Research Paper

Knowledge, Attitude and Practice of PHCCs Visitors about Thalassemia in Iraq

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ABSTRACT:

BACKGROUND:

Thalassemia is an autosomal recessive single gene disorder characterized by defective production of hemoglobin and excessive destruction of red blood cells in which children are in need of regular blood transfusions. The diagnosis and treatment of the thalassemia major could have an impact on family stability and family dynamics. The only way to prevent the disease and to reduce the morbidity and mortality is by educating the general population.

OBJECTIVE:

This study aimed at assessing the knowledge, attitude & practice of visitors of PHCCs about thalassemia in Iraq.

METHODS:

This is a cross-sectional KAP study was conducted from June to November 2022, a sample of 1000 participants was collected from different socioeconomic levels from the main & subsidiary primary health care centers from all Iraqi governorates (except Kurdistan region due to logistic obstacles). The PHCCs were chosen by a simple random sampling technique. The questionnaire form was applied through a direct face to face interview that was performed by a team of health workers who have good previous training in this field.

CONCLUSION:

The study indicates that people's knowledge, attitudes and practices towards thalassemia are poor. There is an urgent need to develop an effective preventive program for thalassemia disease and to integrate it with the education curriculum.

RESULTS:

The majority of the participants have a good modest knowledge about thalassemia, good practice of the participants about thalassemia.

KEYWORDS: primary health care, visitors, thalasseamia.

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INTRODUCTION:

Thalassaemia is considered the most common single gene disorder occurring with high frequency from the Mediterranean basin through the Middle East, Indian, Pakistan, Burma and South East Asia(1). It is a significant public health problem worldwide. Over 330,000 affected infants are born annually. Haemoglobin disorders account for about 3.4% of deaths in children less than 5 years of age(2). Globally, there are 269 million carriers of thalassaemia and 150 million β thalassemia alone, out of which 40 million are in South East Asia. Thalassemia is an inherited disorder of hemoglobin synthesis, from mild to severe in intensity, resulting from the partial or complete failure in synthesis of one or more globins chains(3). There are 19 thalassemic care centers all over Iraq with approximate 28000 patients.

Now days treatments for thalassaemia including bone marrow transplant and hematopoietic stem cell therapy are still out of reach in Iraq, especially among those within the low socioeconomic status(4). Thalassaemia screening is still not included as a national mandatory programme, it is uncertain whether couples who have been screened would be willing to cancel their marriage over the test result.

OBJECTIVE:

This study aimed at assessing the knowledge, attitude & practice of visitors of PHCCs about thalassemia in Iraq.

METHODS:

This is a cross-sectional KAP study that was conducted from June to November 2022. A sample of 1000 participants was collected from different socioeconomic levels through a systematic random sampling technique from the main& subsidiary primary health care centers from all Iraqi governorates (except Kurdistan region due to logistic obstacles).

The PHCCs were chosen by a simple random sampling technique. The questionnaire form was applied through a direct face to face interview that was performed by a team of health workers who have good previous training in this field. The inclusion criteria were: age above 20 years, both genders were included.

A total of 1000 questionnaire form was distributed to the participants in the included 17 health directorates. A verbal consent was taken from all the participants to be included in the study.

The questionnaire form consists of 21 questions, the questions of knowledge were 11 question, answering correctly less than 6 questions of them indicates bad knowledge while answering more than 6 questions indicates good knowledge.

RESULTS:

Table 1: Socio-demographic characteristics of the sample

Variable	No.	(%)
Age		
20-44	655	(65.5)
45-64	281	(28.1)
65+	64	(6.4)
Gender		
Male	507	(50.7)
Female	493	(49.3)
Social status		
Married	915	(91.5)
Not married	85	(8.5%)
Residence		
Urban	658	(65.8)
Rural	342	(34.2)
Consanguinity marriage		
Yes	549	(54.9)
No	451	(45.1)
Education		
Illiterate	89	(8.9)
Primary	249	(24.9)
Secondary	238	(23.8)
College	424	(42.4)
Occupation		
Governmental employee	454	(45.4)
Private work/worker 336	336	(33.6)
Student 85	85	(8.5)
Housewife 72	72	(7.2)
Retired 53	53	(5.3)
Pre-marital screening for thalassemia		
Yes	641	(64.1)
No	359	(35.9)

Table 2: Knowledge characteristics of the sample.

Variable	Type	No.	%
Mode of transmission	Hereditary	811	81.1 %
	Non hereditary	189	18.9 %
Detection of disease	laboratory invest.	753	75.3 %
	clinical examination	247	24.7 %
Signs & symptoms of thalassemia	Anemia	436	43.6 %
	Splenomegaly	205	20.5 %
	Change color of urine	185	18.5 %
	deformity of face & limbs	174	17.4 %
Thalassemia related to malnutrition	No	511	51.1 %
	Yes	489	48.9 %
Thalassemia can cause deformity of the face or bones of patient	Yes	634	63.4 %
	No	363	36.3 %
Fava beans induce thalassemia	Yes	686	68.6 %
	No	314	31.4 %
Herbs can cure thalassemia	No	738	73.4 %
	Yes	262	26.2 %
Types of treatment of thalassemia	blood transfusion	564	56.4 %
	Injection	163	16.3 %
	Tablets	143	14.3 %
	Splenctomy	42	4.2 %
	bone marrow transplant	97	9.7 %
Period of treatment	long-term	648	64.8 %
	short-term	352	35.2 %
Thalassemia affect lifestyle of patient	Yes	865	86.5 %
	No	135	13.5 %

Table 3: Attitude characteristics of the sample.

Variable	Type	No.	%
Financial burden of caring for thalassemia patient	High burden	706	70.6 %
	Mild burden	225	22.5 %
	No burden	69	6.9 %
Previous experience with thalassemia patient	No	705	70.5 %
	Yes	295	29.5 %

Table 4: Practice characteristics of the sample.

Variable	Type	No.	%
Patient with thalassemia have to check hemoglobin regularly	Yes	891	89.1 %
	No	109	10.9 %
Patient with thalassemia need social care	Yes	884	88.4 %
	No	116	11.6 %

DISCUSSION:

The findings of the current study reveal that the percentage of participants from the youth group is approximately (65%) and from the middle-aged group is approximately (28%), male to female participation rate is almost equal, (49% and 48%) respectively.

The majority of the participants in this study have completed academic education (college or institute), or secondary education which indicates they have a good modest knowledge about thalassemia, probable because they heard about it from social media network; from television; from youth cultural forums; through educational curricula, or through participating in community educational campaigns(5).

Finally, after analyzing the data of the practice questions of the participants, we find that the response rate for the two questions is very good, which gives a good indication of the practice and experience of the participants in this study about thalassemia.

Also, compared to another similar study in Indonesia 2021, we find; age, education, gender, residence and family income were key factors that correlated with or predicted the youth's KAP towards thalassaemia. Older respondents and women were more likely to have good KAP(2).

Also compared to another similar study in Pakistan 2017, that majority of the respondents (89%) had the knowledge about premarital screening, 86.1% were opposed to intermarriages of carrier, and 77.6% believed that consanguineous marriages have been considered major risk factor for the disease; 57% believed that if relatives got married then prenatal diagnosistest is necessary. Overall 82% parents had received genetic counseling(4).

CONCLUSION:

The current study indicates that people's knowledge, attitudes and practices towards thalassemia are poor. There is an urgent need to develop an effective preventive program for thalassemia disease and to integrate it with the education curriculum, in the hope that it will help them make appropriate decisions of marriage and family formation.

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