

## **ASSESSMENT OF NURSES KNOWLEDGE TOWARD LEISHMANIASIS AT PRIMARY HEALTH CARE CENTERS IN THI-QAR PROVINCE**

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### **SUMMARY**

Cutaneous leishmaniasis is a zoonotic disease that infects the skin, in which rashes and chronic ulcers appear, and it is classified within the group of zoonotic and anthroponic diseases. This means that it can be transmitted from animals to humans and between people. It is caused by parasite of the genus *Leishmania*, a single-celled, predatory organism that breeds in humid or aquatic environments. It is spread by a female bloodsucker, known as a sand fly, which forms its reservoir in vertebrate animals.

Leishmaniasis is directly related to poverty and the determinants of health: sanitation, lifestyles and resource availability. However, social, environmental and climatic factors also directly affect the epidemiology of the disease. Climate change is one of the factors that should alert us to the way in which the humidity is increasing in Thi-Qar, and the high temperatures favor the proliferation of insects that transmit leishmaniasis. This study determines the assessment of nurses' knowledge of leishmaniasis in primary health care centers in Thi-Qar governorate, in 2020. It is a descriptive study, and a non-experimental design, with the nursing department 9 centers and 339 nurses in primary care centers. The sample was conducted using a non-probability intentional data type with 179 male and female nurses. The questionnaire was used on the topic of general information about cutaneous leishmaniasis, source of information about cutaneous leishmaniasis, awareness (knowledge) about the transmission of cutaneous leishmaniasis, awareness (knowledge) about the characters and places of reproduction of the disease-causing vector, and awareness (knowledge) of the clinical manifestations of cutaneous leishmaniasis. SPSS version 24 software was used to develop statistical database and tables. Related to knowledge about cutaneous leishmaniasis, from 179 nurses (92.73%) had heard or read about it and that more than half of the participants had regular knowledge of it. Whereas with regard to knowledge of infection (84.91%) of the sample had good knowledge of leishmaniasis infection and (15%) had poor knowledge of leishmaniasis. Thus, the nursing staff in Thi-Qar governorate have regular knowledge of cutaneous leishmaniasis and most of them apply good practices to prevent this disease.

**Key Words:** Assessment, Nurses, Leishmaniasis

## **1. INTRODUCTION**

### **History of Leishmaniasis**

In the late of the nineteenth century, Cunningham, Borowski, Leichmann, Donovan, Wright, Ledenberg, and Fiana independently identified the leishmaniasis parasite and Ronald Ross called the generic name of Leishmania. In 1904, Kathwar and Laveran found leishmaniasis in children with infantile splenic anemia. Nicole named the parasite *L. infantum*, identified its reservoir in a dog in Tunisia in 1908, and cultivated it in the laboratory. Karini identified leishmaniasis in the mucosal lesions of patients in Brazil in 1912. In 1914, the Russians. Yakimov and Shakur, identified the parasites that caused dry urban and rural forms of cutaneous leishmaniasis in Central Asia. In 1922, Pramachari described cutaneous leishmaniasis after kala azar (PKDL) in India. In the early 1940s, Swaminath, Shortt and Anderson in India and Adler and Ber in Palestine showed the transmission of *L. donovani* and *L. tropica* (possibly *L. major*) via sand flies. Gradually, clinical and geographical aspects of human disease were implemented through studies of reservoir animals, disease vectors, behavior of leishmaniasis in laboratory animals and the natural cycle environment of leishmaniasis, laying the foundations for classification and understanding of transmission (WHO, 2010).

### **2.Statement of Problem**

The statement of problem can be summarized by the following question: what is the nursing knowledge of leishmaniasis in Nasiriyah, Iraq.

### **3.The Aim**

This thesis aims to assess nurses' knowledge of leishmaniasis in primary health care centers in Thi-Qar governorate.

