Prevalence and Impact of Headache in Undergraduate Students in Kirkuk University

انتشار وتأثير الصداع بين الطلاب الجامعيين في جامعة كركوك

Rebaz Ismail Ali*

الخلاصة

خلفية البحث: الصداع هو أحد إضطرابات الجهاز العصبي الأكثر شيوعاً وهناك عِدّة أنواع منه مثل صداع من نوع تَوتّرَ، داء شقيقة، صداع عنقودي وتُسبّبُ ما تسمّى بمتلاز ماتِ الصدّاع اليوميةِ المُزمّنةِ المؤدية إلى مستويات كبيرةٍ مِّنْ العجز للطلبة وللناس في كافة أنحاء العالم الهدفٌ : تهدف الدراسةِ الى التُعرفُ على مَدى انتشار الصداع بين طلبَةِ الكليات في جَامَعةِ كركوك وكذلكُ لمعرفةً العلاقة بين الصداع و الخصائص الديمو غرافية مثل العُمر والجنس والسكن .

المنهجية: أجريت الدراسة الوصفية غير تجريبية أجريت على عدد من كليات جامعة كركوك للمدة من 14 ايلول 2014 و لغاية 1 مايس 2015 ولتحقيق أهداف الدراسة اختيرت عينة مناسبة مكونة من (600) طالب وطالبة من الكليات الاتية (التربية , التمريض الزراعة , العلوم القانون والادارة والاقتصاد) ولغرض جمع المعلومات صممت استمارة استبيان تتكون من (52) فقرة ، واستخدم مقياس يتألف من ثلاث مستويات للإجابة : الرقم (3) دائما. والرقم (2) بعض الاحيان. والرقم (1) يعنى ابدا وشملت الأستبانة على الخصائص الديمو غرافية (10) فقرة ؛ ومواصفات الصدّاعُ (42 فقَرة) والتَزَام الطلبة (9 فقرة) وبطريَّةُ المقابَّلة الشَّخصية مع عينة البحث جمعت المعلومات وباستُخدام التحليل الوصفي (التوزيع التكراري النسبة المئوية) كذلكُ التحليلُ ألاستنتاجي (الأنوفا ومقياس تيّ).

النتائج: اظهرتُ النَتائجُ أن الصداّعَ كان عاليا بين الطلاب ضمن المستوياتُ العمرية مابين (21-25 سَنَة) وتُشكّلُ نسبتهم (59.5 %) وان الصداع عند الاناث اكثر من الذكور وتشكّل نسبتهم (50.7%). وأغلب الطلاب كانوا مُتَزَوّجين وتشكّل نسبتهم (8.4%%) و(4%) من الطلاب كانوا يعانون من الصداع التوتّري، فيما يتعلق ببداية الصداع (54.7%) العيّنة كانتُ لَها صداعُ بعد القراءة وأخيراً حول مدّة الصداع (فكانت نسبة 38.8% منهم يعانون الصداع لمدة ساعة واظهرت النتائج إن هناك علاقة بين الصداع ونوع الكليّة . الاستنتاج: الصداع حالة سائدة جدا بين الطلاب في جامعة كركوك, وهذا المرض لربما له تأثير رئيسي على حياة الطلاب وفي بعض الحالات

يودي إلى الفشل الدر اسى في النهاية.

ا**لتوصّيات**: إعتِماداعلى نتائج الدراسة الحالية يَوصى الباحثَ بدِراساتَ أخرى تَتَضمّنُ كُلّ الكليَّات في جامعةِ كركوك، وتوفيرُ الدعم النفسيّ لطبة الكلية لتقْليل الصداع التَّوَتّري، وانشاء مركزَ صّداع مُتَخَصّص للتَعَامُل مع حالاتِ الصداع، وتوڤير كُتَيبات لتَحسين معارف الطلبة حولّ الصداع.

الكلمة المفتاحية: - انتشار , صداع , الطلاب.

