

# A Clinical Study of Parasitological Leishmaniasis in Al-Kut Province

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## Abstract

Leishmaniasis is a potentially intense and skin disease. Individuals with leishmaniasis possess one or different long lesions on the skin. We obtained the sample from the patients initiated at Al-Zahra Teaching Hospital, a total of 190 cases of leishmaniasis have been registered. In this study were 190 individuals. 72 (38 %) females and 118 (62 %) males. The most infection with cutaneous leishmaniasis was in the male. The majority of patients were at the age of (1-15) years 63 (53.3%) in males while in females the highest proportion 39 (54.1%). Infection with cutaneous leishmaniasis had the highest percentage in February 44 (23%) when compared to other months of infection. Results observed for infection with cutaneous leishmaniasis in patients uneducated had the highest percentage 116 (16%) when compared to educated of infection. Medical reference have to be knowing the truth that chronic disease activities produce expansion of the disease and rise range rate in the status that outlet to medical treatment is not easy mostly in poorly conditions of cutaneous chronic disease locations.

*Key words: leishmaniasis, disfiguring disease, educated, lesions, Kut hospital.*

## Introduction

Leishmaniasis is representing a great public health problem in Eastern Mediterranean Region. In spite of the great research conducted on Leishmaniasis disease.<sup>(1)</sup> Diverse chronic disease, parasitological and clinical aspects confuse a defy for the management and control of the disease. The disease gets into humans with the biting of an infected female sand fly, as well as can rarely be inherited by other such as blood transfusions and needle sharing<sup>(2)</sup>. Fresh studies hold shown the reactivation of various foci in China, Brazil and different country<sup>(3,4)</sup>. In addition, co infection with

Leishmania and human immunodeficiency virus is attractive extra and extra fishy.

Although estimated to source the (ninth) largest disease encumbrance among people corruptive diseases, leishmaniasis is in general careless in discussions of equatorial<sup>(5)</sup>. They have a component life cycle. *Leishmaniasis* can reproduce a great assortment of clinical symptoms in humans. All of these report, on these parasites is substantial to progress, investigation of epidemiological research to backing drug and vaccine expansion. The WHO resolve and the adept committee permit highlighted the want to update the epidemiological index base in order to program suitable approaches to the control of leishmaniasis<sup>(6,7)</sup>. The thoroughness of this mensuration be founded on the hardness of the incidence, intensity, period and death-rate data for a certain condition, as well as the underlying

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assumptions used in the calculations and results<sup>(8)</sup>. In parasite infecting, males are influenced more extremely and extraroughly than females<sup>(9)</sup>. Differentiate obvious species bias during infection and disease, several climacteric factors have to be taken into counting. The spread of parasitic diseases is high in developing countries; however, in some countries, classical differences in sociocultural attitude between individual from females and males are extra stated than in industrialized countries. Therefore, foreign factors such as mission, sharing, access to sources of infection, and motility strength falsely create sex bias during the disease. This study was aimed to investigate the epidemiological and statically status of leshmaniasis disease in Al-Kute city, with factors influencing the outcome.

**Materials and Method**

**Sampling and examination**

Samples were collected in sterile containers. The species were examined macroscopically to detect color, smell, consistency, mucus and blood.

**location of Study**

The study location in the Iraqi provinces of Al-Kute. The survey people was the patients with suspicious clinical lesion who were referred to the Iraqi’s clinics and health centre during for a period of one year of 2020.

**Result**

The total numbers of leishmaniasis patients included in this study were 190 individual. it also illustrate male more sensitive to infection. The most infection with cutaneous leishmaniasis was 118(62%), more dominant than in females 72 (38 %) Table (1).

**Table (1): Distribution of cutaneous leishmaniasis patients according to sex.**

Sex	Number	%
Male	118	%62
Female	72	%38
Total	190	%10

Table(2). show the distribution of cutaneous leishmaniasis patients according to age & sex. ages of patients studied as between 1 and 45 years. The plurality of patients were at age of 1-15 years, 39 (54.1%) female and 63 (53.3%) male. 16-25 years, 18(25%) female and 31(26.2%) male. (26-35) years, 8(11.1%) female and 21(17.7%) male. (36-45) years, 7(9.7%) female and 3(2.5%) male.