### **4. Design of the study**

This study is of a non-experimental design because there is no manipulation of the variable. In this respect, it is done without the intentional manipulation of the variables, as phenomena are only observed in their natural environment for analysis. This study is descriptive because it sought to define the knowledge and practices of nursing in primary care centers in Thi-Qar governorate, the second sector of Nasiriyah, and it is part of an applied research, because it uses the theoretical knowledge of the researcher. There will be numerical measurement and statistical analysis of the data collected. The study began from 1/9/2020 until 1/4/2021

### **5. Place and time of study:**

The study will be conducted in primary health care centers in Thi-Qar, where there are 9 health centers and a nursing staff consisting of a nursing team of 339 male and female nurses. The research will take place in the second half of 2020.

## **6. Study population**

The study population was 179 male and female nurses in primary health care centers in Thi-Qar governorate in Iraq, who met the inclusion and exclusion criteria.

## **7. Data collection techniques and tools**

The technique used was the survey that aims to obtain data through simple and easy-to-understand questions that were formulated directly for the users, using the questionnaire as a main method for gathering information, with eight questions that refer to general information about cutaneous leishmaniasis and are divided into questions about knowledge of the disease, the source of the information about cutaneous leishmaniasis, awareness (knowledge) about the transmission of cutaneous leishmaniasis, and awareness (knowledge) about the characters and places of reproduction of the vector causing the disease to achieve the objectives of this research, a questionnaire was used regarding knowledge and practice dimensions of leishmaniasis.

### **This tool consists of several components:**

- Presentation: where information is presented about the university to which the student who conducted this study belongs.
- An explanation of the confidentiality of the survey.

### **The first part will consist of demographic data.**

- General data on the participants, such as gender and educational level.

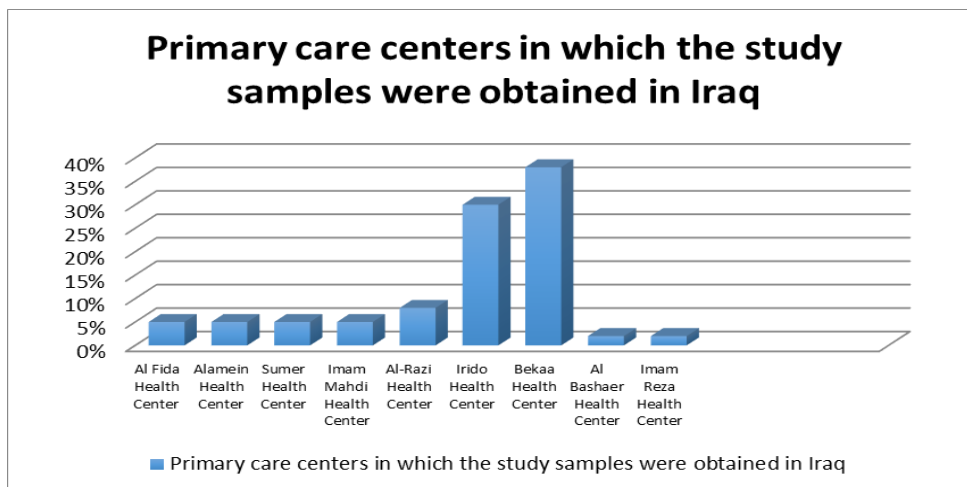
### **The second part deals with the scale of leishmaniasis to describe the knowledge of pathogens and this tool used will be included in the thesis.**

Using the Alpha Cronbach scale to collect information, the researcher obtained this questionnaire because it shows the extent of knowledge of the causes of leishmaniasis..

## **8.RESULTS**

The sample was selected by nurses working in primary health centers in Thi-Qar governorate, Nasiriyah region, Iraq, using a simple random sampling method.

The primary health centers from which the study samples were obtained are Al-Fida Health Center, Al-Alamein Health Center, Sumer Health Center, Imam Al-Mahdi Health Center, Al-Razi Health Center, Arido Health Center, Bekaa Health Center, Al-Bashaer Health Center, Imam Al-Reza Health Center, as in Figure<sup>1</sup>



Relative distribution of the study population by primary health centers. The majority of the study sample (38%) is represented by the Bekaa Health Center, the rest is distributed to other primary health centers.