Abstract

Background : Headache is one of the most common disorders of the nervous system and several of its subtypes tension-type headache, migraine, cluster headache and the so-called chronic daily headache syndromes—cause substantial levels of disability for students and peoples throughout the world. Objectives of the study :- Aims of the study to determine headache prevalence among college students at Kirkuk university in Kirkuk city and to find out the relationship between headache and demographic characteristic of student with age, gender and residence

Material and Method : descriptive design used to achieve the objectives of the study was carried out at on students of collegs at Kirkuk University between the from September 14th 2014 to May 1st 2015. The study was conducted in Kirkuk university, the study conducted on six college from Kirkuk University (Education Nursing, Agriculture, Science, Law and Administration and Economic). A convenient sample consisted of (600) students who were study in the colleges of Kirkuk university. Through extensive review of relevant literature, In order to collect the study information, a questionnaire was constructed .The data was collected by using personal and interview technique. Overall items included in the questionnaire were (52) items. The questionnaire consists of two parts, demographic data which is composed of (10) items such as (age, gender, class, marital status, types of headache and duration).part two include characteristic of headache comprised of (42) items. That classified as (Frequency, Onset, Location, Triggers and Associated Symptoms for headache. All items were measured by using 3-likert scale option were used in the rating scale as always (3), some time (2) and Never (1). Data were analyzed by using descriptive statistics, which include frequency and percentages, were computed and inferential statistics (T test and ANOVA), Statistical Package for Social Science (SPSS) version (17) is used for data analysis at (P.value \leq 0.05).

Results :The results shows the headache were high in students at age between (21-25 years) and constitute (59.5 %). Also the results shows the headache is common in females and constituted of (50.7 %). Most of the students were Single and constituted (86.4%) and (43.0%) of the students were have tension headache ,with regard to the start of headache (54.7%) of the sample were have headache after reading finally about duration of headache (38.8%) of student were have headache hourly also the result show high significant between headache and type of college Also the study concluded there were significant differences between pain type, Location , Triggers and Associated Symptoms for headache and their student gender except for Frequency and Onset of headache.

Conclusion: Headache is a highly prevalent condition among the students at the University of kirkuk .This disease may have a major impact on the students' lives and in some cases, ultimately lead to educational failure.

Recommendation:- The researcher recommends further studies includes all colleges Kirkuk university ,provide psychological support for college student to decrease tension headache, constructing specialized headache center to dealing with headache cases and providing posters, booklet to improve students' knowledge about headache

Keys; Headache Prevalence, Students .

*Assistant lecturer, M.Sc. in Adult Nursing-College of Nursing/Kirkuk University. E-mail: rebazmaster@yahoo.com

INTRODUCTION:

Headache is common, with a lifetime prevalence of over 90% of the general population in the United Kingdom (UK). It accounts for 4.4% of consultations in primary care and 30% of neurology outpatient consultations⁽¹⁾. Headache disorders are underdiagnosed and under-treated conditions in certain populations, such as undergraduate students. In this specific population, the headaches lead to lost days of study and worse academic performance. Few studies were performed on undergraduate students. In Greece, the prevalence of migraine is 2.4% and in Turkey, 12.4%. In Brazil, Primary headache, such as migraine and tension-type headache, affects Brazilian children with a prevalence rate of 12.3% and 4.2%, respectively ⁽²⁾. Headache disorders are generally classified as either primary or secondary, and these classifications are further divided into specific headache types. Primary headache disorders are not associated with an underlying pathology and include migraine, tension-type, and cluster headache. Secondary headache disorders are attributed to an underlying pathological condition and include any head pain of infectious, neoplastic, vascular, or drug-induced origin $^{(3)}$. Migraine is the most common severe form of primary headache affecting about six million people in the UK in the age range 16-65, and can cause significant disability⁽⁴⁾. The World Health Organization (WHO) ranks migraine in its top 20 disabling conditions for women aged 15 to 44. It is estimated that migraine costs the UK almost £2 billion a year in direct and indirect costs⁽⁵⁾. With over 100,000 people absent from work or school because of migraine every working day. Tension-type headache affects over 40% of the population at any one time. Although less of a burden to the individual sufferer than migraine, its higher prevalence results in a greater societal burden, with as many lost days from work as with migraine⁽⁶⁾. Chronic headache, defined as headache on 15 or more days per month, affects three per cent of people worldwide. Healthcare professionals often find the diagnosis of headache difficult and both healthcare professionals and patients worry about serious rare causes of headaches such as brain

tumors. General practitioners (GPs) are often uncertain about when to refer patients to secondary care. GPs refer 2-3% of patients consulting for headaches to neurological clinics. This may allow the exclusion of secondary headache but often does not provide a headache management service. Most primary headache can be managed in primary care and investigations are rarely needed⁽⁷⁾

OBJECTIVES OF THE STUDY :-

- 1-To determine headache prevalence among college students at Kirkuk university in Kirkuk city
- **2-** To find out the relationship between headache and demographic characteristic of student with age , gender and residence.

