

Life Style for Adult Patients with Hyperthyroidism at Baghdad Teaching Hospital

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Abstract: As a result of increasing incidence of hyperthyroidism and Big impact on patients in terms of external behavior and physical effects, Because of their large signs and symptoms on the body, So we have to complete the search for the patients life style because of its importance in controlling of the signs and symptoms of this patients .

Objectives: The study to assess the life style of adult patient with hyperthyroidism. and to find out the relationship between the life style pattern with patient demographic characteristic (age ,gender , place occupationetc)

Methodology: A descriptive analytical study was conducted on Non-probability (purposive sample) of (100) patients with hyperthyroidism in Baghdad teaching hospitals which include AL- Amal National Hospital for Cancer Management , Al_Yarmook teaching hospital , Baghdad Teaching Hospital and AL-Kindy hospital (Endocrine and diabetic center) . A questionnaire was used as a tool of data collection for the period of 15th March to 15th May 2015. Descriptive statistical analyses were used to analyze the data

Results : The results of the study indicated that (31%) of the study sample were male, (69%) female , marred (69%),patient with past family history (63%) , (62%) live in Urban areas.

Conclusions: There was a significant association between lifestyle and gender, moderate significant association between lifestyle and marital status and no significant association between lifestyle and monthly income.

Recommendations: The researcher recommend that Establish a specialized center for thyroid disease to treatment the thyroid disorder. Efforts should be mad to organized team of health professional to give perfect care for patient with hyperthyroidism , Periodic inspection and early detection for thyroid disease and Give educational courses, seminars and lectures to make the pattern of life of patients with thyroid disease is more stable than through TV, radio or billboards in hospitals and Publications .

I. Introduction

Thyroid diseases are amongst the most common of medical conditions. Their show vary extremely from area to other area and are determined principally by the availability of iodine in the diet. Epidemiological studies of thyroid dysfunction have limitations, for example the definition of over hyperthyroidism and subclinical hyperthyroidism, the selection criteria of the sample used, the effect of age, sex, genetic and environmental factors and the different techniques used for the measurement of thyroid hormones and the relative rarity of incidence data. [1].

The main causes of hyperthyroidism are Graves disease and toxic multinodular goitre, whilst rarer causes include a functioning thyroid adenoma, or thyroiditis. In epidemiological, an autonomously, studies however, the a etiology is rarely ascertained. [2].

There are other causes of hyperthyroidism this called subclinical causes ,Subclinical hyperthyroidism is defined as a decrease of serum TSH concentration with normal serum T4 and T3 concentrations in the obscurity of pituitary disease, non-thyroidal illness, or ingestion of drugs that inhibit TSH secretion such as glucocorticoids or dopamine, The obtainable studies different in the definition of a decrease of serum TSH concentration and whether the subjects include were receiving thyroxin therapy. The third generation assays have rarely been used in epidemiological Studies [3].

II. Methodology

A descriptive analytical study was carried out upon patient with hyperthyroidism to assess the life style at Baghdad teaching hospital . Sample size (100) patients . Study implemented for the period of October 21th, 2014 to September 30th , 2015. The research study was conducted in two cardiac centers in Baghdad city which include AL- Amal National Hospital for Cancer Management , Al_Yarmook teaching hospital , Baghdad Teaching Hospital and AL-Kindy hospital (Endocrine and diabetic center) . The period of data collection for sample in all hospitals was about two months. Data collection was gathered by questionnaire format, and interview with the patient . A questionnaire was used as a tool of data collection to fulfill with objective of the study and consisted of three parts, including demographic characteristics, patient's medical and surgical history,

and domains concerned with physical condition , nutritional status , physical activities and events , drug status , psychosocial status and spiritual status . A pilot study was carried out between the 15th March to 10th April 2015, on (10) patients who had hyperthyroidism at one of Baghdad teaching hospital (Al-Yarmook teaching hospital) to determine the reliability of the questionnaire and content validity was carried out through the 16 experts. Descriptive and inferential statistical analyses were used to analyze the data.

