCDs), principally cardiovascular diseases, diabetes, cancer and chronic respiratory diseases. Nearly 80% of these NCD deaths (29 million) occurred in low- and middle-income countries. NCDs are the most frequent causes of death in most countries in the Americas, the Eastern Mediterranean, Europe, South-East Asia, and the Western Pacific <sup>(4,5)</sup>.

Up to researchers' knowledge, no previous study had been carried out among Erbil population related to lifestyles.

**Aim of study**: To identify the lifestyle aspects for clients attending primary health care centers **Specific objectives**: Study association between some socio-demographic characteristics (like age, gender, occupation, family income, marital status, and type of family) with lifestyle aspects (that include smoking, alcohol drinking, nutritional kind and behaviors, physical activities, engaging activities with family and friends, sleeping hours, and time of TV watching).

## **METHODOLOGY:**

**Research design:** A quantitative, descriptive study.

**Setting:** The study conducted in Primary Health Care Centers in Erbil City of Kurdistan Region of Iraq.

**Duration of the study:** This study was carried out from 17<sup>th</sup> Jul 2014 to 11<sup>th</sup> January 2015.

**Study sample**: A convenience method of sampling was used to recruit 248 participants from primary health care centers (115 males and 133 females) who were attended to primary health care centers during study period for purpose either treatment minor illness or vaccination coverage program for their children.

Inclusion criteria were clients who were attended in primary health care centers during the study period, both genders, aged 15 years or more. Exclusion criteria clients who were have one or more chronic diseases (patients with chronic diseases are not free for choice lifestyle).

**Tools and methods of data collection:** A direct interview was done with the clients, using a questionnaire designed by the researchers. The questionnaire consisted of two parts; part one related to socio demographic characteristics of patients (which as age, gender, marital status, occupation, and levels of income. Part two involved number of questions about lifestyle or behavioral aspects (Which as smoking, alcohol drinking, sleeping duration, physical activities, watching TV, engaging with others, and eating and drinking pattern).

**Statistical analysis:** The data were analyzed through the SPSS software V.20 (Statistical Package for Science Service) application for statistical data analysis, which include descriptive (frequency, percentage, and mean) and inferential (Chi-square and Fisher's exact test) statistical analyses. P-value of  $\leq 0.05$  was considered as statistically significant.

### **RESULTS:**

Table 1: Socio-demographic characteristics of study sample

Variables		
Age categories	Frequency	Percentage
15-25	47	19.0
26-35	72	29.0
36-45	75	30.2
46-55	33	13.3
56-65	18	7.3
66+	3	1.2
Gender		
Male	115	46.4
Female	133	53.6
Marital status		
Single	71	28.6
Married	175	70.6
Divorced	2	.8
Occupation		
Unemployed	115	46.4
Unskilled	52	21.0
Lower professional	66	26.6
High professional	15	6.0
Type of family		
Extended	108	43.5
Nuclear	140	56.5
Income		
Inadequate for daily needs	118	47.6
Enough for daily living	90	36.3
Extra saving	40	16.1

Table 1 show that the highest percentage 30.2% of study sample was among age group 36-45 year followed by 29.0% was among age group 26-35 years. Same table show that 70.6% of study sample were married and 28.6% were single. The table show that near to half (46.4%) of study sample was unemployed, followed by 26.6 and 21.0 were lower professional and unskilled respectively, more than half (56.5%) of study sample living in nuclear type of family. Also the

table show that near to half (47.6%) of study sample were haven't enough income for daily living and only 16.1% were have extra-saving.

Table 2: Distribution of study sample according to behaviors

	Yes		1	No	
Items	Frequency	Percentage	Frequency	Percentage	
Do you smoker?	67	27.0	181	73.0	
Do Alcohol drinker?	7	2.8	241	97.2	
Do you sleep 6-8 hours per day?	174	70.2	74	29.8	
Do you go to bed early?	129	52.0	119	48.0	
Do you practice physical activities?	87	35.1	161	64.9	
Do you engage with individual, family, or	58	23.4	190	76.6	
team?					
Do you watch TV 6 hours daily?	174	70.2	74	29.8	
Do you drink beverages containing	226	91.1	22	8.9	
caffeine (tea, coffee, cocoa)?					
Do you eat foods high in fat (like fatty	101	40.7	147	59.3	
meats)?					
Do you eat between meals?	54	21.8	194	78.2	
Do you try to eat meals, rather than skip	49	19.8	199	80.2	
of meals?					
Do you eat salad and vegetable with meal?	225	90.7	23	9.3	
Don you eat fruits at day?	215	86.7	33	13.3	

