ISSN: 3029-0716

Research Article

Journal of Infectious Diseases & Treatments

Assessment of Patients Practices Regarding Tuberculosis Disease in Wad Medani Teaching Hospital Gezira State: Sudan During June 2017- October 2018

Ustaz Nisreen Yasin Khalf Allah[1*], Gurashi Gabr Alla Hamad[2*] and Maiada Saif Al Dowlla Hussin[3]

[1]T. B & HIV program - Ministry of Health - Gezira State- Sudan

[2]Assistant Professor - Faculty of Public & Environmental Health- West Kordofan University- Sudan

[3]Ministry of Health - West Kordoufan state - Sudan

[*]Corresponding author

Nisreen Yasin Khalf Allah, T. B & HIV program - Ministry of Health - Gezira State- Sudan.

Gurashi Gabr Alla Hamad, Assistant Professor - Faculty of Public & Environmental Health- West Kordofan University- Sudan.

Received: December 04, 2024; **Accepted:** December 11, 2024; **Published:** December 17, 2024

ABSTRACT

Background: Tuberculosis (TB) is an airborne infectious disease caused by organisms of the Mycobacterium tuberculosis complex. Infection with M. tuberculosis can evolve from containment in the host, in which the bacteria are isolated within granulomas (latent TB infection), to a contagious state, in which the patient will show symptoms that can include cough, fever, night sweats and weight loss. Only active pulmonary TB is contagious. In many low-income and middle-income countries, TB continues to be a major cause of morbidity and mortality.

Methodology: A cross-sectional descriptive hospital-based study was carried out from June 2017 to october 2018. The sample size was total coverage of all patient attending tuberculosis management unit during the study period Study inclusion all patient age (18years-over fifteen) years and exclusion children (0-17). The data collected using formula is a questionnaire but I'm going to take the all sample. The data were analyzed by using Statistical Package for Social Science (SPSS)version17.

Results: The results indicated the 67.5% know that cover mouth and nose when coughing is method of prevention as well as 68%cover mouth when coughing about treatment 97% take drug at the time early morning, but (26%) attend the clinic eighth visit in all duration this visit important to follow patient but did not attend the clinic due to lack of money.

Conclusion: The study concluded that the design of health educational program to increase patients' general awareness about the disease is crucial to the control of the infection. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

Introduction

Tuberculosis (TB), one of the most widespread infectious diseases, is the leading cause of death due to a single infectious agent among adults in the world. The words "tuberculosis (TB)" and "M. tuberculosis," the bacterium that causes TB, are used in different ways [1]. The first known case of recorded pulmonary TB occurred between 668-626 BC [2]. This record was found in the library of King Assurbanipal of Assyria the following is an extract: "The patient coughs frequently, his sputum is thick and sometimes contains blood. His breathing is like a flute. His skin is cold, but his feet are hot. He sweats greatly and his heart is much disturbed. When the disease is extremely grave, he suffers from diarrhea. It is estimated that between the years 2000 and 2010, eight to nine million new cases emerged each year [3]. Approximately 1.5 million people die from the disease each year. In adults, tuberculosis is the second leading cause of the death due to infectious disease (after AIDS), with 95% of death occurring in low-income countries. Tuberculosis is a major problem of children in poor countries where it kill over 100,000 children each year. Tuberculosis is caused due to slow dividing bacteria [4]. As a result, it takes the infection several months to years to develop active symptoms for the disease.

Citation: Ustaz Nisreen Yasin Khalf Allah, Gurashi Gabr Alla Hamad, Maiada Saif Al Dowlla Hussin. Assessment of Patients Practices Regarding Tuberculosis Disease in Wad Medani Teaching Hospital Gezira State: Sudan During June 2017- October 2018. J Infect Dise Treat. 2024. 2(2): 1-3.