III. Results

Table (1) : Distribution of The Sample (100 patients) According to Their Demographic Characteristics.

age	Frequency	Valid Percent	Cumulative Percent
18-28	14	14.0	14.0
29-39	15	15.0	29.0
40-50	42	42.0	71.0
51-60	24	24.0	95.0
60 above	5	5.0	100.0
Total	100	100.0	
Gender	Frequency	Valid Percent	Cumulative Percent
male	31	31.0	31.0
female	69	69.0	100.0
Total	100	100.0	
Wight	Frequency	Valid Percent	Cumulative Percent
40-49	11	11.0	11.0
50-59	25	25.0	36.0
60-69	25	25.0	61.0
70-79	18	18.0	79.0
80-89	14	14.0	93.0
90 Above	7	7.0	100.0
Total	100	100.0	
length	Frequency	Valid Percent	Cumulative Percent
140-149	1	1.0	1.0
150-159	16	16.0	17.0
160-169	48	48.0	65.0
170-179	31	31.0	96.0
180 Above	4	4.0	100.0
Total	100	100.0	
Occupation	Frequency	Valid Percent	Cumulative Percent
employ	32	62.0	62.0
student	30	38.0	100.0
free work	38	100.0	
Total	100	62.0	
Place of residence	Frequency	Valid Percent	Cumulative Percent
Urban areas	62	62.0	62.0
Rural areas	38	38.0	100.0
Total	100	100.0	

Table (1) shows that the majority of patients age; the highest percentage of the patients (42%) was within the age group (40-50) and the lowest percentage of patients (5%) was within the age group (60 above).

According to their gender the highest percentage of the patients were female (69%) while (31%) were male. Regarding to the weight; the highest percentage of the patients weight (25%) were within group (50-59) and group (60-69), the highest percentage of the patients length (48%) were within group (160-169). According to their occupation the majority of patients free work and were accounted (38%), and most of them were living in a urban areas and were accounted (62%).

Table (2) : Distribution of The Sample (100 patients) According to Their Demographic Characteristics.

Monthly income	Frequency	Percent	Cumulative Percent
Sufficient	22	22.0	22.0
Barely Sufficient	36	36.0	58.0
Insufficient	42	42.0	100.0
Total	100	100.0	22.0
Education Level	Frequency	Percent	Cumulative Percent
read & write	8	8.0	8.0
Primary graduate	13	13.0	21.0
Intermediate graduate	24	24.0	45.0
Secondary graduate	20	20.0	65.0
institute graduate	23	23.0	88.0
collage graduate& above	12	12.0	100.0
Total	100	100.0	
Marital status	Frequency	Percent	Cumulative Percent
single	25	25.0	25.0
marred	69	69.0	94.0
divorce	4	4.0	98.0
widowed	2	2.0	100.0
Total	100	100.0	
Infected Family with thyroid disease	Frequency	Percent	Cumulative Percent
yes	63	63.0	63.0
no	37	37.0	100.0
Total	100	100.0	
Seen or participated in lectures on thyroid disease	Frequency	Percent	Cumulative Percent
yes	29	29.0	29.0
no	71	71.0	100.0
Total	100	100.0	
smoking	Frequency	Percent	Cumulative Percent
yes	37	37.0	37.0
no	63	63.0	100.0
Total	100	100.0	

Table (2) reveals that the majority of the sample (42.0 %) of the Monthly income were Insufficient. The majority of educational level were Intermediate graduate (24) and were accounted (24%), and most of them were married (69) and were accounted (69%). The table presented that most of sample were Infected Family with thyroid disease (63) and were accounted (63%). The most of sample were no Seen or participated in lectures on thyroid disease (71)and were accounted (71%). The majority of sample were no smoking (63) and were accounted (63%).

Table (3) : Association Between Patients' Gender and Lifestyle of (100) Patients.

Gender	lifestyle			TOTAL
	High	Moderate	Low	
Male	8	23	0	31
Female	6	49	14	69
TOTAL	14	72	14	100

$X^{2obs}=10.793$, $df = 2$, $P \leq 0.05$, X^2 **Critic.** = 5.991

X^2 obs.= Chi-Square observed, **df.**= degree of freedom, **P**= probability, X^2 **Critical.**= Chi-Square critical

Table (3) shows that there is high significant association between patients' gender and their lifestyle.

Table (4) : Association Between Monthly Income and Lifestyle of (100) Patients with Hyperthyroidism.