Table 2: show that 27.0% of study sample were smoker, only 2.8% were alcohol drinker. Same table show that 70.2 % of study sample were spend 6-8 hours daily for sleep, near to half 48% of sample did not go to bed early. The table show that 70.2% of study sample were watch TV seven hours and more daily and only 23.4% of sample engages with family, or team. Only 21.8% of study sample were eat between meals and only 19.8% of sample try eat meals rather skip.

Table3: smoking and sleeping in relation to socio-demographic characteristics

Behaviors Items	Variables		7	Yes		No	
			F.	%	F.	%	P value
Smoking	Age	15-25	7	10.5	40	22.1	0.000
	(years)	26-35	9	13.4	63	34.8	
		36-45	26	38.8	49	27.1	
		46-55	17	25.4	16	8.8	
		56-65	8	11.9	10	5.5	
		66+	0	.0	3	1.7	
	Gender	Male	47	70.1	68	37.6	.030
		Female	20	29.9	113	62.4	
	Marital	Single	12	17.9	59	32.6	.030
	status	Married	55	82.1	120	66.3	
		Divorced	0	0	2	1.1	
Sleeping hours	Age	15-25	29	16.7	18	24.3	0.000
6-8 per day		26-35	59	33.9	13	17.6	
		36-45	56	32.2	19	25.7	
		46-55	22	12.6	11	14.8	
		56-65	5	2.9	13	17.6	

		66+	3	1.7	0	.0	
	Gender	Male	83	47.7	32	43.24	.519
		Female	91	52.3	42	56.75	
Going to bed	Age	15-25	29	16. 7	18	24.3	.000
early		26-35	59	33.9	13	17.6	
		36-45	56	32.2	19	25.7	
		46-55	22	12.6	11	14.8	
		56-65	5	2.9	13	17.6	
		66+	3	1.7	0	.0	
	Marital	Single	28	21.7	43	36.1	.014
	status	Married	99	76.7	76	63.9	
		Divorced	2	1.5	0	.0	

F.: Frequency: %: percentage

Table 3 shows that the highest percentage 38.8% of smoker were among age group 36-45 years followed by 25.4% among age group 46-55 years. While the highest percentage 34.8% of non-smoker were among age group 26-35 years. There was significantly association between age groups and smoking status (p<0.0001). The table shows that there was significantly differences between smoking status and gender 70.1% of smoker were males. While 62.4% of who not smoker were females (p<0.03). Same table show that there was significantly differences (p=0.03) between marital status and smoking 82.1% of smoker were married. While 66.3% of nonsmoker where married. Around 34% (33.9%) of whose sleep six to eight hours per day were age group 26-35 years. While the highest percentage 25.7% of whose sleep less than six hours were age group 36-45 years followed by 24.3% among age group 15-25 years (p<0.0001). Highest percentage 76.7 of whose go to bed early where married (p=0.014).

Table 4: Life style at home in relation to socio-demographic characteristics

Behaviors Items	Variables		Y	es	1	No	P value
			F.	%	F.	%	
Engage in	Age (years)	15-25	7	12.0	40	21.0	.007
individual,		26-35	23	39.7	49	25.8	
family, or team		36-45	19	32.8	56	29.5	
		46-55	2	3.5	31	16.3	
		56-65	7	12.0	11	5.8	
		66+	0	.0	3	1.6	
	Marital status	Single	10	17.2	61	32.1	.040
		Married	48	82.8	127	66.8	
		Divorced	0	.0	2	1.1	
Watch TV	Type of family	Extended	86	49.4	22	29.7	.004
seven hours and		Nuclear	88	50.6	52	70.3	
more per day	levels of income	Inadequate for daily needs	74	42.5	44	59.5	.02
		Enough for daily living	66	37.9	24	32.4	
		Extra saving	34	19.5	6	8.1	
Practicing	Gender	Male	49	56.3	66	41.0	.02
physical		Female	38	43.7	95	59.0	
activities	Occupation	Unemployed	29	33.3	86	53.4	.00
	_	Unskilled	30	34.5	22	13.7	
		Lower professional	21	24.1	45	27.9	
		High professional	7	8.0	8	5	

F.: Frequency %: percentage

Table 4 shows that 39.7% of those who were engage with individuals, family, and team were age group 26-35 years. Highest percentage 29.5% of those were hasn't engage interesting were age group 36-45 years followed by 25.8% were age group 26-35 years (P=0.007).