DOI: doi.org/10.61440/JIDT.2024.v2.20

However, within 2 to 12 weeks of exposure to the bacteria, a person may develop a primary infection to lungs. Incidentally, this infection is asymptotic, meaning it does not produce not produce any symptom at all. A chest X ray at this time shows no infection to lungs. Tuberculosis (TB) is a communicable disease caused by bacteria of the „tuberculosis complex group" (mainly Mycobacterium tuberculosis [MTB] and rarely M bovis, M africanum and M microti) [5]. The infection is transmitted from one person to another through invisible droplet nuclei which are generated when someone with active TB of the lungs or larynx coughs, sneezes, spits, laughs or talks. Active TB may also occur in sites outside the airways but transmission does not occur from these sites or is very uncommon (eg. discharging wounds or abscesses). Most infections do not have symptoms, known as latent tuberculosis. It is estimated that up to 10% of infected persons will gradually develop active tuberculosis in their lifetime and fatal up to 50% of patients if left untreated [6,7]. Transmission is relatively insufficient (in comparison to highly contagious diseases such as measles and chickenpox) and depends on the infectivity of the source case, as well as the amount of time spent in contact with others and the environment in which contact occurs. Conditions such as overcrowding in poorly ventilated enclosed spaces that are not exposed to sunlight (which kills MTB bacilli) greatly enhance the risk of transmission. M bovis (acquired directly or indirectly from cattle) has historically been a significant cause of TB. When ingested in milk containing large numbers of organisms, M bovis may penetrate the gastrointestinal mucosa or invade the lymphatic tissue of the oropharynx. Human infection with M bovis has been largely eliminated in developed countries as a result of milk pasteurisation and bovine TB control programs.[8].

Justifications and Problem State

1. The delays in treatment lead to transmission of the bacteria to others.
   Gezira State is one of the high tuberculosis burden states of Sudan, and further, there is high default rate from treatment (12% in the year 2010). Moreover, interruption of TB treatment is a risk factor for the development of MDR- tuberculosis, a disease that is not only difficult and expensive to treat but also carries high mortality rate.
2. Up until now, early case detection and treatment of cases is the only and most effective method of tuberculosis control. Lack of knowledge lead to stigma and discrimination for tuberculosis Disease make it more difficult for patients to continue with care, because their fear of being identified as infected with tuberculosis hinder their access to services on a daily bas.

Objective

To Assessment of patients Practices Regarding Tuberculosis Disease in Wad Medani Teaching hospital Gezira state: Sudan during June 2017- October 2018

Material & Method

Study Design: A descriptive cross-sectional hospital-based study.
Study area: in Wad Medani Teaching hospital Gezira state.

Study Population: All patient attending tuberculosis management unit during the study period Study inclusion all patient age (18years-over fifteen) years and exclusion children (0-17).

Sample Size: All patients attending tuberculosis management unit during the study period.

Methodology: Data collected using following tools:

Questionnaire: In the form of administrated questionnaire filled by pregnant women attending at El-Nuhud Teaching Hospital, West Kordufan State. The questionnaire includes the following variables:

Data Collection Tools/ Instruments: The data collected using formula is a questionnaire but I'm going to take the all sample (total coverage)

Study Variables: The main study variables are: sex, level of education, classification of patients, Mode of transmission and prevention.

Data Managements: Before the study will verification, clearness, quality completing and supervisor should be mentioned.

Data entry and cleaning was done by a trained encoder using SPSS (Statistical Package for Social Science version 17; SPPS, Inc., Chicago, IL).

Ethnical Consideration: Permission was taken from the T.B patients with her full consent and permission was obtained from the Ministry of Health, Gzira State, also permission was taken from the Hospital Medical Manger as well as an ethnical approval from the Department of T.B in wad madani Hospital.

Table 1: Residence distribution for T.B patient in wad madani hospital Gazira state June 2017- October 2018 N =200

Residence	Total	Percent %
Urban	148	74.0
Rural	52	26.0
Total	200	100.0

Table 1 shows residence distribution for T.B patient (74%) in urban and (26%) in rural area.