**Table.1 :** Distribution of the studied groups with comparisons significant (n: 179)

Basis Information	Groups	Frequency	Percent
Age Groups (years.)	20-25 years	69	38.54%
	26-30 years	54	30.16%
	31-35 years	8	4.46%
	36-40 years	30	16.75%
	41 years and over	18	10%
	<b>Total</b>	<b>179</b>	<b>100%</b>
Gender	Male	66	36.87%
	Female	113	63.12%
	<b>Total</b>	<b>179</b>	<b>100%</b>
Education Level	Secondary nursing school graduate	63	35.19%
	Nursing institute graduate	84	46.92%
	Nursing college graduate	31	17.31%
	Master of Nursing	1	0.55%
	<b>Total</b>	<b>179</b>	<b>100.0</b>
Marital status	Single	126	72%
	Married	50	27.93%
	Other	3	1.67%
	<b>Total</b>	<b>179</b>	<b>100.0</b>
No. of years of experience	1-5 years	87	48.60%

	6-10 years	43	24%
	11-15 years	22	12.29%
	16-20 years	16	8.93%
	21 years & more	11	6.14%
	<b>Total</b>	<b>179</b>	<b>100.0</b>
<b>Adres</b>	City	165	92.17%
	Village	14	7.82%
	<b>Total</b>	<b>179</b>	<b>100.0</b>

Table 4.1 indicated that the majority of the study sample (63.12%) are females, and the rest are males, and most of them are between 20-25 years old and represent (38.54%). Only 8 nurses were in the age group 31-35 years, at a rate of (4.46%). With regard to the issue of marital status, the majority of the sample members were single and constituted (72%) of the total sample.