Regarding marital status 66.8% of those who were haven't engage interesting were married (p=0.04). Regarding daily time that was spend in watching TV the table show that 37.9% of those who have enough income for daily living watch TV seven hours and more. While 59.5% of whose watch TV less than seven hours were haven't income for daily needs (p=0.021). Regarding physical activity, 59.0% of those who not practice physical activity were female. While 56.3 of who practice physical activities were male (p=0.02). Same table show that 53.4% of those who haven't interesting in practicing physical activities were unemployed. While 34.5% of who practicing physical activities were unskilled (p<0.001).

Table5: lifestyles related to eating habits by socio-demographic characteristics

Behaviors Items	Variables		Yes		No		P value
			F.	%	F.	%	
Eating between meals	Marital	Single	16	29.6	55	28.4	.043
	status	Married	36	66.7	139	71.6	
		Divorced	2	3.7	0	.0	
Eating between	Type of	Extended	17	31.5	91	46.9	.043
meals	family	Nuclear	37	68.5	103	53.1	
Eat meals rather than	Occupation	Unemployed	25	51.02	90	45.23	
skip of meals		Unskilled	4	8.16	48	24.12	.000
		Lower professional	11	22.45	55	27.64	
		High professional	9	18.37	6	3.0	
Drinking beverages	Age (years)	15-25	46	20.3	1	4.6	.000
containing caffeine		26-35	61	27.0	11	50	
(tea, coffee, cocao)		36-45	71	31.4	4	18.2	
		46-55	30	13.3	3	13.6	
		56-65	18	8	0	.0	
		66+	0	.0	3	13.6	
	Gender	Male	111	49.1	4	18.2	.005
		Female	115	50.9	18	81.8	

Table 5 shows 68.5% of those eating between meals were live in nuclear type of family. While 53.1% of those not eating between meals were live in nuclear family (P=0.043). Regarding drinking beverages (such as tea, coffee, and cocao) 49.1% of who were drinking beverage were males. While 81.8% of who not drinking beverage were females (p=0.005)

## **DISCUSSION:**

Present findings indicated that more than half (59.2%) of study sample at age group 26-45 years, 70.6% of them married, near to half (47.6%) of sample 26.6% and 21.0% were lower professional and unskilled respectively followed by 46.4% of sample were unemployed. The highest percentage 47.6% of sample was hasn't adequate income for daily needs. According to study conducted in United States of America (USA) by Reeves and Rafferty in year 2005 results indicated that 24.3% of them at age between 35-44 years, followed by 21% were among age group 45-54 years, 56.7% of them male, and 41.4% of sample were living in middle level of income, followed by 30.4% of them living in high level of income <sup>(6)</sup>.

Present finding revealed that there was proportions of unhealthy behaviors the study sample that involvers smoking (27.0%), alcohol drinking (2.8), watch TV more than seven hours in day (70.2%), drinking beverages (91.1%), eating foods high fat (40.7%), eating between meals (21.8%), and skip of meals rather than regular (19.8%). While at the same time the healthy behaviors among study sample such as sleeping six to eight hours (70.2%), going to bed early(52.0%), practicing physical activities (35.1%), engaging activities (23.4%), daily eating vegetable and salad (90.7%) and daily eating fruits (86.7%). Study Reeves and Rafferty indicated that only 3% of the population meets the definition of a healthy lifestyle: 76.0% of sample was

nonsmoker, 23.3% of them consuming five servings of fruits and vegetables per day, and only 22.2% of them regularly practicing physical activities <sup>(6)</sup>.

The results of present study indicated that there was significantly association between age of participant and smoking behavior and also indicated that the highest percentage of smoker where among age group 36-45 years. In contrast with study conducted in United Kingdom (UK) 2015 indicated smoking prevalence is highest among young adults: 25% of them were among age 25-34 years, followed by 23% among age 16-24 years<sup>(7)</sup>.

