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RESEARCH ARTICLE

Prevalence of Tuberculosis in Nasiriyah City from 2010-2015

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Abstract

Tuberculosis deployed in Nasiriyah City this study aimed to prevalence of Tuberculosis in Nasiriyah City, It is during visit to the health centers in the first and second Nasiriyah sector and updating us on the data found where the number of total infections in Nasiriyah from a year 2010 and 2015 to 2821 cases distributed among different age groups where the infection rate among children 5% and women 25% and men 70% and through study and observation of the database and the number of cases. low that number infection case in 2015 than it was in 2010 where the number of people with tuberculosis in 2010 in 628 infection case in 2015 was 260 cases and this shows a lower incidence gradually The study was conducted in Nasiriyah City, said the number of infected men more than women and children, and this goes back several reasons in men and through the study also found Variation in infection to the health center. Some centers recorded the highest cases of infection from tuberculosis during this year's, some did not score in three years, an infection in Nasiriyah, the second sector is generally more than the infection in the first sector.It is during our visit to the health centers in the Nasiriyah to first and second Nasiriyah sector and updating us on the data found Also, the percentage fixed in Nasiriyah, from 2010 to 2015 among children, women and men, but the disparity in number by every year.

Keywords: *Tuberculosis, Nasiriyah city, Iraq.*

Introduction

Tuberculosis is a major global health problem. It causes illness among millions of people each year and ranks as the second leading cause of death from an infectious disease worldwide, next to HIV (human immunodeficiency virus) infection. According to the WHO (World Health Organization) 2012 report , almost 9 million new cases and 1.4 million TB deaths occur worldwide by the year 2011 [1].

Effective treatment of TB requires adherence to a minimum of 6 months treatment with multiple drugs, Tuberculosis is an infectious disease caused by *Mycobacterium tuberculosis*, which is a facultative intracellular parasite that is easily ingested by phagocytes; however, it is resistant to intracellular killing.

It affects primarily lungs causing pulmonary tuberculosis, it can also affect meninges, bones, lymph glands and other tissues in body [2].Globally speaking, one-third of population is asymptomatically infected with tuberculosis, of whom 5% - 10% will develop apparent clinical features [3].The great majority of new cases and deaths occur in developing countries where infection was acquired during childhood [4].

The disease still causes a public health problem. During the year 2013, it was found 9million newly developed cases, 56% of them occur in Asia, whereas 29% in Africa, 13% (1.1 million) of these were HIV positive [5].It was found that 1.5 million people died of tuberculosis, of whom 360,000 where HIV positive and 210,000 were due to MDR-TB (Multidrug Resistant TB) [6]. Out of those newly diagnosed cases only 6.1 million cases were reported to WHO, of these only 5.7 million were newly diagnosed, the total number of missed cases during this year were three million, either undiagnosed or diagnosed but not treated [7].

Regarding classification of tuberculosis cases according to drug resistance, the most important type is MDR-TB, where TB is resistant to at least both isoniazid and rifampicin [8].The MDR-TB infection is more prevalent in developing countries, which could be due to poverty, economic causes, malnutrition, overcrowding, or there is a defect in the application of national tuberculosis control programmes, which hamper the achievement of high cure rate [9]. In 2008, a WHA (World Health Assembly) had set "a global target of cure of 85% of sputum-positive patients under treatment and detection of 70% of cases by the year 2009".

However, it had become apparent that the targets would not be met by the specified date; in 2011, the fifty-third WHA therefore postponed the target year to 2005. The Stop TB Partnership has found that the achievement of these impact targets globally requires sustained progress in implementation [10, 11]. That is, national control programmes around the world must reach at least 70% case detection and 85% treatment success [12, 13].

WHO had set strategy called DOTS (Directly Observed Treatment, Short course) Chemotherapy to ensure cure by providing the most effective drugs and confirming that is taken. It is the only programme which has been proved to be effective against TB infection [5].DOTS strategy has a central role in the approach for tuberculosis control, which is now presented as Stop TB Strategy. The target of DOTS programme is successful treatment or cure rate of 85 % of newly cases with positive sputum smear, and detection of 70 % of such cases [14]. WHO launched the new Stop TB Strategy in 2006 for the second "Global Plan to stop TB (2006-2015)". The target of this strategy by the year 2006 is to reduce prevalence and death rates to 50% relative to 1990 levels, while the target by the year 2015 is that the global incidence of TB disease will be less than or equal to one case per million population per year [15]. The aim of this study was to prevalence TB patients in Nasiriyah City.

Methods

Collection of Data

This study based on the data available from 2010 to 2015 in Nasiriyah for all pulmonary tuberculosis Each of health Nasiriyah sector first and second where we observed data in each health center on the basis of Patient sex, year and location found to be infected in Nasiriyah , 2821 cases from 2010 to 2015 and the total number is uneven. But fixed rates of 5% children, 25% women and 70% of children each year, where we visited all health centers in Nasiriyah Some health centers as that in the first health sector and the second did not register for some years, but most infections where cases recorded and found the largest number in the second health sector.

Results

Relationship between the infection and patient sex find the percentage of infected children 5% and 70% of adult man and women 25%.total infection2820 cases As shown in Table (1).