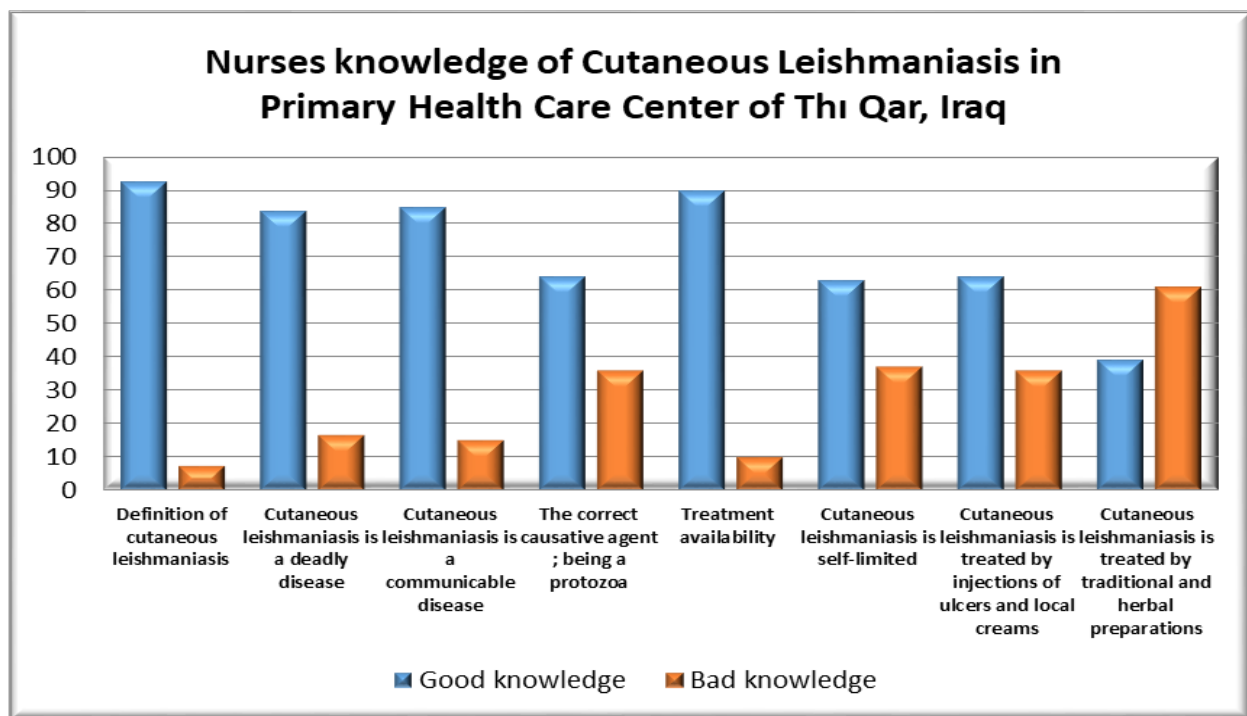


Figure 2 shows the knowledge that nurses possess about cutaneous leishmaniasis Primary care centers in Thi-Qar, Iraq, 2020, surveyed, 179. It is evident in this study that more than half of the respondents have good knowledge.

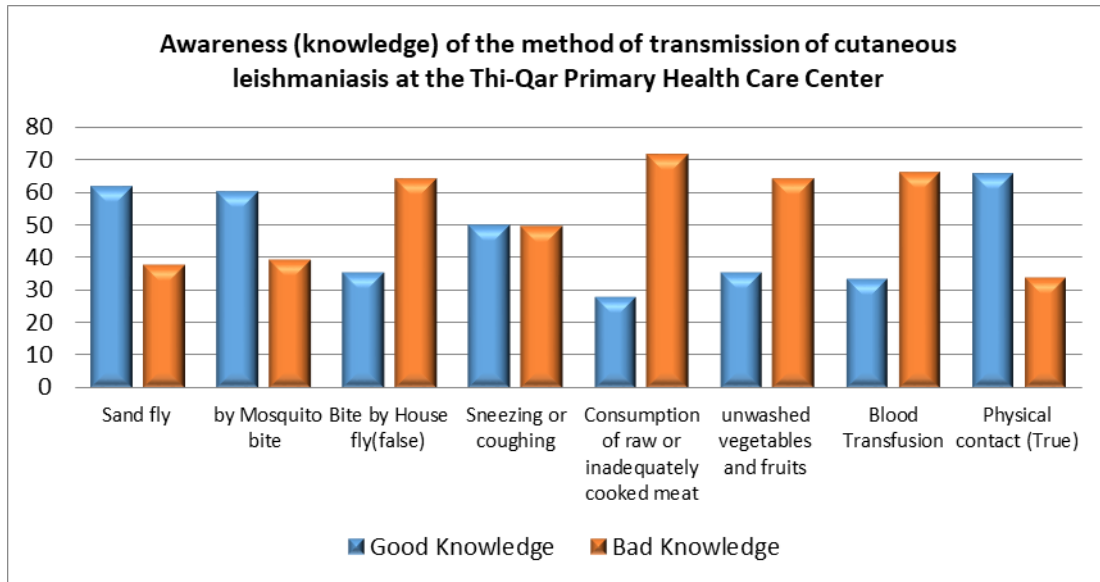


Figure 3: Awareness (knowledge) of the method of transmission of cutaneous leishmaniasis at the Thi-Qar Primary Health Care Center