Tobacco use in adolescents is mainly associated with low educational ambitions and less affluent self-reported family economy <sup>(8)</sup>.

Also present findings indicate that there were significantly differences between gender and smoking behavior male higher than female. Agree with study conducted in China by Lv et al, 2015, involved 487,527 adults. Result indicated that the prevalence of regular smokers was significantly higher among males (60.6%) than among females  $(2.2\%)^{(9)}$ .

In Great Britain 22% and 17% of adult men and women respectively were smokers<sup>7</sup>. Globally, male smoking prevalence is 4.4 times that of women smoker <sup>(10)</sup>.

According to study conducted in Turkey by Kilic and Ozturk in year 2013. Results indicated that they were factors affecting on levels of cigarette consumption between male and female and it include: prices, which has affect on the level of cigarette consumption of females but not of males whereas pro-cigarette marketing affects the decision of how much to smoke for males with no effect for female smoking (11).

Present findings indicates that there was significantly association between age of participant and sleep duration 66.1% who duration of sleep six to eight hours per day where among age group 26-45 year. While 25.7% of who do not sleep six to eight hours per day where among age group 36-45 years, followed by 24.3% among age group 15-25 years. Present study indicates that there was no significant differences between gender and sleep duration. Result of study conducted in Korean by Stefani et al in year 2013 indicated that the gender and age significantly modify the relationship between sleep duration and metabolic syndrom<sup>(12)</sup>.

Among older adults, short sleep duration is associated with greater age-related brain atrophy and cognitive decline <sup>(13)</sup>.

Present study indicates that there was significantly association between watch TV more than seven hours and family income near to 60% (59.5%) of whose not watch TV seven and hours and more were low level of income (p=0.004). According to study of Sugiyama et al conducted in Australian. Results indicated that neighborhood walkability was negatively associated with TV viewing time in adult women, but not in adult men, even the study indicated that the adult women who were living in medium- and high-walkable neighborhoods significantly less TV viewing time per day (14 minutes and 17 minutes, respectively) compared to those residing in low-walk able neighborhoods  $^{(14)}$ . The differences between two studies maybe related to differences of two cultures and method of evaluation income in present study were different than the method of evaluation walkability in the other study.

Present study shows that there was a significantly difference between genders about practicing physical activities (p=0.02). Agree with study conducted by Azevedo et al in Pelotas (south Brazil) in 2007 (study involved 1344 men and 1756 women). Result indicated that the males were more active than women regarding physical activity<sup>(15)</sup>.

The present study indicated that there was significantly association between marital status and eating between meals, two third (66.7%)of who answered yeas about eat between meals where married. A study conducted by Valentin et al Romania (in 2015) indicated that the not married people being less likely to snack than married people <sup>(16)</sup>.

Result of study conducted by Berge et al 2012 indicated that frequently meals in family associated with consumption of fruits and vegetables for parents after adjusting some variables such as age, educational attainment, race, and marital status. The study also indicated that less fast food intake for fathers and fewer dieting and binge eating behaviors for mothers were significantly associated with family meal frequency (17).

Present study indicated that there was significantly differences between age and beverage drinking (p<0.0001), and significantly differences between gender and beverage drinking (0.005). According to study conducted in USA depended in depth analysis of the U.S. population's consumption of caffeine between 2003 and 2008. It focused on different dietary sources of caffeine. Results indicated that the major food sources of caffeine are coffee, soft drinks and tea. Teenagers and young adults consumed roughly one-third the amount of caffeine as adults, or about 100 mg per day, and energy drinks contributed only a small portion of caffeine consumed by teenagers  $^{(18)}$ .

## **CONCLUSIONS:**

Study concluded that there was unhealthy behaviors practice in the study sample, which are smoking, watch TV more than seven hours per day, eating fatty foods, sleeping hours less than six hours per day. Study finds that there was significantly association between age and smoking, sleeping less than six hours and age, and there were significantly association between gender and practicing physical activities.

## **RECOMMENDATION:**

Study recommended for health policy in governorate about:

- 1. Necessary to improve awareness of people about healthy lifestyle through mass media (like avoid tobacco smoking, avoid eating fatty food) to promote and maintain the public health.
- **2.** Encourage people especially female to practicing physical activity through mass media and open more sports clubs.

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