METHODOLOGY:

To achieve the objectives of the study cross-sectional study was carried out at on students of college at Kirkuk university between period from period September 14th 2014 to May 1st 2015. The study was conducted in Kirkuk university, the study includes six colleges from Kirkuk university (Education ,Nursing , Agriculture , Science , Law and Administration and Economic). A convenient sample consisted of (600) students who were study in the colleges of Kirkuk university hospitals. Through extensive review of relevant literature, a questionnaires was constructed for reach purpose of the study the data was collected by using personal and interview technique. Overall items included in the questionnaire were (52) items. The questionnaire consists of two parts, demographic data which is composed of (10) items such as (age, gender, class, marital status, types of headache and duration). Part two include characteristic of headache comprised of (42) items. That classified as (Frequency, Onset, Location of Triggers and associated Symptoms for headache). The data were collected through the utilization of constructed questionnaire, interview technique with the students in Kirkuk university. The data Was collected between February 29th, 2015 up to March 22th, 2015.. All items were measured by using 3likert scale option were used in the rating scale as always (3), some time (2) and Never (1). Data were analyzed by using descriptive statistics, which include frequency and percentages, nd inferential statistics (T test), by using; Statistical Package for Social Science (SPSS) version (17) is used for data analysis at (P.value ≤ 0.05).

RESULTS:

Vari	Variables No. %						
Age	16-20 years	212	35.3				
	21-25 years	357	59.5				
	26-30 years	31	5.2				
	Total	600	100.0				
Gender	Male	296	49.3				
	Female	304	50.7				
	Total	600	100.0				

College	nursing college	100	16.67	
	Education college	100	16.67	
	Law college	100	16.67	
	Science college	100	16.67	
	Agriculture college	100	16.67	
	administrative and economic	100	16.67	
	college			
	Total	600	100.0	
Class	1 class	150	25.0	
	2 class	150	25.0	
	3 class	150	25.0	
	4 class	150	25.0	
	Total	600	100.0	
Residence	City	450	75.0	
	Internal department	150	25.0	
	Total	600	100.0	
Marital status	Single	524	87.3	
	Married	76	12.7	
	Total	600	100.0	
Type of headache	No have headache	23	3.8	
	Migraine	57	9.5	
	Tension	258	43.0	
	Probable migraine	22	3.7	
	Probable tension	127	21.2	
	No class	113	18.8	
	Total	600	100.0	
start of headache	Head trauma	50	8.3	
	Neck trauma	62	10.3	
	Illness	39	6.5	
	Infection	9	1.5	
	After reading	328	54.7	
	After writing	112	18.7	
	Total	600	100.0	
Duration of headache	Minutsa	49	8.2	
	Hours	233	38.8	
	Days	212	35.3	
	One week	73	12.2	
	One month	33	5.5	
	Total	600	100.0	

Table (1) demonstrates the socio-demographic characteristics of the whole study sample. The results shows the headache were high percent in most students at age between (21-25 years) and constitute (59.5 %). Also the results shows the headache is common in females and constituted of (50.7 %). With regard to college (16.7%) percentage of each college in related to the class (25.0%) percentage of each class. with regard to the residence (75.0%) from students were living in city, most of the students were single (86.4%) and (43.0%) of the students were have tension headache with regard to the start of headache (54.7%) of the sample were have headache after reading finally about duration of headache (38.8%) of student were have headache hourly.

No	Frequency of headaches	Alv	ways	Some	e time	Ne	ver	MS	Severity
		F	%	F	%	F	%		
1	It occur at each times	239	39.8	301	50.2	60	10.0	2.2	Ms
2	Increasing in frequency	218	36.3	318	53.0	64	10.7	2.2	Ms
3	It in more frequent on weekends	220	36.7	222	37.0	158	26.3	2.1	Ms

Table (2): Mean of Scores for Frequency of headaches items with frequency, percentage and severity.