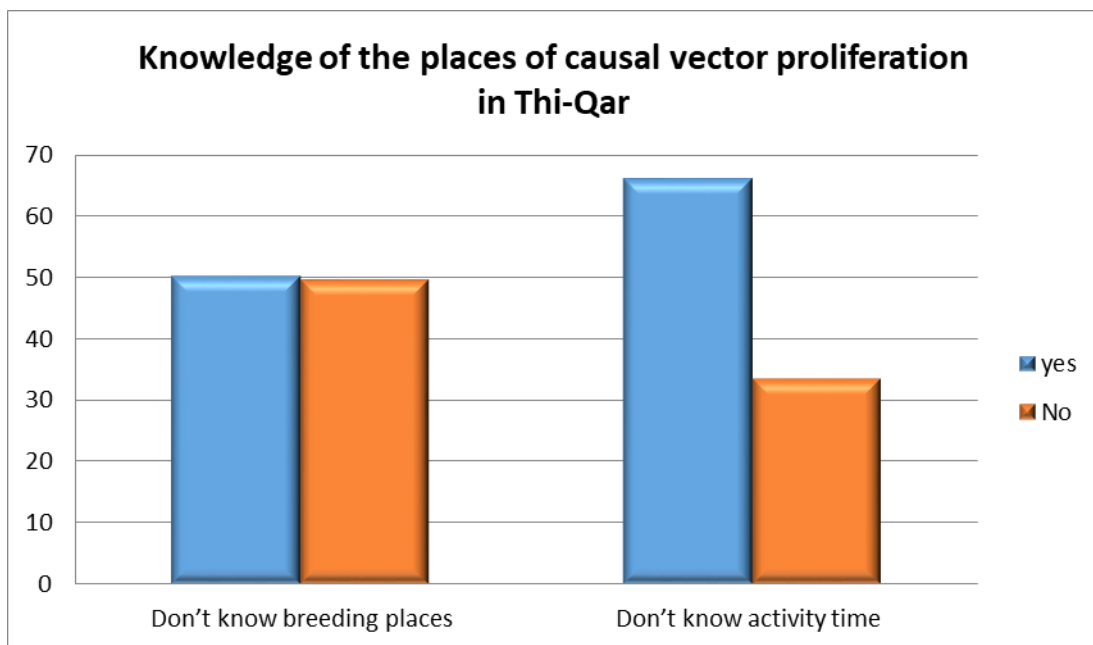


Figure 4: Knowledge of the places of causal vector proliferation in Thi-Qar Primary Health Care Center

## 9.DISCUSSION

According to the general goal of determining the assessment of nurses' knowledge of leishmaniasis in primary health care centers in Thi-Qar governorate in 2020 table 4.2 shows that 179 participants (92.73%) heard or read about it and that more than half of the sample had

regular knowledge of it. Whereas, regarding knowledge of infection, (84.91%) of the sample had good knowledge of leishmaniasis infection and (15%) had poor knowledge of leishmaniasis.

If the nursing staff does not acquire the necessary knowledge about the disease, they will not achieve a change in behavior favorable to their health and the health of the patients, and the risk of developing the disease is high. Therefore, ignorance about disease, whether it is regular or bad, has negative consequences, such as the risk of disease infection and thus serious physical and emotional health complications due to the presence of chronic wounds, deformities in the body, exposed areas of the body as well another consequence is social isolation due to rejection, people withdraw from their environment, and the patient's own shame.

## **10.CONCLUSIONS**

The knowledge of the etiology of cutaneous leishmaniasis in nursing in primary care centers in Thi-Qar, 2020 is a regular occurrence in nearly half of the respondents. What is needed to be improved through education is the recognition of the disease, disease transmitted by the carrier and the form of transmission. This means that counseling and training of nurses about the origin and development of the disease and the consequences it brings to health human beings.

The practices related to preventive measures for cutaneous leishmaniasis in the primary care centers in Thi-Qar 2020 are sufficient because more than half of the respondents perform preventive measures against sand fly bites, and a high percentage of the study population has inappropriate practices for this reason. What must be improved in practice is protection from sand fly and cleaning around their homes to be avoided spreading the vector that transmits leishmaniasis.

## **11.Recommendations**

- Extending the investigation of this thesis to the authorities and multidisciplinary health personnel to conduct media campaigns.
- Involving the employees of primary health care centers in educational sessions about the origin and development of the disease.

- Conducting preventive campaigns and visits to primary health care centers.
- Establishing a technical team to direct the work of analyzing the health status of primary health care centers in Thi-Qar governorate, Iraq, due to the outbreak.
- In a future research, separating two variables (knowledge and practices) for the application of the tow tools and the ability to link them.

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