Table 2: Shows where patients T.B going for treatment in wad madani hospital Gazira state June 2017- October 2018 N =200

Place of treatment	Total	Percent %
Private clinic	41	20.5
Health center	24	12.0
Hospital	134	67.0
Pharmacy	1	.5
Total	200	100.0

Table 2 shows Place of treatment high proportion in hospital (67%), private clinic (20.5%), health center (12%), and pharmacy (0.5%).

Table 3: Shows the number of visits to the T.B unit for follow up in wad madani hospital Gazira state June 2017- October 2018 N =200

Visits number	Total	Percent %
Once in all treat duration	54	27.0
Twice in all treat duration	87	43.5
Eight in all treat duration	59	29.5
Total	200	100.0

Table 3 shows twice in all treat duration (43.5%), eight all treat duration (29.5%) and (27%) once in all treat duration.

Table 4: Shows when you feel the side effects of T.B treatment, what to do in wad madani hospital Gazira state June 2017- October 2018 N =200

What to do with side effects	Total	Percent %
Stop treatment	55	27.5
Back to doctor	138	69.0
Another doctor	7	3.5
Total	200	100.0

Table 4 shows when you feel side effect about (69%) back to doctor, (27.5%) stop treatment and (3.5%) go to another doctor.

Discussion

This a cross-sectional descriptive hospital-based study was conducted at Wad madani hospital in Gezira state (June 2017 to October 2019).

This study has indicated more target residence in urban areas about (74%), while rural areas about (26%).

The study has showed about (67%) of target were take the treatment in the hospital, because the treatment free in this place.

In this study not good practice that about 27% stopping treatment. Conversely, there were well informed about treatment taking 97% Take medicine on the stomach and this is the right time Ending TB epidemic by 2030 is among the health targets of the newly adopted Sustainable Development Goals Cognizant of this initiative, early detection and Prompt treatment of cases is the main strategy to reduce disease morbidity and mortality.

Conclusions

This a cross- sectional descriptive hospital-based study was conducted with an objective to Assessment of patients Practices Regarding Tuberculosis Disease in Wad Medani Teaching hospital Gezira state: Sudan during June 2017- October 2018

The study concluded that) 76 % (of the patients are residence in urban areas, follow-up visits were) 27% (for follow-up on a monthly basis, and) 48% (did not attend the clinic due to lack of money. The study showed that 27% of patients stopped treatment due to side effects.

The study showed about attitude and practices regarding tuberculosis the patient had good practice.

Recommendation

1. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
2. Provision adequate of quality and quantity of nutrients and food for patients.
3. Develop plan and implemented advocacy with the relevant authorities to raise awareness with the participation of the community.
4. Training of health personnel to upgrade their scientific knowledge for educating patients about tuberculosis.

References

1. Cosivi O, Grange JM, Daborn CJ, Raviglione MC, Fujikura T, et al. Meslin Emerging Infectious Diseases. 1998. 4: 1.
2. WHO Tuberculosis Infection Control in The Era of Expanding HIV Care and Treatment- -Limited Settings. 1999.
3. Harms, Jerome Tuberculosis: Captain Death. 1997.
4. Medicines San Frontiers and Partners in Health, Tuberculosis: Partical guide for clinical, nurses, laboratory technician and medical auxiliaries. 2014.
5. Christine F, Sizemore D, Ritchard H, Anthony S. National Institute of Allergy and Infectious Diseases. Available on lineat, 2011.
6. Cole E, Cook C. Characterization of infectious aerosols in health care facilities: an aid to effective engineering controls and preventive strategies. Am J infecting Control. 1998. 26: 453-464.
7. Nicas M, Nazaroff WW, Hubbard A. Toward understanding the risk of secondary airborne infection: emission of respirable pathogens. J Occup EnvironHyg. 2005. 2: 143-154.
8. CDC Guidelines for the Control of Tuberculosis in the Northern Territory- 4th edition. 2008.