Monthly income	Lifestyle			TOTAL
	High	Moderate	Low	
Sufficient	3	19	0	22
Barely Sufficient	8	21	7	36
Insufficient	3	32	7	42
TOTAL	14	72	14	100

$X^{2obs.}=8.873$, $df = 4$, $P \leq 0.05$, X^2 **Critic.** = 9.488

X^2 obs.= Chi-Square observed, **df.**= degree of freedom, **P**= probability, X^2 **Critical.**= Chi-Square critical

Table (4) shows that there is no significant association between monthly income and their lifestyle.

Table (5) : Association Between Marital Status and Lifestyle of (100) Patients with Hyperthyroidism .

Lifestyle \ Marital status	High	Moderate	Low	TOTAL
single	2	17	6	25
marred	12	51	6	69
divorce	0	3	1	4
widowed	0	1	1	2
TOTAL	14	72	14	100
$X^2_{obs} = 7.649$, $df = 6$, $P \leq 0.05$, $X^2_{Critic.} = 12.592$				

X^2_{obs} = Chi-Square observed, df = degree of freedom, P = probability, $X^2_{Critical}$ = Chi-Square critical

Table (5) shows that there is a moderate significant association between Marital status and lifestyle for patients with hyperthyroidism.

Table (6) : Association Between Place of Residence and Lifestyle of (100) Patients with Hyperthyroidism.

Lifestyle \ Place of residence	High	Moderate	Low	TOTAL
Urban areas	8	45	9	62
Rural areas	6	27	5	38
TOTAL	14	72	14	100
$X^2_{obs} = .179$, $df = 2$, $P \leq 0.05$, $X^2_{Critic.} = 5.991$				

X^2_{obs} = Chi-Square observed, df = degree of freedom, P = probability, $X^2_{Critical}$ = Chi-Square critical

Table (6) shows that there is no significant association between Place of residence and lifestyle.

Table (7) : Association Between Infected Family with Thyroid Disease and Lifestyle of (100) Patients with Hyperthyroidism.

Lifestyle \ Infected Family with thyroid disease	High	Moderate	Low	TOTAL
Yes	11	39	13	63
No	3	33	1	37
TOTAL	14	72	14	100
$X^2_{obs} = 9.220$, $df = 2$, $P \leq 0.05$, $X^2_{Critic.} = 5.991$				

X^2_{obs} = Chi-Square observed, df = degree of freedom, P = probability, $X^2_{Critical}$ = Chi-Square critical

Table (7) shows that there is a high significant association between Infected Family with thyroid disease and their lifestyle.

IV. Discussion

Discussion of the demographic Characteristics of Studied Sample

1 -Age

Table (1) indicated that interpretation the relationship between age and hyperthyroidism, that appear there is the large prevalence of hyperthyroidism of patient with age (40 – 50) according to my study in the patient with hyperthyroidism at Baghdad teaching hospital. that result disagree with Manji because their was found the median age (31-40) years is more prevalence from other age of patient with hyperthyroidism^[4]. Amit Allahabadia agree with this result that found the prevalence of the hyperthyroidism increase in age above 40 years and it support result of study. Xander, supported this result. That study found the hyperthyroidism advancing with age spatiality in patient their have (40-50) years, approve this study on the laboratory test of (T3, T4, TSH)^[5,6].

The result found disagree with Robin , that the older age peoples over (60) years are more prevalence from other patient with hyperthyroidism. American association of thyroid according this result in (2009) disagree that found the people their was in progress age (elderly age) more prevalence from other people^[7].

2 – Gender :-

The study result educated to ratio between male and female , the male is less vulnerable to hyperthyroidism , and the female are more susceptible to hyperthyroidism , the rate between them Male 31% the female 69% as the table (1) .That result supported from the study of Amit Allahabadia that result indicated to the ratio between male 17.8 % and female 81.2% of the patient with hyperthyroidism .^[6] Manji , agree with him , he said that the women in that diagnosed with hyperthyroidism are more than male 40% male 60% female.^[4]

3 -Weight

The weight of patient with hyperthyroidism is below than the normal weight, this mean the patient with hyperthyroidism their seafaring weight loss. This result agree Pinaki Dutta that study found that the patient with hyperthyroidism seafaring from weight loss.^[8]

4 – Occupation:-

The result of study showed the peoples who working free (free work peoples) more incidence for hyperthyroidism from other peoples, that mean the peoples with free work dealing with chemical substances or radiation that made them more risk from other.