Table(2) indicates that the mean of score was medium Level about the occurrence, and frequency of headache

Table (3): Mean of Scores for Onset of each headache items with frequency, percentage and severity

	per centage and severity									
No	Onset of each headache	Alv	ways	Som	e time	Ne	ever	MS	Severity	_
		F	%	F	%	F	%			
1	It begins usually in the morning	256	42.7	246	41.0	98	16.3	1.2	Ls	
2	It begins usually in the night	214	35.7	277	46.2	109	18.2	1.1	Ls	
3	It begins usually in the afternoon	292	48.7	224	37.3	84	13.9	1.3	Ls	

Table 3indicates that the mean of score was low significant in items (It begins usually in the morning, It begins usually in the night and It begins usually in the aftenoon

Table (4): Mean of Scores for Pain Type of headache items with frequency, percentage and severity and Chi-square.

No	Pain Type	Alv	ways	Som	e time	Ne	ever	MS	Severity
		F	0⁄~	F	0⁄~	F	0/2		
1	Pressure	242	40.4	247	41.2	110	18.4	1.2	Ms
2	Stabbing	278	46.4	201	33.6	120	20.0	1.2	Ms
3	Throbbing	238	39.7	235	39.2	126	21.0	1.1	Ms
4	Tight band	288	48.1	231	38.6	80	13.4	1.3	Ms
5	Exploding	334	55.6	218	36.5	48	8.0	1.4	Ls
L	Obs.X² =104.651		DF=	8		Crit	$t. X^2 =$	15.51	

Table 4 indicates that the mean of score was moderate significant in items (Pressure, Stabbing, Throbbing and Tight band) and low significant in items (Exploding).

	and severity.								
No	Headache Triggers	Alv	vays	Som	e time	Ne	ever	MS	Severity
		F	%	F	%	F	%		
1-	Prolonged computer work	254	42.2	261	43.6	85	14.2	1.2	Ls
2-	Bright lights/sun	145	24.0	274	45.7	181	30.2	1.9	Ms
3-	After stress	220	36.6	268	44.7	112	18.7	1.1	Ns
4-	Fatigue	235	39.1	222	37.1	143	23.9	1.1	Ns
5-	During stressful times	233	38.7	247	41.2	120	20.0	1.1	Ns
6-	Weather changes	234	38.9	244	40.7	122	20.4	1.1	Ns
7-	Hunger / Skipping meals	199	33.1	222	37.1	179	29.9	1.00	Ns
8-	Too little sleep	250	41.7	209	34.9	140	23.4	2.1	Ms
9-	Too much sleep	260	43.2	225	37.6	115	19.2	2.2	Ms
10-	Loud sounds	243	40.4	259	43.2	98	16.2	2.2	Ms

Table (5): Mean of Scores for Headache Triggers items with frequency, percentag	je
and severity.	

Table 5 indicates that the mean of score moderate significant in items (Bright lights/sun, Too little sleep, Too much sleep and Loud sounds)

Table (6) statistical Differences between Frequency, Onset , Location of , Triggers and Associated Symptoms for headache with their age.

Categories	5.0.V	55	M S	F.Obs					
Frequency of headaches	Between Groups	18.719	9.360	4 420					
	Within Groups	1253.745	2.118	S					
	Total	1272.464							
Onset of each headache	Between Groups	13.098	6.549	2 460					
	Within Groups	1117.617	1.888	S.409					
	Total	1130.716							
Location of Headaches	Between Groups	41.579	20.790	4 268					
	Within Groups	2878.860	4.871	4.200 S					
	Total	2920.439							
Pain Type	Between Groups	47.348	23.674	4.539					
	Within Groups	3082.544	5.216	S					

Categories	S.O.V	SS	M S	F.Obs
Headache Triggers	Total Between Groups	3129.892 34.465	17.233	
	Within Groups	12608.089	21.333	.808
	Total	12642.554		IND
Associated Symptoms for	Between Groups	306.472	153.236	
headache	Within Groups	10796.916	18 260	8.388 S
	Total	11103.387	18.209	5
F critical = 2.60	DF = 599			

DF= 599

Table (6) shows that there were significant differences between Frequency, Onset, Location, and Associated Symptoms for headache student and their age at P value ≤ 0.05 except for Triggers of headache

Table (7) comparisons between Frequency, Onset, Location, pain type, Triggers and Associated Symptoms for headache with their gender.