Table 1: The percentage of cases of tuberculosis, depending on Patient sex

Patient	Number	Percentage
2010		
Children	34	5%
Adult male	498	70%
Adult women	178	25%
Total	710	100 %
2011		
children	30	5%
Adult male	427	70%
Adult women	153	25%
Total	610	
2012		
children	32	5%
Adult male	440	70%
Adult women	158	25%
Total	630	
2013		
children	20	5%
Adult male	280	70%
Adult women	100	25%
Total	400	

2014		
children	13	5%
Adult male	190	70%
Adult women	67	25%
Total	270	
2015		
children	10	5%
Adult male	140	70%
Adult women	50	25%
Total	200	
2820		

The Number of infections detected in Second health Nasiriyah sector in the years from 2010 to 2015. Highest infection were recorded in Aredo center 638 infection case , Lower recorded case in Omal baneen health center 18 infection case .see Table 2.

Table 2: Distribution of cases of tuberculosis in second health Nasiriyah sector, by the health centers and years

Health Center	2010	2011	2012	2013	2014	2015
Al Haboby	33	76	43	22	19	18
Al Bashaar	1	22	9		12	2
Al Razi	10	17	21	44		4
Alimam AlMahdi	4	8	13	74	25	6
Al Fadaa	21	69	66	70	8	
Al Sheed Alwal	8	21	17	8	3	3
Arido	100	197	123	88	89	41
Sumer	12	51	53	1	2	
Al Amam Al Raedh	11		22	9	1	
Mohammed Al Mousy	5	1	50		15	12
Albakaa	3	10	2	12		7
Alialmeen	2	40	12	5	4	
Omal Baneen	5	2	6	2		3
Alkarya Alasry	85	20	12	30	40	49
Alnamothagi	2	1	88	1		
Total	302	535	537	366	218	145
2103						

The number of infections detected in first Nasiriyah health sector in the years from 2010 to 2015. Highest infections were recorded in Al Bathaa center 385 infection cases, a health center 15 Shaaban 33 infection case. See Table 3.

Table 3: Distribution of cases of tuberculosis in First health Nasiriyah sector, by the health centers and years

Health Center	2010	2011	2012	2013	2014	2015
Al Bathaa	180	77	33	30	35	30
Al Basool	20	20		13		2
15 Shaaban	10	3	14	2	3	1
Alkarar	15	7	4	7		7
Alimmam AlHassan	23	2		2	8	1
Alascan	28	5	7	1		
Al Mansorya	16	4	11	13	3	11
Alhot Prison	6	28		30	1	4
Total	298	146	69	98	50	56
717						

A comparison of the infection in the first sector of Nasiriyah and the second from 2010 to 2015.The number of infection at second Nasiriyah sector more than the number of infection at Nasiriyah sector see Table 4.

Table 4: Number of infection in first and second health Nasiriyah sector

Years	First Health Nasiriyah sector Number infection	Second Health Nasiriyah sector Number infection
2010	298	302
2011	146	535
2012	69	537
2013	98	366
2014	50	218
2015	56	145

Discussions

In this Study, the prevalence of TB in Jigawa state was found to be significantly increasing. This doesn't agree with the finding in Abia State (Nigeria) between 2005 and 2006 that shows a decrease in the prevalence of the disease, this result may be as a result that Tuberculosis center in Jigawa State, started functioning much later in 2009. Therefore, TB patients began to visit the center for awareness, medication and other purposes en mass. Out of all the 9590 patients seen at the center, 6538 (68.18 %) were males and 3052 (31.82 %) were females.

This is in agreement with the study in TB referral center in South-Southern Nigeria, which shows that prevalence is more among men than women [16]. In formats The above, we find that the percentage of cases of tuberculosis almost constant in Dhi Qar of 2010, the province until the year 2015 where the adult males accounted for 70 percent of infection either women shall be 25 percent, while children shall be 5 percent either numbers vary from year of other men infection are more probably goes back to work in men Living situation where men more contact with women and cafes as well as the late detection of the disease in men

The total number is less, we find the conclusion reached in 2015 and the highest reached mechanism in 2010, and note the number Say gradually and may be due for health awareness and treatment by health institutions. In general Pulmonary TB has a higher prevalence of 95.69% compared to Extra Pulmonary TB that has only 4.31%.

This result is a little bit higher than that of the TB patients seen in Ado–Ekiti, Ekiti State, Nigeria [17]. In 2010, we find that the lowest rate of tuberculosis were recorded in health center al Bashaar single case and the highest percentage recorded in a health center Arido hundred case either in 2011, we find the lowest rate with the development of tuberculosis were recorded in Mohammed al-Moussawi hospital where he recorded a single case, as well as the highest recorded in the Arido Health Center the 197 case as he increased incidence in Albasher Center From one in 2010 to 22 cases in 2011[18].

But in 2013, we find that Imam Hussein hospital did not record any case of infection, as well as the highest percentage recorded in Arido, as well as the proportion of higher Mohammed Al-Moussawi rose Lama in 2013, we find that there were no cases in Sumer and AL namothajy, Alascan, Mohammed al-Musawi, as well as the highest rate in Arido. In 2014, we find cases which do not exist in Razi Albkaa heath center and Om ALbaneen, ALnamothajy, ALrasool, and ALascan. As well as more cases in Arido. We find there are no cases in Sumer health center from the year 2013 until the year 2015 and more cases in Arido center probably why the delay diagnosis in patients making the most of them carrying .

Conclusion

- The study, conducted in Dhi Qar province, showed that more men than women and children were infected. Find the percentage of infected children 5% and 70% of adult man and women 25%.
- There was a disparity in infection in health centers ,detected in Second health Nasiriyah sector, Highest infection were recorded in Aredo center 638 infection case , Lower recorded case in Omal baneen health center 18 infection case.
- in first Nasiriyah health sector, Highest infection were recorded in Al Bathaa center 385 infection case , a health center 15 Shaaban 33 infection case .
- The number of infection at second Nasiriyah sector more than the number of infection at Nasiriyah sector.

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