The empires are second degree risk for hyperthyroidism , because they stay under stress for long time of the day. Sara Villeneuve, found that the incidence of male with disease was increased in a person that working in chemical substance like the motor and vehicle mechanics, and dyer ,the worker in the manufacture of furniture, and in the person who exposure for radiation such as they work in X Ray field .That study agree with study result and give the same result about effect of occupation on the disease.^[9]

5 – place:-

The study find showed (62%) of patient with hyperthyroidism living in urban area , and in rural area (38 %) of patient .That result mean the disease is more prevalence in urban than rural area . Seong-Woo Choi , disagree with this study and that found the majority patient in the rural area.^[10] The disease more common in the urban area than the rural area said that Khalida M , and support the study .^[11]

Discussion of the Socio-demographic Characteristics of Studied Sample (Table 2)

6 – marital status :-

My study revealed that the majority of patient (69 %) were married and (25 %) single and (4%) divorce (2%) were widowed , this result agree with (Denise K. Scannell that thesis found that the most patient with thyroid disorder are marred , that support my study and agree with it.^[12]

Chanwa & saigh , found that the marred patient were more prevalence with disease from other , that thesis agree with the study and support for the study .

Other study supported the result study that found the patient with thyroid disease increased with marred patient .^{[13] [10]}

7- Monthly income

It appear in the result that the patient of low income were more prevalence with hyperthyroidism . Seong-Woo Choi , disagree with study and found that the patient with sufficient monthly income were more than other.^[10]

8 – level of education :-

The study showed is the more common patient with hyperthyroidism were secondary school graduate (the intermediate education level), (23%) institution gradated , (12%) college and above gradated . Seong-Woo Choi showed that the patient that gradated from high study (college and above) there were more prevalence with disease (hyperthyroidism) , that study disagree with study .

WHO, (2007) supported this study because it was found that the patient with low level of education were more common prevalence to disease .^[10]

9 – smoking :-

The result of study showed that the patient non- smoked were more common than smoked patient. Manji, J: disagree with this result study and that found that the smoking patient more common than non smoked. [4] Seong-Woo Choi ,supported the result of study that found the patient with hyperthyroidism were smoked accounted (21%). [10]

10 – family history :-

The result study indicated that the patient with family history were the majority from other with out family history , the result is (63 %) have family history of hyperthyroidism (37 %) there are don't have family history . Manji, J. supported this study and agree with it because they found the more common patient with family history . [4]

That study also supported this study and agree with it about the family history and he found that the patient with thyroid disease and having family history are more prevalence from other Seong-Woo Choi . [10]

Discussion of Association Between lifestyle and Their Demographic Data.

Lifestyle and gender :-

The finding of study that there is a high significant association between gender and lifestyle for patient with hyperthyroidism , this see in table (3).

Manji, agree with this result study that found is a significant association between gender and lifestyle of patient with hyperthyroidism . that study supported result study and agree with it . [4]

Lifestyle and monthly income :-

The study results revealed there were no significant relation ship between lifestyle and monthly income (economic statuses). Table (4) This result disagree with Seong-Woo Choi that found there are a relationship between monthly income and lifestyle . [10]

Lifestyle and marital status :-

The results of the study showed there is moderate significant association between lifestyle and marital status. Table (5) This result supported by Lorig, Kate , showed there was high significant association between marital status and disease . [14]

Lifestyle and place :-

This study shows that there is no significant association between place and lifestyle. Table (6) Adler& Burman,(2007) , disagree with this result and found that there is a high significant association between lifestyle and place . [15]

life style and family history :-

This study shows that there is a high significant association between life style and family history . Table (7) This result supported by Barros , et.al , (2003) that found there is a significant association between life style and family history . [16]

V. Conclusion

The result of study can be concluded : the majority patients gender were female , the majority patient setting place in urban area , – most the patient were low economic status (limited income) , most of the patient were graduated and intermediate school , the majority of patient were married and majority patient were have family history with hydroid disease .

VI. Recommendations

The study recommended that it's important to establish a specialized center for thyroid disease to treatment the thyroid disorder. Efforts should be mad to organized team of health professional to give perfect care for patient with hyperthyroidism . Working a special statistical for the thyroid cases from all center and hospital and reporting the ministry of health to know about the number of patient their having disease and prevalence of this disease in Iraq. Intensify research on thyroid disease and work to reduce this disease through periodic inspection in the thyroid center .

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