Categories	Sex	No.	Х	S.D	T.obs	P≤0.05
Frequency of	Male	293	6.4778	1.46781	.014	NC
headaches	Female	302	6.8046	1.44382		INS .
Onset of each	Male	293	6.6519	1.37553	.012	NS
headache	Female	302	6.9007	1.37493		IND
Location of Headaches	Male	292	11.2740	2.13149	8.611	S
	Female	302	11.5199	2.29790		5
Pain Type	Male	292	11.1918	2.23780	4.926	S
	Female	302	11.7351	2.32622		3
Headache Triggers	Male	292	21.7568	4.27642	7.136	8
	Female	302	21.3642	4.92398		5
Associated Symptoms	Male	292	21.9418	4.16664	5 365	S
for headache	Female	302	22.8974	4.43327	5.505	6

T critical = 1.96 DF=598

Table (7) shows that there were significant differences between pain type, Location, Triggers and Associated Symptoms for headache and their student gender at P value ≤ 0.05 Except for Frequency and Onset of headache.

Table (8) statistical Differences between difference between Frequency, Onset, Location, pain type, Triggers and Associated Symptoms for headache with their student college

student conege .								
Categories	S.O.V	S S	M S	F.Obs				
Frequency of headaches	Between Groups	169.925	33.985	18 156				
	Within Groups Total	1102.539 1272.464	1.872	HS				
Onset of each headache	Between Groups	144.906	28.981	17 216				
	Within Groups	985.810	1.674	HS				
	Total	1130.716						

Categories	S.O.V	S S	M S	F.Obs
Location of Headaches	Between Groups	549.181	109.836	27.224
	Within Groups	2371.259	4.033	27.236 HS
	Total	2920.439		115
Pain Type	Between Groups	624.621	124.924	
	Within Groups	2505.272	4.261	29.320 HS
	Total	3129.892		115
Headache Triggers	Between Groups	1397.806	279.561	14 (10
	Within Groups	11244.748	19.124	14.019 US
	Total	12642.554		115
Associated Symptoms for	Between Groups	3315.096	663.019	50.057
headache	Within Groups	7788.291		50.057 HS
	Total	11103.387	13.273	
F critical = $2, 2$	DF= 599			

Table (8) shows that there were high significant differences between Frequency, Onset, Location, pain type, Triggers and Associated Symptoms of student and their college at P value ≤ 0.05 .

Categories	S.O.V	S S	M S	F.Obs
Frequency of headaches	Between Groups Within Groups Total	8.979 1263.485 1272.464	2.993 2.138	1.400 NS
Onset of each headache	Between Groups Within Groups Total	6.676 1124.040 1130.716	2.225 1.902	1.170 NS
Location of Headaches	Between Groups Within Groups Total	20.080 2900.360 2920.439	6.693 4.916	1.362 NS
Pain Type	Between Groups Within Groups Total	.417 3129.476 3129.892	.139 5.304	.026 NS
Headache Triggers	Between Groups Within Groups Total	28.810 12613.744 12642.554	9.603 21.379	.449 NS
Associated Symptoms for headache	Between Groups Within Groups Total	166.298 10937.089 11103.387	55.433 18.537	2.990 S

 Table(9) statistical Differences between Frequency, Onset , Location , Triggers and

 Associated Symptoms for headache with their student class .

F critical = 2.2

DF= 599

Table (9) shows that there were no significant differences between Frequency, Onset , Location , Pain Type. Triggers of headache and associated symptoms for headache of student and their class at P value ≤ 0.05 .except for associated symptoms for headache.