**Table (2): Distribution of leishmaniasis patients according to age & sex.**

Groups	Male (%)	Female (%)	Total (%)
1-15	63 (53.3)	39 (54.1)	102 (53.6)
16-25	31(26.2)	18 (25)	49 (25.7)
26-35	21(17.7)	8 (11.1)	29 (15.2)
36-45	3 (2.5)	7 (9.7)	10 (5.2)
Total	118 (62.1)	72 (37.9)	190 (100)

Table (3) shows the number of cases with formal education had the higher of 116 (61 %), and cutaneous leishmaniasis according to Educated and the infection with educated people was 74 (38 %). uneducated of infected person. the people with no

**Table (3): Educated and uneducated distribution males and females during 2019.**

<b>Educated</b>	<b>Uneducate</b>	<b>Total</b>
74(39)	116(16)	190(100)

Table (4) shows the cases increased from January to March, reaching a high in the wintertime, and then declined to a minimum between April to August. The lowest numbers of cases in a month were reported for June and July 2020 was in (5(2.6%) and 3 (1.5). and the maximum number in February 2020 (44(23%) cases). followed by January 43 (22 %), December 23(12 %), October 18 (9 %), November 16(8%),march 11(5.7%).

**Table (4): Distribution of cutaneous leishmaniasis patients according to months.**

<b>Months</b>	<b>Number (Male and Female)</b>	<b>%</b>
January	43	22
February	44	23
March	11	5.7
April	7	3.6
May	6	3
June	3	1.5
July	5	2.6
August	8	4
September	6	3
October	18	9
November	16	8
December	23	12
Total	190	100

## Discussion

In AL-Kute province the study carried out in 2020 with different factors infected with leishmaniasis such as age, sex, sex with age, educated, uneducated and the month.

Tab (1) showed distribution of cutaneous leishmaniasis patients according to sex. The survey of this study displays that occurrence of 190 cases of leishmaniasis, the number of infected males were 118 (62%) while females were 72 (38%). Probably because the male outlay extra time in outdoor activities in compare to the females.<sup>(10)</sup>

Table (2) showed distribution of cutaneous according to investigations with the relationship between age and sex. Was found that the highest incidence of males is in age (1-15) proportion 63 (53.3%), while in females the highest incidence is in ages (1-15) proportion 39 (54.1%), that's mean the age in males is more effective and movement as well as playing in places that may be contaminated insect sand fly, found more reservoir animals while females this age is found inside house, especially in areas near river as well as non-resistance to insects because of their small age. This survey agreed with a study<sup>(11)</sup>.

Table (3) showed were observed for infection with cutaneous leishmaniasis of patients infected in uneducated had the highest percentage 116 (16%) when compared to educated of infection. This result agrees with studies that carried out in different Iraqi province.<sup>(12)</sup>

Table (4) showed the numbers of infection rates during the months of the year, with the highest percentage of infection during February 44 (23%), while the lowest percentage was in a June 3 (1.5%) reported a disparity in parasitic infection rates *Leishmaniatropica*. The period time of incubation *Leishmania* is between (2–6 months). When the insects bites the host in October, cases would become visible, in January or February. This survey agreed with the result was done in Iran.<sup>(13,14)</sup>

## Conclusions

Leishmaniasis affected a big number of people in AL-Kut affecting males being affected more than females, also leishmaniasis with affecting in younger age groups mostly among residency, it was more prevalent in the population of uneducated because of ignorance of this disease and the presence of sandflies and vectors and lifestyle habits including sleeping outdoors, and most of happening in winter. Therefore the medical reference have to be knowing of the fact that chronic disease induce expansion of the disease, and increase incidence average in the situation that arriving to treatment, is difficult particularly in poorly conditions of cutaneous chronic disease locations.

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