DISCUSSION:

Results of the study in table (1) show the headache were high percent in most students at age between (21-25 years) and constitute (59.5 %) The researcher believes that the explanation of this result because of the students in this age usually admissions to the college. Primary headaches affect individuals of all ages, being a major cause of impairment and lower quality of life. In undergraduate student populations, the disability provoked by headache has a negative influence on academic productivity ⁽⁸⁾. Also the results shows the headache is common in females and constituted of (50.7%). Steiner and others (2003) mention the primary headache affecting about six million people in the UK in the age range 16-65, and can cause significant disability⁽⁴⁾. Tention Type Headache and migraine ranked respectively as second and third most common diseases in the world (behind dental caries) in both males and females⁽⁹⁾. With regard to college (16.7%) percentage of each college in related to the class (25.0%) percentage of each class. with regard to the residence (75.0%) from students were living in city because of the college situation in the city center. Also result show the most of the students were un married and constituted (86.4%), Luo and others (2010) mention migraine and tension Type Headache were higher in married than single people, but there was no significant relationship which was consistent with some studies⁽¹⁰⁾. Ayatollahi and Cheraghian's(2003) study showed a significant relationship between headache and marital status. This difference can be caused by stress of married life such as concerns about the economic problems, children's future and routine disputes⁽¹¹⁾. Also the result show (43.0%) of the students were have tension headache. Lyngberg and others (2005) mention the tensiontype headache, the frequency found in their study was 12.8%. The tension-type headache frequency varies more than migraine across the studies. The lifetime prevalence can be as high as 86% ⁽¹²⁾. Bigal and others (2001) conducted their study about headache and find the headache Among undergraduate students at a Brazilian university, the one-year prevalence of episodic tension-type headache (ETTH) was 32.9% ⁽²⁾. While Kaynak (2004) find in a Turkish population, the prevalence of Tension Headache was 20.35%. with regard to the start of headache (54.7%) of the sample were have headache after reading finally about duration of headache (38.8%) of student were have headache hourly. The researcher believes that the explanation of this result related to concentration during reading

Table (2) Frequency of headaches this table indicates that the mean of score was medium significant in items of I occur at each times, Increasing in frequency and It in more frequent on weekends

Stovner and others (2007) mention the Tension-type headache in its episodic subtype affects up to 80% of people from time to time, many of whom refer to it as "normal" or "ordinary" headache. Consequently, they mostly treat themselves without reference to physicians using over-the-counter (OTC) medications and generally effectively. Nevertheless, it can be a disabling headache over several hours and the high prevalence of this disorder means its economic burden through lost work and reduced working effectiveness is similar to that of migraine. In a minority of people, episodic tension-type headache is frequent, whilst up to 3% of adults have the chronic sub type occurring on more than 15 days every month. These people have high morbidity and may be substantially disabled; many are chronically off work⁽¹⁴⁾. Stewart and others (2006)

mention The frequency, severity, and incidence of migraine-associated symptoms (nausea, photophobia, and vomiting) have been studied in population- based telephone interviews involving 1748 migraine⁽¹⁵⁾.

Table (3) Onset of each headache this table indicates that the mean of score was low significant in items of begins usually in the morning , It begins usually in the night and It begins usually in the afternoon

Table (4) about pain type this table indicates that the mean of score was moderate significant in items of Pressure, Stabbing, Throbbing, Tight band and low significant in items of Exploding

Bertoli and others (2007) stated the episodic migraine it is often defined as <50% reduction in frequency of headache days or attacks ⁽¹⁶⁾. For chronic migraine, treatment failure is defined as <30% reduction in headache days. Headache day is defined as at least 4 hours of continuous pain with a peak intensity that is at least moderate severity⁽¹⁶⁾. Lewis and mon (2011) Migraine prophylaxis and associated reduction of the impact of headache severity on social and cognitive functioning might be expected to benefit academic performance ⁽¹⁷⁾.

Table (5) about Headache Triggers this table indicates that the mean of score was no significant in item (After stress, Fatigue During stressful times, Weather changes and low significant in items (Prolonged computer work), and moderate significant in items (Bright lights sun, Too little sleep, Too much sleep, Loud sounds)

Khan (2008) conducted study in Saudi Arabia, and find the students with headache had impaired concentration (34%), memory disturbances $(41\%)^{(18)}$ and sleeplessness (38.8%) while In the USA, mood disorders were one of the top three concerns for students with headache pursuing psychological counseling, and sleep disorders are commonly seen at campus mental health services⁽¹⁹⁾. TTH prevalence was higher in less than 25 years and 36-45 years. Kachouei et al. showed that poor sleep, tiredness and stress are the main factors for migraine⁽²⁰⁾.

Table (6) This table shows that there were significant differences between Frequency, Onset , Location , and Associated Symptoms for headache student and their age at P value ≤ 0.05 except for Triggers of headache

Academy of Neurology (AAN)(2009) Practice Parameter, Treatment of Migraine, endorsed by the American Academy of Pediatrics, reports a migraine prevalence of 3% at age 3 to 7 years that increases to 4% to 11% at ages 7 to 11 and 8% to 23% at age 11 to 15+ years ⁽²¹⁾. Also, Bigal showed that the prevalence of migraine rose between ages 25-55 years and then, trend was declining⁽²⁾.

Table (7) this table shows that there were significant differences between pain type , Location , Triggers and Associated Symptoms for headache and their student gender at P value ≤ 0.05 Except for Frequency and Onset of headache

Arruda and others (2010) find In this study Primary headache, such as migraine and tension-type headache, affects Brazilian children with a prevalence rate of 12.3% and 4.2%, respectively ⁽²²⁾. Society expectations, social limitations and stress of life issues can help to explain this difference. Some studies considered the role of female hormones in the prevalence of migraine in women⁽²³⁾.

Table (8) This table shows that there were high significant differences between Frequency, Onset, Location, pain type, Triggers and Associated Symptoms of student

and their college at P value ≤ 0.05 while the Table (9) This table shows that there were no significant differences between Frequency, Onset, Location, Pain Type, Triggers of headache And Associated Symptoms for headache of student and their class at P value ≤ 0.05 except for Associated Symptoms for headache.

The results showed an inverse statistically relationship between education level and migraine. Stang et al (2006) showed that the headache rose with increasing education level24, but Queiroz et al. did not show any significant relationship in this field25. Results showed that the frequency of TTH was significantly more than migraine but, the duration of migraine was significantly more than TTH that these results were consistent with Ayatollahi et al. study⁽²⁶⁾.

CONCLUSION:

- 1. The headache were high percent in most students at age between (21-25 years) and constitute (59.5 %). Also the headache were common in females and constituted of (50.7 %).
- **2.** Most of the students were single and constituted (86.4%) and (43.0%) of the students were have tension headache.
- **3.** With regard to the start of headache (54.7%) of the sample were have headache after reading finally about duration of headache (38.8%) of student were have headache hourly.
- 4. The result show high significant between headache and type of college .
- **5.** The result shows that there were significant differences between pain type , Location , Triggers and Associated Symptoms for headache and their student gender except for Frequency and Onset of headache .

RECOMMENDATION:

- 1. Further studies includes all college in the Kirkuk university.
- 2. provide psychological support for college student to decrease tension headache.
- **3.** Constructing specialized headache center to dealing with headache cases especially in rural.
- 4. providing posters, booklet to improve students' knowledge about diabetic control.

REFERENCE:

- **1.** Larner AJ. Guidelines for primary headache disorders in primary care: an "intervention" study. Headache Care 2006;3(1):1-2.
- **2.** Arruda MA, Guidetti V, Galli F, Albuquerque RC, Bigal ME .Migraine, tensiontype headache, and attention-deficit/ hyperactivity disorder in childhood: a population-based study. Postgrad Med (2010) 122, 18-26.
- **3.** Martin V, Elkind A. Diagnosis and classification of primary headache disorders. In: Standards of care for headache diagnosis and treatment. Chicago (IL): National Headache Foundation; 2004. p.4-18
- **4.** Steiner TJ, Scher AI, Stewart WF, Kolodner K, Liberman J, Lipton RB.The prevalence and disability burden of adult migraine in England and their relationships to age, gender and ethnicity. Cephalalgia, 2003;23(7):519-27.

- 5. World Health Organization. The world health report 2001 mental health: new understanding, new hope. Geneva: World Health Organization;
- **6.** Stovner L, Hagen K, Jensen R, Katsarava Z, Lipton R, Scher A, et al. The global burden of headache: a documentation of headache prevalence and disability worldwide. Cephalalgia 2007;27(3):193- 210.
- **7.** Frishberg BM, Rosenberg JH, Matchar DB, McCrory DC, Pietrzak MP, et al. Evidence based guidelines in the primary care setting: neuroimaging in patients with non-acuteheadache. [cited 16 Oct 2008]. Available from url: <u>http://www</u>
- **8.** Demirkirkan MK, Ellidokuz H, Boluk A. Prevalence and clinical characteristics of migraine in university students in Turkey. Tohoku J Exp Med 2006;208:87-92.
- **9.** World Health Organization. The World HealthReport. WHO, Geneva.2001;pp 19 45.
- **10.** Luo N, Fang Y, Tan F, et al. Prevalence and burden of headache disorders: A comparative regional study in China. Headache. 2010; 51(3): 1-9.
- **11.** Ayatollahi SMT, Cheraghian B. [An epidemiologic model for risk factors of migraine and tension type headaches among primary schools teachers of Shiraz, 2003] Persian. J Kerman Univ Med Sci. 2005; 12(2): 85-92.
- **12.** Lyngberg AC, Rasmussen BK, Jorgensen T, Jensen R. Has the prevalence of migraine and tension-type headache changed over a 12-year period? A Danish population survey. *Eur J Epidemiol* 2005;20:243-249.
- **13.** Kaynak Key FN, Donmez S, Tuzun U. Epidemiological and clinical characteristics with psychosocial aspects of tension-type headache in Turkish college students. Cephalalgia 2004;24:669-674.
- 14. Stovner LJ, Hagen K, Jensen R, Katsarava Z, Lipton R, Scher AI, Steiner TJ, Zwart J-A. Headache prevalence and disability worldwide: A systematic review in support of "The Global Campaign to Reduce the Burden of Headache". Cephalalgia 2007; 27: 193-210.
- **15.** Stewart , M ,Quard ,S and Bothle K, mention The frequency, severity, and incidence of migraine-associated symptoms (nausea, photophobia, and vomiting) have been studied in population- based telephone interviews involving 1748, 2006 migraine
- **16.** Bertoli FM, Antoniuk SA, Bruck I, Xavier GR, Rodrigues DC, Losso EM Evaluation of the signs and symptoms of temporomandibular disorders in children with headaches. Arq Neuropsiquiatr .(2007) 65,pp: 251-255.
- **17.** Lewis D, Mor , A. Neurology. 2011;63(12):2215-2224.
- **18.** Khan, M.M. Adverse effects of excessive mobile phone use. Int. J. Occup. Med. Environ. Health 2008, 21, 289–293.
- **19.** Pikó, B.; Piczil, M. Study of stress, coping and psychosomatic health among baccalaureate nurses-to-be. Orv. Hetil. 2012, 153, 1225–1233
- **20.** Kachouei H, Ameli J, SHarifi-Bonab MH, et al. [Evaluation of provocating factors of migraine attacks] Persian. Kowsar Med J. 2006; 11(3): 279-284.
- **21.** Academe of Neurology (AAN) ephalalgia. 2009;24(1 Suppl):9-160doi:10.11 11 /j.1468-2982.2003.00824.x

- **22.** Arruda MA, Guidetti V, Galli F, Albuquerque RC, Bigal ME (2010) Migraine, tension-type headache, and attention-deficit/ hyperactivity disorder in childhood: a population-based study. Postgrad Med (2010) pp122, 18-26.
- **23.** Kachouei H, Ameli J, SHarifi-Bonab MH, et al. [Evaluation of provocating factors of migraine attacks] Persian. Kowsar Med J. 2006; 11(3): 279-284.
- **24.** Stang PE, Osterhaus JT. Impact of migraine in the United States: Data from the National Health Interview Survey. Headache. 2006; 33(1): 29-35.
- **25.** Queiroz LP, Barea LM, Blank N. An epidemiological study of headache in Florianopolis, Brazil. Cephalalgia. 2006; 26(2): 122-7.
- **26.** Ayatollahi SMT, Sahebi L, Borhani-Haghighi A. Epidemiologic and clinical characteristics of migraine and tension-type headaches among hospitals staffs of Shiraz (Iran). Acta Medica Iranica 2009; 47(2):115-120.